

Annual Drinking Water Quality Report for 2008

New Dominion School for Girls – PWSID No. 5029341

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:

Robert Klement 434-983-2051

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. Contaminants in source water may be naturally occurring substances, or 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.

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 the same protection for public health.

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).

VULNERABLE POPULATIONS

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(S) AND TREATMENT OF YOUR DRINKING WATER

The source of your drinking water is groundwater from one drilled well. The water for this system is disinfected with sodium hypochlorite.

A source water assessment of our system was conducted in 2002 by the Virginia Department of Health. The well 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 5 years. The report is available by contacting your water system operator at the phone number or address given elsewhere in this drinking water quality report.

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 this monitoring for the period of January 1st through 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:

Non-detects (ND) - lab analysis indicates that the contaminant is not detectable, based on the limits of the analytical equipment used.

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

Parts per billion (ppb) or Micrograms per liter (µg/l) - one part per billion corresponds to one minute in 2,000 years, or one penny in \$10,000,000.

Action Level (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.

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.

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 Residual Disinfectant Level Goal (MRDLG) - the level of a 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 a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control

WATER QUALITY RESULTS

We routinely 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.

Inorganic Contaminants						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found	Violation	Date of Sample	Typical Source of Contamination
Nitrate ppm	10	10	1.94	No	July 2008	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Lead and Copper						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found / Range	Exceedence	Date of Sample	Typical Source of Contamination
Lead ppb	0	AL=15	2 (90 th percentile) Range: <2 to 3 Of the five samples collected none exceeded the AL.	No	July 2008	Corrosion of household plumbing systems; Erosion of natural deposits
Copper ppm	1.3	AL=1.3	0.4 (90 th percentile) Range: <0.02 to 0.8 Of the five samples collected none exceeded the AL.	No	July 2008	Corrosion of household plumbing systems; Erosion of natural deposits
Radiological Contaminants						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found	Violation	Date of Sample	Typical Source of Contamination
Alpha emitters pCi/L	0	15	Ave: 3.75 Range: 3.6 to 3.9	No	4 th qtr. 2005, 1 st , 2 nd , 3 rd qtrs. 2006	Erosion of natural deposits
Combined Radium pCi/L	0	5	Ave: 0.75 Range: 0.5 to 0.9	No		Erosion of natural deposits
Disinfection Byproducts						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found	Violation	Date of Sample	Typical Source of Contamination
TTHMs (Total Trihalomethanes) ppb	N/A	80	1.4	No	August 2007	By-product of drinking water disinfection
Chlorine ppm	MRDLG =4	MRDL =4	Average: 1.0	No	Monthly 2008 (No results for Jan., June, July, Aug., Dec. 2008)	

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 results, though representative, are more than one year old.

The U.S. Environmental Protection Agency 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 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-one-million chance of having the described health effect for other contaminants.

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. New Dominion School for Boys 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>.

VIOLATION INFORMATION:

New Dominion School for Girls did not incur any drinking water violations during the 2008 calendar year.

Annual Drinking Water Quality Report for 2008

New Dominion School for Boys – PWSID No. 5029340

INTRODUCTION

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Inorganic Contaminants						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found	Violation	Date of Sample	Typical Source of Contamination
Nitrate ppm	10	10	1.57	No	October 2008	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Chromium ppb	100	100	19	No	February 2008	Discharge from steel and pulp mills; Erosion of natural deposits
Lead and Copper						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found / Range	Exceedence	Date of Sample	Typical Source of Contamination
Lead ppb	0	AL=15	3 (90 th percentile) Range: <2 to 3 Of the five samples collected none exceeded the AL.	No	July 2008	Corrosion of household plumbing systems; Erosion of natural deposits
Copper ppm	1.3	AL=1.3	0.3 (90 th percentile) Range: <0.2 to 0.3 Of the five samples collected none exceeded the AL.	No	July 2008	Corrosion of household plumbing systems; Erosion of natural deposits
Disinfection Byproducts						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found	Violation	Date of Sample	Typical Source of Contamination
TTHMs (Total Trihalomethanes) ppb	N/A	80	1.1	No	June 2007	By-product of drinking water disinfection
Chlorine ppm	MRDLG =4	MRDL =4	Average: 1.11 Range: 0.8 to 2.3	No	Monthly 2008 (No results for March, April, Sept. and Oct. 2008)	Water additive used to control microbes

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 results, though representative, are more than one year old.

The U.S. Environmental Protection Agency 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 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-one-million chance of having the described health effect for other contaminants.

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VIOLATION INFORMATION:

New Dominion School for Boys did not incur any drinking water violations during the 2008 calendar year.

CONSUMER CONFIDENCE REPORT DISTRIBUTION CERTIFICATION

Waterworks Name:

PWSID No.

Please check the boxes below that describe how you distributed the 2008 Consumer Confidence Report (CCR).
CHECK EVERY BOX THAT APPLIES. A response MUST be given for Items 1, 2, and 3 below.

1. Distribution

- The 2008 CCR was distributed to consumers by mail on _____
- The 2008 CCR was distributed to consumers by a direct delivery method other than mail on _____
Describe _____

2. "Good Faith Effort" to Reach Non-Bill-Paying Consumers

- A "Good Faith Effort" to reach non-bill-paying consumers **does not apply** since all consumers received a copy of the 2008 CCR
- A "Good Faith Effort" was used to reach non-bill-paying consumers by
 - Posting the 2008 CCR on the Internet on _____
 - Posting the 2008 CCR in public places such as libraries, schools, community centers, etc. on _____
 - Mailing the 2008 CCR to all postal patrons on _____
 - Publishing the 2008 CCR in local newspapers on _____
 - Advertising 2008 CCR availability in local news media on _____
 - Delivering the 2008 CCR to community organizations on _____
 - Delivering multiple copies of the 2008 CCR to single-bill addresses serving multiple people, such as apartment buildings, factories, etc. on _____
 - Other "Good Faith Effort" Describe _____

3. Availability

- The 2008 CCR is available to the public upon request

Please sign and date the required certification below.

I certify that the Water Quality Report for 2008 has been distributed to consumers in accordance with the Consumer Confidence Reports Rule, and that the information contained in the report is correct and consistent with the compliance monitoring results obtained in conformance with state and federal drinking water standards.

Signature of Waterworks Representative Robert J. Monast Date 6-23-09

Title Operator Telephone 434 959 2051

You must return the completed form by September 30, 2009 to:

Virginia Department of Health
Office of Drinking Water
1347 Piney Forest Road
Danville, VA 24540