

# *Annual Drinking Water Quality Report*

## Town of Hamilton

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### INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2010 is designed to inform you about the quality of your drinking water. 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, or 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:

Greg Wilmoth, Mayor	(540) 338-2811
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The times and location of regularly scheduled board meetings are as follows:

Second Monday of the month at 7:00 p.m. in the Town Hall
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### 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 storm-water 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 at (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 at (800) 426-4791.

## SOURCE(S) AND TREATMENT OF YOUR DRINKING WATER

The source(s) of your drinking water is/are ( ) surface water (X) groundwater as described below:

This system consists of eight (8) wells constructed to commercial well standards and have dedicated lots. The wells are designated the following numbers: #1; #4a; #12; #9; #11; #8; #6; and #14, and are located throughout the Town. If you are interested and would like more information, call at the above telephone number.

Is there any treatment of your drinking water supply? (X) Yes ( ) No If yes, it is described below:

All wells are equipped with iron and manganese removal and are under continuous chlorination treatment.

The Virginia Department of Health conducted a source water assessment of our system. The system 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 5 years. Additional information is available by contacting your water system representative at the phone number of address given elsewhere in this drinking water quality report.

## DEFINITIONS

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. While most of our results are from 2010, we are allowed to monitor some contaminants less than once per year. Where that is the case, the most recent results are reported. In the tables 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) - one part per million corresponds to one minute in two years or a single penny in \$10,000.*

*Parts per billion (ppb) - 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.*

*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.*

*Maximum residual disinfectant level goal or 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 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.*

## WATER QUALITY RESULTS

### I. Microbiological Contaminants

We are pleased to report that the Town of Hamilton had no detections of total coliforms or E. coli in the treated water for the 2010 calendar year. All monthly samples complied with EPA standards.

### II. Lead and Copper Contaminants – Were there any detections? Yes, as described below. No

Contaminant	Units of Measurement	Action Level	MCL G	Results of Samples for the 90th Percentile Value	Action Level Exceeded (Y/N)	Sampling Year	# of Sampling Sites Exceeding Action Level	Typical Source of Contamination
Lead	ppb	15	0	8	N	2010	0	Corrosion of household plumbing systems.
Copper	ppm	1.3	1.3	0.324	N	2010	0	Corrosion of household plumbing systems.

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 Town of Hamilton 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 or at <http://www.epa.gov/safewater/lead>.

The Town continues to perform annual sampling and monitoring for lead contaminants to ensure our drinking water meets all State and Federal standards.

The new water treatment plant located at Harmony was completed and has been “on-line” since October 2009. This treatment plant utilizes state of the art technology for delivering high quality drinking water that meets all State and Federal standards.

### III. Other Chemical and Radiological Contaminants – Were there any detections? Yes, as described below. No

Contaminant	Units of Measurement	MCLG	MCL	Level Detected	Violation (Y/N)	Range of Detection at Sampling Points	Sampling Year	Typical Source of Contamination
Gross Alpha	pCi/L	0	15	1.7	N	0.2 – 1.7	2003 – 2010	Erosion of natural deposits.
Radium 228	pCi/L	0	5	0.7	N	ND – 0.7	2003 – 2010	Erosion of natural deposits.
Fluoride	ppm	4	4	0.22	N	ND – 0.22	2009 – 2010	Erosion of natural deposits. Promotes healthy teeth.
Nitrate plus nitrite Nitrogen	ppm	10	10	4.79	N	ND – 4.79	2010	Runoff from fertilizer, Leaching from septic tanks; Erosion from natural deposits.
Barium	ppm	2	2	0.117	N	ND – 0.117	2009 – 2010	Erosion from natural deposits.
Ethylbenzene	ppb	700	700	0.25	N	ND – 1	2009 – 2010	Leaching of paints and adhesives.
Total Xylene	ppm	10	10	0.002	N	ND – 0.005	2009 – 2010	Leaching of paints and adhesives.

**IV. Disinfection and Disinfection Byproducts** – Were there any detections?  Yes, as described below.  No

Contaminant	Units of Measurement	MCLG	MCL	Level Detected	Violation (Y/N)	Range of Detection at Sampling Points	Sampling Year	Typical Source of Contamination
Free Chlorine	ppm	MRDLG =4	MRDL=4	1.44*	N	0.78 – 1.9	2010	Added to water as a precaution against microbes.
TTHM's	ppb	N/A	80	6	N	1.3 – 10	2010	A byproduct of disinfection.
HAA	ppb	N/A	60	1	N	ND – 2.4	2010	A byproduct of disinfection.

\*The level detected for free chlorine is based on a quarterly average.

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

Are there other drinking water constituents we want to inform you about in this report?

Yes, as described below.  No

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.

**VIOLATION INFORMATION**

Your water system did not have any violations during the year.

**ADDITIONAL HEALTH INFORMATION**

Is there other drinking water health information you should be made aware of in this report?

Yes, as described below.  No.

This Drinking Water Quality Report was prepared by:

Tony Hopson, Water Operator Class IV, Town of Hamilton