

# Richmond Water Resources Department

## 2011 Consumer Confidence Report

### Water System Identification # VT0005084

#### Consumer Confidence Report (CCR) for Calendar Year 2010

The Richmond Water Resources Department's goal is to provide you with a safe and dependable supply of drinking water. This report provides a snapshot of the quality of water provided to you from January 1, 2010 through December 31, 2010. The CCR identifies all water quality contaminants detected in the past year. The CCR also contains information on all contaminant tests performed within the last five years.

#### Richmond's Water Resources Department

Thanks to the hard work of the RWRD staff, the Town of Richmond provides some of the best drinking water in the State. In past years we have won awards for taste and quality and our goal is to hold each gallon to the highest standards.

#### Water Source Information

The source of Richmond's drinking water is:

Vermont Source Type: **Gravel Packed Screened well**  
EPA Source Type: **Groundwater, non-purchased**  
Source Name: **Waterhouse**

Richmond's Water Supply Source Protection Ordinance (SSPO) protects the wellhead area by the Round Church from contamination. The SSPO was approved by the Vermont Department of Environmental Conservation's Water Supply Division on October 11, 1995. The SSPO, available at our office and online at Richmond's website ([www.richmondvt.com](http://www.richmondvt.com)), provides information on potential sources of contamination. Some of these sources are storm water runoff with highway contaminants, excess fertilizer runoff from fields and gardens and any misuse of potentially harmful contaminants such as gasoline while performing any agricultural or residential activities. While specific tests confirmed Richmond's water supply source is not under the direct influence of surface water, the source can be at risk if these contaminants seep directly into the groundwater.

#### Sources of Contaminants

Drinking water sources (both for tap water and bottled water) include surface waters (streams, lakes) and ground waters (wells, springs). As water travels over the land's surface or through the ground, it dissolves naturally-occurring minerals. It can also pick up substances from animal and human activity. Some of these substances are contaminants and can be harmful while others, such as iron and sulfur, are not harmful. Public water systems treat water to remove harmful contaminants.

In order to ensure that your water is safe to drink, we test it regularly according to regulations established by the U.S. Environmental Protection Agency and the State of Vermont. These regulations limit the amount of various contaminants in the following categories:

- Microbial organisms such as viruses and bacteria may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic chemicals such as salts and metals, which can be naturally-occurring or result from storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides may come from a variety of sources such as agriculture, storm water runoff, and residential users.
- Radioactive contaminants can be naturally occurring or the result of mining activity.
- Organic contaminants including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems

The Water Resources Department is required to monitor your drinking water for specific contaminants on a regular basis. Results of this regular monitoring are an indicator of whether or not our drinking water meets health standards. A failure to perform required monitoring means we cannot be sure of the quality of our water during that time.

### Water Quality Data

The tables below list the drinking water contaminants that we detected during the past year and any contaminants detected within the past five years. The presence of these contaminants in the water does not necessarily mean that the water poses a health risk.

#### Detected Contaminants RICHMOND WATER DEPT

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of June, 2 sample(s) returned as positive	MCL: Systems that Collect Less Than 40 Samples per Month - No more than 1 positive monthly sample	0	Naturally present in the environment

Chemical Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
NITRATE	1/9/2007	0.7	0.7	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	1/12/2010	1.2	1.2	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	4/8/2009	0.39	0.39	pCi/L	5	0	Erosion of natural deposits
RADIUM-228	4/8/2009	0.39	0.39	PCI/L	5	0	

Disinfection ByProducts	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2010							

Lead and Copper	Date	90 <sup>th</sup> Percentile	95 <sup>th</sup> Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	2008 - 2010	0.85	0.9	0.23 - 0.85	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2008 - 2010	3	4	1 - 4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

### Violation(s) that occurred during the year

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. The below table lists any drinking water violations we incurred during 2010. A failure to perform required monitoring means we cannot be sure of the quality of our water during that time.

Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2010			

### Additional information (including steps taken to correct any violations listed above)

#### Definitions for the terms and abbreviations in table 1:

- **Maximum Contamination 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 Contamination 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.
- **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 disinfectants in controlling microbial contaminants.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. Addition disinfectant may help control microbial contaminants.
- **Action Level:** The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.
- **90<sup>th</sup> Percentile:** Ninety percent of the samples are below the action level. (Nine of ten sites sampled were at or below this level).
- **Treatment Technique (TT):** A process aimed to reduce the level of a contaminant in drinking water.
- **Parts per million (ppm) or Milligrams per liter (mg/l):** (one penny in ten thousand dollars)
- **Parts per billion (ppb) or Micrograms per liter (g/l):** (one penny in ten million dollars)
- **Picocuries per liter (pCi/L):** a measure of radioactivity in water
- **Nephelometric Turbidity Unit (NTU):** NTU is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Running Annual Average (RAA):** The average of 4 consecutive quarters (when on quarterly monitoring); values in table represent the highest RAA for the year.

### Protecting Water Quality – What You Can Do?

The Town of Richmond recognizes the need to protect all private and public water supply sources. We strive to achieve this through appropriate land use strategies and conservation measures. As a customer of the Richmond Water Resources Department, you can help us protect your high quality of drinking water in the following ways

1. **Do not remove the backflow prevention device in your water supply line.** The backflow device prevents contaminated water from your home or business from being sent back into the town mains and traveling to other locations. You are protecting your neighbor, and your neighbor is protecting you! In 2010 we achieved 100% compliance with this State of Vermont Water Supply Division rule. Thank you to everyone for cooperating. If you need to make changes to your water supply line, please notify RWRD staff first to insure you remain protected. The devices are free from the Richmond Water Resources Department and should be installed by a licensed plumber as directed by RWRD staff.
2. **Use fertilizers on you lawn and garden sparingly. Never submerge the hose and leave it running.**
3. **Use chemicals, oil and gasoline with care and dispose of them properly.** Contact the Chittenden Solid Waste District Hotline: 802-872-8111 (<http://www.cswd.net/>) for convenient, safe disposal help.
4. **Practice water conservation.** Conservation of water is increasingly important as the costs of treatment continue to go up and supply may not always be able to meet demand during droughts or emergency situations. For water conservation advice on ways you can audit your own home or business for leaks or reduce usage, visit [www.wateruseitwisely.com](http://www.wateruseitwisely.com). You may also find additional regulatory information at the State Water Quality Division website - [www.anr.state.vt.us/dec/watersup/wslinks.htm](http://www.anr.state.vt.us/dec/watersup/wslinks.htm).
5. **Follow the recommendations in Richmond's Source Protection Plan Ordinance!**  
<http://www.richmondvt.com/documents.php>

### **Health information regarding drinking water**

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 the water poses a health risk. 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 (or their guardians) should seek advice about drinking water from their health care providers. Environmental Protection Agency (EPA) and Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from **EPA's Safe Drinking Water Hotline (800-426-4791)**.

### **Infants and children are typically more vulnerable to lead in drinking water than the general population.**

It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your homes plumbing. If you are concerned about elevated lead levels in your homes water, you may wish to have your water tested and also flush your tap for 30 seconds to 2 minutes before using tap water.

### **Additional information**

We add fluoride to our water supply to promote public health through the prevention of tooth decay.

US EPA's Water Sense Website  
[www.epa.gov/watersense/](http://www.epa.gov/watersense/)



## **Owner/Operator and Public Participation Opportunities**

We want our customers to be informed about their water quality. If you have any questions about this report or the Richmond Water Resources Department, please feel free to contact us, or attend any of our regularly scheduled meetings.

### **Authorized Owner of System**

Town of Richmond  
Geoffrey Urbanik, Town Administrator  
P.O. Box 285  
Richmond, VT 05477  
802-434-5170  
townadministrator@gmavt.net

### **Other Contacts**

RWRD staff  
Kendall Chamberlin, Superintendent  
Trudy Jones, Lead Mechanical Operator  
Brian Mattison, Lead Process Operator  
802-434-2178

### **Richmond Board of Water & Sewer Commissioners Meetings:**

**Dates:** 1st Mondays of the month  
**Time:** ~6:30 p.m.  
**Location:** Town Center Meeting Room, 203 Bridge Street

Please share this information with all the people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. Thank you for assisting the town in this effort.

### **Richmond Water Resources Annual Customer Meeting:**

**Date:** Monday, May 2  
**Time:** ~6:00 p.m.  
**Location:** Town Center Meeting Room, 203 Bridge Street

Please share note that this is the annual meeting to review and approve the proposed budget as well as discuss customers concerns about the system.

### ***Richmond Water Resources Department***

*PO Box 285  
Richmond, VT 05477*

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