Richmond Water Resources Department
2013 Consumer Confidence Report
Water System Identification # VT0005084

Consumer Confidence Report (CCR) for Calendar Year 2012

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, 2012 through December 31, 2012. 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 Drinking Water Division on October 11, 1995. The SSPO, available at our office and online at Richmond's website (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 including failed septic systems. 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 picks 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 may 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
No Detected Results were Found in the Calendar Year of 2012				

Chemical Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Fluoride	10/01/2012	1.1	0 - 1.1	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate-Nitrite	02/16/2012	1.9	1.9 - 1.9	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	04/08/2009	0.39	0.39 - 0.39	pCi/L	5	0	Erosion of natural deposits
Radium-228	04/08/2009	0.39	0.39 - 0.39	pCi/L	5	0	Erosion of natural deposits

Disinfection ByProducts	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found							

Lead and Copper	Date	90th Percentile	95th Percentile	Range	Unit	AL	Sites Over AL	Typical Source
Copper	2012	0.82	0.97	0.13 - 1.11	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2012	3	3	0 - 3	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 2012. 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 2012			

Additional information (including steps taken to correct any violations listed above)
Public Notice - Uncorrected Significant Deficiencies: The system is required to inform the public of any significant deficiencies identified during a sanitary survey conducted by the Drinking Water and Groundwater Protection Division that have not yet been corrected. For more information please refer to the schedule for compliance in the system's Operating Permit.

Date Identified	Deficiency	Facility
10/23/2012	Inadequate Cross-Connection Controls (inline booster pump(s))	
10/23/2012	Operation and Maintenance (O&M) Manual Needed	

The Operation and Maintenance Manual will be updated this year. The cross connection controls over the booster pumps will be corrected with the installation of a replacement water tank that will provide adequate water pressure to those customers who have inadequate pressure now. This tank is expected to be built by 2016.

Terms and abbreviations - In this table you may find terms you might not be familiar with. To help you better understand these terms we have provided the following definitions:

Maximum Contamination Level Goal (MCLG)**:** The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.
Maximum Contamination Level (MCL): The "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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 disinfectants in controlling microbial contaminants.
Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. Addition a disinfectant may help control microbial contaminants.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
90th 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 (µg/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

2012 we achieved 100% compliance with this State of Vermont Water Supply 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.** There was new legislation that passed in 2012 that banned the use of some fertilizers on lawns. See www.lawntolake.org for more information.
3. **Never submerge the hose and leave it running.**
4. **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.
5. **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.
6. **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 home's water, you may wish to have your water tested and also flush your tap for 30 seconds to 2 minutes before using tap water. . 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.

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/

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 Manager
P.O. Box 285
Richmond, VT 05477
802-434-5170
townmgr@gmavt.net

Other Contacts

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

Richmond Board of Water & Sewer Commissioners Meetings*:*

Dates: 3rd 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: Thursday, May 16th
Time: 6:00 p.m.
Location: Town Center Meeting Room, 203 Bridge Street

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

Richmond Water Resources has been doing an exceptional job at maintaining the water and wastewater system despite significant challenges. Much of the water infrastructure has reached the end of its useful life and significant investments are needed. The RWRD is facing declining revenue from septage receipts, which directly support our revenue stream, offsetting both the water and sewer rates. Future investments via capital reserve contributions have been sacrificed due to increasing expenses, both planned and unplanned. Lastly, recent necessary and prudent investments in the system has resulted in debt payments coming due. These pressures result in the need to re-evaluate the rate structures to ensure equitability across all users and sustainability of our system's infrastructure.

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Richmond, VT 05477

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