

# Richmond Water Department

## 2006 Consumer Confidence Report

### WSID # 5084

#### Water Quality Report – for Calendar Year 2005

Our goal is to provide you with a safe and dependable supply of drinking water. This report is a snapshot of the quality of water that we provided for January 1, 2005 through December 31, 2005. It also includes the date and results of any contaminants that we detected within the past five years if tested less than once a year. Any contaminants detected within the past five years are listed along with the date of detection and concentration. This report is designed to inform you about the quality water and services we deliver to you every day.

#### Water Source Information

The source of your drinking water is:

Vermont Source Type: **Gravel Screened well**  
EPA Source Type: **Groundwater, non-purchased**  
Source Name: **Well 1**

Source Protection Plan: We have a source protection plan available from our office that provides more information such as potential sources of contamination. The Water Supply Division approved our source protection plan on: 10/11/95. Our System's susceptibility to potential sources of contamination is: Highway contaminants, stormwater from fields and roadways and agricultural / residential activities misusing potentially harmful contaminants such as fertilizers and gasoline. The water supply source is not under direct influence of surface water.

#### Sources of Drinking Water and Contaminants

The sources of drinking water (both tap water and bottled water) include surface water (streams, lakes) and ground water (wells, springs). As water travels over the land's surface or through the ground, it dissolves naturally-occurring minerals. It also picks up substances resulting from the presence of animals and human activity. Some "contaminants" may be harmful. Others, such as iron and sulfur, are not harmful. Public water systems treat water to remove contaminants, if any are present.

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:

- 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 urban stormwater 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, stormwater runoff, and residential users.
- Radioactive contaminants which 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 stormwater run-off, and septic systems

#### Water Conservation Measures

The Town of Richmond recognizes the need to protect all private and public water supply sources through appropriate land use strategies and conservation measures. Individuals may contribute to the overall goal of conserving water resources for future residents by recognizing the risk that humans may have on the environment through illegal dumping of hazardous wastes and overuse of resources.

## W A T E R   Q U A L I T Y   D A T A

The table below lists all the drinking water contaminants that we detected during the past year. It also includes the date and results of any contaminants that we detected within the past five years if tested less than once a year. The presence of these contaminants in the water does not necessarily show that the water poses a health risk.

**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 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 of 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 (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.

### Detected Contaminants RICHMOND WATER DEPT

No Detected Results were Found in the Calendar Year of 2005
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Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	04/06/04	0.01	0.01	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLOURIDE	04/06/04	0.08	0.08	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE (AS N)	03/17/2005	2.1	2.1	Ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Lead and Copper	Date	90 <sup>th</sup> Percentile	Range	Unit	Action Level	# of sites over Action Level	Typical Source
COPPER	2003	0.78	0.06 – 1.04	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2003	3	< 1 – 5	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
RADIUM, COMBINED(226,228)	7/15/2003	0.27	0.27	pCi/L	5	0	Erosion of natural deposits
RADIUM – 226	7/15/2003	0.07	0.07	pCi/L	5	0	Erosion of natural deposits
RADIUM – 228	7/15/2003	0.2	0.2	pCi/L	5	0	Erosion of natural deposits

Disinfection By-products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2005	< 5	< 5	ppb	60	0	By-product of drinking water disinfection
TOTAL TRIHALOMETHANE S (TTHM)	2005	1	1	ppb	80	0	By-product of drinking water chlorination

### Secondary Contaminants

No Detected Results were found in the Calendar Year of 2005

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

No Violations Occurred in the Calendar Year of 2005.

### Additional information

We add fluoride to our water supply to promote public health through the prevention of tooth decay. The Town of Richmond has received statewide recognition for the Best Drinking Water Award in the years 2002 and 2004 as determined by a panel of water quality professionals from national and regional organizations (VRWA, GMWEA), the State of Vermont and other public water supply professionals. Congratulations to the staff at the Richmond Water Resources Department – Kendall Chamberlin, Trudy Jones and Kayhon Bahar.

### Health information regarding drinking water

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 EPA's **Safe Drinking Water Hotline (1-800-426-4791)**.

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. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline.

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

As a customer of the Richmond Water System, you can help us protect your high quality of drinking water in the following ways:

- 1. Install a backflow prevention device in your supply line** – the backflow device prevents contaminated water from your home or business – typically caused by back pressure from a boiler or pump or loss of pressure in the main water system – from being sent back into the town main water system and traveling to other locations. The devices are free from the Richmond Water Department, required to be installed by the State of Vermont and must be installed by your plumber, as directed by the town water department staff. Most customers have already been inspected and advised of the need for this device. Thank you to everyone that has recently installed the backflow prevention device!
- 2. Water conservation** – Conservation of water is increasingly important as the costs of treatment increase and supply is not always 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).



## Owner/Operator and Public Participation Opportunities

If you have any questions about this report or concerning your water quality utility, please contact the person(s) listed below. We want our customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled meetings.

### Local Contact:

Ronald Rodjenski, Town Administrator  
Town of Richmond – Owner of System  
260 Esplanade - P.O. Box 285  
Richmond VT 05477  
Phone Number: (802)-434-5170  
townadministrator@richmondvt.com

### ***VOLUNTEER OPPORTUNITY***

The 2006 Town Charter Amendments now provide for up to two customers to be members of the five-person Board of Water and Sewer Commissioners. At the Commission's monthly meeting, projects are planned, budgets reviewed and user rates are decided. Please send a letter of interest to Selectboard, PO Box 285, Richmond, VT 05477.

### OTHER CONTACTS:

#### Operator

**Kayhon Bahar**

Phone Number: (802)-434-2178

#### Operator

**Kendall Chamberlin**

Phone Number: (802)-434-2178

#### Operator

**Trudy Jones**

Phone Number: (802)-434-2178

### *Time is available for public discussion of Water Department issues during Selectboard Meetings:*

Date: 1st Mondays of the Month

Time: 7:00 p.m.

Location: 203 Bridge Street, Town Center Meeting Room

***Richmond Water Resources Department***

*PO Box 285*

*Richmond, VT 05477*

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