Richmond Water Department
2004 Consumer Confidence Report
WSID # 5084

Water Quality Report - 2004

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, 2004 through December 31, 2004. It also includes the date and results of any contaminants that we detected within the past five years 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**

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* (viruses and bacteria) may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic chemicals* (salts and metals) can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, or farming.
- *Synthetic Organic chemicals* (pesticides and herbicides) may come from agriculture, urban stormwater runoff, residential uses, and careless disposal of household chemicals.
- *Volatile Organic chemicals* (gasoline and solvents) may come from gas stations, urban stormwater runoff, septic systems, industrial process, and careless disposal of household chemicals.
- *Naturally occurring radioactivity*

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 2004 calendar year. It also includes the date and results of any contaminants that we detected within the past five years 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 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.
- **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 (□g/l):** (one penny in ten million dollars)
- **Picocuries per liter (pCi/L)***:* a measure of radioactivity in water
- **N/A**: Not applicable

Level of Detected Contaminants

Contaminant Detected	Level Detected Units	MCL	MCLG	Sample Date	Violation Y or No	Likely source of detected contaminant
Barium	0.010 ppm	2.000	2.000	04/06/04	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper	15.200 ppm	1.300	1.300	05/31/00	NO	Corrosion of household plumbing systems; erosion of natural deposits.
Fluoride	0.800 ppm	4.000	4.000	04/06/04	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Lead	19.000 ppb	15.000	0.000	10/05/01	NO	Corrosion of household plumbing systems; erosion of natural deposits.
Lead	660.000 ppb	15.000	0.000	09/20/01	NO	Corrosion of household plumbing systems; erosion of natural deposits.
Lead	20.000 ppb	15.000	0.000	09/20/01	NO	Corrosion of household plumbing systems; erosion of natural deposits.
Nitrate	2.000 ppm	10.000	10.000	02/03/04	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Radium-226	0.070 pci/L	N/A	N/A	07/15/03	No	Erosion of natural deposits
Radium-228	0.200 pci/L	N/A	N/A	07/15/03	No	Erosion of natural deposits

Lead and Copper Action Levels

Contaminant Detected	Action Level	90th Percentile	Sampling Date	# of sites that exceeded the Action Level	Total # of sites sampled	Likely source of detected contaminant
Copper	1.3 mg/L	0.78	2003	0	21	Corrosion of household plumbing systems; erosion of natural deposits.
Lead	15 ppb	3.000	2003	0	21	Corrosion of household plumbing systems; erosion of natural deposits.

Turbidity levels (cloudiness of the water) were excellent indicating that the water source's subsurface "natural" filtration and the municipal treatment system's disinfectant and filtration processes are very effective.

Violation(s) that occurred during the year

The Town had no violations occur during the 2004 calendar year.

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 (NEWRA, GMWEA), the State of Vermont and other public water supply professionals. Congratulations to the staff at the Richmond Water Resources Department - Kendall, Erik (resigned in April 2005) and Kevin (resigned in June of 2004)! WELCOME to new staff members Trudy Jones from Northfield, Matt Dow from Georgia and Kelly Farr from Richmond.

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.

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

OTHER CONTACTS:

Operator
Matt Dow
Georgia, VT
Phone Number: (802)-434-2178

Operator
Kendall Chamberlin
Essex, VT
Phone Number: (802)-434-2178

Operator
Trudy Jones
Northfield, VT
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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& invitation to the
RICHMOND WASTEWATER TREATMENT FACILITY - OPEN HOUSE

FRIDAY JUNE 24 3:30 PM – 6:30 PM **VOLUNTEERS GREEN CONCESSION STAND**

Food, balloons, a short ceremony at 3:45 p.m. and guided tours of the Town's newest facility