Quality on Tap…Our Commitment, Our Profession

Brandon Fire District No.1

2002

Water Quality Report

2 West Seminary Street
Brandon, Vermont 05733

1-802-247-3311

Quality and service for 146 years.

Brandon Fire District No.1 Water Quality Report – 2002

We are pleased to present to you the 2002 Water Quality Report. Under federal regulations, all Public Community water Systems are required to provide annual drinking water quality reports to their customers. This report is designed to inform you about the quality water and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the excellent water and services we have provided in the past year. Included are details about where your water comes from, what it contains, and how it compares to U.S. Environmental Protection Agency (EPA) and state standards.

Public Water System Name

Brandon Fire District No.1
Brandon, Vt. 05733
WSID# 5211
Date: May 7, 2002

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 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 cryptosporidium and other microbiological contaminants are available from EPA's Safe Drinking Water Hotline (1-800-426-4791). All 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.

Water Source Information

Our water sources are:
Vermont Source Type: **Gravel Well**
EPA Source Type: **Groundwater, non-purchased**
Source Name: **Well 1 - Griffin**
Location: **66 Newton Road**

Vermont Source Type: **Gravel Well**
EPA Source Type: **Groundwater, non-purchased**
Source Name: **Well 2 - Mohan**
Location: **67 Blackberry Lane**

Source Protection Plan

We have a source protection plan available from our office that provides information such as potential sources of contamination. The Water Supply Division approved our source protection plan on June 21, 1995.

Our water system's susceptibility to potential sources of contamination is from

inadequate isolation control of wells, septic systems, manufacturers and agricultural uses.

Owner/Operators and Public Participation Opportunities

If you have any questions about this report or concerning your water utility, please contact Raymond Counter at the Brandon Fire District office at (802) 247-3311. We want our customers to be informed about their water quality. If you would like to learn more, please attend any of our regularly scheduled meetings.

Regularly scheduled meetings are held on:
Date: **First Wednesday of Month**
Time: **7:00 PM**
Location: **2 West Seminary Street, Brandon**

Owner or Official
Tom Whittaker, Prudential Committee
Brandon Fire District No.1
2 West Seminary Street
Brandon, Vermont 05733
Phone: (802) 247-3311

Operator / Responsible Person
Raymond Counter
277 Hathaway Road
Goshen, Vermont 05733
Phone: (802) 247-3059

Operator
Robert Berardo
PO Box 410
Pittsford, Vermont 05763
Phone: (802) 483-9179

Sources of Drinking Water and Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water before we treat it include:

- ***Microbial organisms***, such as viruses and bacteria, which 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.
- ***Synthetic Organic chemicals,*** (pesticides and herbicides) which may come from a variety of sources such as agriculture, urban stormwater runoff, residential uses and careless disposal of household chemicals.
- ***Volatile Organic chemicals,*** which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, septic systems and careless disposal of household chemicals.
- ***Radioactive chemicals,*** which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and the State of Vermont prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and state regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Water Quality Data

Brandon Fire District No.1 routinely monitors for contaminants in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1st to December 31st, 2001 unless otherwise noted.

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

- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- **Maximum Contaminant Level (MCL):** 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.

- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's 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 a disinfectant may help control microbial contaminants.

- **Action Level:** 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.

- **N/A:** Not applicable

Our water system is required to meet the rules that govern our operations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water **IS SAFE** at these levels.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Level of Detected Contaminants

Contaminant	Barium	Lead	Nitrate
Level Detected	0.010	18.000	0.900
Units	ppm	ppb	ppm
MCL	2.000	15.000	10.000
MCLG	2.000	0.000	10.000
Sample Date	3/22/01	9/20/99	7/31/01
Violation Y/N	No	No	No
Likely source of Detected contaminant	Discharge of Drilling wastes; discharge from metal refineries; erosion of natural deposits	Corrosion of household plumbing systems; erosion of natural deposits	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Contaminant	Level Detected	Sample Date	Violation	Likely Source
Total Coliform	Present	8/15/01	Yes	Naturally Present
Total Coliform	Present	8/20/01	Yes	Naturally Present
Total Coliform	Present	8/20/01	Yes	Naturally Present
Total Coliform	Present	8/20/01	Yes	Naturally Present

Lead And Copper Action Levels

Contaminant Detected	Copper	Lead
Action Level	1.3 mg/l	15 ppb
90th Percentile	0.55	5.000
Sampling Date	1999	1999
# of sites that exceeded the Action Level	0	1
Total # of Sites sampled	20	20
Likely source of Detected contaminant	Corrosion of Household plumbing systems; erosion of natural deposits	Corrosion of household plumbing systems; erosion of natural deposits

Health Effects Language

Barium – Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Nitrate – Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Total Coliform – Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other; potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Copper – Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Lead – Infants and young 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 home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the **Safe Drinking Water Hotline (1-800-426-4791)**.

Violations that occurred during 2001

Contaminant	Type of Violation	Date/Month of Violation
Total Coliform	Monthly MCL	08/2001

Explanation for violation(s):

There was several large water leaks repaired in the month of August 2001. One of the leaks required a major portion of the town to be shut down and this caused back-siphonage of water into the water mains. Flushing of mains did not adequately remove all potential contaminants. The violations occurred on one street in town which indicates that it potentially was a distribution problem.

Actions taken to address violation(s):

The Fire District was issued a boil water notice on 8/22/01. Chlorination of the entire water system began at that time. Public Notice was issued by television, radio, newspaper, and hand delivery. After obtaining three consecutive days of Coliform absent bacteriological samples, the boil water notice was lifted on 8/30/01.

Additional information:

The Brandon Fire District No.1 was required Water Supply Division to disinfect two(2) months consecutively as a result of the Total Coliform MCL violation(s). Daily chlorine residual was recorded and submitted to Water Supply. Continuous chlorination of the system ended on October 31, 2001.

The events of September 11, 2001 have brought many changes to the water industry. The Fire District has reviewed operating procedures and updated security and emergency response plans.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements to the water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

The Brandon Fire District works around the clock to provide top quality water to every tap. We ask that all of our customers help us to protect our water sources, which are the heart of our community, our way of life and our children's future.

If you see something or someone around your drinking water supply that looks suspicious, please call the local police department **(9-1-1)**.

If you would like further information about your water utility, please call the District office at **247-3311**.

Resources for more information:

Vermont Water Supply Division
1-800-823-6500
www.anr.state.vt.us/dec/watersup/wsd.htm
Northeast Rural Water Association
1-800-556-3792
www.neruralwater.org
EPA Safe Drinking Water Hotline
1-800-426-4791
EPA Safe Water Website
www.epa.gov/safewater
EPA State Drinking Water Program
www.epa.gov/safewater.org