

HARDWICK TOWN WATER SYSTEM – VT0005039

Consumer Confidence Report – 2014

This report is a snapshot of the quality of the water that we provided in 2014. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. This report is designed to inform you about the quality water and services we deliver to you every day. The Town Select Board meets every first and third Thursdays at 6pm in the Hardwick Memorial building on 20 Church Street in Hardwick, Vermont.

The person who can answer questions about this report is: (print) Jon Jewett, Hardwick Town Manager

Telephone: 802 472 6120 and/ or Email jon.jewett@hardwickvt.org

Water Source Information

Your water comes from

Source Name	Source Water Type
WELL 1	Groundwater
WELL 2	Groundwater

The State of Vermont Water Supply Rule requires Public Community Water Systems to develop a Source Protection Plan. This plan delineates a source protection area for our system and identifies potential and actual sources of contamination. Please contact us if you are interested in reviewing the plan.

Drinking Water 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 contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban 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 storm water run-off, agriculture, 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 storm water run-off, and septic systems.

Water Quality Data

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 “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.

Locational Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during four consecutive calendar quarters.

Running Annual Average (RAA): The average of 4 consecutive quarters (when on quarterly monitoring); values in table represent the highest RAA for the year.

Detected Contaminants HARDWICK TOWN WATER SYSTEM

NEW inclusion for 2014 CCRs – Disinfection Residual

<u>Disinfection Residual</u>	<u>RAA</u>	<u>Range</u>	<u>Unit</u>	<u>MRDL</u>	<u>MRDLG</u>	<u>Typical Source</u>
Chlorine	0.085	0.01-0.26	mg/l	4.0	4.0	Water additive to control microbes

<u>Microbiological</u>	<u>Result</u>	<u>MCL</u>	<u>MCLG</u>	<u>Typical Source</u>
No Detected Results were Found in the Calendar Year of 2014				

<u>Chemical Contaminants</u>	<u>Collection Date</u>	<u>Highest Value</u>	<u>Range</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Typical Source</u>
Arsenic	05/17/2011	2	2 - 2	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	05/17/2011	0.005	0.005 - 0.005	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	05/17/2011	0.1	0.1 - 0.1	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Manganese	05/17/2011	0.015	0.015 - 0.015	ppm			
Nitrate	10/09/2014	0.22	0.22 - 0.22	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

<u>Radionuclides</u>	<u>Collection Date</u>	<u>Highest Value</u>	<u>Range</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Typical Source</u>
No Detected Results were Found							

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

Lead and Copper	Date	90 th Percentile	95 th Percentile	Range	Unit	AL	Sites Over AL	Typical Source
Copper	2011 to 2013	0	0	0 - 0	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2011 to 2013	0	3	0 - 5	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 2014. 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 2014			

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

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.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. HARDWICK TOWN WATER SYSTEM is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. 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>.

Public Notice - Permit to Operate Issued February 27, 2014: The Water System is required to notify all users of the following compliance schedule contained in the Permit to Operate issued by the State of Vermont Agency of Natural Resources:

1. On or before May 1st 2014, the Permittee shall submit a Permit to Construct (PTC) Application to the Division for an improvements project that includes the construction of additional water storage tank volume in order to meet the storage tank volume requirements of the Rule.

2. On or before July 1st, 2014, the Permittee shall obtain a PTC from the Division for an improvements project that includes the construction of additional water storage tank volume.
3. On or before December 1st 2014, the Permittee shall complete construction of the additional storage tank volume in accordance with the PTC.
4. On or before April 1st 2014, the Permittee shall notify the local fire department in writing a) identifying which fire hydrants are not capable of meeting the minimum fire flow requirement of 500 gpm while maintaining at least 20 psi at all points in the distribution system *and* b) requiring that they NOT connect any firefighting equipment directly those hydrants. By this same date, a copy of the notice must be submitted to the Division and must also be placed in the Water System's Operation & Maintenance Manual.
5. On or before July 1, 2014, the Permittee shall make short term modifications to each fire hydrant listed in 4(a), listed above. Short term modifications include, but may not be limited to, color-coding the hydrants to further help distinguish them from fire-fighting hydrants , labeling the hydrants as being out-of- service, welding or locking the hydrant steamer caps, etc.
6. On or before July 1, 2015, the Permittee shall submit a long range improvement plan and schedule that details prioritized distribution system improvements that are necessary to improve system hydraulics to meet minimum fire flow requirements while maintaining a minimum of 20 psi throughout the distribution system.

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
02/17/2012	Inadequate Storage Volume	BRIDGEMAN HILL STORAGE
02/17/2012	Inadequate Water Pressure (Under Normal, Peak, or Maximum Flow Conditions)	DISTRIBUTION SYSTEM
02/17/2012	Long Range Plan Needed	

Inadequate storage volume addressed in current construction project adding 300,000 gallons of storage capacity off from Hastings Lane in the Town of Hardwick. This was constructed in addition to 300,000 gallons of storage located on Bridgeman Hill. The project is due to be completed by July 30,2015.

Inadequate water pressure located on Pearl Street to be addressed summer 2015 by the addition of new water lines and a pump station to be located on North Main Street and Pearl Street in the Town of Hardwick.

A long range plan was developed and submitted to the Water Supply and Ground Water Protection Division on October 2012. A new long range plan will be developed for July 1, 2015.

Distribution information

Please share this information with all the other 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 and distributing copies by hand or mail.