RANDOLPH CENTER WATER SYSTEM – WSID 5177 Consumer Confidence Report – 2018 Issued June 19, 2019

This report may also be found at the following website page: http://www.rfd1.org/?page_id=255

What the report is:

This report is a summary of the quality of the water that we provided in the water system's 2018 operating year (Jan. 1-Dec. 31, 2018). Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and Vermont state standards. Providing water system consumers with this report annually is required by the federal Safe Drinking Water Act. We also take this opportunity to inform our customers of what the water system does to reliably provide this water.

We are committed to providing you with water quality and service information because informed customers are our best allies. This report is designed to inform you about the quality of the water and related services we deliver to you every day. To learn more, please attend any of our regularly scheduled meetings, which are held on the 3rd Thursday of each month*. These are customarily held at the Red School House in Randolph Center. *Visit the Randolph Center Fire District #1 website at http://www.rfd1.org/?page_id=250, and look under Notices: for meeting agenda including dates and times, along with other information about the fire district. The Randolph Fire District #1 Annual meeting is held on the third Tuesday in May and is open to the public, as are all the monthly meetings.

The person who can answer questions about the water quality data in this report is: Patricia M. Beavers, The Fire District's Contract Water System Operator. Please write: P2 Environmental 19 Johnson Circle, Turnbridge, Vermont 05077 and/ or Email <u>patricia@p2water.com</u>.

What Randolph Center Water System provides to our community:

- The fire district is a municipal entity, established in 1939, which maintains a water supply source, storage, and distribution system serving much of the village of Randolph Center. This system is connected at several locations with the Vermont Technical College water system, and we both utilize the water tower on South Randolph Road directly south of the college for storage and pressure. Although connected each system is responsible for providing its own water except in emergency situations.
- 2. We take our responsibility to provide safe drinking water seriously and provide system oversight through governance by a fire district prudential committee, supported by our contract water system operator, P² Environmental. P² Environmental has qualified conscientious individuals on staff who perform and review the periodic testing required under state and federal regulation.
- 3. In addition to providing a drinking water supply, the water distribution system piping provides fire protection via the hydrants located within our service area.
- 4. The Fire District installed meters at customer connections in the fall of 2017. Meters are a vital best practice to allow for monitoring our distribution system for leaks, to allow consumers to be charged equitably for the amount of water they use, and both encourage and reward water conservation measures.
- 5. The Water System enrolled in the VT-ALERT system through the Vermont Division of Emergency Management in March 2018 to provide our customers with access to an automated emergency notification system for essential information concerning our water system in emergencies. Examples of such alerts include a Boil-Water Notice should there be a break in a water line or other breach in the system which requires such a precaution. Enrolling in this system is part of our commitment to provide our customers with convenient and prompt access to vital information.

Water's Value — Water and You

Water is life. It nourishes us. It cleans us and sustains us. Put simply, water is you.

- 1. The average American uses 176 gallons of water per day—that's 64,240 gallons a year!
- 2. 40% of water in America is used to produce the food we eat and the beverages we drink.

- 3. How is water used in your home? On average, 17% goes toward showering, 27% is used by the toilet, your faucet drains 15%, your clothes washer another 22%, miscellaneous needs take up 5%, and leaks steal another 14%.
- 4. If drinking water and soda cost equally, your water bill would skyrocket more than 10,000%.
- 5. For more information on the Value of Water go to: <u>http://www.thevalueofwater.org/</u>

What we ask of our customers:

We ask that our water customers support the fire district and community in general, by attention to the following:

- Conserve water. Use what you need but be prudent with your use. Quality water is limited and needs to be treated as the precious resource that it is. Check your outside hose bib or spigot to make sure it isn't frozen, leaking or broken. Check your home plumbing regularly for leaks. This includes all fixtures especially the toilet that will make a sound when the bowl is continuously filling. We appreciate conservation during dry times as well. When we each work to save water in many small ways, together we save a lot.
- 2. Be vigilant of outside water leaks, such as those which may show up as new wet areas in lawns and fields near the distribution lines along roadways and walks, and the service lines leading to residences. Such wet areas could mean a leaking distribution line or leaking service line to your home or business. Leaks quickly add-up to large losses to our supply and cost all of us a great deal through added pumping and treatment costs. Contact the Fire District if you notice one of these areas, or other indications of a possible leak, such as low pressure at your home, so that we can promptly investigate and take appropriate action.

We thank the customers who let us into their homes to sample every month to ensure water quality. We appreciate your assistance in allowing us to do our job well.

YOUR WATER QUALITY INFORMATION

The water quality information presented in the tables is from the most recent round of testing done according to the applicable regulations. All data shown were collected during the last calendar year unless otherwise noted in the tables.

Water Source Information

Your water comes from:

Source Name	Source Water Type	Owner		
Spring	Groundwater	Randolph Fire District #1		
Langevin Farm Well/Penny Brook	Groundwater	Vermont Technical College		

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. Our Plan was approved in December 2018. Please see the educational letter and Map at the end of this report. 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:

<u>Microbial contaminants</u>, 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.

<u>Pesticides and herbicides</u>, 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:

<u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Level 1 Assessment: A level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

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.

<u>Maximum Contamination Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: The highest level of a disinfectant allowed in drinking water. Addition a disinfectant may help control microbial contaminants.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: NTU is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Parts per billion (ppb) or Micrograms per liter (ug/l): (one penny in ten million dollars)

Parts per million (ppm) or Milligrams per liter (mg/l): (one penny in ten thousand dollars)

Picocuries per liter (pCi/L): a measure of radioactivity in water

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

<u>90th Percentile</u>: Ninety percent of the samples are below the action level. (Nine of ten sites sampled were at or below this level).

Detected Contaminants RANDOLPH CENTER WATER SYSTEM

Disinfection Residual	RAA	RANGE	Unit	MRDL	MRDLG	Typical Source
Chlorine	0.27	0.050 - 0.900	mg/l	4	4	Water additive to control microbes

Chemical Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Nitrate	03/01/2018	2.1	1.7 - 2.1	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Radionuclides	Collection Date	Highest Value	Range	Unit	MC L	MCL G	Typical Source
Gross Alpha Particle Activity*	05/28/2014	2.72	0.991 - 2.72	pCi/ L	NA	0	Erosion of natural deposits

*Gross Alpha particle activity results include Uranium activity. However, the EPA has set a maximum contaminant level (MCL) for "adjusted" Gross Alpha particle activity (including radium-226 but excluding Uranium) at 15 pCi/L. To determine compliance with the "adjusted" Gross Alpha MCL, a separate Uranium result is required for the adjustment calculation, and it must be converted from mass (ug/L) to activity (pCi/L). The estimated Uranium activity is then subtracted from the Gross Alpha particle activity lab result to yield the "adjusted" Gross Alpha result in pCi/L.

Lead and Copper	Collection Year	90th Percentile	Range	Unit	AL*	Sites Over AL	Typical Source
Copper	2016	0.1	0 - 0.1	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2016	2	0 - 3	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

*The lead and copper AL (Action Level) exceedance is based on the 90th percentile concentration, not the highest detected result.

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 2018. A failure to perform required monitoring means we cannot be sure of the quality of our water during that time.

Туре	Category	Analyte	Compliance Period
MONITORING, ROUTINE (DBP), MAJOR	Failure to Monitor	CHLORINE	08/01/2018 - 08/31/2018
MONITORING, ROUTINE, MAJOR(RTCR)	Failure to Monitor	E. COLI	08/01/2018 - 08/31/2018

Due to an oversight by the VTC Water Operator, the Routine Sample for August 2018 was inadvertently collected <u>on July</u> <u>31, 2018</u> instead of <u>August 1, 2018</u>. The water sample did test negative.

Health Information Regarding Drinking Water

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. RANDOLPH CENTER 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.

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	Significant Deficiencies	Facility
12/20/2018	No Permit to Operate	NA

The water system, FD#1 and VTC, with their designated Water System Operators met with the Vermont Drinking Water and Groundwater Protection Sanitarians. A survey was conducted on the Water System December 20, 2017. At that time, a Permit to Operate Application was submitted to the DWGPD. To date, the DEC has not generated this Permit for the Water System. We anticipate an Operating Permit during 2019.

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.