

**Vermont Department of Environmental Conservation
Drinking Water and Groundwater Protection Division**

One National Life Drive - Davis 4 [phone] 802-828-1535
Montpelier, VT 05620-3521 [fax] 802-828-1541
www.dec.vermont.gov/water

Agency of Natural Resources

May 19, 2021

Randolph Fire District #1
Attn: John Lens
P.O. Box 314
Randolph Center, VT 05061

Vermont State Colleges
Attn: Theodore Manazir
P.O. Box 500
Randolph Center, VT 05061

Re: Permit to Operate for Randolph Center Water System, Public Community Water System, Randolph, VT, WSID# VT0005177.

Dear Mr. Lens and Mr. Manazir,

Enclosed you will find a new Permit to Operate for the Randolph Center Water System. Please notice that while this Permit does not have an expiration date, this Division will amend the Permit as it deems necessary. The Permit establishes general requirements that the Water System must adhere to.

Section II requires resolution of one (1) sanitary deficiency. Failure to complete corrective actions in accordance with the timeline established in Section II.B constitutes a violation of the Permit, the Vermont Water Supply Rule, and the Federal Groundwater Rule.

Section IV requires the Permittees to submit an electronic copy of a comprehensive operation and maintenance manual to the Division for review and approval, ensure all routine monitoring samples are representative of all permitted sources, and to notify the Division immediately when the Water System's water use data exceed 90% of the permitted maximum day demand.

Please contact me directly with any questions regarding this Permit. I may be reached directly by phone at 802-522-6409 or by email at matthew.caldwell@vermont.gov.

Sincerely,



Matthew P. Caldwell
Community System Operations Specialist
Drinking Water and Groundwater Protection Division

C: Randolph Fire District #1, Water System Owner/Permittee, VT0005177
Vermont State Colleges, Water System Owner/Permittee, VT0005177
Ted Manazir, Water System Operator, VT0005177
Patricia Beavers, Water System Operator, VT0005177
Ben Montross, Drinking Water Program Manager, DWGWPD
Jeff Girard, Compliance Section Supervisor, DWGWPD
Dana Nagy, Community Operations Section Supervisor, DWGWPD
Peter Kopsco, Permit Specialist, EAO
Carl Fuller, Montpelier Regional Office, DWGWPD
WSID File VT0005177

Enc: Permit to Operate

Agency of Natural Resources
Vermont Department of Environmental Conservation
Drinking Water and Groundwater Protection Division

Public Community Water System Permit to Operate

PERMIT NUMBER: 5177-21.0

WATER SYSTEM IDENTIFICATION NUMBER: VT0005177

PIN #: BR98-0427

PERMITTEES (Owners): Randolph Fire District #1 & Vermont State Colleges

WATER SYSTEM: Randolph Center

TOWN: Randolph

ADMINISTRATIVE CONTACT: John Lens & Theodore Manazir

ADDRESS: P.O. Box 314
Randolph Center, VT 05061

P.O. Box 500
Randolph Center, VT 05061

I. Authority

This Permit to Operate (Permit) for the **Public Community** Water System, known as the **Randolph Center Water System** (Water System) is issued to **Randolph Fire District #1** and **Vermont State Colleges** as co-Permittees (Permittees), by the Vermont Department of Environmental Conservation, Drinking Water and Ground Water Protection Division (the Division) on behalf of the Secretary of the Agency of Natural Resources (the Secretary) in accordance with 10 V.S.A. Chapter 56 and the Vermont Water Supply Rule (Rule). Because Vermont has primacy to implement the relevant provisions of the Federal Safe Drinking Water Act, and the Rule adopted under that Act, regarding public water systems and because the Rule incorporates the relevant Federal requirements, this Permit is also issued under and implements the provisions of Federal Law.

II. Findings, Violations, and Compliance Schedule

A. The Secretary finds that the Water System is being operated in a manner that constitutes a violation of the Rule. This violation is:

1. Inadequate Disinfection Monitoring, TP001: Under Chapter 21, Appendix A, Part 4.3.4(b) of the Rule, “*Each system shall continuously monitor the disinfectant residual of the water as it enters distribution system and record the lowest disinfection residual each day...*” The Water System is not monitoring disinfection residual for the Spring

Treatment Facility (TP001) from a location that is at, or before, the first service connection, after disinfection contact time (CT).

B. The Secretary also finds that if the following compliance schedule is met, the continued operation of the Water System does not constitute a public health hazard or a significant public health risk:

1. On or before September 1, 2021, the Permittees shall either identify the first connection served by TP001 and begin recording daily disinfection residual concentrations at that location or, submit a plan and schedule to install a dedicated sampling hydrant prior to the first service connection and after disinfection CT to the Division for review and approval.

C. The Permittees shall submit a report to the Drinking Water and Groundwater Protection Division (Division) within fifteen (15) days after each required compliance date listed in Part B, above, if the required actions have not been completed by the specified date. The Permittees shall document the reasons for non-compliance in the report and shall make a written request that the Division modify the compliance schedule in this Permit. A compliance schedule will only be modified if there is good cause for the modification.

D. The Permittees shall give public notice to the users of the Water System of the requirements of the compliance schedule contained in this Permit on or before July 1st of each year that the items within the compliance schedule remain uncorrected. The Permittees shall also give notice to the users of the Water System whenever there is a change in the compliance schedule.

III. Water System Description

This Permit authorizes the use of the following components of the Water System, the permitted water system demand, and the other specified aspects of the design and operation of the Water System described below:

The Water System is co-owned by Randolph Fire District #1 and Vermont State Colleges as co-Permittees. Responsibility for the various components of the Water System is described in the Agreement initially dated February 21, 1967.

A. Permitted Source Yield:

Source #	Source Name	Source Type	Source Yield (gpm)	Authorized MDD Rate (gpd)
WL001	Spring	Groundwater	128	46,080
WL002	Langevin Farm Well/Penny Brook	Groundwater	70	100,800

The Water System has been determined to be a groundwater system, subject to the Rule and the Federal Groundwater Rule, 40 CFR 141.400-141.405. The Division's records indicate an approved yield has not been established for the Water System. Historical operating data indicate the sources are adequate to meet the water use demands of the Water System's existing users.

WL001 is permitted for an average daily demand (ADD) rate of 23,040 gallons per day (gpd) and a Maximum Daily Demand (MDD) rate of 46,080 gpd. WL002 is permitted for an ADD rate of 50,400 gpd and a MDD rate of 100,800 gpd. These permitted rates equate to a flow rate of 32 gallons per minute (gpm) for WL001 and 70 gpm for WL002 when the sources are being operated for 12 hours to meet ADD or 24 hours to meet MDD.

B. Permitted Water System Demand: The Water System serves a year-round residential population of approximately 584 people and a Non-Transient population of approximately 554 people through 116 service connections. The Water System is authorized for a MDD Rate of 146,880 gallons per day and an ADD rate of 73,440 gallons per day. This authorized rate equates to a flow rate of 102 gpm when the sources are being operated for 24 hours to meet MDD or operated for 12 hours to meet ADD.

C. Source Protection and Isolation: Source isolation zones are prescribed by Appendix A, Part 3.3 of the Rule. All identified land use activities within the sources' recharge areas are subject to a routine vulnerability assessment and are managed by the Water System through a Source Protection Plan Update that is subject to review and approval of the Secretary once every three years.

D. Treatment Components, Processes, and Capacity: The Water System utilizes two (2) treatment facilities.

1. TP001 – Treatment Plant 1 – Spring: TP001 treats water provided by WL001 and has the capability to provide continuous disinfection utilizing a sodium hypochlorite solution and positive displacement pump. Disinfection CT is provided by approximately 1,300' of 6-inch pipe prior to the first connection.

2. TP002 – Treatment Plant 2 – Langevin/Pennybrook: TP002 treats water provided by WL002 and has the capability to provide continuous disinfection utilizing a sodium hypochlorite solution and positive displacement pump. Disinfection CT is provided by approximately 2,590' of 4-inch pipe prior to the first connection.

E. Storage Components and Capacity: The Water System utilizes a 250,000-gallon steel storage tank (ST001) that floats on the distribution system.

F. Pump Stations: The Water System utilizes one (1) booster pump facility (PF001). Raw water from WL002 is pumped via submersible pump through treatment and into distribution. PF001 utilizes two (2) 10hp centrifugal booster pumps to draw water from WL001, through treatment, and into distribution. Distribution pressure is regulated and maintained by the water level in ST001.

G. Distribution System: The distribution system consists of 6-inch asbestos cement pipe, 6-inch ductile iron pipe, 6-inch PVC pipe, and 1.5-inch polyethylene pipe.

H. Fire Protection: The Water System was designed to provide fire flow protection and has approximately ten (10) hydrants installed throughout the distribution system.

IV. Special Conditions, Requirements, and Restrictions

A. Reserve Capacity Demonstration: The Water System has sufficient permitted source, treatment, and distribution system capacities to provide for further expansion of the Water System. The Permittees are responsible for monitoring the Water System's water use. The Permittees shall ensure that water use allocations provided to new users, new consecutive systems, or as increased water use allocations to existing users do not exceed the Water System's permitted maximum daily demand flow rate identified in Section III.B of this Permit. The Permittees shall notify the Division immediately when the Water System's water use data exceed 90% of the permitted maximum day demand. Proposed improvements to the Water System are to adhere to the Vermont Water Supply Rule, Chapter 21, and the Vermont Wastewater System and Potable Water Supply Rule, Chapter 1. The Permittees shall not authorize or provide allocations for any proposed new Service Line to be connected to the Water System unless the Permittees records documentation demonstrating that the proposed Service Line will meet the necessary water quality, quantity, and hydraulic pressure (at the foundation wall) requirements for all units being provided water. This documentation shall be retained in the Permittee's files for the Water System and shall be provided to the Secretary upon request.

B. Operation and Maintenance (O&M) Manual Required: On or before January 1, 2022, the Permittees shall submit an electronic copy of a comprehensive O&M Manual that includes the Randolph Fire District #1 and Vermont State Colleges portions of the Water System for the review and approval by the Secretary.

C. Representative Samples Required: The Permittees shall ensure that routine samples collected from the Water System are representative of all permitted sources. Permittees shall submit a Source Operations Plan to the Secretary that describes the procedures to be followed to ensure the routine samples are representative of all permitted sources. This Source Operations Plan shall be incorporated into the Water System's O&M Manual.

V. General Conditions, Requirements, and Restrictions

A. Water Quality Monitoring:

1. Water Quality Monitoring Requirements: The Permittees shall comply with all of the Drinking Water Quality Monitoring Requirements set forth in the Rule at the frequency described in the Rule. The Permittees shall monitor for contaminants not listed in the Rule if the Secretary determines that the additional monitoring is necessary to protect human health and notifies the Water System of those additional monitoring requirements. The Secretary shall, on at least an annual basis, provide the Permittees with a monitoring schedule in order to assist the Permittees with its obligation to comply with the requirements of the Rule.

2. Notification of Water Quality Violations: The Permittees shall notify the Division immediately (and no later than 24 hours) following any test result greater than or equal to the Maximum Contaminant Levels (MCL), Maximum Residual Disinfectant Levels (MRDL), or turbidity levels as specified under 40 CFR, Part 141 (National Primary Drinking Water Regulations), or other water quality standard adopted by the Agency to protect public health.

3. Reporting of Water Quality Analytical Testing Results: The Permittees shall be responsible for the submission of all water quality monitoring analytical testing results in accordance with the reporting timeframes in the Rule.

B. Reporting Requirements:

1. The Permittees shall submit a signed report to the Division once a month, no later than ten (10) days following the end of the month, with the following information:
 - a. A summary of the Public Water System operation, including the amount of water produced from each source. Water production summaries shall contain metered data. The daily volume of water produced from each source must be reported for each day that disinfectant is introduced.
 - b. Daily disinfectant residual at the entry point(s) to the distribution system, following disinfection contact time, for each day that disinfectant is introduced.
2. If a chemical disinfectant is applied or if water within the distribution system may contain a chemical disinfectant, the Permittees must report disinfectant residual in the water system at a location and frequency corresponding to the approved total coliform sampling plan and verify the free chlorine concentrations (if no free chlorine is available, the Permittees must measure total chlorine concentration as well) on the laboratory reporting form.

C. Requirement for Certified Operator: The Water System is a Class 2 Water System as defined in the Rule. The Permittees shall ensure that the appropriate class of Vermont certified operator is placed in responsible charge of the Water System in accordance with Section 12.2.2 of the Rule. This designation shall be made in writing, signed by both the owner and the certified operator, and available to the Secretary upon request. The certified operator shall hold a valid certification equal to or greater than the classification of the Water System. For Water Systems which only have one certified operator, the Permittees must notify the Division within 24 hours of changing their certified operator.

D. Notification of Change in Administrative Contact: The Permittees shall notify the Secretary within 30 days of a change in the Administrative Contact identified in this Permit. This notification shall include the new name, address, and telephone number of the individual who is authorized by the Permittees to act as the primary contact person for all matters related to the operation of the Water System.

E. Consumer Confidence Reports: The Permittees shall prepare and deliver to the customers of the Water System and the Secretary an annual consumer confidence report (CCR) on or before July 1 of each year. The Permittees shall comply with the requirements of 40 CFR Subpart O, including Appendix A, and Subchapter 10 of the Rule as it relates to the preparation, content, and distribution of the CCR.

F. Operation and Maintenance Manual: Per section IV.B of this Permit, the Permittees are required to submit and obtain Division approval of a comprehensive O&M Manual. Once approved the O&M Manual shall be amended as needed when significant changes are made to the infrastructure and operations of the Water System. All amendments to the O&M Manual shall comply with the Rule and be approved by the Secretary. The O&M Manual shall be kept in a location so that it is readily available to the Permittees and the operator(s) of the Water

System. If the O&M Manual cannot be located during an inspection or sanitary survey by the Secretary, the Permittees shall prepare a new O&M Manual and submit an electronic copy to the Division for approval.

G. Water System Modification Prohibited Without Required Permits: The Permittees shall obtain all required Source and/or Construction Permits before proceeding with modifications to the Water System, including, but not limited to, Water System expansions that require a Public Water Supply Permit, source deepening, reconstruction, and new treatment systems.

H. Reporting of Non-Routine Operating Conditions: The Permittees shall report to the Division whenever atypical or non-routine operating conditions are experienced by the Water System, including but not limited to deviation from within normal operating distribution system pressure ranges, e.g., significant and unusual fluctuations in distribution system hydraulic pressure; hydraulic pressures of less than 35 psi in the distribution system; failure of critical Water System infrastructure components; water color or odor complaints/observations from system users; or any operating condition that does not meet the standards of Appendix A of the Rule and/or a condition that poses a significant health risk. When experiencing atypical or non-routine operating conditions, Permittees shall:

1. Notify the Division as soon as possible and within 12 hours of becoming aware of the Non-Routine Operating conditions.
2. Take appropriate action(s) to safeguard all users of the Water System, including notification to all users when the water supply becomes vulnerable to contamination (e.g., VT-Alert, Television, Radio, Hand delivery (door to door), other method as advised).
3. Follow all actions and provide all documentation as requested by the Division.

I. Use of Unpermitted Sources of Water: The Permittees shall not use or connect an unpermitted and/or unauthorized water source, including hauled bulk water and designated emergency sources, to the Water System unless an emergency operating condition exists. When experiencing operating conditions that may require the use of an unpermitted or unauthorized source, the Permittees shall:

1. Notify the Division prior to utilizing the unpermitted or unauthorized source of Water.
2. Provide all public notice as recommended by the Division, which may include issuing a Boil Water, Do Not Drink, or Do Not Use Notification to all users of the Water System. Notifications shall be provided within twelve hours of receiving the Division's recommendation or as otherwise directed by the Division in writing.
3. Follow all actions and provide all documentation as requested by the Division.
4. The unpermitted and/or unauthorized source shall be used for no more than 90 cumulative days unless the Permittees have submitted a written request to the Secretary for an extension and the Secretary has determined that there is good cause for granting an extension.

J. Maintenance and Periodic Update of Approved Plans: The Permittees shall comply with the plans approved by the Secretary for the Water System. In the event of significant structural or operational changes to the Water System, the applicable plans shall be revised and submitted to the Secretary for approval. In addition, the plans shall be updated when specified in the Rule. The approved plans for the Water System are:

1. Revised Total Coliform Rule Coliform Sampling Plan, approved by the Division on April 19, 2016;
2. Lead and Copper Sampling Plan, approved by the Division on April 21, 2017;
3. Disinfection Byproducts (DBP) Compliance Monitoring Sampling Plan, Stage 2, approved by the Division on January 4, 2013; and
4. Source Protection Plan, last update approved by the Division on January 2, 2019.

K. Posting of Permit: The Permittees shall post the current valid operating Permit in a conspicuous place at the public Water System headquarters or treatment plant.

L. Permit Modification: Based upon information received (e.g., findings of a facility inspection, or information submitted by the Permittee), the Secretary shall determine whether one or more of the following causes to modify a Permit exist. If cause exists, the Secretary may modify the Permit, and may request an updated application and/or administrative contacts information if necessary. When a Permit is modified, only the conditions subject to modification are reopened. Cause for modification includes, but is not limited to:

1. Material and substantial additions or alterations to the Water System, or the Water System's operations or any other change in conditions, that occurred after the issuance of the Permit that justify the application of conditions different or absent from this Permit;
2. The receipt of information that was not available when the Permit was issued which justifies the application of conditions different or absent from this Permit;
3. The statutes, standards or Rule, on which the Permit was based, were revised by adoption or judicial decision after the Permit was issued and those revisions justify the application of conditions different or absent from this Permit;
4. A determination by the Secretary that other good cause exists for amendment, based on the need to protect human health or the environment; or
5. Cause exists for revocation of the Permit, but the Secretary determines that modification of the Permit is appropriate.

M. Permit Suspension or Revocation: This Permit may be suspended or revoked in accordance with the Rule.

N. Transfer of Ownership or Control:

1. This Permit is not transferable or assignable without prior written approval of the Secretary. All operating fees must be paid in full prior to any transfer or assignment of the Permit. In the event of a proposed change in control or ownership of the Water System, the Permittees shall provide a copy of this Permit to the prospective owner and/or operator and shall send written notification of the proposed change in ownership or control to the Secretary. The Permittees shall also inform the prospective owner and/or operator of their responsibility to make an application for transfer of this Permit.
2. Any request for transfer of ownership and/or control must, at a minimum, include:
 - a. A properly completed application form provided by the Secretary including the Permit application fee and administrative contacts information;
 - b. A written statement from the prospective owner or operator certifying:
 - i. The conditions of the operation of the Water System will not be materially different under the new ownership or control;
 - ii. The prospective owner or operator has read and is familiar with the terms of the Permit and agrees to comply with all terms and conditions of the Permit; and
 - iii. The prospective owner or operator has the technical, managerial, and financial capability to operate and maintain the Water System and remain in compliance with the terms and conditions of the Permit.
 - c. The date of the sale or transfer; and
 - d. Any other additional information the Secretary may require in light of the current status of the facility operation, maintenance, and Permit compliance.

O. Right of Access to the Water System: By acceptance of this Permit, the Permittees agree to allow any duly authorized representative of the Secretary, upon presentation of the appropriate credentials, to:

1. Inspect or investigate any portion of the Permittee's property, fixtures, or other appurtenances belonging to or used by the Permittees for the operation and maintenance of the Water System;
2. Sample, monitor, or test the Water System; or
3. Gain access to and copy any records, reports or other documents related to the operation and maintenance of the Water System.

P. Fees: The Permittees shall pay the annual operating fees specified in 3 V.S.A. §2822.

Q. Compliance with the Rule and Other Laws: Compliance with this Permit does not relieve the Permittees of the need to comply with all applicable provisions of the Rule and all other applicable requirements of Federal, State, and Local laws.

R. Appeals: This Permit may be appealed to the Environmental Division of the Superior Court within 30 days of the date the final decision is posted to the Environmental Notice Bulletin in accordance with 10 V.S.A., Chapter 220.

S. Enforcement: Pursuant to 10 V.S.A. Chapters 56, 201 and 211, any violation of the terms and conditions of this permit, including any compliance schedule, is grounds for the initiation of an enforcement action by the State against the Permittee.

T. Effective Date: This Permit becomes effective on the date of signing.

This Operating Permit for the Operation of the Water System located in Vermont is effective on May 19, 2021.

Peter Walke, Commissioner
Department of Environmental Conservation
Vermont Agency of Natural Resources



By _____
Dana K. Nagy, Community Operations Section Supervisor
Drinking Water and Groundwater Protection Division