

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

One National Life Drive - Main 2
Montpelier, VT 05620-3521
www.drinkingwater.vt.gov

[phone] 802-828-1535
[in-state] 800-823-6500
[fax] 802-828-1541

Agency of Natural Resources

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Public Community Water System Permit to Operate

PERMIT NUMBER: 20964-14.0

WATER SYSTEM IDENTIFICATION NUMBER: #VT0020964

PIN #: EJ13-0095

PERMITTEE (Owner): South Alburgh Fire District #2

WATER SYSTEM: South Alburgh Fire District #2

TOWN: Alburgh

DESIGNATED CONTACT PERSON: Paul Hansen

ADDRESS: South Alburgh Fire District No 2
PO Box 192
Alburgh VT 05440

I. Authority

This Permit to Operate (Permit) a Public Community Water System, known as the South Alburgh Fire District #2 (Water System) is issued to South Alburgh Fire District #2 (Permittee) 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

A. The Secretary finds that the Water System has the technical, managerial, and financial capacity to ensure compliance with the Rule and Federal Safe Drinking Water Act. The Water System must, however, complete the following:

1. *Operation and Maintenance (O&M) Manual*: Under Chapter 21-7, section 7.1.1 of the Rule, all Public Water Systems shall have an O&M Manual approved by the Secretary and shall be operated in a manner consistent with the approved O&M Manual. As of the date of this permit, the Water System does not have an O&M Manual that has been approved by the Secretary.

2. *Long Range Plan*: Under Chapter 21-4, section 4.2.2 of the Rule, all new Public Community Water Systems shall have a Long Range Plan approved by the Secretary. As

of the date of this permit, the Water System does not have a Long Range Plan that has been reviewed and approved by the Secretary.

3. *Record Drawings*: Under item C.5 of the construction permit (C-2976-13.0), the Water System must submit Record Drawings depicting the system as it was constructed, including any field modifications. As of the date of this permit, the Water System has not submitted Record Drawings.

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 August 15th, 2014, the Permittee shall develop and submit an electronic copy of an O&M Manual for review and approval by the Secretary.**
2. **On or before September 27th, 2014, the Permittee shall develop and submit an electronic copy of the Water System’s Long Range Plan to the Secretary for review and approval.**
3. **On or before September 5th, 2014, the Permittee shall submit Record Drawings and meet all other conditions outlined in the construction permit (C-2976-13.0).**

C. The Permittee shall submit a report to the Drinking Water and Groundwater Protection Division (Division) within fifteen (15) days after the required compliance date if the required actions have not been completed by the specified date. The Permittee 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 Permittee 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 1 of each year that the items on the compliance schedule remain uncorrected. The Permittee 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:

A. Source: The Water System purchases all of its water from the Alburgh Village Water System, WSID #5136 (Wholesaler). The Wholesaler has been determined to be a surface water system, subject to the Rule; the Long Term 1 Enhanced Surface Water Treatment Rule, 40 CFR 141.500-141.571; and the Long Term 2 Enhanced Surface Water Treatment Rule 40 CFR 141.700 – 141.722. The following source is connected to and supplies water to the Water System:

Source #	Source Name	Source Type	Source Yield (gpm)	Authorized Rate (gpm)
CC001	Lake Champlain (Alburgh Village Water System)	Surface Water Purchased (WSID #5136)	37.5 (Allocated – see III.G below)	37.5

B. Activities near the Permitted Source: Lake Champlain is vulnerable to contamination from a number of everyday activities. Potential sources of contamination (PSOCs) near the intake include *boat traffic* and other common surface water contaminants. The PSOCs that may influence the source water are assessed and managed by the Wholesaler, the Village of Alburgh Water Department (WSID #5136) through their Source Protection Plan (SPP). The plan must be updated and reviewed and approved by the Secretary every three years. The most recent update of the SPP was approved on July 3th, 2014.

C. Treatment Components, Processes, and Capacity: All water is treated by the Wholesaler and the Water System provides no additional treatment. The Wholesaler has the capability to introduce potassium permanganate and sodium hypochlorite at the intake for zebra mussel control. The Wholesaler adds a combined coagulant of alum and a non-ionic polymer for flocculation and coagulation pre-filtration. The water is then processed through a rapid sand filtration system. Post-filtration disinfection is achieved with ultraviolet light followed by sodium hypochlorite. Sodium fluoride is added for dental benefit after disinfection and prior to the 30,000 gallons clearwell. Prior to leaving the treatment facility sodium hydroxide is added to adjust pH for corrosion control.

D. Storage Components and Capacity: The Water System does not provide storage and relies on that of the Wholesaler.

E. Pump Stations: The Water System does not have any pump stations and relies on that of the Wholesaler.

F. Distribution System: The water distribution system is comprised of 8" diameter C900 PVC pipe, flushing-only hydrants, and associated appurtenances.

G. Permitted Water System Demand: The Water System is permitted to regularly serve a year-round residential equivalent population of about 150 people through 60 service connections. The Water System has been allocated a maximum of 54,000 gallons per day when received over a 24-hour period. This allocation equates to an average of 37.5 gallons per minute during a 24-hour period.

The source yield and design limitations (ex: treatment capacity, pump size, storage volume, etcetera) of the Water System and Wholesaler's water system were determined to have adequate capacity to meet the expected demand.

IV. Conditions, Requirements, and Restrictions

A. Water Quality Monitoring.

1. **Water Quality Monitoring Requirements.** The Permittee shall comply with all of the Drinking Water Quality Monitoring Requirements set forth in the Rule at the frequency described in the Rule. The Permittee 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 Permittee with a monitoring schedule in order to assist the Permittee with its obligation to comply with the requirements of the Rule.

2. **Notification of Water Quality Violations.** The Permittee 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).

3. **Reporting of Water Quality Analytical Testing Results.** The Permittee 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 Permittee shall submit a signed report to the Division once a month, no later than ten (10) days following the end of the month. The report must provide a summary of the Water System operation, including the amount of water received from the Wholesaler based on daily meter readings.

The Permittee must report the disinfectant residual in the distribution at a location and frequency corresponding to the approved bacteriological sampling plan, and verify the free chlorine concentrations (if no free chlorine is available, the Permittee must measure total chlorine concentration as well) on the laboratory reporting form.

C. Requirement for Certified Operator. The Permittee shall assure that the appropriate class of Vermont certified operator is available to operate the Water System as required by the Rule. "Available" means based on Water System size, complexity, and source water quality, a certified operator must be on site or able to be contacted as needed to initiate the appropriate action in a timely manner. If the Permittee is not a certified operator, the Permittee shall designate a certified operator to carry on the daily operations of the Water System. 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 Permittee must notify the Division with 24 hours of changing their certified operator.

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

E. Consumer Confidence Reports. The Permittee 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 Permittee 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. The Permittee shall operate the Water System in a manner consistent with the Water System's Operation & Maintenance (O&M) Manual, which is currently being finalized and pending approval by the Secretary (see Section II. Above). 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 Permittee 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 Permittee 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 Permittee 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. Use of Unpermitted Sources of Water. The Water System shall not use or connect to an unpermitted water source, including designated emergency sources, or hauled or bulk water, unless an emergency exists, (e.g. malfunctioning equipment, punctured storage tanks, unacceptable levels of contaminants with acute effects, acts of god that affect the functionality of the Water System, etc.) The unpermitted source shall be used for no more than 90 cumulative days unless the Permittee has submitted a written request to the Secretary for an extension and the Secretary has determined that there is good cause for granting an extension. When an unpermitted source is used in an emergency situation, the Permittee shall:

1. Notify the Division as soon as possible, but no later than within 12 hours of the connection and/or use; and
2. Issue either Boil Water or Do Not Drink notification to all users of the Water System within 12 hours of the connection and/or use.

I. Maintenance and Periodic Update of Approved Plans. The Permittee 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. Bacteriological Sampling Plan, dated July 1, 2014;
2. Lead and Copper Sampling Plan, dated July 1, 2014;
3. Disinfection Byproducts (DBP) Compliance Monitoring Sampling Plan, Stage 2, dated July 1, 2014; and
4. Source Protection Plan, last update approved July 3, 2014.

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

K. 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.

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

M. 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 Permittee 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 Permittee 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.

N. Right of Access to the Water System. By acceptance of this Permit, the Permittee agrees 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 Permittee 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.

O. Fees. The Permittee shall pay the annual operating fees specified in 3 V.S.A. §2822.

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

Q. Appeals. Pursuant to 10 V.S.A. Chapter 220, any appeal of this Permit must be filed with the clerk of the Environmental Court within 30 days of the date of this Permit in accordance with the Rule governing appeals to the Environmental Court.

R. 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.

S. 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 July 29, 2014.

Agency of Natural Resources
Department of Environmental Conservation
David K. Mears, Commissioner

By



Ellen E. Parr Doering, for
Christine Thompson, Director
Drinking Water and Groundwater Protection Division