



State of Vermont Department of Environmental Conservation

# WASTEWATER SYSTEM AND POTABLE WATER SUPPLY PERMIT

### LAWS/REGULATIONS INVOLVED

10 V.S.A. Chapter 64, Potable Water Supply and Wastewater System Permit Wastewater System and Potable Water Supply Rules, Effective September 29, 2007 Chapter 21, Water Supply Rules, Effective December 1, 2010

Landowner(s): Colleen Kole 2004 Revocable Trust Marc Kole 2004 Revocable Trust 2930 Oak Hollow Dr SE Grand Rapids MI 495061955

Permit Number: WW-5-7832

This permit affects the following properties in Morristown, Vermont:

Lot		Parcel	SPAN	Acres	Book/Page#'s	
1		17039	414-129-11892	9.50	Book:135 Page:720	

This project, consisting of a four bedroom, single family residence with a one bedroom, detached apartment on an existing, 9.50 acre parcel, utilizing a new, to be shared on-site wastewater disposal system and existing, to be shared on-site drilled well water supply, located at 787 Bliss Hill Road in Morristown, Vermont, is hereby approved under the requirements of the regulations named above subject to the following conditions.

#### 1. GENERAL

The project shall be completed as shown on the plans and/or documents prepared by Grenier Engineering, P.C., 1.1 (John D. Grenier P.E.), with the stamped plans listed as follows:

Title	Sheet No.	Plan Date
Replacement Septic System Site Plan & Details	1 of 1	10.16.18

- This permit does not relieve the landowner from obtaining all other approvals and permits PRIOR to construction 1.2 including, but not limited to, those that may be required from the Act 250 Environmental Commission; the Drinking Water and Groundwater Protection Division; the Watershed Management Division; the Division of Fire Safety; the Vermont Department of Health; the Family Services Division; or other State departments and local officials.
  - The conditions of this permit shall run with the land and will be binding upon and enforceable against the landowner and all assigns and successors in interest. The landowner shall record and index this permit in the Morristown Land Records within thirty, (30) days of issuance of this permit and prior to the conveyance of any lot subject to the jurisdiction of this permit.
- The landowner shall record and index all required installation certifications and other documents that are required to be filed under these Rules or under a specific permit condition in the Morristown Land Records and ensure that copies of all certifications are sent to the Secretary.
- No permit issued by the Secretary shall be valid for a substantially completed potable water supply and wastewater 1.5 system until the Secretary receives a signed and dated certification from a qualified Vermont Licensed Designer (or where allowed, the installer) that states:

"I hereby certify that, in the exercise of my reasonable professional judgment, the installation-related information submitted is true and correct and the potable water supply and wastewater system were installed in accordance with the permitted design and all the permit conditions, were inspected, were properly tested, and have successfully met those performance tests",

or which otherwise satisfies the requirements of §1-308 and §1-911 of the referenced rules.



- The project/lot is approved for a four bedroom single family residence with a one bedroom, detached apartment. No alterations to the existing building other than those indicated in this permit that would change or affect the water supply or wastewater system shall be allowed without prior approval by the Drinking Water and Groundwater Protection Division. Construction of additional nonexempt buildings including commercial and residential buildings is not allowed without prior permitting by the Drinking Water and Groundwater Protection Division and such permit may not be granted unless the proposal conforms to the applicable laws and regulations. No construction is allowed that will cause non-compliance with an existing permit.
- Each purchaser of any portion of the project shall be shown copies of the Wastewater System And Potable Water Supply Permit, the stamped plans, and Innovative/Alternative System Approval letter #2004-02-R4 for Enviro-Septic® (ES)) Pipe Leaching System) prior to conveyance of the lot. The owner of a property where an Innovative/Alternative System has been installed shall comply with all the conditions in the Innovative/Alternative Approval letter that is incorporated with this permit including a maintenance agreement for the system.
- 1.8 The project/lot is approved for wastewater disposal by construction and utilization of the site-specific Innovative/Alternative System wastewater system depicted on the stamped plans. The Drinking Water and Groundwater Protection Division shall allow no other method or location of wastewater disposal without prior review and approval.
- A qualified Vermont Licensed Designer, shall, upon completion and prior to placing the system in use, report in writing to the Division that the installation was accomplished in accordance with the Innovative/Alternative System Approval Letter, stamped plans and permit conditions. The Drinking Water and Groundwater Protection Division is to be notified if at any time the wastewater system fails to function properly and/or creates a health hazard.
- 1.10 The wastewater system serving the approved lot(s) is an Innovative/Alternative System and there are special requirements that apply. Please refer to the attached document titled Innovative/Alternative System Approval for the additional requirements that apply.
- By acceptance of this permit, the landowner agrees to allow representatives of the State of Vermont access to the property covered by the permit, at reasonable times, for the purpose of ascertaining compliance with the Vermont environmental and health statutes and regulations, and permit conditions.
- Any person aggrieved by this permit may appeal to the Environmental Court within 30 days of the date of issuance of this permit in accordance with 10 V.S.A. Chapter 220 and the Vermont Rules of Environmental Court Proceedings.

# 2.WATER SUPPLY

- The project/lot is approved for a shared potable water supply using a drilled or percussion bedrock well for 630 gallons of water per day provided the supply is located as shown on the stamped plan(s) and meets or exceeds the isolation distances, construction standards, and water quality standards required in the Water Supply Rule. The landowner shall operate the potable water supply in a manner that keeps the supply free from contamination. The landowner shall immediately notify the Division if the water supply system fails to function properly and becomes a "failed supply".
- The components of the potable water supply herein approved shall be routinely and reliably inspected during construction by a qualified Vermont Licensed Designer (or where allowed, the installer) who shall, upon completion and prior to occupancy of the associated building, report in writing to the Drinking Water and Groundwater Protection Division that the installation was accomplished in accordance with the referenced plans and permit conditions, as specifically directed in Condition #1.5 herein.
- Prior to use of the shared potable water supply by the one bedroom, detached apartment, the landowner shall obtain an amended permit or approval letter from the Drinking Water and Groundwater Protection Division. The landowner shall submit plans prepared by a qualified Vermont Licensed Designer for a water distribution system, including sizing calculations, specifications for pumps, hydropneumatic tanks, and storage facilities, to the Drinking Water and Groundwater Protection Division for approval.
- Prior to the use of the shared water supply system by the one bedroom, detached apartment, the landowner shall test the water for total coliform bacteria, arsenic, chloride, iron, manganese, nitrate, nitrite, odor, PH, sodium and uranium content and the water quality analyses shall be found to comply with the standards in the Water Supply Rules. All water quality tests shall be conducted at a laboratory certified by the Vermont Department of Health (a list of which can be found on the VDH website) to conduct the specific tests. Results of the water tests shall be submitted to the Drinking Water and Groundwater Protection Division for review and approval prior to use.

#### 3.WASTEWATER DISPOSAL

- The project/lot is approved for the disposal of wastewater in accordance with the design depicted on the stamped plan(s) for 630 gallons of wastewater per day. The system(s) shall be operated at all times in a manner that will not permit the discharge of effluent onto the surface of the ground or into the waters of the State. Should the system fail and not qualify for the minor repair or replacement exemption, the current landowner shall engage a qualified Vermont Licensed Designer to evaluate the cause of the failure and to submit an application to this office and receive written approval prior to correcting the failure.
- 3.2 The components of the sanitary wastewater system herein approved shall be routinely and reliably inspected during construction by a Vermont Licensed Designer (or where allowed, the installer) who shall, upon completion and prior to occupancy of the associated building, report in writing to the Drinking Water and Groundwater Protection Division that the installation was accomplished in accordance with the referenced plans and permit conditions, as specifically directed in Condition #1.5 herein.
- 3.3 The corners of the proposed primary wastewater area(s) shall be accurately staked out and flagged prior to construction with the flagging/staking being maintained until construction is complete.
- 3.4 The project/lot is approved for a shared mound wastewater system provided the mound is constructed in strict accordance with the following conditions:
  - a. The mound system is to be located and constructed as depicted on the plans that have been stamped by the Drinking Water and Groundwater Protection Division.
  - b. A qualified Vermont Licensed Designer shall inspect the mound system during critical stages of construction. This shall include the staking of the location of the mound, ensuring the site has been properly plowed prior to placement of the appropriate sand fill, the installation and testing of the distribution piping, final grading of the mound including side slopes, and pump station installation.
  - c. The construction of the mound shall adhere to the guidelines set forth in Section 1-913(f) of the above referenced rules.
  - d. Upon completion of construction, and prior to occupancy of any structure being served by the mound system, the inspecting consultant shall submit to the Drinking Water and Groundwater Protection Division a written certification stating the construction has been completed in accordance with the stamped plans and the permit.
- 3.5 The wastewater system for this project is approved for domestic type wastewater only except as allowed for water treatment discharges. No discharge of other type process wastewater is permitted unless prior written approval is obtained from the Drinking Water and Groundwater Protection Division.
- 3.6 No buildings, roads, water lines, earthwork, re-grading, excavation or other construction that might interfere with the installation or operation of the wastewater systems are allowed on or near the site-specific wastewater system or replacement area depicted on the stamped plans. All isolation distances that are set forth in the Wastewater System and Potable Water Supply Rules shall be adhered to and will be incorporated into the construction and installation of the wastewater system.
- This permit authorizes the landowner to construct a new wastewater system required to abate a health hazard created by the failure of the existing wastewater system serving the structure/residence. The landowner is required to continue measures to prevent wastewater from surfacing on top of the ground, entering surface waters of the State, or backing up into the existing residence until such time as the approved wastewater system is constructed, activated, and all the conditions of this permit are satisfied.
- 3.8 The landowner shall complete construction of the **replacement wastewater disposal system** approved by this permit **no later than May 1, 2019.** The landowner may request one extension of this deadline, provided the landowner makes the request in writing prior to the specified date, and shows good cause why construction cannot be completed by the stated date. If construction is not completed by the required deadline, this permit shall no longer remain valid for the purposes of authorizing the construction of the **replacement wastewater disposal system**.

3.9 A Homeowners' or Landowners' Association or equivalent legal entity shall be established (if applicable), and registered with the Secretary of State, or other legal mechanism shall be implemented, that shall provide for all the necessary rights and easements for the full operation, maintenance, and repair of the shared water supply and wastewater disposal systems.

Emily Boedecker, Commissioner Department of Environmental Conservation

Dated November 26, 2018

By

William E. Zabiloski Assistant Regional Engineer Montpelier Regional Office

Drinking Water and Groundwater Protection Division

cc;

Grenier Engineering, P.C. Morristown Planning Commission Presby Environmental, Inc.



State of Vermont
Department of Environmental Conservation
Drinking Water & Groundwater Protection Division
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802-585-4911 802-828-1541

Innovative/Alternative System Approval

General Use per §1-1001 of the
Wastewater System and Potable Water Supply Rules, September 29, 2007

Approval Number 2004-02-R4 Approval Date January 18, 2017

Vendor Information

Presby Environmental, Inc. 143 Airport Road Whitefield, NH 03598

Contact

David W. Presby, President Presby Environmental, Inc. 143 Airport Road Whitefield, NH 03598 Phone (800) 473-5298 Fax (603) 837-9864

Web: www.PresbyEnvironmental.com

Technology Name

Advanced Enviro-Septic® (AES); Enviro-Septic® (ES) and Simple Septic® (SS) Pipe Leaching System

Technology Type Gravelless Pipe Distribution System for Septic Tank Effluent

Expiration Date February 23, 2019

### Approval

The Advanced Enviro-Septic® (AES), the Enviro-Septic® (ES), and the Simple Septic® (SS) Pipe Leaching Systems may be used as part of a subsurface wastewater disposal system approved under the Wastewater System and Potable Water Supply Rules, effective September 29, 2007 (Rules) under the following conditions:

- 1. The pipe leaching systems must be designed, installed and operated as described in the Vermont Design and Installation Manual, dated July 2014, filed with the Agency of Natural Resources (Agency).
- 2. This approval is based on treatment only of domestic wastewater of low and moderate strength as specified in §1-915(a)(1)(C) & (D) of the Rules. No high strength wastewater shall be dispersed using this technology. An AES, ES and SS Pipe Leaching Systems shall not be used as a filtrate effluent disposal system.



- 3. The system may be used for both new and replacement systems,
- 4. If the Rules are revised during the term of this approval, this approval shall be revised as needed to conform to the revisions.
- 5. The Licensed Designer (Designer) shall provide a copy of this approval letter to any landowner who is a prospective purchaser of an AES, ES or SS Pipe Leaching System prior to the sale of the system and prior to the filing of any application for a site-specific approval by the Agency for the purchaser's property. The application filed with the Agency shall include the landowner's written acknowledgement of this approval letter. Prior to any sale of the property or completion of a sales agreement to sell the property, a copy of the site-specific permit shall be provided to the prospective purchaser.
- 6. When a project is subject to the Rules, site-specific permission for the use of this product is required in the form of a Wastewater System Potable Water Supply Permit.
- 7. A site-specific permit for the use of this product may be revoked if the system fails to function properly. Revocation of the permit will require that the use of the building be discontinued unless another wastewater disposal system is installed based on prior written approval by the Agency.
- 8. This approval is not a representation or guarantee of the effectiveness, efficiency or operation of an AES, ES or SS Pipe Leaching System.
- 9. Serial distribution shall be limited to 100 feet of pipe along the contour and 500 feet total.
- The Advanced Enviro-Septic® (AES) pipe is comprised of corrugated, perforated plastic pipe, Bio-Accelerator® fabric along its bottom which is surrounded by a layer of randomized plastic fibers and a sewn geo-textile fabric which provides over 40 sq. ft. of total surface area. The Enviro-Septic® (ES) pipe is comprised of corrugated, perforated plastic pipe which is surrounded by a layer of randomized plastic fibers and a sewn geo-textile fabric which provides over 25 sq. ft. of total surface area. The Simple Septic® (SS) pipe is comprised of corrugated plastic pipe which is surrounded by a single layer of sewn geo-textile fabric which provides over 15 sq. ft. of total surface area. The limited surface area of the SS as compared with the AES and ES may result in a shorter lifespan than the AES and ES pipe leaching systems.

### Landowner Requirements

- 1. A copy of the permit shall be provided to any prospective purchaser prior to the sale.
- 2. Each new landowner of the property shall inform the appropriate Regional Environmental Office of the Agency within 30 days of the transfer of the property and include the name and mailing address of the new owner.

### Vendor Requirements

- 1. The vendor shall submit an annual report to the Agency by April 1 of each year containing the following information for the 12-month period ending December 31 of the previous year:
  - A. New permitted systems installed in Vermont for the previous year and shall include:
    - i. Assigned Wastewater Permit Number:
    - ii. Physical and landowner mailing addresses;
    - iii. Name of current landowner:
    - iv. Name of Designer providing the installation certification; and
    - v. Name of installer.
  - B. Existing permitted systems with known changes in ownership shall include the Wastewater Permit Number; the physical and mailing address, and the name of the current landowner.
  - C. All known problems, damages and/or failures, including:
    - i. Description of the issues;
    - ii. Potential/known causes of problems;
    - iii. System operability;
    - iv. Recommended repair/remediation;
    - v. Date(s) of repair/remediation; and
    - vi. System effectiveness.

Note: Repairs that are not defined by the Rules as a "Minor Repair" require approval by the Division prior to making the repair.

- D. A list of names of Designers and Installers trained by the vendor.
- 2. The vendor shall train and certify Designers and installers in the proper use and installation of the AES, ES or SS pipe leaching systems.

# Design and Review Conditions

The following conditions will be used by the Agency in reviewing permit applications that include an Advanced Enviro-Septic®, Enviro-Septic®, or Simple Septic® Pipe Leaching System:

# **Design and Application**

- 1. The Designer shall specify which pipe leaching system is to be installed; the Advanced Enviro-Septic®, Enviro-Septic®, or Simple Septic® Pipe Leaching System;
- 2. The leaching system shall be designed in accordance with the approved Vermont Design and Installation Manual.

- 3. The designer shall assure that the system will properly function in all seasons.
- 4. The designer must assess the ventilation path for the particular application and make any necessary provisions to assure proper flow and control of odor emissions.
- 5. The designer shall provide the landowner with written guidance on the maintenance requirements and homeowner responsibilities in the care and use of an onsite wastewater system according to the AES, ES or SS pipe leaching system requirements for use of the product.
- 6. The designer shall include in the design a septic tank effluent filter with easy access for inspection and cleaning.

## **Installation Inspection**

- 1. The specified pipe leaching system shall be installed in accordance with the approved plans and under the instruction and guidance of an installer/inspector trained by the vendor.
- 2. The leaching system shall be inspected by a Licensed Class 1 Designer or a Licensed Class B Designer, approved by the Vendor, during installation of the system and installation of all tanks before backfilling, and after backfilling and grading is complete. The inspection shall include checking for levelness of the pipes, and inspecting for damage and proper assembly. The Designer shall inspect all transport piping for proper installation and watertightness before backfilling.
- 3. A letter certifying that the system is correctly installed (including the language specified in §1-308 of the Rules) shall be provided electronically to the vendor and the approving Regional Office that issued the permit.
- 4. It is acceptable to substitute AES for specified ES or SS pipe; or to substitute ES for specified SS pipe for permitted wastewater designs. The above described substitutions may be accomplished in the installation certification and record drawing. All other substitutions require a Wastewater System and Potable Water Supply Permit amendment.

#### Permitting

1. The permit shall run with the land.

Effective Date: February 23, 2017

**Ernest Christianson** 

Regional Office Program Manager