

State of Vermont
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Agency of Natural Resources

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# Innovative/Alternative System Approval For General Use

Presby Environmental Advanced Enviro-Septic® and Enviro-Septic®

**Approval Number:** 2004-02-R7 **Approval Date:** September 20, 2019 **Expiration Date:** September 20, 2021

#### **Vendor Information**

Presby Environmental, Inc., wholly owned subsidiary of Infiltrator Water Technologies 143 Airport Road Whitefield, NH 03598

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#### Contact

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## **Technology Names**

Advanced Enviro-Septic® (AES) Enviro-Septic® (ES)

#### **Technology Type**

Gravelless Pipe Wastewater Distribution and Treatment System for Septic Tank Effluent

## I. Approval Conditions

The Advanced Enviro-Septic<sup>®</sup> (AES) and Enviro-Septic<sup>®</sup> (ES) wastewater distribution and treatment systems may be used as part of a subsurface wastewater disposal system approved under the Wastewater System and Potable Water Supply Rules, effective April 12, 2019 (Rules), with the following conditions:

1. The AES and ES wastewater distribution and treatment systems must be designed, installed, and operated as described in the "Vermont Design and Installation Manual for Advanced Enviro-Septic® & Enviro-Septic® Wastewater Treatment Systems" (Manual), dated September 2019, filed with the Agency of Natural Resources (Agency). System sizing must be in accord with the Manual and the Vermont Rules. The allowable application rate documented in Manual is up to two times that allowed for a conventional pipe and stone system based on the application of septic tank effluent.

- 2. This Approval is based on treatment of domestic wastewater of low strength only as specified in §1-805 of the Rules. No high strength wastewater shall be dispersed using this technology. The AES and ES wastewater distribution and treatment systems shall not be used as a filtrate effluent disposal system (as defined in §1-904 of the Rules).
- 3. The AES and ES wastewater distribution and treatment system may be used for both new and replacement systems.
- 4. If the Rules are revised during the term of this Approval, this Approval may be revised as needed to conform to the revisions.
- 5. Site-specific permit for the use of this product is required in the form of a Wastewater System and Potable Water Supply Permit.
- 6. 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.
- 7. The Licensed Designer (Designer) shall provide a copy of this Approval to any landowner who is a prospective purchaser of an AES or ES wastewater distribution and treatment systems prior to the sale of the system and prior to the filing of any application for a site-specific Permit by the Agency for the purchaser's property. Prior to any sale of the property or completion of a sales agreement to sell the property, a copy of the site-specific Permit and technology-specific Approval shall be provided to the prospective purchaser. The application filed with the Agency shall include the landowner's written acknowledgement of this Approval.
- 8. This Approval is not a representation or guarantee of the effectiveness, efficiency or operation of an AES or ES wastewater distribution and treatment system.
- 9. This Approval shall expire on the date stated above. Applications for renewal of this Approval shall be submitted 45 days before the expiration date. The renewal request shall include a description of any changes to the equipment, technical specifications and drawings, installation requirements, operation and maintenance requirements, and homeowner's manuals. If new models are introduced or changes are made to the technology, the vendor shall submit detailed descriptions of any modifications to existing approved models as part of the renewal application.

#### **II.** Landowner Requirements

1. A copy of the site-specific Permit and technology-specific Approval shall be provided to any prospective purchaser prior to the sale.

#### **III.** Vendor Requirements

- 1. The vendor shall train and certify Designers and installers in the proper use and installation of the Advanced Enviro-Septic® and Enviro-Septic® wastewater distribution and treatment systems.
- 2. 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. A list of names of Designers and Installers trained by the vendor.
  - B. 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.

## IV. Design and Review Conditions

The following conditions will be used by the Agency in reviewing Permit applications that include an Advanced Enviro-Septic® or Enviro-Septic® wastewater distribution and treatment system:

#### **Design and Application**

- 1. The Designer shall specify which pipe leaching system is to be installed; the Advanced Enviro-Septic® or Enviro-Septic® wastewater distribution and treatment system.
- 2. The system shall be designed according to the "Vermont Design and Installation Manual for Advanced Enviro-Septic® & Enviro-Septic® Wastewater Treatment Systems", dated September 2019.
- 3. The designer shall assure that the system will properly function in all seasons.
- 4. The designer must assess the ventilation path for the 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 or ES wastewater distribution and treatment 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 wastewater disposal 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 wastewater disposal system shall be inspected by a Licensed Designer Class 1 or Class B, 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 §1-311 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 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: September 20, 2019

Graham Bradley

Innovative Alternative Approvals