



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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### **APPROVAL FOR REMEDIAL USE - REVISED**

Pursuant to Title 5, 310 CMR 15.000

Name and Address of Applicant:

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

Trade name of technology and model: **Presby Enviro-Septic Leaching System** (hereinafter called the "System"). The "Massachusetts Enviro-Septic® Wastewater Treatment System Quick Reference Guide" including schematic drawings of typical Systems, a technology checklist, and a System Installation Form are part of this Remedial Use Approval.

Transmittal Number: X233395  
Date of Issuance: August 16, 2010, revised November 8, 2011  
Date of Expiration: August 16, 2015

### **Authority for Issuance**

Pursuant to Title 5 of the State Environmental Code, 310 CMR 15.000, the Department of Environmental, Protection hereby issues this Approval to: Presby Environmental, Inc., 143 Airport Road, Whitefield, NH 03598 (hereinafter "the Company"), approving the System described herein for Remedial Use in the Commonwealth of Massachusetts. Sale and use of the System are conditioned on compliance by the Company and the System owner with the terms and conditions set forth below. Any noncompliance with the terms or conditions of this Approval constitutes a violation of 310 CMR 15.000.

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David Ferris, Director  
Wastewater Management Program  
Bureau of Resource Protection

November 8, 2011  
Date

## **I. Purpose**

1. This Remedial Use Approval authorizes, with the necessary permits and approvals required by 310 CMR 15.000, the use and installation of the System in Massachusetts.
2. The System may only be installed where conditions meet the criteria of *Approval for Remedial Use*, 310 CMR 15.284(2). The System is an alternative system approved in accordance with 310 CMR 15.280 through 15.289 and is used to treat and dispose of wastewater.
3. This Approval for Remedial Use allows the use of the System only where the local approving authority finds that the System is for upgrade of a failed, failing or nonconforming system with no increase in flow. The Title 5 design flow for the facility must be less than 10,000 gallons per day.

## **II. Design and Construction Standards**

1. The System is a subsurface unit that replaces a soil absorption system (SAS) designed in accordance with 310 CMR 15.000. The System consists of an 11 5/8-inch diameter corrugated, high-density plastic pipe with a 9.5-inch interior diameter and a standard length per unit of 10 feet. The exterior of the pipe has ridges on the peak of each corrugation. The pipe is perforated with eight holes equally distributed around its inner circumference. Each hole has a plastic skimmer extending inwards. The exterior of the pipe shall have a minimum of two layers of material. The inner layer shall be a thick layer of coarse, randomly oriented polypropylene fibers. The outer layer shall be a non-woven geo-textile polypropylene fabric. Connectors designed to connect pipe units together are required. The System also includes a minimum six inches of sand, specified as concrete sand meeting ASTM C-33 (also called 'System sand'), surrounding the pipe on all sides by a minimum of six inches.
2. To upgrade or replace an existing failed or nonconforming system where a conventional system designed in accordance with the standards of 310 CMR 15.100 through 15.255 could be feasibly built on-site, with the exception of providing a reserve area (15.248), an Alternative System approved pursuant to 310 CMR 15.284 (remedial use), may only be installed, provided that:
  - a) there is no increase in the actual or proposed design flow;
  - b) the Designer shows on the plans the area for an approvable conventional system designed in accordance with the standards for new construction of 310 CMR 15.100 through 15.255;
  - c) the record drawings, on file with the local approving authority, shall clearly indicate the area for the conventional system is reserved for the sole purpose of upgrading the on-site sewage disposal system without any increase in flow;
  - d) the installation of the Alternative System and the System Owner shall not disturb the site in any manner that would render it unusable for the future installation of a conventional system designed in accordance with the standards for new construction of 310 CMR 15.100 through 15.255.

- e) no deviation from any of the siting and design requirements of 310 CMR 15.000 shall be granted by the local approving authority under the LUA provisions of 310 15.405, except as allowed by Paragraphs II.4 and II.5.
3. To upgrade or replace an existing failed or nonconforming system, an Alternative System approved pursuant to 310 CMR 15.284 (remedial use) may be installed where a conventional system designed in full compliance with the standards for new construction of 310 CMR 15.100 through 15.255 cannot be feasibly built on-site, provided that:
- a) there is no increase in the actual or proposed design flow;
  - b) the Designer demonstrates that the impact of the proposed Alternative System has been considered and the design requirements of 310 CMR 15.000 have been varied to the least degree necessary so as to allow for both the best feasible upgrade within the borders of the lot and have the least effect on public health, safety, welfare and the environment;
  - c) the Designer shows on the plans an area for the best feasible conventional upgrade without the use of any Alternative System, in the event that the Alternative System fails or is not capable of providing equivalent environmental protection;
  - d) the installation of an Alternative System, including all components and the soil absorption system, shall not disturb the site in any manner that would render it unusable for the future installation of the best feasible conventional upgrade;
  - e) the record drawings, on file with the local approving authority, shall clearly indicate the area reserved for the best feasible conventional upgrade;
  - f) the System Owner shall not construct any permanent buildings or structures in an area for the best feasible conventional upgrade or disturb the site in any manner that would render the area unusable; and
  - g) no deviation from any of the siting and design requirements of 310 CMR 15.000 shall be granted by the local approving authority under the LUA provisions of 310 15.405, except as allowed by Paragraphs II.4 and II.5.
4. Alternative Design Standard to 310 CMR 15.242(1)(a) and 15.245(4), Effluent Loading Rates – For the upgrade or replacement of an existing failed or nonconforming system, Systems sited in soils with a percolation rate of 60 minutes or less per inch, the size of the SAS shall be sized with 40 percent less effective leaching area than required when using the loading rates for gravity systems of 310 CMR 15.242(1)(a).
- For soils with a recorded percolation rate of between 60 and 90 minutes per inch, the size of the SAS shall be sized with 40 percent less effective leaching area than required when using the loading rate of 0.15 gpd/square foot as specified by 310 CMR 15.245(4).
- No reduction greater than 40% in the required effective leaching area is allowed, **including any reductions** under a LUA or a variance. Other deviations to design standards, except the effective leaching area, may be granted under LUA or a variance.

The required effective leaching area of the SAS may be reduced in accordance with the above requirements, except a minimum of 400 square feet of effective leaching area shall be provided if any proposed reduction in the leaching area would result in less than 400 square feet of effective leaching area. Where 400 square feet of effective leaching is not feasible, the greatest effective leaching area shall be installed provided that no more than a 40 percent reduction is taken.

5. Except for the modifications to design requirements allowed under a LUA or the Approval, any further deviation from the siting and design requirements of 310 CMR 15.000 for the upgrade or replacement of an existing failed or nonconforming system shall require the following:
  - a) The applicant may request the approving authority to grant a variance and then request approval from the Department pursuant to 310 CMR 15.410 through filing a BRPWP 59b application; and/or
  - b) Pursuant to 310 CMR 15.284 (remedial use), the applicant may request the Department's Approval for Remedial Use of a System on a site-specific basis. The proposed site-specific use of the System in a remedial situation must first be approved by the local approving authority and then a BRPWP 64c permit application must be submitted to the Department. The Designer must demonstrate that the impact of the proposed Alternative System has been considered and the design requirements of 310 CMR 15.000 have been varied to the least degree necessary so as to allow for both the best feasible upgrade within the borders of the lot and have the least effect on public health, safety, welfare and the environment. The Department will consider one of the following alternative design standards without the need for obtaining a variance under 310 CMR 15.400:
    - i. A proposed reduction of up to 2 feet in the required four feet of naturally occurring pervious material layer required by 310 CMR 15.240(1) provided that it has been demonstrated that a greater depth of naturally occurring pervious does not exist anywhere on the site; or
    - ii. A proposed reduction of up to 2 feet in depth to groundwater required by 310 CMR 15.212, provided that any proposed reduction in the depth to groundwater may only be approved when:
      - (1) An approved Soil Evaluator who is a member or agent of the local Approving Authority determines the high groundwater elevation; and
      - (2) No reduction is granted under LUA for setbacks from public or private wells, bordering vegetated wetlands, surface waters, salt marshes, coastal banks, certified vernal pools, water supply lines, surface water supplies or tributaries to surface water supplies, or drains which discharge to surface water supplies or their tributaries, is allowed.

A reduction of up to 40% in the required effective leaching area is allowed in conjunction with one of the alternative design standard options (i) or (ii) above, provided that no greater reduction in the effective leaching area is approved under LUA or a variance. However, other deviations to design standards may be granted by the local approving authority under LUA in conjunction with one of the alternative design standard options (i) or (ii) above.

6. The System shall not be proposed or used in conjunction with other alternative secondary treatment or nitrogen reduction technologies for any purpose, including but not limited to, meeting nitrogen limits, obtaining approval for a further reduction in effective leaching area, obtaining approval for a further reduction in depth to groundwater, or obtaining approval for a reduction in the depth of pervious material required.  
  
The proposed use of the System is not permitted in a nitrogen sensitive area (NSA) as defined in 310 CMR 15.215 serving facilities with actual or design flows of 2,000 GPD or greater which must include treatment with an RSF or equivalent technology as required by 310 CMR 15.202(1).
7. The System shall be installed in a bed or field configuration, as defined in 310 CMR 15.252. The effective leaching area shall be the bottom area (length times width) of the field or bed as presented in the Company's "Massachusetts Enviro-Septic® Wastewater Treatment System Quick Reference Guide".
8. Unless determined necessary by the Designer or Company, the System shall not be used with pressure distribution for any design flow and the System, when used for a facility with a design flow of 2000 gpd or greater, is exempt from the requirement for pressure distribution under 310 CMR 15.231.
9. Depth to the estimated seasonal high groundwater elevation shall be measured from the bottom of the System sand below the Enviro-Septic Leaching System.
10. The System sand shall meet ASTM C-33 specifications.
11. Systems shall be installed with differential venting for aeration and inspection access at end of each run of pipe, section or serial bed and whenever the System is installed under impervious surfaces.
12. The System shall be designed and installed using distribution boxes allowing for inspection access. The pipe between the distribution box and the System shall be installed at a minimum slope of 0.02 feet/foot.
13. The System shall include an inspection port installed within the bed or field as required by 310 CMR 15.240(13). The port bottom shall be set to the elevation where the System sand layer meets the naturally occurring soil or Title 5 fill.
14. Serial distribution laterals shall be limited to no more than 500 gpd and must be laid level. Multi-level systems shall not be allowed.
15. System component material specifications for the pipe, plastic components, fabric and sand shall comply with the specifications identified in the initial I/A technology approval. Prior approval from the Department for any change from these specifications shall be requested in writing.

### **III. General Conditions**

1. The provisions of 310 CMR 15.000 are applicable to the design, installation, use and operation of a system utilizing an approved or certified alternative technology, except those provisions that specifically have been varied by the conditions of this Approval.
2. All plans and specifications shall be designed in accordance with 310 CMR 15.220.
3. The facility served by an alternative system and the System itself shall be open to inspection by the Department and the Local Approving Authority at all reasonable times.
4. The Department and/or the Local Approving Authority may require the owner of the System to cease operation of the System and/or to take any other action necessary to protect public health, safety, welfare and the environment.
5. The Department has not determined that the performance of the System will provide a level of protection to public health and safety and the environment that is at least equivalent to that of a sewer system. No System shall be installed, upgraded or expanded, if it is feasible to connect the facility to a sanitary sewer, unless as allowed by 310 CMR 15.004. When a sanitary sewer connection becomes feasible, the facility served by the System shall be connected to the sewer, within 60 days of such feasibility, and the System shall be abandoned in compliance with 310 CMR 15.354, unless a later time is allowed, in writing, by the approving authority.
6. Provided that the local approving authority approves the Alternative System in conformance with the Department's Technology Approval, Department review and approval of the site-specific System design and installation is not required unless the Department determines on a case-by-case basis, pursuant to its authority at 310 CMR 15.003(2)(e), that the proposed System requires Department review and approval.

### **IV. Conditions Applicable to the System Owner**

1. This Approval shall be binding on the System Owner and on its agents, contractors, successors, and assigns. Violation of the terms and conditions of this Approval by any of the foregoing persons or entities, respectively, shall constitute violation of this Approval by the System Owner unless the Department determines otherwise.
2. The System Owner shall obtain all necessary permits and approvals required by 310 CMR 15.000 prior to the installation and use of the System in Massachusetts.
3. The System is approved for the treatment and disposal of sanitary sewage only. Any wastes that are non-sanitary sewage generated or used at the facility served by the System shall not be introduced into the System and shall be lawfully disposed.
4. Prior to obtaining a Certificate of Compliance for installation of the System, the System Owner shall record in the chain of title for the property served by the alternative system in the Registry of Deeds or Land Registration Office, as applicable, a Notice disclosing

both the existence of the alternative on-site system and the Department's Remedial Use Approval of the system technology. As proof of recordation, the System Owner shall submit the following to the Local Approving Authority: (i) a certified Registry copy of the Notice bearing the book and page/or document number; and (ii) if the property is unregistered land, a Registry copy of the System Owner's deed to the property, bearing a marginal reference on the System Owner's deed to the property. The Notice to be recorded shall be in the form of the Notice provided by the Department.

5. For facilities served by Alternative Systems approved pursuant to 310 CMR 15.284 (remedial use), prior to signing any agreement to transfer any or all interest in the property served by the System, or any portion of the property, including any possessory interest, the System Owner shall provide written notice, as required by 310 CMR 15.287(5) of all conditions contained in the Approval to the transferee(s). Any and all instruments of transfer and any leases or rental agreements shall include the notice as an exhibit attached thereto and made a part thereof a copy of the Approval for the System. The System Owner shall send a copy of such written notification(s) to the Local Approving Authority within 10 days of giving such notice to the transferee(s).
6. The System Owner shall at all times have the installed System properly operated and maintained in accordance with the most recent O&M provisions of this Approval for the alternative technology, and in accordance with any additional requirements of the Approving Authority.
7. The System owner shall furnish the Department any information that the Department requests regarding the operation and performance of the System, within 21 days of the date of receipt of that request.
8. No System owner shall authorize or allow the installation of the System other than by a person trained by the Company to install the System.
9. The System shall not be required to be inspected at any greater frequency than would be required if the facility was served by a conventional system per Title 5, 310 CMR 15.000, unless in accordance with any Company, Designer, or local approving authority requirements or recommendations.

## **V. Conditions Applicable to the Company**

1. This Approval shall be binding on the Company and its officers, employees, agents, contractors, successors, and assigns. Violation of the terms and conditions of this Approval by any of the foregoing persons or entities, respectively, shall constitute violation of this Approval by the Company unless the Department determines otherwise.
2. The Approval shall only apply to model units with the same model name or designations specified in this approval and meet the same specifications, operating requirements, and plans, as provided by the manufacturer at the time of the application. Any proposed modifications of the units, installation requirements, or operating

requirements shall be subject to the review of the Department for inclusion under a modification of the Approval.

3. The Company shall include copies of the Approval with each System that is sold. In any contract executed by the Company for distribution or re-sale of the System, the Company shall require all vendors, distributors, and resellers to provide each purchaser of the System with copies of the Approval and the procedures in V (4).
4. The Company shall provide, in printed or electronic format, the approved System design, installation, O&M, and Owner's manuals, and any approved updates associated with this technology Approval, to the System Owners, Designers, Installers, vendors, resellers, and distributors of the System. The Company shall submit to the Department a copy of any changes to the manual(s) with reasons for each change, at least 30 days prior to issuance.
5. The Company shall notify all System Owners, resellers, and distributors of changes to the Approval within 60 days of issuance by the Department.
6. The Company shall notify the Department's Director of the Wastewater Management Program at least 30 days in advance of the proposed transfer of ownership of the Technology for which the Approval is issued. Said notification shall include the name and address of the proposed owner containing a specific date of transfer of ownership, responsibility, coverage and liability between them. All provisions of the Approval applicable to the Company shall be applicable to successors and assigns of the Company, unless the Department determines otherwise. In any contract executed by the Company for distribution or re-sale of the System, the Company shall require the distributor or re-seller to provide each purchaser of the System with copies of this Approval and the manual(s) described in Section V (4).
7. The Company shall furnish the Department any information that the Department requests regarding the Technology within 21 days of the date of receipt of that request.
8. If the Company wishes to continue the Approval after its expiration date, the Company shall apply for and obtain a renewal of the Approval. The Company shall submit a renewal application at least 180 days before the expiration date of the Approval, unless written permission for a later date has been granted in writing by the Department. Upon receipt of a timely and complete renewal application, the Approval shall continue in force until the Department has acted on the renewal application.
9. The Company shall maintain the following information for the Systems installed in Massachusetts:
  - a) the address of each facility where the Technology was installed, the Owner's name and address (if different), the type of use (e.g. residential, commercial, institutional, etc.), the design flow;
  - b) the installation date, start-up date, current operational status; and
  - c) a summary of system failures, system malfunctions, and violations of the Approval with the date of each event and corrective actions taken to reach compliance,

including but not limited to: design changes; installation changes; operation/maintenance changes; monitoring changes; and/or changes in roles and responsibilities for the manufacturer, vendors, designers, installers, operators, and owners.

By February 15<sup>th</sup> of each year, the Company shall submit a report to the Department, signed by a corporate officer, general partner or Company owner that identifies the specific alternative technology approval for which the annual report is being filed and contains only the information required by Paragraph V.9(c) above for the previous calendar year for all installed Systems. In the absence of any system failures, system malfunctions, or violations, the Company shall submit a letter certifying, to the best of their knowledge, all installed Systems are in compliance.

10. The Company shall institute and maintain a training program in the proper design and installation of its System and provide a training course at least annually for prospective designers and installers. The Company shall provide each trainee with the Company's system specifications and the design, installation, O&M, and Owner's manuals. The Company shall certify that installers have completed the Company's training class, maintain a list of certified installers, submit a copy to the Department, and update the list annually. Updated lists shall be forwarded to the Department with the annual report submittal.
11. The Company shall comply with 310 CMR 15.000 and all Department policies and guidance that apply and as they may be amended from time to time.
12. Prior to the submission of an application for a Disposal System Construction Permit (DSCP), for all nonresidential Systems and Systems with design flows of 2,000 gpd or greater, the Company shall submit to the Designer and the System Owner, a certification by the Company or its authorized agent that the design conforms to the Approval and all Company requirements and that the proposed use of the System is consistent with the Technology's capabilities. The authorized agent of the Company responsible for the design review shall have received technical training in the Company's products.
13. The Company shall not sell the Technology to an Installer unless the Installer is trained to install the System by the Company. The Company shall require, by contract, that distributors and resellers of the Technology shall not sell the Technology to an Installer unless the Installer is trained to install the System by the Company.

## **VI. Conditions Applicable to Installers of the System**

1. No installer shall install the System unless the System Installer has been trained by the Company on installation of the System or the installation is done under the responsible supervision of a Company trained representative.
2. Prior to the commencement of construction, the System Installer must certify in writing to the Designer, the Approving Authority, and the System Owner that (s)he is a locally approved System Installer. The System Installer shall certify that (s)he has received

- appropriate training by the Company or the System Installer shall identify the Company trained representative who will oversee the installation.
3. The System Installer shall install the System in accordance with Company training on the installation of the System and the conditions of this Approval.
  4. Installers shall complete the System Installation Form and forward a copy to the Company and the local approving authority.
  5. The Installer shall provide the System Owner and the local Approving Authority with a bill of lading certifying that the System sand meets ASTM C-33.
  6. The Installer shall maintain on-site, at all times during construction, a copy of the approved plans, the design, installation, O&M, and Owner's manuals and a copy of the Approval.
  7. Prior to the issuance of a Certificate of Compliance by the local approving authority, the System Installer must provide, in addition to the certifications required by 310 CMR 15.021(3), certification in writing to the local approving authority that the System has been constructed in compliance with the terms of this Approval.

## **VII. Standard Conditions Applicable to the Designer**

1. The Designer shall be a Massachusetts Registered Professional Engineer or a Massachusetts Registered Sanitarian, including when designing systems for repair, provided that such Sanitarian shall not design a system to discharge more than 2,000 gallons per day.
2. Prior to the application for a DSCP, the Designer shall provide the System Owner with a copy of this Approval.
3. Prior to the issuance of a Certificate of Compliance by the local approving authority, the Designer must provide, in addition to the certifications required by 310 CMR 15.021(3), certifications in writing to the local approving authority that the System has been constructed in compliance with the terms of the Approval.

## **VIII. Reporting**

1. All notices and documents required to be submitted to the Department by this Approval shall be submitted to:  
Director  
Wastewater Management Program  
Department of Environmental Protection  
One Winter Street - 5th floor  
Boston, Massachusetts 02108

**IX. Rights of the Department**

1. The Department may suspend, modify or revoke this Approval for cause, including, but not limited to, non-compliance with the terms of this Approval, non-payment of the annual compliance assurance fee, for obtaining the Approval by misrepresentation or failure to disclose fully all relevant facts or any change in or discovery of conditions that would constitute grounds for discontinuance of the Approval, or as necessary for the protection of public health, safety, welfare or the environment, and as authorized by applicable law. The Department reserves its rights to take any enforcement action authorized by law with respect to this Approval and/or the System against the owner of the System and/or the Company.

**X. Expiration Date**

1. Notwithstanding the expiration date of this Approval, any System installed prior to the expiration date of this Approval, and approved, installed and maintained in compliance with this Approval (as it may be modified) and 310 CMR 15.000, may remain in use unless the Department, the local approving authority, or a court requires the System to be modified or removed, or requires discharges to the System to cease.