Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

REMEDIAL USE APPROVAL
Pursuant to Title 5, 310 CMR 15.000

Name and Address of Applicant:

Infiltrator Systems, Inc.
P.O. Box 768
4 Business Park Road
Old Saybrook, CT 06475

Trade name of technology and models: Infiltrator ATL System (hereinafter called the "System"). The Installation Instructions including schematic drawings of typical Systems, an inspection checklist, and a System Installation Form are part of this Approval.

Transmittal Number: X262133
Date of Issuance: February 28, 2018

Authority for Issuance

Pursuant to Title 5 of the State Environmental Code, 310 CMR 15.000, the Department of Environmental Protection (MassDEP or the Department) hereby issues this Approval for Remedial use to: Infiltrator Systems, Inc., 4 Business Park Road, Old Saybrook, CT 06475 (hereinafter "the Company"), certifying the System described herein for Remedial Use in the Commonwealth of Massachusetts. The sale, design, installation, and use of the System are conditioned on compliance by the Company, the Designer, the Installer 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.

_____ February 28, 2018
Marybeth Chubb, Acting Section Chief — Date
Bureau of Water Resources
Wastewater Management Program

Technology Description

The system is an alternative subsurface Soil Absorption System (SAS) that replaces a conventional SAS designed in accordance with 310 CMR 15.000. The Infiltrator ATL System consists of the 12-inch diameter Infiltrator ATL conduit rows and the certified ASTM C-33 system sand. The ATL conduit row includes 4-inch diameter pipe covered by large-diameter synthetic aggregate, coarse geotextile, small-diameter synthetic aggregate, and the last layer is a fine geotextile. The system sand dimensions required for ATL system configurations are as follows:

- a minimum of 6 inches below the Infiltrator ATL conduit rows,
- a minimum of 12 inches between adjacent the Infiltrator ATL conduit rows, and
- a minimum of 12 inches on both sides and both ends of the Infiltrator ATL conduit footprint.

The Infiltrator ATL System can be installed in field or bed configurations.

Conditions of Approval

The term "System" refers to the Alternative Soil Absorption System in combination with the other components of an on-site treatment and disposal system that may be required to serve a facility in accordance with 310 CMR 15.000.

The term "Approval" refers to the technology-specific Special Conditions, the *"Standard Conditions for Alternative Soil Absorption Systems with General Use Certification and/or Approved for Remedial Use"*, the General Conditions of 310 CMR 15.287, and any Attachments.

For Alternative Soil Absorption Systems that have been issued Remedial Use Approval for the upgrade or replacement of an existing failed or nonconforming system, the Department authorizes reductions in the effective leaching area (310 CMR 15.242), depth to groundwater (310 CMR 15.212), and/or depth of naturally occurring pervious material (310 CMR 15.240(1)), subject to the *"Standard Conditions for Alternative Soil Absorption Systems with General Use Certification and/or Approved for Remedial Use"*, and subject to the Special Conditions below applicable to this Technology.

Special Conditions

1. The System is an approved Patented Sand Filter System for use as an Alternative Soil Absorption System. In addition to the Special Conditions contained in this Approval, the System shall comply with all Standard Conditions for Alternative Soil Absorption Systems, except where stated otherwise in these Special Conditions.
2. This Approval applies to the installation of a System for the upgrade or replacement of an existing failed or nonconforming system, provided that the facility meets the siting requirements for upgrades, as provided in paragraph II(7) and II(9) of the Standard Conditions. For the upgrade or replacement of an existing failed or nonconforming system, all installed Systems shall also comply with the Deed Notice requirement of paragraph II(23) and the transferee notification requirements of paragraph IV(1) of the Standard Conditions. The proposed use of the System shall

also comply with any other Standard Conditions which pertain wholly or in part to upgrades of existing systems.

3. SAS Design - 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 effective leaching area is allowed, including any reduction under a LUA or variance.

   The required effective leaching area of the SAS reduced in accordance with the above requirements, must provide a minimum of 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.

4. Alternative Design Standards - Provided that 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 the least effect on public health, safety, welfare and the environment, the local approving authority may allow any combination of the following alternative design standards without the need for granting a variance under 310 CMR 15.400 or obtaining Department approval:

   a. If a reduction in the depth to groundwater required by 310 CMR 15.212 is necessary, the depth to groundwater may be reduced by up to 2 feet, resulting in a minimum separation distance of two feet in soils with a recorded percolation rate of more than two minutes per inch and three feet in soils with a recorded percolation rate of two minutes or less per inch, measured from the bottom of the soil absorption system to the high groundwater elevation, only if;

      i. An approved Soil Evaluator who is a member or agent of the local Approving Authority determines the high groundwater elevation;

      ii. 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; and

      iii. In accordance with 310 CMR 15.212(2), for systems with a design flow of 2,000 gpd or greater, the separation to high groundwater as required by 310 CMR 15.212(1) shall be calculated after adding the

effect of groundwater mounding to the high groundwater elevation as determined pursuant to 310 CMR 15.103(3).

b. If a reduction in the depth of the naturally occurring pervious material layer is necessary, a proposed reduction of up to 2 feet may be allowed in the four feet of naturally occurring pervious material layer required by 310 CMR 15.240(1) provided that it has been demonstrated that no greater depth in naturally occurring pervious material can be met anywhere on the site.

5. In no case, shall the reduction in the effective leaching area allowed under this Approval be made less stringent. Any reductions in the effective leaching area allowed under this Approval shall not be combined with any reduction that may allowed under the procedures of Local Upgrade Approval or the variance procedures of 310 CMR 15.401-413. The Local Approving Authority may vary other design requirements under the LUA provisions of 310 CMR 15.405 or under the variance procedures of 310 CMR 15.411.
6. The System shall only be installed in bed or field configuration, as described in 310 CMR 15.252. The System shall not be installed in trench configuration and no sidewall area shall be considered in the total effective leaching area provided. The effective leaching area shall be the bottom area only (length times width) of the sand bed.
7. Systems shall not be installed for use under impervious or vehicle loading surface.
8. At least one inspection port shall be installed at the end of each bed.
9. System component material specifications for the pipe, fabric and sand shall comply with the specifications identified in the initial technology approval. Prior approval from the Department for any change from these specifications shall be requested in writing.
10. Any changes to the approved plans must receive Local Approving Authority (LAA) approval prior to any changes. Before a Certificate of Compliance can be issued by the LAA the System Designer must include any changes to the approved plan in the as-built plans.