

Let's protect our earth



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
P.O. Box 420, TRENTON, NJ 08625-0402

PERMIT TO CONSTRUCT AND OPERATE* TREATMENT WORKS

**Local Agency approval required prior to operation*

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulation.

PERMIT NO.	ISSUANCE DATE	EXPIRATION DATE	DESIGN FLOW
02-3487-4SG	January 29, 2013	See below	N/A

NAME AND ADDRESS OF APPLICANT	LOCATION OF ACTIVITY
New Jersey Department of Environmental Protection Bureau of Nonpoint Pollution Control P.O. Box 420 Trenton, New Jersey 08625-0029	Counties: All Pinelands Municipalities: All Pinelands

General Requirements:

This approval authorizes administrative authorities to approve residential onsite wastewater treatment and disposal systems located within the boundaries of the Pinelands Area as established by the Pinelands Protection Act (N.J.S.A. 13:18A-1 et seq.) as identified by N.J.A.C. 7:9A-3.8, using nitrate reduction systems in conjunction with systems otherwise designed, constructed, operated and maintained pursuant to N.J.A.C. 7:9A. Only those systems listed below are eligible for consideration under this approval. These nitrate reduction systems are considered advanced wastewater pretreatment devices under N.J.A.C. 7:9A. All other aspects of the onsite wastewater treatment and disposal system design, construction, operation and maintenance not specifically covered by this approval must conform to N.J.A.C. 7:9A.

System Operation and Maintenance Requirements:

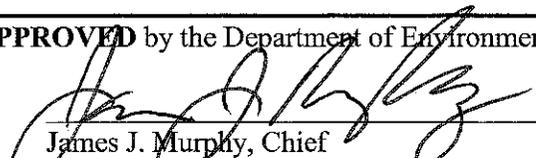
The operation and maintenance of the nitrate reduction system and the individual subsurface sewage disposal system must conform to all provisions of N.J.A.C. 7:9A, including N.J.A.C. 7:9A-12.3, and N.J.A.C. 7:50 et seq.

All nitrate reduction systems require ongoing maintenance in order to ensure adequate functioning of the entire system. These systems must be maintained, for the life of the system, by an authorized service provider meeting the requirements of N.J.A.C. 7:9A-3.17(b). The system must be maintained in accordance with the minimum provisions specified at N.J.A.C. 7:9A-12.3 or additionally as required by the manufacturer and specified on the approved design.

Expiration Date:

This approval to construct and operate shall cease upon the expiration of the Pinelands Alternate Design Waste Water Treatment Systems Pilot Program authorized under N.J.A.C. 7:50-1 et seq. Any subsequent extension to that pilot study or formal acceptance by the Pinelands Commission through adoption of an amendment to N.J.A.C. 7:50-1 et seq. of any of the technologies listed shall be considered an extension of this TWA in full or any applicable part thereof.

APPROVED by the Department of Environmental Protection


James J. Murphy, Chief
Bureau of Nonpoint Pollution Control

1/29/13
Date

This permit is also subject to special provisos and general conditions stipulated on the attached page(s) which are agreed to by the permittee upon acceptance of the permit.

Product Specifications:

Products covered by this TWA are listed in the table below.

MANUFACTURER	PRODUCT
F.R. Mahony & Associates, Inc ¹	Amphidrome (Fixed Film Sequencing Batch Biological Filter)
Aquapoint, Inc. / AWT Environmental ¹	Bioclere (Trickling Filter)
Bio-Microbics, Inc.	FAST (Fixed Activated Sludge Treatment)
Cromaglass Corporation	Cromaglass (Sequencing Batch Reactor)
Bio-Microbics, Inc. ²	Bio-Barrier (Membrane Bioreactor)
Hoot Systems, LLC ²	Hoot ANR (Advanced Nitrogen Reduction) Extended Aeration Activated Sludge
SeptiTech, LLC ²	Trickling Filter
Busse Green Technologies, Inc ²	Busse GT System (Membrane Bioreactor)

¹The Amphidrome and Bioclere wastewater treatment systems were elevated from Pinelands pilot program status to permanent approval status effective October 18, 2010. The Amphidrome and Bioclere wastewater treatment systems remain subject to all of the requirements of the Pinelands pilot program except for mandatory laboratory analysis of treated effluent.

²The Bio-Barrier, Hoot ANR, SeptiTech and Busse GT System were authorized for use in the Pinelands Area subject to the requirements of the Pinelands Alternate Design Treatment Systems Pilot Program (N.J.A.C. 7:50-10.21 et seq.) and issuance of Treatment Works Approval by NJDEP as published in the December 5, 2011 New Jersey Register.

Site Requirements:

The location of the onsite wastewater treatment and disposal system must conform to all provisions of N.J.A.C. 7:9A.

No construction of the onsite wastewater treatment and disposal system or the proposed realty improvement shall begin until the administrative authority has provided written notification to the applicant that all aspects of the design and construction of the onsite wastewater treatment and disposal system which are not authorized under this treatment works approval are in strict conformance with N.J.A.C. 7:9A.

The issuance of this permit does not exempt the applicant of the responsibility to comply with all other applicable Federal, State, County and Municipal rules and regulations.

System Design Requirements:

All aspects of the nitrate reduction systems identified above must be in strict conformance with the Pinelands Alternate Design Waste Water Treatment Systems Pilot Program requirements at N.J.A.C.7:50-10.22 or any subsequent amendment to N.J.A.C. 7:50-1 et seq. adopted by the Pinelands Commission authorizing the use of the technologies.

System maintenance requirements must be included as part of the system design application. In no case shall the maintenance requirements be less than those required by N.J.A.C. 7:50 or N.J.A.C. 7:9A-12.3.

All other aspects of the design of the onsite wastewater treatment and disposal system, including the advanced wastewater pretreatment component, must conform to the provisions of N.J.A.C. 7:9A.

Busse GT Systems that locate wastewater pretreatment components within the building structure must be installed by a New Jersey Licensed Master Plumber. The discharge from the final treatment tank inside of the structure to the building sewer must either:

1. Flow by gravity from the building sewer to a pump tank sized and designed in accordance with the requirements of N.J.A.C. 7:9A-9 prior to the disposal field; or
2. Flow by gravity from the building sewer to a distribution box, provided the building sewer, connecting pipe and distribution box meet the requirements of N.J.A.C. 7:9A-9.3 and 9.4.

Advanced wastewater pretreatment components installed outside of the residential structure that have a total wastewater retention capacity less than what is required for a conforming septic tank in a standard system, must identify and maintain a reserve area for an appropriately sized septic tank which meets the siting and sizing requirements of N.J.A.C. 7:9A. Additional reserve area shall be required for a dosing tank if one would be required to address effluent discharges from a standard septic tank to the proposed disposal area. For every Busse GT system installed within a residential structure or above the ground surface, a reserve area equal to the area that would be required for a fully compliant septic tank is required and an additional reserve area for a dosing tank, if needed.

System Construction Requirements:

Onsite wastewater treatment and disposal systems constructed under the Pinelands Alternate Design Waste Water Treatment Systems Pilot Program shall only be authorized if all the requirements of N.J.A.C. 7:50-10.22, or any subsequent amendment to N.J.A.C. 7:50-1 et seq. adopted by the Pinelands Commission authorizing the use of the technologies, have first been met.

All systems must be installed by an authorized installer in accordance with N.J.A.C. 7:9A-8.3(c). All authorized installers must comply with the requirements of N.J.A.C. 7:9A-3.17(a).

The construction of the onsite wastewater disposal system, including the advanced wastewater pretreatment component, must conform to all provisions of N.J.A.C. 7:9A. With exception to the Busse GT systems, this approval authorizes the construction and use of products in lieu of or in addition to septic tank(s), pump tank(s) and/or other system components located between the building sewer and the connecting pipe or delivery pipe for an onsite wastewater disposal system.

Busse GT systems that are designed to be installed prior to the building sewer must be installed by a New Jersey Licensed Master Plumber and the discharge from the final treatment tank inside of the structure to the building sewer must either:

1. Flow by gravity from the building sewer to a pump tank sized and designed in accordance with the requirements of N.J.A.C. 7:9A-9 prior to the disposal field; or
2. Flow by gravity from the building sewer to a distribution box, provided the building sewer, connecting pipe and distribution box meet the requirements of N.J.A.C. 7:9A-9.3 and 9.4.