



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-831-5508

**Innovative/Alternative ISDS Technology Program**

**Vendor Information:**

Bord na Mona Environmental Products US,  
Inc  
P.O. Box 77457  
Greensboro, NC 27417

**Contact:**

Mr. Greg O'Donnell  
1-800-PURAFLO(787-2356)

**Technology Name & Model Numbers:**

Puraflo® Peat Biofilter

**Technology Type:**

Advanced Wastewater Treatment System  
Class II

**Expiration Date:**

December 31, 2001

**CERTIFICATION**

The RI Department of Environmental Management has reviewed the Innovative/Alternative Technology application for the Puraflo® Peat Biofilter, hereafter referred to as the "System". The System is a wastewater filter technology that is designed to receive and treat septic tank effluent prior to discharge to a leachfield. The System consists of a septic tank, a dosing tank, peat modules, and a leach field. The peat module is a pre-engineered biofiltration compartment that contains natural peat fiber as a biofilm media. Among the processes occurring are filtration, absorption, adsorption, ion exchange, and microbial assimilation. The system is capable of significantly reducing biological oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), ammonia and pathogens. The System is intended to be a single pass-through system.

The System may be installed in a recirculation mode provided a separate recirculation tank (with dosing pump) is added to the System; the dosing tank would then serve to meter-out flow to the leach field. However, the Department will not officially recognize any additional treatment benefit for operating in a recirculation mode under this certification.

Based upon information contained in the application submitted by the applicant, hereafter referred to as the "Vendor", the Department hereby accepts the System for placement on the RI DEM Innovative/Alternative Technology List. Design, installation and operation of the System shall be in accordance with the following terms and conditions:

**I. Design Requirements**

1. The System is approved for treatment of residential strength wastewater only.
2. Systems utilizing this innovative/alternative System shall be allowed a 50% reduction from the

required leach field size. This reduction is based upon the ability of the System to remove BOD and suspended solids as demonstrated by the data presented in the Vendor's submittal.

3. In addition to other approved leach field options allowed by DEM regulations, the effluent from the System may be discharged to a pressure-dosed shallow narrow drainfield provided the latter is designed in accordance with guidance and regulations issued by the Department.
4. Septic tanks used in conjunction with the System shall be equipped with an approved septic tank effluent filter. Septic tank effluent shall be time-dosed distributed to the System in accordance with the manufacture's recommendation. Gravity distribution to the System is prohibited.
5. Each System installation shall meet all other applicable ISDS standards and receive prior approval by the Department pursuant to the regulations in effect at the time of application.
6. Design and installation shall be in strict conformance with the approved System design and installation manual and shall only be performed by an appropriate Rhode Island licensed person who has received training and is authorized in writing by the Vendor to design or install the System.

## **II. General Requirements**

1. This Class II approval shall be effective until December 31, 2001.
2. If the Vendor wishes to extend this Class II approval beyond its expiration date, he/she shall apply for and obtain a renewal of this approval. The Vendor shall submit a renewal application along with the appropriate renewal fee as denoted in SD 23(j)(4) at least 90 days in advance of the expiration date of the approval.
3. The Vendor shall notify the Department at least 30 days prior to any proposed transfer of ownership of the System. Notification shall include the name and address of the new owner and a written agreement between the existing and new owner specifying a date for transfer of ownership, responsibility, and liability for the technology. All provisions of this approval shall be applicable to any new owners.
4. The Vendor shall provide any purchaser of the System with a copy of this approval letter prior to the sale of the system.

## **III. Operation and Maintenance Requirements**

1. Detailed operating instruction shall be provided to the Owner/Operator.
2. Systems shall be maintained according to the manufacturer's specifications.
3. A public or private maintenance entity shall be retained continuously for the life of the System

and be available to perform needed maintenance or repairs. Such entity shall perform an inspection of the treatment system at least twice annually. No agreement with a maintenance entity shall be for less than two (2) years.

#### IV. Reporting Requirements

1. The Vendor shall submit an annual report to the Department by November 30 of each year containing the following information for the previous 12 month period ending September 30 of the year: the number of systems installed in RI, the address of each installation and name of the owner and permit number, the number of inspection/maintenance calls conducted, and all known problems or failures experienced with a brief summary of the cause and remedial measures taken.
2. The Vendor shall monitor the treatment efficiency of a minimum of three representative installations of the System in Rhode Island. Both the influent (septic tank effluent) and effluent shall be sampled and tested. A representative system shall be defined as a system serving a house that is occupied by a minimum of four people year round. Each of the systems shall be monitored at least four times a year for a period of two years. Two samples shall be taken in the summer months and two in the winter months. At a minimum the following parameters shall be monitored for BOD5, TSS, pH, TKN, NO3-N, Ammonia, and Alkalinity. (Should the Vendor want recognition in the future for fecal coliform reduction, the Department suggests testing for fecal coliform also.) This information shall be included in the annual report submitted to the Department by November 30 of every year.
3. The Vendor shall report any termination or non-renewal of any required maintenance agreement to the Department and to the local wastewater management authority should one exist for that area.

#### V. Rights of the Department

1. The Department may suspend, modify or revoke this approval for cause, including but not limited to: non-compliance with any of the conditions or provisions of this approval, misrepresentation or failure to disclose all relevant data, or receipt of new information indicating that the use of the System is contrary to the public interest, public health or the environment.
2. This approval does not represent an endorsement of the System by the Department. This letter of approval may be reproduced only in its entirety.



Russell J. Chateaufneuf, P.E.  
Chief, OWR

Issuance Date: 4/10/00