



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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### REVISION OF APPROVAL FOR REMEDIAL USE

Pursuant to Title 5, 310 CMR 15.00

Name and Address of Applicant:

Bord na Mona Environmental Products U.S. Inc.  
4106 Bernau Avenue  
Greensboro, NC 27407

Trade name of technology and models: **Puraflo Peat Fiber Biofilter** (hereinafter called the "System"). Schematic Drawings illustrating each System, a design and installation manual, an owner's manual, an operation and maintenance manual, and an inspection checklist are part of this Approval.

Transmittal Number: W 149450  
Date of Issuance: November 30, 2007.  
Revision date: November 05, 2012

### 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 for Remedial Use to: Bord na Mona Environmental Products U.S. Inc., 4106 Bernau Avenue, Greensboro, NC 27407 (hereinafter "the Company"), approving 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, the Service Contractor, 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.

David Ferris, Director  
Wastewater Management Program  
Bureau of Resource Protection

November 05, 2012

Date

## **Technology Description**

The System is a Secondary Treatment Unit (STU), an aerobic peat based treatment system comprised of modules made of linear low-density polyethylene (LLDPE), which contain the peat fiber. Each module has a capacity of 150 GPD. Effluent from the septic tank is collected in the pump chamber and pumped using a time dosing system activated by programmable timer with a high water level override and high water alarm set three inches higher than the high water setting.

The peat fiber is a proprietary product, which is comprised of undecomposed roots of bog cotton, and bog sedges with an approximate loose density of 22-28 pounds per cubic foot and organic matter content greater than 95%. Wastewater from the pump chamber is pumped to the module and sprayed over the surface of the peat. After percolating through the peat, the filtrate is collected in the bottom of the module. Effluent is discharged through a drain pipe assembly, and a manifold system, sized in accordance with System manufacturer's recommendations, which intercepts all module effluent and discharges to a pump chamber for pressure distribution to the soil absorption system (SAS)

## **Conditions of Approval**

The term "System" refers to the STU 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 conditions applicable to all STU's, the General Conditions of 310 CMR 15.287, and any Attachments.

For Secondary Treatment Units 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), the depth to groundwater (310 CMR 15.212), and/or the depth of naturally occurring pervious material (310 CMR 15.240(1)) subject to the conditions that apply to all Secondary Treatment Units Approved for Remedial Use and subject to the Special Conditions applicable to the Technology.

## **Special Conditions**

1. The System is Secondary Treatment Unit Approved for Remedial Use. In addition to the Special Conditions contained in this Approval, the System shall comply with all the "Standard Conditions for Secondary Treatment Units Approved for Remedial Use", except where stated otherwise in these Special Conditions,
2. The System is approved for facilities where the local approving authority finds that:
  - a) there is no increase in the actual or proposed design flow;
  - b) the System is for the upgrade of a failed, failing or nonconforming system; and

- c) a conventional system with a reserve area, designed in accordance with the standards of 310 CMR 15.100 through 15.255, cannot feasibly be built on-site.
- 3. The System shall be installed in series between the septic tank and the soil absorption system of a standard Title 5 system constructed in accordance with 310 CMR 15.100 - 15.279, subject to the provisions of this Approval.
- 4. All Systems can be equipped with a modem and auto-dialer programmed to automatically call the Company if an alarm condition occurs, this provides the Company off-site monitoring and control of the system. All nonresidential Systems shall be so equipped.
- 5. The discharge from the septic tank shall be equipped with an approved Effluent Tee Filter.