

January 4, 2024

Barbara Smith
ANUA
P.O. Box 77457
Greensboro, NC 27417

RE: Product Registration Renewal #4 – Notice of Proprietary Treatment Product Listing
Description: Sewage Treatment System, Media Filter Bed
Manufacturer: ANUA
Product Name: Puraflo® Series Peat Fiber Biofilter [Open Bottom (1A to 10A) and Closed Bottom (1B to 10B)]
Model Number: P150 Series*1A and 1B to P150*10A and 10B; Design Flow 150 GPD per Puraflo Peat Fiber Biofilter Module; Design Flow 1500 GPD for 10 Puraflo Peat Fiber Biofilter Modules
Product Listing: Category A (Residential Sewage)

Dear Ms. Smith:

Thank you for your application for product renewal for the ANUA (formerly Bord Na Mona Environmental Products) Puraflo Peat Fiber Biofilter Series, Open Bottom and Closed Bottom Models, which includes the following models: Peat Filter Biofilter P150 Series*1A and 1B (1 module) to Peat Filter Biofilter P150 Series *10A and 10B (10 modules).

In accordance with Minn. R. ch. 7080 through 7083, the Minnesota Pollution Control Agency (MPCA) has reviewed ANUA's submitted materials requesting registration for Category A (residential) treatment product listing of the Puraflo Peat Fiber Biofilter Series, Open Bottom and Closed Bottom Models. Based on the submitted documentation, the MPCA finds that the Puraflo Peat Fiber Biofilter Series is eligible to be registered per Minn. R. ch. 7083.4030 as meeting the following treatment levels:

- **Treatment Level B** (cBOD₅ of 25 mg/L, TSS of 30 mg/L, and fecal coliform of 10,000 colonies per 100 ml) without disinfection
- **Treatment Level A2** (cBOD₅ of 15 mg/L, TSS of 15 mg/L)
- **Treatment Level B2** (cBOD₅ of 25 mg/L, TSS of 30 mg/L)
- **Treatment Level C** (cBOD₅ of 125 mg/L, TSS of 60 mg/L, and Oil & Grease of 25 mg/L)

The Puraflo Peat Fiber Biofilter Series, Open Bottom and Closed Bottom Models, is registered according to the design rated capacities, as shown in Table 1.

Subject to this determination, the Puraflo Peat Fiber Biofilter, Open Bottom and Closed Bottom Models, will be placed on the List of Registered Subsurface Sewage Treatment System (SSTS) Products. The product information listed in this Notice of Proprietary Product Listing will be maintained on the MPCA website and may not be altered by the manufacturer without permission from the MPCA.

Table 1. Puraflo Peat Fiber Biofilter Series, Open Bottom (A) and Closed Bottom (B), P150 Models.

Product Name Model *	Treatment Process	Design Flow (gpd)	BOD ₅ Removed (lbs/day)	Highest Treatment Level	Important Product Use Information
Puraflo Peat Filter Biofilter P150*1A and 1B (1 module)	Media Filter Bed	150	0.3755	B	<ul style="list-style-type: none"> • Notice of Product Listing <ul style="list-style-type: none"> ○ MPCA Letter ○ Conditions of Registration ○ Expiration Date • Puraflo Peat Filter Manual <ul style="list-style-type: none"> ○ Submitted Drawings ○ Flow Splitting ○ Known Limitations ○ Installation ○ Operation & Maintenance ○ Owners Information ○ Regulators Checklist ○ Service Contract • Management Plan • Operating Permit Template
Puraflo Peat Filter Biofilter P150*2A and 2B (2 modules)	Media Filter Bed	300	0.7510	B	
Puraflo Peat Filter Biofilter P150*3A and 3B (3 modules)	Media Filter Bed	450	1.127	B	
Puraflo Peat Filter Biofilter P150*4A and 4B (4 modules)	Media Filter Bed	600	1.502	B	
Puraflo Peat Filter Biofilter P150*5A and 5B (5 modules)	Media Filter Bed	750	1.876	B	
Puraflo Peat Filter Biofilter P150*6A and 6B (6 module)	Media Filter Bed	900	2.253	B	
Puraflo Peat Filter Biofilter P150*7A and 7B (7 modules)	Media Filter Bed	1050	2.629	B	
Puraflo Peat Filter Biofilter P150*8A and 8B (8 modules)	Media Filter Bed	1200	3.004	B	
Puraflo Peat Filter Biofilter P150*9A and 9B (9 modules)	Media Filter Bed	1350	3.380	B	
Puraflo Peat Filter Biofilter P150*10A and 10B (10 modules)	Media Filter Bed	1500	3.755	B	

* A = Type A (Open Bottom draining with weep holes); B = Type B (Closed Bottom without weep holes).

The registration of products in Minnesota is contingent upon compliance with the following conditions:

1. Products must be used in compliance with the MPCA rules and the plans and design specifications provided. Any deviation from the plans and specifications shall not be permitted unless authorized by National Sanitation Foundation (NSF) and, in writing, by the MPCA for registered use.
2. The manufacturer shall have readily accessible information, specific to a product's registered use in Minnesota, for designers, regulators, installers, system owners, service providers and other interested parties for the following items: a) product manual; b) design instructions; c) installation instructions; d) information regarding operation and maintenance; e) homeowner instructions; and f) list of representatives and manufacturer-certified service providers, if any, as required by Minn. R. ch. 7083.4040 (H).
3. The design flows for the registered Puraflo Peat Fiber Biofilter, Open Bottom and Closed Bottom Models, are 150 gallons per day per Puraflo Peat Fiber Biofilter module, as specified in the submittal documentation, up to 1500 gallons per day for ten (10) Puraflo Peat Fiber Biofilter modules.
4. Septic/trash tank capacity for dwellings shall meet the manufacturer's size requirements consistent with Standard 40 National Sanitation Foundation (NSF) testing of the product and sewage tank requirements as specified in the initial Application for Product Registration. Sewage tank(s) shall be designed to withstand the pressures to which it will be subject to. The tank(s) and all pipe penetrations, risers, and other connections to the tank shall be watertight.
5. Systems installed using Puraflo Peat Fiber Biofilters, Open Bottom and Closed Bottom Models, shall be timed-dosed. Adequate storage capacity shall be provided in the pump tank to prevent nuisance high water conditions from occurring. An alarm device is required on all pump tanks in the event the pump malfunctions.
6. Systems installed using Puraflo Peat Fiber Biofilter, Open Bottom and Closed Bottom Models, shall be equipped with a commercial effluent screen, consistent with the type used during the Standard 40 National Sanitation Foundation test of the product. An alarm device is required in the event the effluent screen malfunctions.
7. Each system must be delivered with an installation manual and owner's manual for the Puraflo Peat Fiber Biofilters, Open Bottom and Closed Bottom Models. Each unit must be installed in accordance with the manufacturer's installation manual.
8. ANUA, along with the Intermediate Designer/Advanced Designer and Installer, are responsible to ensure that proper flow devices are used in splitting flows to the Puraflo Peat Fiber Biofilter modules, Open Bottom and Closed Bottom Models. Flow splitting devices must meet the following criteria: 1) a pressure manifold designed specifically and reliably to split wastewater flows; 2) an orifice plate must be present in each union within each module(s); 3) each orifice plate must be accessible for on-going

operation and maintenance; and 4) each orifice plate must be periodically checked for damage or plugging.

9. All systems shall be designed and operated with (a) suitable alarm device(s) should either, or both, the effluent screen or effluent pump malfunction.
10. This treatment product is a Minnesota-registered product for Type IV systems. Effluent loading rates to the soil, method of distribution, and vertical separation requirements shall meet the minimum requirements contained in Minn. R. ch. 7080.2150 thru 7080.2350. The effluent, following treatment in the Puraflo Peat Filter Biofilters, is required to be uniformly distributed to the soil for final treatment and dispersal.
11. Systems may only be designated as Type IV systems when designed and installed per the drawings submitted as part of initial Application for Product Registration, dated March 11, 2009, and subsequent documents submitted prior to product renewal, including the revised ANUA manuals.
12. Open Bottom (i.e. bottom draining) Puraflo Peat Fiber Biofilters must meet the following requirements: 1) not exceed the soil loading rates for Type IV systems; and 2) meet all other requirements for Type I mounds, at-grades, and seepage beds. This includes that: 1) each system has at least 12 inches of natural, unsaturated, suitable soil for final treatment and dispersal and; 2) each design will consider contour loading rate for at-grade and mound systems. All mounds shall have at least one (1) foot of clean sand, per Minnesota Rules Chapter 7080.2220 Subp 3.
13. As a Type IV system, the system must be constructed and operated under the required local permits.
14. The level of maintenance required for the Puraflo Peat Fiber Biofilter, Open Bottom and Closed Bottom Models shall be as specified in the products Operation and Maintenance Manual. This includes, but is not limited to, annual maintenance. Open Bottom (i.e. bottom draining) Puraflo Peat Fiber Biofilter systems shall have an adequate number of inspection pipes installed in the supporting 'gravel bed' at the infiltrative surface to be able to monitor depth of effluent ponding.
15. For systems registered as meeting the requirements for Treatment Level B, testing for fecal coliform bacteria is required per the local operating permits when reduced vertical soil separation is employed.
16. As specified in the Owner's Manual, limitations of the product are identified. The manufacturer is responsible to provide a listing of other known limitations, made available on the company's website or other means.
17. All used filter medium removed from Puraflo Peat Fiber Biofilter, Open Bottom and Closed Bottom Models shall be removed and disposed of by an MPCA licensed Installer, Service Provider, or Maintainer. The used filter materials shall be disposed in a manner that meets the requirements of Minnesota Rules Chapter 7080.2500 subp.3.

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18. Training shall be provided to MPCA-licensed Subsurface Sewage Treatment Systems practitioners before designing, installing, or providing service to the Puraflo Peat Fiber Biofilter, Open Bottom and Closed Bottom Models registered for use in Minnesota.
19. During the period of product registration and as part of the renewal process, systems using registered treatment products are subject to an audit by the MPCA.

Please be advised that this registration expires December 31, 2026. Manufacturers desiring to continue product registration beyond this date must obtain MPCA renewal according to the requirements in Minnesota Rules Chapter 7083.4040 (E). If the product has changed or is retested according to the protocol required for registration, renewal shall be based on the most recent test results.

If the MPCA finds the product has changed in any way that may affect performance, it may not be renewed and must meet the requirements for initial registration.

The MPCA is in no way endorsing these products or any advertising, and is not responsible for any situation that may result from its use or misuse. The MPCA is not liable for any product failure and these statements are not intended and cannot be relied upon to establish any substantive or procedural rights with the state of Minnesota or the MPCA, either express or implied, that can be enforced in litigation or any administrative proceeding.

If you have any questions, please contact Wendy Chirpich at 507-344-5248 or by email at wendy.chirpich@state.mn.us.

Sincerely,

Wendy Chirpich

This document has been electronically signed.

Wendy Chirpich
Environmental Specialist
Municipal Division

cc: File