



Douglas A. Ducey
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Misael Cabrera
Director

Notice of Proprietary Treatment Product Listing Pursuant to Arizona Administrative Code R18-9-A309(E) ADEQ LTF #73072

1. Proprietary Treatment Product Name, Model, and Description

Product Name: Anua

Models: Puraflo Peat Fiber Biofilter

Description: The Puraflo peat fiber biofilter is a single-pass, secondary treatment system for the treatment of typical sewage. The systems consists of a septic tank with a commercially-rated effluent filter, a dosing tank and effluent pump or siphon, the peat biofilter modules and a site specific effluent dispersal system. This listing is applicable for design flows less than 24,000 gpd.

2. Manufacturer Information

Name: Anua

Address: P. O. Box 77457

City/State/Zip: Greensboro, NC

Phone: 336-547-9338

Fax: 336-547-8559

Website: www.anuainternational.com

3. Recognized Treatment Performance

Parameter	Averaging Time	Parameter Value for Averaging Time
5-Day Biochemical Oxygen Demand (BOD ₅), mg/l	30-day arithmetic mean	3
Total Suspended Solids (TSS), mg/l	30-day arithmetic mean	2
Total nitrogen as nitrogen(TN), mg/l	five-month arithmetic mean	53*
Total coliform, colony forming units/100ml	95th percentile	1,000

*Default values due to lack of submitting 3rd party data per R18-9-E11(B).

Main Office

1110 West Washington Street • Phoenix, AZ 85007
(602) 771-2300

Southern Regional Office

400 West Congress Street • Suite 433 • Tucson, AZ 85701
(520) 628-6733

www.azdeq.gov

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4. Product Applicability and Limitations for Use for a Recognized General Permit Technology

Applicability: This listing is for only the Puraflo Peat Fiber Biofilter treatment technology specified in A.A.C. R18-9-E311.

Limitations:

- A. This listing is for treated wastewater that meets the definition of typical sewage in R18-9-101(42).
- B. The Puraflo Peat Fiber Biofilter must receive wastewater that meets the definition of typical sewage in R18-9-101(42) and is treated to a level equal to or better than that specified in R18-9-E302(B).
- C. The Puraflo Peat Fiber Biofilter shall receive pretreated wastewater from a septic tank which conforms to A.A.C. R18-9-A314;
- D. The product, including the pretreatment works, is subject to A.A.C. R18-9-A312(F)(2) through (4).
- E. The product shall conform to the following:

Maximum Design Flow (gallons per day) per R18-9-A309(B)(3) (Per Module)	Manufacturer’s Model Pump or Gravity Disposal	Materials of Construction	Manufacturer’s Model Number	Dose Rate (gpm)	Dose Volume (gallons)
150 gpd	HDPE Module Puraflo Peat Fiber Biofilter Single Pass Mode	HDPE	Module 150N*XX	7 to 12	12.5
300 gpd	Puraflo Precast 1000 Gallon Low Profile Tank	Precast Concrete	P300NP*XX	14 to 24	25
450 gpd	Puraflo Precast 1500 Gallon Low Profile Tank	Precast Concrete	P450NP*XX	21 to 36	37.5
750 gpd	Puraflo Precast 2500 Gallon Low Profile Tank	Precast Concrete	P750NP*XX	35 to 60	62.5

*XX denotes number of modules and type. Type “A” or “B” (Type A – Weep holes; Type B – pipped outlet) See Manufacturer’s details for further information.

- F. Effluent from the peat filter can be dispersed to the disposal works either by gravity flow following the requirements of R18-9-E302, pump flow following the requirements of R18-9-E304 or siphon flow using an A312G in conjunction with the applicable parts of R18-9-E304. If siphon flow is used, a type 4.04 permit along with an A312G application will be required. Bottom discharge from the treatment module through weep holes (Type A) may be dispersed to the gravel bed (pad) supporting the treatment module to allow it to act as a disposal works following the requirements of R18-9-E311(D)(2)(a) and R18-9-E311(D)(2)(b).
- G. In extreme cold weather conditions, the force main should be designed to drain back after each cycle and the drain back cycle should be factored into the dosing calculations per the manufacturer’s requirements.
- H. This listing EXCLUDES appurtenances which are considered to be an alarm, control panel, control, switch, timer, wiring, other electrical devices, and installation components; which are subject to both the manufacturer specifications and any more restrictive requirement in 18 A.A.C. 9, Article 3.
- I. ADEQ does not approve design or operation manuals for proprietary products. However, “if manufactured components are used, an applicant shall design, install, and operate the on-site wastewater treatment facility following the manufacturer’s specifications” as per R18-9-A312(F)(2).

5. Alternative Criteria and Exceptions for Use under the Recognized General Permit Technology

Alternative:	None
Exception:	a. When the wastewater does not meet the definition of typical sewage as defined in R18-9-101(42), a Manufacturer’s Design Review Report shall be submitted for review and approval along with the Notice of Intent to Discharge. This Design Review Report shall specify component capacities, control settings, and supplemental installation & operational practices.

6. Documents Used as the Basis for this Proprietary Treatment Product Listing Notice

Application for Treatment Product Listing:	07/05/2018
3 rd Party Test data:	NSF/ANSI Standard 40 Final Report - Bord Na Mona Environmental Products Us, Inc. June, 2006; Puraflo P 150N*3B Wastewater Treatment System May 2015; NERCC Duluth, Minnesota Individual Alternative Wastewater Treatment Systems: Pollutant Removal in 2003 and Long-term Performance, November, 2004.
Reference Manual:	Puraflo Peat Fiber Biofilter Reference Manual, May 31, 2018
Manufacturer’s Warranty:	TAB 3: Puraflo Owner’s Manual, Limited Warranty, May 31, 2018
Manufacturer’s Specifications:	TAB 6: Engineering Details/Calculations, Technical Specifications, and Installation Requirements of the System, May 31, 2018.
Manufacturer’s Design Calculations & Drawings:	TAB 11: Reference Manual, May 31, 2018.
Operation & Maintenance Manual:	TAB 8: O & M Manual, May 31, 2018.

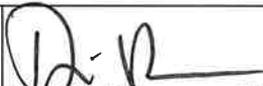
NOTE 1 – This document is an integral part of this Proprietary Treatment Product Listing Notice and is included in the Arizona Department of Environmental Quality website at:

Proprietary Product List

7. Terms and Conditions for this Proprietary Treatment Product Listing Notice

- A. This Notice of Proprietary Treatment Product Listing shall remain in effect until any of the following occurs:
 - 1. Applicable provisions of the Arizona Administrative Code, Title 18, Chapter 9, Article 3 are revised;
 - 2. Documents used for the basis of this listing are altered or modified;
 - 3. Manufacturer claims which are relied upon for this listing are later determined to contain an error or omission;
 - 4. The manufacturer requests termination of this listing;
 - 5. A listing error or omission is identified; or
 - 6. The manufacturer and ADEQ mutually agree to reissue this notification to incorporate correction or update for any reason.
- B. This Notice of Proprietary Treatment Product Listing does not apply when the:
 - 1. Listed proprietary treatment product is modified or operated in a manner that conflicts with Arizona law or the documents used for the basis of this listing action in Section 6.
 - 2. Listed proprietary treatment products are used in a manner that cannot achieve the performance in Section 3 above.
- C. This Notice of Proprietary Treatment Product Listing applies solely to the product specified in Section 1 above.
- D. The manufacturer is responsible for notifying ADEQ of changes to the contact information at the following address:

Attention: Product Listing Supervisor
Engineering Review Desk,
1110 West Washington Street
Phoenix, AZ 85007.
- E. The listing by ADEQ of any proprietary product or service is not an endorsement by ADEQ or the State of Arizona. ADEQ does not endorse, represent, guarantee, warranty or defend the use of any product which is authorized for use pursuant to A.A.C. R18-9-A309(E). Product providers are a direct source unrelated to ADEQ or the State of Arizona. Use of any listed product is at the user's risk and the State assumes no liability.

Signature:	 David Dunaway, Manager	Date Signed:	11/21/18
Title:	Groundwater Protection Value Stream Manager		

ADEQ LTF # - 73072
Reviewer: Linneth A. López,