

April 18, 2024

Barbara Smith  
Anua  
PO Box 77457  
Greensboro, NC 27417

**RE: Product Registration Renewal – Notice of Proprietary Treatment Product Listing**

Description: Recirculating Media Filter  
 Manufacturer: Anua  
 Product Name: Quanics AeroCell Series  
 Model Numbers: ATS-4, ATS-6, and ATS-8, using Quanics FRP Treatment Unit Housing  
 ATS-540-AC-N, ATS-1060-AC-N, and ATS-1530-AC-N using Infiltrator IM  
 Treatment Unit Housing  
 ATS-NS500-AC-N, ATS-NS750-AC-N, ATS-NS1000-AC-N, ATS-NS500-80/20-AC-N,  
 ATS-NS750-80/20-AC-N, ATS-NS1000-80/20-AC-N, using Norwesco or Snyder  
 tanks as a Treatment Unit housing  
 Q-ATS-A400-80/20-AC, Q-ATS-A400-80/20-2-AC, Q-ATS-A400-80/20-3-AC,  
 using Anua HDPE housing  
 Product Listing: Category A (Residential Sewage)

Dear Ms. Smith:

Thank you for your application for product registration and renewal for the Anua Quanics AeroCell Recirculating Media Filter, which includes the following models:

1. ATS-4, ATS-6, and ATS-8 using Quanics FRP Treatment Unit Housing
2. ATS-540-AC-N, ATS-1060-AC-N, and ATS-1530-AC-N using Infiltrator Treatment Unit Housing
3. ATS-NS500-AC-N, ATS-NS750-AC-N, ATS-NS1000-AC-N, ATS-NS500-80/20-AC-N, ATS-NS750-80/20-AC-N, and ATS-NS1000-80/20-AC-N using Norwesco or Snyder tanks as a Treatment unit housing
4. Q-ATS-A400-80/20-AC, Q-ATS-A400-80/20-2-AC, Q-ATS-A400-80/20-3-AC, using Anua HDPE housing

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 Quanics AeroCell models in Table 1.

**Table 1**

<b>Models Using Quanics FRP Treatment Unit Housing</b>	<b>Models using Infiltrator Treatment Unit Housing</b>	<b>Models using Norwesco or Snyder tanks as a Treatment Unit Housing</b>	<b>Models using Anua HDPE as a treatment unit housing</b>
ATS-4	ATS-540-AC-N	ATS-NS500-AC-N	Q-ATS-A400-80/20-AC
ATS-6	ATS-1060-AC-N	ATS-NS750-AC-N	Q-ATS-A400-80/20-2-AC
ATS-8	ATS-1530-AC-N	ATS-NS1000-AC-N ATS-NS500-80/20-AC-N	Q-ATS-A400-80/20-3-AC

	ATS-NS750-80/20-AC-N	
	ATS-NS1000-80/20-AC-N	

Based on the submitted documentation, the MPCA finds that the Quanics AeroCell models in Table 1 are eligible to be registered per Minnesota Rules Chapter 7083.4030 as meeting the following treatment levels:

- **Treatment Level A** (cBOD<sub>5</sub> of 15 mg/L, TSS of 15 mg/L, and fecal coliform of 1000 colonies per 100 ml)
- **Treatment Level B** (cBOD<sub>5</sub> of 25 mg/L, TSS of 30 mg/L, and fecal coliform of 10,000 colonies per 100 ml)
- **Treatment Level A2** (cBOD<sub>5</sub> of 15 mg/L, TSS of 15 mg/L)
- **Treatment Level B2** (cBOD<sub>5</sub> of 25 mg/L, TSS of 30 mg/L)
- **Treatment Level C** (cBOD<sub>5</sub> of 125 mg/L, TSS of 60 mg/L, Oil and Grease of 25 mg/L)
- **Total Nitrogen** (TN of less than or equal to 10 mg/L)

Subject to this determination, the Quanics AeroCell models in Table 1 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 by the MPCA.

**Table 2. Quanics AeroCell Recirculating Media Filter, Models ATS-4, ATS-6, ATS-8, ATS-540-AC-N, ATS- 1060-AC-N, ATS-1530-AC-N, ATS-NS500, ATS-NS750, ATS-NS1000, ATS-NS500-80/20, ATS-NS750-80/20, ATS- NS1000-80/20, Q-ATS-A400-80/20-AC, Q-ATS-A400-80/20-2-AC, and Q-ATS-A400-80/20-3-AC.**

Product Name Model	Treatment Process	Design Flow (gpd)	BOD <sub>5</sub> Removed (lbs/day)	Highest Treatment Level	Nutrient Removal	Important Product Use Information
Quanics AeroCell Model ATS-4	Recirculating Media Filter	192	0.4	A	TN*	<ul style="list-style-type: none"> <li>• Notice Product Listing <ul style="list-style-type: none"> <li>○ MPCA Letter</li> <li>○ Conditions of Registration</li> <li>○ Expiration Date</li> </ul> </li> <li>• AeroCell Manual <ul style="list-style-type: none"> <li>○ Submitted Drawings</li> <li>○ Known Limitations</li> <li>○ Installation</li> <li>○ Operation and Maintenance</li> <li>○ Owners Information</li> <li>○ Regulators Checklist</li> <li>○ Service Contract</li> </ul> </li> <li>• Management Plan</li> </ul>
Quanics AeroCell Model ATS-6	Recirculating Media Filter	318	0.6	A	TN*	
Quanics AeroCell Model ATS-8	Recirculating Media Filter	500	1.0	A	TN*	
Quanics AeroCell Model ATS-540-AC-N	Recirculating Media Filter	500	1.0	A	TN*	
Quanics AeroCell Model ATS-1060-AC-N	Recirculating Media Filter	800	1.6	A	TN*	

Quanics AeroCell <b>Model ATS-1530-AC-N</b>	Recirculating Media Filter	1500	3.0	A	TN*	Operating Permit Template  • Operating Permit Template
Quanics AeroCell <b>Model ATS-NS500-AC-N</b>	Recirculating Media Filter	500	1.0	A	TN*	
Quanics Aerocell <b>Model ATS-NS750-AC-N</b>	Recirculating Media Filter	660	1.3	A	TN*	
Quanics Aerocell <b>Model ATS-NS1000-AC-N</b>	Recirculating Media Filter	800	1.6	A	TN*	
Quanics Aerocell <b>Model ATS-NS500- 80/20-AC-N</b>	Recirculating Media Filter	500	1.0	A	TN*	
Quancis Aerocell <b>Model ATS-NS750- 80/20-AC-N</b>	Recirculating Media Filter	660	1.3	A	TN*	
Quanics Aerocell <b>Model ATS-NS1000- 80/20-AC-N</b>	Recirculating Media Filter	800	1.6	A	TN*	
Quanics Aerocell <b>Q-ATS-A400-80/20-AC</b>	Recirculating Media Filter	400	0.8	A	TN*	
Quanics Aerocell <b>Q-ATS-A400-80/20-2-AC</b>	Recirculating Media Filter	800	1.6	A	TN*	
Quanics Aerocell <b>Q-ATS-A400-80/20-3-AC</b>	Recirculating Media Filter	1200	2.4	A	TN*	

\* Third-party testing showed Quanics AeroCell effluent achieved Total Nitrogen (TN) level less than or equal to 10 mg/L [mean TN = 9 mg/L TN with 78 percent removed]; CBOD<sub>5</sub> was less than 10 mg/L; Total Suspended Solids (TSS) was less than 10 mg/L. Total nitrogen removal is highly dependent upon BOD and TKN loading, adequate alkalinity, temperature and toxicity; site-specific alkalinity levels in the water supply should be evaluated and homeowners should be well educated in order to achieve optimal total nitrogen reduction.

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 the 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 products per module for the Quanics AeroCell Recirculating Media Filter are as follows:
  - Models using the Quanics FRP Treatment Unit Housing:**
    - 192 gallons per day for the Quanics AeroCell Model ATS-4
    - 318 gallons per day for the Quanics AeroCell Model ATS-6
    - 500 gallons per day for the Quanics AeroCell Model ATS-8
  - Models using the Infiltrator IM Treatment Unit Housing:**
    - 500 gallons per day for the Quanics AeroCell Model ATS-540-AC-N
    - 800 gallons per day for the Quanics AeroCell Model ATS-1060-AC-N
    - 1500 gallons per day for the Quanics AeroCell Model ATS-1530-AC-N
  - Models using Norwesco or Snyder Tanks as a Treatment Unit Housing:**
    - 500 gallons per day for the Quanics Aerocell Model ATS-NS500-AC-N
    - 660 gallons per day for the Quanics Aerocell Model ATS-NS750-AC-N
    - 800 gallons per day for the Quanics Aerocell Model ATS-NS1000-AC-N
    - 500 gallons per day for the Quanics Aerocell Model ATS-NS500-80/20-AC-N
    - 660 gallons per day for the Quanics Aerocell Model ATS-NS750-80/20-AC-N
    - 800 gallons per day for the Quanics Aerocell Model ATS-NS1000-80/20-AC-N
  - Models using Anua HDPE as a Treatment Unit Housing:**
    - 400 gallons per day for the Quanics Aerocell Model Q-ATS-A400-80/20-AC
    - 800 gallons per day for the Quanics Aerocell Model Q-ATS-A400-80/20-2-AC
    - 1200 gallons per day for the Quanics Aerocell Model Q-ATS-A400-80/20-3-AC
4. Septic tank capacity for dwellings shall meet the manufacturer's size requirements consistent with Standard 40 NSF testing of the product and sewage tank requirements contained in Minn. R. chs. 7080.1900 through 7080.2020. Sewage tank(s) shall be designed to withstand the pressures to which it will be subject to. Tanks and all pipe penetrations, risers, and other connections to tanks shall be watertight.
5. Systems installed using the Quanics AeroCell Recirculating Media Filters shall be equipped with an effluent screen, consistent with the type used during the Standard 40 NSF test of the product. An alarm device is required in the event the effluent screen malfunctions.

6. Each system must be delivered with an installation manual and owner's manual for the Quanics AeroCell Recirculating Media Filters used in the system. Each component must be installed in accordance with the manufacturer's installation manual.
7. All systems shall be designed and operated with (a) suitable alarm device(s) should the Quanics AeroCell Recirculating Media Filters malfunction.
8. Systems installed using Quantics Aerocell, 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.
9. This treatment product is a Minnesota-registered product for Type IV systems. For Treatment Levels A, A2, B, B2, and C, 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 Quantics AeroCell Recirculating Media Filter, is required to be uniformly distributed to the soil for final treatment and dispersal.
10. Systems may only be designated as Type IV systems when designed and installed per the drawings submitted as part of the initial Application for Registration and subsequent documents submitted prior to this registration.
11. Open Bottom (i.e. bottom draining) Quantics AeroCell 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 atgrade and mound systems. All mounds shall have at least one (1) foot of clean sand, per Minnesota Rules Chapter 7080.2220 Subp 3.
12. As a Type IV system, the system must be constructed and operated under the required local permits.
13. The level of maintenance required for the Quantics AeroCell Recirculating Media Filter components shall be as specified in the products Operation and Maintenance Manual. This includes but is not limited to: 1) initial maintenance three to six months after system start-up; and 2) annual inspections and maintenance. The Quantics AeroCell Recirculating Media Filter units shall be serviced at six-month intervals.
14. UV treatment is not required to achieve treatment level A, A2, B, B2 and C for the Quantics AeroCell Recirculating Media Filter. However, the installation of a Salcor UV Disinfection system is allowed and will result in treatment level A, A2, B, B2, and C when used with the Quantics AeroCell Recirculating Media filter.
15. For systems registered as meeting the requirements for Treatment Levels A or 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. Training shall be provided to MPCA-licensed Subsurface Sewage Treatment System practitioners before designing, installing, or providing service to Quanics AeroCell Recirculating Media Filters registered for use in Minnesota.
18. 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 Minn. R. ch. 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 which 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](mailto:wendy.chirpich@state.mn.us).

Sincerely,

*Wendy Chirpich*

This document has been electronically signed.

Wendy Chirpich  
Environmental Specialist  
Municipal Division