

August 27, 2008 Technical Advisory Panel Meeting - Draft for discussion purposes only

List of Registered SSTS Treatment Products - Minnesota Pollution Control Agency - Windows Internet Explorer

http://www.pca.state.mn.us/programs/lists/product-treatmentlist.html

List of Registered SSTS Treatment Products - Minneso...

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List of SSTS Registered Treatment Products

The following is a listing of registered wastewater treatment devices for subsurface sewage treatment systems (SSTS). The products on this list meet the requirements in Minnesota Rules Chapter 7083. The purpose of this listing is to ensure products are protective of public health and the environment while providing long-term performance to consumers when properly operated and maintained. The list is intended to be a valuable resource to designers, installers, service providers, local regulatory officials, and consumers.

The listing of products does not constitute approval of marketing, advertising, or labeling practices used by the manufacturer, nor is it an affirmation of manufacturer claims of product performance. Registration listing does not constitute endorsement of these products by the Minnesota Pollution Control Agency. Information obtained from the manufacturer is the sole responsibility of the manufacturer or other provider. Links to external resources are provided as a public service, and do not imply endorsement by the Minnesota Pollution Control Agency.

Manufacturers of Registered Category A (Residential) Proprietary Treatment Products

Orencia Systems, Inc.
814 Airway Avenue
Sutherlin, Oregon 97479
Phone: 800-348-9843
Fax: 541-459-2884
Email: nnoble@orencia.com
Web: www.orencia.com

Product Name Model	Design Flow	Treatment Process	Treatment Level	Product Information
AdvanTex Wastewater Treatment System				
AX20-N AX20-2N AX20-3N	500 1000 1500	Attached Growth Recirculating Textile Filter	C	<ul style="list-style-type: none">• Letter of Approval• Submitted Drawings• Service Contract• Installation Manual• Operation and Maintenance Standards• Owners Manual• Regulators Checklist
AdvanTex Wastewater Treatment System				
AX20-N Mode 1 w/Salcor 3G UV unit AX20-2N Mode 1 w/Salcor 3G UV unit AX20-3N Mode 1 w/Salcor 3G UV unit	500 1000 1500	Attached Growth Recirculating Textile Filter and Ultraviolet (UV) Light Disinfection	A and B	

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Product Registration Application - Known Limitations

The application for product registration includes the requirement that manufacturers disclose any known limitations for each of their treatment and distribution products. For example, some manufactures indicate that water softeners shall not be discharged to their treatment unit, or the product warranty is void. At a minimum, the application submitted to the Minnesota Pollution Control Agency must identify product warranty information to describe known limitations of each product. Some possible examples include the following:

Treatment Devices

1. Water softener discharges will result in reduced treatment performance
2. Excessive grease, lint, etc. will prematurely clog the treatment device
3. Harmful chemicals (list) can poison the beneficial organisms and damage treatment devices
4. Manufacturer authorized installers and service providers required
5. Optimal operating temperature is 45 to 70 degrees (F); lower temperatures will result in reduced treatment performance
6. Alkalinity must be at least 250 mg/L for nitrogen treatment, along with temperature requirement
7. Flooding by external means
8. Flow fluctuations – flow not to exceed 60% of daily rated treatment capacity during any 3 hr. period

Distribution Media

1. Soil types (fine sands problematic for certain media products)
2. Drip tubing damaged by chewing rodents

August 27, 2008 TAP Meeting - Draft 'Approval' Letter Template for Discussion with TAP

Date

Mr. Nick Noble
Government Relations
Orenco Systems Inc.
814 Airway Avenue
Sutherlin, OR 97479

RE: Product Registration Process – Application Approval

Description: Sewage Treatment System, Attached Growth
Manufacturer: Orenco Systems, Inc.
Product Name: AdvanTex™ Treatment Systems (with and without disinfection)
Model Number: AX20-N series (Max Design Flow 500 GPD per pod)
Product File No: 2008-001

Dear Mr. Noble:

Thank you for your application for product registration for Orenco's AdvanTex™ Treatment System AX20-N Series (with and without Ultraviolet Disinfection). The Minnesota Pollution Control Agency (MPCA) has reviewed the submitted materials in accordance with Minnesota Rules Chapter 7080 through 7083 for Category A treatment product listing. The AdvanTex™ Model AX20-N Series in this application has a design rated capacity of 500 gallons per day (gpd) per pod. Our review indicates the AdvanTex™ Model AX20-N Series meets the requirements for proprietary treatment product registration.

Subject to this determination, the AdvanTex Models AX20-N, AX20-2N, and AX20-3N will be placed on the List of Subsurface Sewage Treatment System (SSTS) Registered Products as shown in the following tables. The product information listed here will be maintained on the MPCA website and may not be altered by the manufacturer without permission from MPCA.

AX20-N Series without Ultraviolet (UV) Disinfection:

Product Name Model	Design Flow	Treatment Process	Treatment Level	Product Information
AdvanTex™ Wastewater Treatment System AX20-N AX20-2N AX20-3N Mode 1 and Mode 3	 500 1000 1500	 Attached Growth Recirculating Textile Filter	 C	<ul style="list-style-type: none">• Letter of Approval• Submitted Drawings• Service Contract• Installation Manual• Operation and Maintenance Standards• Owners Manual• Regulators Checklist

AX20-N Series with Ultraviolet (UV) Disinfection:

Product Name Model	Design Flow	Treatment Process	Treatment Levels	Product Information
AdvanTex™ Wastewater Treatment System with Salcor 3G UV disinfection				
AX20-N Mode 1 w/one Salcor 3G UV Disinfection	500	Attached Growth Recirculating Textile Filter and Ultraviolet (UV) Light Disinfection	A and B	<ul style="list-style-type: none"> • Letter of Approval • Submitted Drawings • Service Contract • Installation Manual • Operation and Maintenance Standards • Owners Manual • Regulators Checklist
AX20-2N Mode 1 w/two Salcor 3G UV Disinfection	1000			
AX20-3N Mode 1 w/three Salcor 3G UV Disinfection	1500			

The AdvanTex™ AX20 Series is considered a Category A (designed to treat residential sewage) treatment product in the State of Minnesota. The April 2002 ANSI/NSF Standard 40 Evaluation Report received for the AdvanTex AX20N-500 gpd treatment system showed a Carbonaceous Biochemical Oxygen Demand (CBOD₅) maximum 30-day average (arithmetic mean) of 8 mg/L and a Total Suspended Solids (TSS) maximum 30-day average (arithmetic mean) of 6 mg/L for treatment effluents.

The Evaluation Report showed the AX20-500 gpd unit coupled with Salcor 3G UV disinfection unit had a maximum 30-day geometric mean bacteriological reduction for treated effluents that met the requirements of Treatment Level A (less than 1,000 fecal coliforms/100mL) and Treatment Level B (less than 10,000 fecal coliforms/100 mL) during the six month test period.

The registration of the product is contingent upon compliance with the following conditions:

1. Product must be manufactured and used in compliance with MPCA rules and the plans and design specifications provided. Any deviation from the plans and specifications shall not be permitted unless authorized by NSF and in writing by the MPCA.
2. The manufacturer shall have readily accessible information, specific to a product's registered use in Minnesota, for designers, regulators, and systems owners for the following items: a) product manual, b) design instructions, c) installation instructions, d) operation and maintenance requirements, e) homeowner instructions, and f) list of manufacturer-certified service providers, as contained in Minnesota Rules Chapter 7083.4040.
3. Systems may only be designated as Type IV systems if designed and installed per drawings submitted with the Application for Registration (attached).
4. The maximum daily wastewater flow which may be treated with this registered product is 500 gallons per day per unit.

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5. Each unit must be delivered with an installation manual and owners manual for both the AX20 and Salcor 3G UV disinfection unit. Each unit must be installed in accordance with the manufacturer's installation manual.
6. This treatment product is a registered product for Type IV systems. For Treatment Level A and Treatment Level B (AX20 with Salcor 3G UV disinfection unit), effluent loading rates to the soil and vertical separation requirements, shall meet the minimum requirements contained in Minnesota Rules Chapter 7080.2350.
7. In both the AX20-2N and AX20-3N configurations, each AX20 pod shall be equipped with its own Salcor 3G UV disinfection unit to achieve the required level of treatment.
8. All designs shall include automatic shut-off dosing to the soil dispersal system in the event the disinfection unit malfunctions.
9. As a Type IV system, the system must be constructed under a local Construction Permit and operated under a local Operating Permit.
10. Cite known limitations in the Application – i.e.: backwash from the water softener must not be discharged to the product.
- 11.
- 12.

Please be advised that this registration expires December 31, 2010. Manufacturers desiring to continue product registration must obtain MPCA renewal according to the requirements in Minnesota Rules Chapter 7083.4080. If the product has changed or is retested according to the protocol required for registration, renewal is based on the most recent test results. If the MPCA finds the product has changed in any way that affects performance, it may not be renewed and must meet the requirements for initial registration.

The MPCA is in no way endorsing this products or any advertising, and is not responsible for any situation which may result from its use. If you have any questions, please contact Barbara McCarthy at 218-723-4710 or by email at barbara.mccarthy@state.mn.us.

Sincerely,

Xxx

Attachments: Submitted drawings



**Minnesota Pollution
Control Agency**

Minnesota Product Registration for Proprietary Treatment Products - Subsurface Sewage Treatment Systems

Third-Party Testing Submittals

1. Manufacturer submits full application packet to the MPCA both in hard copy and in PDF format.
2. Manufacturer submits a request to the testing entity for the following items; testing entity submits those documents directly to the Minnesota Pollution Control Agency (MPCA):
 - a) Testing Reports (i.e. NSF Standard 40, 245, Disinfection, etc.) – submit electronic copy in PDF format to MPCA.
 - b) A letter from the testing entity to the MPCA (at address below) with the following signed and dated statement:

“I certify that I represent (INSERT TESTING ENTITY NAME) and I am authorized to report the testing results for this proprietary product. I attest, under penalty of law, that the report about the test protocol and results is true, accurate, and complete.”

Contact:

Barbara McCarthy
Minnesota Pollution Control Agency
525 South Lake Avenue Suite 400
Duluth, MN 55802

218-723-4710
barbara.mccarthy@state.mn.us