



Katie Hobbs
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Karen Peters
Director

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

1. Proprietary Treatment Product Name, Model, and Description

Product Name: Orenco AdvanTex

Models: AX25-RT

Description: The AX25-RT is a multiple-pass, packed-bed aerobic wastewater treatment using the same recirculation textile filter technology as the AX20 with the exception of the textile filter media, the recirculation tank, and the discharge pump combined into a single unit. Effluent from the septic tank passes through a Biotube effluent filter and discharge by gravity to the AX-RT unit's recirculation chamber. From there the effluent is drawn through the recirc transfer line to the recirc pump systems where the effluent is time-dosed and evenly distributed by a manifold and spin nozzles over the textile sheets throughout the day. The effluent then percolates down through the sheets and is distributed between the recirc/blend and recirc/filtrate chambers by means of a tank baffle that separates the unit into different sections. The sheets are suspended from the top of the treatment unit, with a portion positioned over the recirc/blend chamber. The remainder is positioned over the recirc/filtrate chamber, from which filtrate (treated effluent) recirculates and discharges.

This listing is applicable for design flows less than 75,000 gallons per day.

2. Manufacturer Information

Name: Orenco Systems, Inc.
Address: 814 Airway Ave.
City/State/Zip: Sutherlin, Oregon
Phone: (800)348-9843
Website: <https://www.orenco.com>

3. Recognized Treatment Performance

Parameter	Statistical Measure	Value
5-Day Biochemical Oxygen Demand (BOD ₅), mg/L	30-day arithmetic mean	8 mg/l
Total Suspended Solids (TSS), mg/L	30-day arithmetic mean	3 mg/l
Total Nitrogen as Nitrogen(TN), mg/L	five-month arithmetic mean	24 mg/l
Total Coliform, Colony Forming Units/100mL	95th percentile	100,000 (Log ₁₀ 5)

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

<p>Applicability: This listing is only for the Orenco AdvanTex AX25-RT and is listed as a textile filter technology specified in A.A.C. R18-9-E312.</p>								
<p>Limitations:</p> <p>A. The AdvanTex AX25-RT model must receive wastewater that is treated to a level equal to or better than specified in R18-9-E302(B). Additionally, the wastewater must not exceed the oil and grease limitation of 75 mg/l as defined in the <i>Typical Sewage</i> definition under R18-9-101.</p> <p>B. The product shall conform to the following:</p> <table border="1" data-bbox="228 646 1419 850"> <thead> <tr> <th>Maximum Design Flow (gallons per day) per R18-9-A309(B)(3)</th> <th>Manufacturer’s Model Number (Stand-alone Pretreatment Tank Pump or Gravity Disposal)</th> <th>Manufacturer’s Model Number (Built In Pretreatment Tank) Pump or Gravity Disposal</th> </tr> </thead> <tbody> <tr> <td style="background-color: yellow;">750</td> <td style="background-color: cyan;">AX25-RT</td> <td style="background-color: cyan;">N/A</td> </tr> </tbody> </table> <p>C. This approval 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.</p> <p>D. This listing is for the treatment of wastewater that meets the definition of typical sewage in R18-9-101(42).</p> <p>E. The manufacturer recommends inspection after 6 months of installation and annually thereafter in addition to the routine maintenance.</p> <p>F. The requirement of R18-9-A312(B)(4)(e) has been met by providing twenty-four-hour emergency storage of wastewater within the unit itself.</p> <p>G. ADEQ approves the Design & Installation Manual, dated for this proprietary product. In addition, it should be noted that the Arizona Administrative Code (AAC) states the following: “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).</p> <p>H. The product, including the pretreatment works, is subject to A.A.C. R18-9-A312(F)(2) through (4).</p>			Maximum Design Flow (gallons per day) per R18-9-A309(B)(3)	Manufacturer’s Model Number (Stand-alone Pretreatment Tank Pump or Gravity Disposal)	Manufacturer’s Model Number (Built In Pretreatment Tank) Pump or Gravity Disposal	750	AX25-RT	N/A
Maximum Design Flow (gallons per day) per R18-9-A309(B)(3)	Manufacturer’s Model Number (Stand-alone Pretreatment Tank Pump or Gravity Disposal)	Manufacturer’s Model Number (Built In Pretreatment Tank) Pump or Gravity Disposal						
750	AX25-RT	N/A						

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

Alternative:	None
Exception:	<p>a. When the wastewater does not meet the definition of typical sewage as defined in R18-9-101, 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.</p>

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

Application for Treatment Product Listing:	
3 rd Party Test data:	<ul style="list-style-type: none"> • NSF/ANSI Standard 40 Evaluation Report for the AdvanTex AX-20RTN-UV dated May 2015 • Orenco Systems, Inc. – Re-review and Clarification on the AdvanTex AX20 System Series, NSF Workorder W0854695 dated July 25, 2023 • Total Coliform Test Data Received October 20, 2025
Installation Instructions:	<ul style="list-style-type: none"> • AdvanTex AX-RT Treatment Systems Residential Applications Installation Manual – Revision 5.1 dated December 2017 • AX-RT Start-Up Checklist Revision 2 dated August 2011
Manufacturer’s Warranty:	<ul style="list-style-type: none"> • AdvanTex Treatment Systems Limited Warranty for Residential Applications Revision 2 dated November 2021
Manufacturer’s Design Calculations & Drawings:	<ul style="list-style-type: none"> • AX25RT Mode 1B Treatment System Pump Discharge Drawing dated 12/12/2022. • Structural & Buoyancy Review Orenco Systems, Inc. AXRT 1000 FRP Tank dated April 2009
Operation & Maintenance Manual:	<ul style="list-style-type: none"> • AdvanTex O&M Manual Part 1: Start-Up and Routine Maintenance Revision 2 Dated October 2022 • AdvanTex O&M Manual Supplemental Information, AX-RT Revision 4 Dated January 2018

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

<p>A. This Notice of Proprietary Treatment Product Listing shall remain in effect until any of the following occurs:</p> <ol style="list-style-type: none"> 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. <p>B. This Notice of Proprietary Treatment Product Listing does not apply when the:</p> <ol style="list-style-type: none"> 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. <p>C. This Notice of Proprietary Treatment Product Listing applies solely to the product specified in Section 1 above.</p>
--

D. The manufacturer is responsible for notifying ADEQ of changes to the contact information at the following address:

Attention: Groundwater Protection & Reuse Section, General Permits Unit
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:	DocuSigned by: <i>Kyle Uptergrove</i> D1ACBBE2CFFE48F...	Date Signed:	11/19/2025
Title:	Kyle Uptergrove, Manager Groundwater Protection Section and Reuse, General Permits Unit		

ADEQ File Number: 20250135; LTF Number: 109727.

Reviewer: LAL