

# **MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

## **NUTRIENT-REDUCING WASTEWATER TREATMENT SYSTEM DESIGNATION FORM**

**DATE:** August 4, 2004 (updated January 2018)

**APPLICATION SUBMITTAL DATE(S):** July 15, 2004

**SYSTEM MANUFACTURER:** Orenco Systems, Inc.

**SYSTEM NAME(S):** AdvanTex models AX10, AX20, and AX100 for both mode 1 and mode 3 configurations<sup>1</sup>.

**DESIGNATED TREATMENT LEVEL<sup>2</sup>:** Level 2 (Can use 24 mg/L for effluent nitrate (as N) concentration in nitrate sensitivity analysis)

### **CONDITIONS:**

- A. Approval extends to future model sizes of the AdvanTex technology if the same treatment technology and AdvanTex treatment media is used.
- B. Due to start-up time lag associated with all biologically mediated nutrient reduction systems (for example, recirculating sand filters), AdvanTex systems may not be suitable for commercial-type systems (for example, campgrounds, RV parks, etc) that are designed to be used seasonally. The applicability of AdvanTex systems for nutrient reduction purposes at seasonal commercial-type systems should be based on a case-by-case analysis.
- C. Approval is valid for residential and non-residential facilities with residential strength wastewater as defined in section 1.2.72 of DEQ 4 – 2013 edition). For systems accepting high strength wastes (as defined in section 1.2.39 of DEQ 4 - 2013 edition) the level 2 designation is valid with proper pre-treatment in compliance with all applicable rules, design standards and as approved by the Department. Approval is valid for residential and non-residential facilities with no limit on design flows as long as all other applicable laws, rules and design circulars are met.

**APPROVED BY:** Eric Regensburger

### **NOTES:**

- 1 Mode 1 systems recirculate partially treated wastewater to recirculation tank that is separate from the septic tank; mode 1 systems can also recirculate partially treated wastewater through the second compartment of the processing treatment tank (i.e. septic tank). Mode 3 systems recirculate partially treated wastewater to the primary compartment of the processing tank.*
- 2 The definitions of level 1a, level 1b, and level 2 are in ARM 17.30.702(9), (10) and (11), respectively.*