

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

NUTRIENT-REDUCING WASTEWATER TREATMENT SYSTEM DESIGNATION FORM

DATE: June 7, 2010 (Updated January 2018)

APPLICATION SUBMITTAL DATE(S): November 21, 2006; December 8, 2009; March 5, 2010.

SYSTEM MANUFACTURER: Quanics

SYSTEM NAME(S): Bio-COIR Model ATS-SCAT-8-BC-C500 and AeroCell ATS-SCAT-8-AC-C500

DESIGNATED TREATMENT LEVEL¹: Level 2 (Can use 24 mg/L for effluent total nitrogen concentration in nitrate sensitivity analysis)

CONDITIONS:

A. Due to start-up time lag associated with all biologically mediated nutrient reduction systems, the Bio-COIR and AeroCell 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 these systems for nutrient reduction purposes at seasonal commercial-type systems should be based on a case-by-case analysis.

B. Approval is only for Bio-COIR and AeroCell systems that include a high water alarm in the septic tank that will automatically turn off the recirculating pump when triggered and not allow any wastewater to be discharged from the system to the disposal location (typically a drainfield). The recirculating pump will not discharge to the disposal location during any other hydraulic failure in the system. If gravity dosing is used for the final disposal location, there must be a separate dosing tank after the septic tank and the pump tank to receive the treated wastewater before gravity dosing to the final disposal location.

C. Approval is valid for residential and non-residential facilities with no limit on design flows if system design is same as those systems approved, and if all other applicable laws, rules and design circulars are met.

D. 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.

APPROVED BY: Eric Regensburger

NOTES:

1 The definitions of level 1a, level 1b, and level 2 are in ARM 17.30.702(9), (10) and (11), respectively.