

R18-9-E316. 4.16 General Permit: Aerobic System with Surface Disposal, Less Than 3000 Gallons Per Day Design Flow

- A. A 4.16 General Permit allows an aerobic system that consists of an aerator for treatment and surface absorption field for disposal of treated wastewater.
1. Definition. For purposes of this Section, an “aerobic system with surface disposal” means:
 - a. Mechanical introduction of oxygen to wastewater followed by clarification and disposal to the land surface, and
 - b. The wastewater is disinfected using a technology authorized in R18-9-E320 before disposal to the land surface.
 2. An applicant may use an aerobic system with surface disposal if:
 - a. Enhanced biochemical processing is needed to treat wastewater with high organic content,
 - b. A soil condition is not adequate to allow installation of a standard septic tank and disposal field as prescribed in R18-9-E302, or
 - c. A highly treated and disinfected wastewater is needed.
- B. Performance. An applicant shall ensure that an aerobic system with surface disposal is designed on the basis that the treated wastewater released to the native soil meets the following criteria:
1. TSS of 30 milligrams per liter, 30-day arithmetic mean;
 2. BOD5 of 30 milligrams per liter, 30-day arithmetic mean;
 3. Total nitrogen (as nitrogen) of 53 milligrams per liter, five-month arithmetic mean;
 4. A total coliform level of Log10 0 colony forming units per 100 milliliters, 99th percentile. Disinfection is by a method established under R18-9-E320.
- C. Additional requirements. An applicant shall:
1. Ensure that treated wastewater complies with any applicable National Pollution Discharge Elimination System permit limits;
 2. Prevent discharge of inadequately treated wastewater to the environment by means of a fail-safe mechanism, included in the system design; and
 3. Use sprinkler, bubbler heads, or other components that provide dispersal to optimize wastewater loading rates and prevent ponding on the land surface.
- D. Reference design.
1. An applicant may design and install an aerobic system with surface disposal that achieves the performance requirements in subsection (B) by following a reference design on file with the Department.
 2. The applicant shall file a form provided by the Department for supplemental information about the proposed system with the applicant’s submittal of the Notice of Intent to Discharge.
- E. Alternative design. An applicant may submit an alternative to the reference design for an aerobic system with surface disposal if, following the requirements in R18-9-A312(G), the design achieves the performance requirements in subsection (B).
1. The Department shall consider the submittal of an alternative design as one design change to establish the applicable fee under 18 A.A.C. 14.
 2. The applicant shall file a form provided by the Department for supplemental information about the proposed system with the applicant’s submittal of the Notice of Intent to Discharge.

Historical Note

New Section adopted by final rulemaking at 7 A.A.R. 235, effective January 1, 2001 (Supp. 00-4).