

TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 9. WATER POLLUTION CONTROL
PART E. TYPE 4 GENERAL PERMITS

R18-9-E313. 4.13 General Permit: Denitrifying System Using Separated Wastewater Streams, Less Than 3000 Gallons Per Day Design Flow

- A.** A 4.13 General Permit allows for the use of a separated wastewater streams, denitrifying system for a dwelling.
1. Definition. For purposes of this Section a “denitrifying system using wastewater streams” means a gravity flow treatment and disposal system for a dwelling that requires separate plumbing drains for conducting dishwasher, kitchen sink, and toilet flush water to wastewater treatment tank “A” and all other wastewater to a wastewater treatment tank “B.”
 - a. Treated wastewater from tanks “A” and “B” is delivered to an engineered composite disposal bed system that includes an upper distribution pipe to deliver treated wastewater from tank “A” to a columnar celled, sand-filled bed.
 - b. The wastewater drains downward into a sand bed, then into a pea gravel bed with an internal distribution pipe system that delivers the treated wastewater from tank “B.”
 - c. The entire composite bed is constructed within an excavation about 6 feet deep.
 - d. The system operates under gravity flow from tanks “A” and “B.”
 - e. An engineered sampling assembly is installed at the midpoint of the disposal line run and at the base of the composite bed during construction to monitor system performance.
 2. An applicant may use a separated wastewater streams, denitrifying system where total nitrogen reduction is required under this Article before release to the native soil.
- B.** Performance. An applicant shall ensure that a separated wastewater streams, denitrifying system is designed so 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 30 milligrams per liter, five-month arithmetic mean; and
 4. Total coliform level of 1,000,000 (Log₁₀ 6) colony forming units per 100 milliliters, 95th percentile.
- C.** Notice of Intent to Discharge. The applicant shall comply with the Notice of Intent to Discharge requirements in R18-9-A301(B) and R18-9-A309(B).
- D.** Design, installation, operation, and maintenance requirements. The applicant shall comply with the applicable design, installation, operation, and maintenance requirements in R18-9-A312, R18-9-A313(A), and R18-9-A313(B).
- E.** Reference design.
1. An applicant may use a separated wastewater streams, denitrifying system achieving the performance requirements specified 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.