

2.2.4.2.2 Drainfield Design Requirements for a Reduced Separation Distance to Surface Water

A drainfield proposed with a reduced separation distance to surface water as allowed under this variance procedure must meet the following minimum design requirements:

1. The drainfield shall be pressurized and designed based on section 4.20 of this manual.
2. The maximum installation depth of the drainfield in the native soil profile shall be 6 inches.
3. Two full-sized drainfields shall be installed under the initial permit, and alternating dosing between each drainfield shall be included in the system's pressurized design.
4. Replacement area for a third drainfield must be reserved on the property.
5. No separation distance to surface water shall be reduced to less than 100 feet.
6. An alternative pretreatment system shall be installed after the septic tank that is capable of reducing total nitrogen to at least 27 milligrams per liter (mg/L). A greater total nitrogen reduction level may be required depending on the outcome of the NP evaluation.

2.2.4.2.3 Nutrient Evaluation Model Outputs for a Reduced Separation Distance to Surface Water

To support a variance for a reduced separation distance to surface water, two nutrient evaluations must be performed based on the following specific effluent nutrient values and minimum model outputs:

Nutrient-Pathogen Evaluation

1. The maximum total nitrogen concentration of the effluent discharged to the drainfield shall be 27 mg/L.
2. All other standard NP evaluation criteria and output requirements apply.

On-Site System Surface Water Separation Distance Determination Guidance and Model

1. The average phosphorous output from the septic tank shall be 8.6 mg/L.
2. The minimum phosphorous site life of receiving soils shall be 100 years for each drainfield.
3. All other standard On-Site System Surface Water Separation Distance Determination Model criteria and output requirements apply as described in DEQ's guidance *On-Site System Surface Water Separation Distance Determination Guidance*.

Restrictions on Drainfield Designs Necessary to Obtain Successful Outputs in Nutrient Evaluation Models

IDAPA 58.01.03 specifies the minimum drainfield area required to adequately handle the specified volume of wastewater generated in the structure being permitted. It is acceptable for a system design to be in excess of the drainfield area required by IDAPA 58.01.03. To reduce a drainfield's separation distance to permanent or intermittent surface water, it may require that the drainfield area is in excess of the minimum requirements stipulated in IDAPA 58.01.03. This may be due to the surface area and volume of soil below the drainfield necessary to sequester