

# Water

## High-Rate Infiltration Systems (Wastewater Treatment)

**What Activities Require This Permit?** High-rate infiltration systems are currently defined as disposal systems that land-apply wastewater to permeable soils. Infiltration for these types of systems have land application rates greater than 1.75 inches of wastewater effluent per week (0.156 GPD/ft<sup>2</sup>) for coastal areas or 16.8 inches of wastewater effluent per week (1.50 GPD/ft<sup>2</sup>) for non-coastal areas. High rate infiltration systems are considered a site-specific wastewater disposal option that can be used effectively at only certain selected sites.

**What Is The Purpose of This Permit?** Allows a wastewater disposal option that can have many advantages over conventional systems in regard to installation costs, operational costs and lower land requirements, but are only effective with careful site testing, conservative safety design and close operational controls.

**Who Issues This Permit?** N.C. Division of Water Resources, Water Quality Permitting Section / Non-Discharge Permitting Unit.

### How Much Will This Permit Cost?

Non-Discharge Activity	New Permit Application Fee	Major Modification Application Fee	Facility's Annual Fee
Non-Discharge Major Permits (≥ 10,000 gallons per day)	\$1,310	\$395	\$1,310
Non-Discharge Minor Permits (< 10,000 gallons per day)	\$810	\$245	\$810

**What Are My Payment Options for Permit Application Fees?** Check, Money Order or Electronic Transfer.

**If Paying by Check, Who do I Make the Check Payable to and Where Do I Send the Check?** Made payable to the North Carolina Department of Environmental Quality (NCDEQ) and sent to NC Division of Water Resources, Water Quality Permitting Section / Non-Discharge Permitting Unit, 1617 Mail Service Center, Raleigh, NC 27699-1617.

**Where Can I Get The Application For These Permits?** <http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/non-discharge-permitting-unit/application>

**How Long Will It Take To Review My Application?** Upon receipt of a complete application, the standard review time for staff is 90 days, although approval may be less than 90 days for most projects. Permit renewals are submitted 180 days prior to expiration.

**Where Do I Submit My Application?** N.C. Division of Water Resources, Water Quality Permitting Section / Non-Discharge Permitting Unit, 1617 Mail Service Center, Raleigh, NC 27699-1617.

**How Long Is My Permit or License or Certificate Valid?** A high-rate infiltration system permit remains valid for five years.

**Notes/Comments:** High rate infiltration systems are required to meet several effluent monitoring requirements, as well as comply with the [02L Groundwater Standards](#). In addition, since most high rate infiltration systems are located on the coast, they must also comply with the [Coastal Waste Treatment Disposal Regulations](#). New high-rate infiltration systems require soils reports from licensed soils scientist and designs by licensed professional engineers. In addition, hydrogeological reports may be required. Please consult an experienced licensed professional to see if a high-rate infiltration system will work for a particular project.

**Legal Authority/Statute Reference:** 15A NCAC 02T .0700

**Link:** <http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/non-discharge-permitting>

**High-Rate Infiltration Systems (Wastewater Treatment)**

**Statewide Contact Information:**

NC Division of Water Resources  
Water Quality Permitting Section / Non-Discharge Permitting Unit  
1617 Mail Service Center  
Raleigh, NC 27699-1617  
Telephone: (919) 807-6332  
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