

Water

High-Rate Infiltration Systems (Wastewater Treatment)

What Activities Require This Permit? High-rate infiltration systems are defined as disposal systems that apply wastewater effluent at a rate greater than 91 inches per year (0.156 GPD/ft²). 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. Department of Environmental Quality Division of Water Resources, Water Quality Permitting Section / Non-Discharge Branch.

How Much Will This Permit Cost? A full list of current permitting fees can be found at the following link:

<https://www.deq.nc.gov/accessdeq/permit-fees-2025-updates>.

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 Branch, 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? The statutory review time is 90 days from receipt of a complete application. If the application is not complete, an additional information letter shall advise the applicant how the application may be modified to make it complete. If all required information is not submitted within 30 days, the application will be returned as incomplete.

Where Do I Submit My Application? Permit applications are submitted electronically using the Electronic Application and Document Upload form (<https://edocs.deq.nc.gov/Forms/NonDischarge-Branch-Submittal-Form-Ver2>), or by email to Non-Discharge.Reports@ncdenr.gov (for applications smaller than 20 MB).

How Long Is My Permit or License or Certificate Valid? A high-rate infiltration system permit remains valid up to eight years. Permit renewals are submitted 180 days prior to expiration.

Notes/Comments: High-rate infiltration systems are required to meet several effluent monitoring requirements, as well as comply with the [02L Groundwater Standards](#). New high-rate infiltration systems require soils reports from licensed soils scientist and designs by licensed professional engineers. In addition, hydrogeological reports or agronomic evaluations by appropriate licensed professionals 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>

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Statewide Contact Information:

NC Division of Water Resources
Water Quality Permitting Section / Non-Discharge Branch
1617 Mail Service Center
Raleigh, NC 27699-1617
Telephone: (919) 707-3654