



Wisconsin's Runoff Management Rules

NON-AGRICULTURAL PERFORMANCE STANDARDS FOR CONSTRUCTION EROSION CONTROL AND STORM WATER MANAGEMENT

NR 151 Subchapter III

NR 151 became effective Oct. 1, 2002 as part of a package of Department Natural Resources and Department of Agriculture, Trade and Consumer Protection rules that address runoff pollution (also known as nonpoint source pollution), the major cause of polluted waters in Wisconsin and the United States.

Complete versions of the Runoff Management rules can be obtained by visiting the DNR Runoff Management Program Web page <http://dnr.wi.gov/org/water/wm/nps/> or by contacting:

Wisconsin DNR
Runoff Management/ WT 2
Attn.: Carol Holden
P.O. Box 7921
Madison, WI 53707
(608)266-0140

NR 151 includes agricultural performance standards and prohibitions, non-agricultural performance standards, transportation performance standards, implementation and enforcement provisions, and a process to develop and disseminate non-agricultural technical standards.

This fact sheet focuses on the non-agricultural performance standards outlined in Subchapter III, the procedures to implement the standards, and the non-agricultural technical standards process.

The non-agricultural performance standards in NR 151 encompass the construction and post-construction phases of new development and redevelopment areas, as well as certain requirements for developed urban areas. The standards are intended to protect water quality by minimizing the amount of sediment and other nonpoint source pollutants that enter waterways.

The standard for **construction sites** requires implementation of an erosion and sediment control plan using Best Management Practices (BMPs) that, by design, reduce to the **maximum extent practicable (MEP)** 80 percent of the sediment load on an average annual basis. No one will be required to exceed 80 percent reduction and some exceptions to meeting this requirement are allowed, provided a proper justification is presented.

Sediment and erosion control practices contained in the 1993 *Wisconsin Construction Site Best Management Practice Handbook* will be accepted as meeting the performance standard until new or revised technical standards replace them. The erosion and sediment control plan also needs to address: minimization of tracking; sewer inlet protection; minimizing sediment discharge from de-watering; and proper use and storage of chemicals, cement

and other compounds. Sediment control practices must be installed before runoff enters waters of the state.

This performance standard applies to sites where land-disturbing construction activity affects one or more acres. This threshold is consistent with federal Environmental Protection Agency Phase 2 Storm Water Regulations.

The landowner (or other person performing services to meet the performance standard through a contract or agreement) is responsible for meeting this standard. The standard is implemented and enforced through storm water construction permits issued by the DNR through NR 216. It is expected that the Department of Commerce will require

implementation and enforcement of these performance standards for projects permitted or approved under their authority.

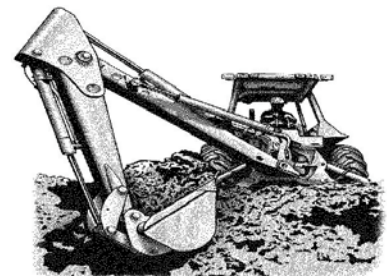
The **post-construction site** performance standards set a minimum level of control of runoff pollution from construction sites after construction is completed and final stabilization has occurred. They apply to sites subject to the construction site erosion control standard, with some specific exceptions.

A written storm water management plan must be developed and implemented for each site and must incorporate the performance standards.

Total Suspended Solids Control. This standard requires BMPs to control to the Maximum Extent Practicable (MEP) 80 percent of the total suspended solids that would normally run off the site, based on an average annual rainfall. For redevelopment and for in-fill development under 5 acres, the reduction goal is 40 percent.

Peak Discharge Rate. This standard requires that BMPs be used to maintain or reduce the peak runoff discharge rate of the 2 year-24 hour design storm, to the MEP. The pre-development land use is assumed to be in good hydrologic condition. Redevelopment sites and in-fill development of less than 5 acres are exempt.

Infiltration. This performance standard requires that, to the MEP, a portion of the runoff volume be infiltrated. The amount to be infiltrated is different for residential and non-residential (commercial,

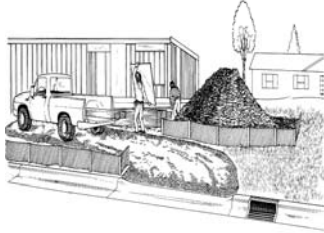


NR 151 Non-Agricultural Performance Standards

industrial, institutional) land uses.

Residential – 90 percent of pre-development infiltration volume or 25 percent of the 2 year-24 hour design storm. No more than 1 percent of the project site is required (cap).

Non-residential – 60 percent of pre-



development infiltration volume or 10 percent of the 2 year-24 hour design storm. No more than 2 percent of the project site is required (cap).

To protect groundwater, this standard identifies areas where infiltration is discouraged: areas associated with Tier 1 industries; storage and loading areas of Tier 2 industries; fueling and maintenance areas; areas near karst features; areas in close proximity to wells; areas with inadequate separation distance to groundwater or bedrock; areas where the soils are contaminated and areas where the soils are too coarse.

For practical reasons, the standard further identifies areas where infiltration is not required, such as areas where the infiltration rate is less than 0.6 inches per hour; areas with less than 5,000 square feet of parking lot or roads in commercial and industrial development; redevelopment areas; in-fill areas less than 5 acres; and certain roads.

Protective Areas. This standard identifies where, to the MEP, a permanent vegetative buffer area must be maintained around lakes, streams, and wetlands to filter pollutants and protect against erosion. Buffer sizes vary according to the type and classification of the waterbody: 75 feet for outstanding and exceptional resource waters and wetlands of special natural resource interest; 50 feet for streams, lakes, and most wetlands; and 10-30 feet for less susceptible wetlands; 10 feet for concentrated flow channels draining more than 130 acres. Some limited exemptions apply.

Fueling and Maintenance Areas.

This standard requires, to the MEP, that petroleum product runoff from fueling and vehicle maintenance areas must be controlled to remove all visible sheen in the runoff.

The practices identified in the storm water management plan must be installed during or immediately after construction. (The practices may be located off-site, but the runoff must be treated to meet the performance standards before it enters the waters of the state.) This standard will be implemented through storm water construction permits issued by the DNR under NR 216. It is expected that the Department of Commerce will require implementation and enforcement of these performance standards for appropriate projects regulated under its authority.



Information and Education. This performance standard applies to **developed urban areas** — incorporated cities, villages, towns, and counties with a population density of 1,000 or more people per square mile. By March 10, 2008, local governments will be responsible for implementing a storm water management plan that includes public education, leaf and grass management where appropriate, application of nutrients on municipally owned property in accordance with a nutrient application schedule, and detection and elimination of illicit discharges. Public education programs need to address proper management of leaves, grass clippings, lawn and garden fertilizers and pesticides, pet

wastes, oil and other chemicals to reduce polluted runoff.

Permitted Municipalities. By March 10, 2008, municipalities subject to a municipal storm water permit under NR 216 must reduce total suspended solids by 20 percent. By March 10, 2013, these permitted municipalities will be required to reduce total suspended solids by 40 percent. Meeting this stricter performance standard may require the use of high efficiency sweepers, which are more effective at picking up smaller pollutants than brush sweepers. In highly polluted areas such as heavy industrial or commercial areas, structural treatment practices may be necessary to control pollutants.

Municipalities covered under a storm water permit issued under Subchapter I of NR 216 are required to meet the developed urban area performance standards as a permit requirement. If a municipality is not regulated under Subchapter I of NR 216, it will *not* receive a permit. However, these municipalities will still be expected to meet the information and education performance standard, enforceable under Section 281.98 of Wisconsin Statutes.

Non-municipal Property Fertilizer.

Owners of properties that apply fertilizer to more than 5 acres of pervious surface (e.g. lawns or turf) must apply nutrients in accordance with a nutrient management schedule. This requirement needs to be met by March 10, 2008.

The **technical standard development process** for formulating and disseminating technical standards to support non-agricultural and transportation performance standards is described in Subchapter V of NR 151. The process includes the roles and responsibilities of agencies requesting or revising technical standards; the procedures to develop technical standards, including the DNR's responsibility to determine effectiveness; and the process for making the technical standards available. The DNR will maintain a list of acceptable technical standards.





Wisconsin's Runoff Management Rules

NR 151 Subchapter IV Transportation Facilities Performance Standards

NR 151 Subchapter IV is part of 8 Department of Natural Resources rules that address runoff pollution (also known as nonpoint source pollution), the major cause of polluted waters in Wisconsin and the United States

Complete versions of the Runoff Management rules can be obtained by visiting the DNR Runoff Management Program Web page (<http://www.dnr.state.wi.us/org/water/wm/nps/index.htm>) or by contacting:

**Wisconsin DNR
Runoff Management/
WT 2
Attn.: Carol Holden
P.O. Box 7921
Madison, WI 53707
(608)266-0140**

Subchapter IV of NR 151 contains the performance standards for major transportation facilities that cause or may cause polluted runoff. Transportation facilities covered by this subchapter of NR 151 include roads, public mass transit systems, highways, public airports, railroads, public trails, and other public transportation works.

The transportation facility performance standards focus on transportation sites during and after construction, as well as to some in developed urban areas. These standards apply to projects administered by the Department of Transportation (DOT), as well as non-DOT-administered projects.

The **transportation facility construction site erosion control** performance standard applies to sites on which land-disturbing construction activity affects 5 or more acres of land. This threshold will be lowered to 1 acre by March 10, 2003. The lower threshold is consistent with the timing and applicability of new U.S. Environmental Protection Agency Phase 2 Storm Water Regulations.

The standard requires implementation of an erosion and sediment control plan using practices that, by design, minimize contaminated runoff entering state waters. The goal is to reduce the average annual sediment load carried in runoff by 80 percent. Some exceptions to meeting the 80-percent control are allowed,

provided a reasonable justification is presented.

Sediment and erosion control practices for transportation facilities are contained in DNR and DOT specifications and manuals. Specific control measures include: minimization of tracking; proper use and storage of chemicals, cement and other compounds; minimizing sediment discharge from de-watering; sediment clean up; and sewer inlet protection. Sediment control practices may be located on or off-site but before runoff enters state waters or a separate storm sewer system connecting to waters of the state.

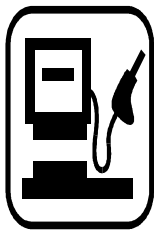
The goal of the **post-construction** performance standard is to set a minimum control level for polluted runoff from transportation facility sites that were subject to the construction performance standard. The standard requires implementation of a storm water management plan using Best Management Practices (BMPs) that minimize pollutants in runoff, maintain or lower runoff rates, provide for infiltration, create and



NR 151 Transportation Facilities Performance Standards

maintain buffer areas, and control 80 percent of the total suspended solids that would normally run off the site. Implementation of the post-construction performance standard is delayed for 2 years after the rule is promulgated to allow time for advance planning for implementation. Properly designed and maintained vegetated swales meet requirements of this performance standard. Additional treatment may be needed for runoff that enters outstanding and exceptional resource waters and federally listed waters that are degraded from nonpoint pollution sources.

The infiltration standard will vary according to soil conditions. Certain types of runoff that could contaminate groundwater are exempt from infiltration. A permanent vegetative buffer area must be maintained in newly developed sites around lakes, streams, and wetlands to filter pollutants and protect against erosion. Buffer sizes vary according to type and classification of the waterbody. Also, petroleum



product runoff from fueling and vehicle maintenance areas must be controlled to remove all visible sheen in the runoff.

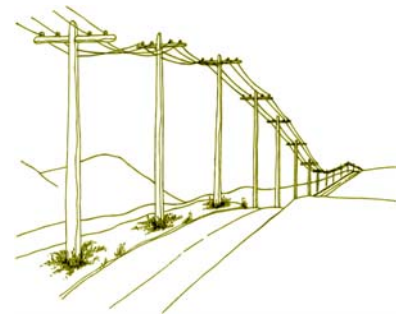
The practices identified in the management plan must be installed during or immediately after construction. The practices may be located off site but must be installed **before** entering state waters.

The **developed urban area** performance standard is applicable *only* to highways that are under the jurisdiction of the DOT that are regulated under an NR 216 municipal storm water discharge permit. (Local roads within an NR 216 municipality not under DOT jurisdiction are covered by the developed urban area performance standards in NR 151.13.) The standard is intended to promote and encourage coordination between the DOT and the NR 216-permitted municipalities to control runoff pollution from urbanized areas.

The performance standard requires DOT to implement a storm water management plan that attains a reduction in total suspended solids from transportation facilities of 20

percent by March 10, 2008, and 40 percent by March 10, 2013. DOT will also be responsible for informing and educating their appropriate staff and contractors about proper use and management of nutrients, pesticides, salt and other de-icing materials, and vehicle maintenance activities to prevent polluted runoff to state waters.

DOT transportation activities covered under Section 30.12(4) of Wisconsin Statutes follow the consultation and conflict resolution process specified in agreements between the DNR and DOT. (Non-DOT transportation activities would be regulated by the DNR through either a storm water permit issued under NR 216 or by Section 281.98 of Wisconsin Statutes.)



Two (2) additional fact sheets covering other provisions of NR 151 (Subchapter II — Agricultural Performance Standards Prohibitions and Subchapter III — Non-Agricultural Performance Standards and Prohibitions) are also available from the Department of Natural Resources.

The Wisconsin Department of Natural Resources provides equal opportunity in its employment programs, services, and functions

under an Affirmative Action Plan. If you have any questions, please write to the Equal Opportunity Office, U.S. Department of the Interior, Washington, D.C., 20240.

This publication is available in alternative format (large print, Braille, audio tape, etc.) upon request. Please call (608)264.6127 for more information

