Chapter NR 151

RUNOFF MANAGEMENT

Subchapter I	— General Provisions	NR 151.124	Infiltration performance standard.
NR 151.001	Purpose.	NR 151.125	Protective areas performance standard.
NR 151.002	Definitions.	NR 151.126	Fueling and vehicle maintenance areas performance standard.
NR 151.003	BMP Location.	NR 151.127	Location.
NR 151.004	State targeted performance standards.	NR 151.128	Timing.
NR 151.005	Performance standard for total maximum daily loads.	NR 151.13	Developed urban area performance standard for municipalities.
NR 151.006	Applicability of maximum extent practicable.	NR 151.14	Turf and garden nutrient management performance standard.
Subchapter I	I — Agricultural Performance Standards and Prohibitions	NR 151.15	Implementation and enforcement.
NR 151.01	Purpose.	Subchanter I	V — Transportation Facility Performance Standards
NR 151.015	Definitions.	NR 151.20	Purpose and applicability.
NR 151.02	Sheet, rill and wind erosion performance standard.	NR 151.21	Definitions.
NR 151.03	Tillage setback performance standard.	NR 151.22	Responsible party.
NR 151.04	Phosphorus index performance standard.	NR 151.225	Construction site performance standard for non–permitted sites and
NR 151.05	Manure storage facilities performance standards.	1414 131.223	routine maintenance.
NR 151.055	Process wastewater handling performance standard.	NR 151.23	Construction site performance standard for sites of one acre or more.
NR 151.06	Clean water diversion performance standard.	NR 151.24	Post–construction performance standard.
NR 151.07	Nutrient management.	NR 151.241	Post–construction performance standards.
NR 151.075	Silurian bedrock performance standards.	NR 151.241 NR 151.242	Total suspended solids performance standard.
NR 151.08	Manure management prohibitions.	NR 151.242 NR 151.243	Peak discharge performance standard.
NR 151.09	Implementation and enforcement procedures for cropland perfor-	NR 151.245 NR 151.244	Infiltration performance standard.
	mance standards.	NR 151.244 NR 151.245	Protective areas performance standard.
NR 151.095	Implementation and enforcement procedures for livestock perfor-	NR 151.245 NR 151.246	
	mance standards and prohibitions.	NR 151.246 NR 151.247	Fueling and vehicle maintenance areas performance standard. Location.
NR 151.096	Local livestock operation ordinances and regulations.	NR 151.247 NR 151.248	Timing.
NR 151.097	Variances.	NR 151.248 NR 151.249	
Cubahantan I	II — Non-Agricultural Performance Standards	NR 151.249 NR 151.25	Swale treatment performance standard.
NR 151.10	Purpose.	NK 131.23	Developed urban area performance standard for transportation facili- ties.
NR 151.105	Construction site performance standard for non–permitted sites.	NR 151.26	Enforcement.
NR 151.11	Construction site performance standard for sites of one acre or more.		
NR 151.12	Post-construction performance standard for new development and	Subchapter V	W — Technical Standards Development Process for Non-Agricul-
	redevelopment.	tural Perform	nance Standards
NR 151.121	Post–construction performance standards.	NR 151.30	Purpose.
NR 151.122	Total suspended solids performance standard.	NR 151.31	Technical standards development process.
NR 151.123	Peak discharge performance standard.	NR 151.32	Dissemination of technical standards.

Subchapter I — General Provisions

NR 151.001 Purpose. This chapter establishes runoff pollution performance standards for non-agricultural facilities and transportation facilities and performance standards and prohibitions for agricultural facilities and practices designed to achieve water quality standards as required by s. 281.16 (2) and (3), Stats. This chapter also specifies a process for the development and dissemination of department technical standards to implement the non-agricultural performance standards as required by s. 281.16 (2) (b), Stats. If these performance standards and prohibitions do not achieve water quality standards, this chapter specifies how the department may develop targeted performance standards in conformance with s. NR 151.004.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02.

NR 151.002 Definitions. In this chapter:

- (1) "Adequate sod, or self-sustaining vegetative cover" means maintenance of sufficient vegetation types and densities such that the physical integrity of the streambank or lakeshore is preserved. Self-sustaining vegetative cover includes grasses, forbs, sedges and duff layers of fallen leaves and woody debris.
- (2) "Agricultural facilities and practices" has the meaning given in s. 281.16 (1), Stats.
- (3) "Average annual rainfall" means a typical calendar year of precipitation as determined by the department for users of models such as SLAMM, P8, or equivalent methodology. The average annual rainfall is chosen from a department publication for the location closest to the municipality.

Note: Information on how to access SLAMM and P8 and the average annual rainfall files for five locations in the state, as published periodically by the department, is available at (608) 267-7694.

- (4) "Best management practices" or "BMPs" means structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the state.
- (5) "Combined sewer system" means a system for conveying both sanitary sewage and stormwater runoff.
- (6) "Connected imperviousness" means an impervious surface connected to the waters of the state via a separate storm sewer, an impervious flow path, or a minimally pervious flow path.

Note: An example of minimally pervious flow path would be roof runoff flowing across a lawn of less than 20 feet, to the driveway, to the street, and finally to the storm sewer. The department has a guidance document to aid in the application of this term that is available from the department at (608) 267-7694.

- (7) "Construction site" means an area upon which one or more land disturbing construction activities occur, including areas that are part of a larger common plan of development or sale where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan. A long-range planning document that describes separate construction projects, such as a 20-year transportation improvement plan, is not a common plan of develop-
- (8) "DATCP" means the department of agriculture, trade and consumer protection.
 - (9) "Department" means the department of natural resources.

(10) "Design storm" means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency and total depth of rainfall.

NR 151.002

- (11) "Development" means residential, commercial, industrial or institutional land uses and associated roads.
- (11m) "Direct conduits to groundwater" means wells, sinkholes, swallets, fractured bedrock at the surface, mine shafts, nonmetallic mines, tile inlets discharging to groundwater, quarries, or depressional groundwater recharge areas over shallow fractured
- (12) "Effective infiltration area" means the area of the infiltration system that is used to infiltrate runoff and does not include the area used for site access, berms or pretreatment.
- (13) "Erosion" means the process by which the land's surface is worn away by the action of wind, water, ice or gravity.
- (14) "Exceptional resource waters" means waters listed in s. NR 102.11.
- (14g) "Existing development" means development in existence on October 1, 2004, or development for which a notice of intent to apply for a storm water permit in accordance with subch. III of ch. NR 216 was received by the department or the department of commerce on or before October 1, 2004.
- (14r) "Filtering layer" means soil that has at least a 3-foot deep layer with at least 20 percent fines; or at least a 5-foot deep layer with at least 10 percent fines; or an engineered soil with an equivalent level of protection as determined by the regulatory authority for the site.
- (15) "Final stabilization" means that all land disturbing construction activities at the construction site have been completed and that a uniform perennial vegetative cover has been established with a density of at least 70% of the cover for the unpaved areas and areas not covered by permanent structures or that employ equivalent permanent stabilization measures.
- (16) "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of runoff, except discharges authorized by a WPDES permit or any other discharge not requiring a WPDES permit such as water line flushing, landscape irrigation, individual residential car washing, fire fighting and similar discharges.
- (16m) "Impaired water" means a waterbody impaired in whole or in part and listed by the department pursuant to 33 USC 1313 (d) (1) (A) and 40 CFR 130.7, for not meeting a water quality standard, including a water quality standard for a specific substance or the waterbody's designated use.
- Note: The impaired waters list is available from the department at (608)
- (17) "Impervious surface" means an area that releases as runoff all or a large portion of the precipitation that falls on it, except for frozen soil. Rooftops, sidewalks, driveways, gravel or paved parking lots, and streets are examples of surfaces that typically are impervious.
- (18) "In-fill" means an undeveloped area of land located within an existing urban sewer service area, surrounded by development or development and natural or man-made features where development cannot occur. "In-fill" does not include any undeveloped area that was part of a larger new development for which a notice of intent to apply for a storm water permit in accordance with subch. III of ch. NR 216 was required to be submitted after October 1, 2004, to the department or the department of com-
- (19) "Infiltration" means the entry and movement of precipitation or runoff into or through soil.
- (20) "Infiltration system" means a device or practice such as a basin, trench, rain garden or swale designed specifically to encourage infiltration, but does not include natural infiltration in pervious surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices, such as

- swales or road side channels designed for conveyance and pollutant removal only.
- (22) "Land disturbing construction activity" means any manmade alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative soil cover, that may result in runoff and lead to an increase in soil erosion and movement of sediment into waters of the state. Land disturbing construction activity includes clearing and grubbing, demolition, excavating, pit trench dewatering, filling and grading activities.
- (23) "Landowner" means any person holding fee title, an easement or other interest in property, which allows the person to undertake cropping, livestock management, land disturbing construction activity or maintenance of storm water BMPs on the
- (24) "Local governmental unit" has the meaning given in s. 92.15 (1) (b), Stats.
- (25) "MEP" or "maximum extent practicable" means the highest level of performance that is achievable but is not equivalent to a performance standard identified in subch. III or IV, as determined in accordance with s. NR 151.006.
- (26) "Municipality" has the meaning given in s. 281.01 (6), Stats.
- (27) "Navigable waters" and "navigable waterway" has the meaning given in s. 30.01 (4m), Stats.
- (28) "New development" means development resulting from the conversion of previously undeveloped land or agricultural land uses.
- (29) "NRCS" means the natural resources conservation service of the U.S. department of agriculture.
- (30) "Ordinary high water mark" has the meaning given in s. NR 115.03 (6).
- (31) "Outstanding resource waters" means waters listed in s. NR 102.10.
- (32) "Percent fines" means the percentage of a given sample of soil, which passes through a # 200 sieve.
- **Note:** Percent fines can be determined using the "American Society for Testing and Materials", volume 04.02, "Test Method C117–95 Standard Test Method for Materials Finer than 75– μ m (No. 200) Sieve in Material Aggregates by Washing". Copies can be obtained by contacting the American society for testing and materials, 100 Barr Harbor Drive, Conshohocken, PA 19428–2959, or phone 610–832–9585, or on line at: http://www.astm.org/.
- (33) "Performance standard" means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.
- (34) "Pervious surface" means an area that releases as runoff a small portion of the precipitation that falls on it. Lawns, gardens, parks, forests or similar vegetated areas are examples of surfaces that typically are pervious.
- **(35)** "Pollutant" has the meaning given in s. 283.01 (13), Stats.
- (36) "Pollution" has the meaning given in s. 281.01 (10), Stats.
- **(37)** "Population" has the meaning given in s. 281.66 (1) (c), Stats.
- (38) "Preventive action limit" has the meaning given in s. NR 140.05 (17).
- (39) "Redevelopment" means areas where development is replacing older development.
- (40) "Runoff" means storm water or precipitation including rain, snow, ice melt or similar water that moves on the land surface via sheet or channelized flow.
- (41) "Sediment" means settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.
- (42) "Separate storm sewer" means a conveyance or system of conveyances including roads with drainage systems, streets,

catch basins, curbs, gutters, ditches, constructed channels or storm drains, which meets all of the following criteria:

- (a) Is designed or used for collecting water or conveying runoff.
 - (b) Is not part of a combined sewer system.
- (c) Is not part of a publicly owned wastewater treatment works that provides secondary or more stringent treatment.
 - (d) Discharges directly or indirectly to waters of the state.
- **(42m)** "Silviculture activity" means activities including tree nursery operations, tree harvesting operations, reforestation, tree thinning, prescribed burning, and pest and fire control. Clearing and grubbing of an area of a construction site is not a silviculture activity
- (43) "Storm water management plan" means a comprehensive plan designed to reduce the discharge of pollutants from storm water, after the site has undergone final stabilization, following completion of the construction activity.
- **(44)** "Targeted performance standard" means a performance standard that will apply in a specific area, where additional practices beyond those contained in this chapter, are necessary to meet water quality standards.
- **(45)** "Technical standard" means a document that specifies design, predicted performance and operation and maintenance specifications for a material, device or method.
- (46) "Top of the channel" means an edge, or point on the land-scape landward from the ordinary high water mark of a surface water of the state, where the slope of the land begins to be less than 12% continually for at least 50 feet. If the slope of the land is 12% or less continually for the initial 50 feet landward from the ordinary high water mark, the top of the channel is the ordinary high water mark.
- **(46m)** "Total maximum daily load" or "TMDL" means the amount of pollutants specified as a function of one or more water quality parameters, that can be discharged per day into a water quality limited segment and still ensure attainment of the applicable water quality standard.
- (47) "TR-55" means the United States department of agriculture, natural resources conservation service (previously soil conservation service), Urban Hydrology for Small Watersheds, Second Edition, Technical Release 55, June 1986, which is incorporated by reference for this chapter.

Note: Copies of this document may be inspected at the offices of the department's bureau of watershed management, the natural resources conservation service, the secretary of state, and the legislative reference bureau, all in Madison, WI.

- (48) "Transportation facility" means a highway, a railroad, a public mass transit facility, a public—use airport, a public trail or any other public work for transportation purposes such as harbor improvements under s. 85.095 (1) (b), Stats. "Transportation facility" does not include building sites for the construction of public buildings and buildings that are places of employment that are regulated by the department pursuant to s. 281.33, Stats.
- **(49)** "Type II distribution" means a rainfall type curve as established in the "United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published 1973", which is incorporated by reference for this chapter. The Type II curve is applicable to all of Wisconsin and represents the most intense storm pattern.

Note: Copies of this document may be inspected at the offices of the department's bureau of watershed management, the natural resources conservation service, the secretary of state, and the legislative reference bureau, all in Madison, WI.

- **(49m)** "US EPA" means the United States environmental protection agency.
- **(50)** "Waters of the state" has the meaning given in s. 283.01 (20), Stats.
- **(51)** "WPDES permit" means a Wisconsin pollutant discharge elimination system permit issued under ch. 283, Stats.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (3), (6), (17), (18), (25), (42) (c), cr. (11m), (14g), (14r), (16m), (42m),

 $(46m),\,(49m),\,r.\,(21)$ Register December 2010 No. 660, eff. 1–1–11; corrections in (48) made under s. 13.92 (4) (b) 6. and 7., Stats., Register December 2010 No. 660.

- NR 151.003 BMP Location. (1) NON-NAVIGABLE WATERS. For purposes of determining compliance with the performance standards of subchs. III and IV, the department may give credit for BMPs that function to provide treatment for runoff from existing development and post–construction runoff from new development, redevelopment, and in–fill development and that are located within non–navigable waters.
- **(2)** NAVIGABLE WATERS. (a) *New development runoff.* Except as allowed under par. (b), BMPs designed to treat post—construction runoff from new development may not be located in navigable waters and, for purposes of determining compliance with the performance standards of subchs. III and IV, the department may not give credit for such BMPs.
- (b) New development runoff exemption. BMPs to treat post-construction runoff from new development may be located within navigable waters and may be creditable by the department under subchs. III and IV, if all the following are met:
- 1. The BMP was constructed prior to October 1, 2002, and received all applicable permits.
- 2. The BMP functions or will function to provide runoff treatment for the new development.
- (c) Existing development and post-construction runoff from redevelopment and in-fill development. Except as provided in par. (d), BMPs that function to provide runoff treatment for existing development and post-construction runoff from redevelopment and in-fill development may not be located in navigable waters and, for purposes of determining compliance with the performance standards of subchs. III and IV, the department may not give credit for such BMPs.
- (d) Existing development and post-construction runoff from redevelopment and in-fill development exemption. BMPs that function to provide treatment of runoff from existing development and post-construction runoff from redevelopment and in-fill development may be located within navigable waters and may be creditable by the department under subchs. III and IV, if any of the following are met:
- 1. The BMP was constructed, contracts were signed or bids advertised and all applicable permits were received prior to January 1, 2011.
- The BMP is on an intermittent waterway and all applicable permits are received.

Note: An intermittent waterway may be identified on a United States geological survey 7.5-minute series topographic map, a county soil survey map, the Surface Water Data Viewer Map, 24K hydro layer on the department's website, or determined by the department through a site evaluation, whichever is more current. The Surface Water Data Viewer Map, 24K hydro layer is available at http://dnr.wi.gov/topic/surfacewater/swdv/.

(3) CREDIT. The amount of credit that the department may give a BMP for purposes of determining compliance with the performance standards of subchs. III and IV is limited to the treatment capability of the BMP.

Note: This section does not supersede any other applicable federal, state, or local regulation such as ch. NR 103 or ch. 30, Stats. Federal, state, and local permits or approvals may be required to excavate, dredge, fill, or construct BMPs in or near wetlands, non-navigable or navigable waters. Other permits and approvals may not be authorized where the BMP construction will result in adverse environmental impacts to the waterway or wetland.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: r. and recr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.004 State targeted performance standards.

Implementation of the statewide performance standards and prohibitions in this chapter may not be sufficient to achieve water quality standards under chs. NR 102 to 105 or groundwater standards under ch. NR 140. In those cases, using modeling or monitoring, the department shall determine if a specific waterbody or area will not attain water quality standards or groundwater standards after substantial implementation of the performance standards and prohibitions in this chapter. If the department finds that

water quality standards or groundwater standards will not be attained using statewide performance standards and prohibitions but the implementation of targeted performance standards would attain water quality standards or groundwater standards, the department shall promulgate the targeted performance standards by rule.

Note: Pursuant to s. 281.16 (2) (a) and (3) (a), Stats., the performance standards shall be designed to meet state water quality standards.

Note: Pursuant to s. 281.16 (3), Stats., the department of agriculture, trade and consumer protection shall develop or specify the best management practices, conservation practices or technical standards used to demonstrate compliance with a performance standard developed under s. NR 151.004.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. Register December 2010 No. 660, eff. 1–1–11.

- NR 151.005 Performance standard for total maximum daily loads. A crop producer or livestock producer subject to this chapter shall reduce discharges of pollutants from a livestock facility or cropland to surface waters if necessary to meet a load allocation in a US EPA and state approved TMDL.
- (1) A crop producer or livestock producer subject to this chapter shall use the best management practices, conservation practices, or technical standards established under ch. ATCP 50 to meet a load allocation in a US EPA and state approved TMDL.
- (2) If compliance with a more stringent or additional performance standard, other than the performance standards contained in this chapter, is required for crop producers or livestock producers to meet a load allocation in a US EPA and state approved TMDL, the department shall use the procedure in s. NR 151.004 to promulgate the more stringent or additional performance standard before compliance is required.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.006 Applicability of maximum extent practicable. Maximum extent practicable applies when a person who is subject to a performance standard of subchs. III and IV demonstrates to the department's satisfaction that a performance standard is not achievable and that a lower level of performance is appropriate. In making the assertion that a performance standard is not achievable and that a level of performance different from the performance standard is the maximum extent practicable, an applicant shall take into account the best available technology, cost effectiveness, geographic features, and other competing interests such as protection of public safety and welfare, protection of endangered and threatened resources, and preservation of historic properties.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

Subchapter II — Agricultural Performance Standards and Prohibitions

NR 151.01 Purpose. The purpose of this subchapter is to prescribe performance standards and prohibitions in accordance with the implementation and enforcement procedures contained in ss. NR 151.09 and 151.095 for agricultural facilities, operations and practices.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02.

NR 151.015 Definitions. In this subchapter:

- (1) "Accounting period" means the crop rotation period over which compliance is measured and consists of the current year and extends back the previous 7 years moving forward each consecutive year creating a rolling time period not to exceed 8 years.
- (2) "Closed depression" means a topographical basin where water ponds to a seasonal high water mark, has no external drainage, and drainage may occur either through direct conduits to groundwater or low areas where water ponds and infiltrates into the groundwater. Closed depressions may be identified using topographic maps and visual interpretation, ArcGIS tools, or other methods. A seasonal high water mark may include, but is not limited to, areas that collect and retain water for extended time

periods (days or weeks) that result in areas of reduced or no crop growth.

- (2m) "Concentrated flow channel" means a natural channel or constructed channel that has been shaped or graded to required dimensions and established in perennial vegetation for the stable conveyance of runoff. Concentrated flow channel may also include non-vegetated channels caused by ephemeral erosion, intermittent streams, drainage ditches, and drainage ends identified on the NRCS soil survey and may be identified as contiguous up-gradient deflections of contour lines on the USGS 1:24,000 scale topographic map.
- (3) "Conservation practice" means a best management practice designed to reduce or prevent soil or sediment loss to the waters of the state.
- **(4)** "Crop producer" means an owner or operator of an operation engaged in crop related agricultural practices specified in s. 281.16 (1) (b), Stats.
- **(5)** "Cropland practice" means the method, activity or management measure used to produce or harvest crops.
- **(6)** "County land conservation committee" means the committee created by a county board under s. 92.06, Stats. "County land conservation committee" includes employees or agents of the committee whom, with committee authorization, act on behalf of the committee.
 - (7) "Direct runoff" includes any of the following:
- (a) Runoff from a feedlot that can be predicted to discharge a significant amount of pollutants to surface waters of the state or to a direct conduit to ground water.
- (b) Runoff of stored manure, including manure leachate, that discharges a significant amount of pollutants to surface waters of the state or to a direct conduit to ground water.
- (c) Construction of a manure storage facility in permeable soils or over fractured bedrock without a liner designed in accordance with s. NR 154.04 (3).
- (d) Discharge of a significant amount of leachate from stored manure to waters of the state.
- (7m) "Established crop" means a growing annual crop, perennial crop, or cover crop that provides vegetative cover of the soil.
- (8) "Feedlot" means a barnyard, exercise area, or other outdoor area where livestock are concentrated for feeding or other purposes and self-sustaining vegetative cover is not maintained. "Feedlot" does not include a winter grazing area or a bare soil area such as a cattle lane or a supplemental feeding area located within a pasture, provided that the bare soil area is not a significant source of pollution to waters of the state.
- **(8d)** "Incorporation" has the meaning given in s. NR 243.03 (28)
- **(8h)** "Infield bedrock verification" means determining bedrock depth using available data which may include well construction reports, location of drill cores or other subsurface investigations, location of quarries and natural bedrock outcrops, geophysical investigations, and uneven crop growth patterns that are linked to fracture traces in the field.
 - (8p) "Injection" has the meaning given in s. NR 243.03 (29).
- (8t) "Liquid manure" has the meaning given in s. NR 243.03 (32) when applied to facilities subject to ch. NR 243, and the meaning given in UW A2809 for all other agricultural facilities where manure is generated.

Note: Copies of the University of Wisconsin — Extension publication A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, dated 2012 (A2809) may be inspected at the office of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the legislative reference bureau, Madison, Wisconsin. A2809 is also available electronically at: http://learningstore.uwex.edu/assets/pdfs/A2809.pdf.

- **(9)** "Livestock facility" means a structure or system constructed or established on a livestock operation.
- (10) "Livestock producer" means an owner or operator of a livestock operation.

- (11) "Livestock operation" has the meaning given in s. 281.16 (1) (c), Stats.
- **(11m)** "Long term no-till" means no-till farming that has been implemented a minimum of 3 consecutive years.
- (12) "Manure" means a material that consists primarily of excreta from livestock, poultry or other animals.
- (13) "Manure storage facility" means an impoundment made by constructing an embankment or excavating a pit or dugout or by fabricating a structure to contain manure and other animal or agricultural wastes.
- (13g) "Margin of safety level" has the meaning given it in s. NR 243.03 (37).
- (13j) "Mechanical application" means surface application, injection, or incorporation of manure on cropland or pastures using manure hauling vehicles or equipment.
- (13m) "Municipality" has the meaning given in s. 281.01 (6), Stats
- (14) "NOD" means a notice of discharge issued under s. NR 243.24 (4).
- (15) "Operator" means a person responsible for the oversight or management of equipment, facilities or livestock at a livestock operation, or is responsible for land management in the production of crops.
- **(15e)** "Overflow" means discharge of manure to the environment resulting from flow over the brim of a facility or from flow directed onto the ground through a man-made device including a pump or pipe.
- (15m) "Pasture" means land on which livestock graze or otherwise seek feed in a manner that maintains the vegetative cover over the grazing area. Pasture may include limited areas of bare soil such as cattle lanes and supplemental feeding areas provided the bare soil areas are not significant sources of pollution to waters of the state.
- (15n) "Pathogens" has the meaning given in s. NR 204.03 (38).
- (15s) "Phosphorus index" or "P-index" means Wisconsin's agricultural land management planning tool for assessing the potential of a cropped or grazed field to contribute phosphorus to the surface water.
- **(15w)** "Pre-tillage" means using mechanical equipment to reduce soil preferential flow paths, worm holes, root holes, and cracks by turning and mixing the soil prior to and at least 2 inches below the depth of manure application.
- (16) "Process wastewater" has the meaning given in s. NR 243.03 (53).
- (17) "Silurian bedrock" means the area in Wisconsin where the bedrock consists of Silurian dolomite with a depth to bedrock of 20 feet or less. This area comprises portions of the following counties: Brown, Calumet, Dodge, Door, Fond du Lac, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Sheboygan, Walworth, Washington, and Waukesha. Areas where Silurian bedrock occurs in Wisconsin can be identified by the most current NRCS, Wisconsin Geological Natural History Survey, department of agriculture, trade and consumer protection, department of natural resources, county maps, or infield bedrock verification methods.
- (18) "Site that is susceptible to groundwater contamination" under s. 281.16 (1) (g), Stats., means any one of the following:
 - (a) An area within 250 feet of a private well.
 - (b) An area within 1000 feet of a municipal well.
- (c) An area within 300 feet upslope or 100 feet downslope of a direct conduit to groundwater.
 - (d) A channel that flows to a direct conduit to groundwater.
- (e) An area where the soil depth to groundwater or bedrock is less than 2 feet.

- (f) An area where the soil does not exhibit one of the following soil characteristics:
- 1. At least a 2–foot soil layer with 40% fines or greater above groundwater and bedrock.
- At least a 3-foot soil layer with 20% fines or greater above groundwater and bedrock.
- 3. At least a 5–foot soil layer with 10% fines, or greater above groundwater and bedrock.
 - Note: See s. NR 151.002 (32) for definition of percent fines.
- (18g) "Soil texture" means the surface texture of the Silurian bedrock soil map unit.
- (18r) "Solid manure" has the meaning given in s. NR 243.03 (58) when applied to facilities subject to ch. NR 243, Wis. Adm. Code and the meaning given in UW A2809 for all other agricultural facilities where manure is generated.

Note: Copies of the University of Wisconsin — Extension publication A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, dated 2012 (A2809) may be inspected at the office of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the legislative reference bureau, Madison, Wisconsin. A2809 is also available electronically at: http://learningstore.uwex.edu/assets/pdfs/A2809.pdf.

- (19) "Stored manure" means manure that is kept in a manure storage facility or an unconfined manure pile.
- **(20)** "Substantially altered" means a change initiated by an owner or operator that results in a relocation of a structure or facility or significant changes to the size, depth or configuration of a structure or facility including:
 - (a) Replacement of a liner in a manure storage structure.
- (b) An increase in the volumetric capacity or area of a structure or facility by greater than 20%.
- (c) A change in a structure or facility related to a change in livestock management from one species of livestock to another such as cattle to poultry.
- **(21)** "Tolerable soil loss" or "T" means the maximum rate of erosion, in tons per acre per year, allowable for particular soils and site conditions that will maintain soil productivity.
- (22) "Unconfined manure pile" means a quantity of manure that is at least 175 ft³ in volume and which covers the ground surface to a depth of at least 2 inches and is not confined within a manure storage facility, livestock housing facility or barnyard runoff control facility or covered or contained in a manner that prevents storm water access and direct runoff to surface water or leaching of pollutants to groundwater.
- (22m) "UW A2809" means the 2012 version of the University of Wisconsin Extension Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin (A2809).

Note: Copies of the University of Wisconsin — Extension publication A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, dated 2012 (A2809) may be inspected at the office of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the legislative reference bureau, Madison, Wisconsin. A2809 is also available electronically at: http://learningstore.uwex.edu/assets/pdfs/A2809.pdf.

- (24) "Water quality management area" or "WQMA" means the area within 1,000 feet from the ordinary high water mark of navigable waters that consist of a lake, pond or flowage, except that, for a navigable water that is a glacial pothole lake, the term means the area within 1,000 feet from the high water mark of the lake; the area within 300 feet from the ordinary high water mark of navigable waters that consist of a river or stream; and a site that is susceptible to groundwater contamination, or that has the potential to be a direct conduit for contamination to reach groundwater.
- **(25)** "Winter grazing area" means a cropland or pasture where livestock feed on dormant vegetation or crop residue, with or without supplementary feed, during the period of October 1 to April 30.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: r. and recr. (1), (8), (16), am. (7), (18) (c), (d), cr. (13g), (15e), (15m), (15s), (25), r. (17) Register December 2010 No. 660, eff. 1–1–11; CR 17–062: cr. (2), (2m), (7m), (8d), (8h), (8p), (8t), (11m), (13j), (15n), (15w), (17), (18g), (18r), (22m), Register June 2018 No. 750 eff. 7–1–18; corrections in (8t) and (17) made under s. 35.17, Stats., Register June 2018 No. 750.

- NR 151.02 Sheet, rill and wind erosion performance standard. (1) All land where crops or feed are grown, including pastures, shall be managed to achieve a soil erosion rate equal to, or less than, the "tolerable" (T) rate established for that soil.
- **(2)** This standard first applies to pastures beginning July 1, 2012

Note: Soil loss will be calculated according to the revised universal soil loss equation II as referenced in ch. ATCP 50 and appropriate wind loss equations as referenced in ch. ATCP 50.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. Register December 2010 No. 660, eff. 1–1–11.

NR 151.03 Tillage setback performance standard.

The purpose of this standard is to prevent tillage operations from destroying stream banks and depositing soil directly in surface waters. In this section, "surface water" has the meaning given in s. NR 102.03 (7).

- (1) No crop producer may conduct a tillage operation that negatively impacts stream bank integrity or deposits soil directly in surface waters.
- (2) No tillage operations may be conducted within 5 feet of the top of the channel of surface waters. Tillage setbacks greater than 5 feet but no more than 20 feet may be required to meet this standard.
- (3) Crop producers shall maintain the area within the tillage setback required under sub. (2) in adequate sod or self–sustaining vegetative cover that provides a minimum of 70% coverage.
- (4) This section does not apply to grassed waterways installed as conservation practices.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11; correction to (intro.) made under s. 13.92 (4) (b) 7., Stats., Register December 2010 No. 660.

NR 151.04 Phosphorus index performance standard. (1) All crop and livestock producers shall comply with this section.

- **(2)** (a) Croplands, pastures, and winter grazing areas shall average a phosphorus index of 6 or less over the accounting period and may not exceed a phosphorus index of 12 in any individual year within the accounting period.
- (b) Except as provided under sub. (3), for purposes of compliance with this section the phosphorus index shall be calculated using the version of the Wisconsin Phosphorus Index available as of January 1, 2011.

Note: The Wisconsin Phosphorus Index is maintained by the University of Wisconsin department of soil science and can be found at http://wpindex.soils.wisc.edu/.

Note: Soil test phosphorus concentration may be used to help identify fields that are high priority for evaluation with the Wisconsin Phosphorus Index. For example, croplands with soil test phosphorus concentrations of 35 parts per million or greater should be given higher priority for evaluation.

Note: Best management practices developed by the department of agriculture, trade and consumer protection may be used alone or in combination to meet the requirements of this section.

- (c) The accounting period required under par. (a) shall meet the following conditions:
- 1. The accounting period shall begin once a nutrient management plan meeting the requirements of s. NR 151.07 and s. ATCP 50.04 (3) is completed.
- 2. During the first 8 years of implementation of this standard by a producer, computation of the phosphorus index may be based on a combination of planned crop management and historic data. Planned crop management data is based on projected management and crop rotations. Historic data is based on management and crop rotations that have actually occurred.
- 3. Once the nutrient management plan under s. NR 151.07 and s. ATCP 50.04 (3) is developed, historic data shall be used for each year as it becomes available.
- (3) If the phosphorus index is not applicable to a particular crop or situation, an equivalent calculation approved by the department shall be used to meet the requirements of this section.

- **Note:** The requirement provides for alternative methods to calculate a phosphorus index. Some strategies for assessing and reducing phosphorus index values, algorithms, and software can be found at http://wpindex.soils.wisc.edu/.
- (4) Producers may not apply nutrients or manure directly, through mechanical means, to surface waters as defined in s. NR 102.03 (7).
- **(5)** The phosphorus index requirement under sub. (2) (a) first takes effect for pastures beginning July 1, 2012.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11; correction to (4) made under s. 13.92 (4) (b) 7., Stats., Register December 2010 No. 660.

- NR 151.05 Manure storage facilities performance standards. (1) APPLICABILITY. All livestock producers building new manure storage facilities, substantially altering manure storage facilities, or choosing to abandon their manure storage facilities shall comply with this section.
- (2) NEW CONSTRUCTION AND ALTERATIONS. (a) New or substantially altered manure storage facilities shall be designed, constructed and maintained to minimize the risk of structural failure of the facility and minimize leakage of the facility in order to comply with groundwater standards. The levels of materials in the storage facility may not exceed the margin of safety level.
- (am) Storage facilities that are constructed or significantly altered on or after January 1, 2011, shall be designed and operated to contain the additional volume of runoff and direct precipitation entering the facility as a result of a 25-year, 24-hour storm.
- (b) A new manure storage facility means a facility constructed after October 1, 2002.
- (c) A substantially altered manure storage facility is a manure storage facility that is substantially altered after October 1, 2002.
- (3) CLOSURE. (a) Closure of a manure storage facility shall occur when an operation where the facility is located ceases operations, or manure has not been added or removed from the facility for a period of 24 months. Manure facilities shall be closed in a manner that will prevent future contamination of groundwater and surface waters.
- (b) The owner or operator may retain the facility for a longer period of time by demonstrating to the department that all of the following conditions are met:
- 1. The facility is designed, constructed and maintained in accordance with sub. (2).
- The facility is designed to store manure for a period of time longer than 24 months.
- Retention of the facility is warranted based on anticipated future use.
- (4) EXISTING FACILITIES. (a) Manure storage facilities in existence as of October 1, 2002, that pose an imminent threat to public health, fish and aquatic life, or groundwater shall be upgraded, replaced, or abandoned in accordance with this section.
- (b) Levels of materials in storage facilities may not exceed the margin of safety level.

Note: Manure storage facilities are sometimes used to store non-agricultural wastes, such as septage or organic food wastes. These facilities may be subject to additional regulatory and cost-sharing requirements.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (title), (2) (a), (4), cr. (2) (am) Register December 2010 No. 660, eff. 1–1–11.

- NR 151.055 Process wastewater handling performance standard. (1) All livestock producers shall comply with this section.
- (2) There may be no significant discharge of process wastewater to waters of the state.
- **(3)** The department shall consider all of the following factors when determining whether a discharge of process wastewater is a significant discharge to waters of the state:
 - (a) Volume and frequency of the discharge.
 - (b) Location of the source relative to receiving waters.

- (c) Means of process wastewater conveyance to waters of the state.
- (d) Slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of process wastewater discharge to waters of the state.
- (e) Available evidence of discharge to a surface water of the state or to a direct conduit to groundwater as defined under s. NR 151.002 (11m).
- (f) Whether the process wastewater discharge is to a site that is defined as a site susceptible to groundwater contamination under s. NR 151.015 (18).
- (g) Other factors relevant to the impact of the discharge on water quality standards of the receiving water or to groundwater standards.

Note: Existing technical standards contained in the U.S. department of agriculture natural resources conservation service field office technical guide may be used for managing process wastewater. When such standards are not applicable, the landowner or operator is expected to take reasonable steps to reduce the significance of the discharge in accordance with the agricultural performance standard and prohibition compliance requirements of this chapter. The Wisconsin department of agriculture, trade and consumer protection is responsible under s. 281.16 (3) (c), Stats., for developing additional management practices if needed.

History: CR 09-112: cr. Register December 2010 No. 660, eff. 1-1-11.

NR 151.06 Clean water diversion performance standard. (1) All livestock producers within a water quality management area shall comply with this section.

(2) Runoff shall be diverted away from contacting feedlot, manure storage areas and barnyard areas within water quality management areas except that a diversion to protect a private well under s. NR 151.015 (18) (a) is required only when the feedlot, manure storage area or barnyard area is located upslope from the private well.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (title) Register December 2010 No. 660, eff. 1–1–11.

NR 151.07 Nutrient management. (1) All crop producers and livestock producers that apply manure or other nutrients directly or through contract to agricultural fields shall comply with this section.

Note: Manure management requirements for concentrated animal feeding operations covered under a WPDES permit are contained in ch. NR 243.

(2) This performance standard does not apply to the application of industrial waste and byproducts regulated under ch. NR 214, municipal sludge regulated under ch. NR 204, and septage regulated under ch. NR 113, provided the material is not commingled with manure prior to application.

Note: In accordance with ss. ATCP 50.04, 50.48 and 50.50, nutrient management planners, Wisconsin certified soil testing laboratories and dealers of commercial fertilizer are advised to make nutrient management recommendations based on the performance standard for nutrient management, s. NR 151.07, to ensure that their customers comply with this performance standard.

Note: If an application of material to cropland is regulated under ch. NR 113, 204, or 214, the management practices, loading limitations, and other restrictions specified in the applicable regulation apply to that application. However, nutrient management plans developed in accordance with this performance standard must account for all nutrient sources, including industrial waste and byproducts, municipal sludge, and septage. This means that the future application of manure and commercial fertilizer may be restricted by this performance standard due to other applications of industrial waste and byproducts, municipal sludge, and septage. In addition, it means that if industrial waste and byproducts, municipal sludge, or septage are placed in a manure storage structure and mixed with manure, the commingled material is also covered by this standard and must be accounted for by the producer when preparing and implementing a nutrient management plan.

- **(3)** Manure, commercial fertilizer and other nutrients shall be applied in conformance with a nutrient management plan.
- (a) The nutrient management plan shall be designed to limit or reduce the discharge of nutrients to waters of the state for the purpose of complying with state water quality standards and groundwater standards.
- (b) Nutrient management plans for croplands in watersheds that contain impaired surface waters or in watersheds that contain outstanding or exceptional resource waters shall meet the following criteria:

- 1. Unless otherwise provided in this paragraph, the plan shall be designed to manage soil nutrient concentrations so as to maintain or reduce delivery of nutrients contributing to the impairment of impaired surface waters and to outstanding or exceptional resource waters
- 2. The plan may allow for an increase in soil nutrient concentrations at a site if necessary to meet crop demands.
- 3. For lands in watersheds containing exceptional or outstanding resource waters, the plan may allow an increase in soil nutrient concentrations if the plan documents that any potential nutrient delivery to the exceptional or outstanding resource waters will not alter the background water quality of the exceptional or outstanding resource waters. For lands in watersheds containing impaired waters, the plan may allow an increase in soil nutrient concentrations if a low risk of delivery of nutrients from the land to the impaired water can be demonstrated.
- (c) In this standard, impaired surface waters are waters identified as impaired pursuant to 33 USC 1313 (d) (1) (A) and 40 CFR 130.7. Outstanding or exceptional resource waters are identified in ch. NR 102
- **(4)** This section is in effect on January 1, 2005 for existing croplands under s. NR 151.09 (4) that are located within any of the following:
- (a) Watersheds containing outstanding or exceptional resource waters.
 - (b) Watersheds containing impaired waters.
 - (c) Source water protection areas defined in s. NR 243.03 (61).
- **(5)** This section is in effect on January 1, 2008 for all other existing croplands under s. NR 151.09 (4).
- **(6)** This section is in effect for all new croplands under s. NR 151.09 (4) on October 1, 2003.

Note: The purpose of the phased implementation of this standard is to allow the department sufficient time to work with the Department of Agriculture, Trade and Consumer Protection and local governmental units to develop and implement an information, education and training program on nutrient management for affected stakeholders.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (2) Register December 2010 No. 660, eff. 1–1–11; correction to (4) (c) made under s. 13.92 (4) (b) 7., Stats., Register December 2010 No. 660.

NR 151.075 Silurian bedrock performance standards. (1) All crop producers and livestock producers that mechanically apply manure directly or through contract or other agreement to cropland or pasture areas that meet the definition of Silurian bedrock under s. NR 151.015 (17) must comply with this section.

- (2) Mechanical manure application may not cause the fecal contamination of water in a well.
- (3) Manure may not be mechanically applied on areas of cropland or pastures that have 24 inches or less of separation between the ground surface and apparent water table.
- **(4)** Manure must be applied in conformance with a nutrient management plan that meets the requirements under all the following:
 - (a) The plan must be consistent with s. NR 151.07.
- (b) The plan must be consistent with NRCS Technical Standard 590, dated December 2015.

Note: Copies of the Wisconsin Natural Resources Conservation Service ("NRCS") Nutrient Management Standard 590, dated December 2015, including the Technical Note (TN-1) referenced in the standard, may be inspected at the offices of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection, county land conservation departments and the legislative reference bureau, Madison Wisconsin. NRCS 590 (and TN-1) is also available electronically at: https://efotg.sc.egov.usda.gov/references/public/WI/S90_Standard-(2015-12).pdf and https://efotg.sc.egov.usda.gov/references/public/WI/Conservation_Planning-TN-1.pdf.

(c) The plan must be designed and implemented consistent with this section to manage manure so as to reduce the risk of pathogen delivery to groundwater and prevent exceedances of groundwater water quality standards.

NR 151.075

- (d) The plan must use NRCS soil survey maps/information or other methods as a planning tool to identify Silurian bedrock within or adjacent to cropland and pastures.
- (5) Manure may not be mechanically applied on croplands or pastures until infield bedrock verification or Silurian bedrock map information is used to identify areas where the Silurian bedrock soil depth is less than 5 feet. If infield bedrock verification uses drill cores or other subsurface investigations, they must be backfilled with soil within 72 hours of being created.

Note: Silurian bedrock map information developed by the department of agriculture, trade and consumer protection and/or department of natural resources, may be used alone or in combination to meet the requirements of this section.

Note: Silurian bedrock map information, available from the University of Wisconsin department of soil science, can be found at https://snapplus.wisc.edu/maps/.

- **(6)** Manure may not be mechanically applied on croplands or pastures where the Silurian bedrock soil depth is less than 5 feet until such fields are evaluated and ranked for risk of pathogen delivery to groundwater. Areas determined to have a high risk for pathogen delivery to groundwater must be avoided or must be lowest priority for manure application.
- (7) Mechanical application of manure and headland stacking of manure is prohibited on soils with 5 feet or less to Silurian bedrock when soils are frozen or snow covered.
- **(8)** Mechanical application of manure is prohibited within Silurian bedrock having soil depths less than 5 feet when rainfall greater than one inch is forecast within 24 hours of planned application.
- **(9)** Mechanical application of manure is prohibited for soils with less than 2 feet to Silurian bedrock.
- **(10)** For soils with 2 to 3 feet to Silurian bedrock, all the following apply:

- (a) No mechanical application of solid manure unless all the following are met:
- 1. Solid manure is incorporated within 72 hours to no more than 4 inches below ground.
 - 2. At least one of the following is implemented:
- a. Solid manure is applied at a rate no greater than 15 tons/ acre/year, or the rate that supplies the crop nitrogen recommendation from UW A2809, whichever is less.
- b. Solid manure is applied in compliance with UW A2809 and within 10 days of the planting date or applied on a perennial or established crop.
- c. Solid manure is composted or treated to reduce pathogen levels via practices to a fecal coliform bacteria density of less than 500,000 colony–forming units or most probable number per gram total solids on a dry weight basis.

Note: Copies of the University of Wisconsin — Extension publication A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, dated 2012 (A2809) may be inspected at the office of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the legislative reference bureau, Madison, Wisconsin. A2809 is also available electronically at: http://learningstore.uwex.edu/assets/pdfs/A2809.pdf.

- (b) No mechanical application of liquid manure unless all the following are met:
- Pre-tillage is completed, unless exempt under par. (c) or (d).
- 2. Liquid manure is injected or incorporated within 24 hours to no more than 4 inches below ground, unless exempt under par.
 - 3. At least one of the following is implemented:
- a. Total liquid manure application is applied in compliance with UW A2809, or limited to Table 1, whichever is less, to prevent hydraulic overloading of the soil.

Table 1. Silurian Bedrock Maximum Liquid Manure Application Rates					
Soil Texture	2 to 3 Feet Depth (gal/ac/yr)	3 to 5 Feet Depth (gal/ac/wk)	5 to 20 Feet Depth (gal/ac/wk)		
Sand	6,750	6,750	13,500		
Sandy Loam	13,500	13,500	27,000*		
Loam	13,500	13,500	27,000*		
Silt Loam	13,500	13,500	27,000*		
Clay Loam	13,500	13,500	20,000*		
Clay	6,750	6,750	13,500		

- *It is anticipated that this rate would exceed the UW A2809 annual (crop year) application rate.
- b. Liquid manure is applied in compliance with UW A2809 and within 10 days of the planting date or applied on a perennial or established crop.
- c. Liquid manure is treated to substantially reduce pathogen levels via practices to a fecal coliform bacteria density of less than 500,000 most probable number or colony–forming units per 100 milliliter sample.

Note: Copies of the University of Wisconsin — Extension publication A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, dated 2012 (A2809) may be inspected at the office of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the legislative reference bureau, Madison, Wisconsin. A2809 is also available electronically at: http://learningstore.uwex.edu/assets/pdfs/A2809.pdf.

- (c) Pre-tillage, incorporation or injection is not required if cropland or pastures meet long term no-till or have a perennial or established crop. Each surface application of liquid manure must not exceed 6,750 gallons per acre.
- (d) Pre-tillage is not required if demonstrated to the department that a field cannot meet s. NR 151.02 over an eight-year crop rotation using a combination of the following practices: tillage, crops, contouring, filter strips, or cover crops.
- (11) For soils with 3 to 5 feet to Silurian bedrock, all the following apply:

- (a) No mechanical application of solid manure unless all the following are met:
- 1. Incorporated within 72 hours to no more than 6 inches below ground.
 - 2. At least one of the following is implemented:
- Manure is applied in accordance with UW A2809 annual application rate, or at a rate of 15 tons/acre/year, whichever is less.
- b. Manure is applied in compliance with UW A2809 and within 10 days of the planting date or applied on a perennial or established crop.
- c. Manure is composted or treated to reduce pathogen levels via practices to a fecal coliform bacteria density of 500,000 colony–forming units, or most probable number per gram total solids on a dry weight basis.

Note: Copies of the University of Wisconsin — Extension publication A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, dated 2012 (A2809) may be inspected at the office of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the legislative reference bureau, Madison, Wisconsin. A2809 is also available electronically at: http://learningstore.uwex.edu/assets/pdfs/A2809.pdf

- (b) No mechanical application of liquid manure unless all the following are met:
 - 1. Pre-tillage is completed unless exempt under par. (c) or (d).
- 2. Liquid manure is injected or incorporated within 24 hours to no more than 6 inches below ground, unless exempt under par. (c).
 - 3. At least one of the following is implemented:
- a. Total liquid manure application is applied in compliance with UW A2809, or limited to sub. (10) (b) 3. Table 1 rates, whichever is less, to prevent hydraulic overloading of the soil.
- b. Liquid manure is applied in compliance with UW A2809 and within 10 days of the planting date or applied on a perennial or established crop.
- c. Liquid manure is treated to substantially reduce pathogen levels via practices to a fecal coliform bacteria density of less than 500,000 most probable number or colony–forming units per 100 milliliter sample.

Note: Copies of the University of Wisconsin — Extension publication A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, dated 2012 (A2809) may be inspected at the office of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the legislative reference bureau, Madison, Wisconsin. A2809 is also available electronically at: http://learningstore.uwex.edu/assets/pdfs/A2809.pdf.

- (c) Pre-tillage, incorporation or injection is not required if cropland or pastures meet long term no-till or have a perennial or established crop. Each surface application of liquid manure must not exceed 6,750 gallons per acre.
- (d) Pre-tillage is not required if demonstrated to the department that a field cannot meet s. NR 151.02 over an eight-year crop rotation using a combination of the following practices: tillage, crops, contouring, filter strips, or cover crops.
- **(12)** For soils with 5 to 20 feet to Silurian bedrock, all the following apply:
- (a) No mechanical application of liquid manure unless all the following are met:
 - 1. Pre-tillage is completed unless exempt under par. (b) or (c).
- 2. Liquid manure is injected or incorporated within 24 hours to no more than 6 inches below ground, unless exempt under par. (b).
 - 3. At least one of the following is implemented:
- a. Total liquid manure application is applied in compliance with UW A2809, or limited to sub. (10) (b) 3. Table 1 rates, whichever is less, to prevent hydraulic overloading of the soil.
- b. Liquid manure is applied in compliance with UW A2809 and within 10 days of the planting date or applied on a perennial or established crop.
- c. Liquid manure is treated to substantially reduce pathogen levels via practices to a fecal coliform bacteria density of less than

500,000 most probable number or colony–forming units per 100 milliliter sample.

Note: Copies of the University of Wisconsin — Extension publication A2809 Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, dated 2012 (A2809) may be inspected at the office of the department, the Wisconsin Department of Agriculture, Trade and Consumer Protection and the legislative reference bureau, Madison, Wisconsin. A2809 is also available electronically at: http://learningstore.uwex.edu/assets/pdfs/A2809.pdf.

- (b) Pre-tillage, incorporation or injection is not required if cropland or pastures meet long term no-till or have a perennial or established crop. Each surface application of liquid manure must not exceed 10,000 gallons per acre.
- (c) Pre-tillage is not required if demonstrated to the department that a field cannot meet s. NR 151.02 over an eight-year crop rotation using a combination of the following practices: tillage, crops, contouring, filter strips, or cover crops.

Note: Silurian bedrock map information for soils with 5 to 20 feet to Silurian bedrock, developed by the department of agriculture, trade and consumer protection and/or department of natural resources, may be used alone or in combination to meet the requirements of this section.

- (13) Mechanical manure applications are prohibited within any of the following:
- (a) 1000 feet of a community water system as defined in s. NR 811.02.
- (b) 250 feet of a private water system or a non-community water system as defined in s. NR 812.07.
- (c) An area within 300 feet upslope or 100 feet downslope of a direct conduit to groundwater as defined in s. NR 151.002 (11m).
- (d) 100 feet of a concentrated flow channel that leads to a water system included in par. (a) or (b) or direct conduit to groundwater in par. (c).
- (14) Mechanical manure applications are prohibited on or within 100 feet of Silurian bedrock in a closed depression unless the manure is injected or incorporated within 24 hours or prior to precipitation capable of producing runoff, whichever comes first. The prohibition of mechanical application of manure does not apply to areas following long term no–till practices or with a perennial or established crop.
- (15) No surface application of manure on slopes of 6 percent or greater in cropland and pasture areas that have concentrated flow channels that drain to a closed depression in Silurian bedrock, unless the material is incorporated within 24 hours or prior to precipitation capable of producing runoff, whichever comes first. The prohibition of surface application of manure does not apply to areas following long term no—till practices or with a perennial or established crop.
- (16) Practices must retain land applied manure on the soil where they are applied with minimal movement to maintain setback distances specified in subs. (13) and (14).

History: CR 17–062: cr. Register June 2018 No. 750 eff. 7–1–18; corrections in (10) (b) 1., 2., (11) (b) 1., 2., (12) (a) 1., 2., (13) (intro.), (d), made under s. 35.17, Stats., Register June 2018 No. 750.

NR 151.08 Manure management prohibitions.

- (1) All livestock producers shall comply with this section.
- **(2)** A livestock operation shall have no overflow of manure storage facilities.
- (3) A livestock operation shall have no unconfined manure pile in a water quality management area.
- **(4)** A livestock operation shall have no direct runoff from a feedlot or stored manure into the waters of the state.
- **(5)** (a) A livestock operation may not allow unlimited access by livestock to waters of the state in a location where high concentrations of animals prevent the maintenance of adequate sod or self–sustaining vegetative cover.
- (b) This prohibition does not apply to properly designed, installed and maintained livestock or farm equipment crossings. **History:** CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02.

NR 151.09 Implementation and enforcement procedures for cropland performance standards. (1) PURPOSE.

The purpose of this section is to identify the procedures the department will follow in implementing and enforcing the cropland performance standards pursuant to ss. 281.16 (3) and 281.98, Stats. This section will also identify circumstances under which an owner or operator of cropland is required to comply with the cropland performance standards. In this section, "cropland performance standards" means performance standards in ss. NR 151.005, 151.02, 151.03, 151.04, 151.07, and 151.075.

(2) ROLE OF MUNICIPALITIES. The department may rely on municipalities to implement the procedures and make determinations established in this section.

Note: In most cases, the department will rely on municipalities to fully implement the cropland performance standards. The department intends to utilize the procedures in this section in cases where a municipality has requested assistance in implementing and enforcing the cropland performance standards or in cases where a municipality has failed to address an incident of noncompliance with the performance standards in a timely manner. The department recognizes that coordination between local municipalities, the Department of Agriculture, Trade and Consumer Protection and other state agencies is needed to achieve statewide compliance with the performance standards. Accordingly, the department plans on working with counties, the Department of Agriculture, Trade and Consumer Protection and other interested partners to develop a detailed intergovernmental strategy for achieving compliance with the performance standards that recognizes the procedures in these rules, state basin plans and the priorities established in land and water conservation plans.

Note: The department implementation and enforcement procedures for livestock performance standards relating to manure management are included in s. NR 151.095 and ch. NR 243.

- (3) LANDOWNER AND OPERATOR REQUIREMENTS. (a) *Introduction*. This section identifies compliance requirements for landowners and operators based on whether the cropland is existing or new and whether cost sharing is required and made available to the landowner or operator.
- (b) General requirements. If any cropland is meeting a cropland performance standard on or after the effective date of the standard, the cropland performance standard shall continue to be met by the existing landowner or operator, heirs or subsequent owners or operators of the cropland. If a landowner or operator alters or changes the management of the cropland in a manner that results in noncompliance with the performance standard, the landowner or operator shall bring the cropland back into compliance, regardless of whether cost—sharing is made available. This paragraph does not apply to croplands completing enrollment determined to be existing under sub. (4) (b) 2.

Note: The department or a municipality may use conservation plans, cost share agreements, deed restrictions, personal observations, landowner records, or other information to determine whether a change has occurred.

- (c) Existing cropland requirements. 1. A landowner or operator of an existing cropland, defined under sub. (4) (b), shall comply with a cropland performance standard if all of the following have been done by the department:
- a. Except as provided in subds. 2. and 3., a determination is made that cost sharing has been made available in accordance with sub. (4) (d) on or after the effective date of the cropland performance standard.
- b. The landowner or operator has been notified in accordance with sub. (5) or (6).
- 2. A landowner or operator of existing cropland, defined under sub. (4) (b), shall comply with a cropland performance standard, regardless of whether cost sharing is available, in situations where the best management practices and other corrective measures needed to meet the performance standards do not involve eligible costs.
- 3. A landowner or operator of an existing cropland that voluntarily proposes to construct or reconstruct a manure storage system shall comply with s. NR 151.07, regardless of whether cost sharing is made available, if the nutrient management plan is required pursuant to a local permit for the manure storage system.

Note: Although the requirement for the nutrient management plan in this subd. 3 is tied to construction of a new manure storage system, the department intends to implement the nutrient management standard through s. NR 151.09 rather than through s. NR 151.095.

(d) New cropland requirements. A landowner or operator of a new cropland, defined under sub. (4) (b), shall comply with the cropland performance standards, regardless of whether cost sharing is available.

Note: Under s. 281.16 (3) (e), Stats., a landowner or operator may not be required by the state or a municipality through an ordinance to bring existing croplands into compliance with the cropland performance standards, technical standards or conservation practices unless cost–sharing is available in accordance with this section.

- **(4)** DEPARTMENT DETERMINATIONS. (a) *Scope of determinations*. If croplands are not in compliance with a cropland performance standard, the department shall make determinations in accordance with the procedures and criteria in this subsection.
- (b) Cropland status. The department shall classify non-complying croplands to be either new or existing for purposes of administering this section and s. 281.16 (3) (e), Stats. In making the determination, the department shall base the decision on the following:
- 1. An existing cropland is one that meets all of the following criteria:
- a. The cropland was being cropped as of the effective date of the standard.
- b. The cropland is not in compliance with a cropland performance standard in this subchapter as of the effective date of the standard. The reason for non-compliance of the cropland may not be failure of the landowner or operator to maintain an installed best management practice in accordance with a cost-share agreement or contract.
- 2. An existing cropland also includes land enrolled on October 1, 2002, in the conservation reserve or conservation reserve enhancement program administered by the U.S. department of agriculture. This subdivision does not apply to croplands re–enrolled after October 1, 2002.
- 3. A new cropland is one that does not meet the definition under subd. 1. or 2., including:
- a. Land without a previous history of cropping that is converted to cropland after the effective date of the standard. "Without a previous history of cropping" means land where crops have not been grown and harvested for agricultural purposes in the last 10 years prior to the conversion to cropland.
- b. Cropland that is in existence and in compliance with a performance standard on or after the effective date of the standard and that undergoes a change in a cropland practice that results in noncompliance with the performance standards.

Note: The department or a municipality may use conservation plans, cost share agreements, deed restrictions, personal observations, landowner records, or other information to determine whether a change has occurred.

- 4. Change in ownership may not be used as the sole basis for determining whether a cropland is existing or new for purposes of administering this subsection.
- (c) Eligible costs. 1. If cost sharing is required to be made available under sub. (3) (c), the department shall determine the total cost of best management practices and corrective measures needed to bring a cropland into compliance with performance standards and shall determine which of those costs are eligible for cost–sharing for the purposes of administering this section and s. 281.16 (3) (e), Stats.
- The cost-share eligibility provisions identified in chs. NR 153 and 154 shall be used in identifying eligible costs for installation of best management practices and corrective measures.
- Eligible technical assistance costs include best management practice planning, design, installation supervision, and installation certification.
- 4. If cost sharing is provided by DATCP or the department, the corrective measures shall be implemented in accordance with the BMPs and technical standards specified in ch. NR 154 or subch. VIII of ch. ATCP 50.

Note: Under chs. NR 153 and 154, eligible costs typically include capital costs and significant other expenses, including design costs, incurred by the landowner or

operator. Eligible costs do not include the value or amount of time spent by a landowner or operator in making management changes

- (d) Determination of cost-share availability. 1. For purposes of administering this section and s. 281.16 (3) (e), Stats., if cost sharing is required to be made available under sub. (3), the department shall make a determination as to whether cost sharing has been made available on or after the effective date of the cropland standard to cover the eligible costs for a landowner or operator to comply with the cropland performance standard.
- 2. Cost sharing under s. 281.65, Stats., shall be considered available when all of the following have been met:
- a. Cost share dollars are offered in accordance with either of the following: the department has entered into a runoff management grant agreement under ch. NR 153 or a nonpoint source grant agreement under ch. NR 120, and a notice under sub. (5), including any required offer of cost sharing, has been issued by the department or a municipality; or the department directly offers cost share assistance and issues a notice under sub. (5).
- b. The grants in subd. 2. a., alone or in combination with other funding determined to be available under subd. 3., provide at least 70% of the eligible costs to implement the best management practices or other corrective measures for croplands needed to meet a cropland performance standard.
- c. In cases of economic hardship determined in accordance with s. NR 154.03 (3), the grants in subd. 2. a., alone or in combination with other funding determined to be available under subd. 3., provide cost sharing consistent with the hardship determination.
- 3. For funding sources other than those administered by s. 281.65, Stats., the department may make a determination of cost share availability after consulting with DATCP and ch. ATCP 50.

Note: Under s. 281.16 (3) (e), DATCP is responsible for promulgating rules that specify criteria for determining whether cost-sharing is available from sources other than s. 281.65, Stats., including s. 92.14, Stats. Pursuant to s. 281.16 (3) (e), Stats., a municipality is required to follow the department's definition of cost-share availability if funds are utilized under s. 281.65, Stats. If funds are utilized from any other source, a municipality must defer to DATCP's definition of cost-share availability.

- (5) NOTIFICATION REQUIREMENTS AND COMPLIANCE PERIODS FOR EXISTING CROPLANDS WHEN COST-SHARING IS REQUIRED. (a) Landowner notification. 1. The department shall notify a landowner or operator in writing of the determinations made under sub. (4) and implementation requirements for existing croplands where cost sharing is required for compliance.
- 2. The notice shall be sent certified mail, return receipt requested or personal delivery.
 - 3. The following information shall be included in the notice:
- a. A description of the cropland performance standard being violated.
- b. The cropland status determination made in accordance with sub. (4) (b).
- c. The determination made in accordance with sub. (4) (c) as to which best management practices or other corrective measures that are needed to comply with cropland performance standards are eligible for cost sharing.

Note: Some best management practices required to comply with cropland performance standards involve no eligible cost to the landowner or operator and are not eligible for cost sharing.

- d. The determination made in accordance with sub. (4) (d) that cost sharing is available for eligible costs to achieve compliance with cropland performance standards, including a written offer of cost sharing.
- e. An offer to provide or coordinate the provision of technical assistance.
- f. A compliance period for meeting the cropland performance standard.
- g. An explanation of the possible consequences if the landowner or operator fails to comply with provisions of the notice, including enforcement or loss of cost sharing, or both

- (b) Compliance schedule. 1. A landowner or operator that receives the notice under par. (a) shall install or implement best management practices and corrective measures to meet the performance standards in the time period specified in the notice, if cost sharing is available in accordance with sub. (4) (d) 2.
- 2. The compliance period identified in the notice in par. (a) shall be determined by the department as follows:
- a. The compliance period shall begin on the postmark date of the notice or the date of personal delivery.
- b. The length of the compliance period shall be not less than 60 days nor more than 3 years unless otherwise provided for in this subdivision.
- c. The length of the compliance period may be less than 60 days if the site is an imminent threat to public health, fish and
- d. The department may authorize an extension up to 4 years on a case-by-case basis provided that the reasons for the extension are beyond the control of the landowner or operator. A compliance period may not be extended to exceed 4 years in total.
- 3. Once a landowner or operator achieves compliance with a cropland performance standard, compliance with the standard shall be maintained by the existing landowner or operator and heirs or subsequent owners, regardless of cost sharing.
- (6) NOTIFICATION REQUIREMENTS AND COMPLIANCE PERIODS FOR EXISTING CROPLANDS IN SITUATIONS WHEN NO ELIGIBLE COSTS ARE INVOLVED. (a) Landowner notification. 1. The department shall notify a non-complying landowner or operator of existing croplands of the determinations made under sub. (4).
- 2. The notice shall be sent certified mail, return receipt requested, or via personal delivery.
 - 3. The following information shall be included in the notice:
- a. A description of the cropland performance standard that is being violated and the determination that corrective measures do not involve eligible costs under sub. (4) (c).
- b. The cropland status determination made in accordance with sub. (4) (b).
- c. A compliance period for achieving the cropland performance standard. The compliance period may not exceed the time limits in par. (b).
- d. An explanation of the consequences if the landowner or operator fails to comply with provisions of the notice.
- (b) Compliance period. 1. The compliance period for existing croplands where best management practices and other corrective measures do not involve eligible costs shall be in accordance with the following:
- a. The compliance period shall begin on the postmark date of the notice or the date of personal delivery.
- b. The length of the compliance period shall be not less than 60 days nor more than 3 years unless otherwise provided for in this subsection.
- c. The length of the compliance period may be less than 60 days if the site is an imminent threat to public health, fish and aquatic life.
- 2. Once compliance with a cropland performance standard is attained, compliance with the standard shall be maintained by the existing landowner or operator and heirs or subsequent owners.
- (c) Combined notices. The department may meet multiple notification requirements under par. (a), sub. (5) and s. NR 151.095 within any single notice issued to a landowner or opera-
- (7) Enforcement. (a) Authority to initiate enforcement. The department may take enforcement action pursuant to s. 281.98, Stats., or other appropriate actions, against the landowner or operator of a cropland for failing to comply with the cropland performance standards in this subchapter or approved variances to the

cropland performance standards provided by the department under s. NR 151.097.

(b) Enforcement following notice and direct enforcement. The department shall provide notice to the landowner or operator of an existing cropland in accordance with subs. (5) and (6) prior to the department initiating enforcement action under s. 281.98, Stats., except in cases of repeated mismanagement. In such cases, the department may pursue direct enforcement under s. 281.98, Stats., for the second and any subsequent offenses.

Note: The implementation and enforcement procedures in this section are limited to actions taken by the department under s. 281.98, Stats., for noncompliance with a cropland performance standard. Pursuant to other statutory authority, the department may take direct enforcement action without cost sharing against a crop producer for willful or intentional acts or other actions by a landowner or operator that pose an immediate or imminent threat to human health or the environment.

Note: An owner or operator of a new cropland is required to meet the cropland performance standards by incorporating necessary management measures at the time the new cropland is created. This requirement shall be met regardless of cost sharing. The department may pursue direct enforcement under s. 281.98, Stats., against landowners or operators of new croplands not in compliance.

- **(8)** NOTIFICATION TO MUNICIPALITIES. The department shall notify the appropriate municipality, including a county land conservation committee, prior to taking any of the following actions under this section:
- (a) Contacting a landowner or operator to investigate compliance with cropland performance standards.
- (b) Issuing a notice under sub. (5) or (6) to a landowner or operator.
- (c) Taking enforcement action under s. 281.98, Stats., against a landowner or operator for failing to comply with cropland performance standards in this subchapter.
- (d) Notification is not required if the site is an imminent threat to public health or fish and aquatic life.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (1), (4) (b) 2., (c) 3., (d) 2. a., c., (5) (b) 2. b., (6) (b) 1. b., (7) (b), r. (5) (a) 3. h., (6) (a) 3. e. Register December 2010 No. 660, eff. 1–1–11; CR 17–062: am. (1), Register June 2018 No. 750 eff. 7–1–18.

NR 151.095 Implementation and enforcement procedures for livestock performance standards and prohibitions. (1) PURPOSE. The purpose of this section is to identify the procedures the department will follow in implementing and enforcing the livestock performance standards and prohibitions pursuant to ss. 281.16 (3) and 281.98, Stats. If a livestock performance standard is also listed as a cropland performance standard under s. NR 151.09, the department may choose the procedures of either s. NR 151.09 or this section to obtain compliance with the standard. This section will also identify circumstances under which an owner or operator of a livestock facility is required to comply with livestock performance standards and prohibitions. In this section, "livestock performance standards and prohibitions" means the performance standards and prohibitions in ss. NR 151.005, 151.05, 151.055, 151.06, and 151.08.

Note: The nutrient management standard in s. NR 151.07 should be implemented through the procedures in s. NR 151.09.

(2) ROLE OF MUNICIPALITIES. The department may rely on municipalities to implement the procedures and make determinations outlined in this section.

Note: In most cases, the department will rely on municipalities to fully implement the livestock performance standards and prohibitions. The department intends to utilize the procedures in this section in cases where a municipality has requested assistance in implementing and enforcing the performance standards or prohibitions or in cases where a municipality has failed to address an incident of noncompliance with the performance standards or prohibitions in a timely manner. The department recognizes that coordination between local municipalities, the department of agriculture, trade and consumer protection and other state agencies is needed to achieve statewide compliance with the performance standards and prohibitions. Accordingly, the department plans on working with counties, the department of agriculture, trade and consumer protection and other interested partners to develop a detailed intergovernmental strategy for achieving compliance with the performance standards and prohibitions that recognizes the procedures in these rules, state basin plans and the priorities established in land and water conservation plans.

Note: Additional implementation and enforcement procedures for livestock performance standards and prohibitions are in ch. NR 243, including the procedures for the issuance of a NOD.

- (3) EXEMPTIONS. The department may follow the procedures in ch. NR 243 and is not obligated to follow the procedures and requirements of this section in the following situations:
 - (a) If the livestock operation holds a WPDES permit.
- (b) If the department has determined that the issuance of a NOD to the owner or operator of the livestock operation is warranted. Circumstances in which a NOD may be warranted include:
- 1. The department has determined that a livestock facility has a point source discharge under s. NR 243.24.
- 2. The department has determined that a discharge to waters of the state is occurring and the discharge is not related to noncompliance with the performance standards or prohibitions.
- 3. The department has determined that a municipality is not addressing a facility's noncompliance with the performance standards and prohibitions in a manner consistent with the procedures and timelines established in this section.
- **(4)** LIVESTOCK OWNER AND OPERATOR REQUIREMENTS. (a) *Introduction*. This section identifies compliance requirements for a livestock owner or operator based on whether a livestock facility is existing or new and whether cost sharing is required to be made available to a livestock owner or operator.
- (b) General requirements. If any livestock facility is meeting a livestock performance standard or prohibition on or after the effective date of the standard or prohibition, the livestock performance standard or prohibition shall continue to be met by the existing owner or operator, heirs or subsequent owners or operators of the facility. If an owner or operator alters or changes the management of the livestock facility in a manner that results in noncompliance with a livestock performance standard or prohibition, the owner or operator shall bring the livestock facility back into compliance regardless of cost—share availability.

Note: The department or a municipality may use conservation plans, cost share agreements, deed restrictions, personal observations, landowner records, or other information to determine whether a change has occurred.

- (c) Existing livestock facility requirements. 1. An owner or operator of an existing livestock facility, defined under sub. (5) (b), shall comply with a livestock performance standard or prohibition if all of the following have been done by the department:
- a. Except as provided in subd. 2., a determination is made that cost sharing has been made available in accordance with sub. (5)
 (d) on or after the effective date of the livestock performance standard or prohibition.
- b. The owner or operator of the livestock facility has been notified in accordance with sub. (6) or (7).
- 2. An owner or operator of an existing livestock facility, defined under sub. (5) (b), shall comply with the livestock performance standards and prohibitions, regardless of whether cost sharing is available, in situations where best management practices and other corrective measures needed to meet the performance standards do not involve eligible costs.
- (d) New livestock facility requirements. An owner or operator of a new livestock facility, defined under sub. (5) (b), shall comply with the livestock performance standards and prohibitions, regardless of whether cost sharing is available.

Note: Under s. 281.16 (3) (e), Stats., an owner or operator may not be required by the state or a municipality through an ordinance or regulation to bring existing livestock facilities into compliance with the livestock performance standards or prohibitions, technical standards or conservation practices unless cost—sharing is available in accordance with this section.

- **(5)** DEPARTMENT DETERMINATIONS. (a) *Scope of determinations*. If a livestock facility is not in compliance with a livestock performance standard or prohibition, the department shall make determinations in accordance with the procedures and criteria in this subsection.
- (b) Livestock facility status. The department shall classify a non-complying livestock facility on an operation to be either new or existing for purposes of administering this section and s. 281.16

- (3) (e), Stats. In making the determination, the department shall base the decision on the following:
- 1. An existing livestock facility is one that meets all of the following criteria:
- a. The facility is in existence as of the effective date of the livestock performance standard or prohibition.
- b. The facility is not in compliance with a livestock performance standard or prohibition in this subchapter as of the effective date of the livestock performance standard or prohibition. The reason for noncompliance of the livestock facility may not be failure of the owner or operator to maintain an installed best management practice in accordance with a cost–share agreement or contract.
- 2. A new livestock operation or facility is one that does not meet the definition under subd. 1., including:
- a. A livestock operation or facility that is established or installed after the effective date of the livestock performance standard or prohibition, including the placement of livestock structures on a site that did not previously have structures, or placement of animals on lands that did not have animals as of the effective date of the livestock performance standard or prohibition, unless the land is part of an existing rotational grazing or pasturing operation.
- b. For a livestock operation that is in existence as of the effective date of the livestock performance standard or prohibition that establishes or constructs or substantially alters a facility after the effective date of the livestock performance standard or prohibition, the facilities constructed, established or substantially altered after the effective date of the livestock performance standard or prohibition are considered new, except as specified in subd. 3.
- c. A livestock facility that is in existence and in compliance with a livestock performance standard or prohibition on or after the effective date of the livestock performance standard or prohibition and that undergoes a change in the livestock facility that results in noncompliance with the livestock performance standard or prohibition. This includes manure storage facilities that fail to meet the requirements of s. NR 151.05 (3) and were either: constructed on or after October 1, 2002; or were constructed prior to October 1, 2002, and subject through October 1, 2002, to the operation and maintenance provisions of a cost share agreement.
- 3. Pursuant to the implementation procedures in this section, if the department or a municipality directs an owner or operator of an existing livestock facility to construct a facility as a corrective measure to comply with a performance standard or prohibition on or after the effective date of the livestock performance standard or prohibition, or directs the owner or operator to reconstruct the existing facility as a corrective measure on or after the effective date of the livestock performance standard or prohibition, the constructed facilities are not considered new for purposes of installing or implementing the corrective measure.
- 4. A livestock facility that meets the criteria in subd. 1. and has subsequently been abandoned shall retain its status as an existing livestock facility if livestock of similar species and number of animal units are reintroduced within 5 years of abandonment.
- 5. Change in ownership may not be used as the basis for determining whether a livestock facility is existing or new for purposes of administering this subsection.
- (c) Eligible costs. 1. If cost sharing is required to be made available under sub. (4) (c), the department shall determine the total cost of best management practices and corrective measures needed to bring a livestock facility into compliance with a livestock performance standard or prohibition and shall determine which of those costs are eligible for cost sharing for the purposes of administering this section and s. 281.16 (3) (e), Stats.
- The cost-share eligibility provisions identified in chs. NR 153 and 154 shall be used in identifying eligible costs for installation of best management practices and corrective measures.

- Eligible technical assistance costs include best management practice planning, design, installation supervision, and installation certification.
- 4. If cost sharing is provided by DATCP or the department, the corrective measures shall be implemented in accordance with the best management practices and technical standards specified in ch. NR 154 or subch. VIII of ch. ATCP 50.

Note: Under chs. NR 153 and 154, eligible costs typically include capital costs and significant other expenses, including design costs, incurred by the owner or operator of the livestock operation. Eligible costs do not include the value or amount of time spent by an owner or operator in making management changes.

- (d) Determination of cost-share availability. 1. For purposes of administering this section and s. 281.16 (3) (e), Stats., if cost sharing is required to be made available under sub. (4) (c), the department shall make a determination as to whether cost sharing has been made available on or after the effective date of the livestock performance standard or prohibition to cover eligible costs for an owner or operator to comply with a livestock performance standard or prohibition.
- 2. Cost sharing under s. 281.65, Stats., shall be considered available when all of the following have been met:
- a. Cost share dollars are offered in accordance with either of the following: the department has entered into a runoff management grant agreement under ch. NR 153 or a nonpoint source grant agreement under ch. NR 120, and a notice under sub. (6) or under s. NR 243.24 (4), including any required offer of cost sharing, has been issued by the department or a municipality; or the department directly offers cost sharing and issues a notice under sub. (6) or s. NR 243.24 (4).
- b. The grants in subd. 2. a., alone or in combination with other funding determined to be available under subd. 3., provide at least 70% of the eligible costs to implement the best management practices or other corrective measures needed for a livestock facility to meet a livestock performance standard or prohibition.
- c. In cases of economic hardship determined in accordance with s. NR 154.03 (3), the grants in subd. 2. a., alone or in combination with other funding determined to be available under subd. 3., provide cost sharing consistent with the hardship determination.
- d. If an existing livestock operation with less than 250 animal units wants to expand at the time it is upgrading a facility to meet a performance standard or prohibition pursuant to a notice in sub. (6) or under s. NR 243.24 (4), the grants in subd. 2. a., alone or in combination with other funding determined to be available under subd. 3., shall also provide at least 70% of eligible costs needed to bring any expansion of facilities of up to 300 animal units into compliance with the performance standard or prohibition. In cases of economic hardship, the grants in subd. 2. a., alone or in combination with other funding determined to be available under subd. 3., shall also provide between 70% and 90% of the eligible costs needed to bring any expansion of facilities of up to 300 animal units into compliance with the performance standards and prohibitions.

Note: For livestock operations with less than 250 animal units, that portion of any expansion of facilities to accommodate more than 300 animal units is not eligible for cost sharing under s. NR 153.15 (2) (d) 1. For an existing livestock operation with greater than 250 animal units, but less than the number of animal units requiring a WPDES permit under s. NR 243.12 (1) (a), (b) or (c), cost sharing may be provided under s. NR 153.15 (2) (d) 2., for at least 70% of eligible costs to bring up to a 20% increase in livestock population into compliance with the performance standards and prohibitions; however, cost sharing for eligible costs up to a 20% expansion in livestock population is not required to be made available for compliance.

3. For funding sources other than those administered by s. 281.65, Stats., the department may make a determination of cost share availability after consulting with DATCP and ch. ATCP 50.

Note: Under s. 281.16 (3) (e), Stats., DATCP is responsible for promulgating rules that specify criteria for determining whether cost sharing is available from sources other than s. 281.65, Stats., including s. 92.14, Stats. Pursuant to s. 281.16 (3) (e), Stats., a municipality is required to follow the department's definition of cost share availability if funds are utilized under s. 281.65, Stats. If funds are utilized from any other source, a municipality shall defer to DATCP's definition of cost share availability.

- **(6)** NOTIFICATION REQUIREMENTS AND COMPLIANCE PERIODS FOR EXISTING LIVESTOCK FACILITIES WHEN COST SHARING IS REQUIRED. (a) *Owner or operator notification*. 1. The department shall notify an owner or operator in writing of the determinations made under sub. (5) and implementation requirements for existing livestock facilities where cost sharing is required for compliance.
- 2. The notice shall be sent certified mail, return receipt requested or personal delivery.
 - 3. The following information shall be included in the notice:
- a. A description of the livestock performance standard or prohibition being violated.
- b. The livestock facility status determination made in accordance with sub. (5) (b).
- c. The determination made in accordance with sub. (5) (c) as to which best management practices or other corrective measures needed to comply with a livestock performance standard or prohibition are eligible for cost sharing.

Note: Some best management practices required to comply with a livestock performance standard or prohibition involves no eligible costs to the owner or operator.

- d. The determination made in accordance with sub. (5) (d) that cost sharing is available for eligible costs to achieve compliance with a livestock performance standard or prohibition, including a written offer of cost sharing.
- e. An offer to provide or coordinate the provision of technical assistance.
- f. A compliance period for meeting the livestock performance standard or prohibition.
- g. An explanation of the possible consequences if the owner or operator fails to comply with provisions of the notice, including enforcement or loss of cost sharing, or both.
- (b) Compliance period. 1. An owner or operator that receives the notice under par. (a) shall install or implement best management practices and corrective measures to meet a performance standard or prohibition in the time period specified in the notice, if cost sharing is available in accordance with sub. (5) (d) 2.
- 2. The compliance period identified in the notice in par. (a) shall be determined by the department as follows:
- a. The compliance period shall begin on the post-mark date of the notice or the date of personal delivery.
- b. The length of the compliance period shall be not less than 60 days nor more than 3 years unless otherwise provided for in this subdivision.
- c. The length of the compliance period may be less than 60 days if the site is an imminent threat to public health or fish and aquatic life.
- d. The department may authorize an extension up to 4 years on a case-by-case basis provided that the reasons for the extension are beyond the control of the owner or operator of the livestock facility. A compliance period may not be extended to exceed 4 years in total.
- 3. Once an owner or operator achieves compliance with a livestock performance standard or prohibition, compliance with the standard or prohibition shall be maintained by the existing owner or operator and heirs or subsequent owners or operators, regardless of cost sharing.
- (7) NOTIFICATION REQUIREMENTS AND COMPLIANCE PERIODS FOR EXISTING LIVESTOCK FACILITIES IN SITUATIONS WHEN NO ELIGIBLE COSTS ARE INVOLVED. (a) *Owner or operator notification*. 1. The department shall notify a non–complying owner or operator of an existing livestock facility of the determinations made under sub. (5).
- 2. The notice shall be sent certified mail, return receipt requested or personal delivery.
 - 3. The following information shall be included in the notice:
- a. A description of the livestock performance standard or prohibition that is being violated and the determination that corrective measures do not involve eligible costs under sub. (5) (c).

- b. The livestock operation status determination made in accordance with sub. (5) (b).
- c. A compliance period for meeting the livestock performance standard or prohibition. The compliance period may not exceed the time limits in par. (b).
- d. An explanation of the consequences if the owner or operator fails to comply with provisions of the notice.
- (b) Compliance period. 1. The compliance period for existing livestock facilities where best management practices and other corrective measures do not involve eligible costs shall be in accordance with the following;
- a. The compliance period shall begin on the postmark date of the notice or the date of personal delivery.
- b. The length of the compliance period shall be not less than 60 days nor more than 3 years unless otherwise provided for in this subsection
- c. The length of the compliance period may be less than 60 days if the site is an imminent threat to public health, or fish and aquatic life.
- Once compliance with a livestock performance standard or prohibition is attained, compliance with the performance standard or prohibition shall be maintained by the existing owner or operator and heirs or subsequent owners or operators.
- (c) Combined notices. The department may meet multiple notification requirements under par. (a), sub. (6) and s. NR 151.09 within any single notice issued to the owner or operator.
- **(8)** ENFORCEMENT. (a) Authority to initiate enforcement. The department may take action pursuant s. 281.98, Stats., or other appropriate actions, against the owner or operator of a livestock operation for failing to comply with the livestock performance standards and prohibitions in this subchapter or approved variances to the livestock performance standards provided by the department under s. NR 151.097.
- (b) Enforcement following notice and direct enforcement. The department shall provide notice to the owner or operator of an existing livestock facility in accordance with sub. (6) or (7) prior to the department initiating enforcement action under s. 281.98, Stats., except in cases of repeated mismanagement, such as allowing repeated manure storage overflows, where the department may pursue direct enforcement under s. 281.98, Stats., for the second and subsequent offenses.

Note: The implementation and enforcement procedures in this section are limited to actions taken by the department under s. 281.98, Stats., for noncompliance with a livestock performance standard or prohibition. Pursuant to other statutory authority, the department may take direct enforcement action without cost sharing against a livestock producer for willful or intentional acts or other actions by a producer that pose an imminent or immediate threat to human health or the environment.

Note: An owner or operator of a new livestock facility is required to meet the livestock performance standards and prohibitions at the time the new facility is created. This requirement shall be met regardless of cost sharing.

- **(9)** NOTIFICATION TO MUNICIPALITIES. The department shall notify the appropriate municipality, including a county land conservation committee, prior to taking any of the following actions under this subsection:
- (a) Contacting an owner or operator to investigate compliance with livestock performance standards and prohibitions.
- (b) Issuing a notice under sub. (6) or (7) to an owner or operator.
- (c) Taking enforcement action under s. 281.98, Stats., against an owner or operator for failing to comply with a livestock performance standard or prohibition in this subchapter.
- (d) Notification is not required if the site is an imminent threat to public health or fish and aquatic life.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (1) (intro.), (5) (b) 2. c., 5., (c) 3., (d) 2. a., c., (6) (b) 2. b., (7) (b) 1. b., (8) (b), r. (6) (a) 3. h., (7) (a) 3. e. Register December 2010 No. 660, eff. 1–1–11.

NR 151.096 Local livestock operation ordinances and regulations. (1) LOCAL REGULATIONS THAT EXCEED STATE STANDARDS; APPROVAL REQUIRED. (a) Except as provided in par.

- (b), a local governmental unit may not enact a livestock operation ordinance or regulation for water quality protection that exceeds the performance standards or prohibitions in ss. NR 151.05 to 151.08 or the related conservation practices or technical standards in ch. ATCP 50, unless the local governmental unit obtains approval from the department under sub. (2), or receives approval from DATCP pursuant to s. ATCP 50.60.
 - (b) Paragraph (a) does not apply to any of the following:
- 1. Local ordinances or regulations that address cropping practices that are not directly related to the livestock operation.
- 2. Local ordinances or regulations enacted prior to October 1, 2002.

Note: See s. 92.15, Stats. A person adversely affected by a local livestock regulation may oppose its adoption at the local level. The person may also challenge a local regulation in court if the person believes that the local governmental unit has violated sub. (1) or s. 92.15, Stats. A local governmental unit is responsible for analyzing the legal adequacy of its regulations, and may exercise its own judgment in deciding whether to seek state approval under this section.

Note: Subsection (1) does not limit or expand the application of s. 92.15, Stats., to ordinances or regulations enacted prior to October 1, 2002.

- **(2)** DEPARTMENT APPROVAL. (a) To obtain department approval under sub. (1) for an existing or proposed regulation, the head of the local governmental unit or the chair of the local governmental unit's governing board shall do all of the following:
- 1. Submit a copy of the livestock operation ordinance or regulation or portion thereof to the department and to the department of agriculture, trade and consumer protection.
- 2. Identify the provisions of the regulation for which the local governmental unit seeks approval.
- 3. Submit supporting documentation explaining why the specific regulatory provisions that exceed the performance standards, prohibitions, conservation practices or technical standards are needed to achieve water quality standards, and why compliance cannot be achieved with a less restrictive standard.
- (b) The department shall notify the local governmental unit in writing within 90 calendar days after the department receives the ordinance or regulation as to whether the ordinance or regulation, or portion thereof is approved or denied and shall state the reasons for its decision. Before the department makes its decision, the department shall solicit a recommendation from DATCP. If the department finds the regulatory provisions are needed to achieve water quality standards, the department may approve the ordinance or regulation or portion thereof.
- (3) LOCAL PERMITS. Local permits or permit conditions are not subject to the review and approval procedures in this section unless the permit conditions are codified in a local ordinance or regulation.

Note: A local permit requirement does not, in and of itself, violate sub. (1), but permit conditions codified in a local ordinance or regulation must comply with sub. (1). If a local governmental unit routinely requires permit holders to comply with uncodified water quality protection standards that exceed state standards, those uncodified requirements may be subject to court challenge for noncompliance with s. 92.15, Stats., and sub. (1) as *de facto* regulatory enactments. A local governmental unit may forestall a legal challenge by codifying standard permit conditions and obtaining any necessary state approval under this section. The department will review codified regulations, but will not review individual permits or uncodified permit conditions under sub. (2).

History: CR 00-027: cr. Register September 2002 No. 561, eff. 10-1-02.

- **NR 151.097 Variances. (1)** The department may grant a variance to the performance standards, technical standards or other non-statutory requirements in this subchapter.
- (2) The department may not grant a variance solely on the basis of economic hardship.
- **(3)** The department may grant a variance only if all of the following conditions are met:
- (a) Compliance with the performance standard or technical standard is not feasible due to site conditions. This condition does not apply to research activities conducted as part of a planned agricultural research and farming curriculum.

- (b) The landowner or operator will implement best management practices or other corrective measures that ensure a level of pollution control that will achieve a level of water quality protection comparable to that afforded by the performance standards in this subchapter.
- (c) The conditions for which the variance is requested are not created by the landowner or operator or their agents or assigns. This condition does not apply to research activities conducted as part of a planned agricultural research and farming curriculum.
- **(4)** The department shall use the following process when administering a variance request:
- (a) The landowner or operator shall submit the variance request to the department or governmental unit, including a county land conservation committee within 60 days of receiving the notice.
- (b) The governmental unit shall forward any variances that it receives to the department. The department may consider a recommendation from the governmental unit concerning acceptance of the variance request.
- (c) The department shall make its determination based on the factors in sub. (3).
- (d) The department shall notify the landowner or operator and the governmental unit of its determination. If the variance is granted, the department or governmental unit shall send to the landowner or operator an amended notice.
- (e) The period of time required to make a ruling on a variance request does not extend the compliance periods allowed under ss. NR 151.09 and 151.095.

Note: The department may consider decisions made by a governmental unit, in accordance with local ordinance provisions, when making its determination whether to accept or deny the variance.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02.

Subchapter III — Non-Agricultural Performance Standards

NR 151.10 Purpose. This subchapter establishes performance standards, as authorized by s. 281.16 (2) (a), Stats., for non-agricultural facilities and practices that cause or may cause nonpoint runoff pollution. These performance standards are intended to limit nonpoint runoff pollution in order to achieve water quality standards. Design guidance and the process for developing technical standards to implement this section are set forth in subch. V.

 $\textbf{History:} \ \ \mathsf{CR}\ 00\text{--}027\text{: cr. Register September } 2002\ \mathsf{No.}\ 561, \mathsf{eff.}\ 10\text{--}1\text{--}02.$

- NR 151.105 Construction site performance standard for non-permitted sites. (1) APPLICABILITY. Except as provided under sub. (2), this section applies to all of the following:
- (a) A construction site that consists of land disturbing construction activity of less than one acre.

Note: Land disturbing construction sites of less than one acre are not regulated under subch. III of ch. NR 216 unless designated by the department under s. NR 216.51 (3).

- (b) Construction projects that are exempted by federal statutes or regulations from the requirement to have a national pollutant discharge elimination system permit issued under 40 CFR 122, for land disturbing construction activity.
 - (2) EXEMPTIONS. This section does not apply to the following:
- (a) One– and two– family dwellings regulated by the department of commerce pursuant to s.101.653, Stats.
 - (b) Agricultural facilities and practices.
 - (c) Silviculture activities.
- (3) RESPONSIBLE PARTY. The landowner of the construction site or other person contracted or obligated by other agreement with the landowner to implement and maintain construction site BMPs is the responsible party and shall comply with this section.

- **(4)** REQUIREMENTS. Erosion and sediment control practices at each site where land disturbing construction activity is to occur shall be used to prevent or reduce all of the following:
- (a) The deposition of soil from being tracked onto streets by vehicles.
- (b) The discharge of sediment from disturbed areas into onsite storm water inlets.
- (c) The discharge of sediment from disturbed areas into adjacent waters of the state.
- (d) The discharge of sediment from drainage ways that flow off the site.
 - (e) The discharge of sediment by dewatering activities.
- (f) The discharge of sediment eroding from soil stockpiles existing for more than 7 days.
- (g) The transport by runoff into waters of the state of chemicals, cement and other building compounds and materials on the construction site during the construction period. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this paragraph.

Note: In accordance with subch. V, the department has developed technical standards to help meet the construction site performance standards. These technical standards are available from the department at (608) 267–7694.

- **(5)** LOCATION. BMPs shall be located so that treatment occurs before runoff enters waters of the state.
- **(6)** IMPLEMENTATION. The BMPs used to comply with this section shall be implemented as follows:
- (a) Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin.
- (b) Erosion and sediment control practices shall be maintained until final stabilization.
- (c) Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.
- (d) Temporary stabilization activity shall commence when land disturbing construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.
- (e) BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.11 Construction site performance standard for sites of one acre or more. (1) DETERMINATION OF SOIL LOSS. In this section, soil loss is calculated using the appropriate rainfall or runoff factor, also referred to as the R factor, or an equivalent design storm using a type II distribution, with consideration given to the geographic location of the site and the period of disturbance.

Note: The universal soil loss equation and its successors, revised universal soil loss equation and revised universal soil loss equation 2, utilize an R factor which has been developed to estimate soil erosion, averaged over extended time periods. The R factor can be modified to estimate monthly and single–storm erosion.

- (2) APPLICABILITY. This section applies to any construction site that consists of one acre or more of land disturbing construction activity.
- (a) Subsections (3), (4), (5), (6), and (7) apply to all of the following:
- 1. Construction sites for which the department received a notice of intent in accordance with subch. III of ch. NR 216 before January 1, 2011.
- 2. Construction sites for which the department of commerce received a notice of intent in accordance with ch. SPS 360 before January 1, 2011.
- 3. Construction sites for which a bid has been advertised or construction contract signed for which no bid was advertised, before January 1, 2011.
- (b) Subsections (3) (a) to (d), (4), (5), (6m), (7), and (8) apply to all of the following:

- 1. Construction sites for which the department received a notice of intent in accordance with subch. III of ch. NR 216 on or after January 1, 2011.
- 2. Construction sites for which a bid has been advertised or construction contract signed for which no bid was advertised, on or after January 1, 2011.
 - (3) EXEMPTIONS. This section does not apply to the following:
- (a) Construction projects that are exempted by federal statutes or regulations from the requirement to have a national pollutant discharge elimination system permit issued under 40 CFR 122, for land disturbing construction activity.
- (b) Transportation facilities, except transportation facility construction projects that are part of a larger common plan of development such as local roads within a residential or industrial development.

Note: Transportation facility performance standards are given in subch. IV.

(c) Nonpoint discharges from agricultural facilities and practices.

Note: This exemption is for nonpoint discharges from agricultural facilities and practices, such as cropping and pasturing. Subchapter III of ch. NR 216 also exempts nonpoint discharges, but regulates point source discharges of storm water, such as the construction of barns, manure storage facilities, sand settling lanes, and barnyard runoff control systems. Under s. NR 216.42 (2), such construction sites are subject to the construction performance standards of this section.

- (d) Nonpoint discharges from silviculture activities.
- (e) Routine maintenance for project sites that have less than 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.
- (4) RESPONSIBLE PARTY. The landowner or other person performing services to meet the performance standards of this subchapter, through a contract or other agreement with the landowner, is the responsible party and shall comply with this section.
- **(5)** PLAN. The responsible party under sub. (4) shall develop and implement a written plan for each construction site. The plan shall incorporate the applicable requirements of this section.

Note: The written plan may be that specified within s. NR 216.46, the erosion control portion of a construction plan or other plan.

- **(6)** PRE-JANUARY 1, 2011 REQUIREMENTS. The plan required under sub. (5) shall include the following:
- (a) Best management practices that, by design, achieve, to the maximum extent practicable, a reduction of 80% of the sediment load carried in runoff, on an average annual basis, as compared with no sediment or erosion controls, until the construction site has undergone final stabilization. No person shall be required to exceed an 80% sediment reduction to meet the requirements of this paragraph. Erosion and sediment control BMPs may be used alone or in combination to meet the requirements of this paragraph. Credit toward meeting the sediment reduction shall be given for limiting the duration or area, or both, of land disturbing construction activity, or other appropriate mechanism.

Note: Soil loss prediction tools that estimate the sediment load leaving the construction site under varying land and management conditions, or methodology identified in subch. V., may be used to calculate sediment reduction.

- (b) Notwithstanding par. (a), if BMPs cannot be designed and implemented to reduce the sediment load by 80%, on an average annual basis, the plan shall include a written and site–specific explanation why the 80% reduction goal is not attainable and the sediment load shall be reduced to the maximum extent practicable
- (c) Where appropriate, the plan shall include sediment controls to do all of the following to the maximum extent practicable:
- 1. Prevent tracking of sediment from the construction site onto roads and other paved surfaces.
- 2. Prevent the discharge of sediment as part of site de-watering.
- Protect separate storm drain inlet structures from receiving sediment.
- (d) The use, storage and disposal of chemicals, cement and other compounds and materials used on the construction site shall

be managed during the construction period to prevent their transport by runoff into waters of the state. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this paragraph.

- **(6m)** POST-JANUARY 1, 2011 REQUIREMENTS. The plan required under sub. (5) shall meet all of the following:
- (a) Erosion and sediment control practices. Erosion and sediment control practices at each site where land disturbing construction activity is to occur shall be used to prevent or reduce all of the following:
- 1. The deposition of soil from being tracked onto streets by vehicles.
- The discharge of sediment from disturbed areas into onsite storm water inlets.
- The discharge of sediment from disturbed areas into adjacent waters of the state.
- 4. The discharge of sediment from drainage ways that flow off the site.
 - 5. The discharge of sediment by dewatering activities.
- 6. The discharge of sediment eroding from soil stockpiles existing for more than 7 days.
- 7. The discharge of sediment from erosive flows at outlets and in downstream channels.
- 8. The transport by runoff into waters of the state of chemicals, cement, and other building compounds and materials on the construction site during the construction period. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this subdivision.
- 9. The transport by runoff into waters of the state of untreated wash water from vehicle and wheel washing.

Note: Wastewaters, such as from concrete truck washout, needs to be properly managed to limit the discharge of pollutants to waters of the state. A separate permit may be needed from the department where a wastewater discharge has the potential to adversely impact waters of the state. The appropriate department wastewater specialist should be contacted to determine if wastewater permit coverage is needed where wastewater will be discharged to waters of the state.

- (b) Sediment performance standards. In addition to the erosion and sediment control practices under par. (a), the following erosion and sediment control practices shall be employed:
- 1. For construction sites for which the department received a notice of intent for the construction project in accordance with subch. III of ch. NR 216, within 2 years after January 1, 2011, BMPs that, by design, achieve a reduction of 80 percent, or to the maximum extent practicable, of the sediment load carried in runoff, on an average annual basis, as compared with no sediment or erosion controls, until the construction site has undergone final stabilization.
- 2. For construction sites for which the department received a notice of intent for the construction project in accordance with subch. III of ch. NR 216, 2 years or more after January 1, 2011, BMPs that, by design, discharge no more than 5 tons per acre per year, or to the maximum extent practicable, of the sediment load carried in runoff from initial grading to final stabilization.
- 3. The department may not require any person to employ more BMPs than are needed to meet a performance standard in order to comply with maximum extent practicable. Erosion and sediment control BMPs may be combined to meet the requirements of this paragraph. The department may give credit toward meeting the sediment performance standard of this paragraph for limiting the duration or area, or both, of land disturbing construction activity, or for other appropriate mechanisms.
- 4. Notwithstanding subd. 1. or 2., if BMPs cannot be designed and implemented to meet the sediment performance standard, the plan shall include a written, site–specific explanation of why the sediment performance standard cannot be met and how the sediment load will be reduced to the maximum extent practicable.

Note: Soil loss prediction tools such as revised universal soil loss equation 2 that estimate the sediment load leaving the construction site under varying land and management conditions, or methodology identified in subch. V, may be used to calculate sediment reduction.

Note: In accordance with subch. V, the department has developed technical standards to help meet the construction site performance standards. These technical standards are available from the department at (608) 267–7694.

- (c) Preventive measures. The plan shall incorporate all of the following:
- 1. Maintenance of existing vegetation, especially adjacent to surface waters whenever possible.
- 2. Minimization of soil compaction and preservation of top-soil.
- 3. Minimization of land disturbing construction activity on slopes of 20% or more.
 - 4. Development of spill prevention and response procedures.
- **(7)** LOCATION. BMPs shall be located so that treatment occurs before runoff enters waters of the state.

Note: While regional treatment facilities are appropriate for control of post–construction pollutants they should not be used for construction site sediment removal.

- **(8)** IMPLEMENTATION. The BMPs used to comply with this section shall be implemented as follows:
- (a) Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin in accordance with the plan developed under sub. (5).
- (b) Erosion and sediment control practices shall be maintained until final stabilization.
- (c) Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.
- (d) Temporary stabilization activity shall commence when land disturbing construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.
- (e) BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (title), (1), (2), (4), (5), (6) (title), (7), cr. (6m), (8) Register December 2010 No. 660, eff. 1–1–11; correction in (2) (a) 2. made under s. 13.93 (4) (b) 7., Stats., Register February 2012 No. 674.

NR 151.12 Post-construction performance standard for new development and redevelopment. (1) GENERAL. In this section:

- (a) "Post-construction site" means a construction site subject to regulation under this subchapter, after construction is completed and final stabilization has occurred.
- (b) Average annual rainfall is determined by the following years and locations: Madison, 1981 (Mar. 12–Dec. 2); Green Bay, 1969 (Mar. 29–Nov. 25); Milwaukee, 1969 (Mar. 28–Dec. 6); Minneapolis, 1959 (Mar. 13–Nov. 4); Duluth, 1975 (Mar. 24–Nov. 19). Of the 5 locations listed, the location closest to a project site best represents the average annual rainfall for that site.
- **(2)** APPLICABILITY. This section applies to a post–construction site that is or was subject to the construction performance standards of s. NR 151.11, except any of the following:
- (a) A post–construction site where the department has received a notice of intent for the construction project, in accordance with subch. III of ch. NR 216, within 2 years after October 1, 2002.
- (b) A post–construction site where the department of commerce has received a notice of intent, in accordance with s. Comm 61.115, within 2 years after October 1, 2002.

Note: Section Comm 61.115 was repealed effective 4-1-07.

(bm) A post–construction site for which the department received a notice of intent for the construction project, in accordance with subch. III of ch. NR 216, on or after January 1, 2011. Post–construction sites for which the department received a notice of intent for the construction project, in accordance with subch. III of ch. NR 216, on or after January 1, 2011, shall meet the performance standards of ss. NR 151.122 to 151.128.

- (c) A redevelopment post-construction site with no increase in exposed parking lots or roads.
- (d) A post–construction site with less than 10% connected imperviousness based on complete development of the post–construction site, provided the cumulative area of all parking lots and rooftops is less than one acre.

Note: Projects that consist of only the construction of bicycle paths or pedestrian trails generally meet this exception as these facilities have minimal connected imperviousness.

- (e) Agricultural facilities and practices.
- (f) An action for which a final environmental impact statement was approved before October 1, 2002.
- (g) An action for which a finding of no significant impact is made under ch. NR 150 before October 1, 2002.
- (h) Underground utility construction such as water, sewer and fiberoptic lines, but not including the construction of any above ground structures associated with utility construction.
- (3) RESPONSIBLE PARTY. The landowner of the post-construction site or other person contracted or obligated by other agreement to implement and maintain post-construction storm water BMPs shall comply with this section.
- (4) STORM WATER MANAGEMENT PLAN. A written storm water management plan shall be developed and implemented for each post–construction site and shall incorporate the requirements of this subsection.

Note: Examples of storm water management plans that may be used to comply with this section may be that specified within s. NR 216.47 or the municipal storm water management program specified within s. NR 216.07 (1) to (6).

- **(5)** REQUIREMENTS. The plan required under sub. (4) shall include:
- (a) *Total suspended solids*. Best management practices shall be designed, installed and maintained to control total suspended solids carried in runoff from the post–construction site as follows:
- 1. For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this subdivision.
- 2. For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this subdivision.
- 3. For in–fill development under 5 acres that occurs within 10 years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this subdivision.
- 4. For in-fill development that occurs 10 or more years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this subdivision.
- 5. Notwithstanding subds. 1. to 4., if the design cannot achieve the applicable total suspended solids reduction specified, the storm water management plan shall include a written and site–specific explanation why that level of reduction is not attained and the total suspended solids load shall be reduced to the maximum extent practicable.

Note: Pollutant loading models such as SLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids. Information on how to access SLAMM and P8 is available from the storm water coordinator in the runoff management section of the bureau of watershed management at (608) 267–7694.

(b) *Peak discharge*. 1. By design, BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to pre-development conditions for the 2-year, 24-hour design storm applicable to the post-construction site. Pre-development conditions shall assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. The meaning of "hydrologic soil group" and "runoff curve number" are as determined in TR-55. However, when pre-development land cover is cropland, rather than using TR-55 values for cropland, the runoff curve numbers in Table 2 shall be used.

Table 2 – Maximum Pre-Development Runoff Curve Numbers for Cropland Areas

Hydrologic Soil Group	A	В	С	D
Runoff Curve Number	56	70	79	83

Note: The curve numbers in Table 2 represent mid–range values for soils under a good hydrologic condition where conservation practices are used and are selected to be protective of the resource waters.

- 2. This paragraph does not apply to:
- a. A post–construction site where the change in hydrology due to development does not increase the existing surface water elevation at any point within the downstream receiving water by more than 0.01 of a foot for the 2–year, 24–hour storm event.

Note: Hydraulic models such as HEC-RAS or another methodology may be used to determine the change in surface water elevations.

- b. A redevelopment post-construction site.
- c. An in-fill development area less than 5 acres.
- **Note:** The intent of par. (b) is to minimize streambank erosion under bank full conditions
- (c) *Infiltration*. BMPs shall be designed, installed and maintained to infiltrate runoff to the maximum extent practicable in accordance with the following, except as provided in subds. 5. to 8.:
- 1. For residential developments one of the following shall be
- a. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.
- b. Infiltrate 25% of the post-development runoff volume from the 2-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.
- For non-residential development, including commercial, industrial and institutional development, one of the following shall be met:
- a. For this subdivision only, the "project site" means the rooftop and parking lot areas.
- b. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.
- c. Infiltrate 10% of the post-development runoff volume from the 2-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.

3. Pre-development condition shall be the same as specified in par. (b).

Note: A model that calculates runoff volume, such as SLAMM, P8 or an equivalent methodology may be used. Information on how to access SLAMM and P8 is available from the storm water coordinator in the runoff management section of the bureau of watershed management at (608) 267–7694.

4. Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with subd. 8. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.

Note: To achieve the infiltration requirement for the parking lots or roads, maximum extent practicable should not be interpreted to require significant topography changes that create an excessive financial burden. To minimize potential groundwater impacts it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollutant source areas such as parking lots.

- 5. Exclusions. The runoff from the following areas are prohibited from meeting the requirements of this paragraph:
- a. Areas associated with tier 1 industrial facilities identified in s. NR 216.21 (2) (a), including storage, loading, rooftop and parking.
- b. Storage and loading areas of tier 2 industrial facilities identified in s. NR 216.21 (2) (b).

Note: Runoff from tier 2 parking and rooftop areas may be infiltrated but may require pretreatment.

- c. Fueling and vehicle maintenance areas.
- d. Areas within 1000 feet upgradient or within 100 feet downgradient of karst features.
- e. Areas with less than 3 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock, except this subd. 5. e. does not prohibit infiltration of roof runoff.
- f. Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than 5 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.
- g. Areas within 400 feet of a community water system well as specified in s. NR 811.16 (4) or within 100 feet of a private well as specified in s. NR 812.08 (4) for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development.
- h. Areas where contaminants of concern, as defined in s. NR 720.03 (2), are present in the soil through which infiltration will occur.
- i. Any area where the soil does not exhibit one of the following characteristics between the bottom of the infiltration system and the seasonal high groundwater and top of bedrock: at least a 3–foot soil layer with 20% fines or greater; or at least a 5–foot soil layer with 10% fines or greater. This subd. 5. i. does not apply where the soil medium within the infiltration system provides an equivalent level of protection. Subdivision 5. i. does not prohibit infiltration of roof runoff.

Note: The areas listed in subd. 5. are prohibited from infiltrating runoff due to the potential for groundwater contamination.

- 6. Exemptions. The following are not required to meet the requirements of this paragraph:
- a. Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the bottom of the infiltration system.
- b. Parking areas and access roads less than 5,000 square feet for commercial and industrial development.
 - Redevelopment post-construction sites.
 - d. In-fill development areas less than 5 acres.
- e. Infiltration areas during periods when the soil on the site is frozen.

- f. Roads in commercial, industrial and institutional land uses, and arterial residential roads.
- 7. Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation, such alternate use shall be given equal credit toward the infiltration volume required by this paragraph.
- 8. a. Infiltration systems designed in accordance with this paragraph shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with ch. NR 140. However, if site specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.
- b. Notwithstanding subd. 8. a., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.
- (d) *Protective areas*. 1. In this paragraph, "protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this paragraph, "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.
- a. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in s. NR 103.04, 75 feet.
- b. For perennial and intermittent streams identified on a United States geological survey 7.5—minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
 - c. For lakes, 50 feet.
- d. For highly susceptible wetlands, 50 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins. Wetland boundary delineation shall be made in accordance with s. NR 103.08 (1m). This paragraph does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.
- e. For less susceptible wetlands, 10% of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.
- f. In subd. 1. a., d. and e., determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03.
- g. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.
- 2. This paragraph applies to post–construction sites located within a protective area, except those areas exempted pursuant to subd. 4.
 - 3. The following requirements shall be met:
- a. Impervious surfaces shall be kept out of the protective area to the maximum extent practicable. The storm water management plan shall contain a written site—specific explanation for any parts of the protective area that are disturbed during construction.
- b. Where land disturbing construction activity occurs within a protective area, and where no impervious surface is present, adequate sod or self-sustaining vegetative cover of 70% or greater

shall be established and maintained. The adequate sod or self-sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non-vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion such as on steep slopes or where high velocity flows occur.

Note: It is recommended that seeding of non-aggressive vegetative cover be used in the protective areas. Vegetation that is flood and drought tolerant and can provide long-term bank stability because of an extensive root system is preferable. Vegetative cover may be measured using the line transect method described in the university of Wisconsin extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".

c. Best management practices such as filter strips, swales or wet detention basins, that are designed to control pollutants from non-point sources may be located in the protective area.

Note: Other regulations, such as ch. 30, Stats., and chs. NR 103, 115, 116 and 117 and their associated review and approval process may apply in the protective area.

- 4. Exemptions. This paragraph does not apply to:
- a. Redevelopment post-construction sites.
- b. In-fill development areas less than 5 acres.
- Structures that cross or access surface waters such as boat landings, bridges and culverts.
- d. Structures constructed in accordance with s. 59.692 (1v), Stats.
- e. Post-construction sites from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.

Note: A vegetated protective area to filter runoff pollutants from post—construction sites described in subd. 4. e. is not necessary since runoff is not entering the surface water at that location. Other practices necessary to meet the requirements of this section, such as a swale or basin, will need to be designed and implemented to reduce runoff pollutants prior to runoff entering a surface water of the state.

(e) Fueling and vehicle maintenance areas. Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

Note: A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non-structural method of preventing or treating petroleum in runoff.

- (f) Location. To comply with the standards required under this subsection, BMPs may be located on–site or off–site as part of a regional storm water device, practice or system, but shall be installed in accordance with s. NR 151.003.
- (g) *Timing*. The BMPs that are required under this subsection shall be installed before the construction site has undergone final stabilization.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: cr. (2) (bm) Register December 2010 No. 660, eff. 1–1–11.

- NR 151.121 Post-construction performance standards. (1) GENERAL. In ss. NR 151.121 to 151.128, "post-construction site" means a construction site subject to regulation under this subchapter, after construction is completed and final stabilization has occurred.
- **(2)** APPLICABILITY. Sections NR 151.121 to 151.128 apply to a post–construction site that is or was subject to the construction performance standards of s. NR 151.11, except any of the following:
- (a) A post–construction site with less than 10 percent connected imperviousness, based on the area of land disturbance, provided the cumulative area of all impervious surfaces is less than one acre. However, the exemption of this paragraph does not include exemption from the protective area standard of s. NR 151.125.
 - (b) Agricultural facilities and practices.

Note: This exemption includes both point and nonpoint discharges from agricultural facilities and practices. Therefore, post—construction structures such as barns, manure storage facilities, sand settling lanes, and barnyard runoff control systems are subject to subch. II and are not subject, under s. NR 216.47 (1), to the post—construction performance standards of this subchapter.

- (c) Underground utility construction, but not including the construction of any above ground structures associated with utility construction.
- (3) RESPONSIBLE PARTY. The landowner of the post—construction site or other person contracted or obligated by other agreement with the landowner to implement and maintain post—construction storm water BMPs is the responsible party and shall comply with ss. NR 151.121 to 151.128.
- **(4)** STORM WATER MANAGEMENT PLAN. A written storm water management plan shall be developed and implemented for each post–construction site and shall incorporate the requirements of ss. NR 151.122 to 151.128.

Note: Examples of storm water management plans that may be used to comply with ss. NR 151.122 to 151.128 may include those specified in s. NR 216.47 or the municipal storm water management program specified in s. NR 216.07 (5).

(5) MAINTENANCE OF EFFORT. For redevelopment sites where the redevelopment will be replacing older development that was subject to post—construction performance standards of this chapter in effect on or after October 1, 2004, the responsible party shall meet the total suspended solids reduction, peak flow control, infiltration, and protective areas standards applicable to the older development or meet the redevelopment standards of ss. NR 151.122 to 151.125, whichever are more stringent.

History: CR 09-112: cr. Register December 2010 No. 660, eff. 1-1-11.

NR 151.122 Total suspended solids performance standard. (1) REQUIREMENT. BMPs shall be designed, installed and maintained to control total suspended solids carried in runoff from the post–construction site. BMPs shall be designed in accordance with Table 1., or to the maximum extent practicable as provided in sub. (3). The design shall be based on an average annual rainfall, as compared to no runoff management controls.

Table 1. TSS Reduction Standards			
Development Type	TSS Reduction		
New Development	80 percent		
In–fill ≥ 5 acres	80 percent		
In-fill < 5 acres on or after October 1, 2012	80 percent		
Redevelopment	40 percent of load from parking areas and roads		
In-fill < 5 acres and before October 1, 2012	40 percent		

- **(2)** REDEVELOPMENT. Except as provided in s. NR 151.121 (5), the redevelopment total suspended solids reduction standard of Table 1., applies to redevelopment.
- (3) MAXIMUM EXTENT PRACTICABLE. If the design cannot meet a total suspended solids reduction performance standard of sub. (1), Table 1., the storm water management plan shall include a written, site—specific explanation of why the total suspended solids reduction performance standard cannot be met and why the total suspended solids load will be reduced only to the maximum extent practicable. The department may not require any person to exceed the applicable total suspended solids reduction performance standard to meet the requirements of maximum extent practicable.

Note: Pollutant loading models such as DETPOND, SLAMM, P8, or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids. Information on how to access these models is available from the department's storm water management program at (608) 267–7694. Use the most recent version of the model and the rainfall files and other parameter files identified for Wisconsin users unless directed otherwise by the regulatory authority.

(4) OFF-SITE DRAINAGE. When designing BMPs, runoff draining to the BMP from off-site shall be taken into account in determining the treatment efficiency of the practice. Any impact on the efficiency shall be compensated for by increasing the size of the BMP accordingly.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.123 Peak discharge performance standard.

(1) REQUIREMENT. By design, BMPs shall be employed to maintain or reduce the 1-year, 24-hour and the 2-year, 24-hour post-construction peak runoff discharge rates to the 1-year, 24-hour and the 2-year, 24-hour pre-development peak runoff discharge rates respectively, or to the maximum extent practicable. The runoff curve numbers in Table 2. shall be used to represent the actual pre-development condition.

Table 2. Maximum Pre–Development Runoff Curve Numbers				
Runoff Curve Number Hydrologic Soil Group				
	A	В	C	D
Woodland	30	55	70	77
Grassland	39	61	71	78
Cropland	55	69	78	83

Note: Where the pre-development condition is a combination of woodland, grassland, or cropland, the runoff curve number should be pro-rated by area.

- (2) EXEMPTIONS. This section does not apply to the following:
- (a) A post–construction site where the discharge is directly into a lake over 5,000 acres or a stream or river segment draining more than 500 square miles.
- (b) Except as provided under s. NR 151.121 (5), a redevelopment post–construction site.
 - (c) An in-fill development area of less than 5 acres.

Note: The intent of s. NR 151.123 is to minimize streambank and shoreline erosion under bank-full conditions.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.124 Infiltration performance standard.

- (1) REQUIREMENT. BMPs shall be designed, installed, and maintained to infiltrate runoff in accordance with the following or to the maximum extent practicable:
- (a) Low imperviousness. For development up to 40 percent connected imperviousness, such as parks, cemeteries, and low density residential development, infiltrate sufficient runoff volume so that the post–development infiltration volume shall be at least 90 percent of the pre–development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than one percent of the post–construction site is required as an effective infiltration area.
- (b) Moderate imperviousness. For development with more than 40 percent and up to 80 percent connected imperviousness, such as medium and high density residential, multi–family development, industrial and institutional development, and office parks, infiltrate sufficient runoff volume so that the post–development infiltration volume shall be at least 75 percent of the pre–development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post–construction site is required as an effective infiltration area.
- (c) *High imperviousness*. For development with more than 80 percent connected imperviousness, such as commercial strip malls, shopping centers, and commercial downtowns, infiltrate sufficient runoff volume so that the post–development infiltration volume shall be at least 60 percent of the pre–development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post–construction site is required as an effective infiltration area.

Note: A histogram showing the relationship between connected imperviousness and land use is available from the department at (608) 267–7694.

(2) PRE-DEVELOPMENT. Pre-development condition shall be the same as specified in s. NR 151.123 (1), Table 2.

Note: A model that calculates runoff volume, such as SLAMM, P8, or an equivalent methodology may be used. For performance standards based on an average annual rainfall, specific rainfall files for five geographic locations around the state may be used. Information on how to access SLAMM and P8 and the rainfall files is available from the department's storm water management program at (608)

- 267–7694. Use the most recent version of the model and the parameter files for Wisconsin users unless directed otherwise by the regulatory authority.
- (3) SOURCE AREAS. (a) *Prohibitions*. Runoff from the following areas may not be infiltrated and may not qualify as contributing to meeting the requirements of this section unless demonstrated to meet the conditions of sub. (6):
- 1. Areas associated with a tier 1 industrial facility identified in s. NR 216.21 (2) (a), including storage, loading, and parking. Rooftops may be infiltrated with the concurrence of the regulatory authority.
- 2. Storage and loading areas of a tier 2 industrial facility identified in s. NR 216.21 (2) (b).

Note: Runoff from the employee and guest parking and rooftop areas of a tier 2 facility may be infiltrated but runoff from the parking area may require pretreatment.

- 3. Fueling and vehicle maintenance areas. Rooftops of fueling and vehicle maintenance areas may be infiltrated with the concurrence of the regulatory authority.
- (b) *Exemptions*. Runoff from the following areas may be credited toward meeting the requirement when infiltrated, but the decision to infiltrate runoff from these source areas is optional:
- 1. Parking areas and access roads less than 5,000 square feet for commercial development.
- 2. Parking areas and access roads less than 5,000 square feet for industrial development not subject to the prohibitions under par. (a).
- 3. Except as provided under s. NR 151.121 (5), redevelopment post–construction sites.
 - 4. In-fill development areas less than 5 acres.
- Roads in commercial, industrial, and institutional land uses, and arterial residential roads.
- **(4)** LOCATION OF PRACTICES. (a) *Prohibitions*. Infiltration practices may not be located in the following areas:
- 1. Areas within 1,000 feet upgradient or within 100 feet downgradient of direct conduits to groundwater.
- 2. Areas within 400 feet of a community water system well as specified in s. NR 811.16 (4) or within the separation distances listed in s. NR 812.08 for any private well or non-community well for runoff infiltrated from commercial, including multi-family residential, industrial, and institutional land uses or regional devices for one- and two-family residential development.
- Areas where contaminants of concern, as defined in s. NR 720.03 (2), are present in the soil through which infiltration will occur.
- (b) Separation distances. 1. Infiltration practices shall be located so that the characteristics of the soil and the separation distance between the bottom of the infiltration system and the elevation of seasonal high groundwater or the top of bedrock are in accordance with Table 3:

Table 3. Separation Distances and Soil Characteristics				
Source	Separation	Soil Character-		
Area	Distance	istics		
Industrial, Commer-	5 feet or	Filtering Layer		
cial, Institutional	more			
Parking Lots and				
Roads				
Residential Arterial	5 feet or	Filtering Layer		
Roads	more			
Roofs Draining to	1 foot or	Native or Engi-		
Subsurface Infiltra-	more	neered Soil with		
tion Practices		Particles Finer		
		than Coarse Sand		

Roofs Draining to Surface Infiltration Practices	Not Applicable	
All Other Impervi-	3 feet or	Filtering Layer
ous Source Areas	more	

- 2. Notwithstanding par. (b), applicable requirements for injection wells classified under ch. NR 815 shall be followed.
- (c) Infiltration rate exemptions. Infiltration practices located in the following areas may be credited toward meeting the requirement under the following conditions, but the decision to infiltrate under these conditions is optional:
- 1. Where the infiltration rate of the soil measured at the proposed bottom of the infiltration system is less than 0.6 inches per hour using a scientifically credible field test method.
- 2. Where the least permeable soil horizon to 5 feet below the proposed bottom of the infiltration system using the U.S. department of agriculture method of soils analysis is one of the following: sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay.
- **(5)** ALTERNATE USE. Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation or storage on green roofs where an equivalent portion of the runoff is captured permanently by rooftop vegetation, such alternate use shall be given equal credit toward the infiltration volume required by this section.
- (6) Groundwater standards. (a) Infiltration systems designed in accordance with this section shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with ch. NR 140. However, if site specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.
- (b) Notwithstanding par. (a), the discharge from BMPs shall remain below the enforcement standard at the point of standards application.
- (7) PRETREATMENT. Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial, and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with sub. (6). Pretreatment options may include, but are not limited to, oil and grease separation, sedimentation, biofiltration, filtration, swales, or filter strips.
- **(8)** MAXIMUM EXTENT PRACTICABLE. Where the conditions of subs. (3) and (4) limit or restrict the use of infiltration practices, the performance standard of s. NR 151.124 shall be met to the maximum extent practicable.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

- NR 151.125 Protective areas performance standard. (1) DEFINITION. In this section, "protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this section, "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, so that runoff cannot enter the enclosure at this location.
- (a) For outstanding resource waters and exceptional resource waters, 75 feet.

- (b) For perennial and intermittent streams identified on a U.S. geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
 - (c) For lakes, 50 feet.
 - (d) For wetlands not subject to par. (e) or (f), 50 feet.
- (e) For highly susceptible wetlands, 75 feet. Highly susceptible wetlands include the following types: calcareous fens, sedge meadows, open and coniferous bogs, low prairies, coniferous swamps, lowland hardwood swamps, and ephemeral ponds.

Note: Information on wetland types, including ephemeral ponds, is available at (608) 266–7012.

- (f) For less susceptible wetlands, 10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include: degraded wetlands dominated by invasive species such as reed canary grass; cultivated hydric soils; and any gravel pits, or dredged material or fill material disposal sites that take on the attributes of a wetland.
- (g) In pars. (d) to (f), determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03.
- (h) Wetland boundary delineation shall be made in accordance with s. NR 103.08 (1m). This paragraph does not apply to wetlands that have been completely filled in compliance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in compliance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed. Where there is a legally authorized wetland fill, the protective area standard need not be met in that location.
- (i) For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.
- (j) Notwithstanding pars. (a) to (i), the greatest protective area width shall apply where rivers, streams, lakes, and wetlands are contiguous.

Note: A stream or lake is not eligible for a lower protective area width even if contiguous to a less susceptible wetland.

- (2) APPLICABILITY. This section applies to post—construction sites located within a protective area, except those areas exempted pursuant to sub. (4).
 - (3) REQUIREMENTS. The following requirements shall be met:
- (a) Impervious surfaces shall be kept out of the protective area entirely or to the maximum extent practicable. If there is no practical alternative to locating an impervious surface in the protective area, the storm water management plan shall contain a written, site—specific explanation.
- (b) Where land disturbing construction activity occurs within a protective area, adequate sod or self–sustaining vegetative cover of 70 percent or greater shall be established and maintained where no impervious surface is present. The adequate sod or self–sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat, and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non–vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion such as on steep slopes or where high velocity flows occur.

Note: It is recommended that seeding of non-invasive vegetative cover be used in the protective areas. Some invasive plants are listed in ch. NR 40. Vegetation that is flood and drought tolerant and can provide long-term bank stability because of an extensive root system is preferable. Vegetative cover may be measured using the line transect method described in the University of Wisconsin extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".

(c) Best management practices such as filter strips, swales, or wet detention ponds, that are designed to control pollutants from non-point sources, may be located in the protective area.

Note: Other laws, such as ch. 30, Stats., and chs. NR 103, 115, 116, and 117 and their associated review and approval processes may apply in the protective area.

(4) EXEMPTIONS. This section does not apply to any of the following:

- (a) Except as provided under s. NR 151.121 (5), redevelopment post-construction sites.
 - (b) In-fill development areas less than 5 acres.
- (c) Structures that cross or access surface waters such as boat landings, bridges, and culverts.
- (d) Structures constructed in accordance with s. 59.692 (1v),
- (e) Areas of post-construction sites from which the runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet the requirements of ss. NR 151.122 to 151.123, except to the extent that vegetative ground cover is necessary to maintain bank stability.

Note: A vegetated protective area to filter runoff pollutants from post-construction sites described in par. (e) is not necessary since the runoff at that location is treated prior to entering the surface water. Other practices necessary to meet the requirements of this section, such as a swale or pond, will need to be designed and implemented to reduce runoff pollutants prior to runoff entering a surface water of the state. The requirements of ch. NR 103 still apply and should be considered before runoff is diverted to or from a wetland. **History:** CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.126 Fueling and vehicle maintenance areas **performance standard.** Fueling and vehicle maintenance areas shall have BMPs designed, installed, and maintained to reduce petroleum within runoff, so that the runoff that enters waters of the state contains no visible petroleum sheen, or to the maximum extent practicable.

Note: A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non-structural method of preventing or treating petroleum in runoff.

History: CR 09-112: cr. Register December 2010 No. 660, eff. 1-1-11.

NR 151.127 Location. To comply with the standards required under ss. NR 151.122 to 151.124, BMPs may be located on–site or off–site as part of a regional storm water device, practice, or system, but shall be installed in accordance with s. NR 151.003.

History: CR 09-112: cr. Register December 2010 No. 660, eff. 1-1-11.

NR 151.128 Timing. The BMPs that are required under ss. NR 151.122 to 151.126 shall be installed before the construction site has undergone final stabilization.

Note: In accordance with subch. V, the department has developed technical standards to help meet the post–construction performance standards. These technical standards are available from the department at (608) 267–7694.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.13 Developed urban area performance standard for municipalities. (1) Incorporated municipali-TIES. (a) Applicability. This subsection applies to any incorporated municipality with an average density of 1,000 people per square mile or greater, based on the latest decennial census made by the U.S. census, as well as any commercial and industrial areas contiguous to these areas.

Note: The municipality has primary responsibility for complying with this subsection. However, the public is expected to follow municipal ordinance requirements and requests to carry out activities such as: proper curbside placement of leaves for collection, relocating vehicles for street sweeping, and utilizing proper disposal methods for oils and other chemicals.

- (b) Requirements. For areas identified under par. (a), all of the following shall be implemented:
- 1. A public information and education program, utilizing materials identified by the department, promoting beneficial onsite reuse of leaves and grass clippings and proper use of turf and garden fertilizers and pesticides, proper management of pet wastes, and prevention of dumping oil and other chemicals in storm sewers.
- 2. A municipal program, as appropriate, for the management of leaf and grass clippings, including public education about this
- 3. The application of turf and garden fertilizers on five acres or more of municipally controlled properties shall be done in accordance with a site specific nutrient application schedule based on appropriate soil tests. The nutrient application schedule

shall be designed to maintain the optimal health of the turf or garden vegetation.

Note: In accordance with subch. V, the department has developed a technical standard to help meet the nutrient management performance standard. The technical standard is available from the department at (608) 267–7694.

- 4. Detection and elimination of illicit discharges to storm sewers.
- (2) PERMITTED MUNICIPALITIES. (a) Applicability. This subsection applies to municipalities that are subject to the municipal storm water permit requirements of subch. I of ch. NR 216.
- (b) Program. A municipality shall develop and implement a storm water management program, including the adoption and administration of any necessary ordinance, to meet the following
- 1. 'Stage 1 requirements.' The municipalities identified under par. (a) shall implement all of the following within 2 years of receiving permit coverage under subch. I of ch. NR 216:
 - a. All of the requirements contained in sub. (1) (b).
- b. A 20 percent reduction in total suspended solids, or to the maximum extent practicable, as compared to no controls, for runoff from existing development that enters waters of the state.
- 2. 'Stage 2 requirements.' The municipalities identified under par. (a) shall implement one of the following for runoff from existing development that enters waters of the state, as compared to no controls:
- a. A 40 percent reduction in total suspended solids, by March 31, 2013, if permit coverage was received under subch. I of ch. NR 216 on or before January 1, 2010.
- b. A 40 percent reduction in total suspended solids within 7 years of the date of receiving permit coverage for municipalities identified under par. (a), if permit coverage was received under subch. I of ch. NR 216 after January 1, 2010.
- c. If a municipality identified under par. (a) has determined that it will not achieve a 40 percent reduction in total suspended solids in runoff that enters waters of the state as compared to no controls, by the applicable date of subd. 2. a. or b., then 6 months before the applicable date the municipality shall submit a report to the department describing the control measures that it has implemented and shall submit a long term storm water management plan in accordance with subd. 3.
- 3. 'Long term storm water management plan.' Plans shall include all of the following elements:
- a. A baseline report showing the existing development boundary, drainage basins, and land uses; and applicable model results to justify the loading for total suspended solids for no controls and controls implemented by the applicable date in subd. 2. to meet the requirements in subd. 2. Modeling shall conform to that described in subd. 5.
- b. Any agreements with an adjacent municipality, or with municipalities within a 10 digit hydrologic unit code level, to implement the 40 percent total suspended solids reduction on a regional basis per s. NR 216.07 (6).
- c. Any long-term maintenance agreements with non-publicly owned control measures where credit for the total suspended solids reduction is included in the analysis.
- d. An implementation plan and its associated timetable for control measures identified in a cost-effectiveness analysis consistent with subd. 3. f., that would result in achieving a 40 percent total suspended solids reduction within a period not to exceed 10 years from the applicable compliance date in subd. 2 unless documentation in subd. 3. e. is provided. The plan shall include modeling data consistent with subd. 5.
- e. If a municipality has determined that it cannot achieve 40 percent total suspended solids reduction within 10 years from the applicable compliance date in subd. 2, including the use of agreements with other municipalities and long term maintenance agreements for non-public control measures, the plan shall demonstrate why 40 percent reduction cannot be achieved. A long term

storm water management plan under this subdivision shall describe the control measures identified in a cost-effectiveness analysis consistent with subd. 3. f. that the municipality will implement within 10 years and document the amount of reduction that will be achieved. The plan shall also include an implementation plan and associated timetable for control measures identified in a cost-effectiveness analysis consistent with subd. 3. f. that would result in achieving a 40 percent total suspended solids reduction. The plan shall include modeling data consistent with subd. 5.

- f. A cost-effectiveness analysis shall include a systematic comparison of alternatives to meet the 40 percent total suspended solids reduction based on the cost per pound of pollutant removed. This analysis shall take into account anticipated redevelopment or reconstruction projects and the cost to retrofit the site versus the cost to install practices during redevelopment or reconstruction. The analysis shall consider the cost to ensure long term maintenance of non-publicly owned control practices for which the municipality is taking credit as well as publicly owned control practices, the source of funding for installation and maintenance of control measures, and competing interests for that funding source. The municipality may include an analysis of affordability in the cost-effectiveness analysis. The analysis shall consider the feasibility and commensurate increase in cost of installing a control measure where there are competing issues such as human safety and welfare, endangered and threatened resources, historic properties, and geographic features.
- 4. 'Long term plan review.' a. The department shall review the plan required under subd. 3. and provide comments within 6 months of receipt. The municipality shall modify the plan to correct any deficiencies identified by the department.
- b. The department shall accept documentation that demonstrates to the department's satisfaction that the 40 percent reduction will be met by the applicable compliance date of subd. 2.
- c. The department shall review plans where the 40 percent reduction can be made within the schedule proposed by the municipality under subd. 3. d. However, the department upon review of the plan may request a modification of the schedule or control measures if the department determines that control measures can achieve the 40 percent reduction within a shorter time-frame. The department shall include in the acceptance of the plan the provision in subd. 4. e.
- d. The department shall review a plan with an extended timetable beyond 10 years from the applicable compliance date in subd. 2. where the municipality has demonstrated to the department's satisfaction that the 40 percent reduction cannot be made within 10 years from the applicable compliance date in subd. 2. However, upon review of the plan the department may request a modification of the schedule or control measures if the department determines that control measures can achieve the 40 percent reduction within a shorter timeframe than proposed by the municipality. The department shall include in the acceptance of the plan the provision in subd. 4. e.
- e. The municipality shall submit a report on an initial schedule set by the department and every 5 years thereafter documenting progress and reviewing whether changes in land use, local regulations, control technology or other factors have affected the use or timing of control measures meeting the performance standard of subd. 2. The report shall include a modeling analysis documenting progress and recommending any changes in control measures or timetables for achieving a 40 percent reduction.
- 5. 'Model requirements.' Evidence of meeting the performance standard of subd. 2. shall be based on the use of a model or an equivalent methodology approved by the department. Acceptable models and model versions include SLAMM version 9.2 and P8 version 3.4 or subsequent versions of those models. Earlier versions of SLAMM are acceptable when the municipality is not taking any credit for street cleaning.

Note: Information on how to access SLAMM and P8 and the relevant parameter files are available by contacting the department's storm water management program at (608) 267–7694.

Note: It is expected that a municipality will be able to achieve the 40 percent reduction with a combination of practices including the use of high efficiency street cleaning, structural BMP retrofit practices, structural BMP redevelopment or reconstruction practices, and entering into maintenance agreements for BMPs on privately owned lands, such as shopping centers, to receive credit.

- (c) *Location*. To comply with the standards required under this subsection, BMPs may be located on–site or off–site as part of a regional storm water device, practice or system, but shall be installed in accordance with s. NR 151.003.
- (d) *Exemption*. The requirements of par. (b) 1. and 2. do not apply to areas subject to a permit issued under subch. II of ch. NR 216
- (e) Calculation of reduction. The department shall recognize total suspended solids reduction not otherwise accounted for in computer models for the implementation of programs, ordinances and other institutional controls that result in scientifically supported reductions of total suspended solids and are developed as a technical standard under s. NR 151.31.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: r. and recr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.14 Turf and garden nutrient management performance standard. (1) APPLICABILITY. This section applies when all of the following conditions are met:

- (a) The property is not subject to s. NR 151.13 (1) (b) 3.
- (b) Nutrients are applied to over 5 acres of turf or garden.
- (c) The property discharges runoff to waters of the state.
- (d) The property is not an agricultural facility or practice.
- (e) The property does not conduct silviculture activity.
- **(2)** RESPONSIBLE PARTY. The landowner is the responsible party and shall comply with this section.
- (3) REQUIREMENTS. The application of turf and garden fertilizers on these properties shall be done in accordance with site–specific nutrient application schedules based on appropriate soil tests. The nutrient application schedule shall be designed to maintain the optimal health of the turf or garden vegetation.

Note: In accordance with subch. V, the department has developed a technical standard to help meet the nutrient management performance standard. The technical standard is available from the department at (608) 267–7694.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: r. and recr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.15 Implementation and enforcement.

- (1) IMPLEMENTATION. This subchapter shall be implemented as follows:
- (a) Construction sites and post—construction sites. The provisions of ss. NR 151.11, 151.12, and 151.121 to 151.128 shall be implemented through subch. III of ch. NR 216.

Note: The department may develop and revise available model ordinances to reflect the applicability and performance standards in ss. NR 151.11, 151.12, and 151.12 to 151.128. These model ordinances are in ch. NR 152. Municipalities are encouraged to adopt the requirements of ss. NR 151.11, 151.12, and 151.121 to 151.128, into local ordinances. Incentives are included in the grant programs identified in chs. NR 153 and 155, for municipalities that adopt the performance standards into their ordinances, provide an information and education program, and track and report their enforcement activity.

- (b) *Developed urban areas*. The provisions of s. NR 151.13 (2) shall be implemented through subch. I of ch. NR 216.
- (2) ENFORCEMENT. The department shall enforce this subchapter under s. 281.98, Stats., except for those requirements that are implemented through ch. NR 216, which shall be enforced under ss. 283.89 and 283.91, Stats.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112; am. (1), (2) Register December 2010 No. 660, eff. 1–1–11; correction to numbering of (2) made under s. 13.92 (4) (b) 1., Stats., Register December 2010 No. 660

Subchapter IV — Transportation Facility Performance Standards

- NR 151.20 Purpose and applicability. (1) This subchapter establishes performance standards, as authorized by s. 281.16 (2) (a), Stats., for transportation facilities that cause or may cause runoff pollution. These performance standards are intended to limit runoff pollution in order to achieve water quality standards. Design guidance and the process for developing technical standards to implement this subchapter are set forth in subch. V.
- (2) Transportation facilities that are directed and supervised by the department of transportation and that are regulated by an administrative rule administered by the department of transportation, where the department determines in writing that the rule meets or exceeds the performance standards of this subchapter and is implemented in accordance with the administrative rule provisions, shall be deemed to meet the requirements of the portions of this subchapter determined by the department.
- (3) In s. NR 151.23, soil loss is calculated using the appropriate rainfall or runoff factor, also referred to as the R factor, or an equivalent design storm using a type II distribution, with consideration given to the geographic location of the site and the period of disturbance.

Note: The universal soil loss equation and its successors, revised universal soil loss equation and revised universal soil loss equation 2, utilize an R factor which has been developed to estimate soil erosion, averaged over extended time periods. The R factor can be modified to estimate monthly and single–storm erosion.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. Register December 2010 No. 660, eff. 1–1–11.

NR 151.21 Definitions. In this subchapter:

(1m) "Average annual rainfall" means a typical calendar year of precipitation as determined by the department for users of models such as SLAMM, P8, or equivalent methodology. The average annual rainfall is chosen from a department publication for the location closest to the municipality.

Note: Information on how to access SLAMM and P8 and the average annual rainfall files for five locations in the state, as published periodically by the department, is available by contacting the storm water management program at (608) 267–7694.

- **(2)** "Borrow site" means an area outside of a project site from which stone, soil, sand or gravel is excavated for use at the project site, except the term does not include commercial pits.
 - (3) "Highway" has the meaning given in s. 340.01 (22), Stats.
- (4) "Material disposal site" means an area outside of a project site, which is used, for the lawful disposal of surplus materials or materials unsuitable for use within the project site that is under the direct control of the contractor. A municipally owned landfill or private landfill that is not managed by the contractor is excluded from this definition.
 - **(5)** "Minor reconstruction" means either of the following:
- (a) For transportation facility construction sites where, before January 1, 2011, a bid was advertised, a construction contract was signed and no bid was advertised, or a notice of intent was received by the department in accordance with subch. III of ch. NR 216, reconstruction that is limited to 1.5 miles in continuous or aggregate total length of realignment and that does not exceed 100 feet in width of roadbed widening.
- (b) For transportation facility construction sites where, on or after January 1, 2011, a bid is advertised, a construction contract signed where no bid is advertised or a notice of intent was received by the department in accordance with subch. III of ch. NR 216, reconstruction that is limited to 1.5 miles in continuous or aggregate total length of realignment and that does not exceed 100 feet in width of roadbed widening, and that does not include replacement of a vegetated drainage system with a non-vegetated drainage system except where necessary to convey runoff under a highway or private road or driveway.
- (6) "Prime contractor" means a person authorized or awarded a contract to perform, directly or using subcontractors, all the

- work of a project directed and supervised by the transportation facility authority.
- (7) "Private road or driveway" has the meaning given in s. 340.01 (46), Stats.
- **(8)** "Public-use airport" has the meaning given it in 49 USC 47102(21).
- (9) "Public mass transit facility" means any area of land or water which is used, or intended for use, by bus or light rail, and any appurtenant areas which are used, or intended for use, by bus or light rail, including buildings or other facilities or rights—of—way, either publicly or privately owned, that provide the public with general or special service on a regular and continuing basis.
- (10) "Public trail" means a "state ice age trail area" designated under s. 23.17 (2), Stats., a state trail under s. 23.175 (2) (a), Stats., an "all-terrain vehicle trail" under s. 23.33 (1) (d), Stats., an "off-the-road motorcycle trail" under s. 23.33 (9) (b) 4., Stats., a "recreational trail" under s. 30.40 (12m), Stats., a "walkway" under s. 30.40 (22), Stats., a state trail under s. 84.06 (11), Stats., a "bikeway" under s. 84.60 (1) (a), Stats., a "snowmobile trail" under s. 350.10 (17), Stats., a "public snowmobile corridor" under s. 350.12 (3j) (a) 1., Stats., or any other trail open to the public as a matter of right.
- (11) "Railroad" means any area of land or water which is used, or intended for use, in operating a railroad as defined in s. 85.01 (5), Stats., and any appurtenant areas which are used, or intended for use, for railroad buildings or other railroad facilities or rights—of—way, together with all railroad buildings and facilities located thereon.
- (12) "Reconditioning" has the meaning given in s. 84.013 (1) (b), Stats.
- (13) "Reconstruction" has the meaning given in s. 84.013 (1) (c), Stats.
- (14) "Resurfacing" has the meaning given in s. 84.013(1)(d), Stats.
- (15) "Transportation facility authority" means any person or entity that is authorized to approve work on a transportation facility by contract, permit or with its own forces or by force account. A permit or approval granted by the department pursuant to ch. 283, Stats., does not qualify as authorization needed to meet this definition.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: r. (1), cr. (1m), am. (5), (8) Register December 2010 No. 660, eff. 1–1–11.

NR 151.22 Responsible party. (1) TRANSPORTATION FACILITY AUTHORITY. (a) The transportation facility authority shall develop a design plan to meet the performance standards of this subchapter for land disturbing construction activity at the transportation facility construction site.

Note: This design plan may be the erosion control plan specified in s. Trans 401.07.

- (b) The transportation facility authority, in consultation with the department, shall approve the implementation plan submitted under sub. (2) (a). The transportation facility authority shall incorporate the implementation plan into the contract for project construction.
- (c) The transportation facility authority shall administer and enforce the implementation plan submitted by the prime contractor under sub. (2) (a) under the contract for project construction. The transportation facility authority shall ensure that the prime contractor follows and maintains the implementation plan under par. (b). If the prime contractor does not follow the implementation plan incorporated into the contract for project construction, the transportation facility authority shall control erosion and sediment at the construction site consistent with the design plan prepared under par. (a) or implementation plan prepared under sub.
- (d) Before accepting the completed project, the transportation facility authority shall verify in writing that the prime contractor

has satisfactorily completed the implementation plan pursuant to sub. (2) (b). The transportation authority shall submit the written verification to the prime contractor and to the authority in charge of maintenance of the transportation facility. Upon written verification by the transportation facility authority under this paragraph, the prime contractor is released from the responsibility under this subchapter, except for any responsibility for defective work or materials, damages by its own operations, or as may be otherwise required in the project construction contract.

(2) PRIME CONTRACTOR. (a) The prime contractor shall develop and submit to the transportation facility authority an implementation plan that identifies applicable BMPs and contains a schedule for implementing the BMPs in accordance with design plan to meet the performance standards under sub. (1) (a). The implementation plan shall identify an array of BMPs that may be employed to meet the performance standards. The implementation plan shall also address the design and implementation of BMPs required in ss. NR 151.23 and 151.24 for land disturbing construction activity within borrow sites and material disposal sites that are related to the construction project.

Note: This implementation plan may be the erosion control implementation plan specified in s. Trans 401.08.

- (b) The prime contractor shall implement the implementation plan as required by the contract for project construction prepared pursuant to sub. (1) (b).
- (c) A transportation authority that carries out the construction activity with its own employees and resources shall comply with the prime contractor requirements contained in this subsection, including preparing and carrying out an implementation plan.
- (3) SINGLE PLAN. For transportation projects that are not administered under ch. Trans 401, the requirements of this subchapter may be developed under one plan instead of 2 separate plans as described under subs. (1) (a) and (2) (a). A plan created under this subsection shall contain both the design components required under sub. (1) (a) and the implementation components required under sub. (2) (a).

Note: This single plan may be the erosion control plan specified in s. NR 216.46.

(4) MAINTENANCE AUTHORITY. Upon execution of the written verification prepared under sub. (1) (d) by the transportation facility authority, the authority in charge of maintenance of the transportation facility shall maintain the BMPs to meet the performance standards of this subchapter. However, BMPs no longer necessary for erosion and sediment control shall be removed by the maintenance authority.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (1) (a) Register December 2010 No. 660, eff. 1–1–11.

NR 151.225 Construction site performance standard for non-permitted sites and routine maintenance.

- (1) APPLICABILITY. This section applies to any transportation facility construction site that consists of land disturbing construction activity for any of the following:
- (a) Transportation facility construction sites of less than one acre.
- (b) Routine maintenance if performed for storm water conveyance system cleaning for sites that consist of less than 5 acres.

Note: Land disturbing construction sites of less than one acre and routine maintenance if performed for storm water conveyance system cleaning for sites that consist of less than 5 acres of land disturbance are not regulated under subch. III of ch. NR 216 unless designated by the department under s. NR 216.51 (3).

- (c) Transportation facility construction projects that are exempted by federal statutes or regulations from the requirement to have a national pollutant discharge elimination system permit issued under 40 CFR 122, for land disturbing construction activity.
- (2) RESPONSIBLE PARTY. The transportation facility authority or other person contracted or obligated by other agreement with the transportation facility authority to implement and maintain

construction site BMPs is the responsible party and shall comply with this section.

- (3) REQUIREMENTS. Erosion and sediment control practices at each site where land disturbing construction activity is to occur shall be used to prevent or reduce all of the following:
- (a) The deposition of soil from being tracked onto streets by vehicles.
- (b) The discharge of sediment from disturbed areas into onsite storm water inlets.
- (c) The discharge of sediment from disturbed areas into adjacent waters of the state.
- (d) The discharge of sediment from drainage ways that flow off the site.
 - (e) The discharge of sediment by dewatering activities.
- (f) The discharge of sediment eroding from soil stockpiles existing for more than 7 days.
- (g) The transport by runoff into waters of the state of chemicals, cement and other building compounds and materials on the construction site during the construction period. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this paragraph.

Note: In accordance with subch. V, the department has developed technical standards to help meet the construction site performance standards. These technical standards are available from the department at (608) 267–7694.

- **(4)** LOCATION. BMPs shall be located so that treatment occurs before runoff enters waters of the state.
- **(5)** IMPLEMENTATION. The BMPs used to comply with this section shall be implemented as follows:
- (a) Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin.
- (b) Erosion and sediment control practices shall be maintained until final stabilization.
- (c) Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.
- (d) Temporary stabilization activity shall commence when land disturbing construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.
- (e) BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

- NR 151.23 Construction site performance standard for sites of one acre or more. (1) APPLICABILITY. This section applies to any transportation facility construction site that consists of one acre or more of land disturbing construction activity.
- (a) Subsections (2), (3), (4), and (5) apply to all of the following:
- 1. Transportation facility construction sites for which the department received a notice of intent in accordance with subch. III of ch. NR 216 before January 1, 2011.
- 2. Transportation facility construction sites for which a bid has been advertised or construction contract signed for which no bid was advertised, before January 1, 2011.
- (b) Subsections (2) (a), (b), and (cm), (3), (4m), (5), and (6) apply to all of the following:
- 1. Transportation facility construction sites for which the department received a notice of intent in accordance with subch. III of ch. NR 216 on or after January 1, 2011.
- 2. Transportation facility construction sites for which a bid has been advertised or construction contract signed for which no bid was advertised, on or after January 1, 2011.
 - **(2)** EXEMPTION. This section does not apply to the following:

hibited by this paragraph.

as constructing bridge footings or BMP installations, are not pro-

NR 151.23

- (a) Transportation facility construction projects that are exempted by federal statutes or regulations from the requirement to have a national pollutant discharge elimination system permit issued under 40 CFR 122, for land disturbing construction activity.
- (b) Transportation facility construction projects that are part of a larger common plan of development, such as a residential or industrial development, and are in compliance with the performance standards of subch. III.
- (c) Routine maintenance for transportation facilities that have less than 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.

Note: Construction projects such as installations of utilities within a transportation right-of-way that are not directed and supervised by the Department of Transportation are subject to the performance standards of subch. III and are not subject to this subchapter.

- (cm) Routine maintenance if performed for storm water conveyance system cleaning for sites that consist of less than 5 acres of land disturbance.
- **(3)** PLAN. (a) The responsible party under s. NR 151.22 shall develop and implement a written design plan for each construction site. The plan shall incorporate the applicable requirements of this section.

Note: The design plan may be the erosion control plan specified in s. NR 216.46 or the design plan in s. NR 151.22 (1) (a).

- (b) The plan required under s. NR 151.22 (2) (a) or (3) shall be properly installed to implement the plan under s. NR 151.22 (1) (a).
- **(4)** PRE-JANUARY 1, 2011 REQUIREMENTS. The design plan required under sub. (3) shall include the following:
- (a) BMPs that, by design, achieve, to the maximum extent practicable, a reduction of 80% of the sediment load carried in runoff, on an average annual basis, as compared with no sediment or erosion controls, as specified in s. NR 151.22 (1) (a) or (3), until the construction site has undergone final stabilization. No person shall be required to exceed an 80% sediment reduction to meet the requirements of this paragraph. Erosion and sediment control BMPs may be used alone or in combination and shall be installed according to any associated implementation plan to meet the requirements of this paragraph. Credit toward meeting the sediment reduction shall be given for limiting the duration or area, or both, of land disturbing construction activity, or other appropriate mechanism.

Note: Soil loss prediction tools that estimate the sediment load leaving the construction site under varying land and management conditions, or methodology identified in subch. V., may be used to calculate sediment reduction.

- (b) Notwithstanding par. (a), if BMPs cannot be designed and implemented to reduce the sediment load by 80%, based on an average annual rainfall, the design plan shall include a written and site–specific explanation why the 80% reduction goal is not attainable and the sediment load shall be reduced to the maximum extent practicable.
- (c) Where appropriate, the design plan shall include sediment controls to do all of the following to the maximum extent practicable:
- 1. Prevent tracking of sediment from the construction site onto roads and other paved surfaces.
- Prevent the discharge of sediment as part of site de-watering.
- Protect the separate storm drain inlet structure from receiving sediment.
- (d) The use, storage and disposal of chemicals, cement and other compounds and materials used on the construction site shall be managed during the construction period to prevent their transport by runoff into waters of the state. However, projects that require the placement of these materials in waters of the state, such

- **(4m)** POST-JANUARY 1, 2011 REQUIREMENTS. The design plan required under sub. (3) shall meet all of the following:
- (a) Erosion and sediment control practices. Erosion and sediment control practices at each site where land disturbing construction activity is to occur shall be used to prevent or reduce all of the following:
- The deposition of soil from being tracked onto streets by vehicles.
- The discharge of sediment from disturbed areas into onsite storm water inlets.
- 3. The discharge of sediment from disturbed areas into adjacent waters of the state.
- 4. The discharge of sediment from drainage ways that flow off the site.
 - 5. The discharge of sediment by dewatering activities.
- 6. The discharge of sediment eroding from soil stockpiles existing for more than 7 days.
- 7. The discharge of sediment from erosive flows at outlets and in downstream channels.
- 8. The transport by runoff into waters of the state of chemicals, cement and other building compounds and materials on the construction site during the construction period. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this subdivision.
- The transport by runoff into waters of the state of untreated wash water from vehicle and wheel washing.

Note: Wastewaters, such as from concrete truck washout, need to be properly managed to limit the discharge of pollutants to waters of the state. A separate permit may be needed from the department where a wastewater discharge has the potential to adversely impact waters of the state. The appropriate department regional wastewater specialist should be contacted to determine if wastewater permit coverage is needed where wastewater will be discharged to waters of the state.

- (b) Sediment performance standards. In addition to the erosion and sediment control practices under par. (a), the following erosion and sediment control practices shall be employed:
- 1. For transportation facility construction sites for which the department received a notice of intent for the construction project in accordance with subch. III of ch. NR 216 within 2 years after January 1, 2011, BMPs that, by design, achieve a reduction of 80 percent, or to the maximum extent practicable, of the sediment load carried in runoff, on an average annual basis, as compared with no sediment or erosion controls, until the construction site has undergone final stabilization.
- 2. For transportation facility construction sites for which the department received a notice of intent for the construction project in accordance with subch. III of ch. NR 216, 2 years or more after January 1, 2011, BMPs that, by design, discharge no more than 5 tons per acre per year, or to the maximum extent practicable, of the sediment load carried in runoff from initial grading to final stabilization
- 3. The department may not require any person to employ more BMPs than are needed to meet a performance standard in order to comply with maximum extent practicable. Erosion and sediment control BMPs may be combined to meet the requirements of this paragraph. The department shall give credit toward meeting the sediment performance standard of this paragraph for limiting the duration or area, or both, of land disturbing construction activity, or for other appropriate mechanisms.
- 4. Notwithstanding subd. 1. or 2., if BMPs cannot be designed and implemented to meet the sediment performance standard, the plan shall include a written, site–specific explanation of why the sediment performance standard cannot be met and how the sediment load will be reduced to the maximum extent practicable.

Note: Soil loss prediction tools such as revised universal soil loss equation 2 that estimate the sediment load leaving the construction site under varying land and management conditions, or methodology identified in subch. V, may be used to calculate sediment reduction.

Note: In accordance with subch. V, the department has developed technical standards to help meet the construction site performance standards. These technical standards are available from the department at (608) 267–7694.

- (c) *Preventive measures*. The plan shall incorporate all of the following:
- 1. Maintenance of existing vegetation, especially adjacent to surface waters, whenever possible.
- Minimization of soil compaction and preservation of topsoil.
- 3. Minimization of land disturbing construction activity on slopes of 20% or more.
 - 4. Development of spill prevention and response procedures.
- **(5)** LOCATION. BMPs shall be located so that treatment occurs before runoff enters waters of the state.

Note: While regional treatment facilities are appropriate for control of post–construction pollutants, they should not be used for construction site sediment removal.

- **(6)** IMPLEMENTATION. The BMPs used to comply with this section shall be implemented as follows:
- (a) Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin and in accordance with the plan developed under sub. (3).
- (b) Erosion and sediment control practices shall be maintained until final stabilization.
- (c) Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.
- (d) Temporary stabilization activity shall commence when land disturbing construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.
- (e) BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (title), (1), (3) (a), (4) (title), (5), cr. (2) (cm), (4m), (6) Register December 2010 No. 660, eff. 1–1–11.

- NR 151.24 Post—construction performance standard. (1) APPLICABILITY. This section applies to a transportation facility that is or was subject to the construction performance standards of s. NR 151.23, except any of the following:
- (a) A transportation construction site where the department has received a notice of intent for the construction project in accordance with subch. III of ch. NR 216 within 2 years after October 1, 2002.
- (b) A transportation facility construction site that has undergone final stabilization within 2 years after October 1, 2002.
- (bm) A transportation post–construction site for which the department received a notice of intent for the construction project in accordance with subch. III of ch. NR 216 on or after January 1, 2011. Transportation post–construction sites for which the department received a notice of intent for the construction project, in accordance with subch. III of ch. NR 216, on or after January 1, 2011, shall meet the performance standards of ss. NR 151.242 to 151.249.
 - (c) Reconditioning or resurfacing of a highway.
- (d) Minor reconstruction of a highway. Notwithstanding the exemption under this paragraph, the protective areas requirements in sub. (6) apply to minor reconstruction of a highway.
- (e) A redevelopment transportation facility with no increase in exposed parking lots or roads.
- (f) A transportation facility with less than 10% connected imperviousness based on complete development of the transportation facility, provided the cumulative area of all parking lots and rooftops is less than one acre.

Note: Projects that consist of only the construction of bicycle paths or pedestrian trails generally meet this exception as these facilities have minimal connected imperviousness.

- (g) Protective area requirements under sub. (6) do apply to actions described in s. NR 151.20 (2).
- (h) A transportation facility, the construction of which involves activity described in s. NR 151.23 (1) (a) 2. but that has less than one acre of land disturbing construction activity.
- (i) Transportation facility construction projects that are part of a larger common plan of development, such as a residential or industrial development, that are in compliance with the performance standards of subch. III.
- (j) Routine maintenance for transportation facilities if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.
- (2) PLAN. A written plan shall be developed and implemented for each transportation facility and shall incorporate the requirements of subs. (3) to (10).

Note: Examples of plans that may be used to comply with this section may be that specified within s. NR 216.47, the municipal storm water management program specified within s. NR 216.07 (1) to (6) or the erosion control plan specified in s. Trans 401.07.

- (3) TOTAL SUSPENDED SOLIDS. Best management practices shall be designed, installed and maintained to control total suspended solids carried in runoff from the transportation facility as follows:
- (a) For new transportation facilities, by design, reduce to the maximum extent practicable, the suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this paragraph.
- (b) For highway reconstruction and non-highway redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this paragraph.
- (c) Notwithstanding pars. (a) and (b), if the design cannot achieve the applicable total suspended solids reduction specified, the design plan shall include a written and site-specific explanation why that level of reduction is not attained and the total suspended solids load shall be reduced to the maximum extent practicable.

Note: Pollutant loading models such as SLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids. Information on how to access SLAMM and P8 is available from the storm water coordinator in the runoff management section of the bureau of watershed management at (608) 267–7694.

(4) PEAK DISCHARGE. (a) By design, BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to pre-development site conditions for the 2-year, 24-hour design storm applicable to the transportation facility. Pre-development conditions shall assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. The meaning of "hydrologic soil group" and "runoff curve number" are as determined in TR-55. However, when pre-development land cover is cropland, rather than using TR-55 values for cropland, the runoff curve numbers in Table 2 of subch. III shall be used.

Note: The curve numbers in Table 2 represent mid–range values for soils under a good hydrologic condition where conservation practices are used and are selected to be protective of the resource waters.

- (b) This subsection does not apply to:
- 1. A transportation facility where the change in hydrology due to development does not increase the existing surface water elevation at any point within the downstream receiving surface water by more than 0.01 of a foot for the 2-year, 24-hour storm event.

Note: Hydraulic models such as HEC-RAS or another methodology may be used to determine the change in surface water elevations.

- A highway reconstruction site.
- 3. A transportation facility that is part of a redevelopment project.

Note: The intent of sub. (4) is to minimize streambank erosion under bank full conditions

- **(5)** INFILTRATION. (a) Except as provided in pars. (d) to (g), BMPs shall be designed, installed and maintained to infiltrate runoff to the maximum extent practicable in accordance with one of the following:
- 1. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.
- 2. Infiltrate 10% of the post-development runoff volume from the 2-year, 24-hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.
- (b) Pre-development condition shall be the same as specified in sub. (4) (a).

Note: A model that calculates runoff volume, such as SLAMM, P8 or an equivalent methodology may be used. Information on how to access SLAMM and P8 is available from the storm water coordinator in the runoff management section of the bureau of watershed management at (608) 267–7694.

(c) Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with par. (g). Pretreatment may include, but is not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.

Note: To minimize potential groundwater impacts it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollutant source areas such as parking lots.

- (d) The following are prohibited from meeting the requirements of this subsection:
- 1. Areas associated with tier 1 industrial facilities identified in s. NR 216.21 (2) (a), including storage, loading, rooftop and parking.
- 2. Storage and loading areas of tier 2 industrial facilities identified in s. NR 216.21 (2) (b).

Note: Runoff from tier 2 parking and rooftop areas may be infiltrated but may require pretreatment.

- 3. Fueling and vehicle maintenance areas.
- 4. Areas within 1000 feet upgradient or within 100 feet downgradient of karst features.
- 5. Areas with less than 3 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.
- 6. Areas with runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than 5 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.
- 7. Areas within 400 feet of a community water system well as specified in s. NR 811.16 (4) or within 100 feet of a private well as specified in s. NR 812.08 (4) for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development.
- 8. Areas where contaminants of concern, as defined in s. NR 720.03 (2), are present in the soil through which infiltration will occur.
- 9. Any area where the soil does not exhibit one of the following characteristics between the bottom of the infiltration system and seasonal high groundwater and top of bedrock:
 - a. At least a 3-foot soil layer with 20% fines or greater.

- b. At least a 5-foot soil layer with 10% fines or greater.
- Where the soil medium within the infiltration system does not provide an equivalent level of protection.

Note: The areas listed in par. (d) are prohibited from infiltrating runoff due to the potential for groundwater contamination.

- (e) Transportation facilities located in the following areas and otherwise subject to the requirements of this subchapter are not required to meet the requirements of this subsection:
- 1. Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the bottom of the infiltration system.
- 2. Parking areas and access roads less than 5,000 square feet for commercial and industrial development.
 - 3. Redevelopment post-construction sites.
 - 4. In-fill development areas less than 5 acres.
- 5. Infiltration areas during periods when the soil on the site is frozen.
- Roads in commercial, industrial and institutional land uses, and arterial residential roads.
 - 7. Highways.
- (f) Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation, such alternate use shall be given equal credit toward the infiltration volume required by this subsection.
- (g) 1. Infiltration systems designed in accordance with this subsection shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with ch. NR 140. However, if site specific information indicates that compliance with a preventive action limit is not achievable, then the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.
- 2. Notwithstanding subd.1., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.
- **(6)** PROTECTIVE AREAS. (a) In this subsection, "protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this paragraph, "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.
- 1. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in s. NR 103.04, 75 feet.
- 2. For perennial and intermittent streams identified on a United States geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
 - 3. For lakes, 50 feet.
- 4. For highly susceptible wetlands, 50 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins. Wetland boundary delineation shall be made in accordance with s. NR 103.08 (1m). This paragraph does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.
- 5. For less susceptible wetlands, 10% of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.

- 6. In subds. 1., 4. and 5., determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03.
- 7. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.
- (b) 1. Beginning with land acquired within a protective area for a transportation facility on or after October 1, 2002, no impervious surface of a transportation facility may be constructed within a protective area, unless the transportation facility authority determines, in consultation with the department, that there is no practical alternative. If there is no practical alternative to locating a transportation facility within a protective area, the transportation facility may be constructed in the protective area only to the extent the transportation facility authority, in consultation with the department, determines is reasonably necessary, and the transportation facility authority shall state in the design plan prepared pursuant to s. NR 151.22 (1) (a), why it is necessary to construct the transportation facility within a protective area.
- 2. If a transportation facility is constructed within a protective area, adequate sod or self–sustaining vegetative cover of 70% or greater shall be established and maintained in the area that is the width of the protective area, or the greatest width practical, and throughout the length of the protective area in which the transportation facility is located. The adequate sod or self–sustaining vegetative cover required under this paragraph shall be sufficient to provide for bank stability, maintenance of fish habitat and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non–vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion such as on steep slopes or where high velocity flows occur.

Note: It is recommended that seeding of non-aggressive vegetative cover be used in the protective areas. Vegetation that is flood and drought tolerant and can provide long-term bank stability because of an extensive root system is preferable. Vegetative cover may be measured using the line transect method described in the university of Wisconsin-extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".

3. Best management practices such as filter strips, swales or wet detention basins, that are designed to control pollutants from nonpoint sources may be located in the protective width area.

Note: Other regulations, such as ch. 30, Stats., and chs. NR 103, 115, 116 and 117 and their associated review and approval process may apply in the protective area.

- This subsection does not apply to:
- a. Non-highway transportation redevelopment sites.
- b. Transportation facilities that cross or access surface waters, such as boat landings, bridges and culverts.
- Structures constructed in accordance with s. 59.692 (1v),
 Stats.
- d. Transportation facilities from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.

Note: A vegetated protective area to filter runoff pollutants from transportation facilities described in subd. 4. d. is not necessary since runoff is not entering the surface water at that location. Other practices necessary to meet requirements of this section, such as a swale or basin, will need to be designed and implemented to reduce runoff pollutants prior to runoff entering a surface water of the state.

(7) FUELING AND VEHICLE MAINTENANCE AREAS. Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

Note: A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non-structural method of preventing or treating petroleum in runoff.

- **(8)** LOCATION. To comply with the standards required under this section, BMPs may be located on–site or off–site as part of a regional storm water device, practice or system, but shall be installed in accordance with s. NR 151.003.
- **(9)** TIMING. The BMPs required under this section shall be installed before the construction site has undergone final stabilization.

- (10) SWALE TREATMENT. (a) Applicability. Except as provided in par. (b), transportation facilities that use swales for runoff conveyance and pollutant removal meet all of the requirements of this section, if the swales are designed to the maximum extent practicable to do all of the following:
- 1. Be vegetated. However, where appropriate, non-vegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams.

Note: It is preferred that tall and dense vegetation be maintained within the swale due to its greater effectiveness at enhancing runoff pollutant removal.

2. Carry runoff through a swale for 200 feet or more in length that is designed with a flow velocity no greater than 1.5 feet per second for the peak flow generated using either a 2–year, 24–hour design storm or a 2–year design storm with a duration equal to the time of concentration as appropriate. If a swale of 200 feet in length cannot be designed with a flow velocity of 1.5 feet per second or less, the flow velocity shall be reduced to the maximum extent practicable.

Note: Check dams may be included in the swale design to slow runoff flows and improve pollutant removal. Transportation facilities with continuous features such as curb and gutter, sidewalks or parking lanes do not comply with the design requirements of this subsection. However, a limited amount of structural measures such as curb and gutter may be allowed as necessary to account for other concerns such as human safety or resource protection.

- (b) *Exemptions*. 1. Notwithstanding par. (a), the department may, consistent with water quality standards, require other provisions of this section, in addition to swale treatment, be met on a transportation facility with an average daily traffic rate greater than 2500 and where the initial surface water of the state that the runoff directly enters is any of the following:
 - a. An outstanding resource water.
 - b. An exceptional resource water.
- c. Waters listed in section 303 (d) of the federal clean water act that are identified as impaired in whole or in part, due to non-point source impacts.
- d. Waters where targeted performance standards are developed pursuant to s. NR 151.004.
- 2. The transportation facility authority shall contact the department's regional storm water staff or the department's liaison to the department of transportation to determine if additional BMPs beyond a water quality swale are needed under this paragraph.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: cr. (1) (bm) Register December 2010 No. 660, eff. 1–1–11.

- NR 151.241 Post–construction performance standards. (1) GENERAL. In ss. NR 151.241 to 151.249, "post–construction site" means a construction site subject to regulation under this subchapter, after construction is completed and final stabilization has occurred.
- **(2)** APPLICABILITY. Sections NR 151.241 to 151.249 apply to a transportation facility post—construction site that is or was subject to the construction performance standards of s. NR 151.23, except any of the following:
- (a) A transportation facility post–construction site with less than 10 percent connected imperviousness, based on the area of land disturbance, provided the cumulative area of all impervious surfaces is less than one acre. However, the exemption of this paragraph does not include exemption from the protective area standard of s. NR 151.245.
 - (b) Reconditioning or resurfacing of a highway.
- (c) Minor reconstruction of a highway. Notwithstanding the exemption under this paragraph, the protective area performance standard in s. NR 151.245 applies to minor reconstruction of a highway.
- (d) Transportation facility construction projects that are part of a larger common plan of development, such as a residential or industrial development, that are in compliance with the performance standards of subch. III.

- (e) Routine maintenance if performed for storm water conveyance system cleaning.
- (3) STORM WATER MANAGEMENT PLAN. The responsible party under s. NR 151.22 shall develop and implement a written storm water management plan for each transportation facility post—construction site and shall incorporate the requirements of ss. NR 151.242 to 151.249.

Note: Examples of storm water management plans that may be used to comply with ss. NR 151.242 to 151.249 may include those specified in s. NR 216.47 or s. TRANS 401.106 (2).

(4) Maintenance of effort. For non-highway transportation facility redevelopment sites and highway reconstruction where the redevelopment or reconstruction will be replacing older development or highway that was subject to post-construction performance standards of this chapter in effect on or after October 1, 2004, the responsible party shall meet the total suspended solids reduction, peak flow control, infiltration, and protective areas standards applicable to the older development or highway, or meet the redevelopment or highway reconstruction standards of ss. NR 151.242 to 151.249, whichever are more stringent.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.242 Total suspended solids performance standard. (1) REQUIREMENT. Except as provided in sub. (3), BMPs shall be designed, installed, and maintained to control total suspended solids carried in runoff from the transportation facility post–construction site. BMPs shall be designed in accordance with Table 1., or to the maximum extent practicable as provided in sub. (4). The design shall be based on an average annual rainfall, as compared to no runoff management controls.

Table 1. TSS Reduction Standards			
Development Type	TSS Reduction		
New Transportation Facilities	80 percent		
Highway Reconstruction	40 percent		
Non-highway transportation	40 percent of load from		
facility redevelopment	parking areas and roads		

(2) NON-HIGHWAY TRANSPORTATION REDEVELOPMENT AND HIGHWAY RECONSTRUCTION. Except as provided in s. NR 151.241 (4), the non-highway transportation facility redevelopment and

- highway reconstruction total suspended solids reduction standard of Table 1. applies to non-highway transportation facility redevelopment and highway reconstruction.
- (3) DELAYED IMPLEMENTATION. For municipalities that are regulated under subch. I of ch. NR 216 and for transportation facilities under the jurisdiction of the department of transportation for maintenance purposes that are located within municipalities regulated under subch. I of ch. NR 216, the highway reconstruction total suspended solids performance standard first applies January 1, 2017.
- (4) MAXIMUM EXTENT PRACTICABLE. If the design cannot meet a total suspended solids reduction performance standard of sub. (1), Table 1., the storm water management plan shall include a written, site—specific explanation of why the total suspended solids reduction performance standard cannot be met and why the total suspended solids load will be reduced only to the maximum extent practicable. The department may not require any person to exceed the applicable total suspended solids reduction performance standard to meet the requirements of maximum extent practicable.

Note: Pollutant loading models such as DETPOND, SLAMM, P8, or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids. Information on how to access these models is available from the department's storm water management program at (608) 267–7694. Use the most recent version of the model and the rainfall files and other parameter files identified for Wisconsin users unless directed otherwise by the regulatory authority.

(5) OFF-SITE DRAINAGE. When designing BMPs, runoff draining to the BMP from off-site shall be taken into account in determining the treatment efficiency of the practice. Any impact on the efficiency shall be compensated for by increasing the size of the BMP accordingly.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.243 Peak discharge performance standard.

(1) REQUIREMENT. By design, BMPs shall be employed to maintain or reduce the 1-year, 24-hour and the 2-year, 24-hour post-construction peak runoff discharge rates to the 1-year, 24-hour and the 2-year, 24-hour pre-development peak runoff discharge rates respectively, or to the maximum extent practicable. The runoff curve numbers in Table 2. shall be used to represent the actual pre-development condition.

Table 2. Maximum Pre-Development Runoff Curve				
Numbers				
Runoff Curve Number Hydrologic Soil Group				
	A	В	C	D
Woodland	30	55	70	77
Grassland	39	61	71	78
Cropland	55	69	78	83

Note: Where the pre-development condition is a combination of woodland, grassland, or cropland, the runoff curve number should be pro-rated by area.

- **(2)** EXEMPTIONS. This section does not apply to the following:
- (a) A transportation facility post-construction site where the discharge is directly into a lake over 5,000 acres or a stream or river segment draining more than 500 square miles.
- (b) Except as provided under s. NR 151.241 (4), a transportation facility that is part of a redevelopment project.
- (c) Except as provided under s. NR 151.241 (4), a highway reconstruction site.

Note: The intent of s. NR 151.243 is to minimize streambank and shoreline erosion under bank-full conditions.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.244 Infiltration performance standard. (1) REQUIREMENT. Except as provided in sub. (2), the requirements are the same as those given in s. NR 151.124.

(2) EXEMPTIONS. Except as provided under s. NR 151.241 (4), transportation facility highway reconstruction and new highways are not required to meet the performance standards of this section.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11; renumbering of (1), (2) made under s. 13.92 (4) (b) 1., Stats., Register December 2010 No. 660.

NR 151.245 Protective areas performance standard. (1) Definition. In this section, "protective area" means an area of land that commences at the top of the channel of lakes, streams, and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this section, "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, so that runoff cannot enter the enclosure at this location.

- (a) For outstanding resource waters and exceptional resource waters, 75 feet.
- (b) For perennial and intermittent streams identified on a U.S. geological survey 7.5—minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
 - (c) For lakes, 50 feet.
 - (d) For wetlands not subject to par. (e) or (f), 50 feet.
- (e) For highly susceptible wetlands, 75 feet. Highly susceptible wetlands include the following types: calcareous fens, sedge meadows, open and coniferous bogs, low prairies, coniferous swamps, lowland hardwood swamps, and ephemeral ponds.

Note: Information on wetland types, including ephemeral ponds, is available from the department at (608) 266–7012.

- (f) For less susceptible wetlands, 10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include: degraded wetlands dominated by invasive species such as reed canary grass; cultivated hydric soils; and any gravel pits, or dredged material or fill material disposal sites that take on the attributes of a wetland.
- (g) In pars. (d) to (f), determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03.
- (h) Wetland boundary delineation shall be made in accordance with s. NR 103.08 (1m). This paragraph does not apply to wetlands that have been completely filled in compliance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in compliance with all

applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed. Where there is a legally authorized wetland fill, the protective area standard need not be met in that location.

- (i) For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.
- (j) Notwithstanding pars. (a) to (i), the greatest protective area width shall apply where rivers, streams, lakes, and wetlands are contiguous.

Note: A stream or lake is not eligible for a lower protective area width even if contiguous to a less susceptible wetland.

- **(2)** APPLICABILITY. This section applies to transportation facility post—construction sites located within a protective area, except those areas exempted pursuant to sub. (4).
 - (3) REQUIREMENTS. The following requirements shall be met:
- (a) No impervious surface of a transportation facility may be constructed within a protective area, unless the transportation facility authority determines, in consultation with the department, that there is no practical alternative. If there is no practical alternative to locating a transportation facility within a protective area, the transportation facility may be constructed in the protective area only to the extent the transportation facility authority, in consultation with the department, determines is reasonably necessary. The transportation facility authority shall state in the design plan prepared pursuant to s. NR 151.241 (3), why it is necessary to construct the transportation facility within a protective area.
- (b) Where land disturbing construction activity occurs within a protective area, adequate sod or self—sustaining vegetative cover of 70 percent or greater shall be established and maintained where no impervious surface is present. The adequate sod or self—sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat, and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non–vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion such as on steep slopes or where high velocity flows occur.

Note: It is recommended that seeding of non–invasive vegetative cover be used in the protective areas. Some invasive plants are listed in ch. NR 40. Vegetation that is flood and drought tolerant and can provide long–term bank stability because of an extensive root system is preferable. Vegetative cover may be measured using the line transect method described in the University of Wisconsin extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".

(c) Best management practices such as filter strips, swales, or wet detention ponds, that are designed to control pollutants from non-point sources, may be located in the protective area.

Note: Other laws, such as ch. 30, Stats., and chs. NR 103, 115, 116, and 117 and their associated review and approval processes may apply in the protective area.

- **(4)** EXEMPTIONS. This section does not apply to any of the following:
- (a) Except as provided under s. NR 151.241 (4), non-highway transportation redevelopment post-construction sites.
- (b) Structures that cross or access surface waters such as boat landings, bridges, and culverts.
- (c) Structures constructed in accordance with s. 59.692 (1v), Stats.
- (d) Transportation facilities from which the runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet the requirements of ss. NR 151.242 to 151.243, except to the extent that vegetative ground cover is necessary to maintain bank stability.

Note: A vegetated protective area to filter runoff pollutants from transportation facilities described in par. (d) is not necessary since the runoff at that location is treated prior to entering the surface water. Other practices necessary to meet the requirements of this section, such as a swale or pond, will need to be designed and implemented to reduce runoff pollutants prior to runoff entering a surface water of the state. The requirements of ch. NR 103 still apply and should be considered before runoff is diverted to or from a wetland.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.246 Fueling and vehicle maintenance areas performance standard. Fueling and vehicle maintenance areas shall have BMPs designed, installed, and maintained to

reduce petroleum within runoff, so that the runoff that enters waters of the state contains no visible petroleum sheen, or to the maximum extent practicable.

Note: A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non-structural method of preventing or treating petroleum in runoff.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.247 Location. To comply with the standards required under ss. NR 151.242 to 151.244, BMPs may be located on–site or off–site as part of a regional storm water device, practice or system, but shall be installed in accordance with s. NR 151.003.

History: CR 09-112: cr. Register December 2010 No. 660, eff. 1-1-11.

NR 151.248 Timing. The BMPs that are required under ss. NR 151.242 to 151.246 and 151.249 shall be installed before the construction site has undergone final stabilization.

Note: In accordance with subch. V, the department has developed technical standards to help meet the post–construction performance standards. These technical standards are available from the department at (608) 267–7694.

History: CR 09-112: cr. Register December 2010 No. 660, eff. 1-1-11.

- NR 151.249 Swale treatment performance standard. (1) REQUIREMENT. Except as provided in sub. (2), transportation facilities that use swales for runoff conveyance and pollutant removal are exempt from the requirements of ss. NR 151.242 to 151.244, if the swales are designed to do all of the following or to the maximum extent practicable:
- (a) Swales shall be vegetated. However, where appropriate, non-vegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams

Note: It is preferred that tall and dense vegetation be maintained within the swale due to its greater effectiveness at enhancing runoff pollutant removal.

(b) Swales shall comply with the department technical standard 1005, "Vegetated Infiltration Swale", dated May, 2007, except as otherwise authorized in writing by the department.

Note: In accordance with subch. V, the department has developed technical standards to help meet the post–construction performance standards. These technical standards are available from the department at (608) 267–7694.

- (2) OTHER REQUIREMENTS. (a) Notwithstanding sub. (1), the department may, consistent with water quality standards, require that other requirements, in addition to swale treatment, be met on a transportation facility with an average daily traffic rate greater than 2,500 and where the initial surface water of the state that the runoff directly enters is any of the following:
 - 1. An outstanding resource water.
 - 2. An exceptional resource water.
- 3. Waters listed in section 303 (d) of the federal clean water act that are identified as impaired in whole or in part, due to non-point source impacts.
- 4. Waters where targeted performance standards are developed pursuant to s. NR 151.004.
- (b) The transportation facility authority shall contact the department's regional storm water staff or the department's liaison to the department of transportation to determine if additional BMPs beyond a water quality swale are needed under this subsection.

History: CR 09–112: cr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.25 Developed urban area performance standard for transportation facilities. (1) APPLICABILITY. This section applies to transportation facilities under the jurisdiction of the department of transportation for maintenance purposes that are located within a municipality regulated under subch. I of the NR 216

Note: Transportation facilities that are not under the jurisdiction of the department of transportation for maintenance purposes are subject to the performance standards in s. NR 151.13.

- (2) REQUIREMENTS. (a) Except as provided in par. (c), the department of transportation shall develop and implement a storm water management plan in consultation with the department to control pollutants from transportation facilities described in sub. (1), for runoff from existing transportation facilities that enters waters of the state as compared to no storm water management controls. By design, the plan shall do the following:
- 1. A 20 percent reduction in total suspended solids or to the maximum extent practicable, beginning not later than a date consistent with the municipality regulated under subch. I of ch. NR 216.
- 2. A 40 percent reduction in total suspended solids in runoff by March 31, 2013, for transportation facilities within a municipality that received permit coverage under subch. I of ch. NR 216 on or before January 1, 2010.
- 3. A 40 percent reduction in total suspended solids in runoff within 7 years, for transportation facilities within a municipality receiving permit coverage under subch. I of ch. NR 216 after January 1, 2010.
- 4. Evidence of meeting the performance standard of this paragraph shall require the use of a model or an equivalent methodology approved by the department. Acceptable models and model versions include SLAMM version 9.2 and P8 version 3.4 or subsequent versions of those models. An earlier version of SLAMM is acceptable if no credit is being taken for street cleaning.

Note: Information on how to access SLAMM and P8 and the relevant parameter files is available from the department's storm water management program at (608) 267–7604.

- (b) The department of transportation shall inform and educate appropriate department of transportation staff and any transportation facility maintenance authority contracted by the department of transportation to maintain transportation facilities owned by the department of transportation regarding nutrient, pesticide, salt and other deicing material and vehicle maintenance management activities in order to prevent runoff pollution of waters of the state.
- (c) If the department of transportation has determined that it will not achieve a 40 percent reduction in total suspended solids in runoff that enters waters of the state as compared to no controls by the applicable date of par. (a) 2. or 3., then 6 months before the applicable date, the department of transportation shall submit a report to the department describing the control measures that it has implemented and shall submit a long term storm water management plan in accordance with s. NR 151.13 (2) (b) 3. The department shall review the plan in accordance with s. NR 151.13 (2) (b) 4.
- (d) To comply with the standards required under this subsection, BMPs may be located on-site or off-site as part of a regional storm water device, practice or system, but shall be installed in accordance with s. NR 151.003.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: r. and recr. Register December 2010 No. 660, eff. 1–1–11.

NR 151.26 Enforcement. This subchapter shall be enforced as follows:

- (1) If a transportation facility that is exempt from prohibitions, permit or approval requirements by s. 30.2022 (1m), Stats., does not comply with the performance standards of this subchapter, the department shall initiate the conflict resolution process specified in the cooperative agreement between the department of transportation and the department established under the interdepartmental liaison procedures under s. 30.2022 (2), Stats.
- (2) The department shall enforce this subchapter where applicable for transportation facilities not specified in sub. (1) under s. 281.98, Stats.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; corrections in (1) made under s. 13.93 (2m) (b) 7., Stats., Register July 2004 No. 583; CR

09–112: am. (1) Register December 2010 No. 660, eff. 1-1-11; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register January 2017 No. 733.

Subchapter V — Technical Standards Development Process for Non-Agricultural Performance Standards

NR 151.30 Purpose. This subchapter specifies the process for developing and disseminating technical standards to implement the performance standards in subchs. III and IV, as authorized by s. 281.16 (2) (b), Stats., and establishes the procedures that the department shall use to determine if technical standards adequately and effectively implement, as appropriate, the performance standards in subchs. III and IV. This subchapter applies to technical standards developed or implemented by any agency of the state of Wisconsin.

 $\textbf{History:} \ \ \mathsf{CR}\ 00-027 \mathsf{:}\ \mathsf{cr.}\ \mathsf{Register}\ \mathsf{September}\ 2002\ \mathsf{No.}\ 561,\ \mathsf{eff.}\ 10-1-02.$

- NR 151.31 Technical standards development process. (1) The department shall develop and revise technical standards to implement the performance standards in subchs. III and IV through a process outlined as follows:
- (a) The department may decide that a new or revised technical standard is necessary to implement a performance standard.
- (b) Any person may request the department to develop or revise a technical standard designed to meet a performance standard. The request shall be made in writing to the director of the department's bureau of watershed management and shall include the performance standard for which technical standard development or revision may be needed, and an explanation why a new or revised technical standard is requested.
- (c) The department shall evaluate a request submitted pursuant to par. (b), to determine if it is necessary to develop or revise a technical standard to implement a performance standard. If the department determines that a new or revised technical standard is not necessary to implement a performance standard, it shall reply to the requester in writing as to the reasons that a technical standard does not need to be developed or revised.
- (d) If the department determines that a new or revised technical standard is necessary to implement a performance standard, it shall:
- 1. Determine the state agency responsible for the technical standard.
- If the responsible state agency is not the department, request the responsible state agency to develop or revise a technical standard.
- 3. If the responsible agency denies the request to develop or revise a technical standard, the department may initiate conflict resolution procedures outlined under any existing memorandum of understanding or agreement between the department and the responsible agency. If no conflict resolution procedures exist, the department may attempt to resolve the disagreement through stepped negotiations between increasing higher levels of management.
- (e) The department shall use the following procedures when it acts to develop or revise technical standards to implement the performance standards in subchs. III and IV.
- 1. Convene a work group to develop or revise the technical standard that includes agencies and persons with technical expertise and direct policy interest. The work group shall include at least one representative from the agency or person that made an initial request to develop or revise the technical standard.
- 2. The work group shall publish a class 1 public notice and consider public comments received on the technical standard prior to providing recommendations to the department under subd 3
- 3. The work group shall provide a recommended technical standard to the department within 18 months of its formation

- unless the director of the bureau of watershed management grants an extension to this deadline.
- (f) 1. Notwithstanding other provisions of this section, and acting jointly with the department of transportation and in consultation with other appropriate stakeholders, the department shall:
- a. Develop a technical standard that, by design, meets the performance standard established in s. NR 151.23 (4) and (4m). This technical standard shall address slope erosion and channel erosion and identify BMPs that may be used given a variety of site conditions.
 - b. Annually review this technical standard.

Note: This technical standard is sometimes referred to as the standardized erosion control reference matrix for transportation.

- 2. For transportation facility construction sites, the technical standard developed under this paragraph shall also indicate any conditions under which it may not be used to implement the performance standard established in s. NR 151.23 (4) and (4m).
- 3. This technical standard and future revisions become effective upon signatures from both secretaries of the department and the department of transportation, or their designees.
- (2) (a) Upon receipt of a proposed technical standard or technical standard revision, either developed by the department or a responsible state agency, the department shall determine if the technical standard will effectively achieve or contribute to achievement of the performance standards in subchs. III and IV. The department shall provide its determination in writing to the responsible state agency that prepared the proposed technical standard.
- (b) If the department determines that a proposed technical standard will not adequately or effectively implement a performance standard in subchs. III and IV, the proposed technical standard may not be used to implement a performance standard in whole or in part.
- (c) If the department determines that a proposed technical standard will adequately and effectively implement a performance standard in subchs. III and IV in whole or in part, the new or revised technical standard shall be used in lieu of any existing standards to implement the performance standard beginning with plans developed after the date of this determination.
- (d) The department may determine a portion of a technical standard is adequate and effective to implement the performance standards under subch. III or IV.
- (3) The department shall accept technical standards and best management practices developed by the department, the department of safety and professional services, the department of transportation or other appropriate state agencies, existing on October 1, 2002, unless the department identifies a technical standard as not adequate or effective to implement a performance standard in subchs. III and IV in whole or in part, and informs the responsible state agency of this determination and the basis for it.
- **(4)** Until the processes under subs. (1) and (2) are completed, an existing technical standard identified by the department under sub. (3), or previously accepted by the department as adequate and effective to implement a performance standard under subch. III or IV shall be recognized as appropriate for use under this chapter.
- (5) The department may identify technical standards that exist or are developed by qualified groups or organizations as adequate and effective to implement the performance standards under subch. III or IV.
- **(6)** Except as provided in s. NR 151.26, if a technical standard that the department determines is not adequate or effective to implement a performance standard in whole or in part is used to implement a performance standard under subch. III or IV, the

NR 151.32

department may initiate enforcement proceedings for failure to meet the performance standard under s. 281.98, Stats.

408-25

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02; CR 09–112: am. (1) (intro.), 1. a., 2. Register December 2010 No. 660, eff. 1–1–11; correction in (3) made under s. 13.93 (4) (b) 6., Stats., Register February 2012 No. 674.

NR 151.32 Dissemination of technical standards.

(1) Technical standards developed or revised under this section may be made available through the responsible state agency's appropriate rules, manuals or guidance in keeping with normal publication schedules. If the responsible state agency does not publish appropriate manuals or guidance, the department shall request the agency provide the department with a copy of the technical standard. Where provided, the department shall publish or reproduce the technical standard for public use.

(2) The department shall maintain a list of technical standards that it has determined adequate and effective to implement the performance standards under subch. III or IV and make the list available upon request.

History: CR 00–027: cr. Register September 2002 No. 561, eff. 10–1–02.