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(FORM UPDATED: 08/11/2010)

WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2009-10

(session year)

Joint

(Assembly, Senate or Joint)

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* Contents organized for archiving by: Stefanie Rose (LRB) (June 2012)

ORDER OF THE STATE OF WISCONSIN
NATURAL RESOURCES BOARD
REPEALING, AMENDING, REPEALING AND RECREATING AND CREATING
RULES

The Wisconsin Natural Resources Board proposes an order to repeal NR 151.002 (21), 151.015 (17), 151.09 (5) (a) 3. h. and (6) (a) 3. e., 151.095 (6) (a) 3. h. and (7) (a) 3. e., 151.21 (1), 153.12 (22) and (28), 153.15 (2) (c), 153.22 (3) (k), 153.23 (1) (f), 153.24, 153.27 (5), 155.16 (1) (c) 2. a., d., e. and f. and 3., (d) 3., 6., 7. and 9. and (f), 155.17 (2) (d), 155.18 (3), 155.19 (4) (d), 155.23 (1) (f), 155.24 and 155.27 (5); to amend NR 151.002 (3), (6), (17), (18), (25), (42) (c), (47) (note) and (49) (note), 151.004, 151.015 (7) and (18) (c) and (d), 151.02, 151.05 (title), (2) (a), (4) (title) and (4), 151.06 (title), 151.07 (2), 151.09 (1), (3) (b) (note), (4) (b) 2. and 3. b.(note), (c) 3., and (d) 2. a., and c., (5) (b) 2. b., (6) (b) 1. b. and (7) (b), 151.095 (1) (intro.), (5) (b) 2. c. and 5., (c) 3. and (d) 2. a. and c., (6) (b) 2. b., (7) (b) 1. b. and (8) (b), 151.11 (title), (1), (2), (4), (5), (6) (title) and (7), 151.15 (1) and (2), 151.20, 151.21 (5) and (8), 151.22 (1) (a), 151.23 (title), (1), (3) (a), (4) (title) and (5), 151.26 (1), 151.31 (1) (intro.) and (f) 1.a. and 2., ch. NR 153 (title), 153.10, 153.11 (1) and (3), 153.12 (8), (19), (23) to (27), (29) and (31), 153.13, 153.15 (1) (a), (c) (intro.) and 4. and (g), (2) (b), (d) (intro.), (e) and (y), (3) (b) 1., (4) (a) 3. and (6) (b), 153.18 (title), (intro.), (1), (2) and (3), 153.22 (1) (a), (3) (d), (f), (j), (m) and (n), (6) (b) 1. (intro.) and 2. (note), (7), (8) (a), (9) and (11), 153.23 (1) (c) and (e) (title), 153.26 (1), (5) and (7), 153.27 (3) (b) and (4) (a), 153.28 (1) (b) 1., 2. b., 3. and 5., 155.12 (7), 155.13 (1) (intro.), 155.14 (3), 155.15 (1) (a), and (e) (note), 155.16 (1) (b), (c) (intro.) and 1. a. and 2. c. and (e), 155.17 (2) (b) 2. and 4. b., 155.18 (2), 155.19 (3) (a) and (b) (intro.), 155.21 (2) (a) and (b) (intro.) and (4) (d) 3., 155.22 (3) (i), (4), (10) (a) and (11), 155.23 (1) (c) (note), 155.26 (1) and (6), 155.27 (3) (b) and 155.28 (1) (b) 3.; to repeal and recreate NR 151.003, 151.015 (1), (8) and (16), 151.13, 151.14, 151.25, 153.12 (1), 153.14, 153.15 (2) (a) and (j), 153.16, 153.17, 153.19, 153.20, 153.21, 153.25, 155.15 (2) (g), 155.20, 155.25 and 155.27 (4); and to create NR 151.002 (11m), (14g), (14r), (16m), (42m), (46m), and (49m), 151.005, 151.006, 151.015 (13g), (15e), (15m), (15s) and (25), 151.03, 151.04, 151.05 (2) (am), 151.055, 151.07 (2) (note), 151.095 (4) (b) (note), 151.105, 151.11 (3) (c) (note), (6m) and (8), 151.12 (2) (bm), 151.121 to 151.128, 151.21 (1m), 151.225, 151.23 (2) (cm), (4m) and (6), 151.24 (1) (bm), 151.241 to 151.249, 153.11 (1m), 153.12 (5m), (12m), (18g), (18r), (19m), (31m), (32g) and (32r), 153.145, 153.15 (2) (ag) and (ar), 153.205, 153.22 (3) (o) and (p) and (12), 153.27 (4) (c), 153.29 (1) (e) 3. g., 155.14 (3) (b), 155.17 (2) (b) 13. and 14., 155.21 (2) (b) 3., and 155.23 (3) and (4), relating to runoff pollution performance standards and prohibitions, the targeted runoff management grant program and the urban nonpoint source and storm water management grant program, and affecting small business.

WT-14-08

Analysis Prepared by Department of Natural Resources

1. **Statutory authority:** Sections 227.11(2) (a), 281.16, 281.19, 281.65 and 281.66, Stats.
2. **Statutes interpreted:** Sections 281.16, 281.65 and 281.66, Stats.

3. Explanation of agency authority: Section 227.11(2) (a), Stats., expressly confers rulemaking authority on the department to promulgate rules interpreting any statute enforced or administered by it, if the agency considers it necessary to effectuate the purpose of the statute. The department considers the rules created by this Order to be necessary to effectuate the purposes of ss. 281.16, 281.65 and 281.66, Stats. Section 281.16, Stats., authorizes the department to prescribe by rule performance standards for non-agricultural practices, and, in consultation with department of agriculture, trade and consumer protection, prescribe performance standards and prohibitions for agricultural practices and facilities, s. 281.19, Stats., grants authority to the department to issue general orders and promulgate rules pertaining to the abatement of water pollution, s. 281.65, Stats., establishes the framework for the targeted runoff management grant program that provides financial assistance for nonpoint sources of pollution to governmental units and state agencies and allows governmental units to request financial assistance to address manure management problems for which notices of discharge have been issued and s. 281.66, Stats., establishes the framework for the urban nonpoint source and storm water management program that provides financial assistance to governmental units to control both point and nonpoint sources of storm water runoff from existing urban areas, developing urban areas and areas of urban redevelopment.

4. Related statute or rule: Chapter 92 and s. 283.33, Stats., and chs. ATCP 50, NR 120, 152, 154, 216 and 243.

5. Plain language analysis of the rule:

Chapter NR 151, Runoff Management

The rule adds new and modifies existing performance standards that address runoff pollution from both agricultural and non-agricultural sources, including transportation facilities. The new performance standards include:

- a setback from waterbodies in agricultural fields within which no tillage would be allowed for the purpose of maintaining stream bank integrity and avoiding soil deposits into state waters;
- a limit on the amount of phosphorus that may run off croplands as measured by a phosphorus index;
- a prohibition against significant discharge of process wastewater from milk houses, feedlots, and other similar sources;
- a standard that requires crop and livestock producers to reduce discharges if necessary to meet a load allocation specified in an approved Total Maximum Daily Load (TMDL) by implementing targeted performance standards specified for the TMDL area using best management practices, conservation practices and performance standards specified in ch. ATCP 50.

Modifications are made to the agricultural performance standards addressing cropland soil erosion control, nutrient management and manure storage.

- The rule modifies the sheet, rill and wind erosion standard by extending it to pastures starting July 1, 2012.
- The rule clarifies that the nutrient management standard does not apply to applications of industrial waste, municipal sludge or septage regulated under other DNR programs provided the material is not commingled with manure prior to application. The rule also includes a note to explain how the application of these materials will affect farm nutrient management planning.
- Manure storage standards for existing and new facilities are modified to include margin of safety requirements.

The rule also changes the non-agricultural performance standards that address construction site erosion control, post-construction storm water management and developed urban areas:

- The rule modifies the construction site performance standard to apply prescriptive standards to construction sites of less than one acre to accommodate the transfer of ch. COMM 60 to the department effective January 1, 2010; to incorporate non-numeric effluent limits promulgated by US EPA effective February 1, 2010; and to revise the sediment reduction standard from an 80% reduction to a maximum discharge of 5 tons/acre/year. The revised sediment reduction standard has a two year delayed implementation to allow for development of a model to measure compliance.
- The rule revises the post-construction performance standards by removing the exemption from the total suspended solids performance standards of redevelopment sites with no increase in exposed parking or roads; adding the 1-year, 24-hour design storm for the peak flow control performance standard and a mid-level infiltration performance standard for sites with moderate impervious area to pervious area development; and revising the definition of a highly susceptible wetland that requires a 75 feet protective area standard.
- The principle change made by the rule to the developed urban area performance standard is the description of a process that permitted municipalities can use if they cannot meet the total suspended solids reduction of 40% by 2013. The process identifies the storm water management plan submittal, the department review process and allowance for up to 10 more years to comply with the standard as long as the plan is followed.

The agricultural implementation and enforcement sections are modified to clarify cost-share eligibility and to better align with the department's stepped enforcement procedures. Some definitions are added and other definitions that are no longer used are deleted.

Chapter NR 153, Targeted Runoff Management And Notice Of Discharge Grant Programs

This existing rule contains policies and procedures for administering targeted runoff management grants to reduce both agricultural and urban nonpoint source pollution. Grants may be used to cost share the installation of best management practices as well as to support a variety of local administrative and planning functions. Projects are selected through a competitive scoring system and generally take two to three years to complete.

The revisions create four project categories for the targeted runoff management grant program instead of one category in the existing rule. The categories include large-scale/TMDL implementation, large-scale/non-TMDL control, small-scale/TMDL implementation and small-scale/non-TMDL control projects. The rule will help the state make progress in meeting its obligation to address impaired waters by focused funding of projects addressing TMDLs.

To implement recent statutory changes to the grant program, the rule creates a mechanism outside the competitive TRM process to fund Notices of Discharge (NODs) issued under ch. NR 243. Other provisions allow the department more flexibility in allocating grant funds and ensure an equitable scoring system. Portions of ch. NR 153 are repealed and recreated to accommodate the newly created categories, to eliminate or add definitions, clarify and expand restrictions on cost sharing, require the establishment of a local ch. NR 151 implementation program as a grant condition and allow for additional safeguards in the application documents so that projects do not negatively impact historic sites, cultural resources, endangered resources or create problem interactions with hazardous sites.

Chapter NR 155, Urban Nonpoint Source Pollution Abatement And Storm Water Management Grant Program

This existing rule contains policy and procedures for administering the urban nonpoint source and storm water management grant program authorized under s. 281.66, Stats. The department may make grants under this program to governmental units for practices to control both point and nonpoint sources of storm water runoff from existing urban areas, and to fund storm water management plans for developing urban areas and areas of urban redevelopment. The goal of this grant program is to achieve water quality standards, minimize flooding, protect groundwater, coordinate urban nonpoint source management activities with the municipal storm water discharge permit program and implement the non-agricultural nonpoint source performance standards under ch. NR 151. Grants to a governmental unit may be used to cost share the installation of best management practices as well as to support a variety of local administrative and planning functions. The department may also make grants to the board of regents of the University of Wisconsin System to control urban storm water runoff from campuses in selected locations. Projects are selected through a competitive scoring system and generally take one to two years to complete.

The revisions to ch. NR 155 increase the department's management oversight and accountability of grants while at the same time increase flexibility in how the grants are used. The revisions limit the amount of money a grantee may receive in a given grant year to 20% of the available funds. This limit is enough to allow a single grantee to win 2 or 3 grant awards while preventing a handful of successful applicants to garner all of the available funding. The amended rule will require DNR approval of all professional services contracts instead of just those over \$10,000. The reason for this is that even small planning contracts can lead to recommendations for expensive best management practices that the department may end up funding. It also will expose early on in the grants process any differences of opinion between the department and grantees over the eligibility of project costs. The amended rule provides the department greater flexibility in awarding funds. This includes granting of a partial award to a project that is too low on the ranking list to be offered full funding. This option allows the grantee to accept a partial award while remaining obligated to fulfill the project as described in the application. This will result in a greater chance that the project will proceed and water quality benefits to be realized as opposed to denying the partial grant award to an otherwise willing community. In addition, the revised rule allows the department to deny a new grant award if the applicant is delinquent in completing a previously issued grant award. This discretion is needed as communities sign grant awards in successive years and sometimes get behind in completing projects. This provision will serve as an incentive for communities to not over-commit themselves and will help maximize the portion of funds awarded that are getting practices installed instead of waiting in the queue. The revised rule requires the applicant to address potentially negative environmental impacts of projects in the application process. This helps facilitate the process of making grant awards as soon as scoring is completed and results in fewer projects that must be discontinued due to unforeseen circumstances.

The rule also allows the use of local assistance grants to pay for work done by competent in-house staff rather than hiring an outside consultant thus increasing local government's flexibility to control costs. The rule adds requirements that hired consultants be competent in storm water management, all outstanding grants be completed on schedule prior to a new grant award, a final report be submitted and that the department may deny a grant to an otherwise eligible project if there is a potential impact on hazardous sites in addition to historic sites, cultural resources or endangered resources. Other parts of ch. NR 155 are repealed and recreated to define terms, clarify concepts and merge similar sections, giving the department greater flexibility in awarding funds.

6. Summary and comparison with existing and proposed federal regulations: The rule revisions are consistent with federal regulations that apply to control of nonpoint sources of pollution, animal feeding operations, nutrient management and storm water management. While federal regulations do not apply specifically to cropland practices or livestock operations that have only nonpoint source runoff, there are federal regulations for concentrated animal feeding operations (point sources) that specify control of nutrients entering surface waters. Certain modifications also better align state grant funding priorities with those of the federal government regarding TMDLs.

The rule's phosphorus index performance standard is based on national policy and guidelines on nutrient management issued by the US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) in April, 1999. The national policy and guidelines suggested the use of one of three phosphorus risk assessment tools, the most comprehensive of which is the phosphorus index. Prior to the adoption of this national policy, states began developing phosphorus-based nutrient management guidelines or regulations. The tillage setback performance standard is based on the phosphorus index calculation that assumes no tillage to the edge of the bank. The performance standard requiring agricultural operations to reduce discharges to surface waters to meet the load requirements of approved TMDLs and targeted performance standards set for the TMDL area will help the state to control nonpoint source pollutants to achieve federally required and approved TMDLs. The control of process wastewater discharge is of sufficient concern that USDA has developed technical standards for management of process wastewater.

7. Comparison of similar rules in adjacent states: In general, the adjacent states do not use statewide performance standards specifically designed to address polluted runoff from agricultural sources. However, these states have various regulations and procedures in place to address many of the polluted runoff sources that these rule revisions address. All four states use the phosphorus index in some form but none have proposed using it as a statewide performance standard as this rule does. The rule differs from the adjacent states' rules because it has more detail in its phosphorus index, is more quantitative and has more research to validate it. Also, in Wisconsin, pursuant to s. 281.16, Stats., cost sharing must be made available to existing agricultural operations before the state may require compliance with the standards.

Illinois

Illinois does not have a tillage setback requirement, but it does offer a property tax incentive for the construction of livestock waste management facilities including the development of vegetative filter strips. The filter strips must be in cropland that is surrounding a surface-water or groundwater conduit, must be part of a conservation plan, and must have a uniform groundcover. The minimum and maximum widths that are eligible for the tax reduction is determined by the slope. Illinois does not allow raw materials, by-products and products of livestock management facilities, including milkhouse waste, silage leachate, and other similar products to be discharged to waters of the state. In addition to tax incentives, Illinois relies on federal Clean Water Act section 319 funds from US EPA to fund nonpoint source projects in the state.

Illinois requires that permit applicants follow a series of technical standards that are in the Illinois Urban Manual for both construction and post-construction. If the developer uses the technical standards they are considered in compliance, unless an inspection indicates that the technical standard is not working adequately. The developer will then need to make changes to their construction site or storm water management plan.

Iowa

Iowa requires that nutrient management plans for livestock operation of 500 or more animal units be based on the phosphorus index. The rule's version of the phosphorus index uses Iowa's "quasi-modeling" approach but the equations are based on Wisconsin research. Iowa does not require a separation distance between tillage activities and waterbodies. Iowa prohibits discharge to waters of the state, polluting waters of the state and discharge to road ditches.

Iowa does not have a performance standard approach to construction projects, but does require Best Management Practice (BMP) implementation. There is no specific goal for post-construction other than to have a storm water management plan similar to the way Wisconsin's program was set up before ch. NR 151 was promulgated in 2002. The requirement on the municipality is to try to control runoff from new development. There are no specific goals.

Iowa is making an effort to coordinate the development of TMDLs with the implementation of water quality improvement plans based on TMDLs. There is not yet a separate funding source specifically for implementing TMDL plans, but there are several different funding sources currently used for watershed project implementation, including section 319 funds and three different sources of state-funded watershed implementation funds. There is also a state-funded lakes restoration fund which may be partly used for watershed restoration work. Wherever possible, watershed projects try to leverage EQIP and other federal sources of funds.

Iowa does not currently offer a separate source of funds for Animal Feeding Operation BMPs in response to a Notice of Discharge violation. However, Iowa does not preclude a producer from funding because of a Notice of Violation (NOV), except in the case where the NOV results in the requirement for an NPDES permit. Funding from State Revolving Funds and federal section 319 cannot be used for BMPs requiring an NPDES permit, but can be used for non-permitted BMPs. EQIP funds in Iowa are currently allocated such that counties with water quality livestock projects receive 40 percent of the eligible points when scoring for EQIP funding. The Iowa Department of Agriculture and Land Stewardship has a nutrient management program designed to offer financial assistance for livestock producers for manure management, but the program has not been funded in over 10 years.

Michigan

Michigan does not require a separation distance between tillage activities and waterbodies. The state's rules regarding process wastewater only apply to permitted concentrated animal feeding operations, but discharges from smaller farms are generally prohibited as a violation of water quality standards.

Within permits that apply to municipal separate storm sewer systems (MS4s), Michigan has similar performance standards for post-construction total suspended solids control and peak flow control in new development. It has a minimum treatment volume standard of one inch (or ½ inch if technically supported) where they must achieve an 80 percent total suspended solids reduction. It also has a channel protection criteria where the post-peak flow rate and volume must match the pre-peak flow rate and volume for all storms up to the 2-year, 24-hour event. The peak flow control standard is more stringent than this rule because it also controls volume. Wisconsin is trying to control streambank erosion by controlling a greater number of smaller storms. Michigan has also identified some water bodies that are not required to meet the channel protection standard, similar to Wisconsin's approach. Michigan has an option to use low impact development to meet these two standards, which is very different from Wisconsin. However, unlike Wisconsin, Michigan is only implementing these performance standards on new development in municipalities that have an MS4 permit. Also, if the municipality had an

ordinance in place prior to this rule that addressed water quality for new development even if the performance standard was not included, they are grandfathered in.

Michigan has a pass through grant (section 319 and Clean Michigan Initiative funds) that places a priority on projects that will restore impaired waters or achieve progress toward meeting TMDL load reductions. Michigan does not have a program similar to the rule's mechanism to fund NODs outside of a competitive grant process.

Minnesota:

Minnesota does not have a tillage setback requirement along all waterbodies in agricultural areas, but the state does require a 16.5 foot (one rod) grass strip along certain public drainage ditches as well as vegetated strips, restored wetlands, and other voluntary set-aside lands through federal, state and local programs. For process wastewater, Minnesota rules place a limit of less than 25 mg/l BOD₅ (biological oxygen demand) that can be released to surface water and, if released to a leach field, the threshold is less than 200 mg/l BOD₅.

For non-agricultural practices, Minnesota recently reissued construction permits that require infiltration and the need for additional BMPs when sites are located near Clean Water Act s. 303 (d) impaired waters or outstanding resource waters (ORWs). Its permit generally is more prescriptive in terms of how to design a BMP for optimal control, but it is not usually presented as a performance standard which would provide more flexibility. Based on Minnesota's documentation, it appears to require BMPs that will achieve an 80 percent total suspended solids reduction and ones that will infiltrate the first half inch of runoff from impervious surfaces. Minnesota requires more BMPs, including temperature control, if the receiving water has special needs such as outstanding resource waters or exceptional resource waters (ERWs) or s. 303 (d) waters.

Minnesota provides funding for TMDLs through its Clean Water Legacy Act and section 319 of the federal Clean Water Act. The state does not have a funding mechanism to fund notices of discharge specifically, but is looking for ways to provide more financial support for runoff from feedlots. There is a state cost-share program which is used alone or in combination with federal cost share.

8. Summary of factual data and analytical methodologies used in the rules and how any related findings support the regulatory approach chosen: The rule's agricultural performance standards were developed with input from an advisory committee that met four times between December 2007 and February 2008. The following research results and methodologies were analyzed as part of the development of these standards.

Phosphorus Index:

The Wisconsin Buffer Initiative: A Report to the Natural Resources Board of the Wisconsin Department of Natural Resources by the University of Wisconsin-Madison, College of Agricultural and Life Sciences. Dec. 22, 2005.

The following series of articles focused on the watershed targeting approach used in the Wisconsin Buffer Initiative report:

Diebel, M. W., J.T. Maxted, P. J. Nowak, and M. J. Vander Zanden. 2008. Landscape planning for agricultural nonpoint source pollution reduction I: A geographical allocation framework. *Environmental Management* 42 (5): 789-802.

Maxted, J. T., Diebel, M. W., and M. J. Vander Zanden. 2009. Landscape planning for agricultural nonpoint source pollution reduction II: Balancing watershed size, number of watersheds, and implementation effort. *Environmental Management* 43 (1): 60-68.

Diebel, M. W., J.T. Maxted, D. Robertson, S. Han, and M. J. Vander Zanden. 2009. Landscape planning for agricultural nonpoint source pollution reduction III: Assessing phosphorus and sediment reduction potential. *Environmental Management* 43 (1): 69-83.

The following studies of in-field runoff sediment and phosphorus concentrations provided some of the data that was used in building phosphorus index equations:

Panuska, J.C., K.G. Karthikeyan and P.S. Miller. 2008. Impact of surface roughness and crusting on particle size distribution of edge-of-field sediments. *Geoderma* 145: 315 – 324.

Panuska, J.C., K.G. Karthikeyan and J.M. Norman. 2008. Sediment and phosphorus losses in snowmelt and rainfall runoff from three corn management systems. *Trans. ASABE* 51: 95 – 105.

Panuska, J.C., K.G. Karthikeyan. 2009. Phosphorus and organic matter enrichment in snowmelt and rainfall runoff from agricultural fields. *Geoderma* XX: XX –XX (in review).

The following articles about the in-field runoff monitoring methods to collect the runoff phosphorus data that are used to validate the phosphorus index:

Bonilla, C.A., D.G. Kroll, J. M. Norman, D.C. Yoder, C.C. Molling, P.S. Miller, J.C. Panuska, J. B. Topel, P.L. Wakeman, and K.G. Karthikeyan. 2006. Instrumentation for measuring runoff, sediment, and chemical losses from agricultural fields. *Journal of Environmental Quality* 35:216-223.

Stunetebeck, T.D., M.J. Komiskey, D.W. Owens, and D.W. Hall. 2008. Methods of data collection, sample processing and data analysis for edge-of-field, stream gaging, subsurface tile, and meteorological stations at Discovery Farms and Pioneer Farm in Wisconsin, 2001-7. U.S. Geological Survey Open File report 2008-1015. 51 p.

The following paper showed one year's worth of research that validated the Wisconsin phosphorus index.

Bundy, L. G., A. P. Mallarino, and L. W. Good. 2008. Field-Scale Tools for Reducing Nutrient Losses to Water Resources. Pp. 159-170 in Final Report: Gulf Hypoxia and Local Water Quality Concerns Workshop. September 26-28, 2005, Ames, Iowa. Sponsored by Iowa State University and EPA. Organized by the MRSHNC, Upper Mississippi River Sub-basin Hypoxia Nutrient Committee. St. Joseph, Michigan.

The following paper in press shows that simple runoff phosphorus loss models, like the Wisconsin phosphorus index can work well:

Vadas, P. A., L.W. Good, P.A. Moore Jr., and N. Widman. 2009. Estimating phosphorus loss in runoff from manure and phosphorus for a phosphorus loss quantification tool. *Journal of Environmental Quality* (in press).

The following document shows all the phosphorus index equations on the internet:

Good, L. W. and J. C. Panuska. 2008. Current calculations in the Wisconsin P Index. Available at: <http://wpindex.soils.wisc.edu> .

The following models were used in the development of the Wisconsin phosphorus index:

RUSLE 2 (Revised Universal Soil Loss Equations, version 2), USDA-NRCS official RUSLE2 Program and Database and Training materials and User's Guides are available from http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm The draft user's guide on this site is on the link labeled "RUSLE2 Technology."

Snap-Plus 1.129.1, 1/20/2009 Copyright 2003-2008 by University of Wisconsin Regents Software developed by P Kaarakka, L.W. Good, and J. Wolter in the Department of Soil Science, UW Madison. This a software program links models for nutrient management (SNAP), conservation assessment (RUSLE2) and the Wisconsin Phosphorus Index (PI) into one software program for multi-year nutrient and conservation planning. The most current version is available at <http://www.snapplus.net/>.

Process wastewater performance standard:

The rule's performance standard requires that livestock producers have no significant discharge of process wastewater to waters of the state. Sources of greatest concern include feed storage leachate and milk house waste. Process wastewater discharge is of sufficient concern that USDA has developed technical standards for its management. Environmental aspects of milking center waste water and feed storage leachate, including waste characteristics and water quality impacts, are included in:

Pollution Control Guide for Milking Center Wastewater Management. Springman, R.E., Payer, D.D and B.J. Holmes. 1994. University of Wisconsin-Extension, 44 pages.

"Silage Leachate Control". Wright, Peter, in *Silage: Field to Feedbunk, Proceedings from the North American Conference, Hershey, Pennsylvania, February 11-13, 1997. Pages 173 – 186. NRAES, editor.*

"Environmental Problems with Silage Effluent". Graves, R.E., and P.J. Vanderstappen. USDA Natural Resources Conservation Service, National Water Management Center Publication. 6 pages

"Base Flow Leachate Control." Wright, Peter and P.J. Vanderstappen. Paper No. 94-25 60, ASCE Meeting Presentation at the 1994 International Winter Meeting, Atlanta Ga., December 13 – 16, 1994.7 pages.

The USDA technical standard for managing milk house waste and feed storage leachate discharges is: *Waste Treatment (no. 629)*. USDA, Natural Resources Conservation Service. August, 2008. 22 pages.

Modifications to the non-agricultural performance standards were developed with input from a technical advisory committee that met four times between October 2007 and February 2008. Changes to the protective areas performance standard are based on the department's Guidance for the Establishment of Protective Areas for Wetlands in Runoff Management Rules, Wisconsin Administrative Code NR 151 in the Waterway and Wetland Handbook, Ch. 10. Department staff gathered information from municipal engineers and conducted analyses under various scenarios using analytical models to provide information to the technical advisory committee including:

- analysis showing the impact of redevelopment on total suspended solids loads, recommendations and estimated costs for control practices,
- analysis of the infiltration performance standards modifications for different land uses.

9. Analysis and supporting documentation used to support the small business analysis: The department concluded that the revisions to chs. NR 151, 153 and 155 will result in additional

compliance requirements for small businesses, but the rules will not result in additional reporting or significant increases in record-keeping requirements for small businesses. Rather than mandate specific design standards, the rules either establish new performance standards or revise existing performance standards.

Compliance requirements for agricultural producers vary depending on the type of operation and the performance standard, but the revisions to the rules will not change the existing compliance requirements for agricultural operations. Under state law, compliance with the performance standards is not required for existing nonpoint agricultural facilities and practices unless cost sharing is made available for eligible costs. A less stringent compliance schedule is not included for agricultural producers because compliance is contingent on cost sharing and in many cases, it can take years for a county or the state to provide cost share money to a producer.

Agricultural producers who are in compliance with the existing nutrient management performance standard may already be in compliance with the new phosphorus index and tillage setback performance standards. A phosphorus reduction strategy is included in NRCS nutrient management technical standard 590 (Sept. 5, 2005). A phosphorus index of 6 or less is specified in the PI strategy in Criteria C, 2 of the technical standard. The concept of streambank integrity, as proposed through a tillage setback performance standard, is an assumption of the phosphorus index calculation, which estimates phosphorus delivery to the stream via overland flow, but not from bank erosion or other means that soil, manure or fertilizer might enter the stream from farming operations. In circumstances where the phosphorus index has been determined to be insufficient to achieve water quality standards in areas where an approved TMDL has been approved, a higher level of pollution control may be required as specified in a targeted performance standard developed for the TMDL area. An owner or operator in this situation would be required to reduce discharges further to meet the load allocation in the TMDL.

The rule revisions will not change the schedules for compliance and reporting requirements for non-agricultural businesses. For all but less than one acre construction sites, these requirements are the same as those specified in ch. NR 216. In determining whether non-agricultural small businesses can be exempted from the rules, the department concluded that because the requirements of ch. NR 151, Subchapter III are based on federal requirements the state cannot exempt those businesses. Also, the impacts from certain small business construction activities can have as large a water quality impact as from large businesses.

In determining the compliance and reporting effects, the department considered 1) the existing performance standards and prohibitions in ch. NR 151, 2) the requirements of NRCS technical standard 590 needed to meet the nutrient management performance standard, 3) assumptions contained in the Wisconsin Phosphorus Index, 4) compliance and reporting requirements under ch. NR 216, Subchapter II, 5) agreement with the department of commerce to regulate storm water discharges from commercial building sites under one permit, and 6) feedback from members of advisory committees that included small business owners and organizations.

10. Effect on small business, including how this rule will be enforced: The overall effect on small businesses may be increased time, labor and money spent on BMPs or planning tools, but there will not be a significant economic impact on small business. However, for agricultural producers the proposed new agricultural performance standards and the revised existing agricultural performance standards are not enforceable unless 70 percent cost sharing is provided, or up to 90 percent for economic hardship cases. The rules will be enforced either through county ordinances, DNR stepped enforcement procedures or a combination of the two.

Small businesses in the construction industry will not see an effect from the changes to the construction performance standard, but may experience increased costs from the changes to some of the post-construction performance standards. The changes to the total suspended solids standard will affect redevelopment sites but it is difficult to estimate how many construction sites are redevelopment sites and how many of the developers of these sites would be classified as small businesses. The modifications to the infiltration and the protective area performance standards may add additional costs, but they are expected to be small. Businesses affected will be both large and small. The rule will be enforced through permits required under ch. NR 216, or through local ordinances. For the non-agricultural performance standards, cost sharing is not required for compliance. However, the department may award grants for certain BMPs and planning activities.

11. Agency contact:

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SECTION 1. NR 151.002 (3) and (6) are amended to read:

NR 151.002 (3) "Average annual rainfall" means a typical calendar year of precipitation, ~~excluding snow, which is considered typical~~ 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: <http://dnr.wi.gov/runoff/models/index.htm> or by contacting the storm water management program at (608) 267-7694.

(6) "Connected imperviousness" means an impervious surface ~~that is directly connected to a separate storm sewer or water~~ 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 at <http://dnr.wi.gov/runoff/stormwater/muni.htm>

SECTION 2. NR 151.002 (11m), (14g), (14r) and (16m) are created to read:

NR 151.002 (11m) "Direct conduits to groundwater" mean wells, sinkholes, swallets, fractured bedrock at the surface, mine shafts, non-metallic mines, tile inlets discharging to groundwater, quarries, or depressional groundwater recharge areas over shallow fractured bedrock.

(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.

(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 can be viewed on the department website at <http://dnr.wi.gov/org/water/wm/wqs/303d/303d.html>.

SECTION 3. NR 151.002 (17) and (18) are amended to read:

NR 151.002 (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 area~~" "In-fill" means an undeveloped area of land located within an existing urban sewer service ~~areas~~ area surrounded by ~~already-existing~~ development or existing 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 commerce.

SECTION 4. NR 151.002 (21) is repealed.

SECTION 5. NR 151.002 (25) is amended to read:

NR 151.002 (25) “MEP” or “maximum extent practicable” means a the highest level of implementing best management practices in order to achieve a performance standard specified in this chapter which takes into account the best available technology, cost effectiveness and other competing issues such as human safety and welfare, endangered and threatened resources, historic properties and geographic features. MEP allows flexibility in the way to meet the performance standards and may vary based on the performance standard and site conditions 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.

SECTION 6. NR 151.002 (42) (c) is amended to read:

NR 151.002 (42) (c) Is not draining to a storm water treatment device or system part of a publicly owned wastewater treatment works that provides secondary or more stringent treatment.

SECTION 7. NR 151.002 (42m) is created to read:

NR 151.002 (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.

SECTION 8. NR 151.002 (46m) is created to read:

NR 151.002 (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.

SECTION 9. NR 151.002 (47) (note) is amended to read:

NR 151.002 (47) Note: Copies of this document may be inspected at the offices of the Department’s Bureau of Watershed Management, NRCS, the Secretary of State and the Legislative Reference Bureau department’s bureau of watershed management, the natural resources conservation service, the secretary of state and the legislative reference bureau, all in

Madison, WI. ~~Copies may be obtained from the DNR bureau of watershed management, P.O. Box 7921, Madison, WI 53707.~~

SECTION 10. NR 151.002 (49) (note) is amended to read:

NR 151.002 (49) Note: Copies of this document may be inspected at the offices of the ~~Department's Bureau of Watershed Management, NRCS, the Secretary of State and the Legislative Reference Bureau~~ department's bureau of watershed management, the natural resources conservation service, the secretary of state and the legislative reference bureau, all in Madison, WI. ~~Copies may be obtained from the DNR Bureau of Watershed Management, P.O. Box 7921, Madison, WI 53707.~~

SECTION 11. NR 151.002 (49m) is created to read:

NR 151.002 (49m) "US EPA" means the United States environmental protection agency.

SECTION 12. NR 151.003 repealed and recreated to read:

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 the effective date of the rule . . . [legislative reference bureau inserts date].

2. 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, 24 K hydro layer is available at http://dnr.wi.gov/org/water/data_viewer.htm

(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.

SECTION 13. NR 151.004 is amended to read:

NR 151.004 State targeted performance standards. ~~For some areas, implementation~~ 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, ~~using actual or predicted modeling or monitoring~~. 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 (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.

SECTION 14. NR 151.005 and 151.006 are created to read:

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.

NR 151.006 Applicability of maximum extent practicable. Maximum extent practicable applies when a person who is subject to a performance standard of subch. 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.

SECTION 15. NR 151.015 (1) is repealed and recreated to read:

NR 151.015 (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.

SECTION 16. NR 151.015 (7) is amended to read:

NR 151.015 (7) "~~Direct runoff~~" ~~means a discharge of a significant amount of pollutants to waters of the state resulting from any of the following practices~~ includes any of the following:

(a) ~~Runoff from a manure storage facility~~ 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 from an animal lot that can be predicted to reach surface waters of the state through a defined or channelized flow path or man-made conveyance~~ 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) ~~Discharge of leachate from a manure pile~~ 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) ~~Seepage from a manure storage facility~~ Discharge of a significant amount of leachate from stored manure to waters of the state.

~~(e) 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).~~

SECTION 17. NR 151.015 (8) is repealed and recreated to read:

NR 151.015 (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.

SECTION 18. NR 151.015 (13g), (15e), (15m) and (15s) are created to read:

NR 151.015 (13g) "Margin of safety level" has the meaning given it in s. NR 243.03 (37).

(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.

(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.

SECTION 19. NR 151.015 (16) is repealed and recreated to read:

NR 151.015 (16) "Process wastewater" has the meaning given in s. NR 243.03 (53).

SECTION 20. NR 151.015 (17) is repealed.

SECTION 21. NR 151.015 (18) (c) and (d) are amended to read:

NR 151.015 (18) (c) An area within 300 feet upslope or 100 feet downslope of karst features a direct conduit to groundwater.

(d) A channel ~~with a cross-sectional area equal to or greater than 3 square feet~~ that flows to a karst feature direct conduit to ground water.

SECTION 22. NR 151.015 (25) is created to read:

NR 151.015 (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.

SECTION 23. NR 151.02 is amended to read:

NR 151.02 (title) Sheet, rill and wind erosion performance standard. (1) All land where crops or feed are grown, including pastures, shall be ~~eropped~~ 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.

SECTION 24. NR 151.03 and 151.04 are created to read:

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 (6).

(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.

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 the effective date of this rule . . . [legislative reference bureau inserts date].

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 ss. NR 151.07 and 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 ss. NR 151.07 and 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 (6).

(5) The phosphorus index requirement under sub. (2) (a) first takes effect for pastures beginning July 1, 2012.

SECTION 25. NR 151.05 (title) is amended to read:

NR 151.05 (title) Manure storage facilities performance standard.

SECTION 26. NR 151.05 (2) (a) is amended to read:

NR 151.05 (2) (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, and maintain one foot of freeboard storage or adequate freeboard storage to the equivalent volume of a 25-year, 24-hour storm, whichever is greater. The levels of materials in the storage facility may not exceed the margin of safety level.

SECTION 27. NR 151.05 (2) (am) is created to read:

NR 151.05 (2) (am) Storage facilities that are constructed or significantly altered on or after the effective date of this rule . . . [legislative reference bureau inserts date] 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.

SECTION 28. NR 151.05 (4) (title) and (4) are amended to read:

NR 151.05 (4) (title) ~~FAILING AND LEAKING EXISTING FACILITIES~~. (a) Manure storage facilities in existence as of October 1, 2002, that pose an imminent threat to public health, or fish and aquatic life, or ~~are causing a violation of groundwater standards~~ 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.

SECTION 29. NR 151.055 is created to read:

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 ground water 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.

SECTION 30. NR 151.06 (title) is amended to read:

NR 151.06 (title) Clean water diversions performance standard.

SECTION 31. NR 151.07 (2) is amended to read:

NR 151.07 (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, or septage regulated under ch. NR 113, ~~or manure deposited by pasturing or grazing animals on fields dedicated to pasturing or grazing,~~ provided the material is not commingled with manure prior to application.

SECTION 32. NR 151.07 (2) (note) is created to read:

NR 151.07 (2) Note: If an application of material to cropland is regulated under ch. NR 113, 204 or 214, Wis. Adm. Code, 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.

SECTION 33. NR 151.09 (1), (3) (b) (note), (4) (b) 2. and 3. b. (note), (c) 3. and (d) 2. a. and c. are amended to read:

NR 151.09 (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 and 151.07.

(3) (b) 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) (b) 2. An existing cropland also includes land enrolled 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. b. **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) 3. ~~The technical assistance eligibility provisions identified in ss. NR 153.15 (1) and 153.16 (1) or ch. ATCP 50 shall be used in identifying eligible costs for planning, design and construction services.~~ Eligible technical assistance costs include best management practice planning, design, installation supervision and installation certification.

(d) 2. 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).

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., ~~cover not less than 70% and not greater than 90% of the eligible costs to implement the best management practices or other corrective measures needed to meet a cropland performance standard~~ provide cost sharing consistent with the hardship determination.

SECTION 34. NR 151.09 (5) (a) 3. h. is repealed.

SECTION 35. NR 151.09 (5) (b) 2. b. is amended to read:

NR 151.09 (5) (b) 2. b. The length of the compliance period shall be ~~from~~ not less than 60 days to nor more than 3 years unless otherwise provided for in this subdivision.

SECTION 36. NR 151.09 (6) (a) 3. e. is repealed.

SECTION 37. NR 151.09 (6) (b) 1. b. and (7) (b) are amended to read:

NR 151.09 (6) (b) 1. b. The length of the compliance period shall be ~~from~~ not less than 60 days to nor more than 2 years unless otherwise provided for in this subsection.

(7) (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.

SECTION 38. NR 151.095 (1) (intro.) is amended to read:

NR 151.095 (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.

SECTION 39. NR 151.095 (4) (b) (note) is created to read:

NR 151.095 (4) (b) 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.

SECTION 40. NR 151.095 (5) (b) 2. c. and 5., (c) 3. and (d) 2. a. and c. are amended to read:

NR 151.095 (5) (b) 2. 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.

5. Change in ownership may not be used as the sole basis for determining whether a livestock facility is existing or new for purposes of administering this subsection.

(c) 3. ~~The technical assistance eligibility provisions identified in ss. NR 153.15 (1) and 153.16 (1) or ch. ATCP 50 shall be used in identifying eligible costs for planning, design and construction services.~~ Eligible technical assistance costs include best management practice planning, design, installation supervision and installation certification.

(d) 2. 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 share assistance and issues a notice under sub. (6) or under s. NR 243.24 (4)

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., ~~cover not less than 70% and not greater than 90% of the eligible costs to implement the best management practices or other corrective measures needed to meet a cropland performance standard or prohibition~~ provide cost sharing consistent with the hardship determination.

SECTION 41. NR 151.095 (6) (a) 3. h. is repealed.

SECTION 42. NR 151.095 (6) (b) 2. b. is amended to read:

NR 151.095 (6) (b) 2. b. The length of the compliance period shall be ~~from~~ not less than 60 days to nor more than 3 years unless otherwise provided for in this subdivision.

SECTION 43. NR 151.095 (7) (a) 3. e. is repealed.

SECTION 44. NR 151.095 (7) (b) 1. b. and (8) (b) are amended to read:

NR 151.095 (7) (b) 1. b. The length of the compliance period shall be ~~from~~ not less than 60 days to nor more than 2 years unless otherwise provided for in this ~~subdivision~~ subsection.

(8) (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.

SECTION 45. NR 151.105 is created to read:

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 on-site 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 on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

(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.

SECTION 46. NR 151.11 (title), (1) and (2) are amended to read:

NR 151.11 (title) Construction site performance standard for new development and redevelopment sites of one acre or more. (1) DETERMINATION OF AVERAGE ANNUAL BASIS SOIL LOSS. In this section, ~~average annual basis~~ soil loss is calculated using the appropriate ~~annual~~ 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 ~~USLE universal soil loss equation~~ and its successors ~~RUSLE revised universal soil loss equation~~ and ~~RUSLE2 revised universal soil loss equation 2~~, utilize an R factor which has been developed to estimate annual soil erosion, averaged over extended time periods. The R factor can be modified to estimate monthly and single-storm erosion. ~~A design storm can be statistically calculated to provide an equivalent R factor as an average annual calculation.~~

(2) APPLICABILITY. ~~Except as provided under sub. (3), this~~ This section applies to all the following:

~~(a) A construction site that has 5 or more acres of land disturbing construction activity, unless any of the following are met:~~

~~1. The department has received a notice of intent for the construction project in accordance with subch. III of ch. NR 216 before October 1, 2002.~~

~~**Note:** Prior to submitting a notice of intent pursuant to subch. III of ch. NR 216, a construction site erosion control plan in conformance with s. NR 216.46 and a storm water management plan in conformance with s. NR 216.47 must be developed.~~

~~2. The department of commerce has received a notice of intent for the construction project in accordance with s. Comm 61.115 before October 1, 2002.~~

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

~~3. A bid is advertised or construction contract signed where no bid is advertised, before October 1, 2002.~~

~~(b) After March 10, 2003, any construction site that has at least consists of one acre or more of land disturbing construction activity, ~~except where bids are advertised, or construction contracts signed where no bids are advertised, before October 1, 2002.~~~~

~~**Note:** The 5 and 1-acre land disturbance thresholds are consistent with subch. III of ch. NR 216 and EPA phase II storm water discharge rules regarding applicability of land disturbing construction permits.~~

(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 the effective date of this rule . . . [legislative reference bureau inserts date].

2. Construction sites for which the department of commerce received a notice of intent in accordance with ch. Comm 60 before the effective date of this rule . . . [legislative reference bureau inserts date].

3. Construction sites for which a bid has been advertised or construction contract signed for which no bid was advertised, before the effective date of the rule . . . [legislative reference bureau inserts date].

(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 the effective date of this rule . . . [legislative reference bureau inserts date].

2. Construction sites for which a bid has been advertised or construction contract signed for which no bid was advertised, on or after the effective date of the rule . . . [legislative reference bureau inserts date].

SECTION 47. NR 151.11 (3) (c) (note) is created to read:

NR 151.11 (3) (c) Note: This exemption is for nonpoint discharges from agricultural facilities and practices such as cropping and pasturing. subch. 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.

SECTION 48. NR 151.11 (4) and (5) are amended to read:

NR 151.11 (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.

~~Note: Other persons include anyone responsible for disturbing the land or implementing or maintaining BMPs, such as a general contractor or landscape architect.~~

~~(5) PLAN. A written plan shall be developed and implemented~~ The responsible party under sub.(4) shall develop and implement a written plan for each construction site, ~~and~~ The plan shall incorporate the applicable requirements of this section.

SECTION 49. NR 151.11 (6) (title) is amended to read:

NR 151.11 (6) PRE-EFFECTIVE DATE [legislative reference bureau inserts date]
REQUIREMENTS.

SECTION 50. NR 151.11 (6m) is created to read:

NR 151.11 (6m) POST-EFFECTIVE DATE [legislative reference bureau inserts date]
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.
2. The discharge of sediment from disturbed areas into on-site 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.
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 the effective date of the rule ... [legislative reference bureau inserts date], 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 the effective date of the rule ... [legislative reference bureau inserts date], 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 on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

(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 topsoil.
3. Minimization of land disturbing construction activity on slopes of 20% or more.
4. Development of spill prevention and response procedures.

SECTION 51. NR 151.11 (7) is amended to read:

NR 151.11 (7) LOCATION. ~~The BMPs used to comply with this section shall be located prior to~~ so that treatment occurs before runoff entering enters waters of the state.

SECTION 52. NR 151.11 (8) is created to read:

NR 151.11 (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.

SECTION 53. NR 151.12 (2) (bm) is created to read:

NR 151.12 (2) (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 the effective date of the rule ... [legislative reference bureau inserts date]. 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 the effective date of the rule ... [legislative reference bureau inserts date] shall meet the performance standards of ss. NR 151.122 to 151.128.

SECTION 54. NR 151.121 to 151.128 are created to read:

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.

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 \geq 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 at: <http://dnr.wi.gov/runoff/models/index.htm> or by contacting 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.

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	B	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.

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 with less than 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 at <http://dnr.wi.gov/runoff/stormwater/muni.htm>

(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 at:

<http://dnr.wi.gov/runoff/models/index.htm> or by contacting 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.

5. 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.

3. 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 Area	Separation Distance	Soil Characteristics
Industrial, Commercial, Institutional Parking Lots and Roads	5 feet or more	Filtering Layer
Residential Arterial Roads	5 feet or more	Filtering Layer
Roofs Draining to Subsurface Infiltration Practices	1 foot or more	Native or Engineered Soil with Particles Finer than Coarse Sand
Roofs Draining to Surface Infiltration Practices	Not Applicable	
All Other Impervious Source	3 feet or more	Filtering Layer

Areas		
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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 United States 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.

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 pars. (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 can be found at:

<http://dnr.wi.gov/wetlands/types.html>. Additional information on wetland types including ephemeral ponds is given under wetland community at:

<http://dnr.wi.gov/org/land/er/communities/>

(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), Stats.

(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.

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.

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.

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 on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

SECTION 55. NR 151.13 is repealed and recreated to read:

NR 151.13 Developed urban area performance standard for municipalities. (1)
INCORPORATED MUNICIPALITIES.

(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 on-site 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 program.
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 on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

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 requirements:

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 timeframe. 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 at: <http://dnr.wi.gov/runoff/models/index.htm> or 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.

SECTION 56. NR 151.14 is repealed and recreated to read:

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 on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>

SECTION 57. NR 151.15 (1) and (2) are amended to read:

NR 151.15 Implementation and enforcement. (1) IMPLEMENTATION. This subchapter shall be implemented as follows:

(a) *Construction sites and post-construction sites.* ~~For sites defined in ss. NR 151.11 (2) and 151.12 (1) and (2):~~

1. The provisions of ss. NR 151.11, ~~and 151.12,~~ and 151.121 to 151.128 shall be implemented through subch. III of ch. NR 216.

2. ~~The department shall make available model ordinances that reflect and implement the performance standards in ss. NR 151.11 and 151.12.~~

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 151.121 to 151.128. These model ordinances are in ch. NR 152. Municipalities are encouraged to adopt the requirements of ss. NR 151.11, ~~and 151.12,~~ and 151.121 to 151.128, into local ordinances ~~that reflect these models.~~ 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.* ~~1. The provisions of ss. NR 151.13 (1) and 151.14 shall be enforced under sub. (2).~~

~~2. The provisions of s. NR 151.13 (2) shall be implemented through subch. I of ch. NR 216.~~

(2) ENFORCEMENT. (a) 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.

~~Note: The department may also enforce performance standards implemented through ch. NR 216 under ss. 283.89 and 283.91, Stats.~~

SECTION 58. NR 151.20 is amended to read:

NR 151.20 Purpose and applicability. (1)(a) This subchapter establishes performance standards, as authorized by s. 281.16 (2) (a), Stats., for transportation facilities that cause or may cause runoff pollution, ~~except as provided in sub. (2).~~ 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.

(b) (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.

~~(2)(a) This subchapter does not apply to any of the following:~~

~~1. Actions for which a final environmental impact statement is approved before October 1, 2002.~~

~~2. Actions for which a finding of no significant impact is made under ch. Trans 400 before October 1, 2002.~~

~~3. Actions that are documented in an environmental report, as defined in s. Trans 400.04 (10), completed before October 1, 2002, that fit the criteria or conditions for approval as a categorical exclusion in 23 CFR 771.117, April 1, 2000, or has met the review criteria of~~

~~paragraph 23.a. of chapter 3 of federal aviation administration order 5050.4A issued on October 8, 1985.~~

~~(b) Notwithstanding par. (a), the construction site performance standards under s. NR 151.23 and the protective area requirements under s. NR 151.24 (6) apply to transportation facilities subject to this subchapter.~~

(3) In s. NR 151.23, ~~average annual basis~~ soil loss is calculated using the appropriate ~~annual~~ 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 ~~USLE~~ universal soil loss equation and its successors ~~RUSLE~~ revised universal soil loss equation and ~~RUSLE2~~, revised universal soil loss equation 2, utilize an R factor which has been developed to estimate ~~annual~~ soil erosion, averaged over extended time periods. The R factor can be modified to estimate monthly and single-storm erosion. ~~A design storm can be statistically calculated to provide an equivalent R factor as an average annual calculation.~~

(4) In s. NR 151.24, ~~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.

SECTION 59. NR 151.21 (1) is repealed.

SECTION 60. NR 151.21 (1m) is created to read:

NR 151.21 (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 at: <http://dnr.wi.gov/runoff/models/index.htm> or by contacting the storm water management program at (608) 267-7694.

SECTION 61. NR 151.21 (5) is amended to read:

NR 151.21 (5) "Minor reconstruction" means either of the following:

(a) For transportation facility construction sites where, before the effective date of this rule ... [legislative reference bureau inserts date], 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 the effective date of this rule ... [legislative reference bureau inserts date], 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.

SECTION 62. NR 151.21 (8) is amended to read:

NR 151.21 (8) "Public-use airport" means ~~either of the following as described~~ has the meaning given it in 49 USC 47102(17): 47102 (21).

~~(a) A public airport.~~

~~(b) A privately owned airport used or intended to be used for public purposes that is either:~~

~~1. A reliever airport as designated by the secretary of the United States department of transportation to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community.~~

~~2. Determined by the secretary of the United States department of transportation to have at least 2,500 passenger boardings each year and to receive scheduled passenger aircraft service.~~

SECTION 63. NR 151.22 (1) (a) is amended to read:

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 ~~ss. NR 151.23 and 151.24~~ this subchapter for land disturbing construction activity at transportation facility construction sites.

SECTION 64. NR 151.225 is created to read:

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 consists 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 on-site 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 on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

(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.

SECTION 65. NR 151.23 (title) and (1) are amended to read:

NR 151.23 Construction site performance standard for sites of one acre or more. (1)

APPLICABILITY. ~~Except as provided under sub. (2), this~~ This section applies to all of the following:

~~(a) A transportation facility construction site that has 5 or more acres of land disturbing construction activity, unless any of the following are met:~~

~~1. The department has received a notice of intent for the transportation construction project in accordance with subch. III of ch. NR 216 before October 1, 2002.~~

~~Note: Prior to submitting a notice of intent pursuant to subch. III of ch. NR 216, a construction site erosion control plan in conformance with s. NR 216.46 and a storm water management plan in conformance with s. NR 216.47 shall be developed.~~

~~2. A bid is advertised or construction contract signed where no bid is advertised, October 1, 2002.~~

~~(b) After March 10, 2003, any transportation facility construction site that has at least consists of one acre or more of land disturbing construction activity, except where bids are advertised, or construction contracts signed where no bids are advertised, before October 1, 2002.~~

(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 the effective date of this rule . . . [legislative reference bureau inserts date].

2. Transportation facility construction sites for which a bid has been advertised or construction contract signed for which no bid was advertised, before the effective date of the rule . . . [legislative reference bureau inserts date].

(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 the effective date of this rule . . . [legislative reference bureau inserts date].

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 the effective date of the rule . . . [legislative reference bureau inserts date].

SECTION 66. NR 151.23 (2) (cm) is created to read:

NR 151.23 (2) (cm) Routine maintenance if performed for storm water conveyance system cleaning for sites that consist of less than 5 acres of land disturbance.

SECTION 67. NR 151.23 (3) (a) is amended to read:

NR 151.23 (3) PLAN. (a) ~~A written plan shall be developed~~ The responsible party under s. NR 151.22 shall develop and implement a written design plan for each construction site ~~and~~. The plan shall incorporate the applicable requirements of this section.

SECTION 68. NR 151.23 (4) (title) is amended to read:

NR 151.23 (4) PRE-EFFECTIVE DATE [legislative reference bureau inserts date]
REQUIREMENTS.:

SECTION 69. NR 151.23 (4m) is created to read:

NR 151.23 (4m) POST-EFFECTIVE DATE . . . [legislative reference bureau inserts date] 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:

1. The deposition of soil from being tracked onto streets by vehicles.
2. The discharge of sediment from disturbed areas into on-site 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.
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, 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 the effective date of the rule ... [legislative reference bureau inserts date], 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 the effective date of the rule ... [legislative reference bureau inserts date], 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 on the department web page at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

(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 topsoil.
3. Minimization of land disturbing construction activity on slopes of 20% or more.
4. Development of spill prevention and response procedures.

SECTION 70. NR 151.23 (5) is amended to read:

NR 151.23 (5) LOCATION. ~~The BMPs used to comply with this section shall be located prior to~~ so that treatment occurs before runoff entering enters waters of the state.

SECTION 71. NR 151.23 (6) is created to read:

NR 151.23 (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.

SECTION 72. NR 151.24 (1) (bm) is created to read:

NR 151.24 (1) (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 the effective date of the rule ... [legislative reference bureau inserts date]. 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 the effective date of this rule ... [legislative reference bureau inserts date] shall meet the performance standards of ss. NR 151.242 to 151.249.

SECTION 73. NR 151.241 to NR 151.249 are created to read:

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. 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.

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 facility redevelopment	40 percent of load from 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 at: <http://dnr.wi.gov/runoff/models/index.htm> or by contacting 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.

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	B	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.

NR 151.244 Infiltration performance standard. (1) REQUIREMENT. (a) Except as provided in par. (b) the requirements are the same as those given in s. NR 151.124.

(b) 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.

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 pars. (e) or (f) , 50 feet.