



***STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES***

**PERMIT TO DISCHARGE UNDER THE
WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEMS**

In compliance with the provisions of Chapter 283, Wisconsin Statutes:

THE NORTH SHORE GROUP:

**Village of Bayside
Village of Brown Deer
Village of Fox Point
City of Glendale
Village of River Hills
Village of Shorewood
Village of Whitefish Bay**

are permitted to discharge storm water from

ALL PORTIONS OF THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS

owned or operated by the North Shore Group to waters of the state in the following watersheds:

**Milwaukee River South
Lake Michigan**

in accordance with the conditions set forth in this permit.

This permit will become effective on the date of signature.

This permit to discharge shall expire at midnight, June 11, 2018.

To retain authorization to discharge after this expiration date, an application shall be filed for reissuance of this permit in accordance with the requirements of Chapter NR 216.08, Wis. Adm. Code, at least 180 days prior to this expiration date.

State of Wisconsin Department of Natural Resources For the Secretary

By

Jamie D. Lambert
Storm Water Specialist

Date of Signature

EFFECTIVE DATE: June 12, 2013

EXPIRATION DATE: June 11, 2018

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GENERAL DESCRIPTION AND PURPOSE OF THE WPDES STORM WATER PERMIT FOR THE NORTH SHORE GROUP

The City of Glendale and the Villages of Bayside, Brown Deer, Fox Point, River Hills, Shorewood and Whitefish Bay, now referred to as the **North Shore Group**, who own and operate municipal separate storm sewer systems that discharge to waters of the state.

Discharges from the municipal separate storm sewer systems (MS4s) generally consist of runoff from rain events or snow melt. Pollutants of concern found in MS4 discharges include organic materials, suspended solids, metals, nutrients, bacteria, pesticides, fertilizer, traces of toxic materials and other deleterious materials introduced by fluids from spills or illicit connections

This WPDES permit regulates discharges from the North Shore Group's municipal separate storm sewer systems in accordance with s. 283.33, Wis. Stats., and subch. I. of NR 216, Wis. Adm. Code. The permit requirements are intended to restore and maintain the chemical, physical, and biological integrity of waters of the state through pollution prevention and storm water management of urban runoff.

PART I. APPLICABILITY

- A. PERMITTED AREA:** This permit covers all areas within the jurisdiction of a Permittee that contributes to discharges from the municipal separate storm sewer system owned or operated by said Permittee. Municipal separate storm sewer system means a conveyance or systems of conveyances designed or used for the collection or conveyance of storm water. These include, but are not limited to; storm sewers, roads with drainage systems, municipal streets, catch basins, inlets, curbs, gutters, ditches, constructed channels or storm drains.
- B. AUTHORIZED DISCHARGES:** This permit authorizes storm water point source discharges to waters of the state from the municipal separate storm sewer systems in the permitted area. This permit also authorizes the discharge of storm water commingled with flows contributed by process wastewater, non-process wastewater, and storm water associated with industrial activity, provided the discharges are regulated by other WPDES permits or are discharges which are not considered illicit discharges.
- C. WATER QUALITY STANDARDS**
1. This permit specifies the conditions under which storm water may be discharged to waters of the state for the purpose of achieving water quality standards contained in chs. NR 102 through 105 and NR 140, Wis. Adm. Code. For the term of this permit, compliance with water quality standards will be addressed by adherence to general narrative-type storm water discharge limitations and implementation of storm water management programs and practices.
 2. This permit does not authorize water discharges that the Department, prior to authorization of coverage under this permit, determines will cause or have reasonable potential to cause or contribute to an excursion above any applicable water quality standards. Where such determinations have been made prior to authorization, the Department may authorize coverage under this permit where the storm water management programs required under this permit will include appropriate controls and implementation procedures designed to bring the storm water discharge into compliance with water quality standards.
- D. GENERAL STORM WATER DISCHARGE LIMITATIONS:** The Permittee may not discharge the following substances from their municipal separate storm sewer system in amounts that have an unreasonable effect on receiving water quality or aquatic life:
1. Solids that may settle to form putrescence or otherwise objectionable sludge deposits.
 2. Oil, grease, and other floating material that form noticeable accumulations of debris, scum, foam, or sheen.
 3. Color or odor that is unnatural and to such a degree as to create a nuisance.
 4. Toxic substances in amounts toxic to aquatic life, wildlife, or humans.
 5. Nutrients conducive to the excessive growth of aquatic plants and algae to the extent that such growths are detrimental to desirable forms of aquatic life, create conditions that are unsightly, or are a nuisance.
 6. Any other substances that may impair, or threaten to impair, beneficial uses of the receiving water.

E. INDIVIDUAL RESPONSIBILITY: The Permittee is responsible for:

1. Compliance with conditions of this permit relating to discharges from those portions of the municipal separate storm sewer systems where the municipality is the owner or operator. This includes carrying out programs and activities as required under Part III of this permit.
2. Storm water management program implementation, as required by this permit, on portions of each municipality that drain to a municipal separate storm sewer system where they are the owner or operator.
3. All other activities required by this permit.
4. Working collaboratively with the other Permittees as a member of the North Shore Group to meet the Group Conditions as allowed under Part II of this permit.

F. SHARED RESPONSIBILITY: The North Shore Group is responsible for:

1. Participation in annual meetings and active participation in planning and /or implementation of programs conducted as a group as allowed under Part II of this permit. The North Shore Group's implementation of one or more of the conditions of this permit may incorporate cooperative efforts with other MS4 regulated Permittees or efforts by groups or organizations provided the Department is notified of such efforts.

G. OUTSTANDING AND EXCEPTIONAL RESOURCE WATERS: This permit does not authorize the discharge to any Outstanding or Exceptional Resource Waters as listed in ss. NR 102.10 and 102.11, Wis. Adm. Code. At time of permit issuance there is no known Outstanding or Exceptional Resource Waters within the North Shore Groups physical boundaries.

H. IMPAIRED WATERBODIES AND TOTAL MAXIMUM DAILY LOAD REQUIREMENTS: Permit for MS4 discharges to impaired waterbodies and/or EPA-approved TMDL waters are identified under Part III-Section F of this permit.

I. WETLANDS: The Permittee's MS4 discharge shall comply with the wetland water quality standard provisions in ch. NR 103, Wis. Adm. Code.

J. ENDANGERED AND THREATENED RESOURCES: The Permittee's MS4 discharge shall comply with the endangered and threatened resource protection requirements of s. 29.604, Wis. Stats., and ch. NR 27, Wis. Adm. Code.

K. HISTORIC PROPERTY: The Permittee's MS4 discharge may not affect any historic property that is listed property, or on the inventory, or on the list of locally designated historic places under s. 44.45, Wis. Stats., unless the Department determines that the MS4 discharge will not have an adverse effect on any historic property pursuant to s. 44.40 (3), Wis. Stats.

L. EXCLUSIONS: The following are excluded from coverage under this permit:

1. **Combined Sewer and Sanitary Sewer Systems**
Discharges of water from a sanitary sewer or a combined sewer systems conveying both sanitary and storm water. These discharges are regulated under s. 283.31, Wis. Stats, and require a separate individual permit.
2. **Agricultural Facilities and Practices**
Discharges from "agricultural facilities" and "agricultural practices". "Agricultural facility" means a structure associated with an agricultural practice. "Agricultural practice" means beekeeping; commercial feedlots; dairying; egg production; floriculture; fish or fur farming; grazing; livestock raising; orchards; poultry raising; raising of grain, grass, mint and seed crops; raising of fruits, nuts and berries; sod farming; placing land in federal programs in return for payments in kind; owning land, at least 35 acres of which is enrolled in the conservation reserve program under 16 USC 3831 to 3836; and vegetable raising.

3. **Other Excluded Discharges**

Storm water discharges from industrial operations or land disturbing construction activities that require separate coverage under a WPDES permit pursuant to subchs. II or III of ch. NR 216, Wis. Adm. Code. For example, while storm water from industrial or construction activity may discharge from the Permittees MS4, this permit does not satisfy the need to obtain any other permits for those discharges. This exclusion does not apply to the Permittees responsibility to regulate construction sites within its jurisdiction in accordance with Part III sections B and C of this permit.

Part II. GROUP CONDITIONS

The North Shore Group intends to collaborate and satisfy these conditions collectively. This does not prohibit the Permittees from continuing to develop and implement unique programs within their respective jurisdictional municipal boundaries.

- A. PUBLIC EDUCATION AND OUTREACH:** The North Shore Group shall continue existing public and staff education and outreach programs to increase the awareness of storm water impacts on waters of the state to encourage changing public behavior to reduce such impacts. The public education and outreach program may incorporate cooperative efforts with other entities not regulated by this permit provided the results of these cooperative efforts are reported annually.
1. The North Shore Group shall be responsible for prioritizing education topics each year at an annual meeting. All topics shall be addressed at least once during the permit term with a minimum of 3 topics being addressed each year. Topics may be repeated as necessary. The program shall identify target audiences, establish measurable goals, and at a minimum address the following:
 - a. Illicit discharges from municipal separate storm sewer systems and associated water quality impacts.
 - b. Storm water runoff from residential properties and potential pollutant sources such as pet waste, hazardous household waste, automobile care, and lawn care.
 - c. Storm water runoff from commercial properties and, where appropriate, educate specific businesses such as lawn care companies, golf courses, carwashes, and restaurants on storm water pollution prevention planning to reduce pollutant sources.
 - d. Beneficial onsite reuse or proper management of leaves and grass clippings.
 - e. Restorative and protective management of streambanks and shorelines by riparian landowners to minimize erosion and restore and enhance the ecological value of waterways.
 - f. Infiltration and beneficial onsite reuse of residential storm water runoff from rooftops, driveways, and sidewalks through implementation of green infrastructure best management practices such as rain barrels, rain gardens, and permeable pavements.
 - g. Proper design, installation, and maintenance of erosion and sediment control best management practices to minimize, with the intent of eliminating, sediment transport from construction sites. The program shall highlight the potential harmful effects on the environment from sediment in construction site runoff and shall target construction companies, individual operators, and developers as key audiences.
 - h. Routine inspection and maintenance of storm water best management practices by homeowner associations with Long Term Maintenance Agreements (LTMA).
 - i. Watershed education and the contributions of point and nonpoint source pollution on waterbody and waterway impairments.

- j. Best management practices for snow and ice removal and informing specific audiences such as snow removal/deicing companies, private residences, industrial and commercial facilities, and residents about resources that provide further information on methods of reducing application of chemical deicers while maintaining public safety.

Note: The USEPA has created guidance to assist MS4 operators with developing measurable goals as part of their storm water management plan. Measurable goals allow communities to assess the effectiveness of individual control practices and the storm water management program as a whole. This guidance can be found on USEPA's website at: <http://www.epa.gov/npdes/pubs/measurablegoals.pdf>.

- B. PUBLIC INVOLVEMENT AND PARTICIPATION:** The North Shore Group shall implement a program to notify the public of activities required by this permit and to encourage input and participation from the public regarding these activities. This program shall include measurable goals for public involvement and participation, from various interest groups such as river partnerships, and comply with applicable state and local public notice requirements.
- C. ILLICIT DISCHARGE NOTIFICATION:** In the case of an illicit discharge which originates from one Permittee and discharges directly to a storm sewer or property under the jurisdiction of the other Permittee, the municipality discovering the discharge shall notify the affected municipality within one working day.
- D. ANNUAL MEETING:** The North Shore Group is required to meet at least once per year. Topics to be addressed at these meetings shall include setting annual priorities for the North Shore Groups public education and outreach program; development, implementation, and modification; and other such topics as the group deem appropriate for discussion.

Note: The North Shore Group have indicated that they plan to meet quarterly to exchange information and set group priorities, however attendance at these quarterly meetings are not mandatory. Permittees are encouraged to participate in these additional meetings.

Part III. INDIVIDUAL CONDITIONS

A. ILLICIT DISCHARGE DETECTION AND ELIMINATION: The Permittee shall continue to implement a program to detect and remove illicit connections and discharges to the municipal separate storm sewer systems. The program shall include measurable goals and include all of the following:

1. An ordinance or other regulatory mechanism to prevent and eliminate illicit discharges and connections to the municipal separate storm sewer system. At a minimum, the Permittee's ordinance or other regulatory mechanism shall:
 - a. Prohibit the discharge, spill or dumping of non-storm water substances or material into waters of the state or the MS4s.
 - b. Identify non-storm water discharges or flows that are not considered illicit discharges. Non-storm water discharges that are **not** considered illicit discharges include: water line flushing, landscape irrigation, individual residential car washing, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, flows from riparian habitats and wetlands, firefighting and discharges authorized under a WPDES permit unless identified by the Permittee as a significant source of pollutant to waters of the state.
 - c. Maintain inspection and enforcement authority.

Note: Chapter NR 815, Wis. Adm. Code, regulates injection wells including storm water injection wells. Construction or use of a well to dispose of storm water directly into groundwater is prohibited under s. NR 815.11(5), Wis. Adm. Code.

2. On-going dry weather field screening of outfalls during the term of the permit. Outfalls will be evaluated on an on-going basis during dry weather periods (typically 72 hours after any measurable rainfall) according to the following schedule unless an alternative screening program is submitted to and approved by the Department:
 - a. On a rolling basis, annual screening of at least one fifth of the major outfalls so that all major outfalls will be screened at least once within the term of this permit.
 - b. At a minimum, annual screening of all major outfalls which showed evidence of illicit discharges from sampling conducted under the preceding permit.
 - c. On a frequency to be determined by the Permittee, additional screening of priority outfalls.

Note: Priority outfalls would be considered as any MS4 outfall regardless of size, contributing drainage area size or land use characteristics that may have a higher likelihood of illicit discharges or connections.

3. At a minimum, field screening shall include:
 - a. Sensory Observation - A narrative description of visual observations including color, odor, turbidity, oil sheen or surface scum, flow rate and any other relevant observations regarding the potential presence of non-storm water discharges or illegal dumping. (Include narrative in annual report)
 - b. Field Analysis - If an illicit discharge or illicit connection is suspected one grab sample will be tested at each location using a field test kit to determine the presence of illicit non-storm water discharges or dumping. The test kit will provide approximate readings for pH, total chlorine, total copper, total phenols, and detergents or surfactants.

Note: The Department has written a guidance document to assist municipalities with development of field screening programs to determine the presence of illicit discharges from MS4 outfalls.

The guidance can be found on the Departments website at:

http://dnr.wi.gov/topic/stormwater/documents/MS4_IDDE_Guidance_3-2012.pdf

- i. Field screening points shall, where possible, be located downstream of any source of suspected illicit activity.**
 - ii. Field screening points shall be located where practicable at the farthest manhole or other accessible location downstream in the systems. Safety of personnel and accessibility of the location shall be considered in making this determination.
 - iii. Consideration shall be given to hydrological conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area, and land use types.
4. Procedures for responding to known or suspected illicit discharges. At a minimum, procedures shall continue to:
 - a. Investigate portions of the municipal separate storm sewer system that, based on the results of field screening or other information, indicate a reasonable potential for containing illicit discharges or other sources of non-storm water discharges.
 - b. Responding to spills that discharge into and/or from the municipal separate storm sewer systems including tracking and locating the source of the spill if unknown.
 - c. Preventing and containing spills that may discharge into or are already within the municipal separate storm sewer systems.
 - d. Notify the Department in accordance with ch. NR 706, Wis. Adm. Code, in the event that the Permittee identifies a spill or release of a hazardous substance, which has resulted or may result in the discharge of pollutants into waters of the state. The Department shall be notified via the 24-hour toll free spill hotline at 1-800-943-0003. The North Shore Group member shall cooperate with the Department in efforts to investigate and prevent such discharges from polluting waters of the state.
 - e. Identified illicit discharges shall be eliminated within three working days to the maximum extent practicable. If neither the source nor the non-stormwater discharge has been identified or observed within 6 months of beginning the investigation, then the municipality must maintain written documentation of the actions undertaken for review by the Department. A minimum of 3 separate investigations to observe and sample flow at the identified outfall must be made within the 6 month period. Outfalls with indeterminate sources and non-stormwater discharges shall continue to be screened annually. Once an illicit discharge is identified, the investigating municipality must contact the Department within 24 hours.
 - f. Eliminate leakage from sanitary conveyance systems into the municipal separate storm sewer systems to the maximum extent practicable.
 - g. Provide the Department with advance notice of the time and location of dye testing within a MS4. (Because the dye may get reported to the Department as an illicit discharge or spill, the Department requires prior notification of dye testing.)
 - h. Notify affected municipalities within one working day in the case of an illicit discharge that originates from the permitted area and that discharges directly to a municipal separate storm sewer or property under the jurisdiction of another municipality.
 - i. Submit inspection reports to the Department for outfalls with known or suspected illicit discharges within 30 days of outfall inspection.

B. CONSTRUCTION SITE POLLUTANT CONTROL: The Permittee shall continue to implement and enforce a program that establishes measurable goals and reduces the discharge of sediment and construction materials from construction sites. The Permittee through implementation of this program shall:

1. Conduct plan reviews to ensure site erosion control plans are in accordance with design, installation, and maintenance standards and specifications that meet or exceed the Department's technical standards or Permittee's ordinance.
2. Conduct erosion control inspections at all sites within the Permittee's jurisdiction following the frequency and actions outlined in the Permittee's construction site pollutant control program. The Permittee shall contact the Department if there are significant or repeat violations at a site, or if there are threats or impacts to waters of the state.
3. Maintain records of site inspections, including any follow up necessary on sites out of compliance with site-specific erosion control plans according to the Permittee's program and schedule identified in Part IV of this permit.
4. Notify landowners who apply for local construction or land disturbance permits of the possible applicability of Subchapter III of NR 216, Wis. Adm. Code, Construction Site Storm Water Discharge Permits, or other Department waterway and wetland permits.
5. Enforce construction site performance standards equivalent to or more restrictive than those in ss. NR 151.11 and 151.23, Wis. Adm. Code on all sites including municipal projects applicable under the Permittees ordinance.
6. Enforce erosion and sediment control plan requirements for landowners of construction sites equivalent to those contained in s. NR 216.46, Wis. Adm. Code including municipal projects applicable under the Permittee's ordinance.
7. Maintain and enforce the municipal ordinance regarding construction site storm water discharges. Within 12 months of the effective date of this permit, the municipal ordinance shall be revised to include current s. NR 151 Wis. Adm. Code requirements.

C. POST-CONSTRUCTION STORM WATER MANAGEMENT: The Permittee shall continue to implement and enforce a program that establishes measurable goals and controls the quantity and quality of discharges from areas of new development and redevelopment, after construction is completed. The Permittee through implementation of this program shall:

1. Conduct plan reviews to ensure storm water management and long-term operation and maintenance plans are in accordance with design, installation, and maintenance standards and specifications that meet or exceed the Department's technical standards and the Permittees Storm Water Management Ordinance.
2. Enforce post-construction performance standards equivalent to or more restrictive than those in ss. NR 151.121 and 151.241, Wis. Adm. Code.
3. Enforce storm water plan requirements for landowners of construction sites equivalent to those contained in s. NR 216.47, Wis. Adm. Code.
4. Enforce long-term maintenance requirements for landowners and other persons responsible for long-term maintenance of post-construction storm water management facilities.
5. Maintain and enforce the municipal ordinance regarding post-construction storm water management. Within 12 months of the effective date of this permit, the municipal ordinance shall be revised to include current s. NR 151, Wis. Adm. Code requirements.

D. POLLUTION PREVENTION: Permittee shall continue to implement and enforce a pollution prevention program that establishes measurable goals to prevent or reduce the discharge of pollutants in storm water runoff. The Permittee through the implementation of this program shall:

1. Continue to inspect the following:
 - a. Municipally-owned storm water management facilities. Necessary repairs/maintenance shall be documented during the inspection;
 - b. Privately-owned storm water management facilities where the Permittee has established maintenance authority through long-term maintenance agreements or other legal documentation. At minimum, all privately owned facilities with LTMA's that are more than 5 years old shall be inspected at least once per the term of this permit.
 - c. Municipal garages, yards, storage areas, and any other municipally owned and operated facility with potential to generate storm water pollution. Inspections shall be conducted annually or according to the schedule identified in the site-specific Storm Water Pollution Prevention Plan (SWPPP) prepared for the facility.
2. Perform or require necessary maintenance at inspected facilities within a reasonable timeframe and document all minor maintenance activities conducted throughout the year for inclusion in the annual report.
3. Notify the Department of scheduled major maintenance activities prior to starting work.

Note: Minor maintenance would include activities such as any routine maintenance to maintain aesthetic qualities and prevent nuisance problems, i.e., removing trash and debris from control openings and inlet areas, routine mowing and landscaping, stabilizing eroded areas, and manual or chemical aquatic plant control under ss. NR 109 and NR 107, Wis. Adm. Code. Major maintenance activities would include any work necessary to either maintain the original grade and hydraulic design capacity of the facility or alter the designed performance of the facility (i.e., rebuilding deteriorated or failed catch basins). Any earthwork, tillage practices, modifications to outlet and inlet structures, and removal of accumulated sediment should be considered a major maintenance activity. Removal and disposal of accumulated sediment in storm water management facilities is regulated under s. NR 528 Wis. Adm. Code. This code does not apply to street sweeping and catch basin practices. Street sweeping and catch basin cleaning waste is a solid waste and shall be disposed of in a licensed landfill.

4. Continue to implement municipal yard SWPPPs. Update municipal yard SWPPPs if any of the following circumstances occur:
 - a. Expansion of the facility or a change in material handling or storage will result in significant increases in the exposure of pollutants to storm water discharged either to waters of the state, the Permittees MS4, an adjacent MS4, or to storm water treatment devices;
 - b. An inspection or visual observation finds that the provisions of the SWPPP are ineffective in controlling storm water pollutants discharged to either waters of the state, the Permittees MS4, an adjacent MS4, or to downstream storm water treatment devices;
 - c. Upon notice that the Department finds the SWPPP to be ineffective in achieving the conditions under this subsection.
5. Continue street sweeping and routine cleaning of catch basins according to the frequency included in the Permittees pollutant loading analysis. Notify the Department of any proposed modifications to the sweeping or catch basin cleaning schedule prior to implementation.
6. Properly dispose of street sweepings and catch basin cleaning waste.

7. Properly dispose of any solids, sludge's, filter backwash or other pollutants removed from storm water management facilities in a manner that prevents any pollutant from the materials from entering the waters of the state, and complies with all applicable Federal, State, and Local regulations.
8. If road salt or other deicers are applied, no more shall be applied than the amount necessary to maintain public safety, as determined by the Permittee. To achieve this requirement, a winter road management plan shall be developed and implemented. At minimum, the plan shall include the following:
 - a. Identification of staff responsible for implementing winter road management.
 - b. Identification of truck routes with attention to waterway crossings and road areas within 100 feet of a water body.
 - c. Description of deicing equipment and methods of calibrating equipment.
 - d. Description of deicing and anti-icing products and their effective temperature range.
 - e. Street application rates for deicing and anti-icing products in pounds of product per lane mile.
 - f. Disposal locations for mass snow removal (if applicable).
 - g. Evaluation of the winter road management plan implementation submitted with each annual report. The evaluation shall include an estimate of the amount of products used per month.

Note: The Department recommends recording usage on a per event basis until the winter road management plan is optimized for varying weather conditions.

9. Maintain proper management of leaves and grass clippings, which may include on-site beneficial reuse as opposed to collection;
10. Adhere to site-specific nutrient application schedule for application of lawn and garden fertilizers on municipally controlled properties with pervious surfaces over 5 acres each. The site-specific nutrient application schedule must be based on appropriate soil tests.
11. Ensure all utility staff is aware of general WPDES permits and requirements, such as the hydrostatic test water and water supply system water when discharging to the MS4. A list of these permits and requirements can be found at the following website:
<http://dnr.wi.gov/topic/wastewater/GeneralPermits.html>

E. STORM WATER QUALITY MANAGEMENT: The Permittee shall continue to implement a municipal storm water management program that controls the discharge of total suspended solids from the MS4 system to waters of the State. Since much of the phosphorus found in urban runoff is adsorbed to soil particles, it is reasonable to expect that implementation of actions under this permit that reduce total suspended solids loads will also reduce phosphorus proportionally with the intent to achieve designated use conditions in impaired waterways. The storm water management program shall maintain compliance with the developed urban area performance standards of s. NR 151.13(2), Wis. Adm. Code, for those areas of the municipality that were not subject to the post-construction performance standards of s. NR 151.12 or 151.24, Wis. Adm. Code. (Note: projects prior to Oct. 1, 2004). The program shall include:

1. To the maximum extent practicable, continued operation and maintenance of all best management practices implemented on or before July 1, 2011 to achieve a total suspended solids reduction of more than 20 percent as compared to no controls.
2. If applicable, a storm water management plan that identifies a schedule for implementing best management practices necessary to achieve a 20 reduction in the annual average mass of total suspended solids discharging from the MS4 to waters of the state as compared to no controls. The municipality may elect to meet the 20 percent total suspended solids standard on a watershed or regional basis by working with other

Permittee(s) to provide regional treatment or other measures that collectively meets the standard. Municipalities currently not achieving at least a 20 percent reduction must prepare and submit this plan to the Department within 12 months of the permit start date. Existing controls that collectively contribute to a given MS4 achieving greater than a 20 percent reduction in TSS loads from areas of existing development as of July 1, 2011, shall not be applied to increase the level of compliance of an MS4 with a level of reduction below 20 percent. The plan shall include the following:

- a. Assessment of compliance with s. NR 151.13(2), Wis. Adm. Code must include an updated pollutant loading analysis using a model such as SLAMM, P8 or equivalent methodology approved by the Department.
- b. Any agreements with an adjacent municipality, or with municipalities within a 10 digit hydrologic unit code level, to implement the required total suspended solids reduction.
- c. Any long-term maintenance agreements with owners of non-public control measures where credit for the total suspended solids reduction is included in the analysis.
- d. A cost-effectiveness analysis including the systematic comparison of alternatives to meet the 20 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 existing practices versus the cost to install practices during redevelopment or reconstruction. The analysis shall consider the cost to ensure long term maintenance of nonpublic 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.

Note: Pursuant to s. NR 151.13(2), Wis. Adm. Code, the total suspended solids reduction requirements are applied to runoff from areas of urban land use and are not applicable to agricultural or rural land uses and associated roads. Additional MS4 modeling guidance for modeling the total suspended solids control is given on the Department's Internet site at: <http://dnr.wi.gov/topic/stormwater/standards/index.html>. Costs of implementing storm water management practices should be presented as dollars per pound of pollutant removed and should take into account anticipated redevelopment or reconstruction projects and retrofitting practices.

F. IMPAIRED WATERBODIES AND TOTAL MAXIMUM DAILY LOAD REQUIREMENTS: Each Permittee shall determine whether any part of its MS4 discharges to an impaired water body listed in accordance with section 303(d)(1) of the federal Clean Water Act, 33 USC 1313(d)(1)(C), and the implementing regulation of the US Environmental Protection Agency, 40 CFR 130.7(c)(1). Impaired waters are those that are not meeting applicable water quality standards.

1. If a Permittees MS4 discharges to an impaired water body, the Permittee shall include a written section in its storm water management program that discusses the management practices and control measures it will implement as part of its program to reduce, with the goal of eliminating, the discharge of pollutants of concern that contribute to the impairment of the water body. This section of the Permittees program shall specifically identify control measures and practices that will collectively be used to try to eliminate the MS4's discharge of pollutant(s) of concern that contribute to the impairment of the water body and explain why these control measures and practices were chosen as opposed to other alternatives. Pollutant(s) of concern means a pollutant that is causing impairment of a water body.

Note: Work is currently underway on TMDLs which will address the bacteria and phosphorus-related impairments in the Milwaukee River basin. Since much of the phosphorus found in urban runoff is adsorbed to soil particles, it is reasonable to expect that implementation of actions under

this permit that reduce total suspended solids loads will also reduce phosphorus proportionally with the intent to achieve designated use conditions in impaired waterways.

The Department maintains a searchable database of impaired waterways. This publicly accessible database is available at <http://dnr.wi.gov/water/impairedSearch.aspx>

2. After the Permittees start date of coverage under this permit they may not establish a new MS4 discharge of a pollutant of concern to an impaired water body or increase the discharge of a pollutant of concern to an impaired water body unless the new or increased discharge causes the receiving water to meet applicable water quality standards.

Note: Once the Department approves a TMDL for an impaired water body to which the Permittee discharges, the Department anticipates that when this permit is reissued in the next permit cycle it will include requirements necessary to achieve the TMDL wasteload allocation for the MS4. Approved TMDLs are listed on the Department Internet site at <http://dnr.wi.gov/topic/tmdls/tmdlreports.html>

Table 2 provides an example of the way that wasteload allocations may be presented in the next permit cycle

Table 2. TEMPLATE FOR MS4 WASTE LOAD ALLOCATIONS BY MUNICIPALITY

Municipality	Reach	Water Body Name	Water Body Extents	Reach Description	Annual TSS Waste Load Allocation (tons)
MCD Name	Reach No.	Local Name	Stream Mile to Mile	Landmark to Landmark	tons
MCD Name	Reach No.	Local Name	Stream Mile to Mile	Landmark to Landmark	tons
MCD Name	Total				tons

G. STORM SEWER SYSTEMS MAP: The Permittee shall maintain a current municipal separate storm sewer systems map. The Permittee is encouraged to submit electronic mapping files to the Department in ArcGIS format or provide access to municipal GIS mapping sites as some features may be difficult to discern at larger mapping scales. The municipal storm sewer systems map shall include:

1. Identification of waters of the state, name and classification of receiving water(s), identification of whether the receiving water is an ORW, ERW or listed as an impaired water under s. 303(d) of the Clean Water Act, storm water drainage basin boundaries for each MS4s outfall and municipal separate storm sewer conveyance systems.
2. Identification of all known municipal separate storm sewer systems outfalls discharging to waters of the state or other municipal separate storm sewer systems. Major outfalls shall be uniquely identified. A listing of the outfall number, location description, and size shall also be included.
3. Unique identification of grass swale and storm sewer conveyance systems
4. Location of any known discharge to the municipal separate storm sewer systems that has been issued WPDES permit coverage by the Department.
5. Location of structural storm water management facilities including but not limited to any municipally owned wet detention basins, dry detention basins, infiltration basins, grass swales, and proprietary devices. Regional treatment facilities and privately owned facilities where the Permittee has established long term maintenance authority must be uniquely identified
6. Identification of publicly owned parks, recreational areas and other open lands.
7. Location of municipal garages, storage areas and other public works facilities.

8. Identification of streets.
9. Inclusion of an appropriately detailed legend and north directional arrow.

H. ANNUAL REPORT: The Permittee shall submit an annual report for each calendar year unless the Department authorizes biannual reporting to be submitted the 2nd and 4th year of the permit term pursuant to s. NR 216.07(8) Wis. Adm. Code. The municipal governing body, interest groups and the general public shall be encouraged to review and comment on the annual report. The annual report shall include:

1. The status of implementing the permit requirements, status of meeting measurable program goals and compliance with permit schedules.
2. Updated storm sewer systems maps, where necessary, to identify any new outfalls, structural controls, or other noteworthy changes.
3. A summary of activities describing:
 - a. The number and nature of inspections and enforcement actions conducted to ensure compliance with the required ordinances.
 - b. The number of plan reviews conducted to ensure compliance with the required ordinances.
 - c. Public education and outreach programs conducted with and without inter-municipal cooperation. The North Shore Group may submit the I&E portion of the annual report as a single group report.
 - d. Internal education efforts, including what topics were discussed, who the target audiences were, how the information was received and what follow-up information or activities are/were recommended.
 - e. Number and nature of reported spills or illicit discharges and associated responses.
 - f. Street sweeping and catch basin cleaning frequency, the amount of waste collected, and the disposal location(s) for this material.
 - g. Municipal yard evaluations, including any SWPPP amendments.
 - h. Items quantified through implementation of the winter road management plan.
 - i. Any changes to the status of meeting developed urban area performance standards presented as changes in pollutant removal efficiencies, according to Part III section E of this permit including changes in pollutant removing efficiencies.
 - j. A summary of revisions made to the storm water management plan.
4. Proposed revisions to the storm water management program.
5. A fiscal analysis including annual expenditures and budget for the reporting year or biannual reporting cycle and proposed expenditures and budget for the following reporting cycle.
6. Any other activities that may reduce the amount of pollutants reaching the local wetlands and waterways via the municipal storm sewer system that have measurable results; this information shall be used to assess the success of the programs and to determine if any details should be adjusted to achieve a successful implementation.
7. A duly authorized representative of the Permittee shall sign and certify the annual report and include a statement or resolution that the municipal governing body or delegated representatives have reviewed or

been appraised of the content of the annual report. A signed copy of the annual report and other required reports shall be submitted to the DNR Milwaukee Service Center, 2300 North Dr. Martin Luther King Jr. Drive, Milwaukee, WI 53212.

PART IV. COMPLIANCE SCHEDULE

The Permittee shall achieve compliance with the special permit conditions contained in Parts II and III in accordance with the following schedule:

PERMIT CONDITION	ACTIVITY	WHEN
Public Education and Outreach - Part II.A	Address at least 3 topics each year in order to complete all 11 within permit term	Minimum of once per year
Public Involvement and Participation – Part II. B	Encourage input and participation from residents	Ongoing
Illicit Discharge Detection and Elimination - Part III. A	1. Dry weather field screening of outfalls	20 percent per year
	2. Enforce the Illicit Discharge and Connection Storm water Ordinance	Ongoing
Construction Site Pollutant Control - Part III. B	1. Enforce the Construction Site Pollutant Control Ordinance	Ongoing
	2. Construction site inspection, documentation, and enforcement	Monthly - Ongoing
Post-Construction Storm Water Management - Part III. C	1. Enforce the Post-Construction Storm water Management Ordinance	Ongoing
	2. Continue procedures for long-term maintenance procedures	Ongoing
Pollution Prevention - Part III. D	1. Inspection and maintenance of municipally owned or operated structural storm water management facilities	Ongoing
	2. Catch basin cleaning	Conduct according to pollutant loading analysis and storm water management plan Ongoing
	3. Street sweeping	Conduct according to pollutant loading analysis and storm water management plan Ongoing
	4. Proper collection and disposal of leaves and grass clippings	Ongoing
	5. Inspections of all department of public works yards	Annually - Ongoing
	6. Application of lawn and garden fertilizers on municipally controlled properties with pervious surfaces over 5 acres each.	Ongoing
Storm Water Quality Management - Part III. E	1. 20% reduction in total suspended solids in runoff that enters waters of the state, to the maximum extent practicable	March 10, 2008

Storm Sewer System Map - Part III. G	Maintain a current storm sewer systems map	Ongoing
Annual Report - Part III. H	Submit annual reports	March 31st of each year (or March 31st of 2nd and 4th year permit term for biannual reporting)
Annual Meeting- – Part II. D	Meet annually with Co-Permittees to discuss permit programs and group conditions	Ongoing
Duty to Reapply – Part V. N	Submit new application	December 14, 2017 (180 days prior to expiration date of permit)

PART V. GENERAL CONDITIONS

The conditions in s. NR 205.07(1) and (3), Wis. Adm. Code, are incorporated by reference in this permit. Each Permittee shall be responsible for meeting these requirements. Some of these requirements are outlined below in paragraph A. through R. Requirements not specifically outlined below can be found in s. NR 205.07(1) and (3), Wis. Adm. Code.

- A. DUTY TO COMPLY:** The Permittee shall comply with all conditions of the permit. Any permit noncompliance is a violation of the permit and is grounds for enforcement action, permit revocation or modification, or denial of a permit reissuance application.
- B. COMPLIANCE SCHEDULES:** Reports of compliance or noncompliance with interim and final requirements contained in any compliance schedule of the permit shall be submitted in writing within 14 days after the schedule date, except that progress reports shall be submitted in writing on or before each schedule date for each report. Any report of noncompliance shall include the cause of noncompliance, a description of remedial actions taken, and an estimate of the effect of the noncompliance on the Permittees ability to meet the remaining schedule dates.
- C. NONCOMPLIANCE NOTIFICATION:**
1. Upon becoming aware of any permit noncompliance that may endanger public health or the environment, the municipality shall report this information by a telephone call to the Department within 24 hours. A written report describing the noncompliance shall be submitted to the Department within 5 days after the municipalities became aware of the noncompliance. The Department may waive the written report on a case-by-case basis based on an oral report received within 24 hours. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.
 2. Reports of any other noncompliance not covered under General Condition's B., C.1, or E. shall be submitted with the annual report. The reports shall contain all the information listed in General Condition C.1.
- D. DUTY TO MITIGATE:** The Permittee shall take all reasonable steps to minimize or prevent any adverse impact on the waters of the state resulting from noncompliance with the permit.
- E. SPILL REPORTING:** The Permittee shall immediately notify the Department, in accordance with ch. NR 706, Wis. Adm. Code, in the event of a spill or accidental release of hazardous substances which results in a discharge of pollutants into waters of the state. The Department shall be notified via the 24-hour spill hotline (1-800-943-0003).
- F. PROPER OPERATION AND MAINTENANCE:** The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the municipality to achieve compliance with the conditions of the permit and the storm water management plan. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with conditions of this permit.
- G. BYPASS:** The Permittee may temporarily bypass storm water treatment facilities if necessary for maintenance, or due to runoff from a storm event which exceeds the design capacity of the treatment facility, or during an emergency.
- H. DUTY TO HALT OR REDUCE ACTIVITY:** Upon failure or impairment of best management practices identified in the storm water management program, the municipality shall, to the extent practicable and necessary to maintain permit compliance, modify or curtail operations until the best management practices are restored or an alternative method of storm water pollution control is provided.

- I. REMOVED SUBSTANCES:** Solids, sludges, filter backwash or other pollutants removed from or resulting from treatment or control of storm water shall be stored and disposed of in a manner to prevent any pollutant from the materials from entering the waters of the state, and to comply with all applicable Federal, State, and Local regulations.
- J. ADDITIONAL MONITORING:** If a Permittee monitors any pollutant more frequently than required by the permit, the results of that monitoring shall be reported to the Department in the annual report.
- K. INSPECTION AND ENTRY:** The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and at reasonable times, to:
1. Enter upon the municipal premises where a regulated facility or activity is located or conducted, or where records are required under the conditions of the permit.
 2. Have access to and copy, at reasonable times, any records that are required under the conditions of the permit.
 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under the permit.
 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance, any substances or parameters at any location.
- L. DUTY TO PROVIDE INFORMATION:** The Permittee shall furnish the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking or reissuing the permit or to determine compliance with the permit. The municipality shall also furnish the Department, upon request, copies of records required to be kept by the North Shore Group.
- M. PROPERTY RIGHTS:** The permit does not convey property rights of any sort, or any exclusive privilege. The permit does not authorize any injury or damage to private property or an invasion of personal rights, or any infringement of federal, state or local laws or regulations.
- N. DUTY TO REAPPLY:** If the Permittee wishes to continue an activity regulated by the permit after the expiration date of the permit, the Permittee shall apply for a new permit at least 180 days prior to the expiration date of the permit. If the permit is not reissued by the time the existing permit expires, the existing permit remains in effect.
- O. OTHER INFORMATION:** Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the department, it shall promptly submit such facts or correct information to the department.
- P. RECORDS RETENTION:** The Permittee shall retain records of all monitoring information, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 5 years from the date of the sample, measurement, report or application. The Department may request that this period be extended by issuing a public notice to modify the permit.
- Q. PERMIT ACTIONS:** As provided in s. 283.53, Wis. Stats., after notice and opportunity for a hearing the permit may be modified or revoked and reissued for cause. If the Permittee files a request for a permit modification, revocation or reissuance, or a notification of planned changes or anticipated noncompliance, this action by itself does not relieve the municipality of any permit condition.
- R. SIGNATORY REQUIREMENT:** All applications, reports or information submitted to the Department shall be signed for by a ranking elected official, or other person authorized by them who has responsibility for the overall operation of the municipal separate storm sewer systems and storm water management program activities regulated by the permit. The representative shall certify that the information was gathered and prepared under their supervision and based on inquiry of the people directly under their supervision that, to the best of their

knowledge, the information is true, accurate, and complete.

- S. ENFORCEMENT ACTION:** The Department is authorized under s. 283.89 and 283.91, Wis. Stats., to utilize citations or referrals to the Department of Justice to enforce the conditions of this permit. Violation of a condition of this permit is subject to a fine of up to \$10,000 per day of the violation.
- T. ATTAINMENT OF WATER QUALITY STANDARDS AFTER AUTHORIZATION:** At any time after authorization, the Department may determine that the discharge of storm water from the Permittees MS4 may cause, have the reasonable potential to cause, or contribute to an excursion of any applicable water quality standard. If such determination is made, the Department may require the Permittee to do one of the following:
1. Develop and implement an action plan to address the identified water quality concern to the satisfaction of the Department.
 2. Submit valid and verifiable data and information that is representative of ambient conditions to demonstrate to the Department that the receiving water or groundwater is attaining the water quality standard.

PART V. DEFINITIONS

Definitions for some of the terms found in this permit are as follows:

Controls Condition means a pollutant-loading analysis that includes pollutant reductions from storm water management practices.

Department means Department of Natural Resources.

Erosion means the process by which the land's surface is worn away by the action of wind, water, ice or gravity.

Hazardous substance means any substance which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration or physical, chemical or infectious characteristics.

Illicit Connection means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer system.

Illicit Discharge means any discharge to a municipal separate storm sewer system that is not composed entirely of storm water except discharges authorized by a WPDES permit or other discharge not requiring a WPDES permit such non-storm water discharges that are **not** considered illicit discharges include: landscape irrigation, individual residential car washing, firefighting, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, flows from riparian habitats and wetlands and similar discharges.

Infiltration means the entry and movement of precipitation or runoff into or through soil.

Jurisdiction means the area where the Permittee has authority to enforce its ordinance(s) or otherwise has authority to exercise control over a particular activity of concern.

Land Disturbing Construction Activity means any man-made alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative soil cover that may result in storm water runoff and lead to increased soil erosion and movement of sediment into waters of the state. Land disturbing construction activity includes, but is not limited to, clearing and grubbing, demolition, excavating, pit trench dewatering, filling and grading activities.

Major Outfall means a municipal separate storm sewer outfall that meets one of the following criteria:

1. A single pipe with an inside diameter of 36 inches or more or equivalent conveyance (cross sectional area of 1,018 square inches) which is associated with a drainage area of more than 50 acres.
2. A MS4 that receives storm water runoff from lands zoned for industrial activity or from other lands with

industrial activity that is associated with a drainage area of 2 acres or more.

Maximum Extent Practicable means a level of implementing management practices in order to achieve a performance standard specified in ch. NR 151, Wis. Adm. Code, 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.

No Controls Condition means a pollutant-loading analysis that does not include pollutant reductions from storm water management practices.

Outstanding and Exceptional Resource Waters are listed in ss. NR 102.10 and 11, Wis. Adm. Code.

Outfall means the point at which storm water is discharged to waters of the state or leaves one municipality and enters another.

Permitted Area refers to the areas of land under the jurisdiction of the North Shore Group that drains into their MS4s, which is regulated under a permit issued pursuant to sub ch. I of NR 216, Wis. Adm. Code.

Permittee refers to the individual municipality permitted under the North Shore Group permit.

Redevelopment means areas where development is replacing older development.

Riparian Landowners are the owners of lands bordering lakes and rivers.

Sediment means settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.

Storm Water Management Practice means structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the state.

Storm Water Pollution Prevention Planning refers to the development of a site-specific plan that describes the measures and controls that will be used to prevent and/or minimize pollution of storm water.

Structural Storm Water Management Facilities are engineered and constructed systems that are designed to provide storm water quality control such as wet detention ponds, constructed wetlands, infiltration basins, and grassed swales.

Waters of the State include surface waters, groundwater and wetlands.

WPDES Permit means a Wisconsin Pollutant Discharge Elimination Systems permit issued pursuant to ch. 283, Wis. Stats