

**STORM WATER
POLLUTION PREVENTION PLAN
(SWPPP)**

WPDES Municipal Storm Water Permit No. WI-S050113-1



**PREPARED FOR:
MILWAUKEE COUNTY
McKINLEY MARINA
1750 LINCOLN MEMORIAL DRIVE
MILWAUKEE, WISCONSIN 53202**

Prepared By:

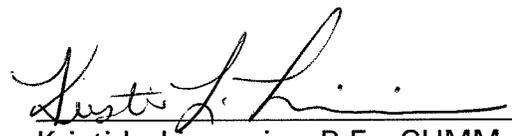


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Date: August 2011


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STORM WATER POLLUTION PREVENTION PLAN CERTIFICATION

I certify under penalty of law that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information contained in the plan. Based on my inquiry of the person, or persons, who manage the system, or those persons directly responsible for gathering the information; the information contained in this document is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for providing false information, including the possibility of fine and imprisonment. In addition, I certify under penalty of law that, based upon inquiry of persons directly under my supervision, to the best of my knowledge and belief, the provisions of this document adhere to the provisions of the storm water permit for the development and implementation of a Storm Water Pollution Prevention Plan and that the plan will be complied with.

Name

Title

Signature

Date

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INTRODUCTION

Milwaukee County Parks Department owns and operates McKinley Marina, located at 1750 Lincoln Memorial Drive, Milwaukee. The marina maintains slips for approximately 700 vessels and is a launch site for other boat owners. There are restroom, shower, and laundry facilities as well as a snack bar. Operations potentially affecting storm water quality at McKinley include boat fueling, dry dock storage, light boat maintenance, boat washing, and fish cleaning.

Milwaukee County was issued a Municipal Wisconsin Pollutant Discharge Elimination System (WPDES) Municipal Storm Water Permit No WI-S050113-1 effective December 15, 2006. A copy of the municipal discharge permit is included in Appendix A.

As set forth in Part II Section F of the permit, the County is required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for garages, storage areas, and other sources of storm water pollution. The goal of the SWPPP is to prevent contaminants from polluting waters of the state through discharge in storm water. Storm water from McKinley Marina is discharged to Lake Michigan.

This document has been prepared utilizing the WDNR's Industrial Storm Water Pollution Prevention Planning manual as guidance.

POLLUTION PREVENTION TEAM

McKinley Marina has designated a pollution prevention team that is responsible for developing, implementing, maintaining, and revising the SWPPP. The team members and their responsibilities are as follows:

<i>Name</i>	<i>Responsibilities</i>
Eric Lesch Manager McKinley Marina Operations Office Phone: (414) 273-5224	<ul style="list-style-type: none">• Coordinate employee training• Implementation of BMPs• Monitor compliance with the SWPPP• Spill response• Keep grounds clean, and prevent spills
Laura Schloesser Department of Parks Recreation and Culture Office Phone: (414) 257-7143	<ul style="list-style-type: none">• Support for BMP implementation
Tim Detzer Environmental Engineer Milwaukee County DPTW – Environmental Services Office Phone: (414) 278-2988	<ul style="list-style-type: none">• Signatory Authority• Coordinate plan development• Maintain records• WDNR contact person• Ensure reports are submitted to regulatory agencies as required

SITE MAP

A facility site map has been prepared indicating approximate property lines, storm drainage areas and collection system, and numbered storm water outfalls. Approximately 85% of the site consists of building, asphalt, or concrete and is therefore impervious. The outfalls have the following approximate drainage areas.

Marina Section	Outfall	Drainage Area (ft ²)
North (Slips A-D)	01	231,739.2
	02	256,568.4
	03	104,108.4
	04	101,059.2
Center (Slips E-K)	05	33,976.8
	06	44,431.2
	07	27,007.2
	08	31,363.2
	09	24,829.2
South (Slips L-P)	10	31,363.2
	11	37,897.2
	12	40,075.2
	13	45,738.0

<u>Outfall</u>	<u>Percentage of Impervious Area</u>
01-04 (North Marina)	80%
05-09 (Center Marina)	90%
10-13 (South Marina)	90%

McKinley Marina North Slips

Discharge at Outfall 01 consists of surface runoff from the northeast portion of McKinley Marina North. Activities on the northeast section of McKinley Marina North include vehicle parking, boat launching and washing. Surface runoff flows east to Lake Michigan via the boat launch area in the northeast corner.

Discharge at Outfall 02 consists of surface runoff from the northwest and central portions of McKinley Marina North and also includes the fueling dock. Activities conducted this portion of the McKinley Marina North include boat fueling, sewage pump out, dry dock storage, light boat maintenance activities and vehicle parking. Surface runoff flows to one of three catch basins. Two of the catch basins are located in the northwest portion of the dry dock storage area and the third catch basin is located on the southeast side of the dry dock storage area. Storm water is conveyed via a 6-inch pipe that transitions to an 8-inch pipe discharging at Outfall 02 which is located in the northwest corner of the A-D boat slip area.

Discharge at Outfall 03 consists of surface runoff from the southeast side of McKinley Marina North. Activities conducted on the southeast end of McKinley Marina North include vehicle parking. Surface runoff flows either to a storm water inlet located in the southeast portion of the parking lot or sheet flows off the property on the southeast end. Storm water collected by the storm water inlet is conveyed via an 18-inch pipe to Outfall 03 which is located on the southwest side of the A-D boat slip area.

Discharge at Outfall 04 consists of surface runoff from the southwest side of McKinley Marina North. Activities conducted on the southwest end of McKinley Marina North include general facility maintenance equipment storage and vehicle parking. Surface runoff flows off the property in the southwest corner of McKinley Marina North.

McKinley Marina Center Slips

Discharge at Outfalls 05 through 09 consists of surface runoff from the vehicle parking area west of the E-K boat slips. Surface runoff flows to storm water inlets and is conveyed via 12 inch piping to the outfalls running north and south discharging to Lake Michigan on the west side of the E-K boat slip area.

McKinley Marina South Slips

Discharge at Outfalls 10 through 12 consists of surface runoff from the vehicle parking area along the south end. Surface runoff flows to storm water inlets located on the north and south ends of the L-P boat slip area. Storm water is conveyed via 15, 18 and 24 inch piping to the outfalls running north and south on the west side of the L-P boat slip area.

Discharge at Outfall 13 consists of surface runoff from the grass area on the southeast side of McKinley Marina South. Surface runoff flows to a catch basin located on the southeast end of the L-P boat slip area. Storm water is conveyed via a 24-inch pipe to Outfall 13 located in the southeast corner of the facility.

The locations of the potential sources of storm water contamination are indicated on the site map.

POTENTIAL SOURCES OF STORM WATER CONTAMINATION

The primary potential pollutant source areas present at McKinley Marina are described in the following paragraphs.

Boat Fueling

Boat fueling occurs as indicated in Figure 1 at the fueling dock. The fueling dock is equipped with 3 fuel dispensers (2 nozzles each) that dispense diesel and gasoline fuels. Drainage from the boat fueling dock discharges directly to Lake Michigan.

Fuel Storage

Diesel fuel and gasoline are stored in underground storage tanks (USTs) located west of the fueling dock and south of the boat launch on the north end of McKinley Marina. The diesel and gasoline tanks have storage capacities of 4,000 and 15,000 gallons, respectively. Filling of the storage tanks occurs directly above the storage tanks. Drainage from this area flows east to the boat launch area (Outfall 01).

Marine Sanitation Devices (MSDs)

Sanitary waste is vacuumed from boat MSDs at the fueling dock at McKinley Marina North. There is one MSD pump out station located directly adjacent to each of the 3 fuel dispensers at the fueling dock. Waste collected from the MSDs is stored in a 300-gallon holding tank located at the far east end of the dock. When the holding tank is full a float switch is activated and the waste is pumped to the sanitary sewer system. Storm water from this area discharges directly to Lake Michigan.

Boat Washing

A hose for boat washing is located at the boat launch in the North section of McKinley Marina. Washing activities, which generally occur at the end of the boating season prior to seasonal storage, are authorized by WPDES Permit WI-0059153-3. In accordance with the solids removal requirements of the permit, the wash area will be equipped with a fabric filter that is designed to prevent solids and other contaminants from reaching Lake Michigan. Drainage from the boat washing area discharges directly to Outfall 01.

Boat Storage/Light Boat Maintenance

Boats are stored in the dry dock storage area located in the northwest portion of the north section of McKinley Marina. Light boat maintenance activities (i.e. oil changes, sanding, scraping, painting, winterizing) also occur in the storage area. Drainage from the dry dock storage area flows to storm water inlets located in the northwest and southeast corners of the storage area. Storm water collected at these inlets discharges to Lake Michigan at Outfall 02.

Fish Cleaning

An enclosed fish cleaning station is located in the north section of the McKinley Marina west of the boat launch on the east end of the vehicle parking area. The cleaning station is equipped with a grinder that grinds unwanted fish parts prior to being discharged to the sanitary sewer system. Drainage from the fish cleaning station flows east to Outfall 01.

General Facility Maintenance

General maintenance equipment is stored in a storage shed located in the southwest portion of the north section of the McKinley Marina. Materials stored in the shed include lawn mowers, janitorial supplies and additional building maintenance equipment. Drainage from the equipment storage shed flows to storm water inlets located in west of the storage area. Storm water collected at these inlets discharges at Outfall 03.

Waste Storage

General refuse is stored in dumpsters or trashcans throughout McKinley Marina. Veolia is contracted to haul waste from the facility. Drainage from the waste storage containers flows to the nearest adjacent outfall.

Potable Toilets

Two portable toilets are located in the north section of the McKinley Marina just north of the boat launch area. A private contractor is responsible for maintaining the toilets. Drainage from this area discharges to Outfall 01.

MATERIAL INVENTORY

The following table summarizes the materials that are present at McKinley Marina:

Material	Location
Diesel and Unleaded Gasoline	Underground tanks, north section of marina, east side adjacent to boat launch/fueling dock, 3 dispensers, loading outdoors
Waste from MSDs	Aboveground storage tank, north section of marina, east end of fueling dock, 3 pump out stations, transfer conducted outdoors
Maintenance Equipment and Gasoline	Storage shed in the southwest corner of the north section of marina
Refuse	Outdoors, throughout the marina

STATUS OF NON-STORM WATER DISCHARGES

The outfalls at the McKinley Marina are visually observed during dry weather conditions in order to identify the existence of dry weather flow, stains, sludge, color, odor or other indications of a non-storm water discharge. Inspection documentation is maintained in Appendix B.

BEST MANAGEMENT PRACTICES

McKinley Marina incorporates the following BMPs into their facility operations.

Structural Containment/Diversion

- The diesel and unleaded underground storage tanks are equipped with spill containers at the fill ports and at the dispensers. Fuel piping is double walled.
- Refuse collected in the north end dumpster is covered.
- An absorbent device (Filtrexx Soxx) will be located at the boat wash area prior to the end of the boating season to contain runoff from washing activities. An additional absorbent

device will be located at the storm water inlets in the northwest corner of the dry dock storage area.

Good Housekeeping

The facility parking areas are swept periodically as needed.

Spill Prevention

The McKinley Marina has an Emergency Response Plan in place which includes spill response procedures. A spill kit is maintained at the fueling dock in order to respond to a minor product spill.

Erosion Control

The shoreline at McKinley Marina has been designed to minimize erosion. With the exception of the shoreline, McKinley Marina does not currently have any areas particularly subject to erosion. As part of any new construction projects at the facility, McKinley will work with their contractors to evaluate the need for erosion control measures. McKinley Marina will require that contractors provide erosion control measures as necessary.

Inspections

All areas of the McKinley Marina will be inspected on a quarterly basis for signs of potential storm water contamination. Any observed problems will be recorded, reported to appropriate McKinley Marina personnel, and corrected as soon as possible. An Inspection/Good Housekeeping Checklist will be followed when the facility inspections are performed. A copy of the checklist and records of inspections are maintained in Appendix B of the SWPPP.

Customer Education

Customers of McKinley Marina leasing a boat slip are provided with a guidance document (Clean Marina: Guidelines for McKinley Marina) that discusses facility rules and tips to protect from discharging harmful materials to the lake. The document covers environmentally friendly boat cleaning agents, engine maintenance tips, wastewater contaminants and disposal guidelines, hull maintenance tips, fuel and oil control, and solid waste contaminant and disposal guidelines. Customers that utilize the dry dock storage area receive a guidance document (Clean Storage at McKinley Marina) that discusses the facility rules for storage and light boat maintenance activities. The document covers boat painting, washing, waxing, sanding, and waste disposal and recycling activities.

Employee Training

Employees at McKinley Marina are trained to practice good housekeeping procedures and preventive maintenance. Employees will receive training on the SWPPP on an annual basis. Employee training is documented on forms (see Appendix C) which are retained with the SWPPP.

BMP Summary

The following table summarizes the potential pollutant storm water sources, their existing management practices, and BMPs to be implemented:

<i>Potential Pollutant Source Identification & BMPs</i>		
Outfall	Potential Storm Water Pollutant Sources	BMPs
01 through 12	Vehicle Parking	Periodically sweep as needed
01	Fuel Storage and Transfer	Visual Inspection, Absorbent Materials Available, Preventative Maintenance
01	Sewage Storage and Transfer	Visual Inspections, Absorbent Materials Available, Preventative Maintenance
02	Boat Storage and Washing/Light Maintenance	Visual Inspections, Absorbent Materials Available, Preventative Maintenance, Education
04	Equipment Storage	Visual Inspections, Absorbent Materials Available, Preventative Maintenance
01 through 13	Waste Storage	Closed/Covered, Visual Inspections

EVALUATION AND MONITORING

Monitoring at McKinley Marina will consist of the following:

- Comprehensive Annual Facility Site Compliance Inspection (AFSCI)
- Quarterly Visual Inspection of Storm Water Discharge Quality
- Semi-annual Non-storm Water Discharge Evaluation
- Good housekeeping inspections

Comprehensive Annual Facility Site Compliance Inspection

In order to monitor and evaluate McKinley Marina’s storm water compliance, an annual facility site compliance inspection is performed. Prior to conducting the site inspection, the SWPPP and facility operations are reviewed. McKinley Marina personnel (or designee) then conduct the site inspection, evaluating the implementation and effectiveness of the BMPs. Documentation of the inspection, including date, personnel, scope, and major observations, is made. The SWPPP is modified and revised as necessary according to the results of the facility inspection. Records of the inspection (on WDNR’s Annual Facility Site Compliance Inspection (Form 3400-176)) are retained in Appendix B of the SWPPP.

Quarterly Visual Inspection of Storm Water Discharge Quality

Quarterly inspections at each of the storm water outfalls are performed during storm events in order to document that storm water is not likely to be contaminated. Observations are made

during the first thirty minutes of the storm event when possible. Inspection personnel look for indicators of storm water pollution such as color, odor, turbidity, floating solids, foam, and oil sheen. Records of these inspections (on the WDNR's Quarterly Visual Inspection Field Sheet (Form 3400-176A)) are retained in Appendix B of the SWPPP.

Semi-Annual Non-Storm Water Discharge Inspection

Semi-annual inspections at each of the storm water discharge outfalls are performed during dry weather conditions. Each outfall is observed for signs of contamination. Records of these inspections are retained with the SWPPP in Appendix B.

Good Housekeeping Inspections

Quarterly good housekeeping inspections are performed throughout the facility. All areas are inspected for general cleanliness and possible signs of storm water contamination. Records these inspections are retained with the SWPPP in Appendix B.

SCHEDULE

The schedule for complying with the storm water regulations and implementing the BMPs is presented in the table below.

<i>Implementation Schedule</i>	
Task	Frequency
Train Employees on SWPPP	Annually
Inspect Site Utilizing Good Housekeeping Checklist	Quarterly
Visual Inspection of Storm Water Discharge	Quarterly
Non-storm Water Discharge Evaluations	Semi-annually
Annual Facility Site Compliance Inspection	Annually

Appendix A

WPDES Municipal Storm Water Discharge Permit No. WI-S050113-1



**STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES**

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

In compliance with the provisions of Chapter 283, Wisconsin Statutes:
MILWAUKEE COUNTY
is permitted to discharge storm water from
ALL PORTIONS OF THE MUNICIPAL SEPARATE STORM SEWER SYSTEM
owned or operated by the County of Milwaukee to waters of the state in the following watersheds:

**MILWAUKEE RIVER
MENOMONEE RIVER
KINNICKINNIC RIVER
ROOT RIVER
OAK CREEK
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, December 15, 2011.

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, Wis. Adm. Code, at least 180 days prior to this expiration date.

State of Wisconsin Department of Natural Resources

For the Secretary

By

James M. Ritchie

James M. Ritchie
Stormwater Specialist

12/15/06

Date of Signature

EFFECTIVE DATE: December 15, 2006

EXPIRATION DATE: December 15, 2011

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GENERAL DESCRIPTION AND PURPOSE OF THE WPDES STORM WATER PERMIT FOR MILWAUKEE COUNTY

Milwaukee County owns and operates numerous municipal separate storm sewer systems that discharge to waters of the state.

Discharges from storm sewer systems may consist of runoff from rain events or snow melt and fluids from spills or illicit connections. Pollutants of concern found in storm sewer system discharges include organic materials, suspended solids, metals, nutrients, bacteria, pesticides, fertilizer, and traces of toxic materials.

This WPDES permit regulates discharges from Milwaukee County's municipal separate storm sewer system in accordance with s. 283.33, Wis. Stats., and ch. 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 under the ownership, control or jurisdiction of Milwaukee County that contribute to discharges from the “municipal separate storm sewer systems” or MS4 owned or operated by Milwaukee County. Municipal separate storm sewer system means a conveyance or system 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. The County’s permit application and storm sewer system maps define the permitted area further.
- 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:** This permit specifies the conditions under which storm water can be discharged to waters of the state for the purpose of achieving water quality standards contained in chs. NR 102 through 105, 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. If the Department of Natural Resources (the Department) determines that the discharge of storm water from a permittee’s Municipal Separate Storm Sewer System (MS4) contributes to an exceedence of any applicable water quality standard, the Department may require the permittee to develop an action plan to adequately address the identified water quality concern, or submit valid and verifiable data and information that are representative of ambient conditions to indicate that the receiving water is attaining the water quality standard.
- D. **Outstanding and Exceptional Resource Waters**
1. The permittee shall determine whether any part of its MS4 discharges either directly or indirectly to an outstanding resource water (ORW) or exceptional resource water (ERW). ORWs and ERWs are listed in ss. NR 102.10 and 102.11, Wis. Adm. Code. ORWs and ERWs are also listed on the Department’s Internet site at: <http://dnr.wi.gov/org/water/wm/wqs/>.
 2. The storm water management programs required under this permit shall be designed to eliminate, to the maximum extent practicable, the discharge of pollutants to an ORW or ERW.
 3. If the permittee’s MS4 discharges to an ORW or ERW waterbody, 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 eliminate the discharge of any pollutants to the maximum extent practicable. This section of the permittee’s program shall specifically identify control measures and practices that will collectively control the discharge of pollutants and explain why these control measures and practices were chosen as opposed to other alternatives.
- E. **Impaired Water Bodies and Total Maximum Daily Load Requirements**
1. The permittee shall determine whether any part of its MS4 discharges either directly or indirectly 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). An updated list of Wisconsin impaired water bodies is listed on the Department’s Internet site at: <http://dnr.wi.gov/org/water/wm/wqs/303d/303d.html>.
 2. If the permittee’s 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 the discharge of any pollutant(s) of concern. This section of the permittee's program shall specifically identify control measures and practices that will collectively control the discharge of the pollutant(s) of concern and explain how this will be accomplished. Pollutant(s) of concern means a pollutant that is causing impairment of an impaired water body.

3. The permittee shall determine whether its MS4 discharges to an impaired water body for which the Department has approved a total maximum daily load (TMDL). If so, the permittee shall assess whether the TMDL allocation for the MS4 is being met through the existing storm water management controls or whether additional control measures are necessary. The permittee's assessment of whether the TMDL allocation is being met shall focus on the adequacy of the permittee's storm water controls (implementation and maintenance). Approved TMDLs are listed on the Department Internet site at: <http://dnr.wi.gov/org/water/wm/wqs/303d/index.html>.

4. The storm water management program developed under Part 2 of this permit shall be redesigned as necessary to achieve and maintain compliance with any Department approved-TMDL allocation for an impaired water to which the MS4 discharges. The redesigned storm water management programs shall be implemented as soon as possible.

F. **GENERAL STORM WATER DISCHARGE LIMITATIONS:** Milwaukee County may not discharge the following substances from the municipal separate storm sewer systems 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.

G. **INDIVIDUAL RESPONSIBILITY:** Milwaukee County is responsible for:

1. Compliance with conditions of this permit relating to discharges from those portions of the municipal separate storm sewer system where the County is the owner or operator.
2. Storm water management program implementation, as required by this permit, on portions of the County that drain to its municipal separate storm sewer system where it is the owner or operator.
3. All other activities required by this permit.

Part II. PERMIT CONDITIONS

A. **PUBLIC EDUCATION AND OUTREACH:** Milwaukee County shall implement a public education and outreach program to increase the awareness of storm water pollution impacts on waters of the state to encourage changes in public behavior to reduce impacts. The program shall establish measurable goals and, at a minimum, include the following elements:

1. Promote detection and elimination of illicit discharges and water quality impacts associated with such discharges of pollution into municipal separate storm sewer systems. This may include storm water inlet stenciling, employee alert bulletins, and cooperative efforts with State and local governments.
2. Inform and educate employees and the public about the proper management of materials that may cause storm water pollution from sources including automobiles, pets, household hazardous waste and household practices.
3. Promote beneficial onsite reuse of leaves and grass clippings and proper use of lawn and garden fertilizers and pesticides.
4. Promote the management of streambanks and shorelines on County lands to minimize erosion and restore and enhance the ecological value of waterways.
5. Promote infiltration of residential storm water runoff from rooftop downspouts, driveways and sidewalks.
6. Inform and educate those responsible for the design, installation, and maintenance of construction site erosion control practices and storm water management facilities on how to design, install, and maintain the practices.
7. Target County departments and activities that may pose a storm water contamination concern, and where appropriate, educate specific audiences including grounds workers and maintenance shops on methods of storm water pollution prevention.
8. Promote environmentally sensitive land use decisions by planners and designers.

B. **PUBLIC INVOLVEMENT AND PARTICIPATION:** Milwaukee County 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 and comply with applicable state and local public notice requirements.

C. **ILLICIT DISCHARGE DETECTION AND ELIMINATION:** Milwaukee County shall develop, implement and enforce a program to detect and remove illicit connections and discharges to the municipal separate storm sewer system. The program shall include measurable goals and include all of the following:

1. A legal authority, policy, or other regulatory mechanism to prevent and eliminate illicit discharges and connections to the municipal separate storm sewer system. At a minimum, the ordinance, policy, 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 MS4.
 - 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, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, fire fighting and discharges authorized under a WPDES permit unless identified by the permittee as significant source of pollutants to waters of the state.
 - c. Establish inspection and enforcement responsibilities.

2. Field screening at all major outfalls during dry weather periods. Outfalls will be evaluated annually, on an on-going basis, at all major outfalls during dry weather periods (typically 72 hours after any measurable rainfall). At a minimum, field screening shall be documented and include:
 - a. Visual 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 flow is observed, a field analysis shall be conducted to determine the presence of illicit non-storm water discharges or illegal dumping. The field analysis shall include sampling for pH, total chlorine, total copper, total phenol and detergents, unless the County elects instead to use detergent, ammonia, potassium and fluoride as the indicator parameters. Other alternative indicator parameters may be authorized by the Department in writing.

Note: Detergent, ammonia, potassium and fluoride indicator parameters provide a better screening tool to identify whether the flow is contaminated with sanitary or wastewater, and also whether the source is a tap water or a natural source of water. The Center for Watershed Protection (CWP) has illicit discharge identification and elimination guidance available at http://www.cwp.org/idde_verify.htm. The CWP guidance includes illicit discharge field sampling guidance developed by Robert Pitt from the University of Alabama on how best to detect illicit discharges including recommended indicator parameters and associated levels of detection.

- i. Field screening points shall, where possible, be located downstream of any source of suspected illegal or illicit activity.
 - ii. Field screening points shall be located where practicable at the farthest manhole or other accessible location downstream in the system. 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 building in the area, history of the area and land use types.
3. Chloride Study. Milwaukee County has expressed an interest in their permit application to conduct a chloride study to quantify and monitor the concentration of chloride pollutants entering waterways via storm water as a result of deicing activities on arterial streets and highways. Milwaukee County may substitute some of the field screening requirements from Part II.C.2. above with the proposed chloride study. If the County chooses to pursue this effort, a monitoring proposal and revised field screening program shall be submitted to the Department for approval by **October 31, 2007**.
4. Procedures for responding to known or suspected illicit discharges. At a minimum, procedures shall established for:
 - a. Immediately 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 system including tracking 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 system.
 - d. Notifying the Department immediately 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 permittee shall cooperate with the Department in

efforts to investigate and prevent such discharges from polluting waters of the state.

- e. Identified illicit discharges or connections shall be eliminated within three working days to the maximum extent practicable. If it will take more than three working days to remove an illicit connection, the Department shall be contacted to discuss an appropriate action and / or timeframe for removal.
- f. To the maximum extent practicable, eliminating or minimizing leakage from sanitary conveyance systems into the municipal separate storm sewer system.
- g. Providing 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. In the case of an illicit discharge that originates from the County's permitted area and that discharges directly to a storm sewer system or property under the jurisdiction of another municipality, the County shall notify the affected municipality within one working day.
- i. The name, title and phone number of the individuals(s) responsible for responding to reports of illicit discharges and spills shall be included in the illicit discharge response procedure and submitted to the Department in accordance with Part III.C.3

D. CONSTRUCTION SITE POLLUTANT CONTROL. Milwaukee County shall develop, implement and enforce a program to reduce the discharge of sediment and construction materials from its construction sites. The program shall establish measurable goals and include:

- 1. A legal authority, policy, or other regulatory mechanism to require erosion and sediment control at construction sites and establish sanctions to ensure compliance. At a minimum, the ordinance, policy, or other regulatory mechanism shall establish or include:

Note: The County has identified in their permit application that in lieu of a County ordinance, the County defers to the applicable municipal construction erosion control ordinance for all county projects. Construction activities undertaken by Milwaukee County, as well as all other construction activities occurring on Milwaukee County owned lands, are required to follow the construction erosion control ordinance of the applicable municipality that the project is within. To fulfill this permit requirement, the County can submit to the Department a declaration or other written policy that identifies this procedure.

- a. Applicability and jurisdiction.
 - i. It shall apply to construction sites with one acre or more of land disturbance, and sites of less than one acre if they are part of a larger common plan of development or sale under the jurisdiction of the permittee.
 - ii. It does not have to apply to construction sites that are listed under s. NR 216.42(2) to (11), Wis. Adm. Code, except that it shall apply to construction sites listed under s. NR 216.42 (4) and (9) where erosion control authority has been delegated by the Wisconsin Department of Commerce to the permittee.
 - iii. If the permittee does not have authority from the Wisconsin Department of Commerce (Commerce) to regulate erosion control at public buildings and places of employment, the permittee shall request such authority from Commerce pursuant to s. 101.1205(4), Wis. Stats., by January 1, 2007.
- b. Erosion and sediment control criteria, standards and specifications equivalent to those approved by the Department. Department erosion and sediment control standards are available through the Department's stormwater internet site at:
<http://dnr.wi.gov/org/water/wm/nps/stormwater.htm>.

- c. Construction site performance standards equivalent to or more restrictive than those in ss. NR 151.11 and 151.23, Wis. Adm. Code.
 - d. Erosion and sediment control plan requirements.
 - e. Permitting requirements, easement policies, procedures, and application.
 - f. Inspection and enforcement responsibility.
 - g. Requirements for construction site owners or operators to manage waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site so as to minimize adverse impacts to waters of the state.
2. Procedures for construction site inspection and enforcement of erosion and sediment measures. At a minimum, the procedures shall establish:
 - a. County departments or staff responsible for construction site inspections and enforcement.
 - b. Construction site inspection frequency and documentation
 - c. Enforcement mechanisms that will be used to achieve compliance.
 3. Procedures for site planning which incorporate consideration of potential water quality impacts.
 4. Procedures for receipt and consideration of information submitted by the public.
- E. POST-CONSTRUCTION STORM WATER MANAGEMENT. Milwaukee County shall develop, implement, and enforce a program to control the quantity and quality of discharges from areas of new development and redevelopment, after construction is completed. The program shall establish measurable goals and include:
1. A legal authority, policy, or other regulatory mechanism to regulate post-construction storm water discharges from new development and redevelopment. At a minimum, the ordinance, policy, or other regulatory mechanism shall establish or include:

Note: The County has identified in their permit application that in lieu of a County ordinance, the County defers to the applicable municipal post-construction storm water discharge ordinance for all county projects. Construction activities undertaken by Milwaukee County, as well as all other construction activities occurring on Milwaukee County owned lands, are required to follow the post-construction storm water discharge ordinance of the applicable municipality that the project is within. To fulfill this permit requirement, the County can submit to the Department a declaration or other written policy that identifies this procedure.

- a. Applicability and jurisdiction that shall apply to construction sites with one acre or more of land disturbance, and sites of less than one acre if they are part of a larger common plan of development or sale under the jurisdiction of the permittee.
- b. Design criteria, standards and specifications equivalent to technical standards or the Wisconsin Storm Water Manual approved by the Department. The Department approved technical standards shall take precedence over the Wisconsin Storm Water Manual. The Department approved technical standards and the Wisconsin Storm Water Manual are available at <http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm>.
- c. Post-construction performance standards equivalent to or more restrictive than those in ss. NR 151.12 and 151.24, Wis. Adm. Code.
- d. Storm water plan requirements for landowner of construction sites.
- e. Permitting requirements, easement policies, procedures and application.

- f. Long-term maintenance requirements for landowners and other persons responsible for long-term maintenance.
 - g. Inspection and enforcement responsibilities.
2. Procedures that will be used for site planning by landowners and developers which incorporate consideration of potential water quality impacts.
 3. Procedures that will be used by the County to ensure the long-term maintenance of storm water management facilities.
- F. **POLLUTION PREVENTION:** Milwaukee County shall develop and implement a pollution prevention program that establishes measurable goals for pollution prevention. The program shall include:
1. Routine inspection and maintenance of County owned, permitted, or operated structural storm water management facilities to maintain their pollutant removal operating efficiency.
 2. Routine street sweeping and catch basin cleaning where appropriate.
 3. Proper disposal of street sweeping and catch basin cleaning waste.
 4. If road salt or other deicers are applied by the permittee, no more shall be applied than necessary to maintain public safety.

Note: The Wisconsin Department of Transportation (DOT) "Highway Maintenance Manual", chapter 35, contains guidance on application of road salt and other deicers that can be used to determine whether not application is necessary and what application rate is appropriate for deicing and ice prevention. This information is held on a secured server and users must first register with the state of Wisconsin to obtain an ID and password. You can learn more about getting connected to this secured server at:
<http://www.dot.wisconsin.gov/business/extranet/>.

5. Proper collection and disposal of leaves and grass clippings, which may involve beneficial on-site reuse as opposed to collection.
 6. Storm water pollution prevention planning for County garages, storage areas and other sources of storm water pollution, including quarterly inspections of these facilities. (Note: Storm water pollution prevention plans have been prepared for several facilities as listed in the permit application).
 7. Application of lawn and garden fertilizers on County controlled properties, with pervious surfaces over 5 acres each, in accordance with a site-specific nutrient application schedule based on appropriate soil tests.
- G. **STORM WATER QUALITY MANAGEMENT:** Milwaukee County shall develop and implement a municipal storm water management program. This program shall achieve 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 ss. NR 151.12 or 151.24, Wis. Adm. Code. (Note: projects prior to Oct. 1, 2004). (Note: each permitted municipality within Milwaukee County shall also develop and implement their own storm water management program and achieve compliance with NR 151.13(2), Wis. Adm. Code). The program shall include:
1. To the maximum extent practicable, implementation of storm water 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, to the maximum extent practicable, by October 1, 2008. (Please note that by Oct. 1, 2013 the requirement for reduction of total suspended solids will be 40%). (Note: reconstruction or redevelopment projects should be targeted to incorporate storm water management practices to help attain the 20% and 40% total suspended solids reduction requirements). The County may elect to meet the 20% total suspended solids standard on a watershed or regional basis by working with other permittee(s) to provide regional treatment that collectively meets the standard.

Note: Pursuant to s. NR 151.13(2), Wis. Adm. Code, the total suspended solids reduction requirement increases to 40% by March 10, 2013. The 20% and 40% 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/org/water/wm/nps/stormwater/techstds.htm>.

2. Evaluation of all County owned, operated, or permitted structural flood control facilities to determine the feasibility of retrofitting to increase total suspended solids removal from runoff.
3. Assessment of compliance with s. NR 151.13(2), Wis. Adm. Code, by conducting a pollutant-loading analysis using a model such as SLAMM, P8 or equivalent methodology approved by the Department. At a minimum, the average annual total suspended solids and phosphorus loads to the MS4 shall be determined for the cumulative discharge from all outfalls for the controls and no controls conditions. For purposes of evaluating the modeling, pollutant loads for grouped drainage areas as modeled shall be reported. The modeling shall calculate the theoretical annual average mass of total suspended solids generated for the entire area served by a municipal separate storm sewer system within the permittee's jurisdiction with no controls or BMPs applied. Modeling to reflect the current state of controls and BMPs shall be judged against the no controls condition to determine the percent of reduction. A storm water infiltration system is considered to be a control or BMP. Controls and BMPs that exist at the time of permit issuance may be used to achieve this reduction. This pollutant level reduction applies to total suspended solids only. If the assessment of compliance indicates that compliance with s. NR 151.13(2), Wis. Adm. Code, will not be achieved by October 1, 2008, a compliance plan and schedule shall be developed.

H. STORM SEWER SYSTEM MAP. Milwaukee County shall maintain a current municipal separate storm sewer system map. The municipal storm sewer system map shall include:

1. Identification of waters of the state, watershed boundaries, name and classification of receiving waters, identification of whether the receiving water is listed as an impaired water under s. 303 (d) of the Clean Water Act, storm water drainage basin boundaries for each MS4 outfall and municipal separate storm sewer conveyance systems.
2. Identification of all known municipal storm sewer system outfalls discharging to waters of the state or other municipal separate storm sewer systems. Major outfalls shall be uniquely identified.
3. Location of any known discharge to the municipal separate storm sewer system that has been issued WPDES permit coverage by the Department. A list of WPDES permit holders in the permittee's area may be obtained from the Department.
4. Location of municipally owned or operated structural storm water facilities including detention basins, infiltration basins, and manufactured treatment devices. If the permittee will be taking credit for pollutant removal from privately-owned facilities they must be identified.
5. Identification of publicly owned parks, recreational areas and other open lands.
6. Location of municipal garages and other public works facilities.
7. Identification of streets.

I. LAKE MICHIGAN OUTFALLS. Milwaukee County shall address adverse impacts from storm water discharges to Bradford Beach and McKinley Beach from the County's storm sewer outfalls. The County has indicated to the Department that it is evaluating alternatives to address the problems associated with these storm sewer outfalls, in an effort to reduce the impact of storm water pollution on, and improve the water quality of Lake Michigan at Bradford Beach and McKinley Beach. Consistent with Part I. C. and D. of this permit, the County shall, by **March 31, 2007** submit a proposal to the Department for review and approval that contains the following:

1. An evaluation of alternatives to address the problems associated with the County's storm sewer outfalls at

Bradford Beach and McKinley Beach.

2. A recommended alternative to achieve water quality improvements at the storm water discharges from the County's storm sewer outfalls at Bradford Beach and McKinley Beach.
3. A schedule to implement the agreed upon alternative(s) by **January 1, 2009**.

J. ANNUAL REPORT. Milwaukee County shall submit an annual report to the Department for each calendar year. The County shall invite the municipal governing body, interest groups and the general public to review and comment on the annual report. The annual report shall include:

1. The status of implementing the permit requirements and compliance with permit schedules.
2. Updated storm sewer system maps, where necessary, to identify any new outfalls, structural controls, or other note worthy changes.
3. A summary describing:
 - a. The number and nature of inspections and enforcement actions conducted to ensure compliance with the required ordinances.
 - b. Public education and outreach programs for each of the eight areas listed in Part II.A.
 - c. Spill responses.
 - d. Street sweeping frequency and the amount collected.
 - e. Catch basin cleaning frequency and the amount collected.
 - f. Any other activities that have measurable results.
4. A summary of revisions made to the stormwater management plan.
5. Proposed revisions to the stormwater management program.
6. A fiscal analysis which includes the annual expenditures and budget for the reporting year, and the proposed budget for the next year.
7. Identification of any known or perceived water quality improvements or degradation in the receiving water to which the permittee's MS4 discharges. Where degradation is identified, identify why and what actions are being taken to improve the water quality of the receiving water.
8. A duly authorized representative of Milwaukee County shall sign and certify the annual report and include a statement or resolution that the County Board or County Supervisors have reviewed or been apprised 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 III. COMPLIANCE SCHEDULE

Milwaukee County shall achieve compliance with the specific permit conditions contained in Part II in accordance with the following schedule:

- A. **PUBLIC OUTREACH AND EDUCATION:** The County shall submit the proposed public education and outreach program to the Department by **March 31, 2008**. The public outreach and education program shall be implemented by **September 30, 2008**.
- B. **PUBLIC INVOLVEMENT AND PARTICIPATION:** The County shall submit the proposed public involvement and participation program to the Department by **March 31, 2008**. The County shall implement the public involvement and participation program by **September 30, 2008**.
- C. **ILLCIT DISCHARGE DETECTION AND ELIMINATION:**
 - 1. The County shall submit the proposed illicit discharge and elimination legal authority or other regulatory mechanism to the Department by **October 31, 2007**. The County shall adopt the illicit discharge and elimination ordinance or other regulatory mechanism by **April 30, 2008**.
 - 2. The County shall complete initial field screening by **December 31, 2007**.
 - 3. The County shall submit the chloride study proposal, if it chooses to pursue it, by **October 31, 2007**.
 - 4. The County shall submit the proposed illicit discharge response procedures to the Department by **October 31, 2007**. Illicit discharge response procedures shall be implemented by **April 30, 2008**.
- D. **CONSTRUCTION SITE POLLUTANT CONTROL:**
 - 1. The County shall submit a declaration or written policy to follow the applicable municipal construction site erosion control ordinances by **June 30, 2007**.
 - 2. The County shall submit the proposed construction site inspection and enforcement procedures to the Department by **March 31, 2008**. The procedures shall be implemented when Department approval is obtained, or no later than **September 30, 2008**.
- E. **POST-CONSTRUCTION STORM WATER MANAGEMENT:**
 - 1. The County shall submit a declaration or written policy to follow the applicable municipal post-construction storm water discharge ordinances by **June 30, 2007**.
 - 2. The County shall submit the proposed long-term maintenance procedures to the Department by **March 31, 2008**. The procedures shall be implemented when Department approval is obtained, or no later than **September 30, 2008**.
- F. **POLLUTION PREVENTION:** The County shall submit the proposed pollution prevention program that addresses the seven items in Part II.F to the Department by **March 31, 2008**. The pollution prevention program shall be implemented by **September 30, 2008**. Existing pollution prevention activities shall be implemented until Department program approval is obtained.
- G. **STORM WATER QUALITY MANAGEMENT:** The County shall complete the evaluation of flood control structures and assessment of compliance and submit the results to the Department by **March 31, 2008**.
- H. **STORM SEWER SYSTEM MAP:** The County shall submit any remaining storm sewer system maps to the Department by **March 31, 2007**. The County shall maintain a current storm sewer system map as changes occur. Updates shall be provided with the annual reports due by **March 31 of each year**.
- I. **LAKE MICHIGAN OUTFALLS:** The County shall submit the alternatives evaluated and recommendation for the Bradford Beach and McKinley Beach storm sewer outfalls to the Department by **March 31, 2007**. The agreed upon alternative shall be constructed by **January 1, 2008**.

- J. ANNUAL REPORT: The County shall submit an annual report for the preceding calendar year by **March 31st of each year**. The first annual report shall be submitted to the Department by **March 31, 2008**.
- K. REAPPLICATION FOR PERMIT COVERAGE: To retain authorization to discharge after the expiration date of this permit, the County shall apply for reissuance of this permit in accordance with the requirements of s. NR 216.09, Wis. Adm. Code, at least 180 days prior to this permit's expiration date.

COMPLIANCE SCHEDULE SUMMARY

PERMIT CONDITION	ACTIVITY	DUE DATE
Public Education and Outreach - Part II.A	Submit the public education and outreach program	March 31, 2008
Public Involvement and Participation – Part II.B	Submit public involvement and participation program	March 31, 2008
Illicit Discharge Detection and Elimination - Part II.C	1. Submit illicit discharge ordinance	October 31, 2007
	2. Complete initial field screening	December 31, 2007
	3. Submit illicit discharge response procedures	October 31, 2007
Construction Site Pollutant Control - Part II.D	1. Submit construction site pollutant control ordinance or declaration	June 30, 2007
	2. Submit construction site inspection and enforcement procedures	March 31, 2008
Post-Construction Storm Water Management - Part II.E	1. Submit post-construction stormwater ordinance or declaration	June 30, 2007
	2. Submit long-term maintenance procedures	March 31, 2008
Pollution Prevention - Part II.F	Submit pollution prevention program	March 31, 2008
Storm Water Quality Management - Part II.G	1. 20% reduction in total suspended solids in runoff that enters waters of the state, to the maximum extent practicable	March 10, 2008
	2. 40% reduction in total suspended solids in runoff that enters waters of the state, to the maximum extent practicable	March 10, 2013
	3. Submit evaluation of flood control structures	March 31, 2008
	4. Submit assessment of compliance	March 31, 2008
Storm Sewer System Map - Part II.H	1. Submit remaining storm sewer system maps	March 31, 2007
	2. Maintain a current storm sewer system map	March 31 of each year
Lake Michigan Outfalls – Part II.I	1. Submit alternatives and recommendation	March 31, 2007
	2. Construct selected alternative	January 1, 2008
Annual Report - Part II.J	Submit annual reports	March 31 of each year
Reapplication for Permit Coverage – Part III.K	Submit new application	June 15, 2011

PART IV. STANDARD CONDITIONS

The conditions in s. NR 205.07(1) and (3), Wis. Adm. Code, are incorporated by reference in this permit. The 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 permittee's ability to meet the remaining scheduled due dates.
- C. **NONCOMPLIANCE NOTIFICATION:**
 - 1. Upon becoming aware of any permit noncompliance that may endanger public health or the environment, the permittee 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 permittee became aware of the noncompliance. The Department may waive the written report on a case-by-case basis based on the 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 Standard Condition's B., C.1, or E. shall be submitted with the annual report. The reports shall contain all the information listed in Standard 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 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 has resulted or may result 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 permittee to achieve compliance with the conditions of the permit and the storm water management plan.
- 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 permittee 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 recorded and reported in accordance with this chapter. Results of this additional monitoring shall be included in the calculation and reporting of the data submitted in the annual report.
- K. **INSPECTION AND ENTRY:** The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, 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 permittee shall also furnish the Department, upon request, copies of records required to be kept by the permittee.
- 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 permittee 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 system 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.

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 as water line flushing, landscape irrigation, individual residential car washing, fire fighting and similar discharges.

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

Infiltration system means a device or practice such as a basin, trench, rain garden or swale designed specifically to encourage infiltration, but does not include natural infiltration in pervious surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices, such as swales or road side channels designed for conveyance and pollutant removal only.

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 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.

A single pipe with an inside diameter of 12 inches or more or equivalent conveyance (cross sectional area of 113 square inches) which receives runoff from land zoned for industrial activity and is associated with a drainage area of more than 2 acres. **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.

Municipal Separate Storm Sewer System or MS4 means a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, constructed channels or storm drains, which meets all of the following criteria:

1. Owned or operated by a municipality.
2. Designed or used for collecting or conveying storm water.
3. Which is not a combined sewer conveying both sanitary and storm water.

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

No Controls Condition means a pollutant-loading analysis that does not include pollutant reductions from existing storm water management practices including, but not limited to, infiltration systems.

Permittee means the owner or operator of a municipal separate storm sewer system authorized to discharge storm water into waters of the state.

Permitted Area refers to the areas of land under the jurisdiction of the permittee that drains into a municipal separate storm sewer system, which is regulated under a permit issued pursuant to subch. I of NR 216, Wis. Adm. Code.

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 System permit issued pursuant to ch. 283, Wis. Stats.

Appendix B

Inspection Documentation

**MILWAUKEE COUNTY – MCKINLEY MARINA
GOOD HOUSEKEEPING/ INSPECTION CHECKLIST**

- | Yes | No | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Are the areas kept free from debris and materials? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there signs of possible storm water contamination? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there any clean-up or maintenance activities required? |
| <input type="checkbox"/> | <input type="checkbox"/> | Check outfalls for flow. If there is flow, describe. |

Name of person performing inspection

Date and Time of Inspection

Signature

Dry or wet weather?

Comments:

Appendix C

Training Documentation

Figures



LEGEND

- - STORM CATCH BASIN
- - STORM OUTFALL
- - STORM SEWER LINE
- 13 - DRAINAGE SUBBASIN DESIGNATION
- - - - DRAINAGE SUBBASIN BOUNDARY
- - SURFACE DRAINAGE FLOW DIRECTION

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE
ONLY - SITE HAS NOT BEEN SURVEYED.

McKINLEY MARINA MILWAUKEE, WI				www.thesigmagroup.com 1300 West Canal Street Milwaukee, WI 53233 Phone: 414-643-4200 Fax: 414-643-4210
DATE: 6/30/11	DRW: PJI	DR. C100-12602.dwg	SCALE: 1" : 600'	
DRAINAGE MAP			McKINLEY MARINA - OVERALL	



LEGEND

- - STORM CATCH BASIN
- - STORM OUTFALL
- - STORM SEWER LINE
- 13 - DRAINAGE SUBBASIN DESIGNATION
- - - - DRAINAGE SUBBASIN BOUNDARY
- ← - SURFACE DRAINAGE FLOW DIRECTION

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE HAS NOT BEEN SURVEYED.

McKINLEY MARINA MILWAUKEE, WI					<small>www.thesigmagroup.com 1300 West Canal Street Milwaukee, WI 53233 Phone: 414-643-4200 Fax: 414-643-4210</small>	
DATE: 6/30/11	DRW: PJI	DR. C100-12602.dwg	SCALE: 1" : 200'			
DRAINAGE MAP					McKINLEY MARINA - NORTH	

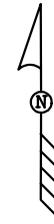


LEGEND

- - STORM CATCH BASIN
- - STORM OUTFALL
- - STORM SEWER LINE
- 13 - DRAINAGE SUBBASIN DESIGNATION
- - - - DRAINAGE SUBBASIN BOUNDARY
- ← - SURFACE DRAINAGE FLOW DIRECTION

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE
ONLY - SITE HAS NOT BEEN SURVEYED.

McKINLEY MARINA MILWAUKEE, WI			 <small>Single Source. Sound Solutions. GROUP</small>	www.thesigmagroup.com 1300 West Canal Street Milwaukee, WI 53233 Phone: 414-643-4200 Fax: 414-643-4210
DATE: 6/30/11	DRW: PJI	DR. C100-12602.dwg	SCALE: 1" : 200'	
DRAINAGE MAP			McKINLEY MARINA - CENTRAL	



LEGEND

- - STORM CATCH BASIN
- - STORM OUTFALL
- - STORM SEWER LINE
- 13 - DRAINAGE SUBBASIN DESIGNATION
- - - - DRAINAGE SUBBASIN BOUNDARY
- - SURFACE DRAINAGE FLOW DIRECTION

NOTE:
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DRAINAGE MAP			McKINLEY MARINA - SOUTH	