

Notice of Intent to Apply for Coverage Under Municipal Storm Water Discharge Permit

Owners and operators of small Municipal Separate Storm Sewer Systems (MS4) within an "Urbanized Area" as defined in 40 CFR 122.32(a)(1), must apply to the Wisconsin Department of Natural Resources (Department) for coverage under a MS4 permit by March 10, 2003, in accordance with 40 CFR 122.33(c)(1). This Notice of Intent form is provided for your voluntary use in applying for coverage under a general MS4 storm water permit that will be issued by the Department. The Department is revising ch. NR 216, Wis. Adm. Code, to comply with the new federal Phase II storm water regulations. After the revisions take effect, the Department will issue a general MS4 storm water permit authorizing storm water discharges from MS4s.

Workshops: There are 5 workshops scheduled across the state to provide assistance in filling out this NOI form in January 2003. See the enclosed sheet for more details on these workshops.

Questions: If you have any questions, feel free to call your Department contact as indicated on the enclosed Wisconsin DNR Municipal Contact List.

Return this completed form to:

Wisconsin DNR
Storm Water Program – WT/2
PO Box 7921
Madison, WI 53707-7921

General Information

Owner/Operator: City of Superior, Public Works Department, Wastewater Division		
Address: 51 East First Street		
City: Superior	State: WI	Zip: 54880
Contact Person: Sean Hancock		
Phone Number: 715-394-0392	E-mail Address: hancocks@ci.superior.wi.us	

MS4 Area Served: Estimate the area served by and the population within the MS4 in an Urbanized Area (UA). Urbanized Area maps are available on the EPA web site at: <http://cfpub1.epa.gov/npdes/stormwater/urbanmaps.cfm>

MS4 area served within UA (in square miles): EPA does not list Superior as a UA; no map is available. The City covers approximately 50 miles², of which 38 miles² are undeveloped.

Population residing within MS4 UA: According to the 2000 Census, the City of Superior population was 27,368

Potential Permit Exemption: The Department may be able exempt permit coverage for certain MS4s that serve less than 1000 people in an Urban Area provided the MS4 does not contribute substantially to the pollutant loadings of a physically interconnected MS4 and the MS4 does not contribute to the water quality impairment of a surface water.

Do you believe that your MS4 may be eligible for this potential exemption: YES or *NO*

Summary of Current Municipal Storm Water Program Activities

Please describe the programs or activities your municipality is currently undertaking that can be used toward complying with the proposed MS4 general permit requirements included in Addendum 1 (Proposed MS4 General Permit Requirements).

1. Public Education and Outreach: Municipal programs or activities used to comply with this proposed requirement.

Education and outreach efforts to protect and restore the state's waterways involve staff participation in the *Statewide Mercury Reduction Team* and the *Lake Superior Toxic Reduction Team*, with activities ongoing since 1997.

Wastewater staff also participate in the following:

Regional Storm Water Protection Team

NEMO and WARMF

St. Louis River Citizen's Action Committee

Lake Superior Public Advisory Team

Lake Superior Nonpoint Source Pollution Technical Advisory Committee

Great Lakes Regional Pollution Prevention Roundtable

For more details on specific educational and outreach programs and activities, see Addendum 1.

Do you believe your programs/activities fully satisfy the public education and outreach requirements? **YES** or NO

2. Public Involvement and Participation: Programs or activities used to comply with this proposed requirement.

In stormwater, as in other municipal activities, the public is involved indirectly via representation through their elected city councilor and more directly as desired by participation in various committees and workgroups. For instance, an advisory committee developed the Stormwater Flood Reduction Pilot Project as the most cost effective approach to resolving basement flooding issues facing the citizens of Superior. See Section 3 for more details on the Pilot Project.

The next major opportunity for public involvement will be revision and upgrade of City ordinances to reflect stormwater management needs.

The comprehensive planning process for stormwater management program development will be expanded and formalized with creation and utilization of a stormwater advisory group and/or public advisory committee. Participation from all sectors of the community is critical to creating the various stormwater program components including development of a dedicated funding mechanism, such as a utility.

City staff responds to all public reports of illicit discharges or water quality impacts from storm sewer discharges.

The annual stormwater report will undergo a public review process.

The St. Louis River Citizen's Action Committee and the Lake Superior Public Advisory Team, with which the City are actively involved, include members from the general public.

Do you believe your programs/activities fully satisfy the public involvement and participation requirements? **YES** or NO

3. Illicit Discharge Detection & Elimination: Describe existing programs or activities.

The Stormwater Flood Control Pilot Project, a comprehensive cost-sharing program intends to prevent stormwater from entering the sanitary sewer system from downspouts, yard drains and sump pumps, thereby helping prevent storm and sanitary wastewater from flooding citizens' basements. This program is being designed to begin with a pre-qualification inspection to evaluate each site for surface water flow characteristics to identify causes of household flooding and to provide risk-reduction recommendations to homeowners. The inspection will include delineation and characterization of impervious surfaces, slopes, elevation, landscaping, soil characteristics, lateral pipe integrity, sump pump size and efficiency, and roof, foundation, yard and other drains. Results will include assurances of lateral integrity and/or repair/replacement, sump pump and house downspout daylighting rather than discharge into the sewer system, and a backflow valve option, if appropriate, for pre-1970's buildings. This inflow reduction program will help maximize the efficiency of the sewer system and reduce surcharging and the resultant overflow of sewage into the environment.

Daylighting rainwater will also slow and reduce the entry of water into the storm sewer system, thereby minimizing collection and transport of sediment and adhered pollutants into the waterways. Informing and encouraging the public to use rain barrels and rain gardens is an important complementary project, now under development.

Complete review and revision of City ordinances to allow precise management of city surface water is underway.

Wet weather flow monitoring and dry weather flow screening of the storm sewers was conducted by a private engineering consultant and the WDNR starting over ten years ago. This process will be improved and continued as necessary.

A thorough review and survey of the City sewer system is proposed to identify weaknesses and potential trouble spots within the sewers of the City. The survey involves complete mapping and inventory of the sewer system in a GIS format. Project specifications are being developed.

Do you believe your programs/activities fully satisfy the illicit discharge detection/elimination requirements? **YES** or NO

4. Construction Site Pollution Control: Describe existing programs or activities in your municipality that can be used to comply with this proposed requirement.

Construction site pollution control is regulated under city code. Chapter 10 Buildings, Construction and Housing; article I.I. details the requirements for Site Erosion Control. The ordinance applies to all land development and land disturbing activities. Standards are as set forth in the BMP Handbook or adopted by the Council. Requirements cover site dewatering, waste and material disposal, dirt/mud tracking, drain inlet protection, sediment cleanup, channelizing, project sequencing, stabilizing, detention, sloping, and dirt storage piles. Toilet facilities are required, as well as the removal of debris from streets after moving buildings. An erosion control plan and permit from the City of Superior are required. By submitting an application, the applicant authorizes the common Council or other agent authorized by the City to enter the site to obtain information required for the review of the erosion control plan. The Public Works Department is authorized in Sec. 10-8.14 to issue a notice of violation or post a stop-work order if no permit was obtained, the erosion control plan is not being implemented in a good faith manner, or the conditions of the permit are not being met. The building inspector may revoke the permit, or request the City attorney to obtain a cease and desist order. Violators of any of the provisions of the ordinance are subject to a forfeiture of not less than \$50 nor more than \$1,000 plus the costs of prosecution for each violation. Each day of violation constitutes a separate offense. Compliance may also be enforced by injunction, citation, abatement, nuisances, or other appropriate and available remedy. Appeals and fees are also detailed in the ordinances.

City ordinances are being reviewed to assure compliance with the most recent NR216 and NR 151 requirements and consistency with the Stormwater Management Program as part of that program development. Development of a comprehensive stormwater management ordinance is in the initial draft stage.

Do you believe your programs or activities fully satisfy the construction site pollution control requirements? YES or NO

5. Post-Construction Site Storm Water Management: Describe existing programs or activities in your municipality that can be used to comply with this proposed requirement.

Ordinance 302.2 supports the intent of managing stormwater to prevent pollution: "All premises shall be graded and maintained to prevent the erosion of soil."

City ordinances are being reviewed to assure compliance with the most recent NR216 and NR 151 requirements and consistency with the Stormwater Management Program. Development of a comprehensive Stormwater Management ordinance is in the initial draft stage.

Examples of post-construction on-site storm water management include the rain garden at B. Dalton Bookstore, a runoff pond at Target, and a miniature constructed wetland at Applebees. An extensive network of grassy swales throughout the City provides areas of infiltration.

Two major infrastructure projects to more effectively manage stormwater in developed areas are in the final stages of planning and permit acquisition. A storm sewer interceptor and wet detention basin project will serve the South Superior neighborhood and upgrades to Lift Station 6 and new sewage surge pond will benefit the residents of Allouez. Construction on both projects is anticipated to begin this spring (2003).

Hundreds of acres of wetlands within City boundaries provide natural stormwater management capacity. This resource is managed through the Special Area Management Plan (SAMP) process.

Do you believe your programs/activities fully satisfy the post-construction site storm water management requirements? YES or NO

6. Pollution Prevention: Describe programs or activities.

- Wastewater Division Toxic Reduction Plan, implemented in 1995.
- 1993 Facility Plan details plans to meet sewer needs to satisfy water quality discharge permits.
- Proactive inspection/cleaning/maintenance schedules.
- Special Area Management Plan (SAMP): wetland management and mitigation plan to allow urban development without compromising integrity of City wetland areas and functions that impact surface water quality and quantity.
- Zoning: Section 2 Restricts construction in flood plain areas and uncontrolled use of the flood plains, rivers or streams
- Ordinances:
 - Chapter 9 Sec 9-2 prohibits the pollution of the harbor and its banks.
 - Sec 9-3 covers the storage and disposal of garbage and refuse on vessels.
 - Chapter 17, Health and Sanitation also prohibits the pollution of watercourses and bodies of water.
 - The Municipal Forest receives specific protection under sub-part D Sec 2, which prohibits depositing any debris, garbage, rock, sand, soil or other materials.
 - Chapter 4 prohibits the dropping of objects from aircraft in flight.
 - Chapter 7 regulates pet feces.
 - Chapter 16 covers garbage and trash, littering, dumping, hazardous material handling, snow disposal, and recycling.
- Adopt-a-Park Program, Parks and Recreation Department.
- Street sweeping.
- Leaf, Christmas tree collections.
- Recycling and special pickups/cleansweeps.
- Snow removal and dumping protocol.
- Landfill leachate treatment.

During National Pollution Prevention Week 2001, approximately 324 students received a hands-on experience in community service, pollution prevention and a basic understanding of the stormwater system by stenciling 400 to 600 inlets and manholes with the message "DUMP NO WASTE DRAINS TO LAKE". Dozens of adult volunteers helped ensure project success.

During P2 Week 2002, 327 fifth and sixth grade students toured the wastewater facility, viewed the stormwater pollution PowerPoint presentation and participated in stormwater educational activities. The City also sponsored a beach sweep of Wisconsin Point, and participated in the St. Louis River CAC clean-up.

All education/outreach and public involvement activities and programs help achieve pollution prevention goals. See sections 1 and 2 and the addendum for more details.

Wet weather monitoring and dry weather screening have been conducted throughout the City. No significant illicit discharge sources were found. Future citywide watershed activities are to include computer modeling of the City with software such as SLAMM or SWMM.

7. Storm Sewer System Map: Describe existing storm sewer system mapping in your municipality that can be used to comply with the proposed requirement.

Stormwater pipes, inlets and outfall data are maintained in ArcInfo for map generation in ArcView. See Addendum for a sample.

AutoCAD files and paper maps from numerous surveys complement the GIS system. For instance, the 1993 Facility Plan for the Wastewater Collection and Treatment System includes schematics and maps delineating sewer districts, areas with combined sewers, excess surface drainage locations, composite inflow rates, pipes, inlets, ponds and basins. Although the primary focus is the sanitary system, all wastewater, particularly the combined component, is highly impacted by stormwater.

The 1996 Stormwater Management Status Report and subsequent studies include numerous maps focusing on stormwater issues, such as sub-watershed, surface water drainage basins, land use, floodplain, and wetland delineations.

Input of relevant data into the ArcView/GIS system is ongoing, as it is discovered and as it is generated. Existing layers and/or themes include USGS 10' elevation contours; sewer, road and other municipal and utility infrastructure as well as parcel/landowner data. Themes we are planning to eventually obtain include digitized orthorectified aerial photographs with 1' contour elevations.

Specifications are being compiled for a new Comprehensive Sewer System Evaluation Survey to update the 1982 study.

Do you believe your storm sewer system maps fully satisfy the storm sewer system map requirements? YES or NO

Addendum 1

Public Education and Outreach, Public Involvement and Participation, and Pollution Prevention

Statewide Mercury Reduction Team and Lake Superior Toxic Reduction Committee

- Displays: three cabinets, at Public Library, City Hall, Mariner Mall, with rotating content, and two 3-panel tabletop boards taken to fairs, expos, meetings, conferences etc.; titles include: “What is a Watershed”; “Dump No Waste”; “Drains to Lake”; “Stormwater Management”; “Lawn and Garden Chemicals”; “Dioxin/Burn Barrels”; “Recycling; Household Mercury”; “Mercury in Fish”
- Storm sewer and combined sewer inlet stenciling, beach sweeps, wastewater treatment facility tours and educational activities
- Surveys: stormwater, burn barrels, mercury
- Brochures, fliers
- Pollution Solutions, a series of newspaper advertisements; radio spots
- Presentations: “What is Stormwater Pollution” for students; “Mercury Spill Cleanup,” Wastewater Operator’s Conference, WEF Conference, Federation of Environmental Technologists, Marquette’s Becoming a Mercury Free UP Mtg., State Risk Management Conference, Medical Workshop, area nursing homes, hospital, and home health care facilities; “Mercury Reduction and Pollution Prevention in the Lake Superior Basin,” Statewide Teachers Conference, and other high school math/science teachers; “Mercury in the Environment” and “Slow Death by Fire: Burn Barrels and Dioxin”
- Displays, Mercury: Home, Fish and Game Shows; Sustainable Development, Health, Head of the Lakes fairs, Earth Day, Lake Association Meetings, Chamber of Commerce Business Expo, IJC Environmental Expo.
- Conference/workshop: “Community Mercury Reduction,” speakers from WI, MN, MI, EPA, Canada, and GLIFWC; “Becoming a Mercury Free Medical Community;” “Pollution Prevention for POTWs and Municipalities;” “Creating a Safe Healthcare Community” ‘Remodeling Lake Superior Contractors Workshop;”
- Statewide Mercury Recycling Project, coordinated effort by Superior, Green Bay, Madison, Milwaukee, Appleton, Kenosha, Racine and Marinette.
- Collection and recycling of mercury and mercury-containing devices from households and businesses. Superior WWTP is northern Wisconsin drop off point.
- Mercury thermometer exchanges: university, hospitals, schools, etc. in Superior, Spooner and Ashland.
- Targeted audience programs: thermostats; fluorescent bulbs; dental, summer camps, schools; automobile switches, air conditioners,
- Informational/educational presentations to city and county officials

Regional Storm Water Protection Team; Surface Water Education Program

Participating entities to date include: Cities of Superior, Wisconsin, Duluth, Hermantown, Proctor, and Cloquet in Minnesota; Duluth and Rice Lake townships, St. Louis County, St. Louis County Soil and Water Conservation District, University of Minnesota Duluth, University of Minnesota Sea Grant, Minnesota Department of Transportation.

Team members meet and identify watershed information/education needs, effective messages and delivery formats. The first round of messages will address watershed awareness, erosion and sediment, salt, lawn chemicals, dumping into inlets and waterways, littering and impervious surface issues.

The MS4 group has filed grant applications for a Contractor Training and Certification Program and a regional media campaign including logo development, public service announcements for television and radio; and a brochure and mailing flyer to promote positive community and individual activities to protect the waters of the region.

NEMO: Nonpoint Education for Municipal Officials, links land use to water quality. We are working to develop a Northland chapter and specifically apply the program to the City of Superior. This will be a primary staff training tool.

WARMF: Watershed Analysis Risk Management Framework, a dynamic GIS-based modeling software being developed for the St. Louis River watershed. Project was initiated by Minnesota Power to address TMDL issues; other partners to date include the St. Louis River Citizen’s Action Committee, Western Lake Superior Sanitary District, National Wildlife Federation, Minnesota Pollution Control Agency, Wisconsin Department of Natural Resources, U.S. EPA

Lake Superior Public Advisory Team

Formed in 1998 with more than 40 representatives from industrial, commercial, municipal, governmental, technical, educational, environmental regulatory and public sectors to advance recommendations to the WDNR to resolve issues raised by the Binational Program to Protect and Restore Lake Superior. Developing consensus on special designation for the Lake was the first goal, achieved in 2002 with the DNR pursuing the rule making process on two recommendations focusing on point-source pollution. Team members are reviewing best management practices for the Basin, focusing on nonpoint pollution sources and the ecological functions of tributaries.

Lake Superior Nonpoint Source Pollution Technical Advisory Committee At February 2001 meeting, identified and best management practices, prioritized abatement strategies for agriculture, forestry, roads/culverts and wetlands/habitat. 2002 meeting: update on programs/projects/grants etc. to help with coordination, communication and funding efforts between basin entities.

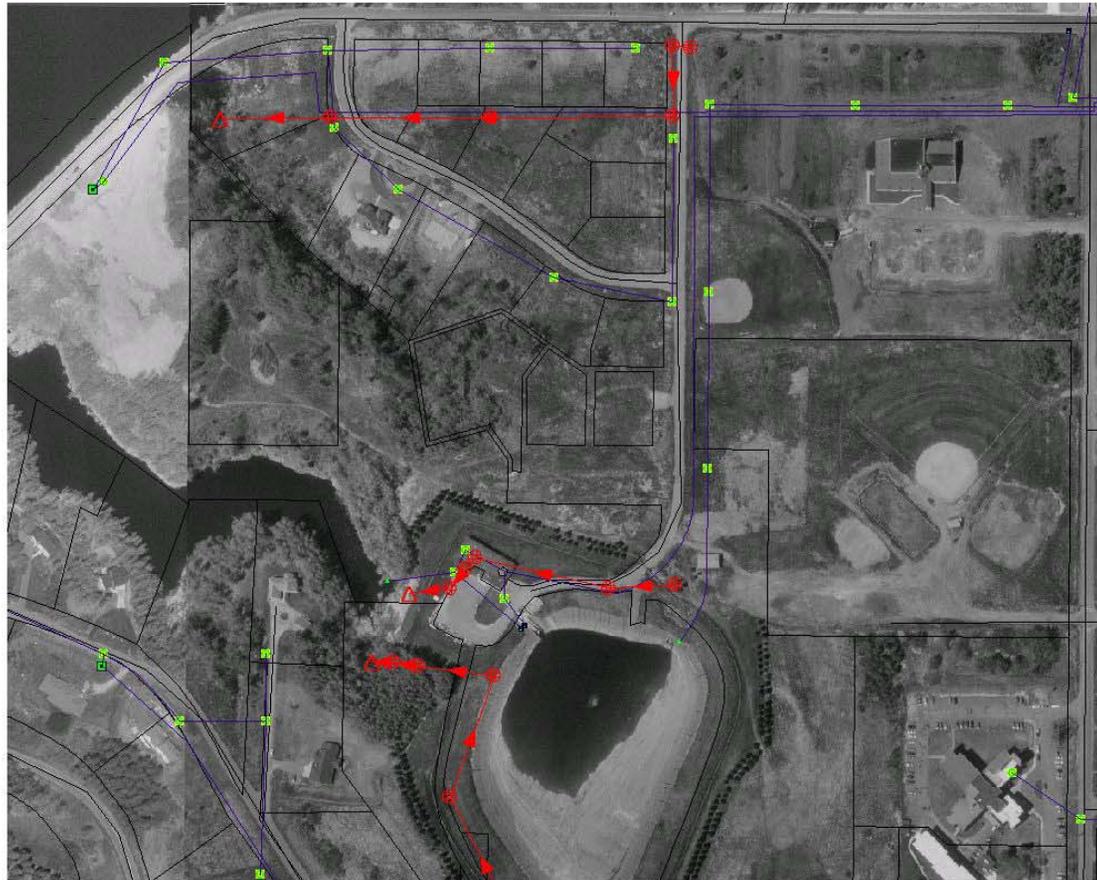
Great Lakes Regional Pollution Prevention Roundtable: a professional organization dedicated to promoting information exchange and networking to P2 professionals in the Great Lakes regions of the United States and Canada.

St. Louis River Citizen’s Action Committee: formed in 1993 to implement the 43 recommendations of the Remedial Action Plan published by the Minnesota Pollution Control Agency and the Wisconsin Department of Natural Resources.

Other: Presentations: Lake Superior Special Designation, proposed revisions to state mercury rule, Pollution Minimization Programs; Northwest Region’s Fall Operator’s Conference; Capacity Management Operation and Maintenance (CMOM) Program, to City of Superior Common Council, and to WDNR Sanitary Sewer Overflow Technical Advisory Committee.

City of Superior

CSO 6



- STORM PIPE
- STORM MHCB-DRAIN-OUTFALL**
- Manhole
- Inlet \ Catch Basin
- Surface Drain
- Outfall
- SANITARY PIPE
- SANITARY MH-LS-OUTFALL**
- Lift Station
- Manhole
- Lamp Hole
- Inlet/Catch Basin
- Surface Drain
- Outfall
- Diversion Chamber
- Treatment Facility

0.1 0 0.1 0.2 Miles

