

University of Nebraska at Omaha – Storm Water Management Plan

The University of Nebraska at Omaha created this storm water management plan (SWMP) in effort to reduce the discharge of pollutants from our campuses to the maximum extent possible (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Described below are actions undertaken to satisfy the minimum control measures described in 119NAC10, paragraphs 002.12B through 002.12F. This plan covers a five year period from the date of issuance to be fully implemented as described below. Measurable goals listed in the SWMP are target goals on which progress will be reported on in the annual report.

MCM 002.12B – Public Education and Outreach		
The Municipal Separate Storm Sewer System (MS4) must implement a public education and outreach program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.		
Item	SWMP Element Description	Target Goals and Implementation Schedule
1.	Develop a plan for outreach that defines the goals, objectives, target audience and distribution process of materials for the public education and outreach program.	Year 1 -- Develop a 5-year education and outreach plan. Submit the plan to NDEQ with the Annual Report. Years 2-5 -- Review and update the plan each permit year and include the revised plan in the Annual Report.
2.	Publish and update storm water educational material on the EHS web site. Collaborate with University Communications and Student Affairs to develop and distribute awareness information for the campus community.	Year 1 -- Publish UNO's Storm Water Permit and SWMP on the EHS web site. Years 2-5 -- Disseminate information to targeted areas of campus using appropriate strategies for target audiences.
3.	Collaborate with faculty to incorporate storm water considerations into the student curriculum.	On-Going All Years – Inventory course offerings that include significant components of storm water management and summarize in the Annual Report.

MCM 002.12C –Detect and Eliminate Illicit Discharges

The permit will require that the MS4 develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the state that receive discharges from these outfalls.

Item	SWMP Element Description	Target Goals and Implementation Schedule
1.	The MS4 must develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the state that receive discharges from these outfalls;	Years 1 and 2 -- Develop a completed storm sewer system map for all three campuses and submit completed maps to NDEQ with the Year 2 Annual Report. Years 3-5 – Maintain and updated storm sewer system map per the permit requirements.
2.	To the extent allowable under state or local law, the MS4 must effectively prohibit, through ordinance or other regulatory mechanism, non-storm water sewer system and implement appropriate enforcement procedures and actions	Year 1 – EHS will identify and assemble a group of primary stakeholders to evaluate enforcement options and draft a plan enforcement procedures and actions. Years 2-5 – The formal Enforcement Plan will be implemented. The plan will be reviewed annually for needed modifications and updates.
3.	The MS4 must develop and implement plans to detect and address non-storm water discharges, including illegal dumping to the MS4 system; and	Year 1 – EHS will develop dry-weather screening procedures and frequency schedule for all UNO outfalls 8” or greater in size. Years 2-5 – EHS will conduct dry-weather screening of all UNO outfalls 8” or greater, such that all outfalls are screened during the 5-year permit cycle.
4.	The MS4 must inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.	Year 1 – EHS will work with University Communications to develop a communications plan to share with the campus community and general public to warn of the hazards associated with illegal discharges and improper disposal of waste. Years 2-5 – Report efforts made to inform these audiences in the annual report.
5.	The MS4’s program need not address the following categories of non-storm water discharges or flows and illicit discharges if the MS4 correctly identifies them as not significant contributors of pollutants to the small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground water, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water, discharges or flows from fire fighting activities.	All years – These categories of non-storm water discharges are not considered to be significant contributors of pollutants. Should events occur that might change this evaluation (such as a significant physical plant failure) they will be described (including any actions taken to prevent their recurrence) in the annual report.

MCM 002.12D – Construction Site Runoff Control

The permit will require that the MS4 develop, implement, and enforce a program to reduce pollutants in any storm water runoff to its small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the MS4 program if that activity is part of a larger common plan of development or sale that would disturb one acre or more. If the Director waives requirements for storm water discharges associated with small construction activity in accordance with the definition in Chapter 1 the MS4 is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites. The program related to construction activities must include the development and implementation of, at a minimum:

Item	SWMP Element Description	Target Goals and Implementation Schedule
1.	An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;	Year 1 -- Develop a 5-year education and outreach plan. Submit the plan to NDEQ with the Annual Report. Years 2-5 -- Review and update the plan each permit year and include the revised plan in the Annual Report.
2.	Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;	Year 1 -- Publish UNO's Storm Water Permit and SWMP on the EHS web site. Years 2-5 -- Disseminate information to targeted areas of campus using appropriate strategies for target audiences.
3.	Procedures for site plan review which incorporate consideration of potential water quality impacts;	On-Going All Years – Inventory course offerings that include significant components of storm water management and summarize in the Annual Report.
4.	Procedures for site inspection and enforcement of control measures.	

MCM 002.12E – Post Construction Runoff Control

The MS4's permit will require that the MS4 address post-construction development in new development and redevelopment. The MS4 must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects less one acre that are part of a common plan of development or sale. The program must ensure that controls are in place that would prevent or minimize water quality impacts and must include:

Item	SWMP Element Description	Target Goals and Implementation Schedule
1.	Development and implementation strategies which include a combination of structural and/or best management practices (BMPs) appropriate for the MS4's community;	Year 1 -- Develop a 5-year education and outreach plan. Submit the plan to NDEQ with the Annual Report. Years 2-5 -- Review and update the plan each permit year and include the revised plan in the Annual Report.
2.	Use of an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law; and	Year 1 -- Publish UNO's Storm Water Permit and SWMP on the EHS web site. Years 2-5 -- Disseminate information to targeted areas of campus using appropriate strategies for target audiences.
3.	Provision for adequate long-term operation and maintenance of BMPs.	On-Going All Years – Inventory course offerings that include significant components of storm water management and summarize in the Annual Report.

MCM 002.12F – Pollution Prevention and Good Housekeeping

The MS4 permit will require pollution prevention and good housekeeping. The MS4 must develop and implement as operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

Item	SWMP Element Description	Target Goals and Implementation Schedule
1.	Develop a plan for outreach that defines the goals, objectives, target audience and distribution process of materials for the public education and outreach program.	Year 1 -- Develop a 5-year education and outreach plan. Submit the plan to NDEQ with the Annual Report. Years 2-5 -- Review and update the plan each permit year and include the revised plan in the Annual Report.

MCM 002.12G – Qualifying Local Program

If an existing qualifying local program required the MS4 to implement one or more of the minimum control measures of paragraphs 002.12B through 002.12F of this section, the NPDES permitting authority may include conditions in an MS4's NPDES permit that direct the MS4 to follow that qualifying programs requirements rather than the requirements of 002.12B through 002.12F. A qualifying local program is a local, or State municipal storm water management program that imposes, at a minimum, the relevant requirements of 002.12B through 002.12F.

Item	SWMP Element Description	Target Goals and Implementation Schedule
1.	UNO Anticipates this permit to be stand-alone rather than requiring our campus to follow another qualifying program.	No action required unless otherwise directed by the permit.

MCM 002.12H – BMPs, Measurables and Responsibilities

In the MS4's permit application (either a notice of intent for coverage under a general permit or an individual permit application), the MS4 must identify and submit to its NPDES permitting authority the following information:

Item	SWMP Element Description	Target Goals and Implementation Schedule
1.	The best management practices (BMPs) that the MS4 or another entity will implement for each of the storm water minimum control measures at paragraphs <u>002.12B</u> through <u>002.12F</u> of this section;	See summary below
2.	The measurable goals for each of the BMPs including, as appropriate, the months and years in which the MS4 will undertake required actions, including interim milestones and the frequency of the action; and	See summary below
3.	The person or persons responsible for implementing or coordinating the MS4's storm water management program.	See summary below

MCM 1 - Public Education and Outreach

BMP#	SWMP Element Description	Target Goals & Implementation Schedule
1, 3, & 4.	Develop a plan for outreach that defines the goals, objectives, target audience and distribution process of materials for the public education and outreach program	Year 1 - Develop a 5 year education and outreach plan. Submit the plan to NDEQ with the Annual Report. Years 2-5 – Review and update the plan each permit year and include the revised plan in the Annual Report.
2.	Maintain and update appropriate messages for targeted residential, construction, and commercial issues.	Year 1 – Inventory current outreach materials in each of these targeted areas and develop new materials as needed. Years 2-5 – Provide copies of new outreach materials in the annual report.

B. Public Participation and Involvement		
BMP#	SWMP Element Description	Target Goals & Implementation Schedule
1.	Provide opportunities for citizens to comment on new rules, ordinances, and regulations regarding the MS4.	On-Going All Years - Post on the City Stormwater Website proposed changes to rules, ordinances, and regulations. Provide information in the annual report on approved changes and input received from the public.
2.	Create opportunities for citizens to participate in the implementation of stormwater controls.	On-Going All Years - Post on the City Stormwater Website opportunities for public involvement in stormwater control related activities.
3.	Provide access to information about the City's SWMP.	On-Going All Years – Maintain current City SWMP and MS4 annual reports on the Omaha Stormwater website.

C. – Illicit Discharge Detection and Elimination

BMP#		SWMP Element Description	Target Goals & Implementation Schedule
1.	a	Maintain a compliance plan or mechanism to follow up on illicit discharges.	On-Going All Years – Maintain the compliance procedures per the permit requirements.
1.	b	Maintain a map showing all known MS4 outfalls and the location of all state-designated waters receiving direct discharges from MS4 outfalls.	On-Going All Years – Maintain a continually updated storm sewer system map per the permit requirements.
1.	c	Conduct field screening activities per the permit requirements specifically geared to local TMDL pollutants of concern such as E. Coli. Other parameters will be determined based on the results of a PCE, but could include nutrients, ammonia, BOD, and TPH.	On-Going All Years - Annually conduct dry weather monitoring “priority” outfalls. “Priority” outfall are those that are 72” or greater and/or those with documented illicit discharges within the previous 3 years.
1.	d	Implement procedures to investigate and trace sources of identified illicit discharges to the MS4.	On-Going All Years – Document investigations include date observed, result of investigation(s) and date closed.
1.	e	Implement procedures to remove illicit discharges to the MS4. Document all interactions with potentially responsible parties.	On-Going All Years –Use the code enforcement procedures to eliminate unauthorized non-stormwater discharges identified during an investigation
1.	f	Identify and address allowable non-stormwater discharges determined to be significant contributors to pollutants. Identify any additional non-stormwater discharges that will not be addressed as illicit discharges.	On-Going All Years – Report on any local controls or conditions placed upon exempt non-stormwater discharges and additional identified exempted non-stormwater discharges.
2 & 3.		Coordinate with adjacent permitted MS4s to report illicit discharges to the appropriate authority having jurisdiction and respond to reports from other MS4s.	Year 1 – Develop procedures for coordination with adjacent permitted MS4’s. On-Going All Years – Include in the annual report any known illicit discharge reports to and from adjacent MS4s.
4.		Maintain written procedures for the IDDE component of the MS4 permit.	On-Going All Years –Make available upon request the standard operating procedures developed under this program component.
5.		Receive reports and complaints, internally and from the public, of illicit discharges and illegal dumping into the MS4. Respond to and investigate complaints about spills, dumping, or disposal of materials other than stormwater to the MS4.	On-Going All Years – Coordinate with others in the City to resolve complaints. Develop a system to generate reports and track the number of calls per year in regard to spills, dumping or improper disposal of material to the MS4. Include a count of complaints received and investigations completed in the annual report.
6.		Develop, implement and maintain a training program for municipal field staff with respect to IDDE.	Year 1 – Develop a strategy which identifies field staff and appropriate levels of training. Years 2 - 5 – Provide a count of employees which have received training in the annual report.

D. Construction Site Runoff Control

BMP#	SWMP Element Description	Target Goals & Implementation Schedule
1.	Maintain the established program requiring operators of public or private construction activities to comply with local erosion and sediment control requirements.	On-Going All Years -Include any updates to City Code or Permit requirements in the annual report.
2.	Maintain a compliance plan or mechanism to follow up on construction site non-compliance.	On-Going All Years – Maintain the compliance procedures per the permit requirements.
3.	Review grading permit applications and maintain a continually updated inventory of all private and public construction sites.	On-Going All Years – Include in the annual report the number and type of grading permits reviewed.
4.	Maintain the electronic records for inspection of construction sites and enforcement of erosion and sediment control measures.	<p>Year 1 – Develop a strategy for site inspections by municipal staff, and include in the annual report.</p> <p>On-Going All Years –Inspect construction sites on a regular basis and on a complaint basis. Track the number of sites inspected annually in a database. Initiate enforcement proceedings as appropriate to address violations. Include a summary of inspections completed and enforcement actions taken in the annual report.</p>
5.	Provide training for municipal staff with respect to their assigned duties as it relates to sediment and erosion control from construction activity. One formal training course for inspection staff during their employment with the City and internal training on an as needed basis to maintain consistent reporting among all inspectors.	On-Going All Years -Include in the annual report the number of staff and their sediment and erosion control training completed.
6.	Communicate with the regulated community and other groups affected by the Construction Site Runoff program and provide a mechanism to receive complaints from the public.	On-Going All Years – Conduct workshops for developers, builders, site designers, contractors, and/or City staff as determined necessary. Track reports from the public regarding construction sites. Include the number of reports received in the annual report and the permittees response.

E. Post Construction Runoff Control

BMP #	SWMP Element Description	Measurable Commitments & Implementation Schedule
1.	Continue to implement the Post Construction Program as stipulated in the OMC. Periodically update guidance material and develop divergent standards for difficult sites such as linear projects. Update as needed the Omaha Regional Stormwater Design Manual (ORSDM).	Year 1 - Develop divergent standards for guidance document and update guidance as needed. Submit standards with the annual report. On-going All Years - Revise as necessary. Include a summary of revisions in the annual report.
2.	Review and update, if needed, the standards outlined in the OMC and ORSDM for consistency with required performance standards as they relate to post-construction stormwater management plans.	On-going All Years - Report on any updates to the OMC or ORSDM.
3.	Maintain an online submittal and review process for site plans, easement and maintenance agreements, as built drawings, deed recordings and drainage studies.	On-going All Years - Report number of PCSMP projects and the status of their progress in the annual report.
4.	Develop SOP's for responding to complaints regarding Post Construction BMPs and a strategy for verifying BMPs are being installed & maintained in perpetuity.	Year 1 - Submit SOP's with the annual report. On-going All Years - Report on any complaints and/or BMP's which have been certified as complete.
5.	Maintain a database that stores information on approved PCSMPs.	On-going All Years - Provide an inventory of certified stormwater control measures installed as part of the PCSMP requirements. Include a count of BMP types as well as any known changes to BMPs in the annual report.
6.	Inspect sites that are certified by the engineer of record and all sites identified as deficient on a complaint basis. Develop a protocol to bring sites in to compliance.	Year 1 - Develop protocol for compliance assistance, and inspection strategy On-going All Years - Document and maintain inspection records of the certified PCSMP projects as identified in the strategy developed. Document any enforcement actions taken. Summarize activities in annual report.

F. Pollution Prevention and Good Housekeeping

BMP#	SWMP Element Description	Target Goals & Implementation Schedule
1.	Maintain an inventory and map of municipal facilities. Review annually and update if needed.	On-Going All Years – Maintain an inventory and map of all municipal facilities.
2.	Conduct assessments of municipal maintenance facilities and review their municipal runoff control plans as applicable. Revise plans as needed if facilities expand or reduce activities and implement recommendations based on annual inspections.	Year 1 – Develop a strategy to assess municipal facilities and prioritize them based upon a defined set of criteria, include strategy in the annual report. Years 2 - 5 - Track the number of assessments for municipal facilities based upon the strategy developed in year 1. Include the number of assessments completed, a description of the assessment procedure and any changes in facilities ranking in the annual report.
3.	Continue to implement Omaha’s Good Housekeeping Program for municipal facilities that addresses “high-priority” facilities (hot spot score of 20-30 out of 30) and site specific SOPs.	On-Going All Years – Annually report new, removed, or significantly updated municipal facilities
4.	Implement practices for maintaining the storm sewer system that includes catch basin maintenance, open channels and other drainage structures, street sweeping, and structural stormwater controls. All maintenance procedures are to be performed such that waste water and waste materials do not enter the MS4.	Year 1: Provide a description of the maintenance programs in the annual report. On-Going All Years: Annually report on Sewer Maintenance activities related to maintaining the storm sewer system and changes to any of the maintenance practices.
5.	Provide training for municipal employees in pollution prevention and good housekeeping.	Year 1 - Develop a strategy for municipal employee training in pollution prevention and good housekeeping, include strategy in annual report. On-Going All Years – Conduct training events for municipal staff include number of employees trained, based on strategy developed in year 1, in annual report.
6.	Provide educational material to contractors hired to perform maintenance activities on the MS4.	Year 1 - Develop materials to provide to contractors and include in the annual report. Years 2 - 5 - Include in the annual report any new materials or updates to existing materials.

G. Industrial and Related Facilities

BMP#	SWMP Element Description	Target Goals & Implementation Schedule
1.	Maintain a program that identifies Industries within the MS4 area which fall into sectors identified in the ISW- NPDES permit.	Year 1 - Develop strategy that will identify industries and their compliance with NPDES permits. On-going All Years - Review and update strategy developed in year on and report on any changes in the annual report.
2.	Request a list of permitted facilities and the NOI from NDEQ in January of each permit year.	On-going All Years - Maintain a database to track NPDES permitted facilities.
3.	Inform industries about the NPDES ISW Permit and notify the state when industries are not in compliance with the state regulations.	On-going All Years - Develop industry specific publications regarding the NPDES regulations and distribute to inspected facilities.
4.	Inspect NPDES permitted industries from a list provided by NDEQ in January of each year. Maintain a tracking system for inspections and SWPPP reviews. Review the SWPPP or NEC prior to completing an inspection.	On-going All Years - Inspect 20% of the facilities on the list provided by NDEQ each year so that all industries are inspected once in the permit cycle.
5.	Insure inspectors completing industrial stormwater inspections are competent.	On-going All Years - Report inspection activities in the annual report.

H. MONITORING PROGRAM

BMP #	SWMP Element Description	Measurable Commitments & Implementation Schedule
A.	Dry Weather Screening	On-going All Years - Implement a dry weather screening of priority outfalls for IDDE. Keep a record of outfalls observed and a record of the field screening results. Follow strategy in SWMP Program Component C - IDDE for outfalls showing presence of an illicit discharge. Update priority list based on observations.
B.	<p>Develop a wet weather BMP assessment monitoring plan for demonstration BMPs to facilitate future SWMP planning. Evaluate the effectiveness of the selected BMPs. BMP assessment may include flow based monitoring, or water quality sampling. Biological systems may include plant assessments and visual observations.</p> <p>Construct structural BMPs and implement non-structural BMPs to evaluate the effectiveness of their ability to address pollutants of concern. Include in the BMP assessment program if appropriate.</p>	<p>Year 1 - Develop the BMP assessment monitoring plan and submit to NDEQ for approval. Amend as necessary when new demonstration projects have been constructed.</p> <p>On-going All Years - Implement monitoring plan in demonstration projects. Report findings in the Annual Report.</p> <p>The following information shall be included in the Annual Activity Report:</p> <ol style="list-style-type: none"> 1) the location of the monitoring site 2) the intensity and duration of the storm event monitored; 3) the timing of sampling in comparison to the occurrence of the storm event and to the discharge of peak storm water flows; 4) the monitoring data; and a summary of the findings.
C.	Utilize data collected by others to help assess the effectiveness of BMPs.	On-going All Years - Gather data from others and include in the annual report with a summary of findings.