

MCM 4: Construction Site Runoff Control

The University of Nebraska-Lincoln has established a construction site runoff control program that requires all construction projects on City and East campuses that disturb one acre or greater or projects less than an acre but part of a larger project to hold a NPDES Construction General Permit. Prior to starting work, General contractors must submit their Erosion and Sediment Control Plans to EHS for review and approval prior to commencing earth disturbing activities. In addition, EHS participates in pre-construction meetings with General Contractors to discuss their obligations under NDEE's NPDES Construction General Permit and UNL's SMS4 NPDES permit. EHS conducts routine inspections of construction sites to evaluate the effectiveness of site-specific runoff controls, as well as compliance with other aspects of NDEE's NPDES Construction General Permit. Audit findings are communicated to the General Contractor and UNL's Construction Project Manager. Follow-up communication and/or inspections establish whether appropriate corrective actions were implemented by the General Contractor.

Authority

UNL has established appropriate authority to support the construction site runoff control program through General Construction Contracts and Project Specifications. A summary of provisions in each of these mechanisms of authority follows.

General Construction Contract:

- Contains provisions that require the contractor to obtain coverage under NDEE's NPDES Construction General Permit when applicable and adhere to all requirements of the permit at all times.
- Specifically requires contractors to minimize sediment runoff, track out, and promptly clean streets of sediment.
- Requires contractor to adhere to proper site dewatering practices.
- Establishes authority for UNL to issue stop work orders as necessary if contractor fails to correct deficiencies.
- Requires contractor to provide prompt notification of releases of hazardous substances and petroleum and to take immediate action to stop and clean-up the release.

General Specification:

- Requires contractor to develop a SWPPP and Erosion and Sediment Control Plan (ESCP) for sites subject to NDEE's NPDES Construction General Permit and submit the ESCP to UNL EHS for review and approval prior to earth disturbing activities.
- Requires contractors to: 1) Plan for, implement, and maintain reasonable measures to prevent storm water pollution resulting from construction activities, 2) Report to the owner any release of any quantity of hazardous material at the construction site, 3) Maintain good housekeeping at the construction site, 4) Take corrective action to rectify concerns expressed by the Owner's representatives related to storm water pollution prevention controls.

Outreach

A primary reference tool to support UNL's SWMP with respect to contractor education is the EHS web site. This web-site is continually updated as new resources are developed or identified. It contains guidance materials developed specifically for UNL (under the heading of Safe Operating Procedures), as well as links to information provided by local, state, and federal authorities. Links are also provided to professional organizations and other materials that are educational in nature. Some of the materials are fairly general and are intended for awareness purposes (e.g., After the Storm Video link), while others are very specific (e.g., Nebraska Department of Transportation Construction Stormwater Best Management Practices Manual, City of Lincoln Drainage Criteria Manual, Chapter 8, Construction Best Management Practices, Omaha Regional Stormwater Design Manual, etc.). This web site will also contain UNL's SMS4 permit, SWMP, annual reports, and key supporting procedures (e.g., Enforcement Response Plan, etc.).

Requirement: MCM 4 Construction Site Runoff Control			
Reference	<p>BMP 4.01 Enforcement (Part IV.B.3.b)</p> <p>The permittee must, as part of the construction requirements and control measures, develop an enforcement plan or mechanism following the requirements of Parts III.A and B of this permit</p>		
Responsible	EHS: Environmental Specialist	Date of Last Review	(date the strategy/SOP reviewed)
Strategy	See BMP 3.01. UNL's enforcement response plan addresses construction sites.	Date of Last Update	(date of last SWMP update)
Measurable Goals	See BMP 3.01		
Report	See BMP 3.01	Activity Satisfied	<input type="radio"/> Yes <input type="radio"/> No
Evaluation: Environmental Indicators of Effectiveness	None		
Reference	<p>BMP 4.02 Site Plan Review and Approval (Part IV.B.3.c)</p> <p>The permittee must require each operator of a construction activity described in Part IV.B.3.a to prepare and submit for review an erosion and sediment control plan prior to the disturbance of land for the permittee's review and written authorization (operator must submit Part III.B.2 of the NDEE NPDES General Permit Number NER 160000 for Storm Water Discharges from Construction Sites to Waters of the State of Nebraska). The permittee must implement site plan review procedures that meet the following minimum requirements:</p> <ol style="list-style-type: none"> 1) The permittee must not approve any erosion and sediment control plan unless it contains appropriate site-specific construction site control measures that meets the minimum local requirements for storm water protection of construction activity. 		

	<p>2) The permittee must use qualified individuals, knowledgeable in the technical review of erosion and sediment control plans to conduct such reviews.</p> <p>3) The permittee must document its review of erosion and sediment control plan using a checklist or similar process.</p> <p>4) The permittee must maintain an inventory that is continually updated of all active public and private construction sites authorized by the permittee within the MS4 boundary.</p>		
Responsible	EHS: Environmental Specialist	Date of Last Review	(date the strategy/SOP reviewed)
Strategy	<p>As discussed in the narrative for this MCM, UNL General Specifications for construction require contractors to submit an Erosion and Sediment Control Plan (ESCP) for review and approval by EHS prior to commencing earth disturbing activities.</p> <p>At a minimum, EHS staff reviewing and approving ESCPs will have a bachelor's degree, one year related experience, and successfully completed a NDOT Erosion and Sediment Control Inspector course or equivalent. Reviews are conducted and documented in accordance with written procedures.</p> <p>A current inventory of permitted construction sites is maintained by EHS.</p>	Date of Last Update	(date of last SWMP update)
Measurable Goals	<p>All Years:</p> <p>EHS will have reviewed and approved ESCPs for 100% of all construction sites subject to NDEE's Construction General Permit initiated during the previous year, and will have review documentation on file for every site.</p>		
Report	Percentage of new construction sites subject to NPDES Construction General Permit requirements for which EHS reviewed and approved an erosion and	Activity Satisfied	<input type="radio"/> Yes <input type="radio"/> No

	sediment control plan during the prior year.		
Evaluation: Environmental Indicators of Effectiveness	N/A		
Reference	<p>BMP 4.03 Construction Site Inspection and Enforcement (Part IV.B.3.d)</p> <ol style="list-style-type: none"> 1. The permittee must inspect public and private construction activity according to local procedures with a strategy documented in the SWMP. 2. The permittee must provide trained and qualified inspectors for municipal inspections. The permittee must also develop and implement written procedures outlining the local inspection and enforcement procedures. Inspections of construction sites must, at a minimum: <ol style="list-style-type: none"> (a) Check for coverage under the NDEE NPDES general construction permit by requesting a copy of any application or Notice of Intent (NOI) or other relevant application form during initial inspections; (b) Review the applicable erosion and sediment control plan and conduct a thorough site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the plan; (c) Assess compliance with the permittee’s ordinances and permits related to storm water runoff, including the implementation and maintenance of designated MCM; (d) Visually observe and record non-storm water discharges, potential illicit connections, potential discharge of pollutants in storm water runoff, and the receiving stream to determine if sediment has moved offsite; (e) Provide education and outreach on storm water pollution prevention, as needed; and (f) Provide a written or electronic inspection report generated from findings in the field. 3. The permittee must track the number of inspections for the inventoried construction sites throughout the reporting period. Inspection findings must be documented and maintained for review by the permitting authority. 4. Based on site inspection findings, the permittee must take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance in accordance with the permittee’s Enforcement Response Plan required in Part III.B. These follow-up and enforcement actions must be tracked and maintained for review by the permitting authority. 		
Responsible	EHS: Environmental Specialist	Date of Last Review	(date the strategy/SOP reviewed)

Strategy	<p>Qualified EHS staff (as described in BMP 4.02) will inspect permitted construction sites at the following frequency:</p> <p>(a) At least 2 (two) times a year;</p> <p>(b) Upon report of a concern;</p> <p>(c) When needed to verify correction of deficiencies identified during a previous inspection.</p> <p>Inspections will be conducted in accordance with written procedures.</p> <p>Inspection reports will be documented and transmitted to the General Contractor and UNL Project Manager. Contractors will be required to submit a written response describing actions taken to correct deficiencies identified during the audit process. As necessary, EHS will implement UNL's Enforcement Response Plan to correct identified deficiencies.</p>	Date of Last Update	(date of last SWMP update)
Measurable Goals	<p>All Years: EHS staff will adhere to the described frequencies of inspection and existing written procedures for conducting construction site inspections, including record keeping, follow-up, and enforcement actions.</p>		
Report	<ol style="list-style-type: none"> Percentage of permitted sites that EHS inspected at the targeted frequency. Summary of substantial changes made to the written construction site inspection procedures during the prior year. 	Activity Satisfied	<input type="radio"/> Yes <input type="radio"/> No
Evaluation: Environmental Indicators of Effectiveness	NA		
Reference	BMP 4.04 Staff Training (Part IV.B.3.e)		

	e. The permittee must ensure that the staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Training must be made available, sponsored, or required in a strategy established in the SWMP for erosion and sediment control/storm water inspectors, plan reviewers, and third-party inspectors and plan reviewers.		
Responsible	EHS: Environmental Specialist	Date of Last Review	(date the strategy/SOP reviewed)
Strategy	At a minimum, assigned staff will have a bachelor's degree, one year related experience, and have successfully completed a NDOT Erosion and Sediment Control Inspector course or equivalent. In addition, assigned staff will review UNL's SWMP and review and adhere to associated written procedures.	Date of Last Update	(date of last SWMP update)
Measurable Goals			
Report	Names of staff persons assigned responsibilities under BMP 4.02 and 4.03 and a summary of their qualifications.	Activity Satisfied	<input type="radio"/> Yes <input type="radio"/> No
Evaluation: Environmental Indicators of Effectiveness	N/A		
Reference	BMP 4.05 Construction Site Operator Education (Part IV.B.3.f.1) <ol style="list-style-type: none"> 1. The permittee must make publically available educational materials to construction site operators in a strategy outlined in the SWMP. <ol style="list-style-type: none"> (a) The permittee must either provide information on existing training opportunities or develop new training for construction operators on control measure selection, installation, implementation, and maintenance as well as overall program compliance. (b) The permittee must develop or utilize existing outreach tools (i.e., brochures, posters, website, plan notes, manuals etc.) aimed at educating construction operators on installation, implementation and maintenance of storm water 		

	<p>controls, as well as overall program compliance.</p> <p>(c) The permittee must make available appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary.</p> <p>(d) The permittee must provide information on the installation and maintenance of controls on the permittee’s website or made publically accessible by whichever methods and procedures are determined appropriate by the permittee and approved by the NDEE.</p>		
Responsible	EHS: Environmental Specialist	Date of Last Review	(date the strategy/SOP reviewed)
Strategy	<ol style="list-style-type: none"> 1. EHS will continue to participate in pre-construction meetings with General Contractors to discuss their obligations under NDEE’s NPDES Construction General Permit and UNL’s SMS4 NPDES permit. EHS will provide instruction on where to access educational and informational materials. 2. EHS will make available existing stormwater manuals, brochures and other education materials aimed at education and outreach of construction best management practices on the EHS website and inform contractors of how to access information using various means, such as email communications, Contract Specifications, and verbal instruction. At present, this includes links to federal, state, and local agencies, as well as professional organizations. Information links include general awareness. 3. As part of the audits discussed in BMP 4.03 (construction site inspections), EHS will reference appropriate educational materials to assist contractors to correct identified deficiencies. 	Date of Last Update	(date of last SWMP update)
Measurable Goals	<p>All Years of the Permit:</p> <ol style="list-style-type: none"> 1. Annually, EHS will review/ enhance the materials made available for the 		

	<p>purpose of General Contractor education and outreach.</p> <p>2. EHS will participate in a pre-construction meeting with every General Contractor for newly permitted sites.</p>		
Report	<p>1. Summary of changes made to educational and outreach materials related to construction best management practices.</p> <p>2. Percentage of newly permitted sites where EHS held a pre-construction meeting with the General Contractor.</p>	Activity Satisfied	<p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>
Evaluation: Environmental Indicators of Effectiveness	N/A		
Reference	<p>BMP 4.06 Public Involvement (Part IV.B.3.f.2)</p> <p>Public Involvement – The permittee must have procedures for tracking complaints and submitting information by the public regarding construction projects and must also provide the permittee’s response if a response is given.</p>		
Responsible	EHS: Environmental Specialist	Date of Last Review	(date the strategy/SOP reviewed)
Strategy	<p>1. EHS will continue to maintain the public reporting mechanism, Stormwater Reporter, on the EHS web page and promote reporting of potential complaints by the campus community as part of the public education and outreach initiatives described in MCM 1 and 2.</p> <p>2. EHS will track, investigate and follow up on all public complaints regarding construction projects, in accordance with UNL’s written construction site inspection procedures discussed in BMP 4.03.</p>	Date of Last Update	(date of last SWMP update)

Measurable Goals	<p>All Years:</p> <ol style="list-style-type: none"> 1. EHS will maintain our existing procedure for reporting suspected illicit discharges including specific concerns related to construction projects (http://ehs.unl.edu/sop/s-stormwater_IDDE.pdf). This procedure is publically available on the EHS website. 2. EHS will respond to 100% of concerns reported by the public and retain documentation of the nature of the complaint and EHS follow-up actions (which will be summarized in the annual report). 3. EHS will maintain our on-line public reporting mechanism (<i>Stormwater Reporter</i>) on the EHS web page. 		
Report	Summary of each complaint received and actions taken to resolve each complaint.	Activity Satisfied	<input type="radio"/> Yes <input type="radio"/> No
Evaluation: Environmental Indicators of Effectiveness	Report any water quality sampling done in response to public reporting.		