



University of Nebraska-Lincoln
2022 Annual Report

NPDES Permit: NER 310000 (sMS4)

| Requirement: MCM 1 Public Education | | |
|-------------------------------------|--|---|
| Reference | <p>BMP 1.01 Public Education (Part IV.B.1.a.1)</p> <p>1. The permittee must develop and implement a comprehensive stormwater education and outreach program for the MS4. The SWMP must, at a minimum: a) Define the goals and objectives of the program based on defined high priority, community-wide issues; b) Define the target audience(s); c) Maintain and update appropriate messages for targeted residential, construction, industrial, and commercial issues; d) Define methods and process of distribution; e) Distribute appropriate educational materials and media to the target audience each year, using whichever methods and procedures determined appropriate by the permittee.</p> | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | <p>(a) EHS will continue to publish and update storm water educational information on the EHS web site.</p> <p>(b) EHS will continue to include a storm water awareness message in general Injury and Illness Prevention Program (IIPP) training, which targets new employees and paid students.</p> <p>(c) EHS will continue to distribute storm water awareness information at gatherings specifically targeting new students.</p> <p>(d) EHS will continue to publish articles related to storm water in the EHS listserv.</p> <p>EHS will continue to collaborate with UNL Communications to publish information in Nebraska Today and Next@Nebraska on newly installed post-construction controls and UNL's SMS4 Permit and SWMP.</p> | |
| Measurable Goals | <p>All Years:</p> <ol style="list-style-type: none"> At least annually, review and update storm water educational information contained on EHS's web site. At least annually, sponsor a storm water awareness booth at a large student event. At least annually, publish a storm water awareness article in the EHS list serve. <p>At least annually, submit a news article for publication in Nebraska Today and Next@Nebraska highlighting either newly installed post-construction structural controls or certain aspects of UNL's SWMP.</p> | |
| Report | <ol style="list-style-type: none"> Date, nature of the large student event(s) with an EHS sponsored booth, estimated number of students that | <ol style="list-style-type: none"> On 04/22/22, EHS sponsored a booth at the Earth Stock Sustainability Block Party to educate students about the stormwater program website and pollution reporter. The |

| | | |
|--|---|--|
| | <p>visited the booth, and summary of relevant information presented/distributed (during the prior year).</p> <ol style="list-style-type: none"> 2. Date, summary of information distributed through EHS listserv, Nebraska Today, or Next@Nebraska 3. Summary of changes made to the EHS web site relative to available educational materials (during the prior year). 4. Number of persons completing an EHS training module that contains a storm water awareness message (during the prior year). | <p>EHS representative presented a poster and discussed what students could do to support the program. The poster explains the UNL Stormwater Management Plan, presents examples of Best Management Practices used by UNL, and has a QR code for quick access to the Stormwater Pollution Reporter Tool. The event was well received with approximately 30 students engaging with the booth. On 05/03/2022 EHS Specialist hosted a class lecture/walk for a Biological Systems Engineering course focusing on Urban Systems. The group of about 20 students discussed and visited 8 Post-Construction Stormwater Controls on East Campus. The specialist also spent time discussing the UNL Stormwater Management program and pollution reporter tool. On 05/31/2022 the EHS Specialist attended a booth at the all-staff conference. The specialist presented educational information regarding the stormwater management at UNL to approximately 30 interested staff members. The specialist referenced the Stormwater Management Poster and discussed where to report water quality concerns on campus through the online pollution reporter tool. The specialist also handed out stormwater tri-fold pamphlets containing references to UNL's program, as well as EPA stormwater educational bookmarks, and EHS's red luggage tags. On 06/13/2022 the EHS Specialist attended the Discovery Days booth event at East Campus Mall. The event was well attended with approximately 100 people throughout the event engaging with the booth. The specialist discussed the UNL Stormwater Program's BMPs including Post-Construction Stormwater Controls, the online pollution reporter tool, and how the public can be involved by signing up to be notified in the EHS listserv to comment on our stormwater management plan and annual report through the stormwater management website. The Sustainability on Wheels events continued from 2021 through the first semester 2022. EHS attended the</p> |
|--|---|--|

sustainability event at the Hixson-Pied College of Fine and Performing Arts on 02/09/2022, The college of Agricultural Sciences and Natural Resources on 02/23/22, and the College of Architecture on 03/30/2022. There was a range of about 5-15 attendees that engaged with the booth at each event. Due to the low attendance the Sustainability on Wheels events were suspended and are unlikely to continue. On 06/08/2022 EHS sponsored a creek clean up event at the Deadman's Run Tributary near 48th and Holdrege. EHS was among the sponsors for the event. The EHS Specialist and Macrae Zappala (EHS Technician) supported the event by providing trucks, supplies, and assisting with the cleanup in the creek. 11 volunteers spent 2 hours in the creek. An estimated 1200 lbs of trash was collected and disposed of properly in the local landfill.

2. On 6/20/2022 the EHS Specialist submitted an article to the Nebraska today regarding the creek clean up event that included a link to the Stormwater Management Website. The article was run in the 06/24/2022 Nebraska Today article titled, "Volunteers Cleaning up Deadman's Run Tributary". EHS distributed 3 listserv articles in 2022; 04/06/2022 listserv article titled, "Sustainability of Wheels & Stormwater Pollution Reporter", 06/08/2022 listserv article titled, "Stormwater Management Annual Report and Sustainable Yard Work Practices", 11/16/2022 listserv article titled, "Reducing Pollution in Stormwater Runoff". Each listserv article distributed contained either a link to either the stormwater management website or online pollution reporter tool. The EHS Listserv is sent to approximately 1,500 recipients.
3. In 2022, the following updates and changes were made to the EHS Stormwater Management website: Updated Runoff Control Plan, Enforcement Response Plan, the 2021 Annual Report; 2022 storm sewer

| | | |
|--|---|--|
| | | <p>maps that include waters of the state, storm sewer outfall locations, and Post-Construction Stormwater Control type and location. The links to the PCSWC Story Map, contractor education including a guide to construction stormwater permitting at UNL, a link to the City of Lincoln’s Stormwater Post-Construction Best Management Practices Guidance Manual and a link to the NDEE website where the Storm Water Discharges from Construction Sites permit where all maintained in 2022.</p> <p>4. During calendar year 2022, two thousand five hundred and fifteen (2515) people completed EHS Injury and Illness Prevention Training, which contains general stormwater awareness information. Additional Stormwater related training is described in MCM 3 and MCM 6. A UNL greetings email that is sent to new employees and a similar handout distributed in at the Discovery Days event which both contained a reference to the Stormwater Management Program, was delivered to 930 new employees and attendees in 2022. Additionally, the Stormwater Management website counted 386 unique page views in 2022, the Virtual Green Infrastructure video counted 54 views, and the PCSWC Story Map counted 292 views.</p> |
| Evaluation: Environmental Indicators of Effectiveness | N/A | |
| | | |
| Requirement: MCM 2 Outreach and Involvement | | |
| Reference | <p>BMP 2.01 Outreach and Involvement (Part IV.B.1.a.2)</p> <p>2. The permittee must provide a stormwater public involvement program that involves the public in the planning and implementation of programs and activities related to the development and implementation of the SWMP. At a minimum, the permittee must: a) Provide public notice of opportunities to review and comment</p> | |

| | | |
|-------------------------|---|--|
| | <p>on all new rules, ordinances, regulations and SWMP revisions drafted by the MS4;</p> <p>b) Create opportunities for citizens to participate in the implementation of storm water controls; and c) Ensure the public can easily find information about the permittee’s SWMP.</p> | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | <ol style="list-style-type: none"> 1. EHS will maintain the on-line Stormwater Pollution Reporter tool. 2. EHS will solicit feedback on UNL’s SWMP and proposed revisions by: <ol style="list-style-type: none"> a. Adding language to the EHS web site asking for comments and suggestions from the campus community. b. Soliciting comments and suggestions with announcements published in the EHS listserv. c. Soliciting comments and suggestions at meetings of the Chancellor’s University Safety Committee, which has broad faculty and staff representation. d. Soliciting comments and suggestions by sending written notice to or attending a meeting of ASUN (Student Government) <p>EHS will announce publication of its annual report and solicit feedback using the same mechanisms described above.</p> | |
| Measurable Goals | <p>Year 1:</p> <p>UNL’s SMS4 permit and SWMP will be published on the EHS web site. Within one month of posting to the EHS web site, EHS will solicit feedback using the mechanisms described above.</p> <p>All Years:</p> <ol style="list-style-type: none"> 1. EHS will solicit comment from the campus community of proposed significant changes to UNL’s SWMP as described above. EHS will provide at least one month for receiving comments on proposed changes. All comments and EHS responses will be published to the EHS web site for a minimum of one month prior to finalizing any changes. 2. EHS will announce publication of its annual storm water report and solicit comment from the campus community as described above. EHS will respond to all comments in writing and maintain records of comments and responses for the duration of the permit term. These records will be made available to the campus community upon request. <p>UNL’s most current SMS4 permit and SWMP will be available on the EHS web site for public viewing throughout the permit term.</p> | |
| Report | <p>Summary of public notices, including date, content, and mechanisms of distribution.</p> <p>Documentation of all comments</p> | <p>1. In 2022, no significant changes were made to the SWMP. A link to submit comments on UNL’s SWMP has been maintained throughout the year</p> |

| | | |
|---|--|--|
| | <p>and responses will be available upon request.</p> | <p>on the EHS website. To date, no public comments have been received.</p> <p>2. Solicitations for review and comment on UNL's 2021 Annual Report and Stormwater Management plan were made in 2022 as follows: An email notification for comment was sent to ASUN Student Government on 04/07/2022; notice for comment was published in the EHS Listserv on 06/08/2022 for the campus community. On 05/17/2022, the Chancellor's University Safety Committee was alerted that the 2021 Annual Stormwater Report was posted to the EHS website and open for public review and comment. No responses were received regarding the 2021 Annual Report in 2022.</p> <p>3. UNL's SWMP remained unchanged during 2022. A request for a minor update to BMP 3.05 is included in this annual report. NDEE's General permit and factsheet were published upon notice of acceptance of UNL's SWMP in 2018 and have remained unchanged through 2022.</p> |
| <p>Evaluation: Environmental Indicators of Effectiveness</p> | <p>N/A</p> | |

| <p>Requirement: MCM 3 Illicit Discharge Detection Elimination</p> | |
|--|---|
| <p>Reference</p> | <p>BMP 3.01 Enforcement Plan (Part IV.B.2.a.1.a) a. The permittee must, as part of the IDDE program, develop an enforcement plan or mechanism following the requirements of Parts III.A and B of this permit.</p> |
| <p>Responsible</p> | <p>EHS: Environmental Specialist</p> |
| <p>Strategy</p> | <p>EHS will continue to have and implement an Enforcement Response Plan</p> |
| <p>Measurable Goals</p> | <p>All Years: The formal written Enforcement Plan will be implemented. The plan will be reviewed annually for needed modifications/updates.</p> |

| | | |
|--|--|---|
| Report | EHS will report substantial changes made to the Enforcement Plan with each annual report. | No circumstances occurred in calendar year 2022 that required implementation of the Enforcement Response Plan. UNL's current Enforcement Response Plan was reviewed and documented on 01/17/2023. The review determined that no significant changes are needed to the plan. |
| Evaluation: Environmental Indicators of Effectiveness | N/A | |
| Reference | BMP 3.02 Mapping (Part IV.B.2.a.1.b): The IDDE program must include or address: <ul style="list-style-type: none"> b. A storm sewer system map showing the location of all outfalls and the names and location of all waters of the state that receive discharges from those outfalls. If the SMS4 system connects to another MS4 system, the outfall drainage areas can be limited to those that drain only to the permittee's system. Connections and interactions to other MS4 systems need to be delineated; | |
| Responsible | Utilities: GIS Project Manager | |
| Strategy | The GIS Project Manager is informed of all projects that involve changes to the existing storm water system through the UNL construction management process. | |
| Measurable Goals | All Years: The GIS Project Manager will update the GIS system as changes are made to the storm sewer system to ensure that current information is readily available. | |
| Report | The GIS map will be available for review by the permitting authority upon request. No reporting. | No reporting required. The most current storm sewer system map located on the EHS website showing the location of all outfalls and waters of the state that receive discharges was uploaded to the stormwater management website on 03/06/2023. Continuously updated maps are located within UNL's online proprietary GIS software. |
| Evaluation: Environmental Indicators of Effectiveness | N/A | |

| | | | |
|--|--|--|---|
| | | | |
| Reference | <p>BMP 3.03 Dry-Weather Field Screening</p> <p>(Part IV.B.2.a.1.c): The IDDE program must include or address:</p> <p>c. Outfall field screening procedures and priority locations to investigate for detecting illicit discharges;</p> <p>I. The permittee must document written dry weather field screening and analytical monitoring procedures which are to be used at a number of outfall locations specified in the SWMP each year to detect discharges to the MS4;</p> <p>II. The screening procedures must identify the minimum staff, equipment, and discharge evaluation process used by the permittee; and</p> <p>III. The permittee must document the basis for its selection of each priority location and maintain a current list of all priority locations identified in the system.</p> | | |
| Responsible | EHS: Environmental Specialist | | |
| Strategy | <p>1. EHS will continue to conduct dry weather inspections of all safely accessible UNL outfalls that are 8" or greater in size. Inspections will be conducted in accordance with the IDDE written procedures described in the introductory narrative of this MCM.</p> <p>A current map listing all qualifying outfalls will continue to be maintained, as described in BMP 3.02.</p> | | |
| Measurable Goals | All Years: EHS will inspect all safely accessible qualifying outfalls and maintain associated documentation. In addition, the storm sewer map will be updated to include newly installed qualifying outfalls as described in BMP 3.02. | | |
| Report | <table border="1"> <tr> <td> <p>1. Report percentage of qualifying outfalls for which a dry weather inspection was completed during the previous year. Report rationale/reason why any qualifying outlet was not inspected during the previous year.</p> <p>2. Provide a summary of illicit discharges identified through dry weather monitoring during the prior year's inspections.</p> </td> <td> <p>1. 100% of qualified outlets were inspected during calendar year 2022 in accordance with the IDDE written procedures.</p> <p>2. No illicit discharges were identified during the 2022 dry weather inspections of outfalls.</p> </td> </tr> </table> | <p>1. Report percentage of qualifying outfalls for which a dry weather inspection was completed during the previous year. Report rationale/reason why any qualifying outlet was not inspected during the previous year.</p> <p>2. Provide a summary of illicit discharges identified through dry weather monitoring during the prior year's inspections.</p> | <p>1. 100% of qualified outlets were inspected during calendar year 2022 in accordance with the IDDE written procedures.</p> <p>2. No illicit discharges were identified during the 2022 dry weather inspections of outfalls.</p> |
| <p>1. Report percentage of qualifying outfalls for which a dry weather inspection was completed during the previous year. Report rationale/reason why any qualifying outlet was not inspected during the previous year.</p> <p>2. Provide a summary of illicit discharges identified through dry weather monitoring during the prior year's inspections.</p> | <p>1. 100% of qualified outlets were inspected during calendar year 2022 in accordance with the IDDE written procedures.</p> <p>2. No illicit discharges were identified during the 2022 dry weather inspections of outfalls.</p> | | |
| Evaluation: Environmental Indicators of Effectiveness | None | | |
| | | | |

| | | |
|--------------------------------|--|--|
| <p>Reference</p> | <p>BMP 3.04 Illicit Discharge Investigation and Response</p> <p>(Part IV.B.2.a.1.d & e): The IDDE program must include or address:</p> <p>d. Procedures, staff, and equipment required for investigating and tracing the source of all identified illicit discharge;</p> <p>(i) The permittee must report immediately the occurrence of any dry weather flows believed to be an immediate threat to human health or the environment to NDEE by calling (402) 471-2186 or (402) 471-4545 after business hours, weekends, and holidays; and</p> <p>(ii) The permittee must document all investigations to track at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.</p> <p>e. Procedures for removing the source of the discharge using the Enforcement Response Plan in Part III.B:</p> <p>(i) Once the source of the illicit discharge has been determined, the permittee must take immediate action so the responsible party of the problem can be notified, and require the responsible party to conduct all necessary corrective actions to eliminate the non-storm water discharge as soon as practicable;</p> <p>(ii) The permittee must document all interactions with potentially responsible parties as well as follow-up investigations to confirm illicit discharges have been removed.</p> | |
| <p>Responsible</p> | <p>EHS: Environmental Specialist</p> | |
| <p>Strategy</p> | <p>1. EHS will continue to investigate all identified and reported illicit discharges and conduct appropriate follow-up investigations and actions in accordance with UNL’s IDDE written procedures (which include all regulatory requirements described in Part IV.B.2.a.1.d & e of the General Permit) and as described in the narrative for this MCM.</p> <p>EHS will implement its Enforcement Response Plan as described in BMP 3.01.</p> | |
| <p>Measurable Goals</p> | <p>All Years:</p> <p>EHS will take action to eliminate all identified illicit discharges to UNL’s storm sewer system.</p> | |
| <p>Report</p> | <p>Summarize nature of each illicit discharge identified during the previous year and actions taken to eliminate the discharge.</p> | <p>During Calendar year 2022, two (2) potential illicit discharges were identified, investigated, and resolved.</p> <ul style="list-style-type: none"> One illicit discharge was associated with a non-contact cooling tower wastewater discharged from the East Campus Utility Plant during a maintenance outage. An estimated 500-850 gallons were discharged into the front drive of |

| | | |
|--|--|---|
| | | <p>the facility by a trash pump before the specialist was alerted and able to cease the discharge. The specialist was able to immediately cease the discharge and informed the UNL employees and contractors onsite that the discharge of non-contact cooling tower wastewater is not an allowable discharge. The specialist stayed onsite until a solution to discharge the remaining wastewater to the sanitary sewer was discovered. The specialist then initiated the illicit discharge protocol and performed an investigation of Deadman's Run. The investigation concluded that an undetermined amount of less than the approximate release volume was discharged to the Deadman's Run. No physical indicators of pollution were observed in the discharge.</p> <ul style="list-style-type: none">• Another illicit discharge was associated with a dye mulch stockpile that was located near the street and contributing mulch dye runoff into a nearby storm sewer. Within approximately 20 minutes of being alerted an EHS Technician was able prevent any further discharge from the stockpile by creating an absorbent berm in the curb. The EHS Specialist informed UNL employees of the concern with dye mulch runoff entering the storm sewer and receiving water body. The dye mulch stockpile and absorbent berm were removed, and the street was swept clean before the end of the working day. |
|--|--|---|

| | |
|--|--|
| Evaluation: Environmental Indicators of Effectiveness | <p>Report any analytical data obtained to characterize illicit discharges detected during the previous year.</p> <p>Screening data and physical examination of the discharge was obtained from the cooling tower basin, the street in front of the East Campus Utility Plant, and Deadman’s upstream and downstream of outfall East_3. This field data was described in the potential illicit discharge memorandum dated 04/13/2022. Lab analyticals were not collected in 2022, therefore there is no other data to report.</p> |
| | |
| Reference | <p>BMP 3.05 Non-Stormwater Discharges</p> <p>(Part IV.B.2.a.1.f): The IDDE program must include or address:</p> <p>The following categories of non-storm water discharges or flows (i.e., illicit discharges) shall be addressed only if they are identified as significant contributors of pollutants to your SMS4: routine water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined in 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges from emergency firefighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the State of Nebraska).</p> <ul style="list-style-type: none"> i. The permittee may also provide a list of other similar, occasional, and incidental non-storm water discharges that will not be addressed as illicit discharges (these incidental discharges are similar to those listed above in Part IV.B. 2.e). These non-storm water discharges must not be reasonably expected to be significant sources of pollutants to the MS4, because of either the nature of the discharges or conditions you have established for allowing these discharges to your MS4. ii. You must document in your SWMP any local controls or conditions placed on additional exempt non-storm water discharges. You must include a provision prohibiting any individual non-storm water discharges that is determined to be contributing significant amounts of pollutants to your MS4. |
| Responsible | EHS: Environmental Specialist |
| Strategy | <p>List of Additional Incidental Non-Stormwater Discharges:</p> <p>Building flooding, recirculating water pump failures, other water line breaks, leaks, and overflows; drainage of sumps used to test water pumps, uncontaminated ground and storm water from foundation drains, utility vaults and tunnels; discharges from routine potable water line flushing, all of which are infrequent, occur in the event of emergency, or are necessary for proper maintenance and/or safety.</p> <p>Local Controls:</p> |

| | | |
|--|---|--|
| | All such discharges must be free of any sheen/film, color, turbidity, odors, or other unusual condition (e.g., off-gassing, foaming, etc.) and not likely to contain other pollutants. | |
| Measurable Goals | All Years: None. | |
| Report | Any changes to local controls. | No significant changes to local controls occurred in 2022. |
| Evaluation: Environmental Indicators of Effectiveness | Report all analytical sampling data generated from incidental discharges from the previous year, if analytical testing is conducted. Samples from incidental non-stormwater discharges were not collected in 2022, therefor there is no data to report. | |
| | | |
| Reference | BMP 3.06 Adjacent MS4 Cooperation (Part IV.B.2.a.2&3) <ol style="list-style-type: none"> 2. If illicit connections or illicit discharges are observed related to an adjacent MS4 operator’s municipal storm sewer system then the permittee must notify the other operator within 48 hours of discovery or as soon as practicable. 3. If another operator notifies the permittee of an illegal connection or illicit discharge to the municipal separate storm sewer system then the permittee must follow the requirements specified in Part IV.B.2.a.1.b-d. | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | EHS will continue to maintain cooperative reporting and investigation practices with the City of Lincoln, as described in UNL’s IDDE procedure. | |
| Measurable Goals | 1. EHS will refer all suspected illicit discharges that originate up-gradient to UNL’s SMS4 to the City of Lincoln within 48 hours of discovery. EHS will investigate all reports of suspected illicit discharges received from the City of Lincoln, in accordance with UNL’s IDDE investigation procedures. | |
| Report | Summarize number and nature of reports forwarded to the City and received from the City, including actions taken to eliminate illicit discharges originating on UNL’s property. | One report of an illicit discharge from the LLCHD was received on 05/26/2022. EHS responded in approximately 20 min to prevent any further release of the dye mulch stockpile runoff to the curb inlet. The stockpile was then removed, and the street was swept clean the same day. The discharge is further described in IDDE BMP 3.04. No potential illicit discharges were reported to the City of Lincoln by UNL. |

| | | |
|--|--|--|
| Evaluation: Environmental Indicators of Effectiveness | N/A | |
| | | |
| Reference | <p>BMP 3.07 Public Reporting of Non-Storm Water Discharges and Spills (Part IV.B.a.2.b.1-3)</p> <ol style="list-style-type: none"> 1) The permittee must promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s. 2) The permittee must develop a written spill/dumping response procedure, and a flow chart or phone tree, or similar list for internal use, that shows the procedures for responding to notification regarding illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response, even if it is a different entity other than the permittee. 3) The permittee must conduct inspections in response to complaints and follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party to achieve and maintain compliance. | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | <ol style="list-style-type: none"> 1. EHS will continue to maintain the public reporting mechanism, Stormwater Reporter, on the EHS web page and promote reporting of potential illicit discharges by the campus community as part of the public education and outreach initiatives described in MCM 1 and 2. 2. UNL's IDDE procedure contains spill/dumping response procedures and contact information for various departments and agencies that may need to be notified. <p>UNL's IDDE procedure addresses tracking, investigation, and follow up on all reports of illicit discharges.</p> | |
| Measurable Goals | <p>All Years:</p> <p>EHS will respond to all reports of potential illicit discharges and retain documentation of the nature of the complaint and EHS follow-up actions, as described in UNL's IDDE procedures.</p> | |
| Report | <ol style="list-style-type: none"> 1. Summary of public reports that EHS received during the prior year, nature of the discharge based on EHS investigation, and actions taken to eliminate the discharge. 2. Report substantial changes made to UNL's IDDE procedures. | <ol style="list-style-type: none"> 1. EHS received 3 public complaints in 2022. EHS investigated and took same day action to prevent an illicit discharge in all complaints. One complaint was associated with improper disposal of concrete slurry. EHS reached out the contractor |

| | | |
|---|---|---|
| | | <p>performing nearby work. The contractor had the area cleaned by the end of day. Another complaint was associated with a propylene glycol spill on a hard surface that occurred during a construction demolition. EHS worked with the contractor and provided spill kit supplies to collect the propylene glycol. The contractor worked to remove the stain the remainder of the day. EHS followed up next day and confirmed the area was cleaned. Another complaint was associated with improper containment of concrete washout at a construction project. The construction project was under an acre and did not require a CSW permit. The specialist reached out to the project manager who forwarded the email to the contractor for removal of the concrete washout container that was discovered leaking. EHS followed up 3 days later and observed the concrete washout container still in place. The EHS Specialist attended a project meeting with the contractor to discuss removing the broken container from the job site. The EHS Specialist observed that the broken container was removed from the jobsite after the weekend but before the end of following business day.</p> <p>2. No substantial changes were made to UNL's IDDE procedure in 2022.</p> |
| <p>Evaluation: Environmental</p> | <p>Report analytical results of water quality sampling conducted in response to illicit discharge investigations, if conducted.</p> | |

| | | |
|------------------------------------|--|--|
| Indicators of Effectiveness | No analytical results of water quality sampling were conducted in response to illicit discharge investigations from public reporting incidents. | |
| | | |
| Reference | <p>BMP 3.08 Illicit Discharge Education and Training (Part IV.B.2.c)</p> <ol style="list-style-type: none"> 1) The permittee must develop and implement a training program for all municipal field staff, which, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system. Training program documents must be available for review by the permitting authority. 2) The SWMP must identify the frequency or implement a strategy for training staff identified in Part IV.B.2.c.1 above on the identification of an illicit discharge or connection. The permittee must document and maintain records of the training provided and the staff trained. | |
| Responsible | EHS: Stormwater Specialist | |
| Strategy | <ol style="list-style-type: none"> 1. EHS will implement a field staff illicit discharge detection training program. 2. Target Audience: appropriate employees that are beyond the scope of MCM 6 training, within EHS, Utilities, Landscape Services, and Building Maintenance Departments. 3. Annually, EHS will schedule a training session with each participating department to train employees who have not previously attended a training session (e.g., new hires). EHS will distribute refresher training materials on an annual basis to employees who have been previously trained. Refresher training format may be instructor-led, web-based, or through distribution of written materials. 4. EHS will maintain records of training to include: names, department and role/title of persons trained, dates of training, and summary of training materials. | |
| Measurable Goals | <p>Year One:</p> <ol style="list-style-type: none"> 1. Identify field staff that are required to participate in the training. 2. Deliver training to field staff. <p>All Subsequent Years:</p> <ol style="list-style-type: none"> 1. Design refresher training materials and distribute to previously trained staff. <p>Deliver training to newly hired field staff.</p> | |
| Report | <ol style="list-style-type: none"> 1. Number of newly trained staff, by department. 2. Number of staff receiving refresher training, by department. | <ol style="list-style-type: none"> 1. During calendar year 2022, EHS delivered initial stormwater awareness training to a total of sixty-four (64) applicable staff. The following departments were subject to completing initial |

| | | |
|--|-----|---|
| | | <p>training for new staff: Animal Science, Building Systems Maintenance, Nebraska Union, Facilities Planning and Capital Programs, Athletics, Campus Recreation, EHS, Housing, Landscape Services, Transportation Services, Utility Services, and Sustainability. The initial training that was delivered to the above departments included in-person or online training modules.</p> <p>2. During calendar year 2022, EHS designed and delivered stormwater awareness refresher training to a total of two hundred and fifty-four (254) UNL staff representing the following departments: Animal Science, Athletics, Building Service Maintenance, Campus Recreation, EHS, Facilities Planning and Capital Programs, Housing, Landscape, Nebraska Union, Transportation Services, Utility Services, and Sustainability. Refresher training was also sent to all general staff that have previously completed initial stormwater awareness training and who are not identified by any of the above departments.</p> |
| Evaluation: Environmental Indicators of Effectiveness | N/A | |

| | |
|--|---|
| Requirement: MCM 4 Construction Site Runoff Control | |
| Reference | BMP 4.01 Enforcement (Part IV.B.3.b) |

| | |
|--|---|
| | 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 |
| Responsible | EHS: Environmental Specialist |
| Strategy & Measurable Goals | See BMP 3.01. UNL's enforcement response plan addresses construction sites. |
| Report | See BMP 3.01 |
| 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. 2) The permittee must use qualified individuals, knowledgeable in the technical review of erosion and sediment control plans to conduct such reviews. 3) The permittee must document its review of erosion and sediment control plan using a checklist or similar process. 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. |
| Responsible | EHS: Environmental Specialist |
| Strategy | 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>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> | |
| 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 | <p>Percentage of new construction sites subject to NPDES Construction General Permit requirements for which EHS reviewed and approved an erosion and sediment control plan during the prior year.</p> | <p>EHS reviewed and approved the Erosion and Sediment Control Plan for all (100%) new construction sites subject to NDEE’s construction general permit that began construction in 2022. A total of one (1) new construction site, Westbrook Music Hall’s, Erosion and Sediment Control plan was approved on 12/21/2022. A total of (3) existing construction sites, North Stadium Expansion, Mabel Lee, and Kiewit Hall, had UNL documented reviews of their SWPPPs and NOIs in 2022. The conditions for each of the review are below:</p> <ul style="list-style-type: none"> • Mabel lee’s NER160000 CSW permit expired and a new NOI and updated SWPPP was submitted after the expiration. EHS reviewed the SWPPP and sent the approval letter on 06/09/2022. • North Stadium Expansion site was expanded from the original permitted boundary. A new SWPPP and NOI was submitted to NDEE for the change. UNL reviewed and approved the SWPPP on 08/29/2022. • Kiewit Hall site planned an expansion from the original permitted boundary. A new SWPPP and NOI was submitted to |

| | | |
|---|---|--|
| | | <p>NDEE and UNL to update both the NER210000 permit and to expand the permitted boundary. UNL approved the SWPPP on 02/09/22. NDEE approved the SWPPP on 06/01/22.</p> <p>The previous NER160000 CSW permit expired on 05/31/2022. North Stadium Expansion, Kiewit Hall, Link Building, Barkley Memorial, Mabel Lee, and Outdoor Track were renewed with a NER210000 permit number. All construction projects greater than one acre or part of a common plan of development greater than one acre are currently permitted.</p> |
| <p>Evaluation: Environmental Indicators of Effectiveness</p> | <p>N/A</p> | |
| | | |
| <p>Reference</p> | <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 | |

| | | |
|-------------------------|---|--|
| | <p>(f) Provide a written or electronic inspection report generated from findings in the field.</p> <p>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.</p> <p>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.</p> | |
| Responsible | EHS: Environmental Specialist | |
| 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 in every twelve month period;</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> | |
| Measurable Goals | 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. | |
| 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. | <ol style="list-style-type: none"> During 2021, all (100%) of the permitted construction sites were inspected by EHS at the targeted frequency described in the strategy. The following permitted sites were subject to construction stormwater inspections throughout CY 2022: Barkley Memorial Center was inspected on 04/20/2022 and 11/10/2022; Kiewit Hall was inspected on 05/02/2022 and 10/13/2022; Link Building was inspected on 05/06/2022 and 10/13/2022; Mabel Lee was |

| | | |
|--|--|---|
| | | <p>inspected on 04/21/2022 and 12/07/2022; North Stadium was inspected on 04/22/2022 and 10/19/2022; Outdoor Track was inspected on 05/04/2022 and 10/19/2022; Westbrook was permitted on 12/29/2023 and will be inspected in the spring of 2023.</p> <p>2. No substantial changes were made to the construction site inspection procedures in 2022. Minor changes were made to the procedure to include updates from the new NER210000 CSW permit.</p> |
| Evaluation: Environmental Indicators of Effectiveness | NA | |
| | | |
| Reference | <p>BMP 4.04 Staff Training (Part IV.B.3.e)</p> <p>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.</p> | |
| Responsible | EHS: Environmental Specialist | |
| 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. | |
| Measurable Goals | <p>All Years</p> <p>EHS will maintain training records for all persons authorized to implement BMP 4.02 or 4.03.</p> | |
| Report | Names of staff persons assigned responsibilities under BMP 4.02 and 4.03 and a summary of their qualifications. | The following individuals were assigned responsibilities under BMP 4.02 and 4.03 in 2022: Brenda Osthus, Patrick Boulas, Bruce Haley, and Macrae Zappala. See Attachment B for a summary of each |

| | | |
|--|--|---|
| | | person’s qualifications. Each person meets or surpasses the minimum qualifications to conduct the activities defined in BMP 4.04. |
| Evaluation: Environmental Indicators of Effectiveness | N/A | |
| | | |
| Reference | <p>BMP 4.05 Construction Site Operator Education (Part IV.B.3.f.1)</p> <ol style="list-style-type: none"> 1. The permittee must make publicly 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 controls, as well as overall program compliance. (c) The permittee must make available appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. (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. | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | <ol style="list-style-type: none"> 1. EHS will continue to participate in pre-construction meetings with General Contractors to discuss or provide written information that discusses their obligations under NDEE’s NPDES Construction General Permit and UNL’s SMS4 NPDES permit. EHS will provide either written and/or verbal 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. | |

| | | |
|--------------------------------|--|---|
| | <p>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.</p> | |
| <p>Measurable Goals</p> | <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 purpose of General Contractor education and outreach. 2. EHS will participate in a pre-construction meeting with every General Contractor for newly permitted sites. | |
| <p>Report</p> | <ol style="list-style-type: none"> 1. Summary of changes made to educational and outreach materials related to construction best management practices. 2. Percentage of newly permitted sites where EHS provided contractor education materials to the general contractor in a pre-construction meeting or by written instruction. | <ol style="list-style-type: none"> 1. The following resources were maintained on the EHS website in 2022: A guide to Construction Storm Water (CSW) Permitting at UNL; City of Lincoln – stormwater post construction best management and chapter 8 stormwater best management practices; NDOT environmental section and stormwater best management practices pocket guide; Omaha stormwater program, erosion and sediment control pocket guide, stormwater best management practices, and construction site requirements. During 2022, EHS sent education materials directly to the contractor representative prior to breaking ground at a permitted construction site. The contractor education email references the UNL Stormwater website, information about EHS led stormwater inspections, education on terminating the construction stormwater permit, and advises the contractor about other state issued permits that might be required during construction such as dewatering, treated groundwater remediation discharges, etc. 2. (%100). There was 1 newly permitted construction site approved to break ground in |

| | | |
|--|--|---|
| | | 2022. The site received a contractor education email and multiple pre-construction meetings were attended by EHS for this specific project. |
| 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 | |
| Strategy | <ol style="list-style-type: none"> 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. 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. | |
| 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 publicly 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. | In 2022, there was one public complaint related to a permitted construction site. The complaint was regrading trackout at the Mabel Lee construction site. The complaint was received through the |

| | | |
|---|--|--|
| | | <p>Pollution Reporter Tool located on the EHS web page. The EHS Specialist immediately investigated the complaint when the notice was forwarded from the EHS account. The specialist observed two contractors actively scraping and sweeping the street upon arrival. The specialist reached out to the contractor project manager to confirm the cleanup efforts were in place. No further actions were deemed necessary to resolve this complaint.</p> |
| <p>Evaluation: Environmental Indicators of Effectiveness</p> | <p>Report any water quality sampling done in response to public reporting. Not applicable.</p> | |

| Requirement: MCM 5 Post Construction Management Program | |
|---|---|
| <p>Reference</p> | <p>BMP 5.01 Site Performance Standards (Part IV.B.4.b)</p> <p>1) Within the permit term, new permittees must adopt local post construction storm water standards for designing, installing, implementing, and maintaining storm water control measures which include BMPs that infiltrate, evapotranspire, harvest, and/or use storm water discharges. Existing permittees must review their current ordinances to ensure compliance with the permit in one year.</p> <p>2) Within the permit term, new permittees must adopt local storm water discharge design standards that consider parameters such as site discharge volume, rate, duration, and frequency for new development and redevelopment sites. The local storm water discharge design standards must describe the site design strategies, control measures, and other practices deemed necessary by the permittee to protect pre-development hydrology to the maximum extent practicable. Existing permittees must review their current ordinances to ensure compliance with the permit in one year.</p> |
| <p>Responsible</p> | <p>EHS: Environmental Specialist</p> |
| <p>Strategy</p> | <p>EHS will identify and assemble a group of primary stakeholders (e.g., Facilities Planning and Construction, Environmental Health and Safety, Landscape Services, Utilities, Campus Planning, etc.) to review the current water quality and water quantity standards contained in the UNL Design Guidelines.</p> |

| | | |
|--|---|--|
| Measurable Goals: | <p>Year One: UNL will review existing performance standards to determine if changes are appropriate or necessary.</p> <p>Ongoing All Years: Maintain site performance standards</p> | |
| Report | Report any changes to performance standards made during the preceding year. | Stakeholders met in November 2022 and reviewed UNL’s most recent Design Guidelines for water quality and quantity standards. The stakeholders meeting concluded with no changes to the performance standards or design guideline. |
| Evaluation: Environmental Indicators of Effectiveness | NA | |
| | | |
| Reference | <p>BMP 5.02 Post-Construction Site Plan Review (Part IV.B.4.c.1.a)</p> <p>1. To ensure that all applicable new development and redeveloped sites conform to the performance standards required in Part IV.B.4.b the permittee must conduct project review, approval, and enforcement procedures that include:</p> <p>(a) Procedures for the site plan review and approval process(es) and modification when changes to an approved plan are desired.</p> | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | <ol style="list-style-type: none"> EHS and FPC will continue to collaboratively review all designs for projects that are subject to UNL’s storm water standards, including the stormwater calculations submitted by the Architect at the design phase. Reviews will be documented in accordance with EHS’s Internal Operating Procedure, <i>BMP 5.02 Post-Construction Plan Review and Approval</i>. | |
| Measurable Goals | Ongoing All Years: Conduct and document the site plan reviews for all (100%) of applicable construction projects. | |
| Report | <p>All Years:</p> <ol style="list-style-type: none"> Percentage of applicable construction projects initiated in the prior year that were reviewed and approved. | <p>All (100%) of the applicable construction projects initiated in 2022 were reviewed and approved in accordance to UNL EHS written procedures.</p> <p>One applicable construction project, Westbrook Music Hall, of 1.0 acre or</p> |

| | | |
|--|--|---|
| | | <p>greater was initiated in 2022. The construction project is in a utility and clearing phase. The project has not had the building phase initiated. A review of the PCSWC design for the project is expected to occur prior to the completion of the building design phase.</p> <p>One project, Outdoor Track, had the Stormwater performance standard calculations and narrative reviewed and approved in 2022. The project was using the turf field inside of the track to achieve the water quality requirement. The water quantity requirement was waived due to the proximity of the project to the Antelope and Salt Creek confluence and floodplain.</p> <p>The following construction projects are still in construction where the PCSWCs have been previously approved. Barkley Memorial Center, Kiewit Hall, Link Building, Mabel Lee, Outdoor Track, and North Stadium. These projects will be inspected per BMP 5.04 accordingly.</p> <p>There were no new construction projects between 0.5 and 1.0 acre that were initiated in 2022.</p> |
| Evaluation: Environmental Indicators of Effectiveness | none | |
| | | |
| Reference | <p>BMP 5.03 As-Builts (Part IV.B.4.c.1.b) (b) A requirement for submittal of “as-built” certifications in a schedule defined in the SWMP and approved by the NDEE.</p> | |
| Responsible | <p>FPC: Project Manager EHS: Environmental Specialist</p> | |

| | | |
|--|--|---|
| Strategy | UNL Project Managers will ensure that As-Builts are submitted by the Architect, in accordance with existing contract provisions and as soon as feasible after substantial completion but no later than the end of the Contractor one-year warranty period. EHS will monitor construction documents to ensure that “As Builts” are on-file, and communicate deficiencies to the Project Manager as needed. | |
| Measurable Goals | All Years of Permit: 100% of applicable development sites will have relevant construction documents related to post-construction structural BMPs on file, including deviations from or modifications to approved designs. | |
| Report | All Years of Permit: Report percentage of applicable projects completed within the prior year for which complete as-built information is on file. | All (%100) applicable projects completed within 2022 that no longer are in the contractor warranty period have relevant as-built information on file. There are 3 projects that have been substantially complete in 2022 and are in the warranty period. Barkley Memorial, Mabel Lee, Outdoor Track. |
| Evaluation: Environmental Indicators of Effectiveness | none | |
| | | |
| Reference | BMP 5.04 Installation Inspections Part IV.B.4.d.1: 1) Procedures must be established to assure all structural storm water control measures installed and implemented meet the approved plans and are maintained in perpetuity. | |
| Responsible | FPC: Project Managers EHS: Environmental Specialist | |
| Strategy | 1. Inspection of installation/implementation of storm water controls A/E Inspection: Existing UNL A/E Agreement provisions require periodic and final inspection by the Architect to ensure that all work conforms to Construction Documents. Issuance of a final certificate of completion is also contingent upon the Architects determination that the work complies with approved design parameters. 2. Maintained in perpetuity UNL Design Guidelines state: “Selected BMPs shall be specified in final design documents, and final construction documents shall contain schedules and | |

| | | |
|--|---|---|
| | procedures for inspection and maintenance of the BMPs.” This schedule of maintenance activities will be uploaded into the appropriate department’s (e.g., Landscape Services, Utility Services) work order system so that assets are maintained into perpetuity. Maintenance inspections are carried out through BMP 6.09 | |
| Measurable Goals | All Years: 100% of all newly-constructed structural post-construction BMPs at sites subject to post-construction design criteria will be inspected by the A/E. | |
| Report | <p>All Years:</p> <p>Percent of construction sites with new post-construction structural BMPs completed in the prior year that were inspected by the A/E and verified as meeting design criteria.</p> | <p>All (%100) of construction projects that completed an installation inspection where the A/E verified the PCSWC as meeting design criteria.</p> <p>The Gymnastics Devaney Training center permeable paver PCSWC was substantially complete in 2020; however, minor repair was needed to fix settling in some of the pavers. The contractor completed this work in 2022. The settling pavers are not expected to have a negative effect to stormwater quality.</p> |
| Evaluation: Environmental Indicators of Effectiveness | None | |
| | | |
| Reference | <p>BMP 5.05 Public Reporting (Part IV.B.4.d.2)</p> <p>2) The permittee must establish procedures to respond to complaints and notifications to ensure the long-term maintenance of structural controls.</p> | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | EHS will track, investigate and follow up on all public complaints regarding post-construction BMP maintenance. Public reporting is encouraged through the mechanisms described in MCM 1 & 2. | |
| Measurable Goals | <p>All Years:</p> <p>1. EHS will continue to maintain the public reporting mechanism, Stormwater Reporter, on the EHS web page.</p> <p>2. EHS will maintain our procedure for reporting suspected maintenance issues http://ehs.unl.edu/sop/s-stormwater_IDDE.pdf. This procedure is publicly available on the EHS website.</p> | |

| | | |
|--|---|---|
| | 3. EHS will respond to all public complaints and summarize the nature of each complaint and EHS follow-up actions in the annual report. | |
| Report | All Years: 1. Number and summary of complaints received and follow-up actions. 2. Summary of any changes to related procedures resulting from a complaint. | EHS did not receive any public complaints regarding post-construction BMP maintenance in calendar year 2022. No follow up actions or changes to procedures were applicable. |
| Evaluation: Environmental Indicators of Effectiveness | Report any water quality sampling done in response to public reporting. Not applicable | |
| | | |
| Reference | BMP 5.06 Tracking Post-Construction Storm Water Control Measures (Part IV.B.4.e) 1. The permittee must maintain a current inventory of certified post-construction structural storm water control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites located within the permit area. 2. A survey or number of new post-construction BMPs sorted by type (bio-retention, catch basins, etc.) must be included in the annual report. 3. Based on inspections conducted under Part IV.B.4.f , the permittee must update the inventory as appropriate where changes occur in property ownership or the specific control measures implemented at the site. This inventory must be maintained and available for review by the permitting authority. | |
| Responsible | EHS: Environmental Specialist Utilities: GIS Project Manager | |
| Strategy | New post-construction storm water controls at sites subject to UNL's Design Guidelines storm water standards will be inventoried and tracked using the campus GIS system, including details on the type of BMP. | |
| Measurable Goals | All Years: 100% of all post-construction structural BMPs subject to UNL Design Guidelines installed after the effective date of UNL's coverage under the SMS4 General NPDES permit are inventoried in UNL's GIS system, including details of type. | |
| Report | All Years: 1. Percentage of new development and redevelopment sites completed during the previous year for which permanent | 1. All (100%) PCSWCs of newly developed and redeveloped sites completed during the previous year were inventoried on UNL's GIS System in 2022. |

| | | |
|--|---|--|
| | <p>structural BMPs are inventoried in UNL's GIS system.</p> <p>2. Number of post-construction permanent BMPs at new development and redevelopment sites completed during the previous year, sorted by type.</p> | <p>Four (4) PCSWCs were nearing completion during 2022; one permeable paver and detention system (Link Building), one turf bioretention system (Mabel Lee), one retention swale (Barkley Memorial), and one turf field infiltration system (Outdoor Track) were all added to the PCSWC inventory and UNL's GIS database in anticipation of completion.</p> |
| Evaluation: Environmental Indicators of Effectiveness | None | |

| Requirement: MCM 6 Pollution Prevention and Good Housekeeping | | |
|---|--|---|
| Reference | <p>BMP 6.01 Mapping and Inventory (Part IV.B.5.a)</p> <p>a. Municipal Facility and Control Inventory</p> <p>1) The permittee must develop and maintain an inventory of municipally-owned or operated facilities and storm water controls that is available for review by the permitting authority.</p> <p>2) The permittee must identify on a map where the municipally-owned or operated facilities are located within the MS4. The map must be maintained and updated regularly and be available for review by the permitting authority.</p> | |
| Responsible | Utility Services: GIS Project Manager | |
| Strategy | UNL's GIS Project Manager is informed of construction projects on the UNL campus and ensures that campus GIS maps are updated to reflect changes. | |
| Measurable Goals | All Years: Update maps as needed in response to campus changes. | |
| Report | The GIS map will be available for review by the permitting authority upon request. No reporting. | UNL GIS maps are up-to-date and available upon request. |
| Evaluation: Environmental | N/A | |

| | | |
|--|---|--|
| Indicators of Effectiveness | | |
| Reference | <p>BMP 6.02 Municipally-Owned or Operated Facility Assessment (Part IV.B.5.b)</p> <ol style="list-style-type: none"> 1) The permittee must maintain current assessments of all municipally-owned or operated facilities identified in Part IV.B.5.a. The strategy and description of the assessment procedure must be included in the annual report. 2) The permittee must identify “high-priority” facilities that have a high potential to generate storm water pollutants. High priority facilities are facilities which have the high potential to generate storm water pollutants. A description of the evaluation criteria for determining “high-priority” must be included in the annual report. 3) The permittee must document the results of the assessments and maintain copies of all site evaluation documents used to conduct the assessment. | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | UNL’s criteria for designating a facility as “high priority” is summarized in the narrative of this MCM, and documented in UNL’s Runoff Control Plan. Final designation as “high priority” is based on known activities and final visual inspection of the site by EHS. | |
| Measurable Goals | Ongoing all years: UNL will conduct and document assessments as new facilities are built or established. | |
| Report | <ol style="list-style-type: none"> 1. Changes to EHS’s assessment strategy to identify “high priority” facilities made during the reporting period will be included in the annual report. 2. A list of newly identified “high priority” facilities made during the reporting period will be included in the annual report. | <ol style="list-style-type: none"> 1. No significant changes were made in the previous year to UNL’s assessment strategy for designating “high priority” facilities in 2022. 2. A New Facility Assessment resulted in no new High Risk Facilities being added in 2022. |
| Evaluation: Environmental Indicators of Effectiveness | N/A | |
| | | |

| | | |
|--|--|--|
| Reference | <p>BMP 6.03 Runoff Control Plans</p> <p>(Part IV.B.5.c)</p> <p>1) The permittee must develop and maintain facility-specific Runoff Control Plans for “high priority” facilities to control the contribution of pollution in storm water runoff.</p> <p>(a) For each “high priority” facility or operation identified in Part IV.B.5.b, the permittee must develop or maintain a site-specific RCP that identifies storm water control measures, inspection strategy, and visual monitoring procedures.</p> <p>(b) A copy of the facility-specific Runoff Control Plan must be maintained and be available for review by the permitting authority. The RCP must be kept on-site at each of the municipally owned or operated facilities’ offices for which it was completed. The RCP must be updated as necessary.</p> <p>2) All “high priority” municipally-owned or operated facility Runoff Control Plans must include provisions for general good housekeeping practices, storage of de-icing materials, fueling operations, vehicle maintenance, and equipment and vehicle washing.</p> | |
| Responsible | <p>EHS: Environmental Specialist</p> | |
| Strategy | <p>UNL has developed a written Runoff Control Plan that covers all high priority facilities at UNL. A copy of this plan will be on file at each location.</p> | |
| Measurable Goals | <p>Year One: EHS will ensure that a copy of UNL’s RCP is on file at each high priority facility.</p> <p>All Subsequent Years: EHS will review the RCP for needed changes and place a copy of the plan at newly identified high priority facilities as they are built or established.</p> | |
| Report | <p>Year One: Percentage of high priority facilities that have a RCP on file at their location.</p> <p>All Subsequent Years: Summary of newly built or established high priority facilities during the previous year and changes made to the RCP related to newly identified facilities.</p> | <p>UNL’s Runoff Control Plan was distributed to the managers of all (100%) of the High Risk Facilities at UNL City and East Campus in Year 1.</p> <p>No New High Risk Facilities were identified at UNL in 2022.</p> <p>EHS inspected every high risk facility for adherence to the UNL Runoff Control Plan and other good housekeeping/pollution prevention measures in 2022. Copies of inspection records are on file.</p> |
| Evaluation: Environmental Indicators of Effectiveness | <p>N/A</p> | |
| | | |

| | | |
|-------------------------|--|---|
| Reference | <p>BMP 6.04 Inlet Maintenance</p> <p>(Part IV.B.5.d.1.a&e)</p> <p>1) MS4 storm water inlets and catch basin maintenance</p> <p>(a)The permittee must develop a strategy to inspect and clean storm water inlets as needed in the SWMP. The results of the implementation of this strategy shall be included in the annual report.</p> <p>(e) The permittee must develop a procedure to dewater and dispose of materials extracted from catch basins so that water removed during the catch basin cleaning process and waste material will not reenter the MS4.</p> | |
| Responsible | <p>Utilities Services: Utility Plant Manager</p> <p>EHS: Environmental Specialist</p> | |
| Strategy | <p>Utilities Services and/or EHS staff will inspect and clean UNL owned inlets and catch basins under the following strategy:</p> <ol style="list-style-type: none"> 1. Catch basins will be inspected annually and cleaned as needed. 2. Inlets within 100' down gradient from construction sites 1 acre or greater in size will be inspected and cleaned as necessary prior to filing of a NOT for the site and following substantial stabilization of the site. 3. Inlets specifically associated with an illicit discharge during the previous year will be inspected the subsequent year to verify that the condition leading to the illicit discharge no longer exists. 4. Inlets that have required maintenance during the previous year for clogging or other discharge malfunction will be inspected during the subsequent year to verify that the conditions leading to the malfunction no longer exist. <p>In collaboration with UNL's Utilities Department, EHS will establish a written procedure for inspection and cleaning of inlets and basins and inspectors will be trained to the SOP. The SOP will include evaluation of physical condition; indicators of pollutants (trash, debris, sanitary sewage, oil sheen, discoloration, etc); and management of recovered debris/material.</p> | |
| Measurable Goals | <p>Year one: Establish an inventory of all inlets and basins requiring inspection. Establish the inlet inspection and maintenance procedure and train applicable staff. Verify that inspection and maintenance activities are captured in the appropriate Department's work order system, or otherwise documented.</p> <p>All Years of Permit: Update the inventory of inlets and basis requiring inspection as needed; document inspection of each.</p> | |
| Report | <p>All Years of Permit:</p> <ol style="list-style-type: none"> 1. Percentage of inlets/basins scheduled for inspection with completed inspections. | <ol style="list-style-type: none"> 1. UNL Utility Services has not identified any underground structures on City or East Campus that would be classified as a catch basin. Utility Services will continue to monitor newly |

| | | |
|--|--|---|
| | <p>2. Number of basins/inlets inspected where corrective action was needed and a summary of actions taken.</p> | <p>installed structures and inventory any that are classified as a catch basin for future inspection. No construction projects have filed NOTs in 2022. All (100%) Inlets associated with an illicit discharge in 2021 have been inspected by EHS in 2022. EHS has re-inspected all (100%) inlets that reported clogging or maintenance issues in 2021.</p> <p>2. In 2022, none of the inlets that were inspected as part of this BMP required corrective action. No action was deemed necessary.</p> |
| Evaluation: Environmental Indicators of Effectiveness | <p>Report any analytical testing done in response to inlet clean-outs</p> <p>No analytical testing was conducted.</p> | |
| | | |
| Reference | <p>BMP 6.05 Inlet Awareness Labels (Part IV.B.5.d.1.b)</p> <p>b. The permittee must have a plan to label inlets with a legible storm water awareness message.</p> | |
| Responsible | <p>EHS: Environmental Specialist</p> <p>Utilities: Utility Plant Manager</p> | |
| Strategy | <p>EHS will meet with the campus stakeholder group (described in MCM 3 & 5) to evaluate/determine:</p> <p>a) Current design guidelines regarding inlet labels and address any changes deemed necessary to be applied to future projects.</p> <p>Criteria for identifying existing, un-labeled, high-priority inlets and identifying funding sources and timelines for retrofitting these with inlet awareness labels/messages.</p> | |
| Measurable Goals | <p>Year One:</p> <p>a) Establish acceptable means and methods for future inlet labeling and update UNL's Design Guidelines accordingly.</p> | |

| | | |
|--|---|--|
| | <p>b) Establish criteria for designating existing “high risk” inlets. Inventory existing “high risk” inlets and establish a funding source and schedule for labeling.</p> <p>All Subsequent Years: Label drains as applicable by Design Guidelines or high priority inlet schedule.</p> | |
| Report | <p>Year One: Provide a summary of inlet labeling design guidelines, and criteria used to identify existing high-priority inlets.</p> <p>Subsequent Years: Provide a summary of changes made to the design guidelines, and status of progress in labeling of existing high-priority inlets.</p> | <p>The design guidelines for UNL reference City of Lincoln design criteria for installation of inlet awareness labels for new construction.</p> <p>There were no changes to the design guidelines regarding stormwater awareness labels in 2022. All areas designated as “high risk” in year one have been surveyed and all are considered labeled and meeting the objectives of this BMP.</p> |
| Evaluation: Environmental Indicators of Effectiveness | | |
| | | |
| Reference | <p>BMP 6.06 Open Drainage Maintenance</p> <p>(Part IV.B.5.d.1.c-d)</p> <p>(c) The permittee must visually monitor permittee-owned open channels and other drainage structures for debris and evidence of ongoing dumping in a strategy defined in the SWMP.</p> <p>(d) The permittee shall include a plan for the removal of trash and debris from open channels and other drainage structures. The plan shall be detailed in the SWMP and approved by the NDEE. The permittee must document drainage structure maintenance activity in a log that is to be made available for review by the permitting authority upon request.</p> | |
| Responsible | <p>Landscape Services: Assistant Director, Landscape Operations</p> <p>EHS: Environmental Specialist</p> | |
| Strategy | <p>Landscape Services will visually monitor all safely accessible UNL owned open channels annually for debris and structural integrity.</p> <p>All waste material will be containerized and disposed of as refuse at a permitted municipal waste landfill, unless meeting criteria of regulated waste, then disposed via EHS in accordance with local, state, and federal rules and regulations as applicable.</p> | |

| | | |
|--|---|--|
| | <p>Any structural maintenance activity will be logged or forwarded to the appropriate agency, if not within the responsibility/authority of UNL.</p> <p>All inspection records will be maintained.</p> | |
| Measurable Goals | All Years: Inspect open drainage channels annually, and maintain a log of associated maintenance activity. | |
| Report | All Years: Percentage of scheduled vs. completed inspections. | All (100%) of UNL owned/maintained open channels on City, East and Innovation campus were inspected in 2022. |
| Evaluation: Environmental Indicators of Effectiveness | <p>Report any analytical results taken.</p> <p>No analytical samples were taken.</p> | |
| | | |
| Reference | <p>BMP 6.07 Municipal Activities and Operations</p> <p>(Part IV.B.5.d.2)</p> <p>(a) The permittee must implement a set of pollution prevention measures that, when applied during municipal O&M activities, will reduce the discharge of pollutants in storm water.</p> <p>(b) All pollution prevention measures implemented at municipal facilities must be visually inspected in a strategy defined in the SWMP to ensure they are working properly; a log of inspections must be maintained and made available for review by the permitting authority upon request.</p> | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | <p>Groups of employees that work within O&M at UNL such as plumbers, painters, certified pesticide applicators, etc., not previously identified under a Runoff Control Plan, that could potentially impact stormwater during the course of their work activities will follow pollution prevention measures to prevent negative impacts to stormwater. These pollution prevention measures are detailed in UNL's RCP and the employees subject to this BMP will receive training on UNL's RCP.</p> <p>EHS will interview O&M facility leadership annually to ensure that they are adhering to pollution prevention measures and maintain associated documentation.</p> | |
| Measurable Goals | <p>Year One:</p> <p>EHS will identify and train groups of affected employees.</p> <p>All Subsequent Years:</p> <ol style="list-style-type: none"> 1. EHS will interview O&M facility leadership groups annually. 2. EHS will review UNL's RCP annually, and update as needed. | |

| | | |
|--|---|--|
| | EHS will distribute refresher training materials annually to affected employees, and refresher training will include any changes made to UNL's RCP. | |
| Report | <ol style="list-style-type: none"> List of O&M facility leadership groups interviewed, and groups of employees receiving training. Significant changes to UNL's RCP. | <ol style="list-style-type: none"> The following departments' facility leadership was interviewed in 2022: Athletics, Building Systems Maintenance, Campus Recreation, Nebraska Union, Facilities Planning & Capital Programs, Sustainability Department, and University Housing. All employees identified at these departments whose work scope could adversely affect stormwater received initial or refresher stormwater awareness training in 2022. For a complete list of departments trained in 2022 refer to BMP 3.08. No significant changes to the Runoff control plan occurred in 2022. Minor updates to the plan occurred in 2023 related to stormwater complaints observed in 2022. The updates included cleaning trackout, discouraging concrete washout and concrete slurry discharges, and discouraging non-contact cooling tower waste water from entering the storm sewer system. |
| Evaluation: Environmental Indicators of Effectiveness | N/A | |
| | | |
| Reference | <p>BMP 6.08 Street Sweeping (Part IV.5.d.3)</p> <p>(a) The permittee must sweep municipally-owned and maintained streets, roads, and public parking lots in accordance with a strategy defined in the SWMP.</p> | |

| | | |
|--|---|---|
| | (b) The permittee must provide a procedure to dewater and dispose of street sweeper waste material. This procedure must ensure that water and material will not reenter the MS4. | |
| Responsible | Landscape Services: Assistant Director of Landscape Operations Parking Services: Director | |
| Strategy | <p>Landscape Services will sweep UNL owned streets and surface parking lots annually in the spring. UNL street sweepers do not utilize liquid in the operation. Streets and surface lots are visually monitored throughout the rest of the year and cleaned as needed.</p> <p>All waste material from street sweepers are collected at a designated area at City and East Campus Landscape Services where it is not able to reenter the MS4 system and then properly disposed at a permitted municipal waste landfill.</p> <p>Parking Services cleans all parking garages annually in the summer, with steamer equipment that recovers all liquid. Recovered liquid is disposed in the sanitary sewer. Filtered sediment is collected and accumulated in a manner not exposed to precipitation and disposed of at a permitted municipal waste landfill.</p> | |
| Measurable Goals | All Years: Clean streets and parking lots at frequency defined. | |
| Report | Summarize any changes to schedule or means of disposal. | No changes were made to the schedule or means of disposal for waste material generated from street sweeping. Open parking lots and streets were swept/cleaned at the targeted frequency. Parking garages were cleaned in 2022. The steamer equipment was not used in the parking garages for 2022 due to the reduction in operating budget. |
| Evaluation: Environmental Indicators of Effectiveness | None | |
| | | |
| Reference | BMP 6.09 Maintenance of Municipally-Owned and/or Maintained Structural Storm Water Controls (Part IV.5.d.4) (a) The permittee must inspect and maintain if necessary municipally-owned or maintained structural storm water controls in accordance with a frequency provided in the SWMP. | |

| | | |
|--|---|---|
| | (b) The permittee must also maintain municipally-owned or maintained green infrastructure practices through regularly scheduled maintenance activities. | |
| Responsible | Utilities Service: Utility Plant Manager Landscape Services: Assistant Director of Landscape Operations EHS: Environmental Specialist | |
| Strategy | (a) Utility Services will inspect and perform maintenance, if necessary, on all underground stormwater structural controls at least annually or at a frequency recommended by the manufacturer for proprietary systems. Landscape Services will inspect all above ground green infrastructure and structural storm water controls at least annually. | |
| Measurable Goals | All Years: All structural and green infrastructure controls will be inspected and maintained at the required frequency. | |
| Report | Percentage of Preventative Maintenance inspections conducted on stormwater controls. | All (100%) UNL post-construction stormwater controls inventoried in BMP 5.06 were inspected by EHS or Landscape Services in 2022. |
| Evaluation: Environmental Indicators of Effectiveness | | |
| | | |
| Reference | BMP 6.10 Training and Education (Part IV.5.e) The permittee must develop and implement an employee training program for employees involved in implementing pollution prevention and good housekeeping practices in this part. The permittee must also identify and track all personnel requiring training and records must be maintained. The training program and target audience must be described in the SWMP. | |
| Responsible | EHS: Environmental Specialist | |
| Strategy | EHS will implement its RCP training programs and include affected employees of “high risk” facilities, as well as O&M employees described in BMP 6.07. In collaboration with management of these departments/facilities, EHS will specifically identify affected employees and update the roster of affected employees annually. | |

| | | |
|--|---|--|
| | <p>Affected employees will receive full RCP training once, and will be provided with refresher training materials annually.</p> <p>EHS will maintain training records for individual employees and records of the materials used for initial and refresher training.</p> | |
| Measurable Goals | <p>Year One: EHS will identify and deliver training to affected employees.</p> <p>All Subsequent Years:</p> <ol style="list-style-type: none"> 1. EHS will update the roster of affected employees at least annually, and deliver full RCP training to newly identified affected employees. 2. Refresher training materials will be provided to previously trained employees at least annually. 3. EHS will review training materials at least annually and update as needed. <p>EHS will maintain records indicating the names of employees receiving training, a summary of the content of the training, date of training, and name of the person conducting the training or other method of delivery.</p> | |
| Report | <p>Year One: Status of completion of training materials.</p> <p>All Subsequent Years: Number of employees, by department, completing training during the reporting period.</p> | <p>As reported for BMP 3.08, three hundred and eighteen (318) UNL staff received initial or refresher training in 2022 and represented the following departments: Building Systems Maintenance, Utilities Services, Landscape Services, EHS, Animal Science, Athletics, Campus Recreation, Nebraska Union, Facilities Planning and Construction, Housing, Sustainability, and Transportation. This included “field staff” and employees at “high risk facilities”.</p> |
| Evaluation: Environmental Indicators of Effectiveness | | |
| Reference | <p>BMP 6.11 Contractor Requirements and Oversight (Part IV.5.f)</p> <p>Any contractors hired by the permittee to perform municipal maintenance activities that have the potential to impact storm water quality must be contractually required and overseen by the permittee to ensure compliance with all of the storm water control measures, good housekeeping practices, and facility-specific Runoff Control Plans described above. The contract must also state who is responsible for overall</p> | |

| | | |
|--|---|---|
| | management and implementation of your pollution prevention/good housekeeping program and, if different, who is responsible for each of the BMPs identified for this program. | |
| Responsible | Leadership of the UNL department issuing the contract for work by the contactor | |
| Strategy | UNL includes language in contracts for municipal maintenance activities obligating contractors to comply with storm water control measures, good housekeeping practices, and runoff control plans. UNL employees are instructed to notify EHS of any condition that is or could result in an illicit discharge. | |
| Measurable Goals | No illicit discharges will occur related to municipal maintenance activities conducted by outside contractors. | |
| Report | Summary of nature of all illicit discharges attributed to municipal maintenance activities conducted by outside contractors during the reporting period. | No illicit discharges associated with municipal maintenance activities conducted by an outside contractor were reported or discovered by EHS during calendar year 2022. |
| Evaluation: Environmental Indicators of Effectiveness | None | |

Attachment A -Statement of Qualifications related to Storm Water Management

For Permit year 2022 - BMP 4.04

Brenda Osthus

- I. Educational Background:
 - B.S. Medical Technology, Northwest Missouri State University, 1986
 - Masters of Legal Studies, University of Nebraska - Lincoln, 1995
- II. Professional Experience:
 - Chemist III, State of Nebraska Department of Environmental Quality, 1987 – 1992
 - Hazardous Materials Specialist, University of Nebraska Lincoln, Department of Environmental Health and Safety, 1992 – 1998
 - Director, University of Nebraska Lincoln, Department of Environmental Health and Safety, 1998 - present
- III. Professional Certifications/Professional Development
 - Certified Hazardous Materials Manager, 1995
 - Certified Erosion and Sediment Control Inspector (#2098), 2017, renewed in March, 2022

Patrick Boulas

- I. Educational Background:
 - B.A. in Geology, University of Colorado – Boulder, 2011
- II. Professional Experience:
 - Stormwater Specialist, University of Nebraska – Lincoln, EHS Department, 2019 - present
 - EHS Technician, University of Nebraska – Lincoln, EHS Department 2017-2019
 - Environmental Specialist, Leidos, 2016 - 2017
Landfill monitoring and stormwater BMP application and maintenance.
- III. Professional Certifications/Professional Development:
 - Geologist Intern – November 2021
 - NDOT Interim Erosion and Sediment Inspector Certification, February, 2019
 - Erosion and Sediment Control Inspector Certification (#2289), April, 2019
 - 40 Hour HAZWOPER Training 2017
 - 8 Hour HAZWOPER Refresher 2018 -2022

Bruce Haley

- I. Educational Background:
 - B.S. in Geology, University of Oklahoma
- II. Professional Experience:
 - Conducted quarterly audit and inspection of LLRW site in Boyd, Co., NE, 1994-1998
 - UNL Project Manager of EPA lead Superfund Project, 2005 – Present
- III. Professional Certifications/Professional Development:
 - Professional Geologist
 - Certification in Hydrogeology, Oklahoma State University, 1988
 - Jacobson Helgoth Consultants, Basic Auditor Course, 1994
 - NDOR Interim Erosion & Control Inspector Certification, December, 2017
 - NDOR Erosion & Sediment Control Inspectors Course, February, 2018
 - Active member of the UNL stormwater construction inspection team, 2018-present

Macrae Zappala

- I. Educational Background:
 - B.S. in Environmental Studies, University of Nebraska - Lincoln, 2020
 - Associate of Science, Southeast Community College, Lincoln, NE - 2015
- II. Professional Experience:
 - Environmental Health and Safety Technician, University of Nebraska - Lincoln, EHS Department 2021 - present
 - Internship at Lincoln Lancaster Health Department, job shadow well water tests - 2018
- III. Professional Certifications/Professional Development:
 - NDOT Erosion and Sediment Control Certification Course (#3288) - October, 2021
 - Hazardous Material Training for EHS - January, 2021
 - Active member of the UNL stormwater construction inspection team, 2021 - present