UNIVERSITY OF NEBRASKA AT OMAHA
ENVIRONMENTAL HEALTH & SAFETY

University of Nebraska at Omaha Runoff Control Plan

Facility Description and Inventory

The University of Nebraska at Omaha Dodge, Scott, and Center Campuses comprise approximately 246 acres of land, upon which academic, recreational, and support buildings have been erected to support nearly 15,000 students, 1100 faculty, and 2200 staff. Building and grounds usage includes parking lots and garages, a greenhouse, recreation fields, residential housing, offices, research and teaching laboratories, classrooms, a library, healthcare, animal housing (indoor), equipment and vehicle storage, a central utilities plant, landscaping operations, streets, sidewalks, and green spaces. UNO's Dodge, Scott, and Center Campuses are classified as a Small Municipal Separate Storm Sewer System (SMS4). UNO is subject to the Nebraska Department of Water, Energy, and Environment (NDWEE) NPDES Permit Authorizing Storm Water Discharges to Waters of the State from Small Municipal Separate Storm Sewer Systems Located in Douglas and Sarpy Counties in the State of Nebraska (NER220000). UNO's Permit and supporting documents (e.g., Storm Water Management Plan, Runoff Control Plan, etc.) are available on the EHS web page.

All facilities on campus are inventoried in UNL's GIS system. Maps can be located at http://gis.unl.edu/. Access to the GIS system is restricted to credentialed persons. Simple campus maps are not available to the public for reasons of site security. Regulatory bodies can contact UNO EHS at 402.554.3596 or uno.ehs@nebraska.edu for details.

Receiving Waters

The Receiving Water from UNO's Campus is Elmwood Creek to the east and the Little Papillion Creek to the west. Elmwood Creek empties into the Little Papillion Creek (which is impaired for E. coli bacteria) just west of the Scott Campus. Receiving Water from the Scott and Center Campuses is also the Little Papillion Creek. UNO activities are not expected to significantly contribute to the impairment of its receiving waters.

The primary source of E. coli bacteria is fecal matter from warm-blooded animals. The primary source of E. coli in this watershed is likely to be combined (sanitary and storm) sewers in some locations (though a sewer separation project is underway to correct that). UNO is not expected to have failed sanitary sewer or septic systems, nor illicit cross-connections from sanitary sewer lines or septic systems. The most likely sources of E. coli originating from campus include wildlife and (to a far lesser extent) pet waste.

UNO also has potential for contributing sediments to receiving waters, primarily through earth-disturbing activities.

BMP 6.02 High Risk Facility Assessment Criteria

UNO uses the following criteria to designate a facility as "high risk":

1. Emergency generator locations where a release is likely to reach a storm drain inlet during re-fueling operations, considering size of the tank, distance to the storm inlet, surface characteristics (concrete, grass, etc.), and topography of the surrounding area;
2. Pesticide/herbicide bulk loading/unloading areas if a release is likely to reach a storm drain inlet;
3. Bulk chemical storage areas if a release occurs through mishandling or loading and unloading and the release is likely to enter a storm drain inlet;
4. 180-day hazardous waste storage facilities if, considering maximum container size and proximity of storm drains and topography, a release during loading/unloading is likely to reach a storm drain inlet (all other waste handling operations are conducted inside the facilities and the facilities are designed to provide containment of releases);
5. Storage of de-icing materials in a manner that could impact stormwater;
6. Commercial-likerefuse support operations (e.g., compactors, garbage truck storage, refuse container storage, etc.);
7. Facility maintenance operations if storage or use practices make it likely that chemicals or other pollutants may reach a storm drain inlet through either normal operations or a release during use, mishandling, loading, or unloading

High Risk Facility Designations

Considering the criteria discussed above, UNO has designated the following facilities as high risk. The rationale for including each facility is provided in parentheses. Facilities that have a site-specific Spill Prevention Control and Countermeasures Plan (SPCC) are indicated with a "**".

1. Central Utilities Plant, Dodge Campus (underground fuel tanks, bulk loading operations where stormwater curb inlet is relatively close) **
2. Landscape Services Buildings, Dodge/Scott/Center Campuses (bulk petroleum storage, fuel dispensing, equipment maintenance, bulk salt/road treatment mix storage) **
3. Dodge Campus 180-day Hazardous Waste Storage Facility (loading and unloading of 55-gallon drums or smaller container and a stormwater curb inlet is located in the immediate vicinity of the building).
4. List of high-risk emergency generator locations at present:

    a. Peter Kiewit Institute Genset #2: 1700 gal
    b. Peter Kiewit Institute Genset #3: 900 gal
    c. Mammel Hall Genset: 500 gal
    d. Pacific Parking Garage Genset: 48 gal

Rationale for not including certain facilities:

1. Facilities Maintenance Shop: All shop areas (including material and waste

storage) are located indoors.
2. Scott Campus Environmental Health and Safety Hazardous Waste Facility: The rooms are contained within the building envelope. The campus is a Conditionally Exempt Small Quantity Generator, and as such, rarely ships drums of liquid waste.

BMP 6.03 General Pollution Prevention and Good Housekeeping Measures

The following are general pollution prevention and good housekeeping measures that must be observed at UNO. All staff of high-risk facilities are encouraged to be alert to and report to their supervisor observed deviations from the pollution prevention and good housekeeping measures described in this plan.

Vehicle/Equipment Washing

Whenever possible, use a commercial wash facility off-site. These locations are connected to the sanitary sewer and have traps to collect dirt and oils. If a commercial wash facility is not available or realistic, use interior areas with drains that connect to the sanitary sewer. Do not use normal interior drains, if:

1. The vehicle/equipment is very dirty/muddy as the dirt/mud can plug drains. This is not an issue if a mud trap is present.
2. The vehicle/equipment is coated with oil to the point that it will cause a sheen in the wash water. Wash water discharged to a sanitary sewer cannot have a sheen. This is not an issue if an oil/grease trap is present.

Washing vehicles/equipment outside has significant limitations. Detergents cannot be used. There cannot be any discharge of the wash water to the storm sewer because it will contain contaminants removed from the vehicle/equipment. As a result, washing vehicles/equipment outside is generally limited to well-maintained vehicles/equipment washed on grass areas where wash water will not enter a storm water conveyance and solely for the removal of dirt, mud, grass clippings, and other plant debris.

Vehicle and Equipment Maintenance

- Maintain vehicles and equipment to eliminate fluid leaks.
- Avoid "topping off' the tank when fueling to minimize the potential for spills due to over-filling.
- Conduct vehicle maintenance and repair inside of a building.
- In the event of a fluid leak/release from equipment (e.g., broken hydraulic hose, etc.), take action to stop the leak/release (e.g., shut valves, use a drip pan, etc.)

  and prevent it from entering the storm sewer system (e.g., apply absorbents, etc.). Promptly clean-up the spill/release and excavate and containerize contaminated soils. Promptly report the release/leak to EHS and adhere to disposal instructions provided by EHS.

Dewatering

- At times, it may be necessary to remove flood or accumulated storm water from areas on campus. There are three options: 1) direct the flow to a sanitary sewer; 2) direct the flow towards vegetation for land application in a manner that no water discharges to the storm drain and at a rate that promotes infiltration; 3) direct the flow to the storm drain under the authority of UNO's SMS4 permit. If discharged directly to the storm drain, the water must be void of color, turbidity, odors, surface sheens, films, other unusual condition (e.g., off-gassing, foaming, etc.), and not suspected of containing any contaminant (including residual chlorine that is characteristic of potable drinking water). It is important to understand that these instructions are specific to stormwater. If you have a need to dewater an area impacted by groundwater (other than traditional building foundation drains), consult EHS. Often, a specific permit is needed for accumulated groundwater. Consult EHS prior to directing any discharge to the storm sewer system.

Chemical Storage and Disposal

- If your facility has a Spill Prevention Control and Countermeasures (SPCC) Plan for storage of petroleum, and you qualify as oil-handling personnel, read and observe all precautions in your site SPCC plan, complete SPCC training annually, and complete SPCC inspection logs at the required interval.
- Store chemicals, fertilizers, de-icers, sand, gravel, oils, greases, and other potential pollutants in an area protected from precipitation and in a manner to prevent migration of releases or leaks to surface waters and any part of a storm sewer conveyance system (inlets, drains, pipes, open channels, etc.). Chemical storage containers should be clearly labeled, in good condition with no leaks, securely closed, and placed within secondary containment trays or devices. Properly designed interior chemical storage locations are preferred. If outdoor storage is necessary for bulk materials (e.g., sand, gravel, mulch, etc.), berm, grade, or otherwise protect the area (tarping, silt fence, etc.) to prevent storm water run-on and run-off.
- When feasible, utilize secondary containment when transporting chemical containers. Use appropriate mechanical devices as needed to facilitate safe movement (e.g., drum carts, hand carts, etc.).
- Observe UNO procedures for spill/release pre-planning and response, as described in the following EHS SOPs and as applicable to your situation:
    - Oil Spill/Release Preparation and Response
        - Dodge Campus SPCC Spill Prevention and Response
        - Scott Campus SPCC Spill Prevention and Response
    - Preplanning For and Responding to Chemical Spills
        - Chemical Collection Containers and Storage
        - Chemical Spill Kits
        - Hazardous Chemical Spill
    - Contact EHS for chemical disposal services. See Chemical Disposal Fact Sheet and Chemical Pick-up Form for details.
- Adhere to EHS guidelines and Fact Sheets on management of all other types of wastes

- Aerosol Can Collection
- Battery Disposal
- Office and Non-Laboratory Areas
- Disposal of Rags and Wipers
- Empty Container Disposal
- Used Motor Oil and Filter Management & Disposal

Facility and Grounds Maintenance & Operation

- All outdoor refuse containers must be designed with a lid and emptied at the specified frequency (typically daily Monday - Friday). Container cleaning should be conducted at the specified frequency and discharge from cleaning must not enter any part of the storm water conveyance system (inlets, pipe, or open swales or channels). Promptly report defective, deteriorating, or leaking refuse containers, or containers in need of cleaning. When feasible, avoid locating refuse containers near any part of a storm water conveyance system (inlets, drains, pipes, open channels, etc.).
- Report landscape irrigation devices that need adjustment to minimize excess flows into storm water inlets and drains.
- Clean grass clippings from hard surfaces promptly.
- Do not blow, sweep, or wash grass clippings, leaves, and other debris into the storm sewer conveyance system.
- Avoid placing mulch in areas near storm sewer inlets/drains.
- Promptly clean storm sewer catch basins of excessive accumulations of sediment and debris, and dispose of removed material at a licensed municipal waste landfill.
- Adhere to established inspection and maintenance schedules and procedures for permanent storm water structural controls (e.g., bioretention basins, drainage swales, green roofs, porous concrete, underground storage structures, rain gardens, etc.). Promptly report known or suspected failures or maintenance needs of permanent storm water structural controls to the proper authority or if unknown to EHS using the Stormwater Pollution Reporter (https://www.unomaha.edu/environmental-health-and-safety/stormwater-management/stormwater-pollution-reporting-form.php).
- Promptly pick-up trash and debris and place in designated refuse containers.
- Clean hard surfaces exposed to precipitation of accumulated sediments. Do not wash sediments to the storm sewer. Use dry sweeping or vacuum methods. Dispose of recovered material at a licensed municipal waste landfill, and store prior to disposal in a designated area that will not allow the material to enter any part of a storm sewer conveyance system.
- Adhere to designated street and parking lot sweeping/cleaning frequencies and dispose of recovered sediment and debris at a licensed municipal solid waste landfill. Store recovered sediment and debris so that it is protected from precipitation and in a designated area that will not allow the material to enter any part of a storm sewer conveyance system prior to disposal.
- Promptly report suspected illicit discharges or suspected failures/needed repairs to storm water structural controls or any component of the storm sewer conveyance system (e.g., pipes, inlets, catch basins, open channels, etc.) to the

proper authority or if unknown to EHS using the Stormwater Reporter (https://www.unomaha.edu/environmental-health-and-safety/stormwater-management/stormwater-pollution-reporting-form.php).

- Avoid power-washing equipment, structures, tools, etc., outdoors and in areas where drains are not connected to the sanitary sewer system. If thought to be necessary, consult with EHS prior to conducting this activity to develop procedures to minimize pollutant loading to the environment.
- Use deicing agents, fertilizers, herbicides, etc., at the recommended application rate. Do not over-apply.
- Stockpile salt-laden snow away from storm sewer inlets and other conveyances.
- Do not allow wash water from cleaning of equipment (e.g., HVAC equipment, etc.) or tools (e.g., paint brushes, etc.) to enter the storm sewer conveyance system or discharge to the ground. Direct wash water to a sanitary sewer, collect using absorbent pads, wet vacuum, etc., or berm and allow to evaporate. This includes cleaning of HVAC equipment.
- Ensure that all contractors hired to conduct O&M activities adhere to all applicable UNO good housekeeping and pollution prevention measures.
- Reinforce with all contractors hired to conduct O&M activities that they are prohibited from discharging anything into or near a storm sewer without proper authorization under an appropriate permit issued by NDWEE and strict adherence to the permit terms.
- Store scrap metal in an area where storm water will not flow across the material and into a storm sewer conveyance system (pipe, inlet, swale, ditch). Storing indoors, or on a rack off the ground, is preferred.
- Strictly adhere to label instructions for use and application of pesticides and herbicides. Adhere to the instructions for cleaning pesticide application equipment described in NebGuide G1770 (http://extensionpubs.unl.edu/publication/9000016365059/cleaning-pesticide-application-equipmenU).
- Implement feasible erosion and sediment controls (e.g., silt fence, waddles, tacked mulch, etc.) when disturbing land, particularly in areas where storm water can transport disturbed soils to the storm sewer and/or nearby receiving waters.

Miscellaneous

- Use trash receptacles provided throughout campus. Do not litter.
- Remove animal waste discovered during routine care and maintenance of landscaped areas.
- Promptly report dry weather flows at outfalls to EHS using the Stormwater Pollution Reporter (https://www.unomaha.edu/environmental-health-and-safety/stormwater-management/stormwater-pollution-reporting-form.php).

Municipal Maintenance Contractors

Municipal maintenance contractors are required to comply with all applicable federal, state, and local laws, regulations, and ordinances, including but not limited to those that apply to protection of surface water quality. Municipal maintenance contractors are responsible to adhere to all pollution prevention and good housekeeping practices described in UNO's

Runoff Control Plan and Storm Water Management Plan. When hiring a municipal maintenance contractor, consider the work that they will be conducting and its potential for having a negative impact on receiving streams. Discuss this with the contractor before the work begins. Review with the contractor applicable best management practices that they should observe to prevent adverse effects on the environment. Also discuss any permits that they may be required to obtain prior to conducting the work. As applicable, municipal maintenance contractors are required to seek coverage under appropriate NPDES permits, such as:

- General NPDES Permit NEG671000 Authorizing Dewatering Discharges
- General NPDES Permit NEG672000 Authorizing Hydrostatic Testing Discharges
- General NPDES Permit NEG500000 Authorizing Ground Application of Concrete Grooving/Grinding Slurry
- General NPDES Permit NEG710000 Authorizing Treated Groundwater Remediation Discharges
- General NPDES Permit NEG160000 Authorizing Storm Water Discharges from Construction Sites to waters of the State of Nebraska

Inspections

On an annual basis, EHS will conduct and document formal inspections of high-risk facilities to evaluate adherence to the pollution prevention and good housekeeping practices described in this Runoff Control Plan. The inspection will consist of visual observation of site conditions, as well as interview with site staff. See Appendix B for a sample inspection checklist. In addition, oil handling personnel at sites with a SPCC plan must conduct and document monthly inspections that evaluate the integrity of all visible portions of tanks, pipes, foundations, valves, and flanges. FMP conducts SPCC inspections annually. All affected employees at high-risk facilities are encouraged to always remain alert to and report conditions that are or could have a negative impact on water quality.

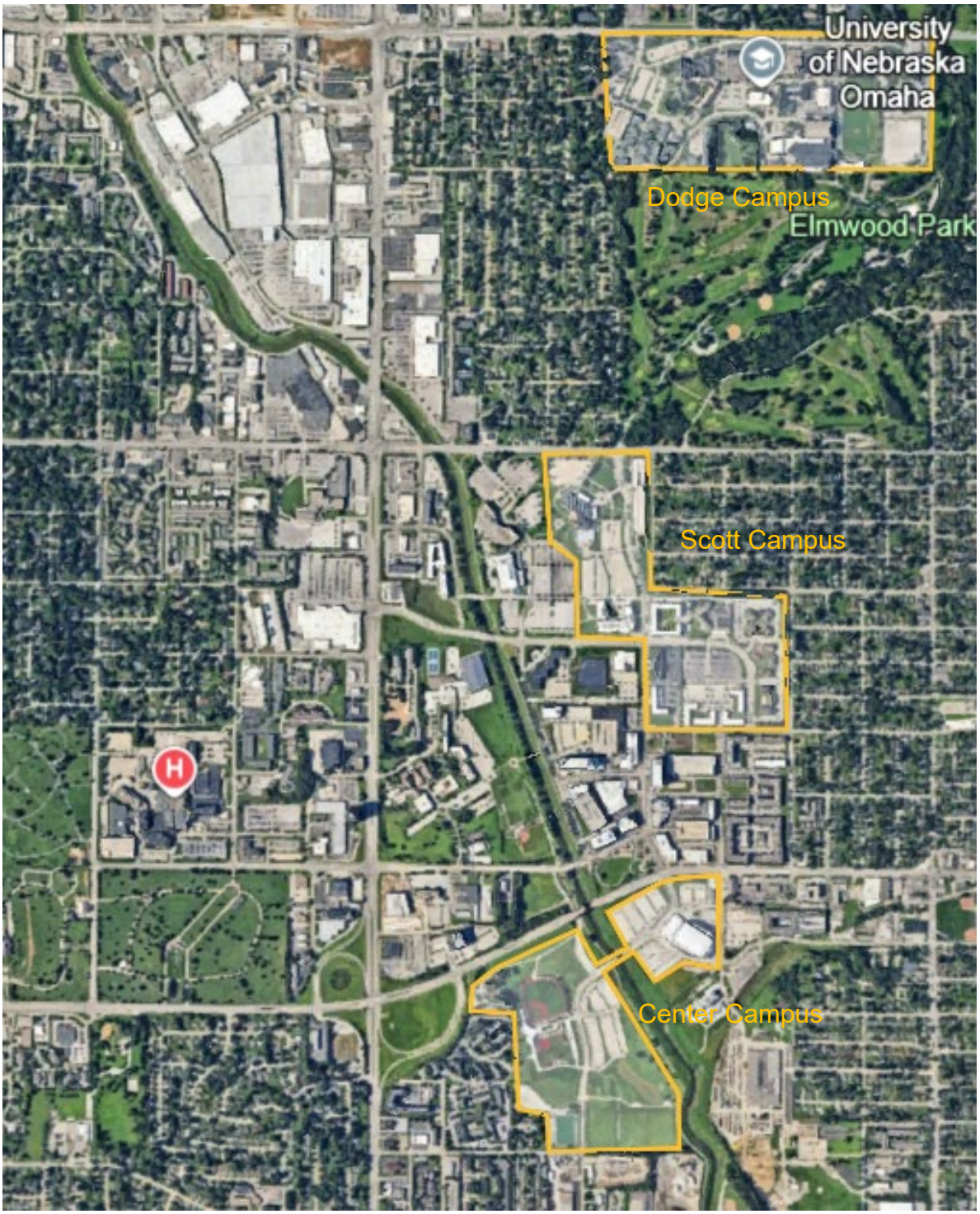
BMP 6.10 Staff Training

EHS will offer training regarding the content of UNO's RCP at each high-risk facility at least annually. Training will also be provided to O&M staff that are not stationed at a high-risk facility but whose duties could impact water quality or position them such that they may encounter potential illicit discharges (e.g., plumbers, painters, etc.).

This training will be directed to include affected employees that have not been previously trained. As needed, EHS or facility leadership will conduct individual training sessions with employees who appear to not understand or adhere to good housekeeping and pollution prevention measures as described in this RCP. Additionally, EHS will ensure that staff also receive refresher training on an annual basis through discussion, distribution of written materials, or on-line training.

Records of training will be maintained to include date of training, name of trainer, name of employee receiving training, reason for training, and a summary of the content of training.

Appendix A: Campus Rendering



Appendix B: Example Inspection Log

Facility:		
Name of Inspector:		
Date of Inspection:		
Visual Site Inspection		
Inspection Item	Deficiency (y/n/NA)	Comments/Description
Chemical		
Containers are securely closed, labeled, in good condition, and compatible with contents		
Stored w/in secondary containment		
Stored Compatibly		
Stored safely (e.g., flammable liquids in rated cabinets and not exposed to ignition sources; oxidizers stored away from combustibles, storage shelves in good condition, etc.)		
Waste chemicals, aerosol cans, batteries, office items, wipers, oils and filters and empty containers are properly stored and disposed		
Exterior Bulk Material Storage		
Protected from rain erosion, run-on, and run-off		
Not located near stormwater conveyances		
Exterior Grounds		
No excessive accumulations of trash/debris		
Trash receptacles in good condition, with lids, not located near stormwater conveyances		
No excessive accumulation of sediment, grass clippings, etc. on hard surfaces		
No evidence of leaks/releases that have not been properly and promptly cleaned (stains, etc.)		
Equipment and Vehicles		
Well maintained; not leaking fluids		
Other		
Sumps, traps, basins, etc., are well maintained and not laden with sediment or other pollutants		

Interview Questions		
Person(s) Interviewed:		
Question	Response	Comments/Notes
Do you regularly encounter any location on campus where any of these problems exist? If yes, provide a description, location, and indicate whether it was reported to EHS.		
Soil erosion?		
Uncontrolled trash/debris?		
Clogged inlets or open channels?		
Dry weather flows from outfalls?		
Anyone intentionally directing a discharge or dumping to a storm sewer?		
Post-Construction Stormwater Controls in distress, improperly functioning, or in need of maintenance/repair?		
Do you engage in any of the following practices? If yes, describe the practices followed.		
Washing of equipment or tools outdoors?		
Dewatering activities?		
Emergency Generator refueling operations?		
Do you know how to properly manage waste chemicals, other regulated materials, and recovered sediments? Please give a brief description.		