The University of Minnesota strives to be a leader in sustainability and energy efficiency. With that goal in mind, Fleet Services strives to be a national leader, integrating sustainability in its everyday actions.
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

UMTC- Fleet Services Facility
Permit ID Number: MNR053D4G

Certification and Management Approval
The University of Minnesota has prepared this Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) permit identified above for the discharge of stormwater from facilities identified in 40 CFR 122.26(b)(14)(i) through (x) and (xi).

Full approval is extended by Management at a level with authority to commit the necessary resources.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Ross Allanson, Director, Parking & Transportation Services
Date: 9/21/17

Ken Kerns, Assistant Vice President
Date: 9/26/2017
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**Appendices**
Part 1. Introduction

The University of Minnesota-Twin Cities (UMTC) is a public research university founded in 1851 located in Minneapolis and St. Paul, Minnesota on approximately 1200 acres, with approximately 50,000 students. The University is organized into 19 colleges and schools, and has over 250 buildings on both river banks (East Bank and West Bank), in St. Paul, and in the Como Service Area.

The primary Standard Industrial Classification (SIC) for University facilities is 8221: Colleges, Universities, and Professional Schools, but has co-located activities related to operations and maintenance activities.

The UMTC- Fleet Services Facility (Facility) is required to obtain permit coverage in 40 CFR 122.26(b)(14)(vii), as the Facility is “involved in regulated industrial activity under SIC code 4173 as “Land Transportation and Warehousing”, Sector P. The Facility is regulated under “Motor Vehicle Facilities”, subsector P3 of the General Stormwater Permit.

This Facility is not eligible for the “no exposure certification”, as not all significant materials and/or activities at the Facility are under cover. This Facility has obtained coverage for stormwater discharges under the NPDES/SDS Industrial Stormwater Multi-Sector General Permit, MNR050000 (General Stormwater Permit); the Permit ID for this Facility is MNR053D4G.

1.1 Purpose of this Plan

The University’s commitment to treatment of storm water is directly linked to institutional values of stewardship and enhancement of natural resource systems found on the campus, in particular in Mississippi River, which flows through the campus.

The primary purpose of the Stormwater Pollution Prevention Plan (SWPPP or Plan) is to:

- Identify pollutants at the industrial facility that could potentially come into contact with stormwater;
- Minimize the potential for contact; and,
- Mitigate any contact prior to being discharged from the industrial site.

This Plan complies with the requirements of the federal and state stormwater requirements to develop a SWPPP and document revisions. Documentation pertaining to required stormwater inspections, monitoring, and employee training are maintained separately in accordance with permit requirements.

1.2 Plan Accessibility

This Plan will be available at the Facility and made available to the MPCA within 72 hours of a request for a review (Minn. R. 7090.3040, subp. 2).

In addition, this Plan will be readily accessible to the Stormwater Pollution Prevention Plan Team Members identified in this part of the Plan, either in an electronic or paper format. The most recent version of this Plan is maintained electronically on the University website at: http://www.dehs.umn.edu/envircomp_swm_isw.htm.
1.3 Contact Information/Responsible Parties

Facility Owner
University of Minnesota – Twin Cities
Office of the Regents
202 Morrill Hall
Minneapolis, MN  55455

Facility Operator
Parking and Transportation Services
Transportation & Safety Building
511 Washington Ave SE,
Minneapolis, MN  55455

The Fleet & Transit Services Assistant Director is Lisa Raduenz, (612) 625-8020

Plan Contact
Lisa Raduenz, Assistant Director
Fleet and Transit Services
901 29th Avenue SE,
Minneapolis, Minnesota 55414
(612) 625-8020; cell (651) 399-4099

1.4 Stormwater Pollution Prevention Team
The Storm Water Pollution Prevention Team is responsible for developing, implementing, maintaining, and revising this Plan. The members of the team are familiar with the management and operations of the Facility.

Lisa Raduenz, Assistant Director  (612) 625-8020, c. (651) 399-4099
Responsibilities:

- Signatory authority.
- Emergency contact.
- Review and approve all stages of plan development and implementation.
- Identify appropriate personnel and respective training needs to effectively implement this SWPPP Plan.
- Implement and/or direct the training of appropriate personnel.
- Implement and/or direct inspections and monitoring to ensure effectiveness of control measures, and for compliance with this Plan.
- Ensure that timely preventive maintenance and good housekeeping procedures are carried out.
- Ensure submittal of reports related to the Permit.
- Ensure update of this Plan, as needed.
- Ensure maintenance of stormwater records, including inspection and maintenance records related to control measures and sampling.

Barry Robertson, Parts Clerk  (612) 624-0398, c. (612) 598-7896
Responsibilities:

- Primary emergency contact.
- Implement training of employees.
- Conduct inspection and monitoring to ensure effectiveness of control measures, and for compliance with this Plan.
• Conduct timely preventive maintenance and good housekeeping procedures to ensure compliance with this Plan.
• Submit permit-related reports and information to Environmental Compliance staff in a timely manner.
• Identify appropriate and timely updates of the SWPPP, including the Site Map, and facilitate update by Environmental Compliance staff.
• Maintain stormwater records, including inspection and maintenance records related to control measures and sampling.
• Initiate the spill response and Spill Reporting Procedure, as necessary. The most recent version of this procedure is maintained electronically on the University EHS webpage at: http://www.dehs.umn.edu/envircomp_sp.htm.

**Facility Operations Staff**

Responsibilities:

• Contain and cleanup spills of significant materials.
• Attend training as directed by management.
• Practice good housekeeping and implement other control measures.
• Conduct inspections as directed by management.
• Attend vehicles during loading/unloading of significant materials to ensure that control measures and SOPs are followed.
• Initiate the spill response and Spill Reporting Procedure, as necessary. The most recent version of this procedure is maintained electronically on the University EHS webpage at: http://www.dehs.umn.edu/envircomp_sp.htm.

**Maintenance & Trades Staff**

Landcare: Tom Ritzer, Assistant Director/Landcare (612) 624-8225
Facilities Management: Bill Paulus, Interim Associate Vice President (612) 626-1091

Responsibilities:

• Perform preventive and/or corrective maintenance on stormwater equipment as directed by management and as identified by Stormwater Inspections.
• Notify facility management and operations staff when spills are observed.
• Attend training as directed by management.

**Julianne Rantala, Environmental Compliance Specialist** (612) 626-7957

Department of Environmental Health & Safety (DEHS)

Responsibilities:

• Complete updates to SWPPP, including the Site Map, in response to inspections/Facility Contact.
• Coordinate and submit reports related to the Permit in a timely manner.
• Perform, participate and/or assist with SWPPP training of employees, as directed by the SWPPP contact.
• Conduct periodic audit of Permit compliance.
• Provide regulatory information and expertise.

1.5 Plan Revision

The Permit requires annual review of the Plan. Modifications must be made to the Plan to ensure that it accurately reflects activities affecting stormwater. The SWPPP will be revised when:
• there is construction or a change in design, operation or maintenance at the Facility that affects stormwater management or compliance with the Permit
• a benchmark monitoring location has been added or changed at the Facility; deficiencies in the Plan are identified during a routine inspection, compliance evaluation or visual inspection;
• additional stormwater control measures and/or BMPs are necessary to meet water quality standards or applicable benchmark monitoring thresholds; or,
• there is an unauthorized discharge, including a release, from the Facility.

The following table describes the date and nature of each revision made to this Plan.

Table 1. Log of SWPPP Revisions

<table>
<thead>
<tr>
<th>Date of Revision</th>
<th>Revision Author Name, Extension</th>
<th>Part(s) of SWPPP Affected</th>
<th>Description of Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/22/2017</td>
<td>J. Rantala</td>
<td>All sections, maps and figures.</td>
<td>New SWPPP.</td>
</tr>
</tbody>
</table>
Part 2. Facility Description

2.1 Facility Information
The Fleet Services is a division within Parking and Transportation Services. Fleet Services provides driver services, vehicle rental, vehicle leasing, maintenance shop services, self-service car wash and self-service vehicle fueling.

The Facility supports one main building, approximately 25,000 square feet, in the south-central portion of the Site. All activities, with the exception of vehicle fueling, are conducted within the building on the Site.

In addition, the Facility includes outdoor areas which are hard-surfaced for equipment traffic and used for outdoor storage. The vehicle fueling station is located in the southeast portion of the property.

Figure 2 below and in Appendix A of this Plan presents a Site Map, including a layout of the Facility with the topographic contours, storm sewer infrastructure, buildings and improvements.

2.2 Facility Location
The Facility is located at 901 29th Avenue SE, Minneapolis MN 55414. The site location is depicted on the USGS quadrangle map as shown in Figure 1 below, and in Appendix A to this Plan.
The Facility’s coordinates are 44.986805 Latitude and - 93.214357 Longitude. The Facility’s entrance/exit is along 29th Avenue SE as indicated on Figure 2, Site Map.

### 2.3 Facility Discharges & Receiving Water

The Facility comprises approximately 3.8 acres. Figure 2 delineate the following features:

- Surface water flow patterns;
- Locations of storm water outfalls;
- Locations of exposed or potentially exposed significant materials and activities;

The property for the Facility is relatively flat with a gentle surface water flow gradient from north to south. Roof drainage from the building is directed to eave troughs and downspouts along the east and west sides of the building.

**Stormwater Discharges**

The stormwater management system is comprised of impervious surface, catch basins and storm sewer piping. Stormwater runoff from the vehicle fueling area flows several hundred feet to the west over asphalt surfacing and discharges into a flush-mount catch basin. Stormwater from the site’s system flows to the City of Minneapolis infrastructure located within the 29th Avenue SE street system. The stormwater management features and flow directions are indicated on the Site Map (Figure 2, and Appendix A of this Plan).

- The Facility is located approximately 1.5 miles northeast of the Mississippi River at reach 07010206-503 (Lower St Anthony Falls to Lock and Dam #1 (RM 853.3 to RM 847.6) ), Class 2B, 3C, 4A, 4B, 5, and 6 water.
- Although there are several potential sampling locations/inlets at the Facility, one benchmark monitoring location has been identified at the Facility to be representative of all stormwater discharged from the Facility. This location is indicated on the Site Map as BML01.
- Impairments. Based on the draft 2016 Clean Water Act section 303d list for impaired waters, the following impaired waters are located within 1 mile of this Facility:

<table>
<thead>
<tr>
<th>AUID</th>
<th>Water Name</th>
<th>Impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>62-0280-00</td>
<td>Mallard Marsh</td>
<td>Aquatic Life</td>
</tr>
<tr>
<td>92-0280-00</td>
<td>Kasota Pond North</td>
<td>Aquatic Life</td>
</tr>
<tr>
<td>92-0281-00</td>
<td>Kasota Pond West</td>
<td>Aquatic Life</td>
</tr>
</tbody>
</table>

- MSGP Appendix A waters. As indicated by Figure 3 of the Plan (see also Appendix A of this Plan), there are four impaired waters classified as ‘lakes’ within 1 mile of this Facility. Wetlands in the NWI meet the definition of a wetland as described by Minn. R. 7050.0186, subp. 1aB.
- This Facility does not discharge to a permitted MS4, but is within the boundaries of the University of Minnesota MS4 (MS400212).

**Non-Stormwater Discharges**

There are no other discharges from the Facility site.
Figure 2: Site Map

MNR053D4G
UMTC-Fleet Services Facility
901 29th Avenue SE
Minneapolis, Minnesota

LANDMARK ENVIRONMENTAL, LLC

Legend

- **#** Significant Materials
- **•** Sampling Location
- **→** Surface Flow Direction
- **↑** Areas with Permeable Surface*
- **↓** Facility Boundary

*All other areas have impervious surface or are the building roof

1 inch = 67 feet

0 30 60 120 Feet

0 120 1 inch = 67 feet

BLM01

1 2 3
List of Significant Materials

<table>
<thead>
<tr>
<th>Site Map Code</th>
<th>Significant Material Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-01</td>
<td>Gasoline</td>
</tr>
<tr>
<td>SM-02</td>
<td>Diesel</td>
</tr>
<tr>
<td>SM-03</td>
<td>E-85 Ethanol</td>
</tr>
<tr>
<td>SM-04</td>
<td>Misc Vehicle Fluids</td>
</tr>
<tr>
<td>SM-05</td>
<td>Solid Waste and Recycling Materials</td>
</tr>
<tr>
<td>SM-06</td>
<td>Oils and Oily Waste</td>
</tr>
<tr>
<td>SM-07</td>
<td>Vehicle Antifreeze</td>
</tr>
<tr>
<td>SM-08</td>
<td>Lead-Acid Batteries</td>
</tr>
<tr>
<td>SM-09</td>
<td>Parts Washer Liquids</td>
</tr>
<tr>
<td>SM-10</td>
<td>Windshield Washer Fluid</td>
</tr>
<tr>
<td>SM-11</td>
<td>Vehicle Wash Chemicals</td>
</tr>
<tr>
<td>SM-12</td>
<td>Drag-out from Vehicle Wash</td>
</tr>
<tr>
<td>SM-13</td>
<td>Lamps and Other Mercury Waste</td>
</tr>
<tr>
<td>SM-14</td>
<td>Batteries (alkaline, Ni-Cad)</td>
</tr>
<tr>
<td>SM-15</td>
<td>Grass Clippings and Organic Detritus</td>
</tr>
<tr>
<td>SM-16</td>
<td>Misc Herbicides/Pesticides</td>
</tr>
<tr>
<td>SM-17</td>
<td>Ice Melt Salt</td>
</tr>
<tr>
<td>SM-18</td>
<td>Snow Storage Debris</td>
</tr>
<tr>
<td>SM-100</td>
<td>Exposed Soil</td>
</tr>
</tbody>
</table>
2.4 Facility Activities

Activities at this Facility can be generally grouped into two broad categories: operations and maintenance. Significant materials or areas related to these activities are listed in Table 2 of this Plan, as well as indicated on the Site Map (Figure 2 of this Plan and in Appendix A).

All activities occurring at the Facility were evaluated as potential sources of stormwater pollution, even if located indoors.

**Vehicle Fueling**

Fleet vehicles and other UMTC vehicles are refueled on the Site. Unleaded gasoline, diesel and E-85 Ethanol are the three types of fuels available for dispensing. Dispensing nozzles are equipped with a trigger type shutoff system, safety locks, and an emergency shut-off switch to prevent accidental discharge. Despite safety measures, there is a potential for significant and routine minor spills to occur during this activity with a potential to impact stormwater.

These materials are considered significant because of the potential contact with rainwater if a spill were to occur during fueling operations. The potentials pollutants are petroleum materials.

**Fuel Delivery**

Fuels are delivered in bulk shipment via contract vendor. The fill locations are flush-mount manholes within the concrete surfacing on the west side of the fueling station. Procedures require that delivery personnel be present during transfer of bulk petroleum products to ensure that valves are properly positioned at all times.

Prior to the initiation of transfer operations, the delivery personnel will verify the available capacity of the tank by direct reading of the tank. The bill of lading or other shipping documents will be checked by the delivery personnel to confirm the correct material is being delivered.

Truck drivers prevent disconnect of fill hoses by setting the parking brake and chocking wheels prior to transfer. The brakes are not released until the bulk transfer has been completed, the lines stowed, and all of the valves are checked to ensure they are secured. Prior to transfer and departure of a tank truck, valves and outlets are closely examined for leakage, and, if necessary, tightened to make sure no leak occurs.

The bulk transfer of oil products is required to meet the minimum requirements and regulations established by the US Department of Transportation. The delivery and loading of products is monitored by the physical presence of the truck driver.

There is a potential for significant and routine minor spills to occur during this activity with a potential to impact stormwater. The potentials pollutants are petroleum materials.

**Vehicle Storage**

The Facility conducts routine maintenance of fleet vehicles. Leaking vehicle fluids (hydraulic fluids, antifreeze, engine oil and/or grease) while vehicles are parked in outdoor areas are potential sources of stormwater pollution.
**Vehicle Maintenance and Repair**
One of the primary functions of the Facility is the maintenance and repair of UMTC vehicles. This involves periodic changing of vehicle fluids and worn parts. These operations require the management of new and old fluids which are mostly oils. New oils are brought to the Facility by contract vendors and are off-loaded as bulk oils into tanks. Some lubricants are delivered as drummed goods. Transfers occur inside the building and oils are stored in the “Oil Room” which is designed and constructed with secondary containment to confine potential spills inside the building. Used oils are also stored in the Oil Room; the tank are periodically pumped out by contract vendor from inside the building for offsite management/recycling. Used oil filters, spent oil sorbents from small spills, and oily rags are generated from operations related to oil use. Oil associated wastes are maintained in designated locations within the building and periodically removed from the Facility by contract vendors. All transfer operations are conducted inside the building and these activities are not potentially exposed to stormwater and are not significant.

New antifreeze is received in pre-packaged containers and off-loaded from inside the building. A used antifreeze tank is located in the Oil Room and periodically pumped out by a contract vendor for offsite management/recycling. Windshield washer fluid is delivered to the Facility in a bulk drum and stored and maintained indoors.

Used lead-acid batteries are generated from vehicle maintenance activities. New and used lead-acid batteries are maintained in designated locations (within portable secondary containment tubs) within the building and periodically removed from the Facility weekly by contract vendors. Transfer of lead-acid batteries occurs inside the building.

**Miscellaneous Chemical Management**
There are numerous solid and liquid chemicals that are used for operations and maintenance throughout the Facility. The chemicals are packaged in containers which range in size from 5 gallon containers to several ounces. The majority of these are associated with vehicle maintenance and repair. Miscellaneous packaged chemicals are delivered to the facility via truck and are off-loaded indoors.

A solvent parts washer is used for degreasing small parts. New and used part washer fluids are managed by a contract vendor at an offsite location. Transfers of new and used washer fluids occur inside the building.

**Car Wash**
Fleet vehicles are routinely run through the indoor commercial car wash located at the Facility. The car wash has an underdrain and water recirculating system for efficient use of water. Soaps and waxes are used for car wash operations. Packaged car wash chemicals are delivered to the facility via truck and are off-loaded indoors. Operations result in water discharge to the sanitary sewer, used water filters and solids. Used filters and solids are disposed as solid waste materials. Some sediment drag out occurs to the exterior of the building as vehicles are exiting the car wash.

**Solid Waste Management**
Solid and recyclable wastes are generated from operations and employee support facilities. The Facility has several dumpsters for solid waste and recycling materials located on the north side of the building. These dumpsters have covers which are maintained in a closed position when the dumpsters are not being actively filled or emptied.
**Miscellaneous Facility Maintenance**

Facility maintenance, including the operation, cleaning and repair of the building are the responsibility of UMTC Facilities Maintenance. These activities result in routine sanitary wastewater discharge, solid wastes and special wastes such as fluorescent lamps and other mercury waste and miscellaneous batteries.

Landscaped areas and turf grasses are maintained by UMTC Facilities Maintenance and Land Care. Occasionally, miscellaneous herbicides/pesticides and fertilizers are used at the Facility, but are not stored at the site. Grass clippings and other organic materials are generated from maintenance on a seasonable basis and are removed from the Facility for offsite management. Ice-melt chemicals are used sparingly during winter months for paved surfaces. These bulk materials are not stored at the Facility.

Table 2 of this Plan includes a listing of significant activities and materials at the Facility, a description of potential pollutants that may be contribute to stormwater and a listing of Best Management Practices (BMPs) that are employed at the Facility to mitigate the potential pollution of stormwater.

2.5 Locations of Significant Materials

The Site Map is used in several ways during Plan implementation:

- Rapid identification of chemical storage/handling areas;
- Rapid identification of drainage pathways within the plant to aid in spill containment;
- Identification of areas requiring routine maintenance;
- Identification of stormwater outfalls which may require monitoring; and,
- Identification of areas to be examined during routine and comprehensive inspections.

A site map for the Facility is shown in Figure 2 and Appendix A of this Plan, and presents the following information for the Facility:

- Surface water drainage areas.
- Directional contours and arrows indicating paths of surface water flow.
- Location of stormwater conveyances and infrastructure.
- Location of stormwater outfall and monitoring at the Facility.
- Location of Municipal Stormwater Separated Sewer System (MS4) receiving stormwater from the Facility (not applicable).
- Location of non-stormwater discharges (not applicable).
- Location of exposed or potentially exposed pollutant sources, including:
  - Locations of significant activities,
  - Storage locations of significant materials, and
- Fueling and vehicle maintenance areas.
- Location of receiving water in the immediate vicinity of Facility.
- Location and extent of structural BMPs at the Facility
- Identification of non-industrial areas – those areas of the Facility which are administrative only.
- Identification of impervious areas – areas of hard surface (i.e. pavement, rooftops, etc) that contribute nearly 100% of precipitation as stormwater runoff and vegetated pervious areas.
Note: there is run-on stormwater to the Facility from adjacent properties, including the University Print Services Facility, a no-exposure industrial waste facility. A large format copy of Figure 2 is included as an appendix to this Plan.
Figure 3: Designated and Impaired Waters Within 1 Mile of Facility

MNR053D4G
UMTC-Fleet Services Facility

- Facility
- 1 Mile Site Buffer
- Calcareous Fens (0)
- Designated Trout Stream (0)
- Protected Tributary to Designated Trout Stream (0)
- Impaired Streams (2016 draft) (0)
- Impaired Lakes (2016 draft) (3)
- Impaired Wetlands (2016 draft) (0)
- NWI Wetlands (35)
- Lakes and Rivers (0)
- University Buildings
- Street Centerlines
- County Boundaries
- Township Boundaries

Note: Numbers within parentheses indicate the number of features within the one mile site buffer

Data: Minnesota Department of Natural Resources (MNDNR), Metropolitan Council, Minnesota Pollution Control Agency, Minnesota Geospatial Information Office (MiGis), University of Minnesota Enterprise GIS, Esri

Scale: 1:24,000
8/18/2017, T. Fimpel
Part 3. Potential Pollutant Sources

3.1 Industrial Activity, Associated Pollutants & Best Management Practices
Table 2 includes a listing of significant activities and materials at the Facility, a description of potential stormwater pollutants and a listing of Best Management Practices (BMPs) that are employed at the Facility to mitigate the potential pollution of stormwater.

**Table 2. Significant materials, Associated Pollutants, and Best Management Practices**

<table>
<thead>
<tr>
<th>Industrial Activity</th>
<th>Significant Material Name</th>
<th>Site Map Code</th>
<th>Pollutants Associated with Significant Material</th>
<th>Best Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operations Activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fueling Vehicles</td>
<td>Gasoline</td>
<td>SM-01</td>
<td>• Petroleum • BOD</td>
<td>• Canopy over pump area</td>
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<td></td>
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<td></td>
<td>• Pump emergency shutoff</td>
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<td></td>
<td>switch</td>
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<td>• Spill response materials</td>
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<td></td>
<td>located in vicinity</td>
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<td></td>
<td>• Users advised to not “top</td>
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<td></td>
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<td></td>
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<td>off vehicle fuel tanks”</td>
</tr>
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<td></td>
<td>Diesel</td>
<td>SM-02</td>
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<td></td>
<td>E-85 Ethanol</td>
<td>SM-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel Delivery</td>
<td>Gasoline</td>
<td>SM-01</td>
<td>• Petroleum • BOD</td>
<td>• Protocols for bulk unloading</td>
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<td></td>
<td></td>
<td>operations</td>
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<td></td>
<td></td>
<td>• Use of specifically trained</td>
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<td>personnel only.</td>
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<td>located in vicinity</td>
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<tr>
<td></td>
<td>E-85 Ethanol</td>
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<tr>
<td>Industrial Activity</td>
<td>Significant Material Name</td>
<td>Site Map Code</td>
<td>Pollutants Associated with Significant Material</td>
<td>Best Management Practices</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------------------------------------------</td>
<td>---------------</td>
<td>-------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Vehicle Storage</td>
<td>Misc Vehicle Fluids</td>
<td>SM-04</td>
<td>Petroleum, VOCs, Heavy metals</td>
<td>Short time period for vehicle storage, Spill response materials readily available in building, Periodic sweeping of hard surface areas, Employee training</td>
</tr>
<tr>
<td>Solid Waste Management</td>
<td>Solid Waste and Recycling Materials</td>
<td>SM-05</td>
<td>Suspended solids, Inorganic salts, BOD, VOCs, PAHs, Heavy Metals</td>
<td>Wastes placed in designated dumpsters and dumpster lids closed, Recycling and disposal arranged periodically to minimize amount on-hand, Cleanup and/or sweeping of Facility surfaces, as directed by SWPPP contact, Employee training, Employee training</td>
</tr>
<tr>
<td>Vehicle Maintenance and Repair</td>
<td>Oils and Oily Wastes</td>
<td>SM-06</td>
<td>Petroleum, VOCs, Heavy metals</td>
<td>All maintenance and repair activities are conducted inside the building, All deliveries and transfers for significant materials occur inside building, Employee training</td>
</tr>
<tr>
<td></td>
<td>Vehicle Antifreeze</td>
<td>SM-07</td>
<td>BOD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lead-Acid Batteries</td>
<td>SM-08</td>
<td>pH, Organic salts</td>
<td></td>
</tr>
<tr>
<td>Industrial Activity</td>
<td>Significant Material Name</td>
<td>Site Map Code</td>
<td>Pollutants Associated with Significant Material</td>
<td>Best Management Practices</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------</td>
<td>---------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Windshield Washer Fluid</td>
<td>SM-10</td>
<td>• Petroleum</td>
<td>• All maintenance and repair activities are conducted inside the building. Adam deliveries and transfers for significant materials occur inside building.</td>
</tr>
<tr>
<td></td>
<td>Parts Washer Liquids</td>
<td>SM-09</td>
<td>• VOCs • Heavy Metals</td>
<td>• Employee training</td>
</tr>
<tr>
<td>Car Wash</td>
<td>Vehicle Wash Chemicals</td>
<td>SM-11</td>
<td>• Surfactants • Suspended solids • Inorganic salts • BOD</td>
<td>• Car wash activities are conducted inside the building. All deliveries and transfers for significant materials occur inside building. Chemicals are stored indoors. Water for car wash is filtered and recycled. Water is discharged to sanitary sewer. Employee training.</td>
</tr>
<tr>
<td></td>
<td>Drag-out from Vehicle Wash</td>
<td>SM-12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Maintenance Activities**

<p>| Misc Waste Management  | Lamps and Other Mercury Waste        | SM-13         | • Mercury                                       | • Wastes placed in designated secured containers and lids closed. Recyling and disposal arranged periodically to minimize amount on-hand. All deliveries and transfers for |
|                        | Batteries (alkaline,                 | SM-14         | • Inorganic salts • pH                          |                                                                                                                                                          |
|               |                                           |                                                                                                                                                          |</p>
<table>
<thead>
<tr>
<th>Industrial Activity</th>
<th>Significant Material Name</th>
<th>Site Map Code</th>
<th>Pollutants Associated with Significant Material</th>
<th>Best Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grounds maintenance, including landscape areas and paved</td>
<td>Grass Clippings and Organic Detritus</td>
<td>SM-15</td>
<td>• BOD</td>
<td>Grounds maintenance activities, including maintenance of the stormwater features, are performed by other operational groups at the University.</td>
</tr>
<tr>
<td>surface maintenance</td>
<td></td>
<td></td>
<td>• Suspended solids</td>
<td>Contractor(s) and other operational units may utilize and transport significant material on site, but significant material is not stored at Facility.</td>
</tr>
<tr>
<td></td>
<td>Misc Herbicides/Pesticides¹</td>
<td>SM-16</td>
<td>• VOCs</td>
<td>Cleanup and/or sweeping of Facility surfaces, as directed by SWPPP contact.</td>
</tr>
<tr>
<td></td>
<td>Ice Melt Salt</td>
<td>SM-17</td>
<td>• Chlorides</td>
<td>Employee training and contractor instructions.</td>
</tr>
<tr>
<td></td>
<td>Snow Storage Debris</td>
<td>SM-18</td>
<td>• BOD</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Suspended solids</td>
<td></td>
</tr>
<tr>
<td>Surface Water Runoff or Construction²</td>
<td>Exposed Soil</td>
<td>SM-100</td>
<td>• Suspended solids</td>
<td>Construction and maintenance activities are performed by other operational groups at the University.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Nutrients (N, P, K)</td>
<td>Contractor(s) and other operational units may utilize and transport significant material on site, but with the exception of FM District</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Herbicides/Pesticides include any pesticide.  
² Construction and maintenance activities are performed by other operational groups at the University.
<table>
<thead>
<tr>
<th>Industrial Activity</th>
<th>Significant Material Name</th>
<th>Site Map Code</th>
<th>Pollutants Associated with Significant Material</th>
<th>Best Management Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations waste (below)</td>
<td>Herbicides, fertilizers and related lawn-care products are not routinely used, transported or stored on-site, though small amounts may be utilized at the Facility on an as-needed basis; consult the MSDS for the specific product for specific pollutant information. Contractor(s) and other operational units may utilize and transport significant material on site, but significant material is not stored at Facility.</td>
<td></td>
<td></td>
<td>• Cleanup and/or sweeping of Facility paved surfaces as directed by SWPPP contact. • Employee training and contractor instructions.</td>
</tr>
<tr>
<td>Any soil disturbing activities</td>
<td>Any soil disturbing activities are managed within the context of the University Municipal Separate Storm Sewer System (MS4) permit, associated permit and University policies. BMPs are required for the project, regardless of size of the soil disturbance. Documentation and inspections, if required, are completed and maintained in accordance with the MS4 permit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part 4. Stormwater Control Measures

The University strategy to collect and consolidate waste for recycling at a centralized waste management facility enables the efficient management of waste that can be recycled, creating reuse or recycling opportunities for specialty waste management that would otherwise be disposed with solid waste. This model also minimizes the impact of waste management operations on the campus, as a whole. Waste inadvertently collected into recycling that needs additional attention is consolidated and transferred to an appropriate solid waste facility or the Chemical Waste Program for proper management.

For universal, oily and hazardous wastes, the University operates a Chemical Waste Program for the proper collection and management of chemical wastes. The Chemical Waste Program implements the procedures to be used for the accumulation and consolidation process, including a description of who is responsible for ensuring compliance during various stages of management, how labeling, storage and consolidation of these wastes is to be managed at each stage, and the internal tracking forms that must be completed.

Table 2 describes the BMPs that have been implemented at this Facility to minimize the potential for spills and stormwater exposure to significant materials. In addition to the non-structural BMPs indicated on Table 2, structural BMPs for this Facility are depicted on Figure 2 of this Plan.

The Permit identifies stormwater control measures that must be reviewed and implemented at the Facility.

- Good Housekeeping
- Eliminating and Reducing Exposure
- Erosion Prevention and Sediment Control
- Management of Runoff
- Facility Inspection
- Maintenance of BMPs and Equipment Preventive Maintenance
- Elimination of Unauthorized Non-Stormwater Discharges
- Spill Prevention and Response Requirements
- Mercury Minimization Plan
- Employee Training Program

The following sections describe the specific activities and BMPs implemented at this Facility to control stormwater. Any additional control measures specified for facilities in Sector P have been included within the relevant section, if applicable.

4.1 Good Housekeeping

Good housekeeping at University facilities is integral to efficient operation of the Facility. University facilities are kept orderly, well maintained and free of debris to the extent practicable, particularly in areas that may expose stormwater to pollutants, such as in areas of solid waste management, storage areas, fueling areas and maintenance areas.

The Facility has implemented and maintains good housekeeping procedures to ensure that exposure to significant materials and activities is minimized. This includes:

- Interior storage of materials that require offsite processing or disposal.
4.2 Eliminating and Reducing Exposure
The University utilizes several strategies in operations that reduce, and in some cases eliminate the exposure of stormwater to significant materials. These strategies are described in the following sections.

To the extent practical based on operational need, significant materials at this Facility are maintained indoors or under cover to prevent exposure to stormwater. Exterior maintenance activities (lawn mowing, snow removal, etc) or temporary outdoor staging of maintenance materials and/or debris are potential exceptions to this policy.

Minimization of exposure is addressed through the implementation of BMPs at the Facility. Refer to Table 2 of this Plan for a listing of BMPs associated with each significant material.

4.3 Salt Storage
Snow removal and salt application of paved areas at this Facility, as needed, are completed by University FM Landcare staff. There is no salt stockpiled at this location. However, small amounts of salt are stored on-site at location SM-17 for the purpose of deicing pedestrian entrances to Facility buildings. This salt is stored in containers and under cover when not in use.

4.4 Erosion Prevention and Sediment Control
Erosion prevention and sediment control at the Facility is accomplished by use and maintenance of BMPs; structural and non-structural BMPs for this Facility are indicated on Table 2 and depicted on the Figure 2 of this Plan (and in Appendix A).

This Facility has a stormwater collection system to facilitate drainage from impermeable surfaces at the Facility; the collection system itself is a mechanism to manage flow to avoid erosive effects of concentrated overland flow.

In areas at the Facility that are prone to poor vegetation and therefore subject to more erosion, conveyances for sheet flow from the Facility, and areas prone to vehicle and/or pedestrian traffic, accommodations to prevent erosion and encourage infiltration are made. These accommodations may include – depending on the specifics of the problem, weed control, use of native vegetation, addition of rip-rap, rerouting of flow into a more sustainable area, and where necessary, the addition of parking lots and/or sidewalks to consolidate and collect flow. Parking is limited to designated roads and general parking areas to prevent disruption of cover materials.

For sediment control on impervious surfaces, the Facility performs routine sweeping of street and other impermeable surfaces at a frequency identified by the Facility SWPPP contact.

4.5 Management of Runoff
The following strategies are primarily used at this Facility to manage runoff to minimize pollutants in stormwater discharges:

- Maintenance of ground cover, where possible, and rip-rap at other areas, to encourage infiltration on-site.
• Collection of stormwater from impervious surfaces to reduce erosion potential.
• Maintenance of the Facility to facilitate drainage and stormwater control basin.

This Facility has a stormwater collection system, which consists of catch basins and associated storm sewer piping as indicated in Figure 2 and Appendix A of this Plan.

4.6 Inspections
The MSGP requires qualified personnel to conduct inspections of the Facility throughout the year. The purpose of Facility inspection is to:

• Determine that the Plan accurately reflects site conditions;
• Verify that BMPs are in place and functional;
• Determine if any new significant materials or activities have been added since last inspection was completed.

During a runoff event, Staff will evaluate stormwater runoff to determine if contaminants are present. Visual indicators of contamination are:

• visible sheens or films on surface of water that indicate the presence of oil in the discharge;
• brown or dark colored streaks (soil erosion);
• Staining (unauthorized non-stormwater discharges);
• Foam; and,
• Trash or other floatable debris.

Persons Responsible
The SWPPP contact identified in Part 1.4 of this Plan is responsible for completing and documenting stormwater inspections on the ISW Inspection Form for this Facility (Appendix C). In some cases, the SWPPP contact will direct another individual to complete the inspection. If designated, the alternate inspector will be properly trained to evaluate the Facility in the context of this Plan.

Inspection forms will be maintained electronically. The Facility Manager will be responsible for implementation of appropriate actions in response to the inspections. If conditions are observed during the inspections that require changes in this Plan, the required changes will be made prior to submission of the annual report for that calendar year. If the findings of the inspection indicate that the BMPs are not meeting this Plan’s objectives, corrective actions will be initiated within 30 days of discovery.

Schedule for Inspections
Stormwater inspections are conducted monthly at the Facility, with at least two inspections per year conducted during a runoff event in accordance with the sector P requirements.

Inspection Areas
Significant materials and structural BMPs located on Figure 2 which is used as the basis for specific areas to be observed during a stormwater inspection. The findings of the inspection, and corrective actions identified and completed, are documented and maintained separately on the completed inspection form.
Special attention is paid to the exterior areas of the Facility where wastes are stored, where inbound materials are unloaded, and materials are loaded out.

The inspection form included as Appendix C is used to record and document inspection findings. Documentation of inspections and findings are not included with this Plan, but are maintained separately and available upon request.

4.7 BMP Maintenance

**BMPs**

BMPs are both structural and non-structural, as indicated by Figure 2 and on Table 2 of this Plan. Maintenance activities for structural BMPs are handled based on the specific BMP and the severity of the problem.

Grounds maintenance activities are performed by the University FM Landcare. Landcare is responsible for the maintenance of vegetative cover, including regular cutting of grass during the growing season, seasonal removal of organic litter and snow removal, and inspection and maintenance of the “green” stormwater features. Potential causes of erosion (animal tunneling, poor grass cover, etc) are corrected when identified. Inspection and maintenance of the stormwater conveyance system is the responsibility of FM Utility Management. Periodic sweeping is arranged by the SWPPP contact as needed.

Documentation of maintenance to BMPs are maintained separately on the completed, relevant inspection form.

**Equipment Preventive Maintenance**

Light maintenance activities of equipment are conducted by operational staff; leaks are repaired as soon as they are identified. Major maintenance is performed off-site under contract using a standard preventive maintenance schedule. As noted in other sections, equipment maintenance is completed indoors whenever possible. There is a vehicle wash area located indoors at this Facility.

Documentation of preventive maintenance of equipment is maintained by the contract vendor; specific records and information is available upon request.

4.8 Non-Stormwater Discharge Certification

The Facility has been inspected by Facility employees for non-storm water discharges as part of the preparation of the SWPPP. It was indicated by Facility employees that there are no floor drains located within the Facility buildings which discharge to the storm sewer infrastructure.

**Date of Evaluation**

Verification that no unauthorized discharges from the Facility are occurring was most recently completed in March, 2016. This Facility was originally constructed in 2000.

**Evaluation Criteria**

Available design plans were used to determine that there were no designed conveyances or other means of discharge for non-stormwater discharges from the Facility other than sanitary sewer. In addition, Facility staff have indicated there are no floor drains located within the Facility buildings which discharge to the storm sewer infrastructure. The conclusion that there are no unauthorized non-stormwater discharges from the Facility is
verified monthly during stormwater inspections and observation of drainage from the Facility.

Outfall/Onsite Drainage Used for Verification
General drainage flow and discharge patterns were observed to verify the findings. There are several inlets to the storm sewer infrastructure, with the inlet located in potential worst-case scenario (downgradient of fueling station and car wash exit) selected as the representative sampling location. There is a relatively small amount of overland drainage to the on-site wetland garden on the north side of the Facility, and to grassy areas to the west and north of the Facility.

Types of Non Stormwater Discharges
There is a car wash associated with this Facility, which recirculates water with subsequent discharge to the sanitary sewer. Domestic wastewater associated with employee support facilities is directed to the sanitary sewer.

Actions Taken to Eliminate Unauthorized Discharges
Action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified: not applicable.

4.9 Spill Prevention and Response Procedure
The likelihood of spills is at this Facility is moderate due to the use of bulk acids and bases for water treatment of boiler water. Additionally, used oils and lubricants are generated from operating equipment. There are no routine fueling or oil transfer activities which are potentially exposed.

University facilities prepare for potential releases in order to minimize impact on stormwater in three ways:

- Identification of spill containment/response equipment locations;
- Formalized Spill Response Procedure; and
- Facility-specific emergency procedures.

The Facility building is equipped with spill kits to provide emergency response for small spills.

Spills and Releases at the University of Minnesota are managed by a coordinated response through the Department of Emergency Management (DEM) and the All Hours Emergency Response Paging System (AHERPS), which is staffed by DEHS staff with a wide range of program expertise. For a complete explanation of the University response procedure, refer to the University Health and Safety On Call (UHSOC) manual and the DEM website.

In the event of a spill, regardless of whether there is a release to the environment, Facility staff are directed to follow the procedure in the DEHS Environmental Fact Sheet: “Responding to Spills and Releases”. This document is contained in Appendix D; the most recent version of this procedure is maintained electronically on the DEHS webpage at: 

This procedure documents the mechanism that should be used in the event of a spill to ensure a consistent and timely identification and response to spills at a Facility, as well as to ensure that notifications and other regulatory actions are completed in compliance with respective rule and/or permit requirements.
**Response Protocol**

The response protocol in the event of a spill is as follows:

1. Stop the release, if possible, by turning off any pump (use the “Emergency Stop” button, valve or by adding a bucket or other container under the drip or leak to contain the release.)
2. Locate spill kit and other necessary materials, including the Material Safety Data Sheet for the spilled material.
3. Ensure access to water and sewers in blocked using adsorbent pads or other methods to divert flow. Isolate the area from others by blocking it, roping it off or using cones.
4. Call for help and complete reporting.

**Reporting Spills**

1. Call 9-1-1 to report the incident
2. Be prepared to provide the following information:
   - Your name, location and phone number,
   - Location of the incident: building, floor and room number,
   - Time and type of incident,
   - Name and quantity of chemicals involved, to the extent known,
   - The extent of injuries, if any.
   - Type of hazard to health or the environment including (particularly: flammable, oxidizer, highly reactive and air-born toxic or irritant materials), radioactive materials, biohazards).
   - The safest route to approach the spill.
3. 9-1-1 operators triage call and page/text:
   - University Health & Safety On-Call and
   - Department of Emergency Management (DEM).

The spill resulting in a release to the environment requires the Facility to complete the UMN Spill Report Form contained in Appendix E. This form is submitted to DEHS staff and is used as the basis for regulatory reporting of releases by DEHS staff.

**4.10 Mercury Minimization Plan**

The Permit requires a determination of any sources of mercury at the Facility that are exposed to stormwater. The University has evaluated this Facility and its operations to identify sources of mercury that may be present in materials received or used. At this Facility, “Lamps and Other Mercury Waste” (SM-13) are possible sources of mercury that could expose stormwater to mercury in the event of a spill or other contact with stormwater.

All lamps and other mercury containing devices have been removed from Facility or are stored in hazardous material storage area for pick-up by the DEHS Chemical Waste Program for proper disposal.

**4.11 Training Program**

Facility staff identified by role will receive training annually, to be performed by DEHS staff. Dates of training and training rosters are maintained separately and will be available (using the same mechanism as safety training) upon request.
Stormwater training includes the following components:

- stormwater pollution control measures
- components and goals of the SWPPP
- monitoring procedures

Persons involved in the inspection, monitoring and reporting portions of the permit are individually trained by DEHS staff to complete specific tasks as indicated in the Pollution Prevention Team responsibilities.
Part 5. Impaired Waters/TMDLs

Stormwater at the Facility is collected by the Facility stormwater collection system. One major drainage area results in discharge into a surface area catch basin. Stormwater not collected by the Facility stormwater collection system drains from the Facility in a nonspecific sheet flow manner and this stormwater is not in potential contact with significant materials.

5.1 Impaired Waters Listing and Status
Waters which are impaired for a particular listed usage must be addressed by the MPCA with a Total Maximum Daily Load (TMDL) study, plan and implementation. Discharges to an impaired water must not cause or contribute to the impairment. If stormwater is specifically listed in the TMDL implementation plan, the Plan must accommodate loading allocations and/or other provisions to reduce causality.

As required by the Permit, this Plan identifies any impaired water within 1 mile of the Facility. Based on the 2016 draft impairment listing, there are no receiving waters with an impairment listing within 1 mile of the Facility.

5.2 Appendix A Waters
While there are several impaired lakes listed in the table in Part 2.3 of this Plan, Appendix A provisions of the permit do not apply. Note that the parameters controlled by the Permit are not the basis of the impairment listing.
Part 6. SWPPP Water Quality Monitoring

This Facility is regulated under Sector P Transportation Facilities of the MSGP.

The General Permit requires the following types of monitoring:

- Benchmark monitoring;
- Effluent limitations guidelines (ELG) monitoring; and,
- Impaired waters monitoring.

Benchmark monitoring is described in the following sections; there are no ELG or special waters monitoring applicable to this Facility.

6.1 Monitoring Location
One major drainage area results in discharge into a surface area catch basin. While there are several inlets to the storm sewer infrastructure, the inlet located in receiving potential worst-case stormwater (downgradient of fueling station and car wash exit) was selected as the representative sampling outfall (BML01). BML01 discharges to the City of Minneapolis storm sewer system.

6.2 Monitoring Parameters
Under the General Permit (Sector P), quarterly sampling of stormwater at each benchmark sampling location is required at this Facility until four values are obtained. Samples are to be analyzed for the parameters identified in Table 3.

Table 3. Sector P3 Sampling Parameters and Benchmark Values

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Benchmark Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>100 mg/l</td>
</tr>
</tbody>
</table>

6.3 Timing of Sample Collection
Samples are collected within 30 minutes of an event at the benchmark monitoring location to the extent feasible. If a sample cannot be collected within first 30 minutes, an explanation is provided on the Stormwater Monitoring Report (SWMR) for the respective monitoring interval.

If a sample was not collected during the monitoring interval because there was no measurable discharge from the BML for that period, the SWMR will reflect “No Flow”.

6.4 Sample Collection Method
Stormwater samples at this Facility are collected manually by grab sample at BML01 for a stormwater discharge event. Nalgene stormwater sampling tubes and bottles are used for this purpose.

University Environmental Health & Safety staff are responsible for collecting stormwater samples from the monitoring station and delivering the sample to the laboratory within relevant holding times for analysis and subsequent reporting. When a stormwater monitoring sample is delivered to the laboratory, Facility staff are advised.
6.5 Analytical Data Summary
This Facility was not covered under the previously issued MSGP. Samples at station BML01 are readily available and are being collected as available.

Sampling results will be reflected in Table 4 as the data are obtained; average values will be calculated and maintained in this tables.

Table 4. Stormwater Sampling Data Summary for BML01: Driveway Storm Sewer

<table>
<thead>
<tr>
<th>Sample Date</th>
<th>TSS, mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/21/2016</td>
<td>28</td>
</tr>
<tr>
<td>5/13/2016</td>
<td>115</td>
</tr>
<tr>
<td>4/20/2017</td>
<td>470</td>
</tr>
<tr>
<td>5/19/2017</td>
<td>133</td>
</tr>
<tr>
<td>Average</td>
<td>186.5</td>
</tr>
<tr>
<td>Benchmark Threshold</td>
<td>100</td>
</tr>
</tbody>
</table>

If the benchmark values are exceeded by the average analytical results for four sample events, an assessment of the permit compliance status will be made and the SWPPP will be revised, as needed. The revised SWPPP will propose corrective actions, including improvements to BMPs, necessary to meet the applicable benchmark values during the subsequent years of monitoring. Changes in BMPs and the timeframe for implementation of all corrective actions will also be identified. Note that as of 8/22/17, the frequency of sweeping of the parking areas at the Facility has been increased to quarterly. Considerations for sediment collection are also being considered in conjunction with other Facility landscape changes.
Figure 1: Facility Location

UMTC-Fleet Services Facility
MNR053D4G
901 29th Avenue SE
Minneapolis, Minnesota

LANDMARK ENVIRONMENTAL, LLC
Figure 2: Site Map

MNR053D4G
UMTC-Fleet Services Facility
901 29th Avenue SE
Minneapolis, Minnesota
LANDMARK ENVIRONMENTAL, LLC

Legend

- Significant Materials
- Sampling Location
- Surface Flow Direction
- Areas with Permeable Surface*
- Facility Boundary

*All other areas have impervious surface or are the building roof

0 30 60 120 Feet
1 inch = 67 feet

F:\GIS\Client\UoM - University of MN\16\Fleet Service\projects\Figure 2 Fleet Service Facility.mxd
List of Significant Materials

<table>
<thead>
<tr>
<th>Site Map Code</th>
<th>Significant Material Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-01</td>
<td>Gasoline</td>
</tr>
<tr>
<td>SM-02</td>
<td>Diesel</td>
</tr>
<tr>
<td>SM-03</td>
<td>E-85 Ethanol</td>
</tr>
<tr>
<td>SM-04</td>
<td>Misc Vehicle Fluids</td>
</tr>
<tr>
<td>SM-05</td>
<td>Solid Waste and Recycling Materials</td>
</tr>
<tr>
<td>SM-06</td>
<td>Oils and Oily Waste</td>
</tr>
<tr>
<td>SM-07</td>
<td>Vehicle Antifreeze</td>
</tr>
<tr>
<td>SM-08</td>
<td>Lead-Acid Batteries</td>
</tr>
<tr>
<td>SM-09</td>
<td>Parts Washer Liquids</td>
</tr>
<tr>
<td>SM-10</td>
<td>Windshield Washer Fluid</td>
</tr>
<tr>
<td>SM-11</td>
<td>Vehicle Wash Chemicals</td>
</tr>
<tr>
<td>SM-12</td>
<td>Drag-out from Vehicle Wash</td>
</tr>
<tr>
<td>SM-13</td>
<td>Lamps and Other Mercury Waste</td>
</tr>
<tr>
<td>SM-14</td>
<td>Batteries (alkaline, Ni-Cad)</td>
</tr>
<tr>
<td>SM-15</td>
<td>Grass Clippings and Organic Detritus</td>
</tr>
<tr>
<td>SM-16</td>
<td>Misc Herbicides/Pesticides</td>
</tr>
<tr>
<td>SM-17</td>
<td>Ice Melt Salt</td>
</tr>
<tr>
<td>SM-18</td>
<td>Snow Storage Debris</td>
</tr>
<tr>
<td>SM-100</td>
<td>Exposed Soil</td>
</tr>
</tbody>
</table>
Figure 3: Designated and Impaired Waters Within 1 Mile of Facility

MNR053D4G
UMTC-Fleet Services Facility

- Facility
- 1 Mile Site Buffer
- Calcareaous Fens (0)
- Designated Trout Stream (0)
- Protected Tributary to Designated Trout Stream (0)
- Impaired Streams (2016 draft) (0)
- Impaired Lakes (2016 draft) (3)
- Impaired Wetlands (2016 draft) (0)
- NWI Wetlands (35)
- Lakes and Rivers (0)
- University Buildings
- Street Centerlines
- County Boundaries
- Township Boundaries

Note: Numbers within parentheses indicate the number of features within the one mile site buffer.
This document provides an overview of environmental regulations and EHS guidelines for the selection of appropriate storage areas, and for the proper storage of materials and wastes in tanks and containers at University projects, sites and buildings. Additional site specific provisions may apply in some cases, including additional requirements for hazardous wastes, and tanks/tank systems.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Choose proper container storage location</td>
</tr>
<tr>
<td></td>
<td>• Indoors or under cover from elements, away from and down-gradient of floor drains, storm sewer drains and exterior building doors.</td>
</tr>
<tr>
<td></td>
<td>• Protected from vehicle traffic, theft and vandalism.</td>
</tr>
<tr>
<td></td>
<td>• Aisles maintained to visually see and allow spill and emergency response.</td>
</tr>
<tr>
<td></td>
<td>• Surface that is compatible and impervious to the material being stored.</td>
</tr>
<tr>
<td></td>
<td>• On pallets or in rack systems to prevent contact with condensation and other moisture.</td>
</tr>
<tr>
<td></td>
<td>• Area should be clean and dry with a moderate temperature to provide the most stable environment</td>
</tr>
<tr>
<td></td>
<td>• Provide secondary containment for all waste, oil products and flammables containers if ≥ 55 gallons in size</td>
</tr>
<tr>
<td>2</td>
<td>Choose proper container</td>
</tr>
<tr>
<td></td>
<td>• Leak-proof and in good condition.</td>
</tr>
<tr>
<td></td>
<td>• Correct size for safe and efficient inventory management.</td>
</tr>
<tr>
<td></td>
<td>• Compatible with material being stored.</td>
</tr>
<tr>
<td>3</td>
<td>Label container</td>
</tr>
<tr>
<td></td>
<td>• Label container as soon as anything is placed in it.</td>
</tr>
<tr>
<td></td>
<td>• Place label on the body of any container – not on the cover.</td>
</tr>
<tr>
<td></td>
<td>• All containers – regardless of the waste/product -- with AT LEAST the following information:</td>
</tr>
<tr>
<td></td>
<td>• Description of the contents (all containers)</td>
</tr>
<tr>
<td></td>
<td>• NFPA diamond (all containers)</td>
</tr>
<tr>
<td></td>
<td>• Capacity of the container (if container is &gt;55 gallons)</td>
</tr>
<tr>
<td></td>
<td>• Tank registration ID from MPCA (if container is ≥ 500 gallons)</td>
</tr>
<tr>
<td></td>
<td>• Oily Wastes (used oil, used oil filters, used oil sorbents and oily rags):</td>
</tr>
<tr>
<td></td>
<td>• Use the words “Used Oil” with the descriptive name, eg. Used Oil Filters, Used Oil Sorbents. (Do not use “Waste Oil”.)</td>
</tr>
<tr>
<td></td>
<td>• Hazardous Wastes (most chemicals not including petroleum or agricultural chemicals):</td>
</tr>
<tr>
<td></td>
<td>• USE a “Hazardous Waste” label with the descriptive name.</td>
</tr>
<tr>
<td></td>
<td>• Accumulation Start Date – indicate the date when you start adding waste to the container</td>
</tr>
<tr>
<td></td>
<td>• Fill Date – indicate the date when container is filled</td>
</tr>
<tr>
<td></td>
<td>• Special/Universal Wastes (batteries, lamps, mercury containing equipment, pesticides) require special markings:</td>
</tr>
<tr>
<td></td>
<td>• Use the words “Used” or “Waste” with the description name, eg. “Used Lamps”, “Waste Batteries”.</td>
</tr>
<tr>
<td>4</td>
<td>Close containers.</td>
</tr>
<tr>
<td></td>
<td>• Containers must remain closed and sealed, except when adding or removing materials/wastes.</td>
</tr>
<tr>
<td></td>
<td>• Closed means bungs and caps are fully screwed in or on.</td>
</tr>
</tbody>
</table>
o Open-head drum containers have lids secured by fully-bolted retaining rings or 'snapped' spring-loaded rings, and
o Bucket snap-lids are fully engaged.
o If your container has a funnel, it must be screwed into the bung and have a lid that securely latches. Open funnels and lids that shut by gravity alone do not meet these requirements.

5 Store containers properly:
- Do not mix wastes together or keep incompatible materials in the same storage area.
- Keep all material and waste containers in storage area unless in use.
- Maintain spill response materials near storage areas, marking the container “Spill Kit” or similar wording.
- Use dry cleanup methods whenever possible to cleanup spills; contain and label waste from cleanup.
- Inspect container storage areas weekly for spills, container condition, label performance, storage time limits, container protection and aisle space.

6 Respond to container problems and spills immediately:
- Implement Spill Response Procedure immediately if there is a spill (contact EHS staff for specifics). See [EHS Spill Response Factsheet](http://www.dehs.umn.edu/PDFs/UMN_FactSheet_Release%200715.pdf) for more information.
- Overpack or repackage any containers that have failed or are in poor condition if it is safe to do so.
- Add/secure labels as indicated above.

7 Manage empty containers properly:
- Empty aerosol cans should be collected, labeled and managed as a hazardous waste.
- Empty drums and other containers may be retained on-site for reuse or recycle:
  - Remove/blackout previous labels/markings
  - Mark “Empty”
  - Store in a manner to prevent safety and nuisance conditions, and to prevent accumulation of precipitation
    - Indoors or under cover is preferable
    - If outdoors, store covered, stacked on their side or upright no more than 2 drums high.

8 Ship containers of waste on a timely basis:
- Special/Universal wastes: off-site within 1 year of fill date.
- Oily wastes: minimize amount stored onsite; recommend shipment off-site every 6 months.
- Hazardous wastes: move within 30 days of fill date to central accumulation area; check with Chemical Waste Program for time allowed in central accumulation area (time varies).
- Contact the Chemical Waste Program at (612) 626-1604 or [hazwaste@tc.umn.edu](mailto:hazwaste@tc.umn.edu) to make arrangements to ship waste.
APPENDIX C

Industrial Storm Water Inspection Form
Instructions: Gather Site Map and List of Significant Materials from the SWPPP for this Facility. Complete an Inspection Form each month; at least two per year must be during a runoff event. One inspection must be completed during a snow melt event. Indicate any corrective actions needed and date completed on this form. Send copy of this completed Inspection Form to DEHS staff only if changes to the SWPPP, Site Map or Significant Materials list are indicated by inspection.

Part 1. Inspection Details

Date and time of inspection: 
Name of inspector:

Site conditions during inspection:

☐ Dry or frozen conditions
☐ Runoff conditions with sampling\(^1\),\(^5\)
☐ Runoff conditions without sampling\(^1\)
☐ Wet, not runoff conditions

If runoff conditions exist, indicate total accumulation from event, in inches, or indicate “melt event”\(^1\): 
If runoff event without sampling, indicate reason for no sample:

Weather conditions:

\(^1\) Indicate total accumulation for the precipitation event, to the nearest tenth of an inch. For less than 0.1”, indicate “Trace”.

Part 2. Significant Activities and Materials

A. Review/recall activities at Facility since the previous stormwater inspection.

Have any spills at the Facility resulted in a release to the environment or resulted in other potential exposure to stormwater? 
☐ Yes ☐ No If yes, indicate spill material and date(s) of spill event(s):

Any salt or sand applied to hard surface areas/roads? 
☐ Yes ☐ No

Any mechanical street sweeping? 
☐ Yes ☐ No If yes, indicate date(s):

Any permanent changes (construction/project) made at facility? 
☐ Yes\(^2\) ☐ No

\(^2\) SWPPP revision may be needed. Review list of Significant Materials and Site Map, marking up as needed to reflect site conditions. Send changes with completed Inspection Form to EC staff to revise the Site Map and/or SWPPP. If site conditions indicate changes to the Site Map or SWPPP are needed, the Plan must be updated prior to submittal of the Annual Report for the reporting period.

B. Review Significant Materials List for this Facility; the list should be complete and accurate.

Is the list a complete and accurate representation of Significant Materials present at the Facility at the time of the inspection? 
☐ Yes ☐ No\(^2\)

C. Review the location of each Significant Material at the Facility as indicated on the Site Map.

Are the map designated locations accurate and complete? 
☐ Yes ☐ No\(^2\)

Are any contractors or trades staff conducting work on-site at time of inspection that may potentially affect stormwater? 
☐ Yes\(^2\) ☐ No

Any construction with disturbed soil at time of inspection? 
☐ Yes\(^3\) ☐ No If yes, total disturbed area is:

\(^3\) If the project disturbs more than 1 acre, make a copy of the Site Map and mark up to indicate disturbed area and indicate the permit number covering the activities. For projects ≤ 1 acre in size, make a copy of the Site Map and mark up to indicate disturbed area, as well as all temporary BMPs and/or BMP maintenance activities at the time of inspection. Staple the marked up Site Map to the Inspection Checklist and maintain with Checklist.

Part 3. Best Management Practices (BMPs)

A. Review areas at the Facility that are indicated as a Structural BMP on the Site Map.

Are all BMPs in place and functioning properly? 
☐ Yes ☐ No\(^4\) If no, indicate corrective action taken and date completed:

Are rip rap areas reasonably free of vegetation? 
☐ Yes ☐ No\(^4\) If no, indicate corrective action taken and date completed:

Are vegetated areas in good condition? 
☐ Yes ☐ No\(^4\) If no, indicate corrective action taken and date completed:
Are structural BMPs and areas nearby free of evidence of erosion?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Are impermeable surfaces reasonably free of salt, sand, detritus and/or other debris?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Corrective action needed, appropriate corrective action must be initiated within 30 days of discovery, and functionality of BMPs restored to full operation as soon as field conditions allow.

B. Review the non-structural BMPs indicated in the SWPPP.

Are all Significant Materials stored indoors or under cover?  
☐ Yes  ☐ No^2

Are containers with Significant Materials plainly labeled?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Are containers with Significant Materials plainly labeled?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Are containers with Significant Materials plainly labeled?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Is inventory of Significant Materials maintained on-site managed appropriately for current and anticipated needs at the Facility (excess inventory minimized)?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Is housekeeping (point-of-use issues) acceptable at time of inspection?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Are Spill Response Materials adequately stocked?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Are training, SOPs and fuel/chemical delivery provisions up-to-date and being implemented at Facility at the time of the inspection?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Part 4. Outfalls and Sampling

A. Review the location of stormwater outfalls at the Facility as indicated on the Site Map.

Are the map designated locations accurate and complete?  
☐ Yes  ☐ No^2

Are outfalls stable and functional (no evidence of erosion or intrusion)?  
☐ Yes  ☐ No^4  
If no, indicate corrective action taken and date completed:

Water discharging to outfall?  
☐ Yes  ☐ No

If yes, was the discharge free of discoloration, sheen, foam and floating items?  
☐ Yes  ☐ No^4  ☐ N/A
If no, indicate corrective action taken and date completed:

If discharge occurring, was a sample taken during inspection?  
☐ Yes^5  ☐ No^6

If a sample is taken, it should be taken within the first 30 minutes of a runoff event, if possible. If not possible to collect the sample within the first 30 minutes, an explanation of why this was not possible should be maintained with test results. Attach test results and explanation, if applicable, to the relevant Inspection Form.

^6If water was discharging to outfall but a sample was not taken, indicate reason in Part 1 of form; e.g. “quarterly sample already taken” or “sampling not required”.
This document provides an overview of the state environmental regulations and EHS guidelines for the report of spills and releases to the environment at University projects, sites and buildings.

Spills and Releases at the University of Minnesota are managed by a coordinated response from University Health and Safety and Facilities Management.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Contain the spill if possible to do safely</strong>&lt;br&gt;• Stop the release, if possible, by turning off any pump (use the “Emergency Stop” button, valve or by adding a bucket or other container under the drip or leak to contain the release.)&lt;br&gt;• Locate spill kit and other necessary materials, including the Material Safety Data Sheet for the spilled material.&lt;br&gt;• Ensure access to water and sewers in blocked using adsorbent pads or other methods to divert flow. Isolate the area from others by blocking it, roping it off or using cones.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Call for help</strong>&lt;br&gt;• Call 9-1-1 to report the incident&lt;br&gt;• Be prepared to provide the following information:&lt;br&gt;  o Your name, location and phone number,&lt;br&gt;  o Location of the incident: building, floor and room number,&lt;br&gt;  o Time and type of incident,&lt;br&gt;  o Name and quantity of chemicals involved, to the extent known,&lt;br&gt;  o The extent of injuries, if any.&lt;br&gt;  o Type of hazard to health or the environment including (particularly: flammable, oxidizer, highly reactive and air-born toxic or irritant materials), radioactive materials, biohazards).&lt;br&gt;  o The safest route to approach the spill.&lt;br&gt;• 9-1-1 operators triage call and page/text:&lt;br&gt;  o University Health and Safety On Call (UHSOC), and&lt;br&gt;  o Department of Emergency Management (DEM).</td>
</tr>
<tr>
<td>3</td>
<td><strong>Clean up the spill</strong>&lt;br&gt;• UHS or DEM staff make contact and coordinate communications and spill response activities, including managing local responders.&lt;br&gt;• If directed to do so, clean up the spill only if:&lt;br&gt;  o it does not involve injury,&lt;br&gt;  o the quantity spilled is less than half a quart of a moderately toxic chemical,&lt;br&gt;  o you have the proper training and proper protective equipment to do the cleanup, and&lt;br&gt;  o the spill is indoors and contained.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Report spills to operational managers</strong>&lt;br&gt;• Notify the Prime Contractor management if spill is at a construction site.&lt;br&gt;• Notify operational unit manager, lead principal investigator (PI) or Project Manager (CPPM, U Construction).</td>
</tr>
</tbody>
</table>
| 5    | **Additional Reporting for releases to the environment**<br>• A release to the environment is any spill to the air, land or to the water – including to the storm sewer, sanitary sewer or to a surface water body such as a drainage ditch.<br>• UHSOC will contact the Environmental Compliance Subject Matter Expert (SME) soon after the initial on-site evaluation has been completed, but no later than 24-hours after discovery of the release.<br>• SME determines if the release exceeds the Reportable Quantity (RQ) for the chemical released.<br>  o A convenient online tool to determine RQ is at [http://homer.ornl.gov/rq/](http://homer.ornl.gov/rq/)<br>  o Report releases above the RQ to the National Response Center at 800.424.8802.<br>• UHS documents the release details, reporting details (including date and time of all regulatory notifications) and response actions for each incident.
APPENDIX E

UMN Spill Report Form
Instructions: Complete this form for any spill or other incident involving a petroleum product, hazardous materials/waste or refrigerant. The information provided on this form is used when contacting Emergency Responders and making required regulatory reports. Refer to the DEHS Fact Sheet: Responding to Spills and Releases for more information.

Part A. Caller Information

Name of Reporter: __________________________ Name of Receiver: __________________________

Phone Number: __________________________ Phone Number: __________________________

☐ University Employee ☐ Contractor
☐ City Employee ☐ State Duty Officer
☐ Other: __________________________

Part B. Spill Information

Material Spilled1: ☐ Petroleum ☐ Refrigerant ☐ Wastewater/Liquid Manure
☐ SARA Chemical ☐ Non-SARA Chemical ☐ Other/Emission

Location Spilled: ☐ Indoors, fully contained ☐ Outdoors, fully contained
☐ Indoors, not fully contained ☐ Outdoors, not fully contained

Discharge to: ☐ None ☐ Air ☐ Storm Sewer
☐ Ground ☐ Sanitary Sewer ☐ Surface Water

Specific Location of Spill2: __________________________

GIS Coordinates: X = ____________ Y = ____________

Duration of Spill3:

Start Date/ Time: ____________

End Date/ Time: ____________

Volume of Spill (est): ____________

☐ Gallons ☐ Pounds

Cause of Spill4:

________________________________________________________________________

Corrective Actions Plan5:

________________________________________________________________________

Part C. Notifications

Name and Badge No/Ext No: __________________________

Ticket No: __________________________ Date/Time: __________________________

State Duty Officer6: __________________________

National Response Center6: __________________________

Env Compliance Staff6: __________________________

Campus EH&S7: __________________________

Other7: __________________________

---

1 See http://homer.ornl.gov/rq/ for a convenient online tool to determine SARA chemicals and RQs.

2 Indicate the Campus Number, Building Number and Room Number or closest University asset (such as an electrical, sanitary, communications manhole), street intersections and directions.

3 Indicate date and time of when spill began and ended. If exact start/stop date is not known, use the date University staff became aware of the spill start/stop.

4 Describe the situation, equipment involved, and other information/causative factors about how the spill occurred.

5 Describe corrective actions taken at the time of spill. DEHS staff to additionally describe any additional corrective actions needed, including time schedule for implementation, and additional reporting.

6 Immediate notification to the State Duty Officer is required for releases to the environment of more than 5 gallons of petroleum product, or any volume of other regulated substances. Immediate notification to the National Response Center is additionally required for releases exceeded the Reportable Quantity (RQ) for identified substances. Consult with EHS Environmental Compliance staff for a determination on when regulatory notifications are required.

7 Notify Campus DEHS and central DEHS staff. Notify CMR or Prime Contractor management if spill is at a construction site. Notify operational unit manager, lead principal investigator (PI) or Project Manager.