Stormwater Pollution Prevention Plan

Municipal Services Facility
929 Highland Avenue
South Portland, ME, 04106

September 2019

Prepared by Fred Dillon – Stormwater Program Coordinator

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Cover Photo Credit: Denise Michaud

1. STORMWATER POLLUTION PREVENTION PLAN OVERVIEW

The City of South Portland (hereafter the City) has developed this Stormwater Pollution Prevention Plan (SWPPP) to minimize the adverse impacts associated with polluted stormwater runoff from municipal operations while addressing the requirements in the Maine Department of Environmental Protection's 2013 General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4GP). The MS4GP requires the City to address six Minimum Control Measures (MCMs), which consist of the following:

1. Public Education and Outreach on Stormwater Impacts
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management in New Development and Redevelopment; and
6. Pollution Prevention / Good Housekeeping for Municipal Operations

Under MCM6 (Part IV.H.6.a.vi of the 2013 MS4GP), the City is required to "*develop and implement a stormwater pollution prevention plan ("SWPPP") for the following municipal operations: public works facilities, transfer stations, and school bus maintenance facilities operated by the permittee.*" The SWPPP must meet the following conditions and requirements:

- Quarterly visual monitoring per Maine's Multi-Sector General Permit (published 4/26/11)
- Outline sources of potential stormwater pollutants and the methods by which these pollutants will be reduced or prevented from entering Waters of the State, other than groundwater, or to an MS4 (i.e., a publicly owned stormwater system)
- Identify SWPPP team of facility personnel as well as SWPPP team leader ultimately responsible for SWPPP implementation

The City has met these requirements by adapting the Maine DEP's SWPPP template for use at the South Portland Municipal Services Facility. This document describes the following:

- The SWPPP Coordinator with a description of the coordinator's duties
- The members of the SWPPP Team and their responsibilities
- Facility location and activities, site maps, and a description of the stormwater drainage system
- Potential stormwater contaminants
- Stormwater management controls and various Best Management Practices (BMPs) needed to reduce pollutants in stormwater discharges
- Employee training program
- The facility's monitoring and inspection plan
- The implementation schedule and provisions for amendment of the plan

2. PLANNING AND ORGANIZATION

2.1 SWPPP Coordinator and Team

The Municipal Services Facility encompasses the operations of multiple municipal departments including Public Works, Parks, City Bus and Fire. The list below identifies the responsibilities for members of the Stormwater Pollution Prevention Team, which is responsible for implementing the SWPPP. In addition to the individuals named below, equipment operators and other relevant staff for the various departments will receive annual training to identify and effectively address potential stormwater pollution sources.

SWPPP Coordinator: Melissa Hutchins	**Office Phone:** (207) 767-7635
Title: Public Works Department Superintendent	**Cell Phone:** (207) 560-7161

Responsibilities: Ms. Hutchins is responsible for overseeing all aspects of Public Works Department's daily operations and maintenance activities, including the fleet maintenance facilities and adjacent grounds for the Department's trucks and associated equipment. She will ensure that the quarterly SWPPP inspections are completed and will be the primary contact person for any concerns related to the Public Works Department's operations.

Team Member: Karl Coughlin	**Office Phone:** (207) 767-7670
Title: Parks Department Deputy Director	**Cell Phone:** (207) 245-0220

Responsibilities: Mr. Coughlin is responsible for overseeing all aspects of Parks Department's daily operations and maintenance activities, including the Sign Shop, Cold Storage Building, Green House and adjacent grounds for the Department's trucks and associated equipment. He will be the primary contact person for any concerns related to the Parks Department's operations.

Team Member: Rick Sargent	**Office Phone:** (207) 767-5556
Title: City Bus Operations Supervisor	**Cell Phone:** (207) 837-1367

Responsibilities: Mr. Sargent is directly responsible for overseeing aspects of the City Bus Department's daily operations and maintenance activities for various vehicles and associated equipment. He will be the primary contact person for any concerns related to the City Bus Department's operations.

Team Member: Steve Masters	**Office Phone:** (207) 767-7635
Title: Public Works Department Lead Mechanic	**Cell Phone:** (207) 671-7526

Responsibilities: Mr. Masters is responsible for directly overseeing the daily activities of all staff involved in the maintenance of the Public Works Department's vehicles, construction equipment and other associated equipment.

Team Member: Linky Erskine	**Office Phone:** (207) 767-7670
Title: Parks Department Assistant Superintendent	**Cell Phone:** (207) 233-7028

Responsibilities: Mr. Erskine is responsible for all daily activities associated with maintaining the Parks Department's vehicles and other associated equipment.

Team Member: Richard Lanoix	**Office Phone:** (207) 767-5556
Title: City Bus Lead Mechanic	**Cell Phone:** (207) 608-7794

Responsibilities: Mr. Lanoix is responsible for all daily activities associated with maintaining the Parks Department's vehicles and other associated equipment.

Team Member: Fred Dillon	**Office Phone:** (207) 347-4138
Title: Stormwater Program Coordinator	**Cell Phone:** (207) 321-9437

Responsibilities: Mr. Dillon is responsible for administering the City's Stormwater Program, which includes assisting all applicable City departments in developing and implementing SWPPPs for activities with the potential to generate stormwater pollution. Questions regarding the contents of this SWPPP can be directed to Mr. Dillon.

3. ASSESSMENT

3.1 Site Description & Site Maps

The City's new Municipal Services Facility at 929 Highland Avenue was completed in January 2018 after a nearly 2-year construction period and as part of a larger effort that included the construction of a new Transfer Station in 2016. (A separate SWPPP has been developed for the Transfer Station). The Municipal Services Facility consolidates operations for several City departments – including Public Works, Parks, City Bus and Fire – into a single 14-acre site with the Transfer Station directly next-door (Figures 1 & 2). The vehicles and equipment associated with these operations include a wide variety of trucks, buses, construction equipment and numerous other related assets.

Many vehicles and equipment reside in a 22,800 s.f. indoor vehicle and equipment storage building while most remaining vehicles (primarily trucks) are stored outside. A number of other buildings were constructed to support the Municipal Services Facility's operations, including a sand & salt shed, administration building, fleet maintenance building, vehicle wash bay, cold storage building and green house (Figure 3 and Table 1).

A series of catch basins and ditches collect stormwater runoff from the vast majority of the site and direct it to a large wet pond for treatment and storage. Likewise, the Transfer Station and main access road from Highland Avenue both use catch basins and ditches to collect stormwater runoff and direct it to the wet pond. In compliance with the State's MS4 General Permit requirements, the wet pond is inspected annually by a 3rd party and maintained by the City. It discharges to a forested wetland that resides in the Gambler's Arm Brook watershed.

Most of the 14-acre site is graded so that stormwater runoff drains to the Gambler's Arm Brook watershed. However, a small section of the snow storage area (~0.6 ac.) on the northern edge of the site resides in the Barberry Creek watershed, which does not meet state water quality standards (primarily due to the adverse effects of surrounding development) and for which the Maine Department of Environmental Protection has established a Total Maximum Daily Load (TMDL). The sand and salt shed was constructed to completely contain all winter maintenance materials and to reduce chloride impacts to adjacent freshwater resources.

All internal piping and floor drains in the primary Municipal Services Facility building (administration, fleet maintenance, indoor equipment storage and wash bay) discharge to the public sewer. All sewage flow from this building passes through a sand and oil separator before draining to a submersible pump station that lifts the sewage up to the public system on Highland Avenue (Figure 2).

The Municipal Services Facility is bounded to the north by a large tract of forested wetland and a cemetery. Medium intensity residential land uses on Highland Avenue are aligned along the facility's eastern border with a setback distance of at least 400' between the nearest dwelling unit and the Municipal Services Facility. The Transfer Station lies along the southern edge of the facility and the municipal landfill cap and solar array lie immediately to the west (Figure 1).

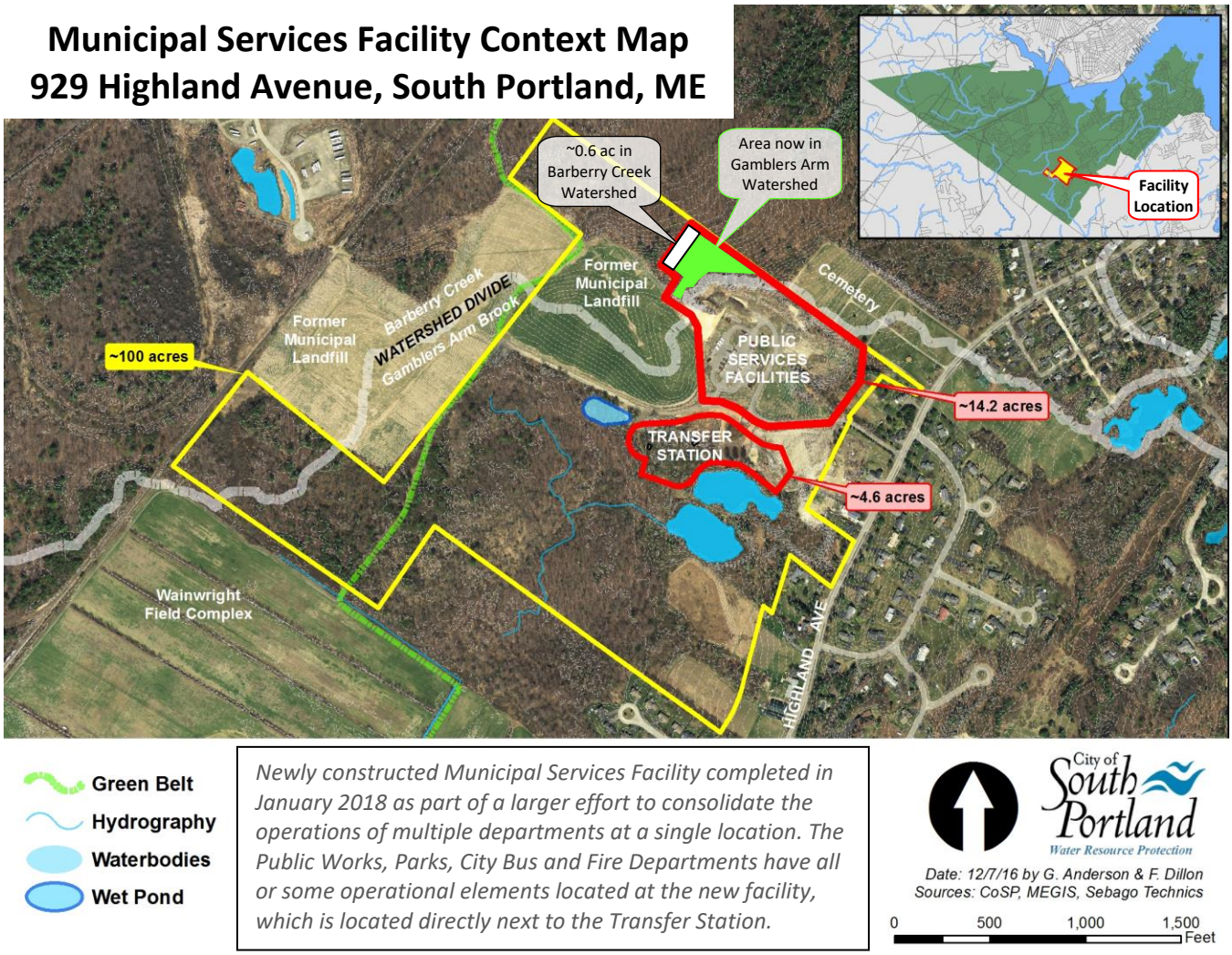


Figure 1: Municipal Services Facility Context Map

Table 1: *main areas associated with Municipal Services Facility operations & maintenance activities*

Description	**Activity Types**	**Approx. Ft²**
Fleet Maintenance	Vehicle & equipment maintenance, sign shop, parts & materials storage, HVAC room, maintenance staff offices	23,126
Indoor Vehicle & Equipment Storage	Covered storage area for variety of vehicles and equipment from various municipal departments	22,800
Administration Building	Administrative staff offices, meeting / training rooms, break / lunch room, locker rooms	10,855
Sand & Salt Shed	Covered storage for all sand & salt needed for winter maintenance activities	9,600
Cold Storage Building	Equipment storage area (primarily for Parks Dept)	4,650
Wash Bay	Indoor equipment wash bay (discharges to public sewer)	3,456
Fuel Island	Two pumps (regular & diesel) with two 10,000 gal. underground storage tanks	2,400
Greenhouse	Horticulture	1,260

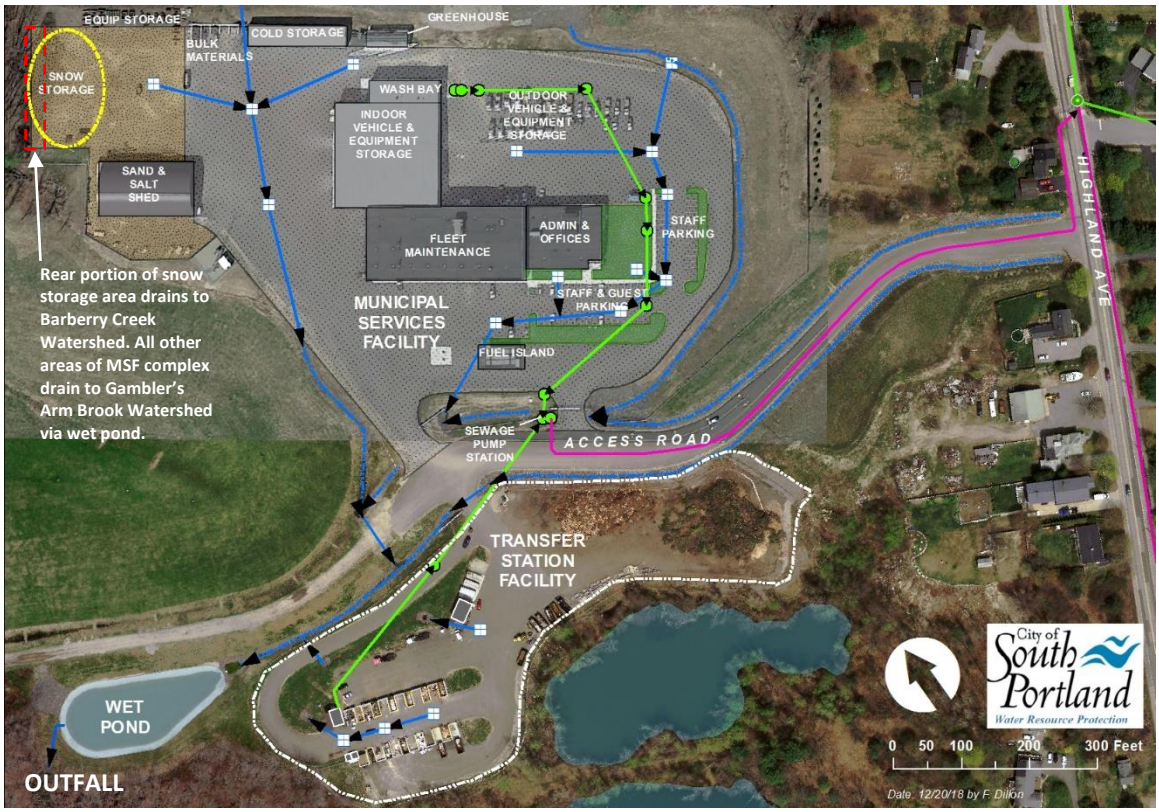


Figure 2: *Municipal Services Complex including Transfer Station (which has separate SWPPP)*

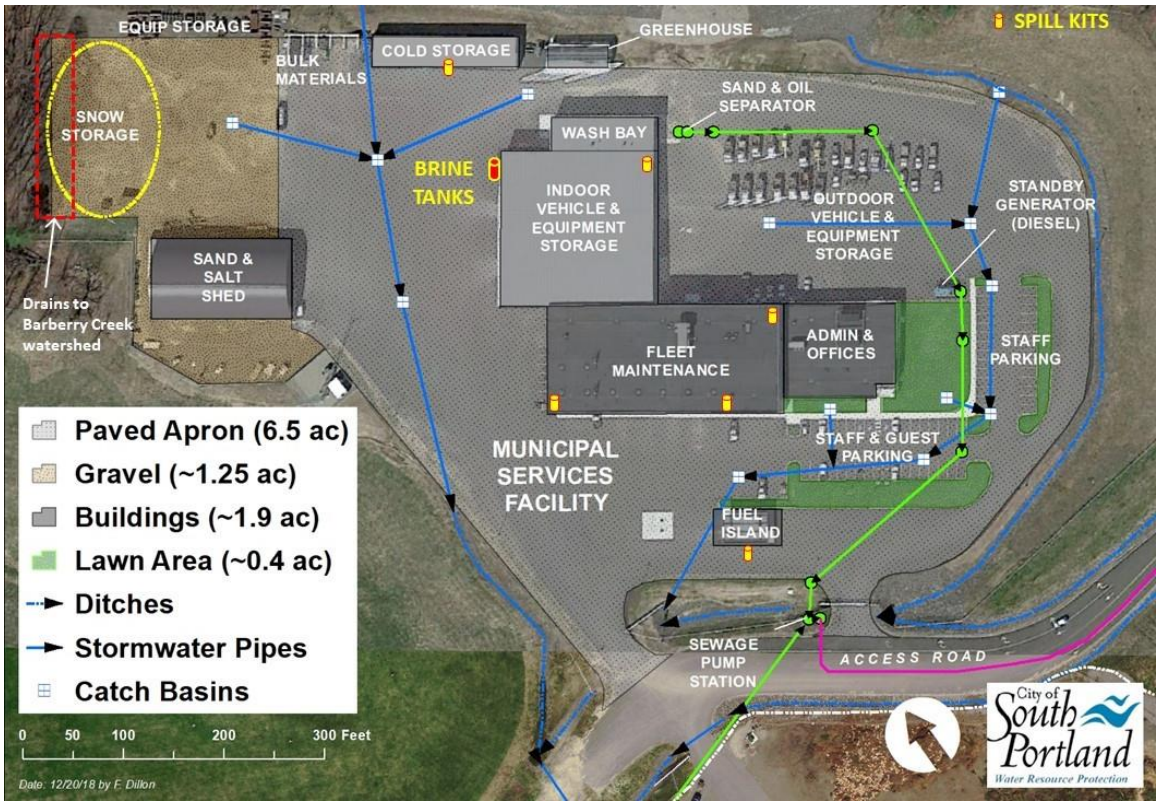


Figure 3: *Municipal Services Facility (green and purple lines indicate sewer system)*

3.2 Significant Material & Equipment Inventory

Outdoor material storage is limited and consists of bulk products such as loam, mulch, compost and wood chips in semi-enclosed concrete storage bunkers along a paved section of the northern edge of the site immediately adjacent to the cold storage building (Figure 4). The combined amount of materials stored in this area generally does not exceed 50 cubic yards and the nearest stormwater catch basins are approximately 100' away.

Figure 4: outside concrete storage bunkers for bulk materials

There are two primary locations designated for outdoor equipment storage (Figure 3):

- An unpaved area of approximately 10,000 s.f. immediately adjacent to the snow storage area used primarily by the Parks Department for landscaping and plow equipment
- A paved area of approximately 1 acre behind the main Municipal Services Facility building used primarily by the Public Works Department for plows and dump trucks. This area includes a diesel-powered standby generator with a double-walled steel 1,700 gallon fuel storage tank.

Virtually all other materials and equipment are stored in buildings (Figure 3):

- **Sand & Salt Building:** designed to provide enough storage to accommodate all annual sand/salt needs with a max. capacity of ~5,000 cubic yards; paved with no floor drains or internal plumbing (Figure 5)
- **Cold Storage Building:** storage for various materials and pieces of landscaping equipment used by Parks Department; concrete slab with no floor drains or internal plumbing (Figure 6)
- **Green House:** designed for horticultural activities; trench drain with internal plumbing connected to facility's sewer system (Figure 6)
- **Main Municipal Services Facility Building:** consists of wash bay, indoor vehicle & equipment storage, fleet maintenance, and administrative services (described in greater detail below)

Figure 5: Sand & Salt Shed

Figure 6: Cold Storage Building (left) & Green House (right)

The Municipal Services Facility (MSF) Building consists of four primary functional areas: Wash Bay; Vehicle & Equipment Storage; Fleet Maintenance; and Administration (Figure 7). Floor drains and plumbing in all areas of the MSF building connect to the sewer system, which discharges via a pump station to the public sewer on Highland Avenue.

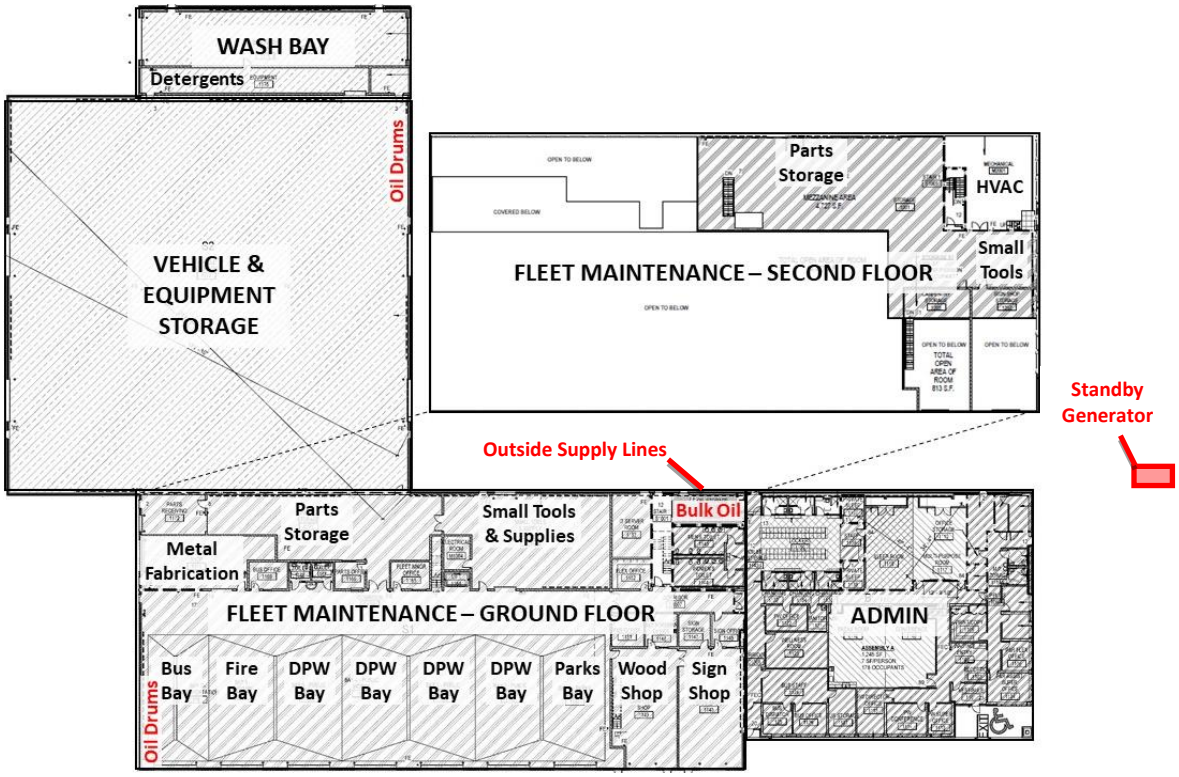


Figure 7: main areas of Municipal Services Facility Building

- ***Wash Bay:*** fully enclosed structure used to clean trucks, other vehicles and various pieces of equipment; central trench drain discharges to sand & oil separator; includes adjacent equipment room with control panels, pumps, detergent drums and tanks.
- ***Vehicle & Equipment Storage:*** used by Public Works and City Bus Departments for various trucks, buses and other associated equipment; several 55 gallon drums of various vehicle fluids on spill pallets.
- ***Fleet Maintenance:*** used by Public Works, Parks, City Bus and Fire Departments for vehicle and equipment maintenance; consists of a bulk oil storage room*, 7 garage bays**, metal fabrication shop, wood shop, sign shop, parts storage, small tools & supplies storage.
    - ***Bulk Oil Storage Room** (Figure 8) provides subfloor secondary containment for four 275-gallon tanks (1 waste coolant, 1 waste oil, 1 hydraulic oil and 1 motor oil), and several 55-gallon drums of grease and coolant. Waste oil and waste coolant are pumped from garage bays into tanks with remote audible and strobe high-level alarms to prevent overfilling.
    - ***Garage Bays** (Figure 9) have up to several 55-gallon drums of various petroleum products on

Figure 8: Bulk Oil Storage room

spill pallets along the side wall of the City Bus garage bay that are used primarily by the City Bus and Fire Departments. There are also several rolling 10-15 gallon containers for waste oil and other vehicle fluids used by various departments.

- ***Administration:*** there are no significant materials or equipment with the potential to generate stormwater pollution stored in this area of the MSF building.

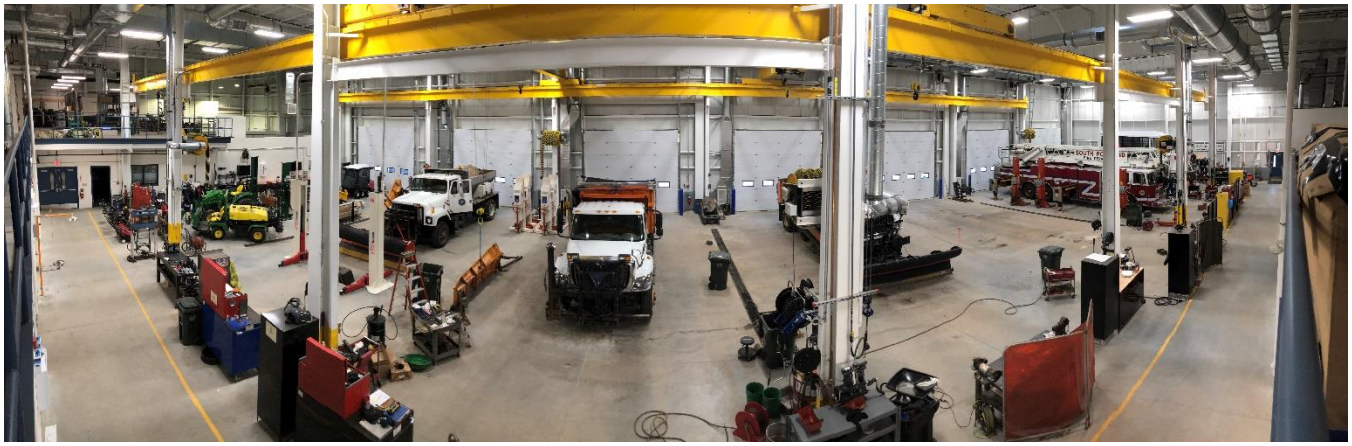


Figure 9: panoramic view of the Fleet Maintenance area's seven garage bays

The Municipal Services Facility requires a **Spill Prevention Control & Countermeasure Plan (SPCC)** because the total amount of petroleum products stored in above ground containers (55-gallon drums or greater) exceeds the 1,320 gallon threshold established by the U.S. Environmental Protection Agency's Oil Pollution Prevention Regulations (Title 40 Code of Federal Regulations Part 112).

3.3 Vehicle & Equipment Washing

As described above, staff generally washes most vehicles & equipment in the Wash Bay of the MSF building. However, lighter washing activities can also occur in other designated areas with nearby floor drains – all of which pass through the Sand & Oil Separator before discharging to the public sewer. To avoid damaging the water recycling equipment for the Wash Bay, outside washing of painting equipment will be done directly above the inlet to the Sand & Oil Separator. During the painting season (typically from May to October), equipment will be cleaned over a metal grate that will be covered at all other times to prevent stormwater runoff from entering the sewer. During the non-painting season (typically from November to April), a solid cover will be placed on the inlet to the Sand & Oil Separator. Any outside vehicle cleaning will consist only of soapless rinsing of the chassis without spraying the undercarriage.

3.4 Snow Storage

A half-acre area on a gravel pad at the northern-most end of the MSF facility is designated for snow storage. This area is graded so that most melt water flows towards a double catch basin near the front of the gravel pad. Since ~0.6 acres of the snow storage area drains to the Barberry Creek Watershed (Figs. 2 & 3), an erosion control berm will be placed along the fence line to prevent debris from spilling out into the forested wetland during melting periods. The City cleans all of the catch basins for the MSF complex on at least an annual basis.

3.5 Spills and Leaks

The areas of the facility most susceptible to spills and leaks that could potentially contribute to stormwater pollution include the following:

- Covered vehicle & equipment fueling island serviced by two 10,000 gallon underground storage tanks (1 for diesel and 1 for gasoline) with permanent spill kit on site
- Outside vehicle and equipment storage areas
- Staff & visitor parking areas

Since stormwater runoff from the facility drains to the wet pond, there is some possibility for polluted stormwater to pass through the wet pond and discharge into the adjacent forested wetlands. Therefore, a Spill Log will be maintained to document any leaks and spills that occur at the MSF complex (**Appendix 1**).

Any spills and leaks of petroleum products will be reported within 2 hours of their occurrence to the Maine Department of Environmental Protection's Oil and Hazardous Spills Reporting Hotline at 1-800-482-0777. The South Portland Fire (911) & Water Resource Protection (767-7675) Departments will also be notified to provide additional assistance and documentation as needed.

All relevant employees will be trained to respond to spills appropriately. At a minimum this training will include:

- Identification and prevention of common potential pollution sources from municipal operations
- An assessment of whether on-site staff has the capability to adequately respond to the leak or spill
- Containment and cleanup procedures
- Notification procedures

Spill prevention and response procedures are described in Section 4.5.

3.6 Non-Stormwater Discharges

No non-stormwater discharges are intended to occur from this facility. However, if a non-stormwater discharge is anticipated or planned, appropriate discharge permits will be obtained prior to release of the materials.

3.7 Allowable Non-Stormwater Discharges

Certain allowable non-stormwater discharges may occur on occasion. These include:

- Fire hydrant – for use in street sweeper
- Potable water – excess poured off from work crews

- Compressor condensate – from main garage bays, metal fabrication, carpentry and sign shops
- Landscape watering
- Pavement washing without detergents
- Exterior building washing without detergents

Runoff from these activities is discharged to the wet pond via catch basins and ditches located throughout the facility (Figures 2 & 3).

3.8 Activities with a Risk of Contaminating Stormwater

There are many activities associated with municipal operations that pose potential stormwater contamination risks (Table 2). Most of the activities conducted in the MSF's several covered buildings are expected to pose low stormwater contamination risks given no or minimal exposure to precipitation and the low likelihood of polluted stormwater runoff to nearby catch basins, the stormwater treatment system (wet pond) and adjacent water resources.

Table 2: municipal activities and potential stormwater pollutants (Source: *Center for Watershed Protection Municipal Pollution Prevention / Good Housekeeping Practices Version 1.0*)

Pollution Generating Activity	Stormwater Pollutants					
	Sediment	Nutrients	Metals	Hydro-carbons	Toxins	Others
Hotspot Facility Management						
Vehicle Repair	○	○	●	●	●	
Vehicle Fueling	×	○	●	●	●	
Vehicle Washing	●	●	◉	◉	●	
Vehicle Storage	○	×	◉	●	○	Trash
Outdoor Loading	●	◉	◉	○	○	Organic Matter*
Outdoor Storage	●	◉	◉	◉	◉	
Waste Management	○	◉	◉	◉	●	Trash
Building Repair	●	○	◉	◉	◉	
Building Maintenance	●	×	●	○	◉	
Parking Lot Maintenance	●	○	◉	●	◉	Chlorides
Turf Management	◉	●	×	×	×	Fertilizers
Landscaping	○	●	×	×	×	Fertilizers

Key
× = not associated with operation
● = frequently associated with operation
◉ = infrequently associated with operation
○ = rarely associated with operation

** Can also include chlorides*

The greatest potential risks for stormwater contamination are associated with fueling, tracking from the sand & salt shed, loading brine solution from the two bulk storage tanks and/or the bulk material storage area (Figure 3), salt spillage or fluid leaks from trucks and equipment stored outdoors and vehicles parked in the staff and visitor parking area. The Pollution Prevention/Good Housekeeping practices described in Section 4 will minimize or prevent stormwater contamination risks.

The large stormwater wet pond that provides stormwater treatment and storage for virtually the entire MSF complex serves as a significant "last line of defense". This system rarely overflows and is likely to retain any sediment and petroleum hydrocarbons rather than discharge these contaminants into the adjacent forested wetland.

4. STORMWATER POLLUTION PREVENTION PLAN IMPLEMENTATION

This section describes facility practices that are in place and implemented to control pollutants that have the potential to contaminate stormwater. Additional pollution prevention/good housekeeping procedures are also provided in **Appendix 2**.

4.1 Pollution Prevention/Good Housekeeping

Pollution prevention/good housekeeping practices are the most effective first step towards preventing stormwater pollution. The general elements of the good housekeeping practices for the Municipal Services Facility are as follows:

- Except for the outside rinsing of truck chassis, no equipment or machinery wash water will be discharged to the stormwater collection system. Washing will either be done in the designated wash bay so that wash water is discharged to the public sanitary sewer.
- All outside plow assemblies and hydraulic hoses will be capped or coupled to prevent spills.
- Spills will be immediately cleaned up using "dry methods" – i.e., absorbent materials placed throughout the complex (see spill kit locations in Figure 3 and Section 4.5).
- All fluid products and wastes will be kept indoors in covered and labeled containers.
- Labeled oil drums will be placed on spill pallets and kept closed except when filling; absorbent pads will be used to wipe up drips and minor spills that may collect on or below the drums.
- All changing of fluids will be performed indoors in the maintenance garage bays.
- Spigots and funnels will be used when changing fluids.
- Drip pans will be used when changing fluids.
- Used batteries and discarded mercury will be transported to the transfer station for recycling.

In addition to these general good housekeeping practices, the Municipal Services Facility staff will also employ the following good housekeeping practices:

- Operations and maintenance staff will regularly inspect vehicles, trucks, associated equipment and machinery for any leaks or spills and immediately clean them up with an absorbent material (see Section 4.5).
- Maintenance staff will also routinely inspect the employee parking area, oil storage room and all fluid storage containers stored throughout the complex and immediately clean up any leaks or spills with an absorbent material (see Section 4.6).

4.2 Preventive Maintenance & Quarterly Inspections

As part of the Preventive Maintenance (PM) program, maintenance staff will conduct documented quarterly inspections (**Appendix 3**) of facility operations and equipment to ensure that no sources of potential stormwater pollution are generated. General elements of a PM procedures include:

- Signs at fluid storage areas with emergency contact info and phone numbers.
- Staff training on proper spill prevention and response procedures.
- Provide spill response equipment at all potential spill areas (see Spill Kit locations in Figure 3).
- All fluid transfers to and from tanks, drums and containers will be observed by qualified staff trained in spill response procedures.
- Routine inspection floor drains and annual cleaning of catch basins to maintain proper functioning.
- Maintenance of drainage swales to ensure proper functioning and prevent erosion.
- Proper maintenance of hydraulic equipment, machinery and vehicles to prevent leaks.
- Frequent inspections of drums and aboveground storage tanks to identify and address leaks.
- Frequent inspections of vehicles, trucks, equipment and machinery to identify and address leaks.

In addition to these general PM practices, the Municipal Services Facility staff will also employ the following PM practices:

- The Lead Mechanics will ensure that all trucks, equipment and machinery are maintained in accordance with the manufacture's recommended maintenance intervals. To the greatest extent possible, all maintenance activities will be conducted indoors to minimize the potential for stormwater pollution.

- All structural BMPs and erosion control systems will be inspected following a significant storm event. If significant storm events do not occur during a three (3) month period, quarterly site inspections will be conducted (Section 5.2). Drainage ditches and slope areas shall also be inspected quarterly and repaired as needed. These items will be documented by the required quarterly site inspections.

- The SWPPP Coordinator will ensure that all stormwater conveyance and treatment systems are routinely inspected and properly maintained to limit discharges of solids and sediment. Procedures include maintaining catch basins and floor drains and keeping truck, equipment and machinery storage areas clean and free of debris by routine sweeping.

- To the greatest extent possible, snow piles will not be pushed onto site boundary buffer zones to prevent off-site transport of sediment and fines.

4.3 Best Management Practices (BMPs)

The goals in designing and implementing BMPs are to prevent or reduce the discharge of potential stormwater pollutants to adjacent surface waters for each area of concern identified in Sections 3.2, 3.3 and 3.4. Since stormwater runoff from the majority of the Municipal Services Facility is discharged to the wet pond through a system of catch basins and drainage ditches, the types of BMPs used to attenuate stormwater pollution are generally non-structural (as described in Sections 4.1 and 4.2 above). The catch basins and drainage ditches are inspected quarterly by City staff and the wet pond is inspected annually by a qualified 3rd party; both inspections use cloud-based forms to improve document sharing and a static copy of the 3rd party inspection form is also available on the City's website. The Collection Systems Division removes sediment from the catch basins on at least an annual basis (more frequently for excess accumulation) and the Parks Department maintains the wet pond according to the criteria established in City's Stormwater Treatment System Maintenance Manual (which derives from the DEP's Stormwater Best Practices Manual) and based on annual 3rd party inspection recommendations to address maintenance concerns. Plan details for the wet pond are included in **Appendix 4**.

4.4 Erosion and Sediment Control

Several areas within the Municipal Services Facility have the potential to generate erosion or sediment that could become a source of stormwater pollution. These areas and the accompanying BMPs needed to minimize or prevent stormwater pollution include the following:

- **Snow Storage Area** can store ~15,000 yards of snow. To control erosion during melting periods, an erosion control berm will be placed along the perimeter fence at the edge of the site and routine inspections (quarterly at a minimum) will be conducted to identify potential problem areas. Eroding areas will be repaired promptly. Quarterly inspections will also identify excessive sediment accumulation rates for the double catch basin into which the meltwater drains.

- **Sand & Salt Shed** can track material onto paved area in front of structure. This area will be swept as needed to prevent any tracked material from entering the nearby catch basin, which will be cleaned annually.

- **Bulk Material Storage Area** can track materials onto pavement. This area will be swept as needed to prevent any tracked materials from entering the nearby catch basin, which will be cleaned annually.

- **Stormwater Drainage Ditches** can erode due to heavy stormwater sheet flow or damage from winter snow piles. The ditches around the perimeter of the MSF site will be inspected at least quarterly and repaired / maintained as needed to minimize erosion and sedimentation.

- **Winter Sanding** of the entire paved area around the facility occurs to allow for the safe passage of trucks, equipment, vehicles and staff. The pavement will be swept shortly after the final snow melt and all catch basins will be cleaned annually.

4.5 Spill Prevention and Response

The following procedures will be used to address any leaks or spills that occur anywhere within the Municipal Services Facility complex.

- Secondary containment will be provided for all drums or containers with petroleum products
- The SWPPP Coordinator will be advised immediately of all leaks or spills of petroleum products, hazardous materials or regulated materials, regardless of quantity.
- Spill response kits are located on the fuel island, in the Fleet Maintenance garage bays, in the Vehicle & Equipment Storage area, and in the Cold Storage Building (Figure 3). Kits will include speedi-dry and/or

absorbent booms and pads. All personnel will be instructed in spill response and know where the kits are located and how to use them to address leaks or spills.

- DEP will be notified (800-482-0777) for ***ANY*** leak or spill (regardless of size) with the potential to threaten surface waters within 2 hours of an incident. Staff will evaluate leaks or spills to determine the necessary response. MSF staff will also notify Public Safety dispatch at 911 and the Water Resource Protection Department at 767-7675.
- Leaks or spills will be contained as close to the source as possible with a dike of absorbent materials from the emergency spill kits. Additional dikes will be constructed to protect swales or other stormwater conveyances of surface waters. A cover or dike will protect any other stormwater structures such as catch basins or sewer manholes.

4.6 Employee Training

Stormwater pollution prevention training for Municipal Services Facilities staff is an essential component of this SWPPP. Annual training will cover identification and prevention of common potential pollution sources from municipal operations, spill prevention and response, good housekeeping, and materials management practices. Stormwater training may be combined with other training topics (e.g., health, safety or emergency response or hazardous materials handling or MSDS, etc.) that fulfill parts of this requirement. The SWPPP Coordinator and Stormwater Program Coordinator will maintain training agendas and employee sign in sheets in an electronic file folder on the City's server that is shared with and accessible to all SWPPP team members and their managers (**Appendix 5**).

Pollution Prevention Team members will meet at least annually to discuss the effectiveness of the training program and make any improvements needed to ensure that Municipal Services Facility staff can identify and prevent the generation of stormwater pollution and respond effectively to spills.

5. STORMWATER POLLUTION PREVENTION PLAN EVALUATION

This section describes the procedures for determining the effectiveness of the SWPPP through quarterly visual monitoring and site inspections, recordkeeping and reporting and plan revisions.

5.1 Quarterly Visual Monitoring

The wet pond that provides stormwater treatment for the facility rarely (or never) overtops. Therefore, if the outlet pipe is discharging the SWPPP and Stormwater Program Coordinators will collect samples for visual observations and record the results using the DEP's Visual Inspection Monitoring Log (**Appendix 6**).

5.2 Quarterly Site Inspections & Annual Comprehensive Site Compliance Evaluations Report

Quarterly site inspections will be completed and documented in an electronic file folder on the City's server that is shared with and accessible to all SWPPP team members and their managers. The SWPPP Coordinator will determine which MSF staff conduct these assessments at least 60 days apart either with paper forms (Appendix 3) that will be scanned and converted into an electronic format. Alternately, MSF staff can also complete quarterly site

inspections with a Google Form on a portable electronic device (completed Google Inspection Forms will also be shared with all relevant staff).

These inspections will evaluate existing Best Management Practices (BMPs) for operational as well as structural effectiveness. Any suggested improvements will be noted on the form and then implemented as soon as possible. Equipment and machinery will also be inspected and recorded on the quarterly inspection report form. At a minimum, the site inspection report will include the date of inspection; the name of personnel conducting the inspection; observations; assessment of BMP's; and the corrective actions taken.

An Annual Comprehensive Site Compliance Evaluation Report will also be prepared and maintained in an electronic file folder on the City's server that is shared with and accessible to all SWPPP team members and their managers (**Appendix 7**).

5.3 Recordkeeping and Reporting

Records described in the SWPPP shall be retained in an electronic file folder on the City's server for at least three (3) years from the date permit coverage expires or is terminated. These records will be made available to state or federal inspectors upon request. Additionally, employee training records, including topic agendas, employee sign-in sheets, spill logs and waste oil manifests or accountings, will also be maintained in an electronic file folder on the City's server.

5.4 Plan Revisions

If the facility expands its operations, or changes any significant material handling or storage practices that could affect stormwater runoff characteristics, the SWPPP will be amended. The amended SWPPP will describe any new activities that may possibly contribute to increased stormwater pollution and the planned control measures to mitigate it. The SWPPP must also be amended if a state or federal stormwater inspector determines that it is not effective in controlling and minimizing Stormwater pollutants discharged to waterways.

6. CERTIFICATION

6.1 Non-Stormwater Discharges

Non-Stormwater discharges are not permitted under the Multi Sector General Permit for Municipal Stormwater. Outfalls that discharge to surface waters or other conveyance structures at this facility have been evaluated and found to be free of non-Stormwater discharges.

6.2 Certification of Stormwater Pollution Prevention Plan (SWPPP)

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared in accordance with sound engineering practices. Qualified personnel properly gathered and evaluated information submitted for this Plan. To the best of my knowledge, the information in this Plan is accurate and complete.

Douglas Howard
Name

Director of Public Works
Title

Signature 

Date: September, 21 2019

APPENDICES

APPENDIX 1: List of Significant Spills and Chronic Leaks

Date	Spill	Leak	Source	Description			Response Procedures	Measures Taken to Prevent Recurrence	Reported By:
				Type of Material	Quantity	Reason			

APPENDIX 2: Pollution Prevention & Good Housekeeping Procedures

PURPOSE

The purpose of these procedures is to provide Municipal Services Facility staff (Public Works, Parks, City Bus and Fire Departments) with guidance on how to prevent pollutants from entering the City's stormwater system and/or local water resources.

SPILLS: Clean up, Response, Reporting & Notification

Maine is a "zero tolerance" State for uncontrolled spills that reach the environment. Spills of gasoline, various heating & motor oils, lubricating & hydraulic oil, asphaltic residuals, pesticides & fertilizers, and other hazardous pollutants should be properly cleaned up, documented and reported.

Always:

- Stop the source of the spill and contain any liquids, **only if it is safe to do so!**
- Immediately report any significant (> 5 gallons) spills of petroleum products to local emergency officials by calling regional dispatch (**911**); also contact:
  - **Fire Chief James Wilson** or **Deputy Chief Mike Williams** at 767-8576
  - **Stormwater Program Coordinator Fred Dillon** at 321-9437
  - **Maine DEP Petroleum Products Spill Response**: 1-800-482-0777
- Immediately report any hazardous materials spills of non-petroleum products to local emergency response officials by calling regional dispatch (**911**); also contact:
  - **Fire Chief James Wilson** or **Deputy Chief Mike Williams** at 767-8576
  - **Stormwater Program Coordinator Fred Dillon** at 321-9437
  - **Maine DEP Hazardous Material (non-oil spill)**: 1-800-452-4664
- Cover the spill with absorbent material such as Speedy dry, kitty litter, sawdust, or oil absorbent pads.
- Clean up all contaminated materials in a timely manner (before it rains).
- Properly dispose of all contaminated absorbents and materials.

Never:

- Use straw to cover or absorb spills.
- Use water to wash away spills.

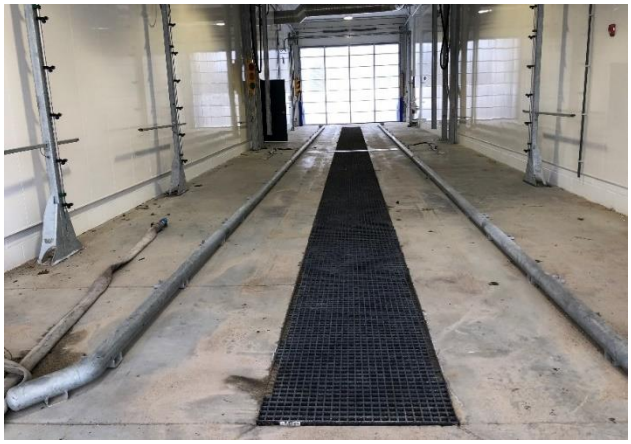
VEHICLE & EQUIPMENT FUELING

Always:

- Fuel vehicles at the Municipal Services Facility's central fueling station.
- Fuel carefully to minimize drips onto the ground.
- When fueling occurs away from the central fueling station:
    - Choose a level, paved or concrete area away from any catch basins, storm drains, ditches, drinking water wells, or water bodies;
    - Keep absorbent material handy for incidental spillage; and
    - Inspect the area for drips, and (if needed) clean up any spillage immediately and properly, before leaving the fueling site.
- When pouring fuel from a jerry can or other mobile container:
    - Use a funnel or drip pan; and
    - Choose a level, paved surface that is not near a catch basin or water body.
- Maintain all fueling equipment in good working order by:
    - Conducting routine preventive maintenance on vehicles and equipment;
    - Conducting regular inspections of parked equipment and vehicles for evidence of spills or leaks; and
    - Parking leaking equipment indoor with a drip pan while awaiting maintenance or repair.

Never:

- Never "top off" fuel tanks.
- Never leave vehicles or equipment unattended while fueling.
- Never dump gas, wastes or contaminated water down storm drains or anywhere outside.
- Never fuel vehicles or equipment near any catch basins, storm drains, ditches, drinking water wells, or water bodies.



VEHICLE & EQUIPMENT WASHING

Always:

- Wash vehicles and equipment in the Municipal Services Facility wash bay or other designated indoor area.

- Wash equipment inside, where wash water is directed to the floor drain and sand/oil separator.
- Discharge all wash water containing additives, such as degreasers, acids, bases, metal brighteners, or other agents (polishes, etc.) to the sewer via the wash bay.

If Working Outside:

- Rinse vehicles and equipment in a grassed area, before washing in the wash bay or inside near a designated floor drain.
- Obtain and use drain guards (filter inserts) to catch sediments and other pollutants that might enter the storm drains as a result of vehicle washing.

Never:

- Perform engine or undercarriage washing outside.
- Wash vehicles over a storm drain or near drinking water wells.

VEHICLE & EQUIPMENT STORAGE & MAINTENANCE

Always:

- Completely drain oil filters before disposal by poking a hole in the top and draining in a clearly marked container for 24 hrs.
- Keep spill kit in storage facility that includes items such as a containment drum, Speedy dry, kitty litter, sand, sawdust, absorbent pads, a shovel, a broom and dustpan.
- Clean up all spills and leaks immediately with absorbent materials.

- Keep others away from the spill and make sure it does not run off into other areas.
- Scoop all waste material into a leak-proof container and properly dispose of it.

When Possible:

- Conduct maintenance within a building or covered area.
- Park vehicles/equipment indoors or under a roof.
- Drain fluid from stored/salvaged vehicles/equipment.

Never:

- Never conduct maintenance, refuel or change oil near storm drains.
- Never hose down the work area.

FLOOR DRAINS

Always:

- Know where to find spill materials in case of spills. Kits should include:
    - Drain mats to cover the floor drain;

  - Absorbent booms to keep larger spills contained;
  - Speedy dry or other absorbent material; and
  - Equipment (shovel, broom, dust pan, etc.) and a receptacle to clean up and properly dispose of contaminated materials.
- Maintain a regular schedule for inspecting and cleaning out:
  - Floor drains and drain traps;
  - Oil/water separators; and
  - Holding tanks.

Never:

- Dump anything outside, like mop water.
- Dump hazardous chemicals down floor drains or store hazardous materials near floor drains.

Whenever Possible:

- Minimize water use or run a dry shop.
- Use secondary containment when storing hazardous liquids near a drain.

LANDSCAPING PRACTICES (mowing, irrigation, materials storage, etc.)

Always:

- Mow only as low as needed for the area's intended use. If areas are not being used, consider allowing a return to meadow or field and mow only once or twice per year.
- Keep mower blades sharpened to avoid damaging grass leaf tissue.
- Remove any grass clippings from paved surfaces and return to grassed areas.
- Water at appropriate times (when no rain is forecasted and in the morning).
- Place stockpiled materials (such as stone and mulch) away from ledge or rock outcrops, storm drains, ditches and surface waters.

When Possible:

- Keep soil or mulch stockpiles under cover or use erosion control berm to contain.
- Use mulching type mowers if available.
- Re-seed and mulch area where soils are exposed.
- Mow when the grass is dry to prevent spread of turf diseases.

Never:

- Never use leaf blowers to blow materials into storm drains or ditches. Only blow into streets when it will be picked up within 24-48 hours or prior to a rain or heavy wind event.
- Never irrigate based on timers or schedules instead of monitoring for rainfall.
- Never deposit accumulated grass clippings on stream banks or other environmentally-sensitive areas.

PESTICIDES

The City's Pesticide Use Ordinance restricts the use of pesticides for turf and landscape management to protect public health and the City's waterways and natural resources. The City's Pest Management Advisory Committee can grant waivers for pesticide use provided the following criteria are met:

- A situation exists that threatens public health and safety and/or where invasive species pose a threat the environment;
- The applicant has carefully evaluated all alternative methods and materials;
- The applicant will, to the greatest extent practical, minimize the impact of the application on abutting properties; and
- The approval of the waiver will not be detrimental to public health, safety or welfare.

Grow Healthy South Portland

FERTILIZERS

Always:

- Keep records/documentation of all materials applied, including when and where.
- Check the weather forecast and apply according to product instructions.
- Store in closed containers labeled with contents and purchase date.
- Keep containers in a secure building enclosure and clean as needed.
- Always routinely inspect storage area for leaks, spills, residue, and trash.
- If fertilizer accidentally ends up on pavement, always sweep it up and put it back in the bag for reuse.

Whenever possible:

- Consider a low or no fertilizer approach to maintain turf.

- Perform a soil test to determine actual fertilization needs and application rate.
- Calibrate fertilizer spreaders to avoid excessive application.
- When fertilizer is needed, use slow or timed-release nitrogen sources.

Never:

- Never apply fertilizers within five (5) feet of pavement, 25 feet of a storm drain inlet, or 50 feet of a stream or water body.

PAINTING

Always:

- Keep work area clean by:
  - Sweeping paint chips and other residues every day; and
  - Performing a thorough cleanup at the end of the project.
- Use impermeable ground cloths, such as plastic sheeting, during painting.
- Store paint buckets and barrels of materials away from contact with storm water at the end of each work day.
- Treat paint spills as a chemical spill and capture before it flows to the storm drain.
- Clean up paint promptly using dry methods.
- Clean water based paint brushes and equipment in a sink connected to the sanitary sewer.
- Clean oil-based paint materials where the waste paint and solvents can be collected to be handled as small quantity hazardous waste - do not pour oil-based paints into the sink or a storm drain.
- Hang tarps or drop cloths to minimize the spread of windblown materials.
- Control sand blasting areas to keep particles off paved surfaces and out of storm drains.
- Clean up any spilled chemicals promptly.

CLEANING PROCEDURES

Always:

- Use the least amount of product (detergent, wax, degreaser, etc.) to get the job done.
- Use only products approved by facilities manager.
- Store cleaning products in original containers, in good condition, in a designated area (storage cabinet, etc.)
- Properly dispose of cleaning tools (rags, mop heads, sponges, paper towels).
- Dump mop water, chemicals, or cleaners into a sink or tub connected to the sanitary sewer.

Never:

- Dump mop water, chemicals, or cleaners outside or into a storm drain.

DE-ICING

Always:

- Clear snow as soon as possible from driveways, sidewalks, and pathways to minimize the likelihood of ice forming.
- Store deicing agents (rock salt or liquid solutions) in closed containers and/or buildings to avoid exposure to the elements and minimize runoff in stormwater or snow melt.

Whenever Possible:

- Use the minimum amount of salt and sand needed to get the job done.
- Sweep any materials that have been tracked from storage piles onto pavement.

DUMPSTERS

Always:

- Locate dumpsters on concrete or paved areas.
- Only use dumpsters for disposal of non-liquids.
- Keep lids closed and drains plugged.
- Report any damaged or leaking dumpster to SWPPP Team Coordinator or Stormwater Program Coordinator.

APPENDIX 3: Quarterly SWPPP Inspection Report Form

Date:_____ Inspector:_____

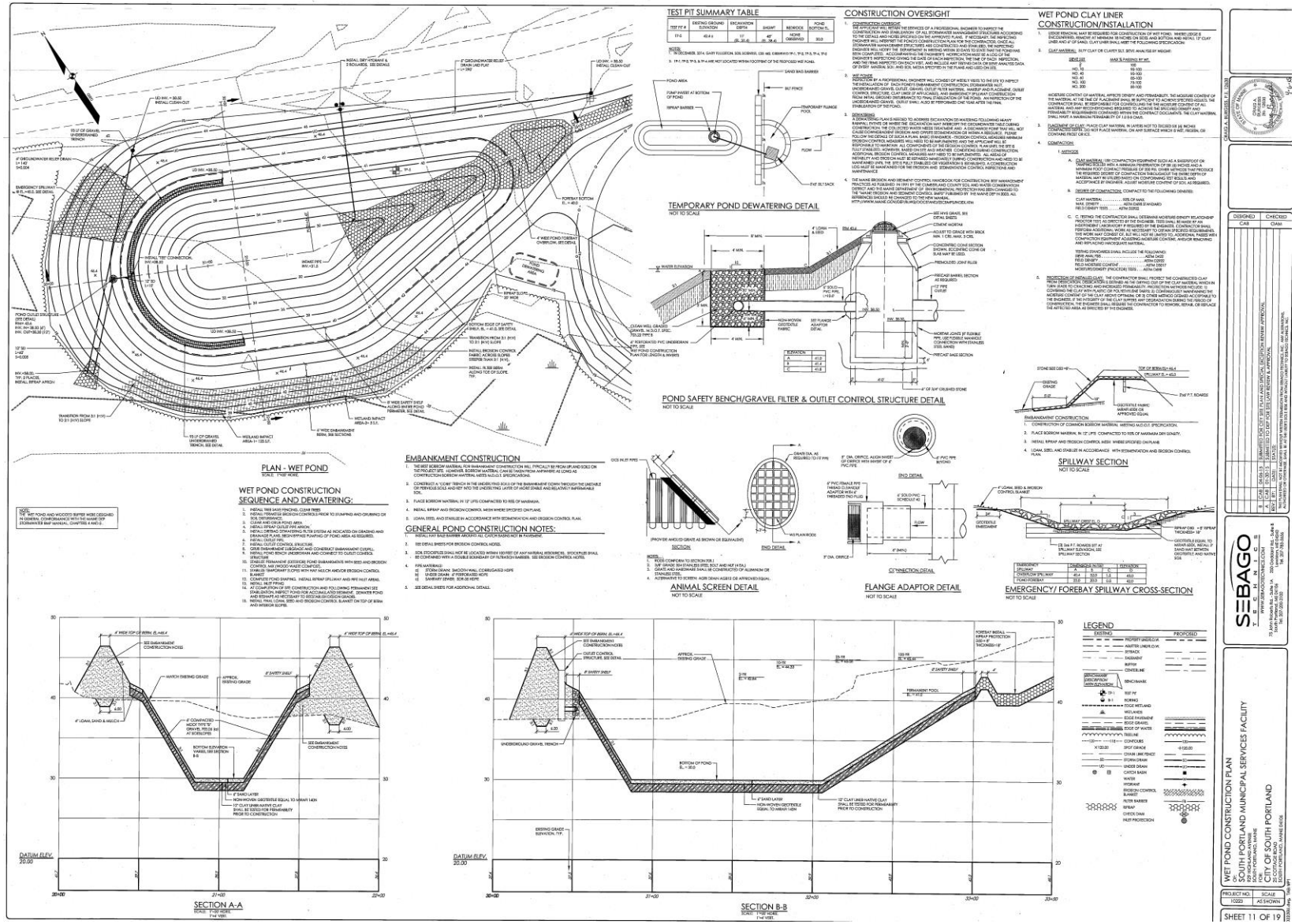
General	Y	N	N/A	Follow-up Actions & Expected Completion Date
SWPPP available (including spill & training logs and inspection reports)				
Wood & Sign Shops				
Spill kit available & fully stocked				
All bulk materials and fluid containers labeled & stored properly				
Evidence of recent leaks or spills				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
Fleet Maintenance Area - Vehicle Bays				
Spill kit available & fully stocked				
All bulk materials and fluid containers labeled & stored properly				
Evidence of recent leaks or spills				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
Fleet Maintenance Area - Parts Room				
Spill kit available & fully stocked				
Fluorescent lights, batteries & mercury switches stored properly				
All bulk materials and fluid containers labeled & stored properly				
Evidence of recent leaks or spills				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
Oil Storage Room				
All bulk materials and fluid containers labeled & stored properly				
Waste oil storage tank high level alarm functioning properly (test alarm)				
Waste oil storage tank fill level in gallons (275 gal capacity)				

Mezzanine (including Boiler Room)	**Y**	**N**	**N/A**	**Follow-up Actions & Expected Completion Date**
Spill kit available & fully stocked				
All bulk materials and fluid containers labeled & stored properly				
Evidence of recent leaks or spills				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
Inside Vehicle & Equip Storage Area				
Spill kit available & fully stocked				
All bulk materials and fluid containers labeled & stored properly				
Evidence of recent leaks or spills				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
Northeast Apron Equipment Storage				
Evidence of erosion or bare soil in perimeter drainage ditch / rip rap				
Evidence of recent leaks or spills on pavement (including around catch basins)				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
Sand & Oil Separator				
May-Oct (outside paint washing): inlet grate covered to keep out runoff				
Nov-April: solid cover in place				
Tank sediment accumulation >6" (if so remove sediment)				
Greenhouse				
Spill kit available & fully stocked				
All bulk materials and fluid containers labeled & stored properly				
Evidence of recent leaks or spills on pavement				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				

Equipment Storage Building	Y	N	N/A	Follow-up Actions & Expected Completion Date
Spill kit available & fully stocked				
All bulk materials and fluid containers labeled & stored properly				
Evidence of recent leaks or spills				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
Aggregate Storage Bins				
Evidence of recent leaks or spills on pavement				
All bulk materials and fluid containers labeled & stored properly				
Area maintained in neat & orderly fashion				
Snow Storage Area				
Evidence of erosion around snow pile perimeter				
Perimeter erosion control berm functioning properly (no material bypass)				
Evidence of excess sediment accumulation in catch basin				
Area maintained in neat & orderly fashion				
Sand & Salt Shed				
Evidence of recent leaks, spills or material tracking on pavement				
All bulk materials and fluid containers labeled & stored properly				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
West Apron				
Evidence of recent leaks or spills on pavement (including around catch basins)				
Used absorbent spill materials removed & disposed of properly				
Evidence of erosion or bare soil in perimeter drainage ditch / rip rap				
Area maintained in neat & orderly fashion				

Fuel Island / South Apron	Y	N	N	Follow-up Actions & Expected Completion Date
Spill kit available & fully stocked				
Evidence of recent leaks or spills on pavement				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
East Apron / Parking Areas				
Evidence of erosion or bare soil in perimeter drainage ditch / rip rap				
Evidence of recent leaks or spills on pavement (including around catch basins)				
Used absorbent spill materials removed & disposed of properly				
Area maintained in neat & orderly fashion				
ADDITIONAL COMMENTS:				

APPENDIX 4: Wet Pond Plan Details



APPENDIX 5: SWPPP Annual Training Sign-in Sheet

Training Performed by:_____ Title:_____

Date of Training:_____

Training Topics:

- Identifying common source of stormwater pollution
- What a SWPPP is and why it's needed
- Major parts of and requirements for a SWPPP
- Effects of polluted stormwater runoff

Attendees / Employee Sign-in

PRINTED NAME	SIGNATURE

APPENDIX 6: Quarterly Visual Monitoring Inspection Log for Stormwater Pollution

Instructions: Every quarter you must visually inspect stormwater outfalls at your facility. This attachment is a sample monitoring log.

Facility Name _____

Facility Address _____

_____

_____

Rainfall (est. inches) _____

Sampler's Name _____

MSGP Permit Number _____

Time Since Last Measurable Storm (Hours) _____

OUTFALL NUMBER						
OBSERVATION TIME						
EST. TIME FROM ONSET OF RUNOFF						
DISCHARGE TYPE Rain or Snowmelt						
Sample Volume (ml)						
COLOR						
ODOR						
CLARITY						
FLOATING SOLIDS*						
SETTLED SOLIDS*						
SUSPENDED SOLIDS*						
FOAM						
OIL SHEEN						
Probable source of any observed contamination						

*Enter description of these criteria in the general comments section for each outfall on the back of this page.

Under penalty of law I certify that these statements are true and correct pursuant to the terms and conditions stated in the MPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.

Sampler's Signature _____ Date _____

General Comments

In the comments section, enter physical description of floating, settled, and suspended solids for each outfall sampled. Enter general comments on the condition and appearance of each outfall in the comments section also as indicated in the instructions.	
Outfall 1	Comments:
Outfall 2	Comments:
Outfall 3	Comments:
Outfall 4	Comments:
Outfall 5	Comments:
Outfall 6	Comments:

APPENDIX 7: Annual Comprehensive Site Compliance Evaluation Report

Staff Completing Assessment**:**_____ Date**:**_____

Have any buildings been added or removed? **Yes** □ **No** □

Have there been any changes to the Stormwater drainage systems or surfaces of the drainage? **Yes** □ **No** □

Potential Pollutant Sources – Significant Materials and Industrial Activities

Have there been any additions or deletions to sources identified in the plan? **Yes** □ **No** □
Have the locations of any of the potential pollution sources changed? **Yes** □ **No** □

Evaluate the effectiveness of the BMPs in use. Review records & inspect structural BMPs

	Excellent	**Good**	**Inadequate**
Housekeeping	□	□	□
Preventative Maintenance	□	□	□
Stormwater System Maintenance (Inspect Devices)	□	□	□
Management of Runoff (Inspect yards)	□	□	□
Spill Prevention	□	□	□
Erosion & Sedimentation Control	□	□	□
Employee Training & Awareness	□	□	□
Reporting & Recordkeeping	□	□	□
Standard Operating Procedures	□	□	□

* See modifications below

Review existing schedules for BMPs. Do the schedules requires modification? **Yes** □ **No** □

Stormwater Pollution Prevention Team

Have there been any changes in personnel assigned to the team? **Yes** □ **No** □
Have there been any changes in team member's responsibilities? **Yes** □ **No** □

Modifications Required to the Plan and/or Site Map(s)

A ***yes*** or ***inadequate*** answer to any of the questions listed above requires the SWPPP or Site Map(s) to be modified to reflect the necessary changes.

Are modifications required to be made to the Plan and/or Site Maps
□ No modification required
□ Plan requires modification
□ Map(s) require modification

All required changes have been made to the Plan. Date:_____ Initials:_____

All required changes have been made to the Site Maps Date:_____ Initials:_____

Are all required records (e.g., visual quarterly monitoring records, spill logs, material inventories, employee training agendas and sign in sheets, waste oil manifests or receipt of pickup, etc., included in the Appendices of the SWPPP? **Yes** □ **No** □

Are there any non-stormwater discharges? **Yes** □ **No** □

If yes, what are they?

_____

_____

Are the non-stormwater discharges authorized under the MSGP? **Yes** □ **No** □

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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowingly violating the law.

Authorized Signature:_____ **Date**:_____