

Stormwater Pollution Prevention Plan – Table of Contents

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This project has been financed with Funds from the Massachusetts Department of Environmental Protection (the Department). The contents do not necessarily reflect the views and policies of the Department, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.

SECTION 1 – Introduction

This Stormwater Pollution Prevention Plan (SWPPP) has been developed by The Town Of Groton to address the requirements of the United States Environmental Protection Agency's (USEPA's) 2016 National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) in Massachusetts, hereafter referred to as the 2016 Massachusetts MS4 Permit.

The 2016 Massachusetts MS4 Permit requires that each permittee, or regulated community, address six Minimum Control Measures. These measures include the following:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination Program
4. Construction Site Stormwater Runoff Control
5. Stormwater Management in New Development and Redevelopment (Post Construction Stormwater Management); and
6. Good Housekeeping and Pollution Prevention for Permittee Owned Operations.

Under Measure 6, Good Housekeeping and Pollution Prevention for Permittee Owned Operations, the permittee is required, per Section 2.3.7.b of the 2016 Massachusetts MS4 Permit (page 50-54), to:

...develop and fully implement a SWPPP for each of the following permittee-owned or operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater as determined by the permittee.

The SWPPP shall contain the following elements:

1. *Pollution Prevention Team*
2. *Description of the facility and identification of potential pollutant sources.*
3. *Identification of stormwater controls*
4. *Management practices including: minimize or prevent exposure, good housekeeping, preventative maintenance, spill prevention and response, erosion and sediment control, management of runoff, management of salt storage piles or piles containing salt, employee training, and maintenance of control measures.*
5. *Site inspections*

This SWPPP accomplishes these requirements by:

- Providing an inventory of the materials and equipment at a facility that have the potential to cause stormwater pollution, and identifying locations where these materials are stored;
- Describing how stormwater is managed at a facility, including: engineered storm drain system conveyance; on-site pretreatment, treatment and infiltration systems; and discharges to surface water directly from the site;
- Reviewing activities that occur at the facility that represent a potential for stormwater pollution;
- Describing the Best Management Practices (BMPs) that will be implemented at the facility to reduce, eliminate and prevent the discharge of pollutants to stormwater;
- Identifying the employees responsible for developing, implementing, maintaining, and revising, as necessary, this SWPPP;
- Establishing a schedule and description of site inspections to be conducted at the facility to determine if the SWPPP is effective in preventing the discharge of pollutants;
- Serving as a tool for the facility employees, including a place to maintain recordkeeping associated with these requirements.

SECTION 2 – Detailed Facility Assessment

2.1 Facility Summary

The DPW Garage is located at 500 Cow Pond Brook Road and is owned and operated by The Town Of Groton. The Locus Map in **Figure 2-1** shows the location of the facility within the Town.

The DPW is primarily responsible for activities at, and maintenance of, the facility.

2.2 Site Inspection

The site inspection associated with the development of this SWPPP was completed on July 2020. The inspection was conducted by Tom Delaney.

During the site inspection, information related to activities at the site, vehicles stored at the site, fueling operations, material storage, transport of oil and other materials, and spill history was gathered.

2.3 Pollution Prevention Team

A Pollution Prevention Team for the DPW has been prepared and designated the task of developing, implementing, maintaining, and revising, as necessary, the SWPPP for this facility. Listed below are Pollution Prevention Team members and their respective responsibilities.

Responsibilities assigned to one or more members of the Pollution Prevention Team include:

- Implementing, administering and revising the SWPPP
- Regularly inspecting stormwater control structures
- Conducting stormwater training
- Recordkeeping

Leader: Tom Delaney

Title: DPW director

Office Phone: 978-448-1162

Cell Phone: 978-852-6545

Responsibilities: Considers all stages of plan development, inspections, and implementation; coordinates employee training programs; maintains all records and ensures that reports are submitted; oversees sampling program. Responsible for certifying the completeness and accuracy of the SWPPP.

Figure 2-1. Locus Map

Member: Troy Conley
Title: foreman

Office Phone: 978-448-1162
Cell Phone:

Responsibilities: Implements the preventative maintenance program; oversees good housekeeping activities; serves as spill response coordinator; conducts inspections; assists with employee training programs; conducts sampling/visual monitoring.

Member: Keith Burchette
Title: Transfer Station Foreman

Office Phone: 978-448-1162
Cell Phone:

Responsibilities: Assists in all components of the stormwater program, as needed. Maintains spill kits at DPW yard.

2.4 Facility Description

The primary purpose of the DPW Garage is to support town activities with the DPW. Activities at the site are described in **SECTION 2.7**

The facility covers approximately 10 acres, and contains the structures and other features shown on the Site Map in **Figure 2-2** and described in detail in the following sections. Components shown on the site map include:

- Location of the engineered drainage system, including catch basins, ditches, drain manholes, and treatment BMPs
- Direction of surface water flow
- Structural stormwater pollution control measures
- Location of floor drains
- Vehicle washing areas
- Vehicle fueling areas
- Aboveground storage tanks (indoors and outdoors)
- Salt storage areas
- Materials stockpiles
- Waste disposal areas.

Figure 2-2. Site Map

2.5 Facility Structures

Vehicle Storage and Maintenance

Buildings at the DPW are used to provide Groton personnel with heated, covered areas in which to complete minor maintenance, oil changes and preparation of vehicles, equipment and tools for use at locations around Groton.

Highway Garage is located at the center portion of the property. Activities in this structure include Maintenance of vehicles related to DPW work. This building contains 2 floor drains, which discharge to a TIGHT TANK.

Maintenance and Storage Buildings

Carpentry, electrical, and minor maintenance activities are completed in the Warehouse. This building contains one floor drains and is fully enclosed. This drain goes to a tight tank shared with the main DPW garage.

Small equipment, signage, and tools are stored in the Warehouse. This building contains one floor drain which goes to a tight tank and is fully enclosed.

Latex paint, spray paint, and similar products are stored in the Garage and Warehouse. This building contain one floor drains and is fully enclosed. These products are properly stored in flammable materials storage cabinets.

Vehicle Wash Bays or Recycling Systems

Groton maintains a vehicle WASH BAY in the main Garage, in the center portion of the property. The building is fully-enclosed. This BUILDING is used for storage and maintenance of equipment.

This building contains one floor drains, which discharge to a TIGHT TANK.

Waste Oil Burner

The main Garage and Warehouse at the center portion of the property contains a waste oil furnace used and operated by the Town.

This structure provides fully-enclosed storage for waste oil drums, and serves as a heated, enclosed workspace for maintenance of Town vehicles. Latex paint, spray paint, and similar products in this building were observed to be properly stored in flammable materials storage cabinets.

Storage of Deicing Materials

ROAD SALT/ SAND/ SAND/SALT MIX and LIQUID CALCIUM CHLORIDE at the DPW yard are stored in 2 buildings on the East side of the property. These two buildings are ENCLOSED and the materials are fully contained within the building. The good housekeeping measure used to minimize the exposure resulting for adding to or removing stored materials include sweeping the area regularly or when salt has accumulated on the paved surface.

Storage of Road Deicing Equipment

The Town utilizes a number of SALT SPREADERS/ SANDERS and SNOW PLOWS on its vehicles to adequately maintain roads. The Warehouse building for these devices is located in the center portion of the property. The equipment is in the enclosed building with one floor drain which goes to a tight tank.

Administrative Buildings

The DPW Administrative offices are located at the center portion of the property in the main highway garage. This building includes ADMINISTRATIVE SPACE, LOCKER ROOMS, OFFICE SPACE, BREAK ROOM, MATERIALS STORAGE.

2.5.1 Additional Site Features

Aboveground Storage Tanks

Aboveground storage tanks (ASTs) at the DPW are used for storage of Gas, Diesel and Calcium Chloride. An inventory of significant materials is included in **SECTION 2.12**.

Two AST is located at the center portion of the property for storage of FUEL. The AST IS NOT covered.

The Calcium Chloride storage tank is inside the salt shed.

Fuel Islands

An island containing one fuel pump for GASOLINE and DIESEL is located at the north side of the main building, and is used on a 24-hour basis for fueling of all Town vehicles. The island /IS NOT covered. Access to these fuel pumps is by PIN number and Card key. The location of the fuel island is such that all users are visible to personnel at all buildings at the main Garage and camera system.

Emergency Generators

An emergency generator located at the west portion of the main facility provides backup power to the facility during outages. The generator, Kohler, is EXPOSED but LACKS 110% containment of its 300 gallons of Diesel fuel. The generator IS NOT located on a pervious surface.

Non-structural controls applicable to this equipment are addressed in SECTION 3 of this SWPPP.

Oil/Water Separators

The Town maintains one oil/water separator at the DPW yard.

Oil/water separator one is located at the center portion of the property between the main garage and the warehouse. This pretreatment structure has a cleanout manhole, and is pumped on an annual basis. The DPW is responsible for contracting this work, and maintains records on the pump out activities. This oil/water separator provides treatment of flow from the main garage and warehouse. Floor drains in all areas where oil materials are used and/or where vehicles are stored receive pretreatment via this oil/water separator.

Tight Tanks

The Town maintains one tight tank at the DPW yard.

Tight tank one is located at the center portion of the property between the main garage and warehouse. This pretreatment structure has a cleanout manhole, and is pumped on an as needed basis and has a high water alarm. The DPW is responsible for contracting this work, and maintains records on the pump out activities. This tight tank provides treatment of flow from the main garage to the warehouse. Floor drains in all areas where oil materials are used and/or where vehicles are stored receive pretreatment via this tight tank.

Materials for Use by Residents

N/A

Parking Areas

There are several designated parking areas at the DPW, each of which is an impervious surface. These parking lots are used primarily for visitors to the FACILITY,

MUNICIPAL-owned cars for daily use by employees, and employees' personal vehicles; DPW trucks and/or heavy equipment also use this parking lot.

The DPW yard has parking for approximately 20 vehicles.

2.6 Site Drainage

No stormwater from adjacent properties impacts the DPW property.

Sheet Flow

Drainage from the impervious surfaces at the DPW yard are directed partially to the drainage system on site.

Engineered Drainage

Engineered drainage at the DPW yard includes approximately three basins and roof drains. Maintenance of the catch basin structures, including sediment removal, is completed by the DPW.

2.6.1 Receiving Waters

The final point of discharge for stormwater from this site is the detention/infiltration basin.

Impairments of this water body are shown in **Table 2-1**, below.

Table 2-1. Impaired Waters Receiving Drainage from the Facility
##FACILITY

Water Body name	ID	Category	Impairment(s)
N/A			

The good housekeeping practices, preventative maintenance and Best Management Practices implemented at the facility are methods to limit potential negative impacts to stormwater. These practices are discussed in **SECTION 3** of this SWPPP.

2.6.2 Applicable TMDLS

N/A

2.7 Site Activities

The following activities occur at the facility:

- Compost Production or Storage
- Facility or Building Maintenance
- Fueling Operations
- Landscaping
- Sand storage
- Salt storage
- Snow dump (seasonal)
- Solid waste management (including scrap metal)
- Tool storage

- Vehicle and equipment storage
- Vehicle and equipment maintenance/repair (including oil changes)
- Vehicle and equipment washing
- Waste Handling and Disposal
- Waste oil storage.

Below is a discussion of site activities and the potential pollutant sources associated with each, as well as measures taken to minimize pollution. Locations of each activity are shown on the Site Plan (**Figure 2-1**).

The DPW does not store hazardous materials other than those noted previously, and no obsolete vehicles or other potential sources of pollutants are kept in any structure at the garage.

One solvent-based parts washers were observed in the main garage. Any hazardous materials are either collected by a third party vendor contracted by the DPW on an annual basis, or collected at the annual Household Hazardous Waste Day (HHHD) that is hosted for the benefit of Groton residents. Waste materials from DPW operations that may be collected at the annual HHHW Day include used motor vehicle fluids that cannot be utilized for the waste oil burner, such as used antifreeze and brake fluid. Any oil that may be contaminated with antifreeze, brake fluid, paint, or other additive that makes it unburnable in the waste oil furnace is also collected on the HHHW Day instead of being used in the waste oil furnace. These materials are properly labeled and stored using appropriate Best Management Practices between the time of generation and disposal.

The DPW does not apply or utilize fertilizers, herbicides, or pesticides at any facility owned or managed by the Town. As such, no fertilizers, herbicides, or pesticides are stored at the DPW garage.

2.7.1 Compost Production or Storage

Potential Sources of Stormwater Pollution

Compost production and storage locations present the threat to contaminate stormwater with pathogens, including bacteria and viruses, nutrients, including phosphorus and nitrogen, fertilizers, pesticides and sediments.

Pollution Prevention

Compost storage areas shall be located and properly labeled within a designated stockpile area that is covered and contained to prevent exposure to precipitation. If the storage area is unable to be covered it should be contained within an area contained by silt fence or concrete barriers and located in an area that does not receive a substantial amount of runoff from upland areas and does not drain directly to a waterbody. The compost shall be kept in neat, separate piles from all other materials.

2.7.2 Stockpiles and Sand Storage

Potential Sources of Stormwater Pollution

Sand stored in piles for use during construction and during winter plowing and deicing activities represents a potential source to stormwater pollution. Stockpiled materials such as gravel, loam, and crushed rock represent a similar source of pollution. When stored unprotected outdoors, sand piles and material stockpiles are exposed to precipitation. When the resulting eroded material enters the stormwater system, the sediment can quickly fill the sumps of catch basin structures, rendering them ineffective.

Mixing sand and salt for use in deicing activities poses an additional element of stormwater pollution, particularly if the mixing area is not fully enclosed and protected from the elements.

Pollution Prevention

To avoid contamination of stormwater by sand and other stockpiled materials, erosion and sediment control measures should be implemented at each storage site. When planning a location for a stockpile, a relatively level site away from slopes and water features should be selected.

Stockpiles can be stabilized by seeding or mulching if they are to remain exposed for more than two weeks, or can be covered with impermeable sheeting to protect the material from rainwater. If the stockpile location becomes a permanent storage site for sand, a roofed structure should be considered to reduce erosion.

Sediment barriers should be placed around the perimeter of the storage site to prevent any runoff carrying sand from entering storm drains and surface waters. If the weather becomes dry and windy, regular light watering of the stockpile and surrounding area will provide effective dust control. Please refer to SOP 6, "Erosion and Sedimentation Control," included in **Appendix A**, for more information.

Sand that has been mixed with salt for use during winter plowing and deicing activities should always be stored in an enclosed and covered salt shed. Salt sheds should be constructed on level ground with an impervious base on which to store the salt/sand mixture. Under no circumstances should loose salt/sand mix be stored outside and unprotected. All mixing of salt and sand should take place within the salt shed or other covered, enclosed area.

Ensuring that the storage area is regularly swept and kept clean is an important good housekeeping practice.

2.7.3 Salt Storage

Potential Sources of Stormwater Pollution

Salt stored in piles for use during winter plowing and deicing operations represents a potential major contributor to stormwater pollution. When stored unprotected outdoors, salt is exposed to precipitation, causing leachate with high chloride that can be discharged to the receiving water. Salt delivery and loading activities can contribute pollutants to stormwater if the material is not handled with care, and if spills from handling operations are not promptly cleaned up.

Pollution Prevention

To prevent stormwater pollution, all salt piles should be enclosed and covered in sheds to prevent exposure to precipitation. Salt sheds should be constructed on level ground with an impervious base on which to store the salt. The shed should prevent disturbance or migration of the salt by wind.

During delivery and loading activities, salt should be transferred to and from vehicles within the salt shed, whenever possible. Any spills during unloading and loading events should be tended to without delay. Ensuring that the salt storage area is regularly swept and kept clean is an important good housekeeping practice.

If it is not feasible to fully enclose the salt pile, the salt should be stored on an impervious base and covered with an impermeable membrane material. Under no circumstances should loose salt be stored outside and exposed to precipitation.

The area should not be hosed down to a storm drain as a cleaning method. To further limit stormwater pollution, an independent runoff collection system may be installed in the area of the salt storage to collect and convey runoff either directly to a treatment best management practice or to a sanitary sewer system, with approval from the operator of the sanitary sewer system.

2.7.4 Solid Waste Management

Potential Sources of Stormwater Pollution

Solid waste production and storage locations present the threat to contaminate stormwater with pathogens, including bacteria and viruses, nutrients, including phosphorus and nitrogen, metals and sediments.

Solid waste may be classified as both hazardous and non-hazardous waste consisting of agricultural, construction and demolition, dead animals, industrial, municipal, and tire waste.

Pollution Prevention

To prevent or reduce the potential for stormwater pollution from solid waste management practices the following preventative maintenance procedures are recommended:

1. All staff shall be properly trained in correct solid waste management practices, including waste disposal and spill prevention and response. All employees shall also be knowledge of the potential hazards associated with solid waste handling and storage.
2. Each waste storage location shall be properly labeled and all significant sources of pollution shall be kept in a secure, covered and contained area.
3. The facility and storage containers shall remain locked at all times other than during normal hours of operation.
4. All waste storage containers and waste handling equipment shall be routinely inspected for signs of spills, leaks, corrosion or general deterioration.
5. The facility shall maintain spill response materials in accordance with SOP 4, "Spill Response and Cleanup".

2.7.5 Snow Dump

Potential Sources of Stormwater Pollution

Snow collected from plowing and road clearing activities and managed in snow dumps can contaminate engineered storm drain systems and receiving waters if disposal sites are not properly selected and maintained. As snow is removed from roadways, parking lots, sidewalks, and other paved areas, contaminants such as sand, salt, litter, and automotive oil are collected along with the snow. These pollutants are ultimately transported to the storage site and eventually to receiving waters once the snow melts.

Infiltration of pollutants in snow, such as chlorides from road salt, can impact groundwater, including drinking water aquifers.

When snow, including sand and debris contained within it, is stored directly on top of catch basins, when combined with sand and debris, discharge to the engineered drainage system can be blocked, causing localized flooding.

Pollution Prevention

To avoid contamination of stormwater and drinking water supplies by snow dumps, storage sites should be selected and prepared before the snow season begins. The snow dump should be located on a pervious surface in an upland area away from water resources and wells, so that meltwater can be filtered through the soil.

Selected sites should have a combined capacity large enough to cope with the estimated snowfall totals for the season. Snow should not be dumped within a Zone II or Interim Wellhead Protection Area of a public water supply, or within 75 feet of a private well. Sanitary landfills are not appropriate locations for snow dumps because the infiltration of

meltwater will result in greater amounts of contaminated leachate. High groundwater levels also make gravel pits poor sites for snow storage.

Proper preparation and maintenance of snow disposal sites will also prevent stormwater pollution. Before winter begins, a silt fence or sediment barrier should be placed on the down-gradient side of the snow dump to collect any sediment in snow meltwater. If the site is located near a body of water, a 50-foot vegetated buffer strip (at minimum) should be maintained during the growth season to filter pollutants out of meltwater. Prior to using the site for snow disposal, all debris should be cleared.

Debris and litter left after the snow has melted should be cleared and disposed of at the end of the snow season, no later than May 15 of each year.

Except under the most extraordinary of circumstances, when all land-based snow disposal options have been exhausted, snow should not be dumped into any body of water. When this option is necessary, requirements of “Snow Disposal Guidance” (BRPG01-01) issued by MassDEP on March 8, 2001, shall be followed.

2.7.6 Use or Storage of Pesticides or Fertilizers

Potential Sources of Stormwater Pollution

Improper use and storage of fertilizers and pesticides can contribute to loadings of nutrients and toxic compounds to stormwater. Applying fertilizers and pesticides in quantities exceeding the manufacturer’s recommendations does not make the product more effective. Rather, excess fertilizer and pesticide will be washed away during precipitation events, entering directly into stormwater and surface waters. The risk of incorrect use or spilling of fertilizers and pesticides increases when the chemicals are not handled by properly trained personnel. Contamination of stormwater can also occur during storage, when the pesticides and fertilizers are not being directly used. Leaks and spills from faulty containers can migrate to the storm drain system if not promptly controlled. Fires may break out if pesticides and fertilizers are not stored in the appropriate facilities.

Pollution Prevention

To avoid contamination of stormwater by fertilizers and pesticides during application, all products should be used in strict accordance with the manufacturer’s instructions and with local regulations. Soil testing should be performed before evaluating and selecting a fertilizer. Using the right type and amount of fertilizer for the location will help ensure that the proper nutrients are absorbed by the plants and will reduce runoff. Efficient use of pesticides is maximized when pesticides are applied at the life stage when the pest is most vulnerable. Pesticides must be handled and applied by individuals licensed with the Massachusetts Department of Agricultural Resources.

Fertilizers and pesticides should always be stored indoors in well-ventilated, dry locations. Floors of storage areas should be water tight, impervious, and provide spill containment. In case a spill or leak does occur, storage areas and any vehicles transporting fertilizers and pesticides should be equipped with a spill response kit. For more information, please refer to SOP 4 “Spill Response and Cleanup Procedures,” and SOP 12 “Storage and Use of Pesticides and Fertilizer,” both included in **Appendix A**.

2.7.7 Vehicle and Equipment Storage

Potential Sources of Stormwater Pollution

Vehicle and equipment storage activities are a potential source of pollution due to the diesel fuel, gasoline, oil, hydraulic fluid, antifreeze and similar hazardous material or fuel the machinery may contain. In addition, vehicles or machinery may pick up pollutants during the course of offsite activities or at other facilities, and then deposit these pollutants at the storage facility.

Pollution Prevention

Regular visual inspection and maintenance of vehicles and equipment can greatly reduce the potential for pollution by finding and addressing leaks before pollution of the environment occurs. When in storage, vehicles and equipment should be kept on a covered slab or within a building with a common drain. Discharge to this drain shall be managed by an oil/ water separator (refer to SOP 11, “Oil/Water Separator Maintenance”, included in **Appendix A**) to remove oils and gasoline. Vehicle washing activities shall not be completed in areas served by an oil/water separator.

No equipment should be kept in an area where leaks could result in pollutants entering catch basins, channels leading to outfalls, or the engineered storm drain system. If vehicles and equipment are stored outdoors, catch basins or engineered drainage system structures should include devices intended to remove oils and sediments prior to entering the system. These treatment devices should be inspected and replaced at the frequency recommended by the manufacturer.

2.7.8 Vehicle and Equipment Maintenance/Repair

Potential Sources of Stormwater Pollution

Vehicle and equipment maintenance and repair often requires the use of harmful liquids such as fuels, oils, and lubricants, and has the potential for producing dust, scrap and by-products that may contain pollutants. Both accidental and purposeful spillage, i.e., a leaky oil pan needing repair vs. draining the pan during an oil change, can lead to situations where pollutants can potentially enter stormwater runoff if the situations are not approached properly. Although there is little potential for effecting stormwater, it should be noted that hazardous gases can be produced during maintenance and repair as well.

Pollution Prevention

Proper maintenance and repair for vehicles and equipment shall include a preliminary assessment of potential pollutant sources. This assessment shall be used to determine the best means of containing any potential spills or by-products of the situation at hand. Approved containers shall be used to capture hazardous liquids to then be disposed of according to applicable MassDEP and USEPA guidelines. If the project may produce hazardous dust that could come in contact and mix with any liquids, the proper containment shall be utilized.

Due to heavy metal accumulation in antifreeze, brake fluid, transmission fluid, and hydraulic oils, it is not recommended that any of these liquids are disposed of in the sanitary sewer system. Contaminated parts removed or replaced on any vehicles or equipment shall be disposed of properly.

All work shall take place on a covered slab or within a building with a common drain. Discharge to this drain shall be managed by an oil/ water separator (refer to SOP 11, “Oil/Water Separator Maintenance”, included in **Appendix A**) to remove oils and gasoline.

Maintenance and repairs shall not take place in areas prone to stormwater runoff or where pollutants could enter catch basins, channels leading to outfalls, or an engineered storm drain system. All catch basins or engineered drainage systems on site that could be affected by accidental spills should include devices intended to remove oils and sediments prior to entering the system. These treatment devices should be inspected and replaced at the frequency recommended by the manufacturer.

2.7.9 Vehicle and Equipment Washing

Potential Sources of Stormwater Pollution

Vehicle and equipment washing activities are a potential source of pollution not only from petroleum products and pollutants deposited on the exterior of the equipment, but also from nutrients and sediment being washed into water bodies from the act of washing itself. Although some cleaning agents are becoming environmentally friendly, many still contain regulated contaminants. Due to the possibility for multiple types of pollutants, vehicle and equipment washing activities have a high potential for degrading stormwater quality.

Pollution Prevention

Outdoors, the use of a tight tank or other similar structure that can contain the wash water is ideal. If the wash water cannot be contained, it shall not be allowed to directly enter water bodies. Use phosphate free detergents that do not contain regulated contaminants, and avoid using solvents where the wash water may enter a sanitary sewer. Impervious

surfaces may be used to promote infiltration and treatment before wash water enters the groundwater, but wash water coming from impervious pavement shall be treated to remove nutrients and petroleum products before entering an engineered storm drain system. Infiltration shall not be used within wellhead protection areas or other protected resource areas. Power washing, steam cleaning and engine and undercarriage washing shall not occur outdoors. Heavily soiled or vehicle dirtied from salting shall not be washed outdoors. All adjacent catch basins shall have a sump and be cleaned periodically, (refer to SOP 3, “Catch Basin Inspection and Cleaning”, included in **Appendix A**). All debris and particulate accumulation shall be removed and swept clean in all outdoor washing areas.

Washing vehicles and equipment indoors in the proper facilities is preferred over washing outdoors whenever possible. Indoor facilities shall have a common drain and it shall utilize a tight tank or other containment device to hold the wash water. The use of detergents shall be avoided and when the use of detergents cannot be avoided, use detergents free from phosphates and regulated contaminants. Detergents shall not be used when the discharge of this drain is controlled by an oil/ water separator (refer to SOP 11, “Oil/Water Separator Maintenance”, included in **Appendix A**). All drains that discharge directly to a water body of engineered storm drain system shall be plugged or abandoned. Dry clean-up methods such as vacuuming and sweeping shall be used whenever possible to avoid washing down floors with water.

For both outdoor and indoor washing, maintain absorbent pads and drip pans to collect spills and leaks observed during washing activities. Refer to SOP 4, “Spill Response and Cleanup Procedures” included in **Appendix A** for more information.

Washing of all facility vehicles is completed in the main garage when using chemicals. Wastewater from vehicle washing operations is discharged to an **OIL/WATER SEPARATOR** and **TIGHT TANK** that is maintained by the DPW

Salt and sand spreaders stored at the warehouse are occasionally pressure washed at that location.

2.7.10 Waste Handling and Disposal

Potential Sources of Stormwater Pollution

Waste handling and disposal facilities and activities present a potential to contaminate stormwater with pathogens (including bacteria and viruses), nutrients, including phosphorus and nitrogen, fertilizers, pesticides and sediments.

There are several classifications of waste which contribute to stormwater pollution, including:

1. Solid Waste
2. Hazardous Materials and Waste

3. Pesticides and Fertilizers
4. Petroleum Products
5. Detergents

Pollution Prevention

A variety of measures are considered appropriate to prevent pollution from waste handling and disposal activities, based on the waste classifications noted previously.

Solid Waste

1. Designate a waste collection area on the site that does not receive a substantial amount of runoff from upland areas and does not drain directly to a receiving water.
2. Ensure that containers have lids so they can be covered before periods of rain, and keep containers in a covered area whenever possible.
3. Schedule waste collection to prevent the containers from overflowing.
4. Clean up spills immediately and in accordance with SOP 4, “Spill Response and Cleanup Procedures” included in **Appendix A**.

Hazardous Materials and Wastes

1. To prevent leaks, empty and clean hazardous waste containers before disposing of them.
2. Never remove the original product label from the container. Follow the manufacturer's recommended method of disposal, printed on the label.
3. Never mix excess products when disposing of them, unless specifically recommended by the manufacturer.
4. Clean up spills immediately and in accordance with SOP 4 “Spill Response and Cleanup”.

Pesticides, Fertilizers and Petroleum Products

1. Do not handle the materials more than necessary.
2. Store materials in a dry, covered, contained area.
3. Clean up spills immediately and in accordance with SOP 4, “Spill Response and Cleanup”.

Detergents

1. Never dump wastes containing detergents to a storm drain system. All wastes containing detergents shall be directed to a sanitary sewer system for treatment at a wastewater treatment plant.

In addition to the pollution prevention requirements a waste management plan is recommended. The plan shall include employee training and signage informing individuals of the hazards associated with improper storage, handling and disposal of wastes. It is imperative that all employees are properly trained and follow the correct procedures to reduce or eliminate stormwater pollution. Routine visual inspection of storage and use areas is critical. The visual inspection process shall include identification

of containers or equipment which could malfunction and cause leaks or spills. The equipment and containers shall be inspected for the following:

1. Leaks
2. Corrosion
3. Support or Foundation Failure
4. Other Deterioration

In the case a defect is found, immediately repair or replace.

2.7.11 Waste Oil Storage

Potential Sources of Stormwater Pollution

When not stored properly, waste oil can be a potential source of petroleum in stormwater. Waste oil containers can leak, and spills can occur while during transportation activities.

Pollution Prevention

All waste oil containers should be properly labeled and stored with secondary containment. Containers should be regularly inspected for rust, leaks, or other signs of deterioration. Defective containers should be promptly removed and replaced. A spill response kit should be located wherever waste oil is stored. Facility personnel should know where the spill kit is located and be familiar with the procedures outlined in SOP 4 “Spill Response and Cleanup Procedures” in **Appendix A**. Used oil filters should also be properly disposed.

Care should be taken when transferring used oil to and from storage containers. For additional information see SOP 7 “Fuel and Oil Handling Procedures” found in **Appendix A**.

Waste oil should be stored indoors or under a covered structure to prevent exposure to precipitation. Floor drain in waste oil storage areas should drain to an oil/water separator rather than the storm drain system. See SOP 11 “Oil/Water Separator Maintenance” in **Appendix A** for further information.

When possible, steps should be taken to recycle waste oil or reduce the amount generated.

2.8 Vehicle and Equipment Inventory

Vehicles and major equipment stored and maintained at the facility are shown in **Table 2-2**.

Table 2-2. Vehicle Inventory

See attached Town Of Groton Fleet list

Vehicle Type	Number on Site

2.9 Location of Leak and Spill Cleanup Materials

Leak and spill cleanup materials are stored at main garage in order to facilitate rapid response. Locations and types of leak and spill cleanup materials are identified in **Table 2-3**.

Table 2-3. Leak and Spill Cleanup Materials

Building or Area	Location	Materials Available

2.10 Allowable Non-Stormwater Discharges

A non-stormwater discharge is defined as any discharge or flow to the engineered storm drain system that is not composed entirely of stormwater runoff.

Allowable non-stormwater discharges that occur at this facility include:

- Firefighting activities
- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground water
- Uncontaminated ground water infiltration (as defined at 40 CFR § 35.2005(20))
- Uncontaminated pumped ground water
- Discharge from potable water sources
- Foundation drains

- Air conditioning condensation
- Irrigation water, springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual resident car washing
- Flows from riparian habitats and wetlands
- De-chlorinated swimming pool discharges
- Street wash waters
- Residential building wash waters without detergents.

It has been determined that the above non-stormwater discharges at #FACILITY do not represent a significant contribution of pollution to the MS4 or the waters of the United States. Therefore, these are considered to be authorized under the current MS4 permit.

2.11 Existing Stormwater Monitoring Data

N/A

Building or Area	Location	Type of Monitoring

2.12 Significant Material Inventory

Materials stored include those specified in **SECTION 2.7**, “Site Activities”. An inventory of these materials at ##FACILITY is included in **Table 2-5**, which also reviews the likelihood for each identified material to come in contact with stormwater. The type of container has also been identified. Oil, gasoline, and other petroleum-based materials are listed separately in the table.

The locations of these material storage areas are provided on the Site Plan in **Figure 2-2**.

**Table 2-5. Significant Material Inventory
Groton DPW facility**

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Petroleum-Based Compounds					
Diesel fuel	Main Garage	6000	Petroleum hydrocarbons	C	None
Gasoline	Main garage	6000	Petroleum hydrocarbons	C	None
Hydraulic Fluid	“”	100	Petroleum hydrocarbons	C	None
Motor Oil	“”	150	Petroleum hydrocarbons	C	None
Fuel Oil, No. 2			Petroleum hydrocarbons		
Fuel Oil, No. 6			Petroleum hydrocarbons		
Lubricants	“”	30	Petroleum hydrocarbons	C	None
Transmission Fluid	“”	50	Petroleum hydrocarbons	C	None
Waste Oil	“”	500	Petroleum hydrocarbons	C	None
Other:					
Total Volume of Oil At Facility =					
Non-Petroleum Significant Materials					
Antifreeze	“”	50	Ethylene glycol; potential source of BOD	C	None
Spray Lubricant	“”	20	Petroleum hydrocarbons	C	None
Sodium Hypochlorite			Chlorides; pH adjustment		
Sodium Bisulfite			pH adjustment		
Acid			pH adjustment		
Adhesives and sealants	“”	5	Volatile and semivolatile organic compounds	C	none
Aggregates			Sediments		
Animal Wastes			Fecal		
Asphalt			Sediments		
Batteries, Used Lead Acid			Lead, sulfuric acid; possible particulate		

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
			matter and residual oil		
Brake Fluid			Volatile organic compounds; non-petroleum based oil		
Coolant (new or used)			Volatile organic compounds		
Deicer- Calcium Chloride (liquid)	Salt shed	2000 gal	Chlorides	c	low
Deicer- Road Salt	Salt shed	4000 ton	Chlorides	c	low
Detergents			Surfactants		
Fertilizers			Nutrients		
Paint, Latex			Petroleum constituents, including volatile and semivolatile organic compounds		
Paint, Oil-Based			Petroleum constituents, including volatile and semivolatile organic compounds		
Paint, Spray	Main garage	20 cans	Petroleum constituents, including volatile and semivolatile organic compounds	E	None
Pesticides			Volatile and semivolatile organic compounds		
Herbicides			Volatile and semivolatile organic compounds		
Sand	Sand shed	500 ton	Sediments	C	low
Solvents			Volatile organic compounds		
Solid Waste, Recyclable	Transfer station	100 tons	Miscellaneous debris/solids, particulate matter, metals	C E	low

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Solid Waste, for Disposal			Particulate matter, solids, metals		
Solid Waste, C&D	Dumpster transfer station	30 yards	Particulate matter, solids, metals	Open top	low
Spill response material (Speedi Dri or similar)	Main building	100 lb	Particulate matter, solids, residual oil.	E	none

2.13 Applicability of Spill Prevention, Control and Countermeasure (SPCC) Requirements

Under federal regulations 40 CFR Part 112 (and Amendments), a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required when a facility has an aboveground oil storage capacity greater than 1,320 gallons, when including containers with a capacity of 55 gallons or more. The FACILITY DOES have aboveground oil storage capacity that exceeds 1,320 gallons.

2.14 Description of Significant Material Storage Areas

Many activities at the DPW yard which involve the materials included in **Table 2-5** occur within contained garages or bays. These activities may include minor equipment/vehicle repair, oil changes, repainting, lubrication, and parts replacement.

Fueling of all MUNICIPALITY vehicles occurs at the Fuel Island located at the north side of main building. All bulk delivery of fuel to the Fuel Island is monitored by a town employee.

The town’s emergency generator is fueled with diesel fuel approximately annually. The FUEL is delivered to the storage tank which is located within the generator. All bulk delivery of fuel to the emergency generator is monitored by a town employee.

Waste oil and other used motor fluids are stored in the main. Waste oil is stored in tanks and drums also located within the main building and warehouse. All delivery of waste oil to the facility occurs within the building and is monitored by a town employee.

Within the salt shed, deicing materials including ROAD SALT/ SAND/ SAND/SALT MIX/ LIQUID CALCIUM CHLORIDE are stored. Delivery of deicing materials to the **salt shed** is monitored by a town employee.

2.15 List of Significant Leaks or Spills

Significant leaks or spills that occurred at the ##FACILITY in the last three years are shown in **Table 2-6**.

Table 2-6. Significant Leaks or Spills
 ##FACILITY

Building or Area	Material	Volume

Forms included in **Appendix B** will be used to document any spill or leak that occurs at the facility in the future.

2.16 Structural BMPs

Structural BMPs include onsite constructed systems that provide pretreatment or treatment of stormwater flows. The following structural BMPs are presently used at the DPW yard to maintain water quality.

2.16.1 Pretreatment Structural BMPs

- Deep sump catch basins
- Oil/Grit Separators
- Sediment Forebays
- Infiltration trench
- Level Spreader

2.16.2 Treatment Structural BMPs

- Rain Garden/Bioretenion Area
- Extended Wet Basin
- Vegetated swale
- Infiltration berm & retentive grading
- Dry extended detention basin

2.17 Sediment and Erosion Control

Site topography at the DPW yard prevents drainage of stormwater and any associated sedimentation from entering the Town's storm drain system or discharging directly to a water body.

SECTION 3 – Non-Structural Controls

3.1 Good Housekeeping

Good housekeeping practices are activities, often conducted daily, that help maintain a clean facility and prevent stormwater pollution problems. The following is a list of good housekeeping measures that are practiced at the facility:

- All chemical washing of vehicles is performed within the designated vehicle wash bay.
- All fluid products and wastes are kept indoors.
- Fueling of small equipment is completed indoors.
- All floor drains present within garage bays drain to an oil/water separator.
- Spill materials and cleanup kits are maintained at all locations where oil materials are used, stored, or may be present, including at Fuel Islands.
- Used spill cleanup materials are disposed of properly.
- Materials are stored indoors or in covered areas to minimize exposure to stormwater.
- Hazardous materials storage lockers with spill containment are used. Storage areas are located away from vehicle and equipment paths to reduce the potential of accident related leaks and spills.
- Storage drums and containers are not located close to storm drain inlets.
- All hazardous material storage areas and containers have proper signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment.
- All materials, waste oil storage containers, and gas cans are properly labeled.
- Oil/water separators and catch basins are maintained regularly and properly.
- Speedi Dri (or similar absorbent) is readily available and used for appropriate spills.
- Spill kits are located in areas where fluids are stored or where activities may result in a spill.
- Tools and materials are returned to designated storage areas after use.
- Waste materials are properly collected and disposed of.
- Different types of wastes are separated as appropriate.
- Regular waste disposal is arranged.
- Work areas are clean and organized.
- Work areas are regularly swept or vacuumed to collect metal, wood, and other particulates and materials.
- Obtain only the amount of materials required to complete a job.
- Materials are recycled when possible.
- Staff is familiar with manufacturer directions for proper use of materials and associated Safety Data Sheets (SDSs).
- Staff is familiar with proper use of equipment.

- Bollards, berms, and containment features are in place around areas and structures where fluids are stored.
- Drip pans are used for maintenance operations involving fluids and under leaking vehicles and equipment waiting repair.

The facility maintains a supply of spill cleanup materials at many buildings on site, and will maintain this inventory. An inventory of spill containment, control, and cleanup materials and spill kits maintained at the main garage was shown in **Table 2-3**.

3.2 Preventative Maintenance

Preventative Maintenance can minimize the occurrence of stormwater pollution by addressing issues before they become problems. Vehicles and equipment should be regularly inspected to prevent leaks of fuel, oil, and other liquids. Structural stormwater controls should be regularly maintained to prevent inadequate performance during storm events.

The following is a list of preventative maintenance procedures practiced at the facility

- All staff members are aware of spill prevention and response procedures.
- All staff members have received formal spill prevention and response procedure training.
- All equipment fueling procedures are completed by qualified personnel trained in spill response procedures.
- Hydraulic equipment is kept in good repair to prevent leaks.
- Vehicle storage areas are inspected frequently for evidence of leaking oil.
- Material storage tanks and containers are regularly inspected for leaks.
- All material and bulk deliveries are monitored by facility employees.
- All waste oil is fully contained and the containers are inspected regularly.

3.3 Best Management Practices

In a SWPPP, existing and planned BMPs are identified that will prevent or reduce the discharge of pollutants in stormwater runoff for each area of concern listed in **SECTION 2**.

To prevent or reduce the potential of stormwater contamination from petroleum products, the following BMPs shall continue to be followed:

1. Follow Standard Operating Procedures (s) during delivery of waste oil to the equipment/waste oil storage bay. These SOPs are included in **Appendix A**.
2. Follow Standard Operating Procedures during delivery of bulk oil to the emergency generator and bulk fuel to the Fuel Island. These SOPs are included in **Appendix A**.
3. Minimize the volume of gasoline stored within the buildings and on the site.

4. Clean up any oil spills observed in the parking lot, garages, or other surfaces in a timely manner.
5. Monitor all material deliveries.
6. Inspect all storage tanks prior to filling activities for spills, leaks and corrosion.

3.4 Spill Prevention and Response

The following procedures apply to the facility:

- All personnel are instructed in location, use, and disposal of spill response equipment and supplies maintained at the site such as oil absorbent materials.
- The Pollution Prevention Team leader will be advised immediately of all spills of hazardous materials or regulated materials, regardless of quantity.
- Spills will be evaluated to determine the necessary response. If there is a health hazard, fire or explosion potential, 911 will be called. If a spill exceeds five gallons or threatens surface waters, including the storm drain system, state or federal emergency response agencies will be called.
- Spills will be contained as close to the source as possible with oil-absorbent materials. Additional materials or oil-absorbent socks will be utilized to protect adjacent catch basins.

SECTION 4 – Plan Implementation

4.1 Employee Training

Regular employee training is required for employees who work in areas where materials or activities are exposed to stormwater, or who are responsible for implementing activities identified in the SWPPP, including all members of the Pollution Prevention Team.

The DPW is responsible for stormwater management training for DPW employees. This position coordinates training related to stormwater management on at least an annual basis to review specific responsibilities for implementing this SWPPP, what and how to accomplish those responsibilities, including BMP implementation.

Additionally, general awareness training is provided regularly (preferably annually) to all employees whose activities may impact stormwater discharges. The purpose of this training is to educate workers on activities that can impact stormwater discharges and to help implement BMPs.

All employees responsible for the fueling or lubrication of vehicles or equipment stored at the facility will be trained regularly (preferably annually). The topics below will be covered at employee training sessions.

1. Spill prevention and response.
2. Good housekeeping.
3. Materials management practices.

Pollution Prevention Team members will meet at least twice a year to discuss the effectiveness of and improvement to the SWPPP. **Appendix C** contains copies of training documentation from these training activities including attendance sheets, instructor name and affiliation, date, time, and location of the training.

4.2 Site Inspection Requirements

It is required that the entire DPW yard be inspected at least once each calendar quarter when the facility is in operation (at least one inspection must be conducted during a period when stormwater discharge is occurring). **one MEMBER OF THE POLLUTION PREVENTION TEAM** is responsible for completing this inspection.

The inspection must check for evidence of pollution, evaluate non-structural controls in place at the site, and inspect equipment. The site inspection report must include:

- The inspection date and time
- The name of the inspector

- Weather information and a description of any discharge occurring at the time of the inspection
- Identification of any previously unidentified discharges from the site
- Any control measures needing maintenance or repair
- Any failed control measures that need replacement
- Any SWPPP changes required as a result of the inspection
- Signed certification statement.

The inspection form for these inspections, and copies of completed inspection forms, are included in **Appendix D**.

Corrective actions may be required based on evidence of past stormwater pollution or the high potential for future stormwater pollution to occur. Information about any issues and the respective corrective actions must be included in a Compliance Evaluation report. The permittee must repair or replace control measures in need of repair or replacement before the next anticipated storm event if possible, or as soon as practicable. In the interim, the permittee shall have back-up measures in place. The Compliance Evaluation report must be kept with the SWPPP and must state the problem, the solution, and when the solution was implemented.

4.3 Recordkeeping and Reporting

The permittee must keep a written record (hardcopy or electronic) of all activities required by the SWPPP including but not limited to maintenance, inspections, and training for a period of at least five years.

This SWPPP shall be kept at the DPW ADMINISTRATIVE OFFICE and shall be updated if any of the conditions in **SECTION 2.21** occur. The SWPPP and records shall be made available to state or federal inspectors and the general public upon request.

The 2016 Massachusetts MS4 Permit requires that each permittee report on the findings from Site Inspections in the annual report to USEPA and MassDEP.

Inspections of the DPW yard should be performed at least quarterly (at least one during stormwater discharge) and described in the Annual Report, including any corrective actions taken, to demonstrate that operation of the DPW facility is in compliance with the 2016 Massachusetts MS4 Permit.

4.4 Triggers for SWPPP Revisions

The town shall review this SWPPP regularly to determine if any update or revision is required. Changes that may trigger revision include:

- An increase in the quantity of any potential pollutant stored at the facility;
- The addition of any new potential pollutant (not already addressed in this SWPPP) to the list of materials stored or used at the facility;

- Physical changes to the facility that expose any potential pollutant (not presently exposed) to stormwater;
- Presence of a new authorized non-stormwater discharge at the facility; or
- Addition of an activity that introduces a new potential pollutant.

Changes in activity may include an expansion of operations, or changes in any significant material handling or storage practices which could impact stormwater.

The amended SWPPP will describe the new activities that could contribute to increased pollution, as well as control measures that have been implemented to minimize the potential for pollution.

This SWPPP will be amended if a state or federal inspector determines that it is not effective in controlling stormwater pollutants discharged to waterways.

SECTION 5 – SWPPP Certification

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.

Authorized Official

Title

Date