



Stormwater Pollution Prevention Plan – Table of Contents

Section	Page
SECTION 1 – Introduction.....	1
SECTION 2 – Detailed Facility Assessment.....	3
SECTION 3 – Non-Structural Controls.....	31
SECTION 4 – Plan Implementation	34
SECTION 5 – SWPPP Certification.....	37

Figure	Page
Figure 2-1. Locus Map	4
Figure 2-2. Site Map.....	6
Figure2-3. Tight Tanks.....	7

Table	Page
Table 2-1. Impaired Waters Receiving Drainage from the Facility.....	13
Table 2-2. Vehicle Inventory	24
Table 2-3. Leak and Spill Cleanup Materials.....	25
Table 2-4. Existing Stormwater Monitoring Data	26
Table 2-5. Significant Material Inventory.....	26
Table 2-6. Significant Leaks or Spills.....	29

Appendix	End of Document
A	Standard Operating Procedures
B	Spill Documentation Forms
C	Training Documentation and Attendance Sheets
D	Facility Inspection Form

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 Georgetown 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.

Instructions: Prepare an individual written (hardcopy or electronic) SWPPP for each facility that is subject to the SWPPP requirements of the 2016 MS4 Permit. If facilities are located on the same property, develop only one SWPPP for the entire property.

SWPPPs must be prepared and implemented at each applicable facility no later than July 1, 2019.

A SWPPP does not need to be developed for a facility if the permittee has either developed a SWPPP or received a no exposure certification for the discharge under the Multi-Sector General Permit or the discharge is authorized under another NPDES permit.



SECTION 2 – Detailed Facility Assessment

2.1 Facility Summary

The Georgetown Highway Department Garage is located at 203 East Main Street and is owned and operated by Georgetown. The Locus Map in **Figure 2-1** shows the location of the facility within the Town of Georgetown.

The Highway Department 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 June 22, 2021. The inspection was conducted by the Merrimack Valley Planning Commission.

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 Highway Department 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

Instructions: Each facility should have at least two Pollution Prevention Team Members.

Leader: Peter Durkee
Title: Highway Surveyor & Tree Warden

Office Phone: (978) 352-5704
Cell Phone: (978-375-0572)

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.

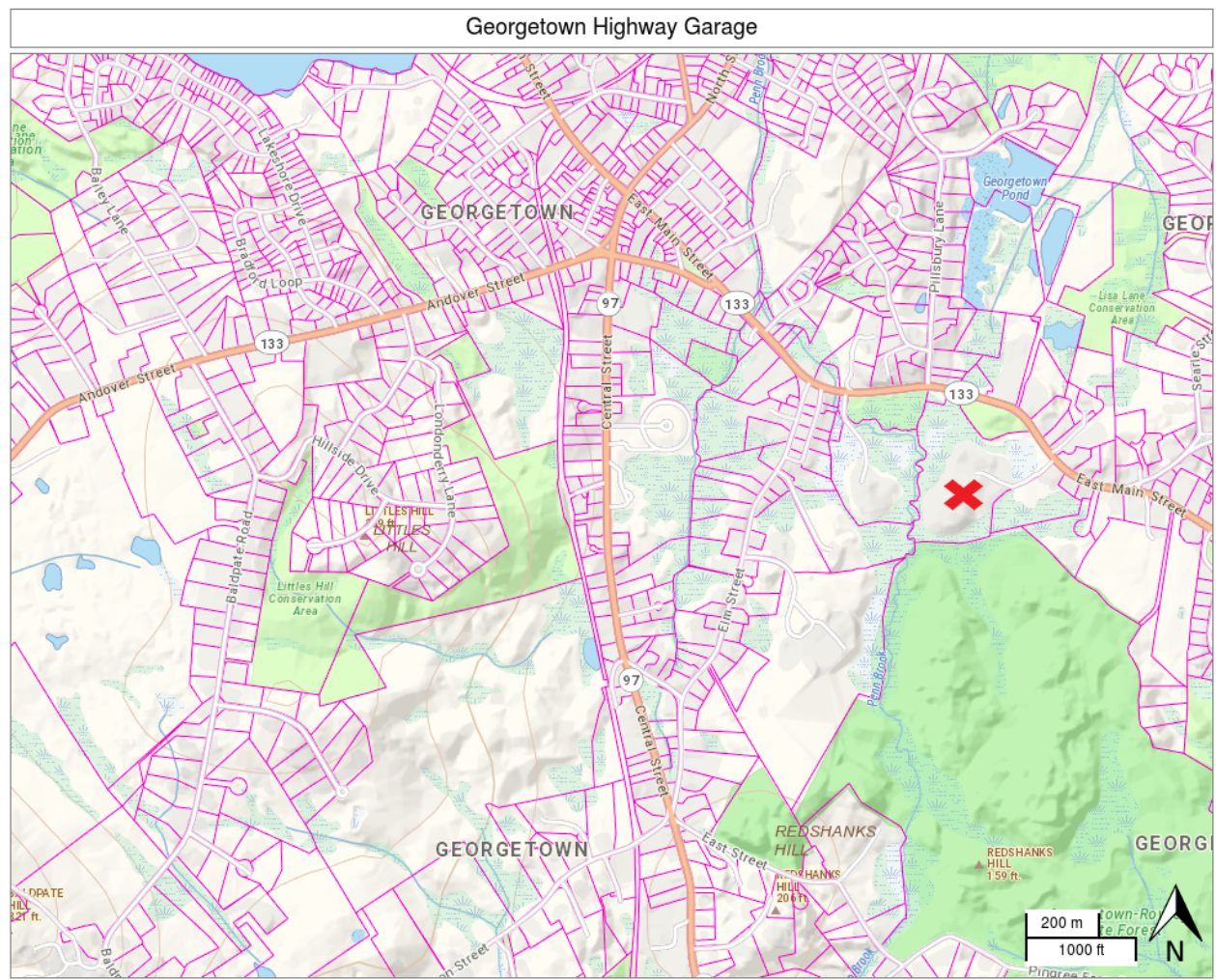


Member: Ed Parker
Title: Foreman

Office Phone: (978) 352-5704
Cell Phone: (978-767-3073)

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.

Figure 2-1. Locus Map





2.4 Facility Description

The primary purpose of the Highway Department Office and Garages is to support the activities of the Highway Department in maintaining town properties and roadways. Activities at the site are described in **SECTION 2.7**

The facility covers approximately 4.5 acres of the approximately 30-acre site and contains the structures and other features shown on the Site Map in **Figure 2-2** and **Figure 2-3 (Tight Tanks)** 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
- Outfalls to a receiving water, and the name of the receiving water
- Direction of surface water flow
- Presence of floor drains (within both garages)
- Vehicle washing areas
- Aboveground storage tanks (indoors and outdoors)
- Underground storage tanks
- Chemical storage areas
- Pesticide and fertilizer storage areas
- Salt storage areas
- Materials stockpiles
- Waste disposal areas.



Figure 2-2 Site Plan

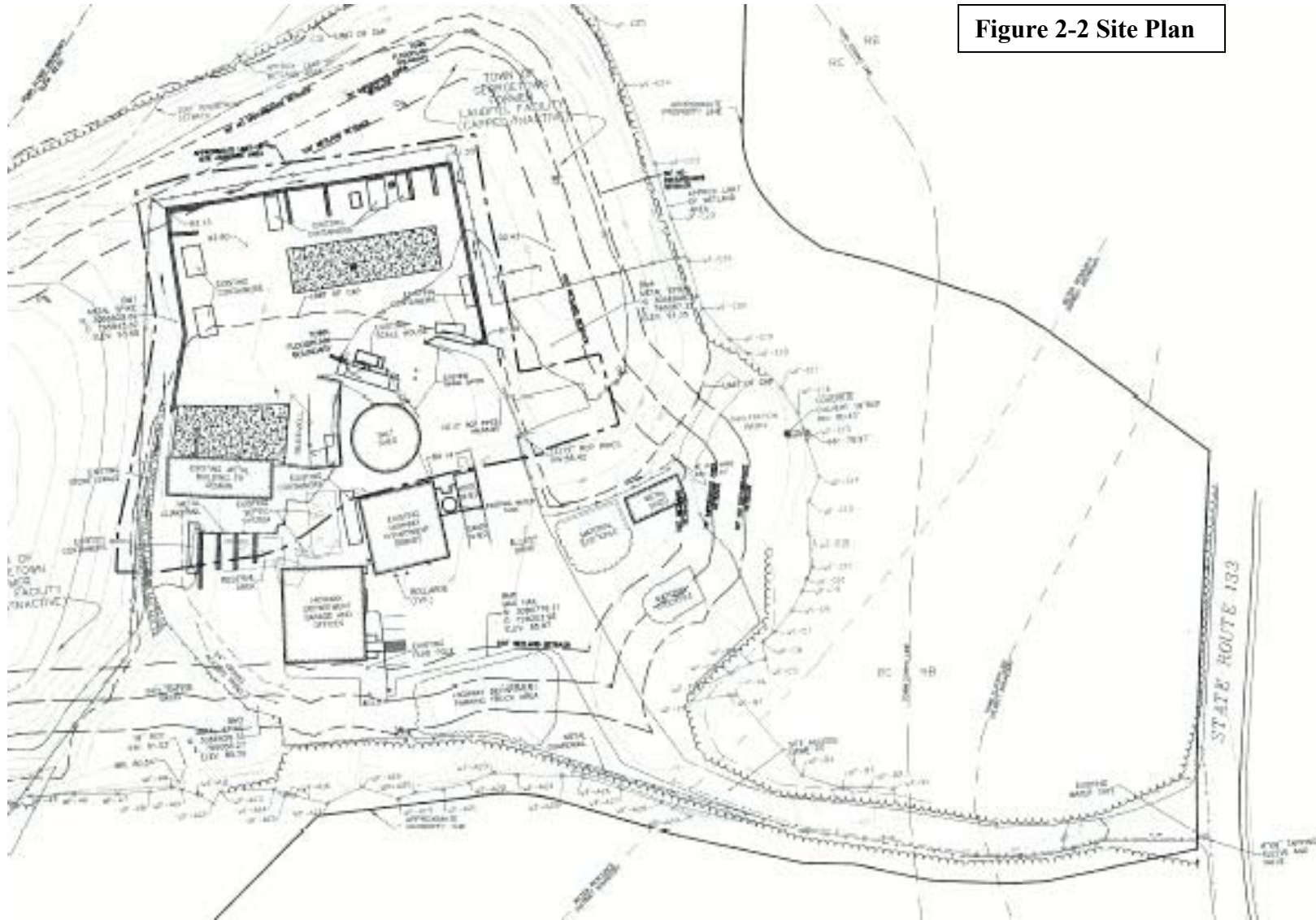
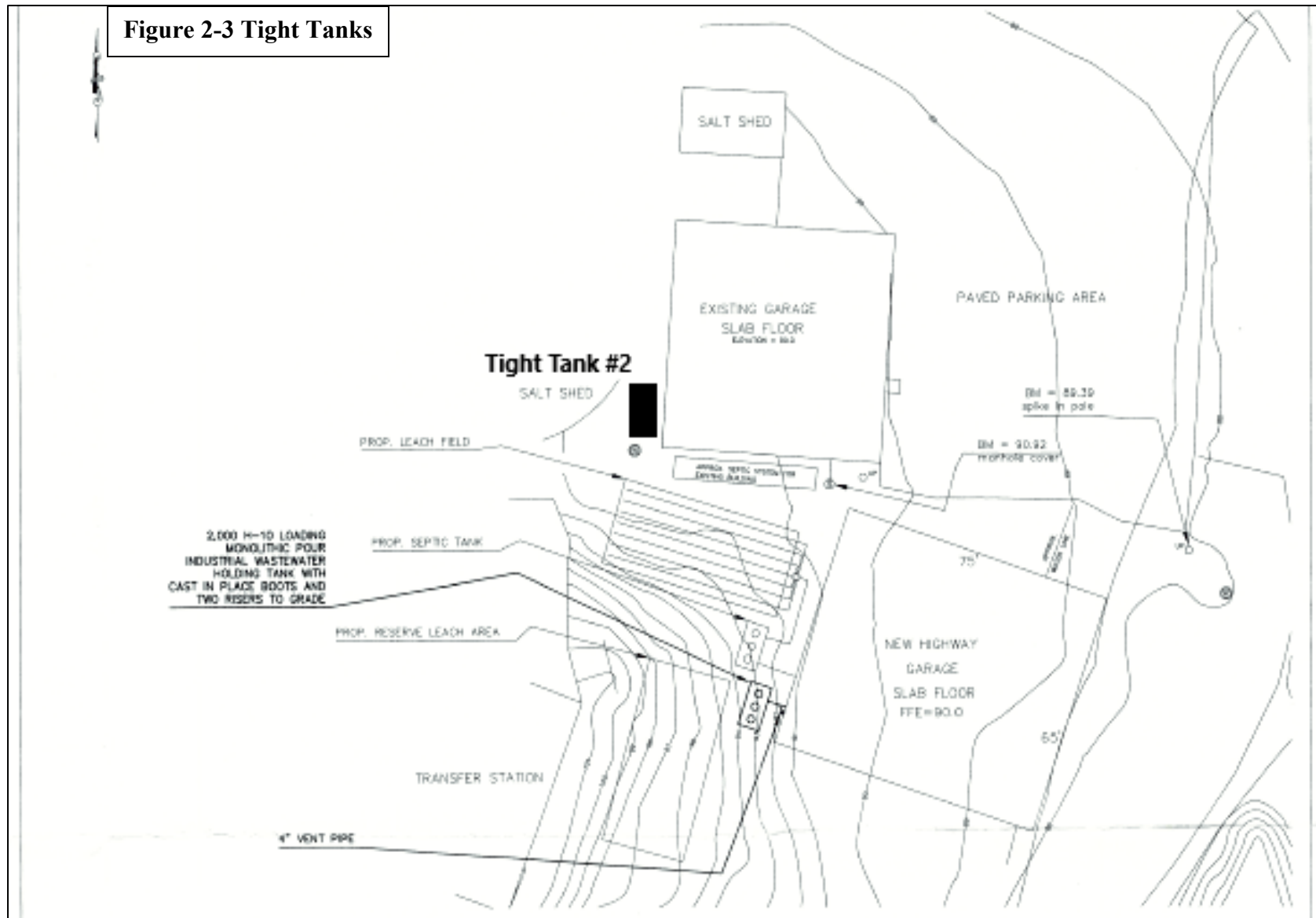




Figure 2-3 Tight Tanks





2.5 Facility Structures

Vehicle Storage and Maintenance

Instructions: Include each of the following paragraphs, as applicable. Provide a unique name for each building or structure. Address the presence or lack of floor drains in each building. For each building where paints and flammable materials are stored, address storage cabinets.

Buildings at the Highway Department Garage are used to provide Georgetown 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 Georgetown.

Administrative Buildings

The Georgetown Highway Department Administrative offices are located in Building 1 – Highway Department Garage and Offices which is located in the southern portion of the property. Staff lockers are housed on the upper garage level. This building contains a floor drain which discharges to a tight tank.

Small equipment, signage, and tools are stored in the garage portion of Building 1. Latex paint and similar products are stored in the garage portion of Building 1. Carpentry, electrical, and minor maintenance activities are completed in BUILDING 1.

This building includes ADMINISTRATIVE SPACE, LOCKERS, OFFICE SPACE/ BREAK ROOM, and BATHROOMS.

Maintenance and Storage Buildings including Waste Oil Burner

Instructions: Describe any waste oil burner (furnace) located at the facility. Delete uses that do not apply. If none, delete the following section.

Building 2 – Highway Maintenance Garage is located slightly to the north and east of Building 1 on the southern portion of the property. Building 2 contains a waste oil furnace used and operated by the Georgetown Highway Department.

This structure provides fully enclosed storage for waste oil drums, and serves as a heated, enclosed workspace for maintenance of Georgetown vehicles. Equipment fuel, hydraulic fluid, and other vehicle maintenance products in this building were observed to be properly stored in flammable materials storage cabinets and/or located on secondary containment.

Storage of Deicing Materials

Instructions: Describe storage of deicing materials. Delete materials that do not apply. If none, delete the following section.



Permit Requirement: "For storage piles of salt or piles containing salt used for deicing or other purposes (including maintenance of paved surfaces) for which the discharge during precipitation events discharges to the permittee's MS4, any other storm sewer system, or to a Water of the US, the permittee shall prevent exposure of the storage pile to precipitation by enclosing or covering the storage piles. Such piles shall be enclosed or covered within two (2) years of the permit effective date (by July 1, 2019). The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. The permittee is encouraged to store piles in such a manner as not to impact surface water resources, ground water resources, recharge areas, and wells."

ROAD SALT/ SAND/ SAND/SALT MIX at the Highway Department site are stored in the Salt Shed and Sand Shed. LIQUID CALCIUM CHLORIDE is stored outside in 2,500 gallon above ground tank. The Salt Shed is COVERED and ENCLOSED and the materials are fully contained within the building. The Sand Shed is covered and enclosed on 3 sides. During the summer, the sand shed houses one of the department's plow trucks. The good housekeeping measures used to minimize the exposure resulting from adding to or removing stored materials include sweeping the loading area regularly or when salt has accumulated on the paved surface. Sand and salt are mixed within the Salt Shed to minimize material on paved surfaces outside of the building.

Storage of Road Deicing Equipment

Instructions: Describe storage of salt spreaders, sanders, and snow plows if it differs from shown below. Delete uses that do not apply.

Georgetown utilizes a number of SANDERS (three 8-yard and two 3-yard) and SNOW PLOWS (8) on its vehicles to adequately maintain roads. Sanders and some plows are stored under cover in the structure labeled "Metal Shed" on the site plan. This building is located at the eastern portion of the property. In this shed, the sanders are suspended off the ground so that they can easily be cleaned, inspected, and maintained, but are protected from the elements. The equipment is covered by a roof but is open on one side so that plow trucks and other vehicles can easily attach the devices.

2.5.1 Additional Site Features

Aboveground Storage Tanks

Instructions: Describe ASTs at the facility. If none, delete the following section. Repeat the second paragraph below as needed.

One aboveground storage tanks (ASTs) at Highway Department is used for storage of liquid calcium chloride. An inventory of significant materials is included in **SECTION 2.12**.



The AST is located in the center portion of the property between the Highway Department Maintenance Garage (Building 2) and the wood shed (see site plan). The AST IS NOT covered but sits on a wooden structure off the ground. Trucks are filled via a hose and proper procedures to avoid spills are followed. The Highway Department is exploring options to provide secondary containment.

Fuel Islands

Instructions: Describe fuel islands at the facility. Describe security controls in place at the fueling island, for example: unique pin number, swipe card, security cameras, and/or physical keyed lock. If none, delete the following section.

There are no fuel islands at the Highway Department.

Emergency Generators

Instructions: Describe emergency generators at the facility, including the level of containment provided by each. If none, delete the following section.

An emergency generator located to the north of the Highway Department Garage and Offices (Building 1) provides backup power to the facility during outages. The generator, Generac Guardian Series, is fueled by natural gas. The generator is located on a concrete pad. While fuel containment is not needed, the generator does have full containment for all other fluids.

Oil/Water Separators

Instructions: Describe oil/water separators at the facility, repeating the second paragraph below as needed. Describe the drains from which buildings are managed each the oil/water separator. If none, delete the following section.

There are no oil/water separators at the Georgetown Highway Department.

Tight Tanks

Instructions: Describe tight tanks at the facility, repeating the second paragraph below as needed. Describe the drains from each building that discharge to each tight tank. If none, delete the following section.

The Georgetown maintains one tight tank at the Highway Department Office and Garage (Building #1) and a second tank at the Highway Garage (Building #2). Tank #1 is 2,500 gallons and tank #2 is 1,500 gallons. Both tanks are concrete construction.

Tight tank #1 (associated with Building 1) is located to the west of Building 1 and just south of the existing septic tank (see **Figure 2-3**). This structure has a cleanout manhole and is pumped on an annual basis. The Highway Department is responsible for



contracting this work and maintains records on the pumpout activities (report from 2020 available). Floor drains in the Building 1 Garage are directed to this tight tank. The tight tank has an alarm to signal when the tank is nearing full. An “Industrial Wastewater Holding Tank compliance certification form” associated with Tank #1 was submitted to MassDEP in 2004. Copies of this paperwork are on file.

Tight Tank #2 (associated with Building 2) is located between the garage and the salt shed (to the north of Building 2). This structure has a cleanout manhole and will be pumped on an annual basis. Floor drains in Building 2 Garage are directed to this tight tank.

Solid Waste Management

Instructions: Describe each dumpster at the facility, repeating the paragraph below as needed. If none, delete the following section.

The Georgetown maintains a metals recycling dumpster at the southeaster portion of the property in the area labeled Highway Department Parking Truck Area. No inappropriate materials were observed during the facility inspection. All other solid waste is handled by the adjacent G. Mello facility.

Materials for Use by Residents

Instructions: Describe storage of materials for use by residents. This may include salt, sand, compost, mulch, aggregate, or asphalt. If none, delete the following section.

The Georgetown Highway Department allows residents to take sand/salt mix from its covered salt shed. This BUILDING is located at the east portion of the property and is COVERED ENCLOSED. Materials contained in each shed are fully contained.

Parking Areas

There are several designated parking areas at the Highway Department, each of which is an impervious surface. These parking lots are used primarily for visitors to the B-1 building, Georgetown-owned cars for daily use by seven employees, personal vehicles; highway trucks and/or heavy equipment are not kept in this parking lot.

The Office area of Building 1 contains parking for three vehicles. The Truck Parking Area has space for 4-6 trucks. The majority of Highway Department vehicles are parked in the garages overnight. The total number of parking spaces at the Highway Department is approximately 14.

2.6 Site Drainage

No stormwater from adjacent properties impacts the Highway Department property.



Sheet Flow and Engineered Drainage

Instructions: Describe sheet flow from all impervious surfaces at the facility.

Drainage from the impervious surfaces at the Highway Department flows is directed partially to two infiltration basins. Drainage from impervious areas on the southern portion of the site enter the southern infiltration basin. There is also a leaching catch basin in the parking area outside the Highway Department Office. Northern portions of the site (occupied by G. Mello Disposal Corp.) and eastern portions of the Highway Department site drain to the eastern infiltration basin. There is a drainage swale along the northwestern wall of the material storage area. The basins are inspected and mowed 2x annually by the Highway Department (see Infiltration Basin Maintenance document).

Instructions: Describe the drainage system at the facility. Note the number and location of catch basins, drain manholes, and stormwater outfalls.

Engineered drainage at the Highway Department includes one leaching catch basin and two infiltration basins. Maintenance of the catch basin structure, including sediment removal, is completed by the Highway Department. The southern infiltration basin outlet structure is located on the southern side of the basin and outlets to bordering vegetated wetland (A-series). The infiltration basin on the east side of the site has an outlet structure on the eastern side of the basin.

2.6.1 Receiving Waters

Instructions: Identify any surface waters that receive drainage from this facility. Refer to MassDEP's website for most recent Integrated List of Waters (CWA Sections 303d, 305B, and 314):
<http://www.mass.gov/eea/agencies/massdep/water/watersheds/total-maximum-daily-loads-tmdls.html>

If impaired, add this surface water body or bodies to Table 2-1.

If no impaired surface waters receive drainage from the site, replace the text below with the following:

“The final point of discharge for stormwater from this site is the ##SURFACE WATER, which has not been identified as impaired. The good housekeeping practices, preventative maintenance and Best Management Practices implemented at the facility are appropriate and adequate controls.”

The final point of discharge for stormwater from this site is the Penn Brook which drains to the Parker River. Penn Brook is no longer identified as impaired in the 303(d) List. Penn Brook is considered a Category 2 water body.



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

Table 2-1. Impaired Waters Receiving Drainage from the Highway Department FACILITY

Water Body Name	ID	Category	Impairment(s)
Penn Brook	MA91-16	2	Uses Attained (aesthetic, fish, primary & secondary contact)
Parker River	MA91-01	4c	Dewatering

There are no impairments documented for this Penn Brook. Penn Brook drains to the Parker River which is impaired due to dewatering in the identified section. The activities and stored materials at the Highway Department Garage DO NOT HAVE the potential to affect this impairment.

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

Water bodies identified as Category 5, as shown in **Table 2-1**, are impaired or threatened for the defined uses. Total Maximum Daily Loads (TMDLs) are required for the impairment shown. The following TMDLs have been developed:

- None

2.7 Site Activities

The following activities occur at the facility:

- Facility or Building Maintenance
- Chemical unloading, handling, and storage (including paint, flammables, fertilizers, and pesticides)
- Painting
- Paving (storage of asphalt prior to disposal)
- Sand storage
- Salt storage
- Snow dump (to be identified)
- Solid waste management (only 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 Highway Department Garage 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 Highway Department FACILITY.

No solvent-based parts washers were observed in any structure at the Highway Department Garage. Any hazardous materials are either collected by a third-party vendor contracted by the Georgetown on an annual basis or collected at the annual Household Hazardous Waste Day (HHHD) that is hosted for the benefit of Georgetown residents. Waste materials from Highway Department 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 Highway Department does not apply or utilize, herbicides or pesticides at any facility owned or managed by the Georgetown. As such, only small amounts of fertilizer and no herbicides, or pesticides are stored at the Highway Department Garage.

2.7.1 Compost Production or Storage

None.

2.7.2 Stockpiles and Sand Storage

Permit Requirement: "For storage piles of salt or piles containing salt used for deicing or other purposes (including maintenance of paved surfaces) for which the discharge during precipitation events discharges to the permittee's MS4, any other storm sewer system, or to a Water of the US, the permittee shall prevent exposure of the storage pile to precipitation by enclosing or covering the storage piles. Such piles shall be enclosed or covered within two (2) years of the permit effective date (by July 1, 2019). The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. The permittee is encouraged to store piles in such a manner as not to impact surface water resources, ground water resources, recharge areas, and wells."



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 (Georgetown has a roofed structure for sand storage).

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

Permit Requirement: "For storage piles of salt or piles containing salt used for deicing or other purposes (including maintenance of paved surfaces) for which the discharge during precipitation events discharges to the permittee's MS4, any other storm sewer system, or to a Water of the US, the permittee shall prevent exposure of the storage pile to precipitation by enclosing or covering the storage piles. Such piles shall be enclosed or covered within two (2) years of the permit effective date (by July 1, 2019). The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. The permittee is encouraged to store piles in such a manner as not to impact surface water resources, ground water resources, recharge areas, and wells."

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. (Georgetown's salt storage area is covered and completely enclosed.

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 knowledgeable 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 (Building 2). 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 building 2 at Highway Department. Wastewater from vehicle washing operations is discharged to an TIGHT TANK that is maintained by the Highway Department

Salt and sand spreaders stored at the Highway Department (Metals Shed) are occasionally pressure washed at the Maintenance Garage.

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 overfilling.
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

Vehicle Make	Model
Peterbilt	Truck
Peterbilt	Truck
Ford	F450
International	4900 Truck
Chevrolet	HD3500
Chevrolet	3500
Ford	F550 Dump Truck
Peterbilt	348 Dump Truck
Ford	F550 1 ton
Ford	F250 Pickup
Ford	F550
Ford	F150

2.9 Location of Leak and Spill Cleanup Materials

Leak and spill cleanup materials are stored at both Highway Department Garages (Buildings 1 & 2) 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
Building 1 – Highway Department Garage & Office	Garage Floor Area	Large Spill Kit
Building 2 - Highway Department Garage	Garage Floor Area	Large Spill Kit
Vehicles	In vehicles	Small Spill Kit
		Extra Materials on hand

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:

- Water line flushing
- Rising ground water
- Uncontaminated ground water infiltration (as defined at 40 CFR § 35.2005(20)
- Flows from riparian habitats and wetlands
- Street wash waters
- Residential building wash waters without detergents.

It has been determined that the above non-stormwater discharges at the Highway Department 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



There is no historical stormwater monitoring data at the Highway Department. The site is the location of a former landfill. The landfill has a separate groundwater monitoring program.

**Table 2-4. Existing Stormwater Monitoring Data
Georgetown Highway FACILITY**

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 the Highway Department Garage 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
Highway Department**

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Petroleum-Based Compounds					
Diesel fuel	Building 2	250 gallons	Petroleum hydrocarbons	E	Low
Gasoline	Building 2	35 gallons	Petroleum hydrocarbons	E	Low
Hydraulic Fluid	Building 2	55 gallons	Petroleum hydrocarbons		Low
Motor Oil	Building 2	200 gallons	Petroleum hydrocarbons	E	Low
Fuel Oil, No. 2	Building 2	250 gal	Petroleum hydrocarbons	E	Low
Lubricants	Building 2	24-5 gal	Petroleum hydrocarbons	E	
Transmission Fluid	Building 2	5 gallons	Petroleum hydrocarbons	C	Low



Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Waste Oil	Building 2	200 gal	Petroleum hydrocarbons	E	Low
Other:					
Total Volume of Oil At Facility =275 gal					
Non-Petroleum Significant Materials					
Antifreeze	Building 2	5gal	Ethylene glycol; potential source of BOD	C	
Spray Lubricant	Building 2	2gal	Petroleum hydrocarbons	C	:pw
Adhesives and sealants	Building 2	.05 gal	Volatile and semivolatile organic compounds	C	low
Aggregates	Outside	300 yards	Sediments	E (concrete blocks)	Low
Asphalt	Outside	30-40 yards	Sediments	E (concrete blocks)	Moderate
Batteries, Used Lead Acid	Building 1	0-1, Picked up regularly for recycling	Lead, sulfuric acid; possible particulate matter and residual oil	C – Inside on rack	Low
Brake Fluid	Building 2	2 gallons	Volatile organic compounds; non-petroleum based oil	C	Low
Deicer- Calcium Chloride (liquid)	AST – Outside	500 gallons	Chlorides	E	Low
Deicer- Road Salt	Salt Shed	2k – Tons	Chlorides	C & E	Low
Detergents	Building 2	No bulk	Surfactants	C & E	Low
Fertilizers	Building 1	4 bags	Nutrients	C	Low
Paint, Latex	Building 1	2 gallons	Petroleum constituents, including volatile and semivolatile organic compounds	C	Low



Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Paint, Oil-Based	Building 1	2-3 gallons	Petroleum constituents, including volatile and semivolatile organic compounds	C	Low
Paint, Spray	Building 1	30 cans	Petroleum constituents, including volatile and semivolatile organic compounds	C & E	Low
Sand	Sand Shed	200 tons	Sediments	C & E	Low
Solvents	Building 1	88 spray cans	Volatile organic compounds	C	Low
Solid Waste, Recyclable	Dumpster – Metal Only	Emptied regularly	Miscellaneous debris/solids, particulate matter, metals	E	Low
Solid Waste, for Disposal	Building 1 & 2	4 barrels empties weekly	Particulate matter, solids, metals	C & E	Low
Solid Waste, C&D	Metals Dumpster & G. Mello Site	In dumpster - emptied regularly	Particulate matter, solids, metals	E	Low
Spill response material (Speedi Dri or similar)	Building 1 & 2 & in trucks	2 large, 4 small kits for vehicles & supplies for refill	Particulate matter, solids, residual oil.	C & E	Low

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 Highway Department Garage DOES NOT have aboveground oil storage capacity that exceeds 1,320 gallons.



2.14 Description of Significant Material Storage Areas

Many activities at the Highway Department Garage 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 Georgetown vehicles occurs at a privately-owned gas station located in Georgetown. Only minor equipment fueling occurs using 5-gallon containers.

The Highway Department emergency generator is fueled with natural gas. There is no fuel delivery.

Waste oil and other used motor fluids are stored in Building 2. Waste oil is stored in tanks and drums also located within the Building 2, all of which have internal containment or are located on appropriate containment pallets. All delivery of waste oil to the facility occurs within the building and is monitored by a Highway Department employee.

Within the **Sand and Salt shed**, deicing materials including ROAD SALT/ SAND/ SAND/SALT MIX are stored. Calcium Chloride is stored outside in an above-ground tank elevated on a wooden platform. Delivery of deicing materials to the **Sand and Salt sheds** is monitored by a Highway Department employee.

2.15 List of Significant Leaks or Spills

No significant leaks or spills that occurred at the Highway Department Garage in the last three years.

**Table 2-6. Significant Leaks or Spills
Highway Department Garage**

Building or Area	Material	Volume
None		

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 Highway Department Garage to maintain water quality.



Instructions: For each, describe the BMP's location at the facility.

2.16.1 Pretreatment Structural BMPs

- None

2.16.2 Treatment Structural BMPs

- Dry well – leaching catch basin located outside the Highway Department Office Building (parking area)
- Vegetated swale – located to the northwest of the Material Stockpile area.
- Infiltration basins - one to the south of Building 1 (Highway Department Garage and Offices) and one to the north of the material stockpile area.

2.16.3 Other Structural BMPs

- Riparian buffer restoration
- Landscape restoration
- Soil amendment and restoration
- Floodplain restoration

2.17 Sediment and Erosion Control

Instructions: Describe any portions of the facility where erosion is a concern, and the methods that are used to prevent or correct erosion. If none, use the following paragraph.

A large stockpile at the entrance of the Highway Department site has the potential to erode into the adjacent wetland/infiltration basin. This pile should be removed or moved to a location where it can be properly contained. Other erodible materials are contained within 3-walled storage bays. Compost or bark mulch socks should be used to prevent runoff on the open side. Erosion controls should be refreshed as needed.



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 washing of vehicles is performed within the designated vehicle wash bay (Building 2).
- All fluid products and wastes are kept indoors.
- Fueling of small equipment is completed indoors.
- All floor drains present within garage bays drain to a tight tank.
- Spill materials and cleanup kits are maintained at all locations where oil materials are used, stored, or may be present.
- Used spill cleanup materials are disposed of properly.
- Materials are stored indoors or in covered areas to minimize exposure to stormwater.
- Small amounts of fertilizer and no herbicides or pesticides are stored or used at the facility.
- Lead-acid batteries are stored indoors and (no secondary containment – picked up for recycling on demand).
- Hazardous materials storage lockers with spill containment (Building 2 – 2 lockers) 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, 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 Highway 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. Minimize the volume of gasoline stored within the buildings and on the site.



3. Clean up any oil spills observed in the parking lot, garages, or other surfaces in a timely manner.
4. Monitor all material deliveries.
5. 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 Georgetown Highway Department is responsible for stormwater management training for Highway Department 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 Highway Department site 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). A 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 Highway Department 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 Highway Department Garage 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 Highway Department Garage is in compliance with the 2016 Massachusetts MS4 Permit.

4.4 Triggers for SWPPP Revisions

Georgetown 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.

Peter J. Dunbar
Authorized Official

Highway Surveyor
Title

7-27-21
Date

Instructions: The SWPPP must be signed by a ranking elected official or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
3. The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.



Appendix A

Standard Operating Procedures

SOP 3: Catch Basin Inspection and Cleaning

Introduction

Catch basins help minimize flooding and protect water quality by removing trash, sediment, decaying debris, and other solids from stormwater runoff. These materials are retained in a sump below the invert of the outlet pipe (older catch basins may not have a sump). Catch basin cleaning reduces foul odors, prevents clogs in the storm drain system, and reduces the loading of trash, suspended solids, nutrients, bacteria, and other pollutants to receiving waters. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees on catch basin inspection and cleaning to reduce the discharge of pollutants from the MS4. If services are contracted, this SOP should be provided to the contractor. The contract should specify that the contractor is responsible for compliance with all applicable laws.

This SOP can also be used for inspection of catch basins or manholes for the purpose of conducting catchment investigations as part of the municipality's Illicit Discharge Detection and Elimination program.

Instructions: Review all information the municipality has on its catch basins, including records or employee knowledge on trends in catch basin loads. Use any available information to identify catch basins that might have higher loads (e.g., catch basins that are located on downward-sloping or low areas where debris runs down and accumulates or streets/parking lots where large amounts of sand are used in the winter). Once the potential areas of high accumulation have been identified, create an initial schedule ("optimization plan") for the prioritized cleaning of high-load catch basins. This optimization plan should be included in the municipality's first annual report.

The Highway Department performs routine inspections, cleaning, and maintenance of the approximately 1097 catch basins annually which are all the catch basins in town. The Town of Georgetown will include an optimization plan for catch basin cleaning and inspection in its annual report.

The town cleans all catch basins annually using a subcontractor. The subcontractor gives the town a list of basins that need repair. Currently cleanings are kept separate for testing so they can be disposed of properly.

The Town of Georgetown will implement the following catch basin inspection and cleaning procedures to reduce the discharge of pollutants from the MS4:

Procedures

Inspection and Cleaning Frequency

- Each catch basin should be cleaned and inspected at least annually.
- Catch basins near construction activities (roadway construction, residential, commercial, or industrial development or redevelopment) or high-use areas should be inspected and cleaned more frequently if inspection finds excessive sediments or debris loadings.

SOP 3: Catch Basin Inspection and Cleaning

- Catch basins should be cleaned to ensure that they are no more than 50 percent full¹ at any time. Establish inspection and maintenance frequencies needed to meet this “50 percent” goal. If a catch basin sump is more than 50 percent full during two consecutive inspections, document the findings, investigate the contributing drainage area for sources of excessive sediment loading, and, if possible, address the contributing sources. If no contributing sources are found, increase the inspection and cleaning frequencies of the sump.
- Street sweeping performed on an appropriate schedule will reduce the amount of sediment, debris, and organic matter entering the catch basins, which will in turn reduce the frequency with which they need to be cleaned. Reference SOP 16: Streets and Parking Lots for information on appropriate street sweeping frequencies. Street sweeping schedules should also be adjusted based on catch basin inspection findings, with more frequent sweepings for areas with higher catch basin loads.

Instructions: Check the municipality’s Stormwater Management Plan (SWMP) to determine if the municipality discharges to waters with metals Total Maximum Daily Load (TMDL) requirements or to water quality limited waters where solids, oil, and grease (hydrocarbons) or metals are the cause of impairment. If yes, then include the following bullet point and applicable impaired waterbodies. – Georgetown has no waterbodies with these impairments

- If impairment status in Georgetown waterbodies should change, then in accordance with IMPAIRED WATER requirements, the Town of Georgetown will prioritize catch basin cleaning and inspection in catchments with impairments when creating their optimization schedule to ensure that these catch basins are no more than 50% full and reduce stormwater pollution to IMPAIRED WATERBODIES.

Inspection and Cleaning Procedures

Catch basin inspection and cleaning procedures should address both the grate opening and the catch basin structure, including the sump and any inlet and outlet pipes. Document any and all observations about the condition of the catch basin structure and water quality (an inspection form and log of catch basins cleaned or inspected are included in the attachments). Collect data on the condition of the physical basin structure, its frame, and the grate, as well as on the quality of stormwater conveyed by the structure. Observations like those below can indicate sources of pollution within the storm drain system:

- Oil sheen
- Discoloration
- Trash and debris

Both oil and bacteria can create a sheen on the water’s surface. The source of a sheen can be differentiating by disturbing it (e.g., with a pole). A sheen caused by oil will remain intact and move in a swirl pattern, while a sheen caused by bacteria will separate and appear “blocky.” The bacteria that cause this sheen are naturally occurring iron bacteria – they are not considered a pollutant but should be noted. Other types of bacteria, such as fecal bacteria, are considered pollutants and their discovery should be recorded.

¹ A catch basin sump is more than 50 percent full if the contents within the sump exceed one half the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin

SOP 3: Catch Basin Inspection and Cleaning

Observations like those below can indicate a potential connection of a sanitary sewer to the storm drain system, which is an illicit discharge:

- Indications of sanitary sewage, including fecal matter or sewage odors
- Foaming, such as from detergent
- Optical enhancers, fluorescent dye added to laundry detergent

In general, adhere to the following procedures when inspecting and cleaning catch basins. Record the findings in the log in the attachments:

1. Implement appropriate traffic safety procedures (e.g., traffic cones) prior to and during the catch basin inspection and cleaning process.
2. Work upstream to downstream in a given drainage network.
3. Clean sediment and trash off of the grate.
4. Visually inspect the outside of the grate.
5. Remove the grate and visually inspect the inside of the catch basin to determine cleaning needs.
6. Inspect the catch basin for structural integrity.
7. Determine the most appropriate equipment and method for cleaning the basin:
 - a. Manually use a shovel to remove accumulated sediments.
 - b. Use a bucket loader to remove accumulated sediments.
 - c. Use a high pressure washer to clean any remaining material out of the catch basin while capturing the slurry with a vacuum.
 - d. If necessary, after the catch basin is cleaned, use the rodder of the vacuum truck to clean the downstream pipe and pull back sediment that might have entered it.
8. If contamination is suspected, chemical analysis will be required to determine if the materials comply with the Massachusetts Department of Environmental Protection (MassDEP) Hazardous Waste Regulations, 310 CMR 30.000 (https://www.mass.gov/files/documents/2016/08/xl/310cmr30_7883_54357.pdf). The chemical analysis required will depend on suspected contaminants. Note the identification number of the catch basin on the sample label and note sample collection on the Catch Basin Inspection Form.

Handling and Disposal of Catch Basin Cleanings

- Properly dispose of collected sediments and catch basin cleanings (solid material, such as leaves, sand, and twigs removed from stormwater collection systems during cleaning operations).
- Cleanings from stormwater-only drainage systems may be disposed at any landfill that is permitted by MassDEP to accept solid waste. MassDEP does not routinely require stormwater-only catch basin cleanings to be tested before disposal, unless there is evidence that they have been contaminated by a spill or some other means.
- Screenings may need to be placed in a drying bed to allow water to evaporate before proper disposal. In this case, ensure that the screenings are managed properly to prevent pollution.
- Catch basin cleanings must be handled and disposed in accordance with compliance with the applicable MassDEP regulations, policies, and guidance (<https://www.mass.gov/files/documents/2018/03/09/catch-basins.pdf>).

Documentation and Reporting

The following information should be documented and included in the municipality's annual report – use the catch basin inspection log provided in the attachments to document the information to include in the report (alternatively, obtain records of volume of debris removed to include in the report):

- Metrics and other information used to reach the determination that the established plan for cleaning and maintenance is optimal for the MS4 (include in the SWMP and first annual report)
- Any action taken in response to excessive sediment or debris loadings
- Total number of catch basins
- Number of catch basins inspected
- Number of catch basins cleaned
- Total volume or mass of material removed from catch basins.

Employee Training

- Employees who perform catch basin cleaning and inspection are trained ANNUALLY on these procedures and the proper operation of related equipment.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Attachments

1. Catch Basin Inspection Form and Log
2. Catch Basin Inventory

Related Standard Operating Procedures

1. SOP 16: Streets and Parking Lots

CATCH BASIN INSPECTION FORM

Job No.: _____ Town: _____ Inspector: _____ Date: _____

Catch Basin I.D.			Final Discharge from Structure? Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes, Discharge to Outfall No: _____	
Catch Basin Label:	Stencil <input type="checkbox"/>	Ground Inset <input type="checkbox"/>	Sign <input type="checkbox"/>	None <input type="checkbox"/> Other _____
Basin Material:	Concrete <input type="checkbox"/> Corrugated metal <input type="checkbox"/> Stone <input type="checkbox"/> Brick <input type="checkbox"/> Other: _____ <input type="checkbox"/>	Catch Basin Condition:		Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Crumbling <input type="checkbox"/>
Pipe Material:	Concrete <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Clay Tile <input type="checkbox"/> Other: _____ <input type="checkbox"/>	Pipe Measurements:		Inlet Dia. (in): d= _____ Outlet Dia. (in): D= _____
Required Maintenance/ Problems (check all that apply): <input type="checkbox"/> Tree Work Required <input type="checkbox"/> New Grate is Required <input type="checkbox"/> Pipe is Blocked <input type="checkbox"/> Frame Maintenance is Required <input type="checkbox"/> Remove Accumulated Sediment <input type="checkbox"/> Pipe Maintenance is Required <input type="checkbox"/> Basin Undermined or Bypassed <input type="checkbox"/> Cannot Remove Cover <input type="checkbox"/> Ditch Work <input type="checkbox"/> Corrosion at Structure <input type="checkbox"/> Erosion Around Structure <input type="checkbox"/> Remove Trash & Debris <input type="checkbox"/> Need Cement Around Grate Other: _____				
Catch Basin Grate Type:	Sediment Buildup Depth:	More than 50% full?	Description of Flow:	Street Name/ Structure Location:
Bar: <input type="checkbox"/> Cascade: <input type="checkbox"/> Other: _____ Properly Aligned: Yes <input type="checkbox"/> No <input type="checkbox"/>	0-6 (in): _____ 6-12(in): _____ 12-18 (in): _____ 18-24 (in): _____ 24 + (in): _____	Yes <input type="checkbox"/> No <input type="checkbox"/>	Heavy <input type="checkbox"/> Moderate <input type="checkbox"/> Slight <input type="checkbox"/> Trickling <input type="checkbox"/>	
*If the outlet is submerged check yes and indicate approximate height of water above the outlet invert. h above invert (in): _____			Yes <input type="checkbox"/>	No <input type="checkbox"/>
<input type="checkbox"/> Flow <input type="checkbox"/> Standing Water (check one or both)	Observations: Color: _____ Odor: _____		Circle those present:	
Weather Conditions : Dry > 24 hours <input type="checkbox"/> Wet <input type="checkbox"/>		Foam Sanitary Waste Orange Staining Excessive sediment Other: _____		
Sample of Screenings Collected for Analysis? Yes <input type="checkbox"/> No <input type="checkbox"/>		Oil Sheen Bacterial Sheen Floatables Pet Waste Optical Enhancers		
Amount of sediment removed:				
Comments:				



SOP 3: Catch Basin Inspection and Cleaning

**Catch Basin Inspection and Cleaning Log
Georgetown, Massachusetts**

Date	Inspector	Weather Conditions	Number of Catch Basins Inspected/Cleaned	Amount of Material Removed	Catch Basins More Than 50% Full	Corrective Action Taken/Recommended if More Than 50% Full



SOP 4: Spill Response and Cleanup

Introduction

Municipalities are responsible for any contaminant spill or release that occurs on property that they own or operate. Particular areas of concern include any facilities that use or store chemicals, fuel oil, or hazardous waste, including schools, garages, and landfills. Implementation of proper spill response and cleanup procedures can help to mitigate the effects of a contaminant release. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to help reduce the discharge of pollutants from the MS4 as a result of spills or releases.

The Town of Georgetown undertakes various precautions with spill response and cleanup procedures.

Spill response materials are available at all facilities that store or use hazardous materials. In addition, all Highway Department commercial work vehicles carry spill containment kits. Spill response training is conducted annually. Reporting is managed by the Fire Department.

Procedures

The Town of Georgetown will implement the following spill response and cleanup procedures to reduce the discharge of pollutants from the MS4:

Responding to a Spill

Employees should be trained in proper spill response specific to the materials used at their site and appropriate personal protective equipment (PPE). In the event of a spill, follow these spill response and cleanup procedures:

- If the facility has a Stormwater Pollution Prevention Plan (SWPPP), notify a member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility safety officer (fill out the attached spill response contact list). If not, continue to follow the procedures outlined below.
- Assess the contaminant release site for potential safety issues and for direction of flow.
- Complete the following:
 - Stop the contaminant release.
 - Contain the contaminant release through the use of spill containment berms or absorbents.
 - Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers.
 - Clean up the spill.
 - Dispose of all contaminated products in accordance with applicable federal, state and local regulations.
 - i. Soil contaminated with petroleum should be handled and disposed of as described in MassDEP policy WCS-94-400, Interim Remediation Waste Management Policy for Petroleum Contaminated Soils (<https://www.mass.gov/files/documents/2016/08/mq/94-400.pdf>).
 - ii. Products saturated with petroleum products or other hazardous chemicals require special handling and disposal by licensed transporters. Licensed transporters will



pick up spill contaminated materials for recycling or disposal. Save the shipping records for at least three years.

- iii. Waste oil contaminated industrial wipes and sorptive minerals:
 1. Perform the “one drop” test to ensure absorbents do not contain enough oil to be considered hazardous, as described in the MassDEP Waste Oil Management Guide
(<https://www.mass.gov/files/documents/2018/12/18/oilwiper.pdf>).
 2. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.
 3. If absorbents pass the “one drop” test they may be discarded in the trash unless contaminated with another hazardous waste.
 - a. It is acceptable to mix the following fluids and handle them as waste oil:
 - i. Waste motor oil
 - ii. Hydraulic fluid
 - iii. Power steering fluid
 - iv. Transmission fluid
 - v. Brake fluid
 - vi. Gear oil
 - b. **Do not mix** the following materials with waste oil. Store each separately:
 - i. Gasoline
 - ii. Antifreeze
 - iii. Brake and carburetor cleaners
 - iv. Cleaning solvents
 - v. Other hazardous wastes
 4. If absorbents do not pass the “one drop” test they should be placed in separate metal containers with tight fitting lids, labeled “Oily Waste Absorbents Only.”
- If you need assistance containing and/or cleaning up the spill, or preventing it from discharging to a surface water (or an engineered storm drain system), contact your local fire department using the number listed below. **In the case of an emergency call 911.**
 - GEORGETOWN MUNICIPAL FIRE DEPARTMENT: (978) 352-5757
- Contact the MassDEP 24-hour spill reporting notification line, toll-free at **(888)-304-1133**;
 - The following scenarios **are exempt** from MassDEP reporting requirements (see the MassDEP factsheet on oil and hazardous materials handling for more information:
<https://www.mass.gov/files/documents/2016/08/xm/spillmgm.pdf>).
 - i. Spills that are less than 10 gallons of petroleum and do not impact a water body
 - ii. Spills that are less than one pound of hazardous chemicals and do not present an imminent health or safety hazard
 - iii. Fuel spills from passenger vehicle accidents
 - iv. Spills within a vault or building with a watertight floor and walls that completely contain all released chemicals



Reporting a Spill

When contacting emergency response personnel or a regulatory agency, or when reporting the contaminant release, be prepared to provide the following information:

1. Your name and the phone number you are calling from.
2. The exact address and location of the contaminant release.
3. Specifics of release, including:
 - a. What was released;
 - b. How much was released, which may include:
 - i. Pounds
 - ii. Gallons
 - iii. Number of containers
4. Where was the release sent/what was contaminated, addressing:
 - a. Pavement
 - b. Soil
 - c. Drains
 - d. Catch basins
 - e. Water bodies
 - f. Public streets
 - g. Public sidewalks
5. The concentration of the released contaminant.
6. What/who caused the release.
7. Is the release being contained and/or cleaned up or is the response complete.
8. Type and amount of petroleum stored on site, if any.
9. Characteristics of contaminant container, including:
 - a. Tanks
 - b. Pipes
 - c. Valves

Maintenance and Prevention Guidance

Prevention of spills is preferable to even the best response and cleanup. To mitigate the effects of a contaminant release, provide proper maintenance and inspection at each facility. To protect against contaminant release adhere to the following guidance:

- Ensure all employees are properly trained to respond in the case of a spill, understand the nature and properties of the contaminant, and understand the spill control materials and personnel safety equipment. Maintain training records of current personnel on site and retain training records of former personnel for at least three years from the date last worked at the facility.
- Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site.
- Implement good management practices where chemicals and hazardous wastes are stored:
 - a. Ensure storage in closed containers inside a building and on an impervious surface wherever possible.
 - b. If storage cannot be provided inside, ensure secondary containment for 110 percent of the



- maximum volume of the storage container.
- c. Locate storage areas near maintenance areas to decrease the distance required for transfer.
- d. Provide accurate labels, Material Safety Data Sheets (MSDS) information, and warnings for all stored materials.
- e. Regularly inspect storage areas for leaks.
- f. Ensure secure storage locations, preventing access by untrained or unauthorized persons.
- g. Maintain accurate records of stored materials.
- Replace traditional hazardous materials such as pesticides and cleansers with non-hazardous products such as bio-lubricants which can reduce response costs in the case of a spill.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

Employee Training

- Employees who perform work with potential stormwater pollutants annually on proper spill procedures.
- Employees are also trained on stormwater pollution prevention and illicit discharge detection and elimination (IDDE) procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Attachments

1. Spill Response and Cleanup Contact List



Vs1#hvsrqv#lqg#Fndqxs#FrqwdfwDlw#
#

Contact	Phone Number	Date and Time Contacted
Facility Supervisor: Peter Durkee, Highway	(978) 352-5704	
Facility Supervisor: David Schofield, Municipal Light	(978) 352-5730	
Facility Supervisor: James Gallagher, Water Department Operations Manager	(978) 352-5750	
Fire Department: Fred Mitchell, Jr., Fire Chief	(978) 352-5757	
MassDEP 24-Hour Spill Reporting	(888) 304-1133	
MassDEP Regional Offices:		
Northeast Regional Office	(978) 694-3200	
Hazardous Waste Compliance Assistance Line	(617) 292-5898	
Household Hazardous Products Hotline	(800) 343-3420	
Massachusetts Department of Fire Services	(978) 567-3100 or (413) 587-3181	
Licensed Site Professionals Association (Wakefield, MA)	(781) 876-8915	
Licensed Site Professionals Board	(617) 556-1091	



SOP 6: EROSION AND SEDIMENTATION CONTROL

Erosion and sedimentation from land-disturbing human activities can be a significant source of stormwater pollution. This Standard Operating Procedure describes methods for reducing or eliminating pollutant loading from such activities.

Controlling Erosion and Sediment through Design and Planning

Prevention of erosion and sedimentation is preferable to installing treatment devices. Consistent application and implementation of the following guidelines during the design and review phases can prevent erosion and sedimentation:

1. Avoid sensitive areas, steep slopes, and highly erodible soils to the maximum extent possible when developing site plans.
2. Identify potential problem areas before the site plan is finalized and approved.
3. Plan to use sediment barriers along contour lines, with a focus on areas where short-circuiting (i.e., flow around the barrier) may occur.
4. Use berms at the top of a steep slopes to divert runoff away from the slope's edge.
5. Design trapezoidal or parabolic vegetated drainage channels, not triangular.
6. Use vegetated channels with rip rap check dams, instead of impervious pavement or concrete, to reduce the water velocity of the conveyance system.
7. Design a check dam or sediment forebay with level spreader at the exit of outfalls to reduce water velocity of the discharge and collect sediment.
8. Use turf reinforcement matting to stabilize vegetated channels, encourage vegetation establishment, and withstand flow velocities without scouring the base of the channel.
9. Plan open channels to follow land contours so natural drainage is not disrupted.
10. Use organic matting for temporary slope stabilization and synthetic matting for permanent stabilization.
11. Provide a stable channel, flume, or slope drain where it is necessary to carry water down slopes.

Controlling Erosion and Sediment on Construction Sites

During the construction phase, it is important to inspect active sites regularly to ensure that practices are consistent with approved site plans and the site's Stormwater Pollution Prevention Plan (SWPPP) or other document, as required by the municipality's legal authority. The following guidelines apply:

1. Erosion and sediment control features should be constructed before initiating activities that remove vegetated cover or otherwise disturb the site. These shall be installed consistent with the approved site plans and with manufacturer's instructions.
2. Erosion and sediment control devices shall be inspected by the contractor regularly, and maintained as needed to ensure function.



3. In the SWPPP or other document, the contractor shall clearly identify the party responsible for maintaining erosion and sediment control devices.
4. An inspection should be completed of active construction sites every month, at a minimum, to check the status of erosion and sedimentation controls. Refer to SOP 5, "Construction Site Inspection", for construction site stormwater inspection procedures.
5. Existing vegetation should be maintained on site as long as possible.
6. Construction should proceed progressively on the site in order to minimize exposed soil, and disturbed areas should be restored as soon as possible after work has been completed.
7. Stockpiles shall be stabilized by seeding or mulching if they are to remain for more than two weeks.
8. Disturbed areas shall be protected from stormwater runoff by using protective Best Management Practices (BMPs).
9. Clean water shall be diverted away from disturbed areas on construction sites to prevent erosion and sedimentation.
10. Sediment traps and sediment barriers should be cleaned out regularly to reduce clogging and maintain design function.
11. Vegetated and wooded buffers shall be protected.
12. Soils shall be stabilized by mulching and/or seeding when they would be exposed for more than one week during the dry season, or more than two days during the rainy season.
13. Vegetation shall be allowed to establish before introducing flows to channels.
14. Regular light watering shall be used for dust control, as this is more effective than infrequent heavy watering.
15. Excessive soil compaction with heavy machinery shall be avoided, to the extent possible.
16. Construction activities during months with higher runoff rates shall be limited, to the extent possible.

Controlling Erosion and Sediment by Proper Maintenance of Permanent BMPs

Many construction phase BMPs can be integrated into the final site design, but ongoing inspection and maintenance are required to ensure long-term function of any permanent BMP. Refer to SOP 9, "Inspection of Constructed Best Management Practices", for more information. The following guidelines summarize the requirements for long-term maintenance of permanent BMPs.

1. Responsibility for maintaining erosion and sediment control devices shall be clearly identified.
2. Erosion and sediment control devices shall be inspected following heavy rainfall events to ensure they are working properly.
3. Erosion control blankets shall be utilized when seeding slopes.
4. Vegetated and wooded buffers shall be protected, and left undisturbed to the extent possible.
5. Runoff shall not be diverted into a sensitive area unless this has been specifically approved.
6. Sedimentation basins shall be cleaned out once sediment reaches 50% of the basin's design capacity.
7. Snow shall not be plowed into, or stored within, retention basins, rain gardens, or other BMPs.



8. Easements and service routes shall be maintained, to enable maintenance equipment to access BMPs for regular cleaning.

Related Standard Operating Procedures

1. SOP 5, Construction Site Inspection
2. SOP 9, Inspection of Constructed Best Management Practices



SOP 7: Fuel and Oil Handling

Introduction

Spills, leaks, and overfilling can occur during handling of fuels and petroleum-based materials, representing a potential source of stormwater pollution, even in small volumes. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees on a variety of ways by which fuels and petroleum-based materials can be delivered, as well as steps to be taken when petroleum products (such as waste oil) are loaded onto vehicles for offsite disposal or recycling. Delivery, unloading, and loading of waste oils are hereafter referred to as “handling.” Attached is a fuel delivery form checklist.

The Town of Georgetown undertakes various procedures and precautions in handling fuel and oil.

Instructions: Briefly describe the municipality’s current policies for handling fuel and oil. – All Town buildings use natural gas for heating. Fueling of small equipment is conducted at various sites and at the Highway Department Garage and Municipal Light Plant. Spill kits are kept at these facilities and in department vehicles. Fuel is stored in a fire rated cabinet at both facilities. The Light Plant contracts with TSI out of New York to test and dispose of oil for all transformers. TSI keeps all records associated with this work. The Highway Department also collects waste oil from town operations and stores it in covered 55-gallon drums for use in the town’s waste oil burner. Drums are stored on secondary containment.

Procedures

Georgetown will implement the following fuel and oil handling procedures to help reduce the discharge of pollutants from the MS4:

General Guidelines

For all manners of fuel and oil handling described below, a member of the facility’s Pollution Prevention Team (if the facility has a SWPPP) or another knowledgeable person familiar with the facility should be present during handling procedures. This person should ensure that the following are observed:

- There is no smoking while fuel handling is in process or underway.
- Sources of flame are kept away while fuel handling is being completed. This includes smoking, lighting matches, carrying any flame, or carrying a lighted cigar, pipe, or cigarette.
- The delivery vehicle’s hand brake is set and wheels are chocked while the activity is being completed.
- Catch basins and drain manholes are adequately protected.
- No tools are to be used that could damage fuel or oil containers or the delivery vehicle.
- No flammable liquid should be unloaded from any motor vehicle while the engine is operating, unless the engine of the motor vehicle is required to be used for the operation of a pump.
- Ensure that local traffic does not interfere with fuel transfer operations. If it does, make appropriate accommodations.
- The attending persons should watch for any leaks or spills:
 - Any small leaks or spills should be immediately stopped, and spilled materials absorbed and disposed of properly. Follow the procedures in SOP 4: Spill Response and Cleanup.

SOP 7: Fuel and Oil Handling

- In the event of a large spill or one that discharges to surface waters or an engineered storm drain system, the facility representative should activate the facility's Stormwater Pollution Prevention Plan (SWPPP) and report the incident as specified in the document.

Delivery by Bulk (Tanker) Truck

Procedures for the delivery of bulk fuel should include the following:

- The truck driver should check in with the facility upon arrival.
- The facility representative should ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP 4: Spill Response and Cleanup for examples of spill cleanup and response materials.
- The facility representative should check to ensure that the amount of delivery does not exceed the available capacity of the tank.
 - A level gauge can be used to verify the level in the tank.
 - If a level gauge is not functioning or is not present on the tank, the tank should be stick tested prior to filling.
- The truck driver and the facility representative should both remain with the vehicle during the delivery process.
- The truck driver and the facility representative should inspect all visible lines, connections, and valves for leaks.
- When delivery is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
- The delivery vehicle should be inspected prior to departure to ensure that the hose is disconnected from the tank.
- The facility representative should inspect the fuel tank to verify that no leaks have occurred, or that any leaked or spilled material has been cleaned and disposed of properly.
- The facility representative should gauge tank levels to ensure that the proper amount of fuel is delivered, and collect a receipt from the truck driver.

Delivery of Drummed Materials

Drummed materials may include motor oil, hydraulic fluid, transmission fluid, or waste oil from another facility (as approved). Procedures for the delivery of drummed materials should include the following:

- The truck driver should check in with the facility upon arrival.
- The facility representative should ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP 4: Spill Response and Cleanup for examples of spill cleanup and response materials. The facility representative should closely examine the shipment for damaged drums.
 - If damaged drums are found, they should be closely inspected for leaks or punctures.
 - Breached drums should be removed to a dry, well-ventilated area and the contents transferred to other suitable containers.
 - Drums should be disposed of in accordance with all applicable regulations.
- Drummed materials should not be unloaded outdoors during wet weather events.
- The truck driver and the facility representative should both remain with the vehicle during the delivery process.

SOP 7: Fuel and Oil Handling

- Drums should be handled and unloaded carefully to prevent damage.
- Upon completion of unloading, the facility representative should inspect the unloading point and the drums to verify that no leaks have occurred, that any leaked or spilled material has been cleaned up and disposed of properly, and that the unloaded drums are not leaking.
- The facility representative should check to ensure that the proper amount of fuel or other material is delivered, and collect a receipt from the truck driver.

Removal of Waste Oil from the Facility

When waste oil or similar oil products need to be removed from the premises, only haulers certified to transport waste oil should be utilized. Procedures should include the following:

- The disposal truck driver should check in with the facility upon arrival.
- The facility representative should ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP 4: Spill Response and Cleanup for examples of spill cleanup and response materials. The truck driver and the facility representative should both remain with the vehicle during the tank draining process.
- When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
- The facility representative should inspect the loading point and the tank to verify that no leaks have occurred, or that any leaked or spilled material has been cleaned up and disposed of properly.
- The facility representative should collect a receipt from the truck driver.
- When draining bulk oil tanks:
 - The facility representative should verify that the volume of waste oil in the tank does not exceed the available capacity of the disposal hauler's vehicle.
 - The disposal hauler vehicle should be inspected prior to departure to ensure that the hose is disconnected from the tank.

Employee Training

- Employees who handle or deliver fuel and/or oil are trained annually on proper procedures.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Attachments

1. Fuel Delivery Checklist

Related Standard Operating Procedures

- SOP 4: Spill Response and Cleanup

SOP 12: Storage and Use of Pesticides and Fertilizer

Introduction

The use and improper storage of pesticides, herbicides, and fertilizers can contribute to the discharge of nutrients and toxic compounds to the municipal storm drainage system and surface waters. The goal of this Standard Operating Procedure (SOP) is to provide guidance on municipal employees on proper handling and storage of pesticides, herbicides, and fertilizers to prevent the discharge of pollutants from the MS4.

Instructions: Briefly describe the municipality's current policies for the use, storage, handling, and disposal of fertilizers, pesticides, and herbicides. The Town sub-contracts out use of herbicides or pesticides on its properties. Fertilizer is applied by the municipality at select sites. Fertilizers are stored at some municipal buildings no more than 500lbs.

Procedures

Below are procedures for the storage and use of fertilizers, pesticides, and herbicides by municipal employees. In this section, the term “pesticide” include products used as herbicides. Refer to SOP 4: Spill Response and Cleanup and SOP 17: Hazardous Materials Storage and Handling for information on and handling spills and hazardous materials.

Storage

- Store pesticides and fertilizers in high, dry locations in accordance with the manufacturer's specifications.
- Store in cool, well-ventilated, and insulated areas to protect against temperature extremes.
- Store in areas that have been constructed in accordance with local fire codes for storing flammable or combustible materials.
 - Flammable products should be stored separately from non-flammable products, preferably in a fire-proof cabinet.
 - Small quantities (less than 500 lbs. or 220 gallons) of pesticides can be stored in cabinets constructed of double-walled 18-gauge sheet metal.
 - Large quantities (greater than 500 lbs. or 220 gallons) of pesticides can be stored in a prefabricated Hazardous Material Storage building or in a purpose-built storage facility. It is not anticipated that many municipal facilities will store quantities in excess of 500 lbs. or 220 gallons of pesticides.
 - Building walls should have a two-hour fire rating and be impervious to the stored materials.
 - Floors should be watertight, impervious, and provide spill containment.
- Store materials in an enclosed area or in covered, impervious containment, such as a locked cabinet. The cabinet should be located in a first story room or one that has direct access to the outdoors. Storage areas should be equipped with easily accessible spill cleanup materials and portable firefighting equipment. Regularly inspect storage areas for leaks and spills. Emergency eyewash stations and emergency drench showers should be located near the storage area.
- For pesticides, storage cabinets should be kept locked and the door to the storage area should contain a weather proof sign that warns of the existence and danger of the pesticides inside. The door should be kept locked. The sign should be visible at a distance of 25 feet and should read as follows:

DANGER
PESTICIDE STORAGE AREA
ALL UNAUTHORIZED PERSONS KEEP OUT
KEEP DOORS LOCKED WHEN NOT IN USE

The sign should be posted in both English and any other language used by maintenance workers.

- Pesticides should not be stored in the same place as ammonium nitrate fertilizer.
- Separate pesticides and fertilizers from other chemical storage and other flammable materials.
- Label all containers with date of purchase. Clearly label all secondary containers. Use older materials first.
- Order for delivery as close to the time of use as possible to reduce the amount of chemicals stored at the facility.
- Order only the amount of materials needed in order to minimize excess or obsolete materials, which require storage and disposal.
- Never leave unlabeled or unstable pesticides and fertilizers in uncontrolled locations.
- Maintain a current written inventory of all pesticides and fertilizers at the storage site.
- Ensure that contaminated waste materials are kept in designated containers and stored in labeled, designated, covered, and contained areas.
- Dispose of excess or obsolete pesticides/fertilizers and associated waste materials in accordance with the manufacturer's specification and all applicable regulations.

Use and Application of Fertilizers

- All fertilizer products manufactured or distributed in the State of Massachusetts must be registered with the Department of Agricultural Resources.
- Perform soil testing before choosing a fertilizer. The quantity of available nutrients already present in the soil will determine the type and amount of fertilizer that is recommended. The soil test will also determine the soil pH, humic matter, texture, and exchangeable acidity, which will indicate whether pH adjustment is required for fertilizer to work efficiently. A soil test should be completed at each facility, as soil type can vary widely within a single community.
 - Soil tests are recommended every 3-4 years for turf and plantings (more frequently for problem or newly planted areas) and every year for soil where phosphorus-containing fertilizers are used. Soil pH tests should be conducted every year for all sites.
 - When collecting soil samples, take multiple samples for each target area at a four-inch depth; mix the samples together in a container and properly label the sample with property information and site use type. Separately sample areas that have discoloration, abnormal plant growth, or other problems. Take the sample at approximately the same time every year. If the area has been fertilized, wait eight weeks after fertilizing to test the soil to ensure nutrients have been absorbed.
- When selecting the optimal type of fertilizer to use on an area, consider the soil test results, type of turf, and type of turf use. Slow-use fertilizer should be used for turf grass.
- Calibrate application equipment regularly to ensure proper application and loading rates.
- Mix fertilizers using clean application equipment under cover in an area where accidental spills will not enter surface water or groundwater and will not contaminate the soil.

- Fertilizers should only be applied by properly trained personnel.
- Never apply fertilizers in quantities exceeding the manufacturer's instructions. Instead, apply small amounts throughout the growing season.
- Time fertilizer application methods for maximum plant uptake, usually in the fall and spring (e.g., between April 15 and October 15). When applying at the beginning and end of planting season, take into consideration the slower uptake rate of fertilizer by plants and adjust the fertilizer application accordingly.
- Never apply fertilizer during a drought, when the soil is dry or frozen, when it is raining, or immediately before expected rain.
- Fertilizer should be applied when the ground temperature is above 55° F.
- Apply fertilizers in amounts appropriate for the type of vegetation to minimize losses to surface water and groundwater. Use the results of the soil test to determine optimal fertilizer timing and application rates.
- Where applicable, till fertilizers into the soil rather than dumping or broadcasting (proper application techniques will depend on the type of soil and vegetation).
- Do not hose down paved areas after fertilizer application if drainage will enter into an engineered storm drain system or drainage ditch.
- Limit irrigation after fertilizer application to prevent runoff (approximately ½ inch of water per application for a week following application).
- Turn off irrigation systems during periods of adequate rainfall.
- Do not over-apply fertilizer in late fall to “use it up” before winter. The effectiveness of fertilizer does not reduce when stored.
- If phosphorus fertilizer is used when re-seeding, mix the phosphorus into the root zone. Do not apply directly to the soil surface.
- Avoid combined products such as “weed and feed,” which do not target specific problems at the appropriate time.

Use and Application of Pesticides and Herbicides

The State of Massachusetts has a stringent program for registration of pesticides and certification of those authorized to apply them. Once a pesticide has been approved for use by the USEPA, it must be registered by the Massachusetts Pesticide Board Subcommittee prior to being distributed, purchased, or used in Massachusetts. Pesticide classification in Massachusetts is based on the potential adverse effects the pesticide may have on humans or the environment. “Restricted Use” pesticides can only be sold by Licensed Dealers to Certified Applicators, while “State Limited Use” pesticides may be restricted to use by certain individuals or require written permission from the Department of Agricultural Resources prior to use. Legal application of pesticides must be performed by an individual licensed or certified by the Massachusetts Department of Agricultural Resources. A Commercial Applicator License is required for applying general use pesticides, and a Commercial Applicator Certification is required for applying restricted and state limited use products.

Use and Application of Pesticides

- Pesticides should only be applied by licensed or certified applicators.
- Calibrate application equipment regularly to ensure proper application and loading rates.
- Ensure that pesticide application equipment is capable of immediate shutoff in case of emergency.

SOP 12: Storage and Use of Pesticides and Fertilizer

- Conduct spray applications according to specific label directions and applicable local regulations.
- Never apply pesticides in quantities exceeding the manufacturer's instructions.
- Apply pesticides at the life stage when the pest is most vulnerable.
- Never apply pesticides if it is raining or immediately before expected rain.
- Establish setback distances from pavement, storm drains, and waterbodies, which act as buffers from pesticide application, with disease-resistant plants and minimal mowing.
- Do not apply pesticides within 100 feet of open waters or of drainage channels.
- Spot treat infected areas instead of the entire location.
- Mix pesticides and clean application equipment under cover in an area where accidental spills will not enter surface water or groundwater and will not contaminate soil.
- Do not hose down paved areas after pesticide application to a storm drain or drainage ditch.
- Recycle rinsate from equipment cleaning back into product.
- Choose the least toxic pesticide that is still capable of reducing the infestation to acceptable levels.
- Use alternatives to pesticides, such as manual weed control, biological controls, and Integrated Pest Management strategies (learn more at: <https://www.mass.gov/files/documents/2016/08/wk/ipm-kit-for-bldg-mgrs.pdf>).
- For the use of herbicides, reduce seed release of weeds by timing cutting and pesticide application at seed set. Select vegetation and landscaping that is low-maintenance in order to tolerate low levels of weeds without interfering with aesthetics.

Employee Training

- Employees who handle pesticides, fertilizers, and herbicides are trained annually on proper handling and storage procedures.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Related Standard Operating Procedures

- SOP 4: Spill Response and Cleanup
- SOP 17: Hazardous Materials Storage and Handling

SOP 14: MUNICIPAL VEHICLE WASHING PROCEDURES

Introduction

Vehicle washing activities can result in the discharge of nutrients, sediment, petroleum products, and other contaminants to a surface water body or to an engineered drainage system.

Consistent with the 2003 USEPA NPDES Phase II Small Municipal Separate Storm Sewer System (MS4) Permit, municipal vehicle washing activities should not discharge pollutants to the MS4 system.

Outdoor Vehicle Washing Procedures

Outdoor washing of municipal vehicles should be avoided unless wash water is contained in a tight tank or similar structure. Where no alternate wash system is available, and full containment of wash water cannot be achieved, the following procedures shall be followed:

1. Avoid discharge of any wash water directly to a surface water (e.g., stream, pond, drainage swale, etc.)
2. Minimize use of water to the extent practical.
3. Where use of detergent cannot be avoided, use products that do not contain regulated contaminants. Use of a biodegradable, phosphate-free detergent is preferred.
4. Do not use solvents except in dedicated solvent parts washer systems or in areas not connected to a sanitary sewer.
5. Do not power wash, steam clean or perform engine cleaning or undercarriage cleaning.
6. Grassy and pervious (porous) surfaces may be used to promote direct infiltration of wash water, providing treatment before recharging groundwater and minimizing runoff to an adjacent stormwater system. Pervious surfaces or other infiltration-based systems shall not be used within wellhead protection areas or within other protected resources.
7. Impervious surfaces discharging to engineered storm drain systems shall not discharge directly to a surface water unless treatment is provided. Treatment can include a compost-filled sock designed specifically for removal of petroleum and nutrients, such as the Filtrexx™ FilterSoxx product, or equal. The treatment device shall be positioned such that all drainage must flow through the device, preventing bypassing or short-circuiting.
8. All adjacent engineered storm drain system catch basins shall have a sump. These structures shall be cleaned periodically (refer to SOP 3, "Catch Basin Inspection and Cleaning").
9. Solids and particulate accumulation from the washing area shall be completed through periodic sweeping and/or cleaning.
10. Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities. Clean up any spills using the procedures described in SOP 4, "Spill Response and Cleanup Procedures".

Heavily soiled vehicles or vehicles dirtied from salting or snow removal efforts shall not be washed outside, without exception.



Indoor Vehicle Washing Procedures

Indoor vehicle washing procedures shall include the following:

1. Where use of detergent cannot be avoided, use products that do not contain regulated contaminants. Use of a biodegradable, phosphate-free detergent is preferred.
2. Detergents shall not be used in areas where oil/water separators provide pre-treatment of drainage (refer to SOP 11, “Oil/Water Separator Maintenance”, for more information).
3. Floor drains shall be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface water bodies or engineered storm drain systems shall be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
4. Designate separate areas for routine maintenance and vehicle cleaning. This helps prevent contamination of wash water by motor oils, hydraulic lubricants, greases, etc.
5. Dry clean-up methods, such as sweeping and vacuuming, are recommended within garage facilities. Do not wash down floors and work areas with water.
6. Bring smaller vehicles to commercial washing stations.
7. Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities. Clean up any spills using the procedures described in SOP 4, “Spill Response and Cleanup Procedures”.

Heavy Equipment Washing Procedures

Heavy equipment washing procedures shall include the following:

1. Mud and heavy debris removal shall occur on impervious pavement or within a retention area.
2. Maintain these areas with frequent mechanical removal and proper disposal of spoils.
3. All adjacent engineered storm drain system components shall have a sump. These structures shall be cleaned periodically (refer to SOP 3, “Catch Basin Inspection and Cleaning”).
4. Impervious surfaces with engineered storm drain systems shall not discharge directly to a surface water.
5. Floor drains shall be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface water bodies or engineered storm drain systems shall be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
6. Where use of detergent cannot be avoided, use products that do not contain regulated contaminants. Use of a biodegradable, phosphate-free detergent is preferred.
7. Detergents shall not be used in areas where oil/water separators provide pre-treatment of drainage (refer to SOP 11, “Oil/Water Separator Maintenance”, for more information).
8. Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities. Clean up any spills using the procedures described in SOP 4, “Spill Response and Cleanup Procedures”.



Engine Washing and Steam Washing Procedures

Engine and steam washing procedures shall include the following:

1. Do not wash parts outdoors.
2. Maintain drip pans and smaller containers to contain motor oils, hydraulic lubricants, greases, etc. and to capture and collect spills or noticeable leaks observed during washing activities, to the extent practicable. Clean up any spills using the procedures described in SOP 4, “Spill Response and Cleanup Procedures”.
3. Where use of detergent cannot be avoided, use products that do not contain regulated contaminants. Use of a biodegradable, phosphate-free detergent is preferred.
4. Avoid cleaning with solvents except in dedicated solvent parts washer systems. Make use of pressure washing and steam cleaning.
5. Recycle clean solutions and rinse water to the extent practicable.
6. Wash water shall discharge to a tight tank or a sanitary sewer via an oil/water separator. Detergents shall not be used in areas where oil/water separators provide pre-treatment of drainage (refer to SOP 11, “Oil/Water Separator Maintenance”, for more information).

Related Standard Operating Procedures

1. SOP 3, Catch Basin Inspection and Cleaning
2. SOP 4, Spill Response and Cleanup Procedures
3. SOP 11, Oil/Water Separator Maintenance



SOP 17: Hazardous Materials Storage and Handling

Introduction

A hazardous material is any biological, chemical, or physical material with properties that make it dangerous or potentially harmful to human health or the environment. Hazardous materials can be released to the environment in a variety of ways. When hazardous materials come into contact with rain or snow, the pollutants are washed into the storm sewer system and to surface waterbodies and/or groundwater. Hazardous materials associated with municipal facilities and their operations include, but are not limited to, oil, gasoline, antifreeze, fertilizers, pesticides, and de-icing agents and additives.

Municipally owned or managed facilities where hazardous materials are commonly stored and handled include:

- Equipment storage and maintenance yards
- Hazardous waste disposal facilities
- Hazardous waste handling and transfer facilities
- Composting facilities
- Materials storage yards
- Municipal buildings and facilities (e.g., schools, libraries, police and fire departments, town offices, municipal pools, and parking garages)
- Public works yards
- Solid waste handling and transfer facilities
- Vehicle storage and maintenance yards
- Water and wastewater facilities

Minimizing or eliminating contact of hazardous materials with stormwater can significantly reduce pollution of receiving waters. Proper hazardous material handling and storage also contributes to employee health, an organized workplace, and efficient operations. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to help prevent stormwater pollution resulting from the handling and storage of hazardous materials. If services are contracted, this SOP should be provided to the contractor. The contract should also specify that the contractor is responsible for compliance with all applicable laws.

The Town of Georgetown undertakes various activities in regards to handling and storing hazardous materials.

Instructions: Briefly describe the municipality's spill response procedures, spill maintenance, spill guidance, etc.- Fill equipment outside wetlands area. Have spill kit nearby. Do not fill equipment on grass areas. Call fire department when over eight gallons call DEP

Procedures

The Town of Georgetown will implement the following procedures for handling and storing hazardous materials to reduce the discharge of pollutants to the MS4:

Handling, Loading, and Unloading

- Avoid loading/unloading materials in the rain and/or provide cover.
- Retrace areas where materials have been transferred to identify spills. If spills are found, immediately clean them up. Follow procedures in SOP 4: Spill Response and Cleanup.
- Time delivery and handling of materials during favorable weather conditions whenever possible (e.g., avoid receiving loads of sand during windy weather).
- Inspect containers for material compatibility and structural integrity prior to loading/unloading any raw or waste materials.
- Use dry cleanup methods (e.g., squeegee and dust pan, sweeping, and absorbents as last step) rather than hosing down surfaces.

Material Storage

- Confine material storage indoors whenever possible. Plug or disconnect floor drains that lead to the stormwater system.
- Confine outdoor material storage to designated areas that are covered, on impervious surfaces, away from high traffic areas, and outside of drainage pathways.
- Store containers on pallets or equivalent structures to facilitate leak inspection and to prevent contact with wet floors that can cause corrosion. This technique also reduces incidences of container damage by insects and rodents.
- Store materials and waste in materially compatible containment units.
- Keep hazardous materials in their original containers.
- If materials are not in their original containers, clearly label all storage containers with the name of the chemical, the expiration date, and handling instructions.
- Maintain an inventory of all raw and waste materials to identify leakage. Order new materials only when needed.
- Provide secondary containment for storage tanks and drums with sufficient volume to store 110 percent of the volume of the material.
- Provide sufficient aisle space to allow for routine inspections and access for spill cleanup.
- Inspect storage areas for spills or leaks and containment units for corrosion or other failures.

Waste Treatment, Disposal, and Cleanup

- Adopt a regular schedule for the pick-up and disposal of waste materials.
- Recycle leftover materials whenever possible.
- Substitute nonhazardous or less-hazardous materials for hazardous materials whenever possible.
- Protect empty containers from exposure to stormwater and dispose of them regularly to avoid contamination from container residues.

Employee Training

- Employees who handle and use hazardous materials are trained annually on these procedures.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.

SOP 17: Hazardous Materials Storage and Handling

- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Related Standard Operating Procedures

1. SOP 4: Spill Response and Cleanup



Appendix B

Spill Documentation Forms

Significant Spills, Leaks or Other Releases

Instructions:

- Include the descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to waters of the U.S., through stormwater or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases .
- Provide information, as shown below, for each incident, and attach additional documentation (e.g., photos, spill cleanup records) as necessary. Repeat as necessary by copying and pasting the fields below.

Date of incident: [Insert Date of Incident](#)

Location of incident: [Insert Location of Incident](#)

Description of incident: [Insert Description of Incident](#)

Circumstances leading to release: [Describe circumstances leading to release](#)

Actions taken in response to release: [Describe actions taken in response to release](#)

Measures taken to prevent recurrence: [Describe measures taken to prevent recurrence](#)

Date of incident: [Insert Date of Incident](#)

Location of incident: [Insert Location of Incident](#)

Description of incident: [Insert Description of Incident](#)

Circumstances leading to release: [Describe circumstances leading to release](#)

Actions taken in response to release: [Describe actions taken in response to release](#)

Measures taken to prevent recurrence: [Describe measures taken to prevent recurrence](#)

Date of incident: [Insert Date of Incident](#)

Location of incident: [Insert Location of Incident](#)

Description of incident: [Insert Description of Incident](#)

Circumstances leading to release: [Describe circumstances leading to release](#)

Actions taken in response to release: [Describe actions taken in response to release](#)

Measures taken to prevent recurrence: [Describe measures taken to prevent recurrence](#)

Date of incident: [Insert Date of Incident](#)

Location of incident: [Insert Location of Incident](#)

Description of incident: [Insert Description of Incident](#)

Circumstances leading to release: [Describe circumstances leading to release](#)

Actions taken in response to release: [Describe actions taken in response to release](#)

Measures taken to prevent recurrence: [Describe measures taken to prevent recurrence](#)

Appendix C

Training Documentation and Attendance Sheets



Employee Training

Instructions:

- Keep records of employee training, including the date of the training.
- For in-person training, consider using the tables below to document your employee trainings. For computer-based or other types of training, keep similar records on who was trained and the type of training conducted.

Training Date: Insert Date of Training	
Training Description (including duration and subjects covered): Insert Description of Training	
Trainer: Insert Trainer(s) names	
Employee(s) trained	Employee signature
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	

Training Date: Insert Date of Training	
Training Description (including duration and subjects covered): Insert Description of Training	
Trainer: Insert Trainer(s) names	
Employee(s) trained	Employee signature
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	

Training Date: Insert Date of Training	
Training Description (including duration and subjects covered): Insert Description of Training	
Trainer: Insert Trainer(s) names	
Employee(s) trained	Employee signature
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	

Appendix D

Facility Inspection Form

Site Inspection Reports

Instructions:

- Include in your records copies of all routine facility inspection reports completed for the facility.
- The sample inspection report is consistent with the requirements in the 2016 Massachusetts MS4 Permit relating to site inspections. If MassDEP provides you with an inspection report, use that form.

Using the Sample Site Inspection Report

- This inspection report is designed to be customized according to the specific control measures and activities at your facility. For ease of use, you should take a copy of your site plan and number all of the stormwater control measures and areas of industrial activity that will be inspected. A brief description of the control measures and areas that were inspected should then be listed in the site-specific section of the inspection report.
- You can complete the items in the “General Information” section that will remain constant, such as the facility name and inspector (if you only use one inspector). Print out multiple copies of this customized inspection report to use during your inspections.
- When conducting the inspection, walk the site by following your site map and numbered control measures/areas of industrial activity to be inspected. Also note whether the “Areas of Materials or Activities exposed to stormwater” have been addressed (customize this list according to the conditions at your facility). Note any required corrective actions and the date and responsible person for the correction.

Stormwater Site Inspection Report

General Information			
Facility Name	Insert Name		
Date of Inspection	Insert Date	Start/End Time	Insert Start/End Time
Inspector's Name(s)	Insert Name		
Inspector's Title(s)	Insert Title		
Inspector's Contact Information	Insert Contact Info		
Inspector's Qualifications	Insert qualifications or add reference to the SWPPP		
Weather Information			
Weather at time of this inspection? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snow <input type="checkbox"/> High Winds <input type="checkbox"/> Other: _____ Temperature: _____			
Have any previously unidentified discharges of pollutants occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: Describe			
Are there any discharges occurring at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: Describe			

Control Measures

- Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
1	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions
2	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions
3	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions
4	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions
5	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions
6	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions
7	Insert Control Measure	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance	Describe Corrective Actions

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
	Name		<input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
8	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions
9	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions
10	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Corrective Actions

Areas of Materials or Activities exposed to stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
2	Equipment operations and maintenance areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
3	Fueling areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
4	Outdoor vehicle and equipment washing areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
5	Waste handling and disposal areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
6	Erodible areas/construction	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
7	Non-stormwater/ illicit connections	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
8	Salt storage piles or pile containing salt	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
9	Dust generation and vehicle tracking	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
10	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
11	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions
12	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Corrective Actions

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

[Describe Non-compliance](#)**Additional Control Measures**

Describe any additional control measures or changes to the SWPPP needed to comply with the permit requirements:

[Describe Additional Controls Needed](#)**Notes**

Use this space for any additional notes or observations from the inspection:

[Additional Notes](#)

Print inspector name and title:

Signature:_____ **Date:**_____

Quarterly Visual Assessment Reports – additional form when stormwater discharge is occurring

Instructions:

- Include in your records copies of all quarterly visual assessment reports completed for the facility. An example quarterly visual assessment report can be found on the following page.
- At least one quarterly inspection per year must occur while stormwater is discharging.

Quarterly Visual Assessment Form– additional form when stormwater discharge is occurring

(Complete a separate form for each outfall you assess)

Name of Facility: [Name of Facility](#)

Outfall Name: [Name](#) "Substantially Identical Outfall"? ☐ No ☐ Yes ([identify substantially identical outfalls](#)):

Person(s)/Title(s) collecting sample: [Name/Title](#)

Person(s)/Title(s) examining sample: [Name/Title](#)

Date & Time Discharge Began (approx.):

[Enter date and time](#)

Date & Time Visual Sample Collected:

[Enter date and time](#)

Date & Time Visual Sample Examined:

[Enter date and time](#)

Nature of Discharge: ☐ Rainfall ☐ Snowmelt

Parameter

Color ☐ None ☐ Other ([describe](#)):

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other ([describe](#)):

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☐ No ☐ Yes ([describe](#)):

Settled Solids* ☐ No ☐ Yes ([describe](#)):

Suspended Solids ☐ No ☐ Yes ([describe](#)):

Foam (gently shake sample) ☐ No ☐ Yes ([describe](#)):

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other ([describe](#)):

Other Obvious Indicators ☐ No ☐ Yes ([describe](#)):
of Stormwater Pollution

* Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary). [Insert details](#)

A. Name:

B. Title:

C. Signature:

D. Date Signed: