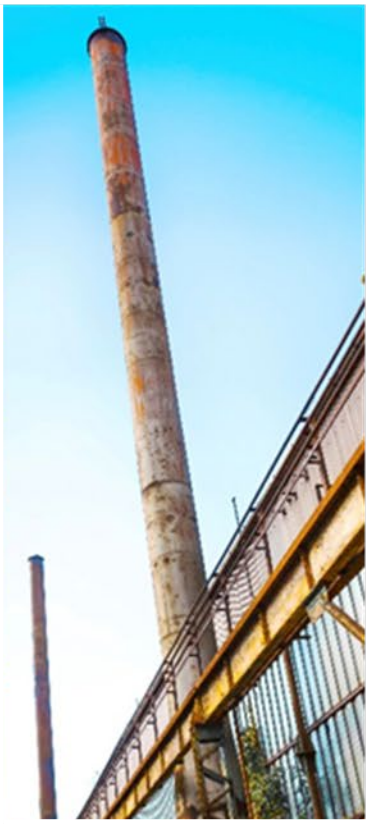
Stormwater Pollution Prevention Plan (SWPPP)

Highway Department

Town of Halifax, MA



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1. Introduction

This Stormwater Pollution Prevention Plan (SWPPP) has been developed by GHD Inc. for the Town of Halifax, Massachusetts to address the requirements of the United States Environmental Protection Agency's (USEPA) 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, within the regulated community, address the 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)
6. Good Housekeeping and Pollution Prevention for Permittee Owned Operations

According to 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 includes the following items and management practices:

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

2. Detailed Facility Assessment

2.1 Facility Summary

The Halifax Highway Department's Highway Garage (the Facility) is located at 60 Hemlock Lane, Halifax, MA 02338 and is owned and operated by the Town of Halifax (Town).

The Highway Department is primarily responsible for coordinating and conducting activities at, and maintenance of, the facility.

Figure 2.1 Halifax Highway Garage

2.2 Site Inspection

The site inspection associated with the development of this SWPPP was completed by GHD Inc. on May 14, 2020.

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

2.3 Pollution Prevention Team

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

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

- Implementing, administering, and revising the SWPPP.
- Regularly inspecting stormwater control structures.

- Conducting stormwater training.
- Recordkeeping.

Leader	Steve Hayward
Title	Highway Surveyor
Office Phone	781-293-1760
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	Steve Hayward
Title	Highway Surveyor
Office Phone	781-293-1760
Responsibilities	Oversees and administers the road/highway program; oversees the department's good housekeeping activities; acts as spill response coordinator; conducts roadway, facility, and infrastructure inspections; administers employee training programs; assists/implements sampling/visual monitoring.
Member	Dave Swanson
Title	Working Foreman
Office Phone	781-293-1760
Responsibilities	Assists in all components of the stormwater program, including system installation, inspection, maintenance, and operation; is responsible for storage and deployment of spill kits that are kept at the highway garage.

Should the Town have specific questions regarding stormwater and stormwater pollution prevention pertaining to this SWPPP, they will contact Massachusetts Department of Environmental Protection (MassDEP) as indicated below.

Agency	MassDEP
Contact	Laura Schifman
Office Phone	617-556-1157
Responsibilities	Assists in all components of stormwater related issues.

2.4 Description of the Facility

The primary purpose of the highway garage is to serve as the central office, material storage facility, and maintenance and storage garage for all highway department equipment and vehicles.

The highway garage was built on a 10.2 acre parcel next to the Halifax Central Cemetery. The site also has an accessory building to the rear that serves as additional maintenance and storage.

2.5 Activities Occurring at the Facility

The following activities frequently occur at the facility:

- Building maintenance.

- Fueling operations.
- Chemical unloading, handling, and storage (paint and flammables).
- Material storage.
- Salt storage.
- Solid waste management (including scrap metal).
- Tool storage.
- Vehicle and equipment storage.
- Vehicle and equipment maintenance/repair (including oil changes).
- Vehicle and equipment washing.
- Waste handling and disposal.
- Waste oil storage.

2.6 Features of the Facility

The following list of features at the facility can be found on Attachment 1. A brief description of each feature is outlined below:

- Structural stormwater pollution control measures (see Section 3 for more information).
- Floor drains (see Section 2.7.7 for more information).
- Salt piles.
- Solid waste management.
- Snow disposal.
- Pesticides or Fertilizers.
- Fueling areas.
- Vehicle and equipment storage.
- Vehicle washing areas.
- Chemical storage areas (paint and fuel lockers).
- Waste handling and disposal.
- Materials stockpiles.
- Aboveground storage tanks (see Section 4.4 for more information).

2.7 Potential Pollution Sources and Prevention Measures

The Town of Halifax will comply with the SWPPP management practices outlined below, which are intended to identify and prevent pollution sources related to stormwater. Please refer to the Halifax Municipal Stormwater Infrastructure Operations and Maintenance (O&M) Plan for more information.

1. Minimize or prevent exposure by locating materials and related activities inside and protecting them with storm-resistant covers. This practice will reduce the risk of material exposure to rain, snow, snowmelt, and runoff, which could otherwise be discharged either directly or indirectly to surface waters. Materials do not need to be covered or enclosed if runoff from affected areas will not discharge directly or indirectly to surface waters.
2. Practice good housekeeping by keeping clean all areas that are potential sources of pollutants. This practice includes regular sweeping of floors, cleaning up spills from damaged containers, and keeping leaking vehicles indoors.
3. Practice preventative maintenance which includes testing, inspecting, maintaining, and repairing all equipment to prevent cross-contamination of leaking pollutants and stormwater. Inspections must occur at minimum once per quarter.

Site-specific potential pollutants that may be found at the Facility and a description of how to prevent pollution from coming in contact with stormwater are outlined in the following sections.

2.7.1 Salt Piles

The Town uses and stores salt during winter months to aid in deicing of roadways and parking lots. Salt is stored in a covered and enclosed salt shed; loaded and unloaded regularly at the facility especially during winter but may be stored throughout the entire year as well. If left uncovered outdoors, rainfall and snowmelt can facilitate movement of this pollutant into runoff and eventually into receiving waters or groundwater.

All salt piles must be stored in a weatherproof, protected shelter where it is difficult to come into contact with precipitation. In addition, best management practices must be employed when it comes to application methods and spreading rate.

2.7.2 Solid Waste Management

Solid waste produced or stored onsite has the potential to contaminate stormwater with pathogens, nutrients, heavy metals, and sediments. Solid waste may be classified as both hazardous and non-hazardous waste and may consist of agricultural, construction and demolition, dead animal, industrial, municipal, and tire waste.

To reduce the risk of contaminating stormwater with solid waste, it is essential to follow all best management practices regarding handling, storage, and disposal of solid wastes. All personnel must properly dispose of solid waste in a separate area or container intended for each stream of waste. Solid waste at the Facility will be stored and handled in secure, weatherproof, contained area. Any time solid waste is spilled, leaking, or has breached a storage container, personnel must exercise approved cleanup methods to safely mitigate the situation.

2.7.3 Snow Disposal

During winter months, snow is plowed and stored at the edges of the parking lot at the Facility to allow for safe vehicular and pedestrian traffic. Snow is commonly contaminated with salt, sand, oil, trash and other pollutants commonly found at the Facility, and once it melts, can easily combine with runoff and enter receiving waters or groundwater.

Snow disposal areas are strategically located away from all receiving waters, engineered drainage systems, or areas where it may flow offsite. The Town will comply with the most recent revision of the MassDEP Snow Disposal Guidance Document, including the following items:

- Avoid dumping snow in Zone A and Zone II water supply areas.
- Avoid storage or disposal of snow or ice in Interim Wellhead Protection Areas (IWPA) of public water supply wells, and within 75 feet of a private well, where road salt may contaminate water supplies.
- Avoid dumping snow into any waterbody, including rivers, the ocean, reservoirs, ponds, or wetlands. In addition to water quality impacts and flooding, snow disposed of in open water can cause navigational hazards when it freezes into ice blocks.
- Avoid dumping snow on MassDEP-designated high and medium-yield aquifers where it may contaminate groundwater.
- Avoid dumping snow in sanitary landfills and gravel pits. Snow meltwater will create more contaminated leachate in landfills posing a greater risk to groundwater; and in gravel pits, there is little opportunity for pollutants to be filtered out of the meltwater because groundwater is close to the land surface.
- Avoid disposing of snow on top of storm drain catch basins or in stormwater drainage systems including detention basins, swales, or ditches. Snow combined with sand and debris may block a stormwater drainage system, causing localized flooding. A high volume of sand, sediment, and litter released from the snow may be quickly transported through the system into surface water.

2.7.4 Pesticides or Fertilizers

The Town does not store pesticides and fertilizers at the Facility. However, they may choose to do so in the future. If so, the chemicals commonly found in pesticides and fertilizers can contaminate stormwater with toxic compounds and excessive nutrients. It is critical to apply these types of chemicals at the application rate directed by the manufacturer; excessive application rates can increase concentrations in stormwater and degrade water quality. Improper storage also increases the risk of spills, leaks, and the likelihood of coming in contact with stormwater.

The Town will correctly store, apply, and dispose of all pesticides and fertilizers according to the manufacturer's guidelines and other applicable state, local, and federal guidelines. When required, a licensed professional will handle and apply pesticides and fertilizers.

2.7.5 Fueling Areas

An island containing two fuel pumps with aboveground fuel storage of 6,000 gallons of unleaded fuel, and 4,000 gallons of diesel fuel, is located to the south of the operations building and are typically used for fueling municipal vehicles. The tanks are relatively new and utilize a dual-walled secondary containment system to safeguard against leaks. The fuel island is not covered, and uses a control panel for secure access by municipal employees only.

The Facility staff will practice regular preventative maintenance and routine spill prevention and cleanup response as identified in section 4.3, 4.4 and in the O&M Plan. Should a spill occur, there are spill kits in the following locations:

- (1) spill kit at the fuel island
- (2) spill kits in the front garage
- (2) 30-gallon cans with speedy dry in the front garage
- (1) spill kit in the rear garage
- (1) can with speedy dry in the rear garage

2.7.6 Vehicle and Equipment Storage and Repair

The Facility is regularly used for vehicle and equipment storage activities, and can be considered a potential source of pollution. All vehicles and equipment with a combustion engine require hydrocarbon fuel, oils, hydraulic fluid, antifreeze, and greases, all of which are considered pollution and must be kept from coming into contact with stormwater.

The Facility staff will practice regular preventative maintenance on all vehicles and equipment to reduce the risk of leak and spills. Equipment will be stored either indoors or on a safe surface that will not convey runoff to receiving waters or other drainage systems. All leaks and spills related to vehicle and equipment storage will be cleaned up according to the manufacturer's recommendations and comply with all local, state, and federal guidelines. All spent fluids (i.e. used oil) will be disposed of per MassDEP and USEPA guidelines.

2.7.7 Vehicle and Equipment Washing

The Town performs routine vehicle and equipment washing at the Facility on their outdoor wash slab. The wash water travels along the concrete slab to a collection basin where solids can settle out and water can evaporate, infiltrate or be stored. These types of activities can transport detergents, pollutants, nutrients, and sediments into groundwater, stormwater controls, and receiving waters. In addition, if equipment is washed inside, there are two floor drains utilized to collect and convey washwater to two separate tight tanks in the Facility yard. The tanks are frequently monitored, cleaned, and scheduled to be emptied (by a subcontractor) when necessary.

To reduce these pollutants from entering the environment, it is critical to keep wash water contained and prevent it from accessing groundwater, surface water, and stormwater. When possible, using a phosphate-free or other environmentally friendly detergent is recommended. Please refer to the O&M Plan for more information.

2.7.8 Chemical Storage Areas (paint and/or fuel)

The Town currently has two chemical storage lockers in the garage, one that holds paints and one that holds fuel canisters. The lockers are rated for flammables and offer a containment pan on the bottom of the locker. The Town understands that improper storage increases the risk of spills, leaks, and the likelihood of coming in contact with stormwater.

The Town will correctly store, apply, and dispose of all chemicals according to the manufacturer's guidelines and other applicable state, local, and federal guidelines. Should a spill occur, there are spill kits in the following locations:

- (2) spill kits in the front garage

- (2) 30-gallon cans with speedy dry in the front garage
- (1) spill kit in the rear garage
- (1) can with speedy dry in the rear garage

2.7.9 Waste Handling and Disposal

The Facility routinely handles and disposes of various wastes, which if not managed correctly, could contaminate stormwater with nutrients, fertilizers, pesticides, viruses, bacteria, and sediment. These wastes can be classified into the following categories: solid waste, hazardous waste, pesticides/fertilizers, petroleum products, and detergents. Each category of waste has its own unique set of handling and disposal requirements, but in general, the following best management practices should be followed at all times:

1. Always handle and dispose of wastes in accordance with manufacturer's recommendations, and local, state and federal guidelines.
2. Collection and storage areas must be located in upland areas that do not drain to receiving waters.
3. Storage containers should never spill, leak, overflow, or be overfilled.
4. All spills should be cleaned up as quickly as possible following manufacturer's recommendations, and local, state, and federal guidelines.
5. Wastes should be stored in a covered, dry area, and handled only when necessary.
6. Never dump or dispose of liquid wastes into a storm drain or septic system.

2.7.10 Material Stockpiles

The Town stockpiles various aggregate materials onsite for roadway building, road repair, drainage systems, grading, and sanding. The materials regularly stockpiled onsite include:

- Loam
- Sand
- Recycled asphalt
- ½" and ¾" stone
- Rip rap
- Catch basin cleanings/street sweepings (only temporary until hauled offsite by subcontractor)

The Town will utilize best management practices to prevent erosion and sediment transport from the piles, including covers, barriers, vegetation, and planned grading to direct runoff. The site is relatively flat which prevents transport of sediment-laden runoff offsite or to receiving waters. See the O&M Plan for more information.

3. Identification of Stormwater Controls

The Facility has minimal structural stormwater controls to capture, treat, and convey runoff (see Attachment 1). Structural stormwater controls include onsite constructed systems that provide pretreatment, treatment, and conveyance of stormwater flows. According to the Town, there are no known offsite discharges or discharges to receiving waters including Great Cedar Swamp.

The following structural stormwater controls are presently used at the Facility to maintain stormwater quality and volume:

1. **Leaching catch basins:** The site has three leaching catch basins used to capture and infiltrate runoff from the Facility yard.
2. **Swale and detention pond:** The Facility has a capped landfill onsite and utilizes a grassed swale to convey runoff to a detention pond.
3. **Catch basin:** The base of the capped landfill also utilizes a catch basin to capture and convey runoff to the detention pond.

4. Management Practices

4.1 Minimize and Prevent Exposure

In general, the Facility, to the extent practicable, keeps materials and activities indoors, or protected by roofs or coverings to prevent contact with precipitation.

4.2 Good Housekeeping

Good housekeeping practices are activities, routinely conducted, intended to help maintain a clean facility and prevent stormwater pollution. 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.
- All fluid products and wastes are kept indoors or in a covered area.
- Fueling of small equipment is performed indoors.
- All floor drains present within garage bays are properly maintained.
- Spill materials and cleanup kits are maintained at all locations where oil materials are used, stored, or may be present, including at fuel islands.
- Used spill cleanup materials are disposed of properly.
- No fertilizers, herbicides, or pesticides are stored or used at the Facility.
- Lead-acid batteries are stored indoors and within secondary containment.
- Hazardous materials storage lockers with spill containment are used. Storage areas are located away from vehicle and equipment paths to reduce the potential of accident-related leaks and spills.

- All hazardous material storage areas and containers have proper signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment.
- All materials, waste oil storage containers, and gas cans are properly labeled.
- 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.
- Staff is familiar with manufacturer directions for proper use of materials and associated Safety Data Sheets (SDSs).
- Staff is trained to properly use and maintain equipment.
- Drip pans are used for maintenance operations involving fluids, and under leaking vehicles and equipment waiting repair.

4.3 Preventative Maintenance

Preventative maintenance can minimize the likelihood of stormwater pollution by addressing issues before they become more severe. Vehicles and equipment should be regularly inspected and maintained to prevent leaks of fuel, oil, and other liquids. Structural stormwater controls should be regularly maintained to ensure proper performance especially during heavy rain events.

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

- All staff members are aware of spill prevention and proper 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.
- Equipment is kept in good repair to prevent leaks.
- Vehicle storage areas are inspected frequently for evidence of fluids.
- Material or liquid 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.

4.4 Spill Prevention and Response

The permittee will minimize the potential for leaks, spills, and releases that may come into contact with precipitation. A plan will be developed for effective response if such spills were to occur (see the O&M Plan for more information).

Per permit requirements, the following procedures will be followed at the Facility:

1. "Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
2. Response procedures that include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing, and cleaning up leaks, spills and other releases. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR section 264 and 40 CFR section 265. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the Pollution Prevention Team; and
3. Contact information for individuals and agencies that shall be notified in the event of a leak, spill, or other release. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR section 110, 40 CFR section 117, or 40 CFR section 302, occurs during a 24-hour period, the permittee shall notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR section 110, 40 CFR section 117, and 40 CFR section 302 as soon as the permittee has knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency, public health or drinking water supply agencies, and owners of public drinking water supplies. Contact information shall be in locations that are readily accessible and available."

The Facility currently has aboveground oil storage capacity consisting of the following, and agrees to comply with the requirements of this SWPPP and the O&M Plan:

1. 6,000 gallon aboveground unleaded fuel tank
2. 4,000 gallon aboveground diesel fuel tank
3. 528 gallon aboveground waste oil tank
4. 500 gallon aboveground waste oil tank
5. Three 275 gallon aboveground oil tanks

Should a spill occur, there are spill kits in the following locations:

- (1) spill kit at the fuel island
- (2) spill kits in the front garage
- (2) 30-gallon cans with speedy dry in the front garage
- (1) spill kit in the rear garage
- (1) can with speedy dry in the rear garage

4.5 Sediment and Erosion Control

Site topography at the Facility is flat and graded to prevent runoff and associated sedimentation from entering the Town storm drain system or discharging directly to a water body. There are no known outfalls or discharges to receiving waters. However, grassed and rip-rap swales aid in reduction of transported sediment with the site. In addition, the Town employs best management practices such as routine street sweeping, maintenance to existing drainage systems, covering piles, utilizing silt socks/fences, and upkeep of grassed areas (to help reduce erosion.)

5. Plan Implementation

5.1 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 Highway Department is responsible for stormwater management training for the identified Pollution Prevention Team. 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.

All employees at the Facility will be trained annually (recommended by EPA). The topics below will be covered at employee training sessions.

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

The permittee will document the following items for each training session:

1. The training date, title, and training duration
2. List of attendees
3. Subjects covered during training session

Pollution Prevention Team members will meet at least twice a year to discuss the effectiveness of and improvement to the SWPPP. See Attachment 2 for an example log to document training activities.

5.2 Maintenance of Control Measures

The permittee understands their requirement to maintain all control measures (structural and non-structural) in effective operating condition required by this permit. The permittee will maintain a backup record log of all procedures (training, maintenance, preventative maintenance, and best management practices) that have taken place in the even that a stormwater pollution event occurs.

5.3 Site Inspection Requirements

It is required that the Facility 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). The Pollution Prevention Team Leader is responsible for completing this inspection.

The Permittee will document the following information for each facility inspection:

- 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.

If the inspections reveal any control measures in need of repair or not operating effectively, the permittee will replace or repair the issue prior to the next storm event if possible. If the issue cannot be corrected prior to the next storm event, they will have back-up measures in place. See Attachment 3 for an example inspection record keeping document.

5.4 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 will be kept at the Halifax Highway Garage, and will be updated as necessary. The SWPPP and records will be made available to state or federal inspectors and the general public upon request.

5.5 SWPPP Revisions

The permittee will review this SWPPP regularly to determine if any update or revision is required. Changes that may require revision include:

- Any significant change in potential pollutants 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.

6. SWPPP Certification

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

_____ _____

Authorized Official Title

_____

Date

_____ _____

Authorized Official Title

_____

Date

_____ _____

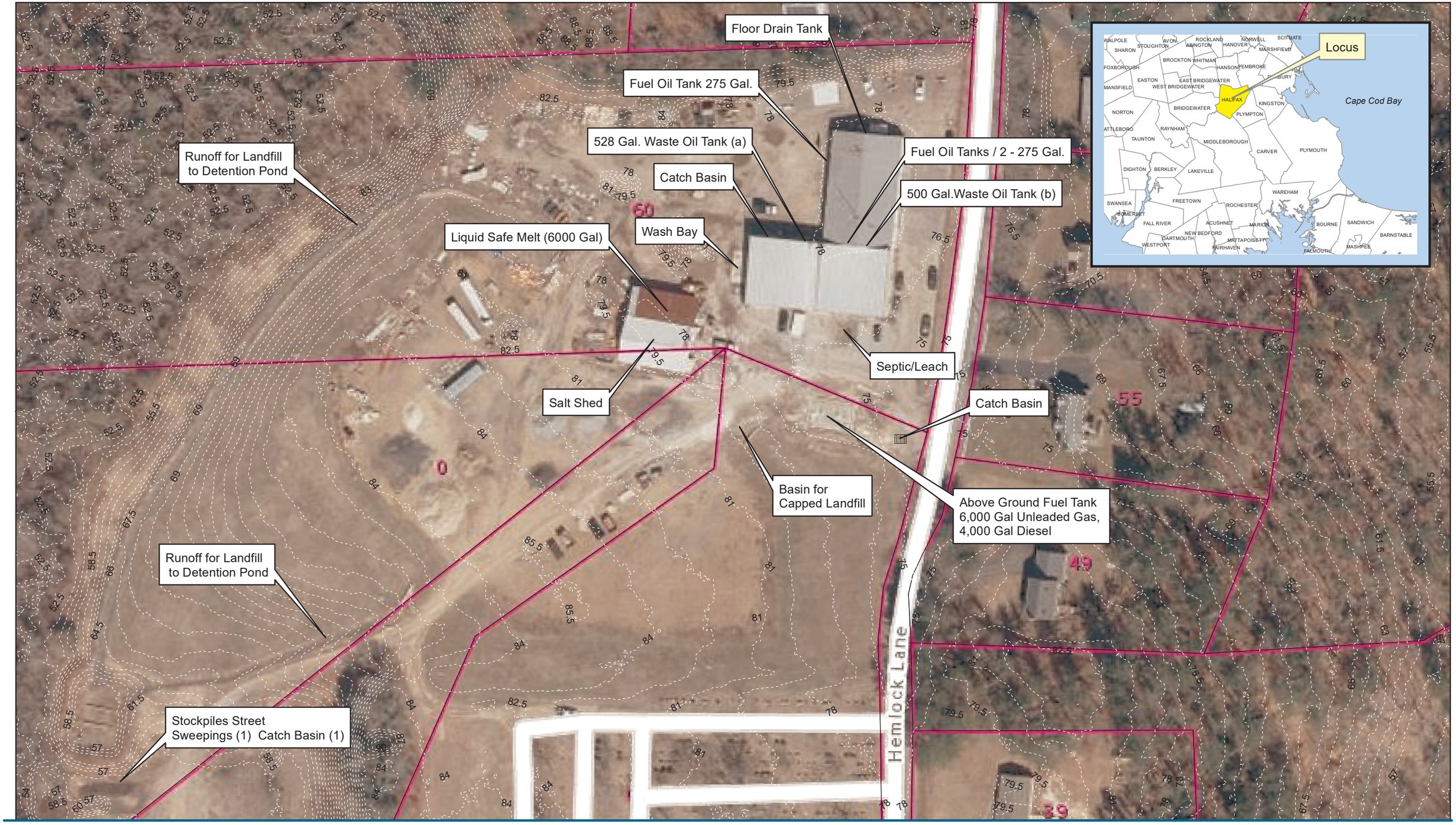
Authorized Official Title

_____

Date

Attachments

Attachment 1
Highway Garage Features at Facility



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Map Projection: Lambert Conformal Conic
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Grid: NAD 1983 StatePlane Massachusetts Island FIPS 2002 Feet

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TOWN OF HALIFAX, MASSACHUSETTS
MS4 Permit

Halifax Highway Garage
Features at Facility

Job Number	11204096
Revision	-
Date	17 Jun 2020

Figure 1

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Data source: Data Custodian, Data Set Name/Title, Version/Date. Created by:jjobrien

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Attachment 2
Employee Training Log Template

This document was based on the information provided by the Central Massachusetts Regional Stormwater Coalition

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:	
Training Description (including duration and subjects covered):	
Trainer:	
Employee(s) trained	**Employee signature**

Training Date:	
Training Description (including duration and subjects covered):	
Trainer:	
Employee(s) trained	**Employee signature**

Training Date:	
Training Description (including duration and subjects covered):	
Trainer:	
Employee(s) trained	**Employee signature**

Attachment 3
Site Inspections Report Template

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.

This document was based on the information provided by the Central Massachusetts Regional Stormwater Coalition

Stormwater Site Inspection Report

General Information			
Facility Name			
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			

Weather Information

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snow ❑ High Winds
❑ Other: Temperature:

Have any previously unidentified discharges of pollutants occurred since the last inspection?
❑Yes ❑No
If yes, describe:

Are there any discharges occurring at the time of inspection? ❑Yes ❑No
If yes, 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		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
2		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
3		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
4		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
5		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
6		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

	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)
7		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
8		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
9		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
10		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

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**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
2	**Equipment operations and maintenance areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
3	**Fueling areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
4	**Outdoor vehicle and equipment washing areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
5	**Waste handling and disposal areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
6	**Erodible areas/construction**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
7	**Non-stormwater/ illicit connections**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
8	**Salt storage piles or pile containing salt**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
9	**Dust generation and vehicle tracking**	❑Yes ❑No ❑ N/A	❑Yes ❑No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
10	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
11	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
12	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	

Non-Compliance

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

Additional Control Measures

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

This document was based on the information provided by the Central Massachusetts Regional Stormwater Coalition

Notes

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

Print inspector name and title: _____

Signature:_____**Date:**_____

This document was based on the information provided by the Central Massachusetts Regional Stormwater Coalition

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.

This document was based on the information provided by the Central Massachusetts Regional Stormwater Coalition

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

(Complete a separate form for each outfall you assess)

Name of Facility:

Outfall Name: "Substantially Identical Outfall"? ☐ Yes ☐ No

Person(s)/Title(s) collecting sample:

Person(s)/Title(s) examining sample:

Date & Time Discharge Began (approx.):

Date & Time Visual Sample Collected:

Date & Time Visual Sample Examined:

Nature of Discharge: ☐ Rainfall ☐ Snowmelt

Parameter

Color ☐ None ☐ Other

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____ ☐ Solvents ☐ Other

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

Floating Solids ☐ No ☐ Yes

Settled Solids* ☐ No ☐ Yes

Suspended Solids ☐ No ☐ Yes

Foam (gently shake sample) ☐ No ☐ Yes

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick ☐ Other

Other Obvious Indicators of Stormwater Pollution ☐ No ☐ Yes

* 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).

A. Name:

B. Title:

C. Signature:

D. Date Signed:

Attachment 4
Halifax Municipal Operations and Maintenance (O&M) Plan Appendix A: Spill Prevention Control and Countermeasure (SPCC) Plan

Halifax Municipal Operations and Maintenance (O+M) Plan for MS4 Permit Compliance

This document was compiled based on template was created by VHB for use by municipal MS4 clients. This template was developed by modifying a template and standard operating procedures (SOPs) from the Central Massachusetts Regional Stormwater Coalition (CMRSWC).

Appendix A: Spill Prevention Control and Countermeasure (SPCC) Plan

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 document is to provide guidance to municipal employees to help reduce the discharge of pollutants from the MS4 as a result of spills or releases.

Halifax undertakes various precautions with spill response and cleanup procedures.

Procedures

Halifax 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:

1. 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.
2. Assess the contaminant release site for potential safety issues and for direction of flow.
3. Complete the following:
    3.1. Stop the contaminant release.
    3.2. Contain the contaminant release through the use of spill containment berms or absorbents.
    3.3. Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers.
    3.4. Clean up the spill.
    3.5. Dispose of all contaminated products in accordance with applicable federal, state and local regulations.
        3.5.1. 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).

3.5.2. 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.

3.5.3. Waste oil contaminated industrial wipes and sorptive minerals:

3.5.3.1. 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).

3.5.3.2. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.

3.5.3.3. If absorbents pass the "one drop" test they may be discarded in the trash unless contaminated with another hazardous waste.

3.5.3.3.1. It is acceptable to mix the following fluids and handle them as waste oil:

- Waste motor oil
- Hydraulic fluid
- Power steering fluid
- Transmission fluid
- Brake fluid
- Gear oil

3.5.3.3.2. **Do not mix** the following materials with waste oil. Store each separately:

- Gasoline
- Antifreeze
- Brake and carburetor cleaners
- Cleaning solvents
- Other hazardous wastes

3.5.3.4. 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."

4. 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**.

   Halifax Fire Department: **(781) 293-1751**

5. Contact the MassDEP 24-hour spill reporting notification line, toll-free at **(888)-304-1133**;

5.1. 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).

5.1.1. Spills that are less than 10 gallons of petroleum and do not impact a water body

5.1.2. Spills that are less than one pound of hazardous chemicals and do not present an imminent health or safety hazard

5.1.3. Fuel spills from passenger vehicle accidents

5.2. 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:
    3.1. What was released;
    3.2. How much was released, which may include:
        3.2.1. Pounds
        3.2.2. Gallons
        3.2.3. Number of containers
4. Where was the release sent/what was contaminated, addressing:
    4.1. Pavement
    4.2. Soil
    4.3. Drains
    4.4. Catch basins
    4.5. Water bodies
    4.6. Public streets
    4.7. 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:
    9.1. Tanks
    9.2. Pipes
    9.3. 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:
  - Ensure storage in closed containers inside a building and on an impervious surface wherever possible.
  - If storage cannot be provided inside, ensure secondary containment for 110 percent of the maximum volume of the storage container.
  - Locate storage areas near maintenance areas to decrease the distance required for transfer.
  - Provide accurate labels, Material Safety Data Sheets (MSDS) information, and warnings for all stored materials.
  - Regularly inspect storage areas for leaks.
  - Ensure secure storage locations, preventing access by untrained or unauthorized persons.
  - 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 will be trained 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.

Spill Response and Cleanup Contact List

Name	Title	Contact Information
Steven Hayward	Highway Surveyor, Highway Department	781-293-1760 steve.hayward@halifax-ma.org
Dave Swanson	Working Foreman	781-293-1760

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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