

APPENDIX XI

STORMWATER POLLUTION PREVENTION PLANS

*DPW YARD
LIGHT DEPARTMENT
PARKS GARAGE
TRANSFER STATION*

Town of Marblehead
Department of Public Works
Stormwater Pollution Prevention Plan
Marblehead, MA



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APPENDIX A

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SECTION 1 – Introduction

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

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

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

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

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

The SWPPP shall contain the following elements:

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

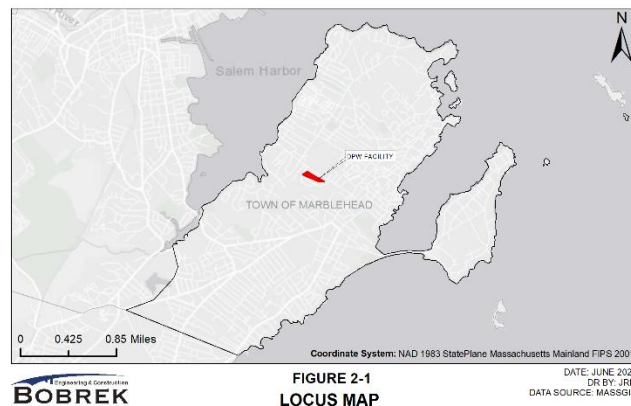
This SWPPP accomplishes these requirements by:

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

SECTION 2 – Detailed Facility Assessment

2.1 Facility Summary

The Marblehead Department of Public Works (DPW) is located at 3 Tower Way, Marblehead, MA 01945 and is owned and operated by the Town of Marblehead (the Town). The property occupies approximately 4.8 acres including the laydown yard behind the Marblehead Animal Shelter. The two lots are identified by the Town of Marblehead's Tax Assessor's Office as Parcel ID 107 9 0 and 108 11 0. The facility is bound to the south by an unnamed stream and Hawthorn Pond. The Locus Map in **Figure 2-1** shows the location of the facility within the Town.



2.2 Site Inspection

The site inspection associated with the development of this SWPPP was completed on May 5, 2021. The inspection was conducted by John Bobrek, P.E. and Julia Miller from Bobrek Engineering and Construction and Maggie Wheeler, Staff Engineer from the Town.

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

2.3 Pollution Prevention Team

A Pollution Prevention Team for Marblehead DPW has been prepared and designated the task of developing, maintaining and revising 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: Robert Dever

Office Phone: 781-631-1750

Title: DPW Director

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

Leader: Maggie Wheeler

Office Phone: 781-631-1750

Title: Staff Engineer

Responsibilities: Supports SWPPP development and implementation; conducts inspections of facility; provides guidance and assistance to DPW Employees.

2.4 Facility Description

The DPW consists of office buildings, maintenance and storage garages, salt shed, bituminous asphalt roadways, and parking areas as shown on Figure 2-2 attached to the document. The Water and Sewer Department, Drain Department, Highway Department and Tree Department all operate out of the Facility. The Marblehead Water Department delivers the water to individual customers and businesses. The Sewer Department maintains over one hundred miles of sewer mains, over 3,000 structures, 28 pump stations. The Drain Department maintains hundreds of miles of drainage mains and over 4000 catch basins, manholes and outfalls. The Highway Department is responsible for the maintenance of public streets and sidewalks and for the maintenance of all town vehicles. The Tree Department is responsible for planting, care and maintenance of trees on public ways as well as additional trees and shrubs in parks and on other public grounds. Additionally, the DPW is responsible for removal of snow, ice, and other inclement weather emergencies and conditions. Activities at the site are described in greater detail in **SECTION 2.7**.

The two lots comprising the property cover approximately 4.8 acres and contains the structures and other features shown on the Site Map in **Figure 2-2**. Components shown on the site map include:

- Location of the engineered drainage system, including catch basins, ditches, drain manholes, and treatment BMPs
- Direction of surface water flow
- Fuel and electrical structures
- Storage locations of various materials

2.5 Facility Structures

The DPW buildings include office space, garage with maintenance bays, large vehicle and equipment storage area and the salt shed. The Water and Sewer Commission building is located at the west side of the property and is abutted to the East by the Highway Department and Maintenance Garage. Approximately 100 feet southeast of this building is the location of the salt shed. In addition to the DPW facility at Tower Road there is a stockpile area located approximately 170 feet southeast on Village Street.

2.5.1 Additional Site Features

Underground Storage Tank

The DPW maintains a fueling station for Town vehicles that consists of one 6,000-gallon underground storage tank (UST) for gasoline, one 3,000-gallon UST for ultra-low sulfur diesel fuel, and dispensing pumps on an elevated concrete island.

Emergency Generator

A diesel generator is located north of the far eastern side of the Water and Sewer Commission building.

Solid Waste Management

The Town maintains two dumpsters, one for recycling and one for trash. Both dumpsters are located in the upper garage. These dumpsters are kept closed when not in use. No inappropriate materials were observed during the facility inspection.

Parking Areas

Impervious parking is located along the southwestern side of the property and in a small section of the stockpile area on Village Street. These parking lots are used primarily for visitors and employees' personal vehicles.

2.6 Site Drainage

The topography of the property generally slopes to the northwest direction with elevations ranging from approximately 88 to 49 feet above mean sea level (MSL). Although the majority of the property is covered with impervious surfaces (buildings, asphalt, or concrete), landscaped and vegetated areas surround the facility on three sides. The separated stockpile area is a compacted dirt and gravel lot that generally slopes to the south. There are no drinking water supply wells on either property nor is either located within a Zone II drinking water protection area. The site is serviced by the municipal water supply and MS4.

The Site is bound to the south by an unnamed stream that flows into Hawthorn Pond. The unnamed stream lies immediately south of the Marblehead Rail Trail and flows southwest to cross West Shore Drive, connecting to Wyman Woods Conservation Area and Lead Mills Conservation Area located approximately 1-mile northwest of the Site

Sheet Flow

Drainage Area 1 (DPW - 2 CBs to Haley Rd, Discharge Pickering Pt)

Drainage Area 1 includes the eastern portion of the Site. This includes the salt shed, storage areas, and the Highway Department and Maintenance Garage. The bituminous asphalt pavement is graded to sheet flow stormwater toward two catch basins which connect to drain line that travels under the DPW building and along the property boundary to combine with the MS4 trunk line located on Haley Road. This portion of the MS4 eventually discharge to Pickering Point. The roof of the salt shed discharges stormwater to the ground on the north and south sides of the building combining with surface drainage. Runoff from the garage roof discharges to the ground behind the building and infiltrates stormwater into the underlying soils.

Drainage Area 2 (Water - 2 CBs to pipe to Haley Rd, Discharge Pickering Pt)

Drainage Area 2 includes the western portion of the Site. This includes the Water and Sewer Department offices, maintenance and equipment building, fueling station, diesel generator, and storage areas for PVC piping, catch basin frames and grates, hydrants, scrap metal, and wooden pallets. The bituminous asphalt pavement is graded to sheet flow stormwater toward two catch basins which connect to a drain line that travels under the garage and connects to the drain line on the northern property boundary. As noted above, this line combines with the MS4 trunk line located on Haley Road and eventually discharges to Pickering Point. Stormwater runoff near the storage areas travel via sheet flow under the property fence to a catch basin on Haley Road connecting to the MS4. Runoff from the garage roof discharges to the ground behind the building and infiltrates stormwater into the underlying soils. There are no structural control measures in Drainage Area 2.

Drainage Area 3 (Eastern)

Drainage Area 3 includes the far eastern portion of the Site and is separated from Drainage Areas 1 and 2 by Tower Way. There is no subsurface collection or conveyance structures in this area. This portion of the Site includes the stockpiles for the DPW. The dirt road is graded to flow stormwater downgradient toward the Marblehead Rail Trail and vegetated areas. Drainage Area 3 does not discharge, directly or indirectly, to the MS4 or surface waters. Stormwater is infiltrated into the underlying soils and therefore, under the MS4 General Permit Part 2.3.7(b)(ii)(4)(a) (Appendix A), the stockpiles do not need to be covered. There are no structural control measures in Drainage Area 3.

Engineered Drainage

Much of the stormwater runoff from the property is directed to the catch basins as part of the engineered drainage system. Figure 2-2 delineates the three drainage areas and illustrates the location of the subsurface collection system and structural control measures.

2.6.1 Receiving Waters

The final point of discharge for stormwater from this site is near Pickering Point (Salem Harbor).

As designated in Massachusetts Surface Water Quality Standards (314 CMR 4.00), the streams discharging to Salem Harbor in Marblehead are considered Class SB waterbodies. Class SB waterbodies are to be used as a habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth, and other critical functions, and for primary and secondary contact recreation. MassDEP has not listed Hawthorn Pond as impaired waterbodies in the Massachusetts Year 2016 Integrated List of Waters. This SWPPP and identified BMPs are intended to address the potential pollutants associated with the activities at this Site.

2.7 Site Activities

The following activities occur at the facility:

- Facility or Building Maintenance
- Chemical unloading, handling, and storage (including paint, flammables)
- Tool storage
- Vehicle and equipment storage
- Vehicle and equipment maintenance/repair (including oil changes)
- Vehicle and equipment washing
- 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 Map (**Figure 2-2**).

The following activities occur indoors or under a roof and are not exposed to stormwater. Therefore, these activities are not addressed in this SWPPP.

- Equipment and Vehicle Storage: Most of the DPW vehicles and equipment are parked within buildings and garages. Only the back hoes, loaders and large field equipment are stored outdoors.
- Equipment Maintenance: Greasing and minor maintenance to vehicles and machinery used at the DPW occur within maintenance garages in Drainage Areas 1 and 2.
- Vehicle Washing: All vehicles and equipment are washed inside within a wash bay.
- Oil and Hazardous Materials Storage: Inside the Highway Department and Maintenance Garage. Floor drains lead to a subsurface oil/water separator that connect to the MS4.
- Hazardous Waste Storage: The DPW is currently registered with MassDEP as a Very Small Quantity Generator (VSQG) of hazardous waste and assigned EPA ID MV7816311750. All hazardous waste containers are stored within the buildings in accordance with MassDEP's Hazardous Waste Regulations. The

waste oil tank is a 275-gallon single-walled steel aboveground storage tank located within the Highway Department Maintenance Garage. The tank is contained within a polyethylene containment sump with a capacity of 300-gallons. The fill port is located on the top of the tank and is equipped with a funnel. The level gauge is immediately adjacent to the fill port to prevent overfilling. All floor drains within the building connect to an oil/water separator and discharge to the MS4. The waste oil tank is clearly posted “WASTE OIL” and “HAZARDOUS WASTE” in letters one inch high.

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

The primary potential pollutant sources at the DPW are materials that are stored onsite or brought onsite and exposure during loading, unloading and transport operations. When not properly protected from precipitation and runoff, these activities can impact stormwater and transport pollutants from the Site to downstream waters.

2.7.1 Stockpiles and Sand Storage

Potential Sources of Stormwater Pollution

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

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

Pollution Prevention

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

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

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

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

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

2.7.2 Salt Storage

Potential Sources of Stormwater Pollution

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

Pollution Prevention

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

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

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

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

management practice or to a sanitary sewer system, with approval from the operator of the sanitary sewer system.

2.7.3 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.

2.7.4 Materials Storage

Potential Sources of Stormwater Pollution

Tires, plows, hydrants, pipes, catch basin frames and grates, concrete blocks/pipes, dirt, sand, and gravel as well as earth materials such as catch basin/street sweepings are materials that are stored onsite. These materials could be associated with pollutants such as chlorides, sediment, organic matter, nutrients, metals, oil, grease, trash, and debris.

Pollution Prevention

Site activities are conducted in a manner to minimize the exposure of stormwater to materials identified above. There is no outdoor storage of hazardous materials and all equipment maintenance and lubrication is performed inside the buildings. Materials stored are clean and free of oils and other pollutants.

The DPW Facility is maintained in a clean and orderly manner. The DPW cleans all areas that are exposed to potential pollutants. This includes keeping trash containers closed when not in use, and frequent sweeping of all paved areas at the Site, including parking, entrance, and storage locations.

Structural and non-structural control measures are employed at the Site to stabilize and contain runoff from exposed areas and to minimize or eliminate onsite erosion and migration of sediment. The Site is primarily covered with asphalt pavement and buildings. The perimeter is well vegetated, and these areas are well maintained. The Site is effectively bermed and graded to divert, absorb, contain, or otherwise reduce runoff.

2.7.5 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 such as sediment, organic matter, or nutrients, during the course of offsite activities or at other facilities, and then deposit these pollutants at the storage facility.

Pollution Prevention

The DPW Facility has a program to ensure that industrial equipment is kept in good operating condition. The DPW will regularly inspect, test, maintain, and repair all equipment and systems to avoid situations that could result in leaks, spills, and other

releases of pollutants to stormwater. At a minimum, these inspections must occur once per quarter.

2.7.6 Vehicle and Equipment Maintenance/Repair

Potential Sources of Stormwater Pollution

Vehicle and equipment maintenance and repair often require 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 vehicle and equipment maintenance take place inside the garages 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.

2.7.8 Vehicle and Equipment Washing

Potential Sources of Stormwater Pollution

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

Pollution Prevention

Outdoors, the use of a tight tank or other similar structure that can contain the wash water is ideal. If the wash water cannot be contained, it shall not be allowed to directly enter water bodies. Use phosphate free detergents that do not contain regulated contaminants, and avoid using solvents where the wash water may enter a sanitary sewer. Impervious surfaces may be used to promote infiltration and treatment before wash water enters the groundwater, but wash water coming from impervious pavement shall be treated to remove nutrients and petroleum products before entering an engineered storm drain system. Infiltration shall not be used within wellhead protection areas or other protected resource areas. Power washing, steam cleaning and engine and undercarriage washing shall not occur outdoors. Heavily soiled or vehicle dirtied from salting shall not be washed outdoors. All adjacent catch basins shall have a sump and be cleaned periodically, (refer to SOP 3, “Catch Basin Inspection and Cleaning”, included in **Appendix A**). All debris and particulate accumulation shall be removed and swept clean in all outdoor washing areas.

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

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

Washing of all facility vehicles is completed in the garages as necessary. Wastewater from vehicle washing operations is discharged into the sewer system.

2.7.9 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. Petroleum Products
4. 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.

Clean up spills immediately and in accordance with SOP 4 "Spill Response and Cleanup." 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.

2.7.10 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 Type	Number on Site
Pickup Truck	6
Town Salt Spreaders	5
Town Snowplows	15

2.9 Location of Leak and Spill Cleanup Materials

Leak and spill cleanup materials are stored at the DPW Yard 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
DPW Garage	Back right of main garage area	Oil Dri Premium absorbents – drawer filled with approx. 32 QTs or 1 bag
Water and Sewer Garage	Near waste oil barrels	Oil Dri Premium Absorbents – about 16 QTs in open container

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:

- Air Conditioning condensation
- Street wash waters

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

2.11 Stormwater Monitoring

Stormwater monitoring is done through the annual MS4 outfall screening and inspections. There are no outfalls on site however the catch basins may be screened during catchment investigations

2.12 Significant Material Inventory

Materials stored include those specified in **SECTION 2.7**, “Site Activities”. An inventory of these materials is included in **Table 2-5**, which also reviews the likelihood for each identified material to encounter 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 Map in **Figure 2-2**.

**Table 2-5. Significant Material Inventory
DPW Yard**

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Petroleum-Based Compounds					
Gasoline	UST in fueling area	1000 Gal	Petroleum hydrocarbons	N/A	Likely
Hydraulic Fluid	Both Garages	100 Gal	Petroleum hydrocarbons	E	Not Likely
Motor Oil	DPW Garage	55 Gal	Petroleum hydrocarbons	E	Not likely
Lubricants	Both Garages	4 - 12 oz	Petroleum hydrocarbons	E	Not likely
Diesel Fluid	Both Garages	100 Gal	Petroleum hydrocarbons	E	Not likely
Waste Oil	Both Garages	300 Gal	Petroleum hydrocarbons	E	Not likely
Other:					
Total Volume of Oil at Facility = 1555.75 Gal					
Non-Petroleum Significant Materials					
Antifreeze	Both Garages	2- 12 oz	Ethylene glycol; potential source of BOD	E	Not likely
Brake Fluid	DPW Garage	24 oz	Volatile organic compounds; non-petroleum based oil	E	Not likely
Detergents	Upper Garage and Lower Garage	30 Gal	Surfactants	E	Not likely
Paint, Latex	DPW Garage in locker	10 Gal	Petroleum constituents, including volatile and semi volatile organic compounds	E	Not likely

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Paint, Spray	DPW Garage in locker	10 Cans	Petroleum constituents, including volatile and semi volatile organic compounds	E	Not likely

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 site does not have aboveground oil storage capacity that exceeds 1,320 gallons.

2.14 Description of Significant Material Storage Areas

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

Fueling of Gasoline occurs outside the Water and Sewer Garage and is not contained. However, is it on a cement pad and runoff is directed to a pervious surface

Waste oil and other used motor fluids are stored in both garages. Waste oil is stored in a temporary barrel and is picked up by Clean Harbors on an as-needed basis. No outside waste oil is allowed of waste oil to the facility occurs within the site and is monitored by an MMLD employee.

2.15 List of Significant Leaks or Spills

No significant spills or leaks have occurred on the site in the last three years. 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 site to maintain water quality.

2.16.1 Pretreatment Structural BMPs

- Deep sump catch basins
- Oil/Grit Separators
- Vegetated Filter strip

2.16.2 Oil/Water Separator

The inline oil/water separator onsite is designed to pretreat wastewater (from interior floor drains) in the collection system prior to discharge into the sanitary sewer. The oil/water separator is an underground storage tank with a single chamber and inlet designed to remove oil, sediment, and floating debris from wastewater. Wastewater enters the chamber where oil, grease, and sediment are removed and settle to the static liquid level of the chamber. With the design of the inlet, the clarified water runoff then discharges to an outlet pipe to the sanitary sewer. The unit is equipped with manholes that allow access to the chambers for visual inspection and maintenance. DPW personnel conduct semi-annual visual inspections of the oil/water separator to ensure proper function. As necessary, the unit is maintained by using a vactor truck to remove sediment, floatable oil, grease, and other debris from the chamber.

2.17 Sediment and Erosion Control

Structural and non-structural control measures are employed at the Site to stabilize and contain runoff from exposed areas and to minimize or eliminate onsite erosion and migration of sediment. The Site is primarily covered with asphalt pavement and buildings. The perimeter is well vegetated, and these areas are well maintained.

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.
- All fluid products and wastes are kept indoors.
- Fueling of small equipment is completed indoors.
- Bulk fuel delivery and vehicle fueling areas are inspected for the presence of residuals and cleaned when necessary.

- All floor drains present within garage bays drain to an UST that is cleaned out annually
- 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.
- No fertilizers, herbicides, or pesticides are stored or used at the facility.
- Lead-acid batteries are stored indoors and within secondary containment.
- Hazardous material storage lockers with spill containment are used. Storage areas are located away from vehicle and equipment paths to reduce the potential of accident-related leaks and spills.
- Storage drums and containers are not located close to storm drain inlets.
- All hazardous material storage areas and containers have proper signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment.
- All materials, waste oil storage containers, and gas cans are properly labeled.
- Speedi Dri (or similar absorbent) is readily available and used for appropriate spills.
- 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, as well as other particulates and materials.
- All areas exposed to potential pollutants are regularly cleaned, which includes keeping trash containers closed when not in use, removing leaking or damaged containers from storage areas, and storing leaking vehicles in need of repair indoors.
- Obtain only the number 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 will be 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.

3.2 Preventative Maintenance

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

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

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

3.3 Best Management Practices

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

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

1. Follow Standard Operating Procedures (s) during delivery of waste oil to the equipment/waste oil storage bay. These SOPs are included in **Appendix A**.
2. Follow Standard Operating Procedures during delivery of bulk oil to the emergency generator and bulk fuel to the Fuel Island. These SOPs are included in **Appendix A**.
3. Minimize the volume of gasoline stored within the buildings and on the site.
4. Clean up any oil spills observed in the parking lot, garages, or other surfaces in a timely manner.
5. Monitor all material deliveries.
6. Inspect all storage tanks prior to filling activities for spills, leaks and corrosion.

3.4 Spill Prevention and Response

The primary method of spill management at the DPW is spill prevention. This has been emphasized through the proper design and containment for the waste oil tank and material storage systems, material handling procedures, personnel training and regular inspections.

All DPW personnel are trained to immediately report spills and releases to a member of the Pollution Prevention Team to ensure prompt corrective action.

Trained DPW employees may respond to small leaks or spills that do not pose significant risks to health or safety. If a major oil or hazardous materials release occurred at the facility, the Director of Public Works or his/her designee would contact outside responders (i.e., fire department or spill response contractor).

If visible leaks are detected, they are promptly stopped, and preventive maintenance is performed to ensure that the cause of the leak is addressed. The DPW maintains absorbent materials in spill kit near the waste oil tank to stop and contain small releases. DPW personnel are trained to place absorbent booms and/or drain covers/mats on catch basins, and any other drainage pathway to prevent dispersion. Spill equipment is used only by trained personnel who are familiar with the hazards posed by the spilled material and are knowledgeable of how to manage the spill cleanup residue. These trained personnel can also be referred to as the Pollution Prevention Team.

The Pollution Prevention Team will ensure that spilled oil and contaminated debris are recovered and properly managed. Waste oil and saturated absorbent material are classified as hazardous waste in Massachusetts and must be appropriately managed according to applicable local, state, and federal regulations. Specifically, these materials should be placed in a closed, compatible container such as a steel 55-gallon drum and labeled with the words “HAZARDOUS WASTE,” “OIL CONTAMINATED DEBRIS,” and “TOXIC.” The Director of Public Works or his designee will coordinate the transport and disposal of the waste materials at an appropriately licensed offsite facility

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.

3.4.1 Oil Releases to Water

If oil is discharged¹ into waters of the state by means of a discharge to a stormwater drainage system or any water body, the Director of Public Works or his/her designee will immediately report the incident to:

- **MassDEP**

(888) 304-1133

(24-Hour Statewide Number to Report a Spill of Oil or Hazardous Material)

- **National Response Center (NRC)** **(800) 424-8802**
(The NRC Operator will notify U.S. Coast Guard, District 1, and EPA, Region 1 as appropriate).

2. Oil Release to Land

A sudden, continuous or intermittent release of oil to the environment must be immediately reported to MassDEP (within two hours of discovery) if it meets ANY of the following criteria:

- 10 gallons or more is released within any period of 24 consecutive hours or less;
- An unknown quantity is released within any period of 24 consecutive hours or less;
- Any quantity of oil or waste oil that results in the appearance of a sheen on surface water is released;
- Any release of oil, 10 gallons or more or an unknown quantity within any period of 24 consecutive hours or less, that is indirectly discharged to the environment by means of discharge to a stormwater drainage system or sanitary sewerage system;
- Any release of any oil, in any quantity or concentration, that poses or could pose an Imminent Hazard, as described in 310 C.MR 40.0321 and 40.0950; or
- A release to the environment indicated by the measurement of oil in a private drinking water supply well at concentrations equal to or greater than a Category RCGW-1 Reportable Concentration, as described in 310 CMR 40.0360 through 40.0369 and listed at 310 CMR 40.1600.

MassDEP **(888) 304-1133**
(24-Hour Statewide Number to Report a Spill of Oil or Hazardous Material)

The ONLY exception to these release reporting requirements is when the release meets one of the following criteria:

- The release of oil occurs during normal handling and transfer operations and the release is completely captured by an oil/water separator. However, if the release bypasses the oil/water separator or exceeds the capacity of the oil/water separator notification is required;
- A release inside a building that is completely contained within the building; or
- A release of gasoline or diesel fuel due to the rupture of the fuel tank of a passenger vehicle as a result of an accident involving that vehicle.

When calling MassDEP to report on incidents, the Director of Public Works will need to provide the following information:

- Name and telephone number of caller;
- Location of release or threat;
- Date and time release occurred;
- Identify type of notification (310 CMR 40.0300);
- Name of oil(s) released or of which there is a threat of release;
- Approximate quantity of oil(s) released or of which there is a threat of release;
- Source of release or threat of release;
- Brief description of the release;
- Name and telephone number of owner/operator of the Site where the release occurred or at which there is a threat of release;

- Name and telephone number of the contact person where the release occurred or at which there is a threat of release;
- A description of the Immediate Response Action (IRA) taken or proposed to address the release or threat of release;
- Names of other federal, state, or local government agencies that have been notified and/or have responded to the release or threat of release; and
- Any other information that is relevant to assessing the degree of hazard posed by the release or threat of release of oil.

Note that spills of hazardous materials other than oil, or releases of oil that do not meet the above criteria may also require reporting to the MassDEP under the Massachusetts Contingency Plan (MCP). For example, a release of oil from an underground storage tank generally requires reporting to MassDEP within 72 hours. Because the rules are complex, in the event of any spill or oil or hazardous materials, the Director of Public Works should consult with a Licensed Site Professional (LSP) for determination of whether additional reporting or actions are required.

3.4.2 Written Notification for Oil Spills

Following verbal notification of a spill requiring immediate (two hour) notification, a completed Release Notification Form (RNF) must be submitted to MassDEP within 60 days. It is the responsibility of the Director of Public Works to ensure that the proper notifications are made. In addition, the DPW must make written notification to the EPA whenever the facility has:

- Discharged more than 1,000 gallons of oil in a single discharge event, or
- Discharged more than 42 gallons (1 barrel) of oil in each of two discharge events to the navigable waters² of the United States or adjoining shorelines within any twelve-month period.

If either of the above criteria is met, the DPW must file a written report within 60 days with the Regional Administrator of the EPA. It is the responsibility of the Director of Public Works to ensure that the proper notifications are made. In accordance with 40 C.F.R. § 112.4(a), this written report will contain the following information:

- Facility name and location;
- Name of the person reporting the event;
- Date, time, and place of release;
- Names, addresses, and telephone numbers of all persons potentially responsible for or liable for the release;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- The corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements (including any third-party damages and costs of containment and removal operations);
- Description of the facility including maps, flow diagrams, and topographical maps, as necessary;
- The cause of the discharge, including an analysis of the system or subsystem in which the failure occurred, and the amount and type of material released;
- Additional preventative measures taken or contemplated to minimize the possibility of recurrence; and

- Such other information as the authorities may reasonably require pertinent to the discharge.

Information submitted to the Regional Administrator must be sent to:

EPA Region 1
SPCC Enforcement Coordinator
Mail Code OESO4-4
5 Post Office Square
Suite 100
Boston, MA 02109-3912

SECTION 4 – Plan Implementation

4.1 Employee Training

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

The DPW is responsible for stormwater management training for town 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 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 director of the DPW or qualified third party 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. All records required by the General Permit shall be maintained for a period of at least five years. USEPA may extend this period at any time.

This SWPPP shall be kept at the DPW office and shall be updated if any changes occur. The SWPPP and records shall be made available to state or federal inspectors and the public upon request during normal business hours. The DPW may charge a reasonable fee for copying requests.

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

The Town must submit an annual report on the annual activities completed in accordance with the SWMP. The reporting period will be from July 1st to June 30th during each year of permit coverage. The DPW must provide the MS4 Program Coordinator with a copy of the completed Annual Review Form in **Appendix D** to be included in the SWMP annual report.

Annual reports must be submitted to both EPA and the MassDEP at the following addresses:

United State Environmental Protection Agency
5 Post Office Square – Suite 100
Mail Code – OEP06-4
Boston, MA 02109-3912

stormwater.reports@epa.gov

After December 21, 2020 all Annual Reports must be submitted electronically to: stormwater.reports@epa.gov

Massachusetts Department of Environmental Protection
One Winter Street – 5th Floor
Boston, MA 02108
ATTN: Fred Civian, Stormwater Coordinator

4.4 Triggers for SWPPP Revisions

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

- An increase in the quantity of any potential pollutant stored at the facility;
- The addition of any new potential pollutant (not already addressed in this SWPPP) to the list of materials stored or used at the facility;
- Physical changes to the facility that expose any potential pollutant (not presently exposed) to stormwater;
- Presence of a new authorized non-stormwater discharge at the facility; or
- Addition of an activity that introduces a new potential pollutant.

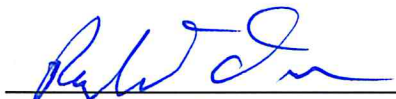
Changes in activity may include an expansion of operations, or changes in any significant material handling or storage practices which could impact stormwater.

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

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

SECTION 5 – SWPPP Certification

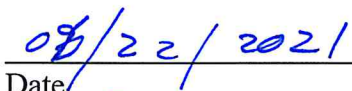
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage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



Authorized Official



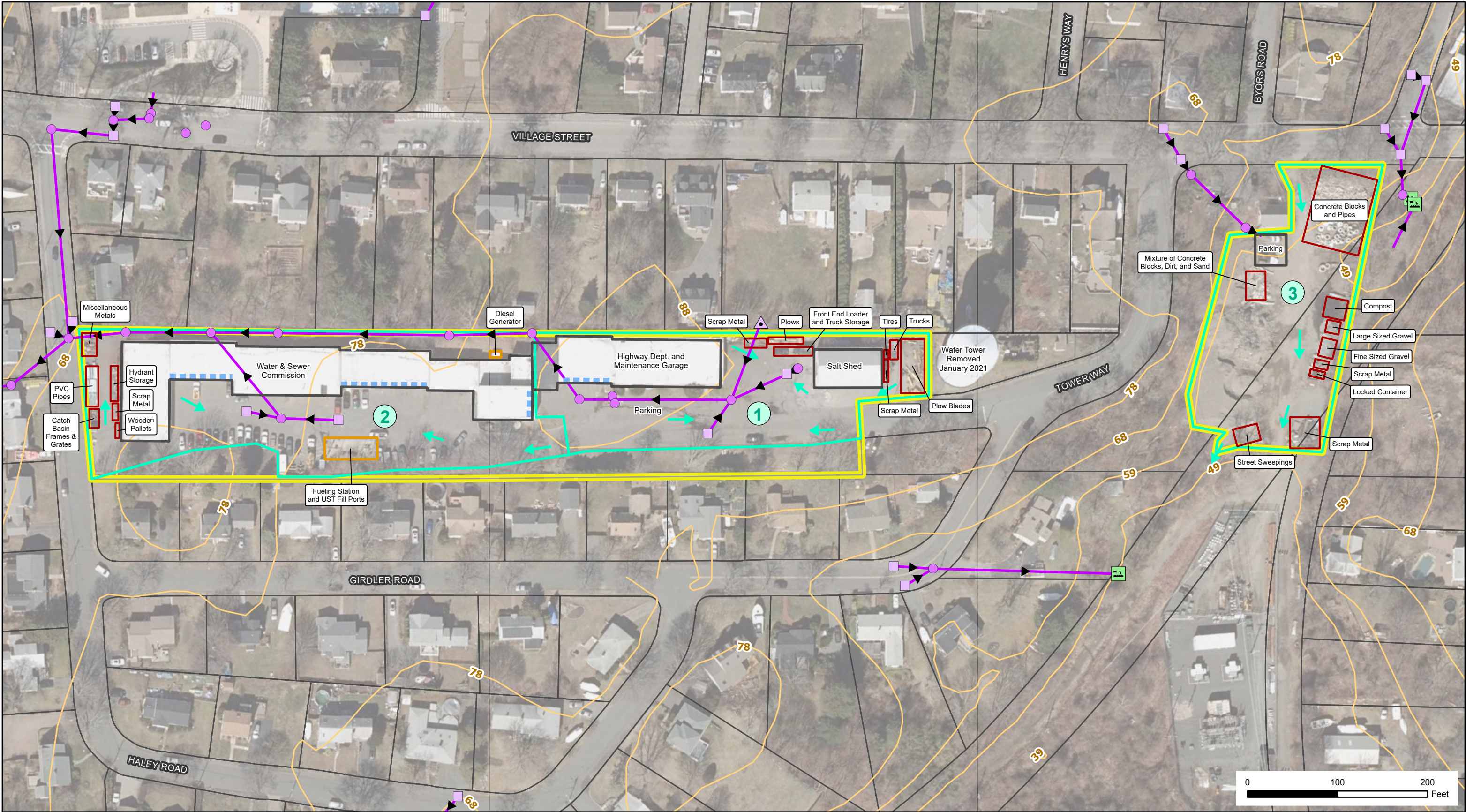
Title



Date

FIGURE 2-2

Z:\WP\Marblehead GIS\ArcPro\MS4\DPW_MS4_CC.aprx Map Created: June 2021



Engineering & Construction
BOBREK
PO BOX 2185
DANVERS, MA 01923
WWW.GOBOBREK.COM

LEGEND

- Public Works/Water and Sewer Facility
- DPW Drainage Flow
- DPW Drainage Area
- 10' Contour (MassGIS)

- Catch Basin
- Drain MH
- Drain Inlet
- Drain Outfall

- Drain Pipes
- Garage Bay Floor Drain

- Building/Structure
- Fuel/Electrical Structure
- Material Storage
- Parcel Boundary

Marblehead DPW
3 Tower Way
Marblehead, MA 01945

CLIENT INFO



NORTH

SWPPP
Figure 2-2
DPW Site Map

MAP TITLE

APPENDIX A:

SOP 4 SPILL RESPONSE AND CLEANUP
SOP 6 EROSION AND SEDIMENTATION CONTROL
SOP 7 FUEL AND OIL HANDLING PROCEDURES
SOP 11 OIL/WATER SEPARATOR

SOP 4: SPILL RESPONSE AND CLEANUP PROCEDURES

Contents

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Maintenance and Prevention Guidance	4
Related Standard Operating Procedures	5

Introduction

Municipalities are responsible for any contaminant spill or release that occurs on property they own or operate. Areas of concern include any facilities that use or store chemicals, fuel oil or hazardous waste, including schools, garages, DPW yards, and landfills. Implementation of proper spill response and cleanup procedures can help to mitigate the effects of a contaminant release.

Responding to a Spill

In the event of a spill, follow these spill response and cleanup procedures:

1. Notify a member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility safety officer.
2. Assess the contaminant release site for potential safety issues and for direction of flow.
3. With proper training and personal protective equipment, complete the following:
 - a. Stop the contaminant release;
 - b. Contain the contaminant release through the use of spill containment berms or absorbents;
 - c. Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers;
 - d. Clean up the spill;
 - e. Dispose of all contaminated products in accordance with applicable federal, state and local regulations.
 - i. Products contaminated with petroleum shall be handled and disposed of as described in MassDEP policy WCS-94-400, Interim Remediation Waste Management Policy for Petroleum Contaminated Soils, <http://www.mass.gov/dep/cleanup/laws/94-400.pdf>.
 - ii.
 - iii. 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.
 - iv. Waste oil contaminated products:
 1. Perform the "one drop" test to ensure absorbents do not contain enough oil to be considered hazardous. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.
 2. 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.
 - 3. If absorbents do not pass the “one drop” test they should be placed in separate metal containers with tight fittings 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, however **in the case of an emergency call 911**;
- Contact the MassDEP 24-hour spill reporting notification line, toll-free at **(888)-3104-1133**; a.
- The following scenarios **are exempt** from MassDEP reporting requirements:
- i. Spills of less than 10 gallons of petroleum and do not impact a water body;
 - ii. Spills of less than one pound of hazardous chemicals and do not present an imminent health or safety hazard;
 - iii. Spills from passenger vehicle accidents;
 - iv. Spills within a vault or building with a watertight floor and walls that completely contain all released chemicals.

Procedures for Reporting Spill Response

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

Where was the release sent/what was contaminated, addressing:

- a. Pavement;
- b. Soil;
- c. Drains;
- d. Catch Basins;

- e. Water Bodies;
 - f. Public Street; and
 - g. Public Sidewalk.
4. The concentration of the released contaminant.
 5. What/who caused the release.
 6. Is the release being contained and/or cleaned up, or is the response complete.
 7. Type and amount of petroleum stored on site, if any.
 8. 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:

1. 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;
2. Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site;
3. 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;
 - 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, 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.
4. 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;
5. Maintain a oil and grease spill response kit with the following materials, at a minimum, at each facility:

- a. 6.5 gallon bucket with screw top lid and handle
- b. 10 gallons of sand
- c. 200 pounds of Speedi Dry absorbent
- d. Drain covers
- e. Spill containment berms
- f. (4) 3' absorbent socks
- g. (16) 16" x 18" absorbent pads
- h. Goggles
- i. Nitrile gloves
- j. Disposable bags to dispose of used materials
- k. Laminated contacts list shall include the following names and numbers:
 - i. Safety Officer;
 - ii. Facility Supervisor;
 - iii. Local Fire Department;
 - iv. MassDEP spill report notification line;
 - v. MassDEP Regional Office;
 - vi. Hazardous Waste Compliance Assistance Line;
 - vii. Household Hazardous Products Hotline;
 - viii. Massachusetts Department of Fire Services;
 - ix. Licensed Site Professionals Information.

Related Standard Operating Procedures

1. SOP 7, Fuel and Oil Handling Procedures

SOP 6: EROSION AND SEDIMENTATION CONTROL

Contents

Introduction	2
Controlling Erosion and Sediment through Design and Planning	2
Controlling Erosion and Sediment on Construction Sites	2
Controlling Erosion and Sediment by Proper Maintenance of Permanent BMPs	3
Related Standard Operating Procedures	4

Introduction

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.
1. Erosion and sediment control devices shall be inspected by the contractor regularly, and maintained as needed to ensure function.

2. In the SWPPP or other document, the contractor shall clearly identify the party responsible for maintaining erosion and sediment control devices.
3. 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.
4. Existing vegetation should be maintained on site as long as possible.
5. 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.
6. Stockpiles shall be stabilized by seeding or mulching if they are to remain for more than two weeks.
7. Disturbed areas shall be protected from stormwater runoff by using protective Best Management Practices (BMPs).
8. Clean water shall be diverted away from disturbed areas on construction sites to prevent erosion and sedimentation.
9. Sediment traps and sediment barriers should be cleaned out regularly to reduce clogging and maintain design function.
10. Vegetated and wooded buffers shall be protected.
11. 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.
12. Vegetation shall be allowed to establish before introducing flows to channels.
13. Regular light watering shall be used for dust control, as this is more effective than infrequent heavy watering.
14. Excessive soil compaction with heavy machinery shall be avoided, to the extent possible.
15. 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 PROCEDURES

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Delivery by Bulk (Tanker) Truck	2
Delivery of Drummed Materials	3
Removal of Waste Oil from the Facility	4
Attachments	4
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Introduction

Spills, leaks, and overfilling can occur during handling of fuels and petroleum-based materials, even in small volumes, representing a potential source of stormwater pollution. This Standard Operating Procedure addresses 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”.

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

1. There is no smoking while fuel handling is in process or underway.
2. 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.
3. The delivery vehicle’s hand brake is set and wheels are chocked while the activity is being completed.
4. Catch basins and drain manholes are adequately protected.
5. No tools are to be used that could damage fuel or oil containers or the delivery vehicle.
6. No flammable liquid shall 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.
7. Local traffic does not interfere with fuel transfer operations.
8. The attending persons should watch for any leaks or spills
 - a. Any small leaks or spills should be immediately stopped, and spilled materials absorbed and disposed of properly. Refer to SOP 4, “Spill Response and Cleanup Procedures”, for examples of spill cleanup and response materials.
 - b. In the event of a large spill or one that discharges to surface waters or an engineered storm drain system, the facility representative shall activate the facility’s Stormwater Pollution Prevention Plan (SWPPP) and report the incident as specified within.

Delivery by Bulk (Tanker) Truck

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

1. The truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures”, for examples of spill cleanup and response materials.

3. The facility representative shall check to ensure that the amount of delivery does not exceed the available capacity of the tank.
 - a. 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.
4. The truck driver and the facility representative shall both remain with the vehicle during the delivery process.
5. The truck driver and the facility representative shall inspect all visible lines, connections, and valves for leaks.
6. When delivery is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
7. The delivery vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
8. The facility representative shall 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.
9. The facility representative shall 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 shall include the following:

1. The truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures", for examples of spill cleanup and response materials.
3. The facility representative shall closely examine the shipment for damaged drums.
 - a. If damaged drums are found, they shall be closely inspected for leaks or punctures.
 - b. Breached drums should be removed to a dry, well-ventilated area and the contents transferred to other suitable containers.
 - c. Drums shall be disposed of in accordance with all applicable regulations.
4. Drummed materials shall not be unloaded outdoors during wet weather events.
5. The truck driver and the facility representative shall both remain with the vehicle during the delivery process.
6. Drums shall be handled and unloaded carefully to prevent damage.
7. Upon completion of unloading, the facility representative shall 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.
8. The facility representative shall check to ensure that the proper amount of fuel 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 for the draining of bulk oil tanks shall include the following:

1. The disposal truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures", for examples of spill cleanup and response materials.
3. The facility representative shall verify that the volume of waste oil in the tank does not exceed the available capacity of the disposal hauler's vehicle.
4. The truck driver and the facility representative shall both remain with the vehicle during the tank draining process.
5. When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
6. The disposal hauler vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
7. The facility representative shall 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.
8. The facility representative shall collect a receipt from the truck driver.

Attachments

1. Fuel Delivery Checklist

Related Standard Operating Procedures

1. SOP 4, Spill Response and Cleanup Procedures

Fuel Delivery Checklist

FUEL DELIVERY FORM

TOWN OF _____

Date: _____

Time of Arrival: _____

Time of Departure: _____

Truck Number: _____

Name of Truck Driver: _____

Name of Town Employee: _____

BEFORE UNLOADING:

Is all spill response equipment and personal protective equipment in place?

Yes ☐ No ☐

In the case of bulk fuel delivery, does tank capacity exceed the amount of delivery?

Yes ☐ No ☐ N/A ☐

In the case of drum fuel delivery, are all drums free of leaks and punctures?

Yes ☐ No ☐ N/A ☐

COMMENCE UNLOADING. REMAIN WITH VEHICLE AT ALL TIMES.

AFTER UNLOADING IS COMPLETE:

Have all fuel containers, including the vehicle, been inspected for leaks?

Yes ☐ No ☐

Has the ground at the unloading point been inspected for evidence of leaks?

Yes ☐ No ☐

If there are any leaks or spills, has the material been properly cleaned?

Yes ☐ No ☐

Has the correct amount of fuel been delivered?

Yes ☐ No ☐

Has a receipt been collected?

Yes ☐ No ☐

SOP 11: OIL/WATER SEPARATOR (OWS) MAINTENANCE

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Documentation of Cleaning and Service.....	3
Attachments.....	4
Related Standard Operating Procedures	4
OIL/WATER SEPARATOR (OWS) QUARTERLY INSPECTION CHECKLIST	5

Introduction

Oil/water separators (OWS), also known as gas/oil separators, are structural devices intended to provide pretreatment of floor drain water from industrial and garage facilities. An OWS allows oils (and substances lighter than water) to be intercepted and be removed for disposal before entering the sanitary sewer system. Substances heavier than water settle into sludge at the bottom of the unit. The remaining water passes through the unit into the sanitary sewer system.

OWS units are generally required where petroleum-based products, wastes containing petroleum, or oily and/or flammable materials are used, produced, or stored. OWS units should not be used to manage stormwater or flow from vehicle washing facilities. High flow rates through an OWS will reduce the structure's ability to separate materials. Detergents and solvents can emulsify oil and grease, allowing the particles to enter the sewer, so these should not be disposed of in drains entering the OWS.

General OWS Maintenance Requirements

1. Each OWS at a facility may receive different materials in different quantities, so the cleanout schedule may not be the same for every OWS at a facility.
2. Employees performing inspections of an OWS must be properly trained and be familiar with the maintenance of that specific structure, since function can vary based on design. Third-party firms may be utilized to perform quarterly inspections.
3. Do not drain petroleum, oil, or lubricants directly to an OWS. The structures are designed to manage these materials at low and medium concentrations in sanitary sewage, not as slug loads.
4. Do not drain antifreeze, degreasers, detergents, fuels, alcohols, solvents, coolant, or paint to the OWS.
5. Separator compartment covers should be tightly sealed to ensure floor drainage only enters the first compartment of the OWS.
6. Drains should be kept free of debris and sediment to the maximum extent practicable.
7. Spill cleanup materials should be maintained in the area served by the OWS. For more information on spill cleanup and response materials, refer to SOP 4, "Spill Response and Cleanup Procedures".

OWS Inspection Procedures

Daily inspection of an OWS should include a visual examination of the area served by the OWS for evidence of spills or leaks.

Weekly inspections of an OWS should include the following:

1. Visually examine the area served by the OWS for evidence of spills or leaks.
2. Inspect the point of discharge (i.e., sewer manhole) for evidence of petroleum bypassing the OWS.
3. Inspect drains for any signs of unauthorized substances entering the OWS.

4. Examine the OWS for signs of leaks or any malfunction.

Quarterly inspections of an OWS should include the following:

1. Complete tasks noted as appropriate for daily and weekly inspection.
2. Complete the Quarterly OWS Inspection Checklist, attached, during the inspection.
3. Take the following measurements to benchmark function of the OWS:
 - A. Distance from rim of access cover to bottom of structure
 - B. Distance from rim of access cover to top of sludge layer
 - C. Depth of sludge layer ($C = A - B$)
 - D. Distance from rim of access cover to the oil/water interface
 - E. Distance from rim of access cover to the top of the liquid surface
 - F. Depth of oil layer ($F = D - E$)

OWS Cleaning Procedures

Cleaning of the OWS is required when there has been a spill to the OWS that exceeds ten gallons of oil, one gallon of detergent or solvent, or any material prohibited by the owner of the sanitary sewer. Cleaning is also required when the levels of accumulated sludge and/or oil meet the manufacturer's recommended levels for cleaning. This will vary based on the manufacturer of the OWS. If the manufacturer's recommendations are unknown, the following guidelines are appropriate for determining when to clean:

1. When sludge accumulates to 25% of the wetted height of the separator compartment; or
2. When oil accumulates to 5% of the wetted height of the separator compartment; or
3. When 75% of the retention capacity of the OWS is filled.

Cleaning should be performed a minimum of once per year. When cleaning is required, it shall be performed by licensed OWS maintenance companies. Materials removed from the OWS must be disposed of in accordance with Massachusetts Hazardous Waste Regulations, 310 CMR 30.00.

Documentation of Cleaning and Service

The operator of the premises where the OWS is located shall maintain a log describing the date and type of all inspections, service and maintenance performed in connection with the Separator. Documentation shall include the identity of the inspector (or the identity of the person or entity that performed the service and/or maintenance). Records shall also document the amount of residue removed from the OWS each time it was cleaned, and how removed materials were disposed. This documentation shall be maintained for a minimum of six years.

Attachments

1. Quarterly OWS Inspection Checklist

Related Standard Operating Procedures

1. SOP 4, Spill Response and Cleanup Procedures

OIL/WATER SEPARATOR (OWS) QUARTERLY INSPECTION CHECKLIST

Facility:

OWS Location:

Inspected By:

Date:

Visual Inspection	Are there any signs of spills or leaks in the general area?	
		Yes No
	Is there any evidence of petroleum bypassing the OWS?	
		Yes No
	Are there any unauthorized substances entering the OWS?	Yes No
	Does the OWS exhibit any signs of leaks or malfunctions?	
		Yes No

If you answered "Yes" to any of the above questions, further inspection, repair, and/or cleaning may be necessary.

	A	Distance from rim of access cover to bottom of structure	
	B	Distance from rim of access cover to top of sludge layer	
	C = A - B	Depth of sludge layer	

Measurements	D	Distance from rim of access cover to the oil/water interface	
	E	Distance from rim of access cover to the top of the liquid surface	
	$F = D - E$	Depth of oil layer	

If the values for “C” and/or “F” are greater than those in the manufacturer’s recommendations, the OWS must be cleaned by a licensed OWS maintenance company.

APPENDIX B

SPILL OR LEAK DOCUMENTS

Significant Spills, Leaks or Other Releases

SPILL 1

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	
Actions taken in response to release:	
Measures taken to prevent recurrence:	

SPILL 2

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	

Actions taken in response to release:	
Measures taken to prevent recurrence:	

SPILL 3

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	
Actions taken in response to release:	
Measures taken to prevent recurrence:	

APPENDIX C

TRAINING ACTIVITY DOCUMENTS

**Illicit Discharge Detection and Elimination (IDDE)
Employee Training Record
YEAR 3
Town of Marblehead, Massachusetts**

Date of Training: 6/15/2021

Training By: Julia Miller, Bobrek Engineering

PLEASE PRINT CLEARLY

Name	Department
Andrew Felt	Health
R. Titus	D.P.W
Peter Stacey	DRAINS
J. Bortwell	Highway
Jim Lowe	DPW
MATT CASHMAN	DPW
Bethany Spangler	WIS
Erik Fields	Water Dept.
Jason R Gulliland	Fire Dept
David Lihmann	DPW
Jana Lemieux	DPW
Don Meyer	DPW
CHARLES QUIGLEY	ENG'G
Collin King	DPW
Margaret Wheeler	DPW
Ruth	DPW
Joe John	Tree

APPENDIX D

INSPECTION FORMS AND REPORTS

Marblehead DPW Yard

Stormwater Site Inspection Report

General Information			
Facility Name	Marblehead DPW Yard		
Date of Inspection	May 5, 2021	Start/End Time	10:30 – 11:30
Inspector's Name(s)	John Bobrek, P.E.		
Inspector's Title(s)	President of Bobrek Engineering & Construction		
Inspector's Contact Information	john@gobobrek.com		
Inspector's Qualifications	Professional Engineer		
Weather Information			
Weather at time of this inspection? ☐ Clear ☐ Cloudy ☒ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds ☐ Other: Temperature: 57 degrees			
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: <i>Salt shed in general disrepair, stormwater enters and combines with salt pile. Fugitive salt contaminated runoff observed departing salt shed.</i>			

Control Measures

	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	Floor Drains to UST with water/oil separator	☒ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
2	Catch Basins	☒ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

Areas of Materials or Activities Exposed to Stormwater

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas in lower yard	☒ Yes ☐ No ☐ N/A	☐ Yes ☒ No	<i>Riprap construction entrance pad should be installed to combat dirt tracking off the site</i>
2	Equipment operations and maintenance areas	☒ Yes ☐ No ☐ N/A	☒ Yes ☐ No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
3	Fueling areas	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
4	Waste handling and disposal areas	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
5	Salt storage Shed	✓ Yes ☐ No ☐ N/A	☐ Yes ✓ No	Salt shed roof and walls in failure. Recommend Town inspect structure and allocate funds to replace.
6	Waste Oil (inside garage)	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	- Water and Sewer Garage has excess of temporary waste oil barrels – recommend scheduling regular disposal if not currently. - Drain Department has permanent waste oil tank with containment/overflow area half-full of debris, recommend cleaning.
7	Spill Response Kit	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	

Non-Compliance

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

The salt shed appears to require major repair, the roof is leaking and walls are buckling allowing stormwater inside and salt seeping out. We recommend the Town to allocate funding to replace the salt shed entirely with proper containment measures.

Additional Control Measures

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

To control the dirt tracking out of the lower yard, we recommend placing riprap construction entrance at the entrance/exit to the lower yard.

Notes

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

Print inspector name and title:



John Bobrek, P.E 5/5/21

Photo 1: Salt Shed Exterior Corrosion



Photo 2: Damage to exterior walls



Photo 3: Exterior walls bowing out



Photo 4: Exterior walls not contained a



Photo 5: Interior Wall Damage



Photo 6: Interior Wall Damage



QUARTERLY SITE INSPECTION CHECKLIST

TOWN OF MARBLEHEAD

PARKS GARAGE

Date: July 7, 2021

Time: 12:30 PM

Inspector(s) Name(s): Maggie Wheeler, Marblehead DPW and Julia Miller, Bobrek Engineering

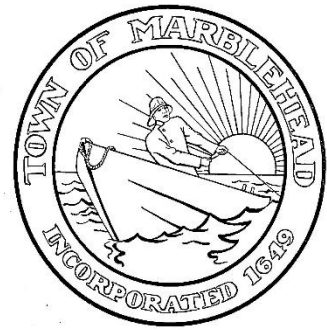
Weather Conditions During Inspection: Sunny, 85 Degrees

Description of Any Discharge Occurring at the Time of the Inspection: The salt shed appears to require major repair, the roof is leaking, and walls are buckling, allowing stormwater inside. Fugitive salt contaminated runoff observed departing salt shed. We recommend the Town allocate funding to replace the salt shed entirely with proper containment measures.

Conduct a thorough inspection of the entire facility and grounds.

Areas to Inspect		Good	Action Needed?	Action Completed?
Potential Pollutant Sources:	Description of problem:			
Material loading/unloading and storage areas	Riprap construction entrance pad should be installed to combat dirt tracking off the site			X
Equipment operations and maintenance areas		X		
Fueling areas		X		
Waste handling and disposal areas		X		
Salt storage Shed	Salt shed roof and walls in failure. Recommend Town inspect structure and allocate funds to replace.			X
Waste Oil area (in garage)	- Water and Sewer Garage has excess of temporary waste oil barrels – Recommend scheduling regular disposal if not currently. - Drain Department has permanent waste oil tank with containment/overflow area half-full of debris, recommend cleaning.			X
Spill Response kit		X		
General Facility Grounds & Outfall:		Good	Action Needed? (Routine)	Action Completed? (Date)
Inspect catch basins, outfalls, compost piles, detention basin, and drainage swales for evidence of damage, erosion or any discharge of pollutants.		X		
Ensure that facility grounds show no signs of poor housekeeping (e.g., materials, residues, or trash that may come in contact with stormwater).		X		
Ensure there are no spots, pools, puddles, or other traces of oil, grease, or other chemicals on the ground around the facility, either liquid or solid.		X		
Ensure there is no evidence of offsite tracking of materials and no blowing of raw, final, or waste materials outside of the operational areas.		X		
Ensure there are no leaks or spills from equipment, drums or other containers, or containers in poor condition outside the facility.		X		

Marblehead Municipal
Light Department
Stormwater Pollution Prevention Plan
Marblehead, MA



Bobrek Engineering & Construction

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Danvers, MA 01923

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978.406.9619

June 2021

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APPENDIX A

SOP 4 SPILL RESPONSE AND CLEANUP

SOP 6 EROSION AND SEDIMENTATION CONTROL

SOP 7 FUEL AND OIL HANDLING PROCEDURES

SOP 11 OIL/WATER SEPARATOR

APPENDIX B

SPILL OR LEAK DOCUMENTS

APPENDIX C

TRAINING ACTIVITY DOCUMENTS

APPENDIX D

INSPECTION FORMS AND REPORTS

SECTION 1 – Introduction

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

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

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

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

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

The SWPPP shall contain the following elements:

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

This SWPPP accomplishes these requirements by:

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

SECTION 2 – Detailed Facility Assessment

2.1 Facility Summary

The Marblehead Municipal Light Department (MMLD) is located at 80 Commercial St, Marblehead, MA 01945 and is owned and operated by the Town of Marblehead (the Town). The Locus Map in **figure 2-1** shows the location of the facility within the Town.

2.2 Site Inspection

The site inspection associated with the development of this SWPPP was completed on May 5, 2021. The inspection was conducted by John Bobrek, P.E. and Julia Miller from Bobrek Engineering and Construction and Maggie Wheeler, Staff Engineer from the Town.

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 MMLD 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: Robert Dever
Title: DPW Director

Office Phone: 781-631-1750

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.

Leader: Maggie Wheeler
Title: Staff Engineer

Office Phone: 781-631-1750

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

Member: Joesph Kowalik
Title: General Manager

Office Phone: 781-631-5600

Responsibilities: Assists in all components of the stormwater program, as needed.

See Figure 2-2. Site Map on next page

2.4 Facility Description

The primary purpose of the MMLD Facility is to store vehicles and supplies as well as offices for staff. Activities at the site are described in **SECTION 2.7**

The facility covers approximately 0.92 acres and contains the structures and other features shown on the Site Map in **Figure 2-2**. Components shown on the site map include:

- Location of the engineered drainage system, including catch basins, ditches, drain manholes, and treatment BMPs
- Direction of surface water flow
- Underground storage tanks
- Chemical storage areas
- Waste disposal areas

2.5 Facility Structures

The MMLD has one structure consisting of two garages and office space. The office space is located at the east side of the property and is used for administrative purposes. The garages provide personnel with heated, covered areas in which to complete minor maintenance of equipment and tools. The upper garage is located at the west side of the property and is also used for small vehicle and equipment storage. The lower garage is located at the middle of the structure and used for Line Truck storage.

2.5.1 Additional Site Features

Underground Storage Tank

There is one Underground storage tank (UST) located in front of the upper garage and is a 1000-gallon tank for gasoline fuel.

Emergency Generators

An emergency generator is located next to the upper garage and powers the entire structure. The generator provides backup power to the main building during outages. The generator, Kohler 150KW, is exposed but has 100% containment of its fuel source. The fuel is piped natural gas from a belly tank generator. All aspects of the generator are located on an impervious surface.

Solid Waste Management

The Town maintains two dumpsters, one for recycling and one for trash. Both dumpsters are located in the upper garage. These dumpsters are kept closed when not in use. No inappropriate materials were observed during the facility inspection.

Parking Areas

Impervious parking is located along the south and east sides of the property. These parking lots are used primarily for visitors and employees' personal vehicles.

2.6 Site Drainage

Stormwater from adjacent properties has the potential of impacting the property as it is lower in elevation from Commercial St. The adjacent properties consist of residential and commercial uses.

Sheet Flow

Drainage from the impervious surfaces at the site is directed into the two catch basins and two bioretention areas in the northeast and southeast corners of the site. These drainage structures drain to an outfall in the seawall located on the north side of the site.

Engineered Drainage

The two bioretention areas were installed in 2017 and are designed to promote infiltration through various species of plants including New England Wood Aster, Joe Pye Weed, Purple Coneflower, Pennsylvania Sedge, Gayfeather, Black Eyed Susan and Little Bluestem.

2.6.1 Receiving Waters

The final point of discharge for stormwater from this site is the Marblehead Harbor, which is identified as a Category 4A impaired water for fecal coliform. The good housekeeping practices, preventative maintenance and Best Management Practices implemented at the facility are appropriate and adequate controls.

2.7 Site Activities

The following activities occur at the facility:

- Facility or Building Maintenance
- Chemical unloading, handling, and storage (including paint, flammables)
- Tool storage
- Vehicle and equipment storage
- Vehicle and equipment maintenance/repair (including oil changes)
- Vehicle and equipment washing
- 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 Map (**Figure 2-2**).

The MMLD 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 site.

No solvent-based parts washers were observed in the garages. Any hazardous materials are either collected by a third-party vendor contracted by the Town on an annual basis, or collected at the annual Household Hazardous Waste Day (HHHD) that is hosted by the Board of Health for the benefit of all residents. Waste materials from MMLD operations that may be collected at the annual HHHW Day include used motor vehicle fluids that cannot be stored in the waste oil tank, such as used antifreeze and brake fluid. Any oil that may be contaminated with antifreeze, brake fluid, paint, or other additive is not accepted by the Town and a third-party vendor is called to collect it. These materials are properly labeled and stored using appropriate Best Management Practices between the time of generation and disposal.

The MMLD does not apply or utilize fertilizers, herbicides, or pesticides at their facility. As such, no fertilizers, herbicides, or pesticides are stored at the site.

2.7.2 Stockpiles

The MMLD does not stockpile materials such as sand or salt on site.

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, Marblehead does have permission to dispose of snow into Marblehead Harbor. When this option is necessary, requirements of “Snow Disposal Guidance” (BRPG01-01) issued by MassDEP on March 8, 2001, shall be followed.

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

Pollution Prevention

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

hazardous dust that could come in contact and mix with any liquids, the proper containment shall be utilized.

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

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

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

2.7.9 Vehicle and Equipment Washing

Potential Sources of Stormwater Pollution

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

Pollution Prevention

Outdoors, the use of a tight tank or other similar structure that can contain the wash water is ideal. If the wash water cannot be contained, it shall not be allowed to directly enter water bodies. Use phosphate free detergents that do not contain regulated contaminants, and avoid using solvents where the wash water may enter a sanitary sewer. Impervious surfaces may be used to promote infiltration and treatment before wash water enters the groundwater, but wash water coming from impervious pavement shall be treated to remove nutrients and petroleum products before entering an engineered storm drain system. Infiltration shall not be used within wellhead protection areas or other protected resource areas. Power washing, steam cleaning and engine and undercarriage washing shall not occur outdoors. Heavily soiled or vehicle dirtied from salting shall not be washed outdoors. All adjacent catch basins shall have a sump and be cleaned periodically, (refer to SOP 3, “Catch Basin Inspection and Cleaning”, included in **Appendix A**). All debris and particulate accumulation shall be removed and swept clean in all outdoor washing areas.

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

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

Washing of all facility vehicles is completed in the garages as nessessary. Wastewater from vehicle washing operations is discharged into the sewer system.

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. Petroleum Products
4. 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 Vehicles and Equipment

Vehicles and major equipment stored and maintained at the facility include line trucks and utility trucks all of which are stored inside the garages when not in use.

2.9 Location of Leak and Spill Cleanup Materials

Leak and spill cleanup materials are stored at the MMLD in each garage to facilitate rapid response. Locations and types of leak and spill cleanup materials are identified in below.

Table 2-3. Leak and Spill Cleanup Materials

Building or Area	Location	Materials Available
Upper Garage	Located in the back left in a yellow barrel	Oil Dri Premium absorbents – 2 32QT Bags
Lower Garage	Found in the back right corner next to Emergency Wash area	Oil Dri Premium Absorbents 1 32 QT bucket
Backstock	Under stairwell from lower to upper garage	Oil Dri Premium Absorbents 5 32 QT bags and one BarrelPal Kit

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:

- Street wash waters

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

2.11 Stormwater Monitoring

Stormwater monitoring is done through the annual MS4 outfall screening and inspections. There are two outfalls located in the seawall behind the to the MMLD building. The eastern outfall is assumed to be decommissioned and the western outfall drains the stormwater from the site.

2.12 Significant Material Inventory

Materials stored include those specified in **SECTION 2.7, “Site Activities”**. An inventory of these materials is included in **Table 2-5**, which also reviews the likelihood for each identified material to encounter 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 Map in **Figure 2-2**.

**Table 2-5. Significant Material Inventory
MMLD Facility**

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Petroleum-Based Compounds					
Gasoline	Outside Upper Garage	150 Gal	Petroleum hydrocarbons	N/A	Likely
Hydraulic Fluid	Upper Garage	55 Gal	Petroleum hydrocarbons	E	Not Likely
Motor Oil	Upper Garage	55 Gal	Petroleum hydrocarbons	E	Not likely
Lubricants	Upper Garage and	4 - 12 oz	Petroleum hydrocarbons	E	Not likely

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
	Lower Garage				
Transmission Fluid	Upper Garage and Lower Garage	55 Gal	Petroleum hydrocarbons	E	Not likely
Waste Oil	Lower Garage	750 Gal	Petroleum hydrocarbons	E	Not likely
Other:					
Total Volume of Oil at Facility = 1065.4 Gal					
Non-Petroleum Significant Materials					
Antifreeze	Upper Garage	12 oz	Ethylene glycol; potential source of BOD	E	Not likely
Brake Fluid	Upper Garage and Lower Garage	24 oz	Volatile organic compounds; non-petroleum based oil	E	Not likely
Detergents	Upper Garage and Lower Garage	30 Gal	Surfactants	E	Not likely
Paint, Latex	Workshop	5 Gal	Petroleum constituents, including volatile and semi volatile organic compounds	E	Not likely
Paint, Spray	Workshop	10 Cans	Petroleum constituents, including volatile and semi volatile organic compounds	E	Not likely
Solid Waste, for Disposal	Loading Dock	1 3 CY Dumpster	Particulate matter, solids, metals	C	Not Likely
Spill response material (Speedi Dri or similar)	Upper Garage and Lower Garage	6 32 QT Bags and two Spill Response Kits in Barrels	Particulate matter, solids, residual oil.	E	Not likely

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 MMLD does not have aboveground oil storage capacity that exceeds 1,320 gallons.

2.14 Description of Significant Material Storage Areas

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

Fueling of Gasoline occurs outside the Upper Garage and is not contained. However, is it on a cement pad and underdrains are located at the garage door that led to the sewer system in case of runoff.

The MMLD emergency generator is fueled with natural gas consistently in the belly tank located below the generator. This area is contained, and the entire generator is on a pervious surface.

Waste oil and other used motor fluids are stored in the lower garage. Waste oil is stored in a temporary barrel and is picked up by Clean Harbors on an as-needed basis. No outside waste oil is allowed of waste oil to the facility occurs within the site and is monitored by an MMLD employee.

2.15 List of Significant Leaks or Spills

No significant spills or leaks have occurred on the site in the last three years. 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 MMLD to maintain water quality.

2.16.1 Pretreatment Structural BMPs

- Deep sump catch basins

- Oil/Grit Separators
- Vegetated Filter strip

2.16.2 Treatment Structural BMPs

- Rain Garden/Bioretention Area

2.17 Sediment and Erosion Control

Deep sump catch basins and bioretention areas at the MMLD prevents drainage of stormwater and any associated sedimentation from entering the storm drain system or discharging directly to a water body.

SECTION 3 – Non-Structural Controls

3.1 Good Housekeeping

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

- All washing of vehicles is performed within the designated vehicle wash bay.
- All fluid products and wastes are kept indoors.
- Fueling of small equipment is completed indoors.
- All floor drains present within garage bays drain to an UST that is cleaned out annually
- 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.
- No fertilizers, herbicides, or pesticides are stored or used at the facility.
- Lead-acid batteries are stored indoors and within secondary containment.
- Hazardous material storage lockers with spill containment are used. Storage areas are located away from vehicle and equipment paths to reduce the potential of accident-related leaks and spills.
- Storage drums and containers are not located close to storm drain inlets.
- All hazardous material storage areas and containers have proper signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment.
- All materials, waste oil storage containers, and gas cans are properly labeled.
- Speedi Dri (or similar absorbent) is readily available and used for appropriate spills.
- 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, as well as other particulates and materials.
- Obtain only the number 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 will be 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 MMLD maintains a supply of spill cleanup materials for all areas on site and will maintain this inventory. An inventory of spill containment, control, and cleanup materials and spill kits maintained at the Light Department was shown in **Table 2-3**.

3.2 Preventative Maintenance

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

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

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

3.3 Best Management Practices

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

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

1. Follow Standard Operating Procedures (s) during delivery of waste oil to the equipment/waste oil storage bay. These SOPs are included in **Appendix A**.
2. Follow Standard Operating Procedures during delivery of bulk oil to the emergency generator and bulk fuel to the Fuel Island. These SOPs are included in **Appendix A**.
3. Minimize the volume of gasoline stored within the buildings and on the site.
4. Clean up any oil spills observed in the parking lot, garages, or other surfaces in a timely manner.
5. Monitor all material deliveries.
6. Inspect all storage tanks prior to filling activities for spills, leaks and corrosion.

3.4 Spill Prevention and Response

The following procedures apply to the facility:

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

SECTION 4 – Plan Implementation

4.1 Employee Training

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

The DPW is responsible for stormwater management training for town 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 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 director of the DPW or qualified third party 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 MMLD 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 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 MMLD 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 MMLD facility is in compliance with the 2016 Massachusetts MS4 Permit.

4.4 Triggers for SWPPP Revisions

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

- An increase in the quantity of any potential pollutant stored at the facility;
- The addition of any new potential pollutant (not already addressed in this SWPPP) to the list of materials stored or used at the facility;
- Physical changes to the facility that expose any potential pollutant (not presently exposed) to stormwater;
- Presence of a new authorized non-stormwater discharge at the facility; or
- Addition of an activity that introduces a new potential pollutant.

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

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

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

SECTION 5 – SWPPP Certification

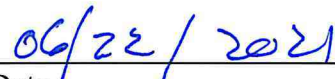
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage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



Authorized Official

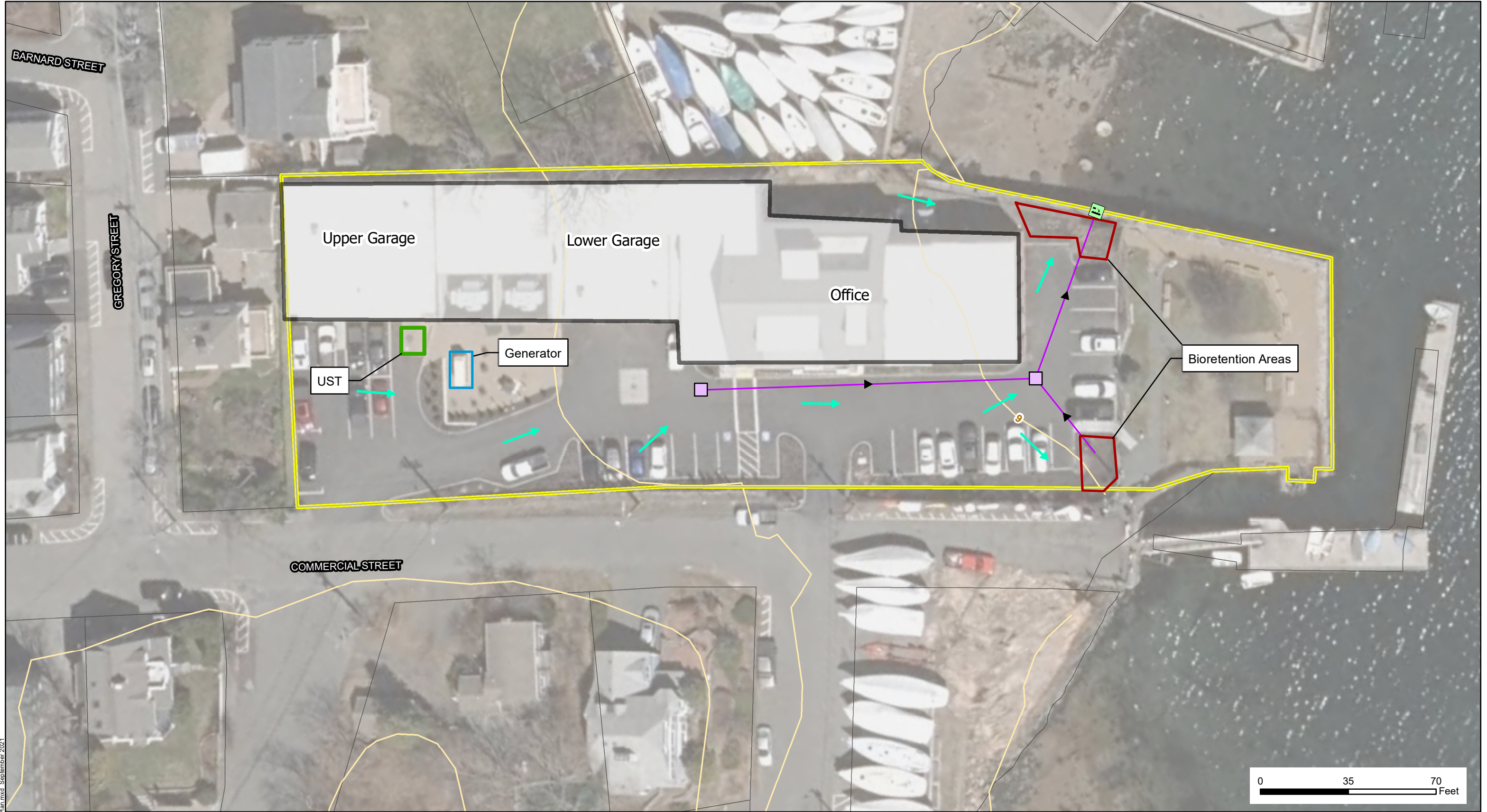


Title



Date

FIGURE 2-2



Z:\WP\Marblehead GIS\MXD\LightDepartment_SitePlan.mxd September 2021

Engineering & Construction
BOBREK
PO BOX 2185
DANVERS, MA 01923
WWW.GOBOBREK.COM

Legend

- | | | |
|--------------------------------------|--------------------|--------------------------------|
| Marblehead Light Department Building | MMLD Drainage Flow | Bioretention Areas |
| MMLD Land Parcel | Drain Pipe | Generator |
| 10' Contour (MassGIS) | CatchBasins | Underground Storage Tank (UST) |
| Parcel Boundary | Drain Outfall | |

Marblehead
Municipal Light Department
80 Commercial Street
Marblehead, MA 01945

CLIENT INFO



NORTH

SWPPP
Figure 2-2
MMLD Site Map

MAP TITLE

APPENDIX A:

SOP 4 SPILL RESPONSE AND CLEANUP
SOP 6 EROSION AND SEDIMENTATION CONTROL
SOP 7 FUEL AND OIL HANDLING PROCEDURES
SOP 11 OIL/WATER SEPARATOR

SOP 4: SPILL RESPONSE AND CLEANUP PROCEDURES

Contents

Introduction	2
Responding to a Spill	2
Procedures for Reporting Spill Response	3
Maintenance and Prevention Guidance	4
Related Standard Operating Procedures	5

Introduction

Municipalities are responsible for any contaminant spill or release that occurs on property they own or operate. Areas of concern include any facilities that use or store chemicals, fuel oil or hazardous waste, including schools, garages, DPW yards, and landfills. Implementation of proper spill response and cleanup procedures can help to mitigate the effects of a contaminant release.

Responding to a Spill

In the event of a spill, follow these spill response and cleanup procedures:

1. Notify a member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility safety officer.
2. Assess the contaminant release site for potential safety issues and for direction of flow.
3. With proper training and personal protective equipment, complete the following:
 - a. Stop the contaminant release;
 - b. Contain the contaminant release through the use of spill containment berms or absorbents;
 - c. Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers;
 - d. Clean up the spill;
 - e. Dispose of all contaminated products in accordance with applicable federal, state and local regulations.
 - i. Products contaminated with petroleum shall be handled and disposed of as described in MassDEP policy WCS-94-400, Interim Remediation Waste Management Policy for Petroleum Contaminated Soils, <http://www.mass.gov/dep/cleanup/laws/94-400.pdf>.
 - ii.
 - iii. 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.
 - iv. Waste oil contaminated products:
 1. Perform the "one drop" test to ensure absorbents do not contain enough oil to be considered hazardous. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.
 2. 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.
 - 3. If absorbents do not pass the “one drop” test they should be placed in separate metal containers with tight fittings 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, however **in the case of an emergency call 911**;
- Contact the MassDEP 24-hour spill reporting notification line, toll-free at **(888)-3104-1133**; a.
- The following scenarios **are exempt** from MassDEP reporting requirements:
- i. Spills of less than 10 gallons of petroleum and do not impact a water body;
 - ii. Spills of less than one pound of hazardous chemicals and do not present an imminent health or safety hazard;
 - iii. Spills from passenger vehicle accidents;
 - iv. Spills within a vault or building with a watertight floor and walls that completely contain all released chemicals.

Procedures for Reporting Spill Response

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

Where was the release sent/what was contaminated, addressing:

- a. Pavement;
- b. Soil;
- c. Drains;
- d. Catch Basins;

- e. Water Bodies;
 - f. Public Street; and
 - g. Public Sidewalk.
4. The concentration of the released contaminant.
 5. What/who caused the release.
 6. Is the release being contained and/or cleaned up, or is the response complete.
 7. Type and amount of petroleum stored on site, if any.
 8. 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:

1. 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;
2. Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site;
3. 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;
 - 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, 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.
4. 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;
5. Maintain a oil and grease spill response kit with the following materials, at a minimum, at each facility:

- a. 6.5 gallon bucket with screw top lid and handle
- b. 10 gallons of sand
- c. 200 pounds of Speedi Dry absorbent
- d. Drain covers
- e. Spill containment berms
- f. (4) 3' absorbent socks
- g. (16) 16" x 18" absorbent pads
- h. Goggles
- i. Nitrile gloves
- j. Disposable bags to dispose of used materials
- k. Laminated contacts list shall include the following names and numbers:
 - i. Safety Officer;
 - ii. Facility Supervisor;
 - iii. Local Fire Department;
 - iv. MassDEP spill report notification line;
 - v. MassDEP Regional Office;
 - vi. Hazardous Waste Compliance Assistance Line;
 - vii. Household Hazardous Products Hotline;
 - viii. Massachusetts Department of Fire Services;
 - ix. Licensed Site Professionals Information.

Related Standard Operating Procedures

1. SOP 7, Fuel and Oil Handling Procedures

SOP 6: EROSION AND SEDIMENTATION CONTROL

Contents

Introduction	2
Controlling Erosion and Sediment through Design and Planning	2
Controlling Erosion and Sediment on Construction Sites	2
Controlling Erosion and Sediment by Proper Maintenance of Permanent BMPs	3
Related Standard Operating Procedures	4

Introduction

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.
1. Erosion and sediment control devices shall be inspected by the contractor regularly, and maintained as needed to ensure function.

2. In the SWPPP or other document, the contractor shall clearly identify the party responsible for maintaining erosion and sediment control devices.
3. 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.
4. Existing vegetation should be maintained on site as long as possible.
5. 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.
6. Stockpiles shall be stabilized by seeding or mulching if they are to remain for more than two weeks.
7. Disturbed areas shall be protected from stormwater runoff by using protective Best Management Practices (BMPs).
8. Clean water shall be diverted away from disturbed areas on construction sites to prevent erosion and sedimentation.
9. Sediment traps and sediment barriers should be cleaned out regularly to reduce clogging and maintain design function.
10. Vegetated and wooded buffers shall be protected.
11. 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.
12. Vegetation shall be allowed to establish before introducing flows to channels.
13. Regular light watering shall be used for dust control, as this is more effective than infrequent heavy watering.
14. Excessive soil compaction with heavy machinery shall be avoided, to the extent possible.
15. 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 PROCEDURES

Contents

Introduction	2
Delivery by Bulk (Tanker) Truck	2
Delivery of Drummed Materials	3
Removal of Waste Oil from the Facility	4
Attachments	4
Related Standard Operating Procedures	4

Introduction

Spills, leaks, and overfilling can occur during handling of fuels and petroleum-based materials, even in small volumes, representing a potential source of stormwater pollution. This Standard Operating Procedure addresses 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”.

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

1. There is no smoking while fuel handling is in process or underway.
2. 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.
3. The delivery vehicle’s hand brake is set and wheels are chocked while the activity is being completed.
4. Catch basins and drain manholes are adequately protected.
5. No tools are to be used that could damage fuel or oil containers or the delivery vehicle.
6. No flammable liquid shall 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.
7. Local traffic does not interfere with fuel transfer operations.
8. The attending persons should watch for any leaks or spills
 - a. Any small leaks or spills should be immediately stopped, and spilled materials absorbed and disposed of properly. Refer to SOP 4, “Spill Response and Cleanup Procedures”, for examples of spill cleanup and response materials.
 - b. In the event of a large spill or one that discharges to surface waters or an engineered storm drain system, the facility representative shall activate the facility’s Stormwater Pollution Prevention Plan (SWPPP) and report the incident as specified within.

Delivery by Bulk (Tanker) Truck

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

1. The truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures”, for examples of spill cleanup and response materials.

3. The facility representative shall check to ensure that the amount of delivery does not exceed the available capacity of the tank.
 - a. 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.
4. The truck driver and the facility representative shall both remain with the vehicle during the delivery process.
5. The truck driver and the facility representative shall inspect all visible lines, connections, and valves for leaks.
6. When delivery is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
7. The delivery vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
8. The facility representative shall 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.
9. The facility representative shall 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 shall include the following:

1. The truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures", for examples of spill cleanup and response materials.
3. The facility representative shall closely examine the shipment for damaged drums.
 - a. If damaged drums are found, they shall be closely inspected for leaks or punctures.
 - b. Breached drums should be removed to a dry, well-ventilated area and the contents transferred to other suitable containers.
 - c. Drums shall be disposed of in accordance with all applicable regulations.
4. Drummed materials shall not be unloaded outdoors during wet weather events.
5. The truck driver and the facility representative shall both remain with the vehicle during the delivery process.
6. Drums shall be handled and unloaded carefully to prevent damage.
7. Upon completion of unloading, the facility representative shall 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.
8. The facility representative shall check to ensure that the proper amount of fuel 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 for the draining of bulk oil tanks shall include the following:

1. The disposal truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures", for examples of spill cleanup and response materials.
3. The facility representative shall verify that the volume of waste oil in the tank does not exceed the available capacity of the disposal hauler's vehicle.
4. The truck driver and the facility representative shall both remain with the vehicle during the tank draining process.
5. When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
6. The disposal hauler vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
7. The facility representative shall 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.
8. The facility representative shall collect a receipt from the truck driver.

Attachments

1. Fuel Delivery Checklist

Related Standard Operating Procedures

1. SOP 4, Spill Response and Cleanup Procedures

Fuel Delivery Checklist

FUEL DELIVERY FORM

TOWN OF _____

Date: _____

Time of Arrival: _____

Time of Departure: _____

Truck Number: _____

Name of Truck Driver: _____

Name of Town Employee: _____

BEFORE UNLOADING:

Is all spill response equipment and personal protective equipment in place?

Yes ☐ No ☐

In the case of bulk fuel delivery, does tank capacity exceed the amount of delivery?

Yes ☐ No ☐ N/A ☐

In the case of drum fuel delivery, are all drums free of leaks and punctures?

Yes ☐ No ☐ N/A ☐

COMMENCE UNLOADING. REMAIN WITH VEHICLE AT ALL TIMES.

AFTER UNLOADING IS COMPLETE:

Have all fuel containers, including the vehicle, been inspected for leaks?

Yes ☐ No ☐

Has the ground at the unloading point been inspected for evidence of leaks?

Yes ☐ No ☐

If there are any leaks or spills, has the material been properly cleaned?

Yes ☐ No ☐

Has the correct amount of fuel been delivered?

Yes ☐ No ☐

Has a receipt been collected?

Yes ☐ No ☐

SOP 11: OIL/WATER SEPARATOR (OWS) MAINTENANCE

Contents

Introduction	2
General OWS Maintenance Requirements.....	2
OWS Inspection Procedures	2
OWS Cleaning Procedures	3
Documentation of Cleaning and Service.....	3
Attachments.....	4
Related Standard Operating Procedures	4
OIL/WATER SEPARATOR (OWS) QUARTERLY INSPECTION CHECKLIST	5

Introduction

Oil/water separators (OWS), also known as gas/oil separators, are structural devices intended to provide pretreatment of floor drain water from industrial and garage facilities. An OWS allows oils (and substances lighter than water) to be intercepted and be removed for disposal before entering the sanitary sewer system. Substances heavier than water settle into sludge at the bottom of the unit. The remaining water passes through the unit into the sanitary sewer system.

OWS units are generally required where petroleum-based products, wastes containing petroleum, or oily and/or flammable materials are used, produced, or stored. OWS units should not be used to manage stormwater or flow from vehicle washing facilities. High flow rates through an OWS will reduce the structure's ability to separate materials. Detergents and solvents can emulsify oil and grease, allowing the particles to enter the sewer, so these should not be disposed of in drains entering the OWS.

General OWS Maintenance Requirements

1. Each OWS at a facility may receive different materials in different quantities, so the cleanout schedule may not be the same for every OWS at a facility.
2. Employees performing inspections of an OWS must be properly trained and be familiar with the maintenance of that specific structure, since function can vary based on design. Third-party firms may be utilized to perform quarterly inspections.
3. Do not drain petroleum, oil, or lubricants directly to an OWS. The structures are designed to manage these materials at low and medium concentrations in sanitary sewage, not as slug loads.
4. Do not drain antifreeze, degreasers, detergents, fuels, alcohols, solvents, coolant, or paint to the OWS.
5. Separator compartment covers should be tightly sealed to ensure floor drainage only enters the first compartment of the OWS.
6. Drains should be kept free of debris and sediment to the maximum extent practicable.
7. Spill cleanup materials should be maintained in the area served by the OWS. For more information on spill cleanup and response materials, refer to SOP 4, "Spill Response and Cleanup Procedures".

OWS Inspection Procedures

Daily inspection of an OWS should include a visual examination of the area served by the OWS for evidence of spills or leaks.

Weekly inspections of an OWS should include the following:

1. Visually examine the area served by the OWS for evidence of spills or leaks.
2. Inspect the point of discharge (i.e., sewer manhole) for evidence of petroleum bypassing the OWS.
3. Inspect drains for any signs of unauthorized substances entering the OWS.

4. Examine the OWS for signs of leaks or any malfunction.

Quarterly inspections of an OWS should include the following:

1. Complete tasks noted as appropriate for daily and weekly inspection.
2. Complete the Quarterly OWS Inspection Checklist, attached, during the inspection.
3. Take the following measurements to benchmark function of the OWS:
 - A. Distance from rim of access cover to bottom of structure
 - B. Distance from rim of access cover to top of sludge layer
 - C. Depth of sludge layer ($C = A - B$)
 - D. Distance from rim of access cover to the oil/water interface
 - E. Distance from rim of access cover to the top of the liquid surface
 - F. Depth of oil layer ($F = D - E$)

OWS Cleaning Procedures

Cleaning of the OWS is required when there has been a spill to the OWS that exceeds ten gallons of oil, one gallon of detergent or solvent, or any material prohibited by the owner of the sanitary sewer. Cleaning is also required when the levels of accumulated sludge and/or oil meet the manufacturer's recommended levels for cleaning. This will vary based on the manufacturer of the OWS. If the manufacturer's recommendations are unknown, the following guidelines are appropriate for determining when to clean:

1. When sludge accumulates to 25% of the wetted height of the separator compartment; or
2. When oil accumulates to 5% of the wetted height of the separator compartment; or
3. When 75% of the retention capacity of the OWS is filled.

Cleaning should be performed a minimum of once per year. When cleaning is required, it shall be performed by licensed OWS maintenance companies. Materials removed from the OWS must be disposed of in accordance with Massachusetts Hazardous Waste Regulations, 310 CMR 30.00.

Documentation of Cleaning and Service

The operator of the premises where the OWS is located shall maintain a log describing the date and type of all inspections, service and maintenance performed in connection with the Separator. Documentation shall include the identity of the inspector (or the identity of the person or entity that performed the service and/or maintenance). Records shall also document the amount of residue removed from the OWS each time it was cleaned, and how removed materials were disposed. This documentation shall be maintained for a minimum of six years.

Attachments

1. Quarterly OWS Inspection Checklist

Related Standard Operating Procedures

1. SOP 4, Spill Response and Cleanup Procedures

OIL/WATER SEPARATOR (OWS) QUARTERLY INSPECTION CHECKLIST

Facility:

OWS Location:

Inspected By:

Date:

Visual Inspection	Are there any signs of spills or leaks in the general area?	
		Yes No
	Is there any evidence of petroleum bypassing the OWS?	
		Yes No
	Are there any unauthorized substances entering the OWS?	Yes No
	Does the OWS exhibit any signs of leaks or malfunctions?	
		Yes No

If you answered "Yes" to any of the above questions, further inspection, repair, and/or cleaning may be necessary.

	A	Distance from rim of access cover to bottom of structure	
	B	Distance from rim of access cover to top of sludge layer	
	C = A - B	Depth of sludge layer	

Measurements	D	Distance from rim of access cover to the oil/water interface	
	E	Distance from rim of access cover to the top of the liquid surface	
	$F = D - E$	Depth of oil layer	

If the values for “C” and/or “F” are greater than those in the manufacturer’s recommendations, the OWS must be cleaned by a licensed OWS maintenance company.

APPENDIX B

SPILL OR LEAK DOCUMENTS

Significant Spills, Leaks or Other Releases

SPILL 1

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	
Actions taken in response to release:	
Measures taken to prevent recurrence:	

SPILL 2

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	

Actions taken in response to release:	
Measures taken to prevent recurrence:	

SPILL 3

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	
Actions taken in response to release:	
Measures taken to prevent recurrence:	

APPENDIX C

TRAINING ACTIVITY DOCUMENTS

**Illicit Discharge Detection and Elimination (IDDE)
Employee Training Record
YEAR 3
Town of Marblehead, Massachusetts**

Date of Training: 6/15/2021

Training By: Julia Miller, Bobrek Engineering

PLEASE PRINT CLEARLY

Name	Department
Andrew Felt	Health
R. Titus	D.P.W
Peter Stacey	DRAINS
J. Bortwell	Highway
Jim Lowe	DPW
MATT CASHMAN	DPW
Bethany Spangler	WIS
Erik Fields	Water Dept.
Jason R Gulliland	Fire Dept
David Lihmann	DPW
Jana Lemieux	DPW
Don Meyer	DPW
CHARLES QUIGLEY	ENG'G
Collin King	DPW
Margaret Wheeler	DPW
Ruth	DPW
Joe John	Tree

APPENDIX D

INSPECTION FORMS AND REPORTS

General Information			
Facility Name	Marblehead Light Department		
Date of Inspection	May 5, 2021	Start/End Time	8:00 – 8:30
Inspector's Name(s)	John Bobrek, P.E.		
Inspector's Title(s)	President of Bobrek Engineering & Construction		
Inspector's Contact Information	<u>john@gobobrek.com</u>		
Inspector's Qualifications	Professional Engineer		
Weather Information			
Weather at time of this inspection? ☐ Clear ☐ Cloudy ☒ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds ☐ Other: _____ Temperature: 57 degrees			
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: _____			

	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	Floor Drains to 2 USTs with water/oil separator	✓Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
2	Catch Basins	✓Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
3	Bioretention with overflows	✓Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

	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	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
2	Equipment operations and maintenance areas	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
3	Fueling areas	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
4	Waste handling and disposal areas	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
5	Waste Oil (inside garage)	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
6	Spill Response Kit (inside garage)	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	

Non-Compliance

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

None

Additional Control Measures

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

None

Notes

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

Print inspector name and title:



John Bobrek, P.E 5/5/21

QUARTERLY SITE INSPECTION CHECKLIST

TOWN OF MARBLEHEAD

LIGHT DEPARTMENT

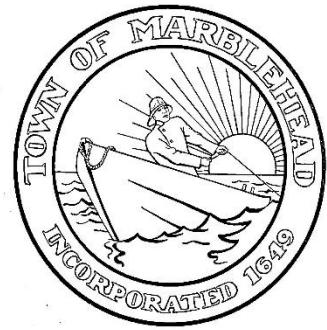
Date: July 7, 2021 Time: 1:00 PM
 Inspector(s) Name(s): Maggie Wheeler, Marblehead DPW and Julia Miller, Bobrek Engineering

Weather Conditions During Inspection: Sunny, 85 Degrees
 Description of Any Discharge Occurring at the Time of the Inspection: No Discharge

Conduct a thorough inspection of the entire facility and grounds.

Areas to Inspect		Good	Action Needed?	Action Completed?
Potential Pollutant Sources:	Description of problem:			
Material loading/unloading and storage areas		X		
Equipment operations and maintenance areas		X		
Waste handling and disposal areas		X		
Fueling areas		X		
Waste Oil (inside garage)		X		
Spill Response Kit (inside garage)		X		
General Facility Grounds & Outfall:		Good	Action Needed? (Routine)	Action Completed? (Date)
Inspect catch basins, outfalls, compost piles, detention basin, and drainage swales for evidence of damage, erosion or any discharge of pollutants.		X		
Ensure that facility grounds show no signs of poor housekeeping (e.g., materials, residues, or trash that may come in contact with stormwater).		X		
Ensure there are no spots, pools, puddles, or other traces of oil, grease, or other chemicals on the ground around the facility, either liquid or solid.		X		
Ensure there are no leaks or spills from equipment, drums or other containers, or containers in poor condition outside the facility.		X		

Marblehead
Parks and Recreation Department
Stormwater Pollution Prevention Plan
Marblehead, MA



Bobrek Engineering & Construction

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May 2021

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APPENDIX A

SOP 4 SPILL RESPONSE AND CLEANUP

SOP 6 EROSION AND SEDIMENTATION CONTROL

SOP 7 FUEL AND OIL HANDLING PROCEDURES

SOP 11 OIL/WATER SEPARATOR

APPENDIX B

SPILL OR LEAK DOCUMENTS

APPENDIX C

TRAINING ACTIVITY DOCUMENTS

APPENDIX D

INSPECTION FORMS AND REPORTS

SECTION 1 – Introduction

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

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

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

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

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

The SWPPP shall contain the following elements:

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

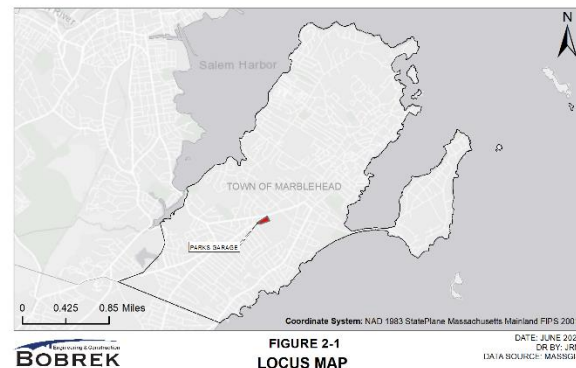
This SWPPP accomplishes these requirements by:

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

SECTION 2 – Detailed Facility Assessment

2.1 Facility Summary

The Parks and Recreation Garage (Parks Garage) is located at 28 Vine, Marblehead, MA 01945 and is owned and operated by the Town of Marblehead (the Town). The Locus Map in **Figure 2-1** shows the location of the facility within the Town.



2.2 Site Inspection

The site inspection associated with the development of this SWPPP was completed on May 5, 2021. The inspection was conducted by John Bobrek, P.E. and Julia Miller from Bobrek Engineering and Construction and Maggie Wheeler, Staff Engineer from the Town.

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 Parks 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: Robert Dever

Office Phone: 781-631-1750

Title: DPW Director

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.

Leader: Maggie Wheeler

Office Phone: 781-631-1750

Title: Staff Engineer

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.

See Figure 2-1. Site Map attached

2.4 Facility Description

The primary purpose of the Parks Garage Facility is to store vehicles and supplies as well as offices for staff. Activities at the site are described in **SECTION 2.7**

The facility covers approximately 0.92 acres and contains the structures and other features shown on the Site Map in **Figure 2-1**. Components shown on the site map include:

- Location of the engineered drainage system, including catch basins, ditches, drain manholes, and treatment BMPs
- Direction of surface water flow
- Underground storage tanks
- Chemical storage areas
- Waste disposal areas

2.5 Facility Structures

The Parks Garage has one structure with two connecting garage bays. This facility is used to provide personnel with heated, covered areas in which to complete minor maintenance of equipment and tools for use at locations around Town. There is also equipment storage located inside the garage.

2.5.1 Additional Site Features

Solid Waste Management

The Town maintains two dumpsters one for recycling and one for trash. Both dumpsters are located to the side of the garage. These dumpsters are kept closed when not in use. No inappropriate materials were observed during the facility inspection.

Parking Areas

Impervious parking is located along next the garage for Town vehicles. There is also pervious parking area below the garage for employees' personal vehicles.

2.6 Site Drainage

Stormwater from adjacent properties has the potential of impacting the property as it is lower in elevation from Commercial St. The adjacent properties consist of residential and commercial uses.

Sheet Flow

Drainage from the impervious surfaces site is directed into pervious surfaces to the north and south of the property. Any drainage from the garage parking lot may drain down Vine Street to a catch basin located next to the tennis courts.

2.6.1 Receiving Waters

The final point of discharge for stormwater from this site is an unnamed wetland area to the east of the property.

2.7 Site Activities

The following activities occur at the facility:

- Facility or Building Maintenance
- Chemical unloading, handling, and storage (including paint, flammables)
- Tool storage
- Vehicle and equipment storage
- Vehicle and equipment maintenance/repair (including oil changes)
- Vehicle and equipment washing
- 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 Map (**Figure 2-1**).

The Parks Garage does not apply fertilizers, herbicides, or pesticides at their facility. However, they do have temporary storage of fertilizer for Town application which is contained in storage containers during the summer season. No obsolete vehicles or other potential sources of pollutants are kept in any structure at the site.

Solvent-based parts washers were observed in the garage in proper containers. Any hazardous materials are either collected by a third-party vendor contracted by the Town on an as needed basis. Waste materials from Parks Garage operations that may be collected include used motor vehicle fluids that cannot be stored in the temporary waste oil tank, such as used antifreeze and brake fluid. Any oil that may be contaminated with antifreeze, brake fluid, paint, or other additive is not accepted by the Town and a third-party vendor is called to collect it. These materials are properly labeled and stored using appropriate Best Management Practices between the time of generation and disposal.

2.7.2 Stockpiles

The Parks Garage does have the ability to stockpile materials such as sand, dirt on site.

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, Marblehead does have permission to dispose of snow into Marblehead. When this option is necessary, requirements of “Snow Disposal Guidance” (BRPG01-01) issued by MassDEP on March 8, 2001, shall be followed.

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.

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 require 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) to remove oils and gasoline. Parks Garage does not currently have an oil/water separator that the Town is aware of.

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 debris and particulate accumulation shall be removed and swept clean in all outdoor washing areas.

Washing vehicles and equipment indoors in the proper facilities is preferred over washing outdoors whenever possible. Indoor facilities shall have a common drain and it shall utilize a tight tank or other containment device to hold the wash water. The use of detergents shall be avoided and when the use of detergents cannot be avoided, use detergents free from phosphates and regulated contaminants.. 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 garages as necessary. Wastewater from vehicle washing operations is discharged into the sewer system.

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. Petroleum Products
4. 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 area drains to the Sewer System. The Town is not aware of any oil/water separator.

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

2.8 Vehicle and Equipment Inventory

The equipment stored at the facility is contained in the garage and include various tractors and lawn mowers. Outside storage of equipment include plow blades however they are in a covered area.

2.9 Location of Leak and Spill Cleanup Materials

Leak and spill cleanup materials are stored at the in each garage 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
Garage	Located in the left side	Oil Dri Premium absorbents – 2 32QT Bags

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:

- Street wash waters

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

2.11 Existing Stormwater Monitoring Data

Stormwater monitoring is done through annual and quarterly inspections. There are no structures, and the monitoring is focused on runoff from the site.

2.12 Significant Material Inventory

Materials stored include those specified in **SECTION 2.7**, “Site Activities”. An inventory of these materials 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 2-1**.

**Table 2-5. Significant Material Inventory
Parks Garage Facility**

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Petroleum-Based Compounds					
Gasoline	Garage	5 – 5 Gallon containers	Petroleum hydrocarbons	E	Not Likely
Hydraulic Fluid	Garage	55 Gal	Petroleum hydrocarbons	E	Not Likely
Motor Oil	Garage	55 Gal	Petroleum hydrocarbons	E	Not likely
Lubricants	Garage	8 - 12 oz	Petroleum hydrocarbons	E	Not likely
Waste Oil	Garage	55 Gal	Petroleum hydrocarbons	E	Not likely
Other:					
Total Volume of Oil At Facility = 190.75 Gal					
Non-Petroleum Significant Materials					
Antifreeze	Garage	1 Gal	Ethylene glycol; potential source of BOD	E	Not likely
Detergents	Garage	1 Gal	Surfactants	E	Not likely
Paint, Latex	Garage – Stored in Cabinet	5 1 Gal	Petroleum constituents, including volatile and semivolatile organic compounds	E	Not likely

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Paint, Spray	Garage	10 Cans	Petroleum constituents, including volatile and semivolatile organic compounds	E	Not likely
Solid Waste, for Disposal	Outside Garage	2 small garbage containers	Particulate matter, solids, metals	C	Not Likely
Fertilizers	Temporary storage in sealed container	2	volatile and semivolatile organic compounds	E	Not Likely

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 Parks 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 Parks 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 Gasoline occurs inside the Garage for equipment only and is completely contained.

Waste oil and other used motor fluids are stored in the garage. Waste oil is stored in a temporary barrel. Only waste oil from the facility is allowed in the barrel and is monitored by an Parks Garage employee.

2.15 List of Significant Leaks or Spills

No significant spills or leaks have occurred on the site in the last three years. Forms included in **Appendix B** will be used to document any spill or leak that occurs at the facility in the future.

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.
- All fluid products and wastes are kept indoors.
- Fueling of small equipment is completed indoors.
- All floor drains present within garage bays drain to an UST that is cleaned out annually
- 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.
- No 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.
- Speedi Dri (or similar absorbent) is readily available and used for appropriate spills.
- 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 will be 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 Parks Garage maintains a supply of spill cleanup materials for all areas on site, and will maintain this inventory. An inventory of spill containment, control, and cleanup materials and spill kits maintained at the Parks 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 DPW is responsible for stormwater management training for town 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 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 director of the DPW or qualified third party 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 Parks Garage 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 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 Parks 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 Parks Garage facility is in compliance with the 2016 Massachusetts MS4 Permit.

4.4 Triggers for SWPPP Revisions

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

- An increase in the quantity of any potential pollutant stored at the facility;

- The addition of any new potential pollutant (not already addressed in this SWPPP) to the list of materials stored or used at the facility;
- Physical changes to the facility that expose any potential pollutant (not presently exposed) to stormwater;
- Presence of a new authorized non-stormwater discharge at the facility; or
- Addition of an activity that introduces a new potential pollutant.

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

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

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

SECTION 5 – SWPPP Certification

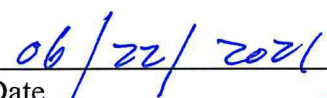
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage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



Authorized Official

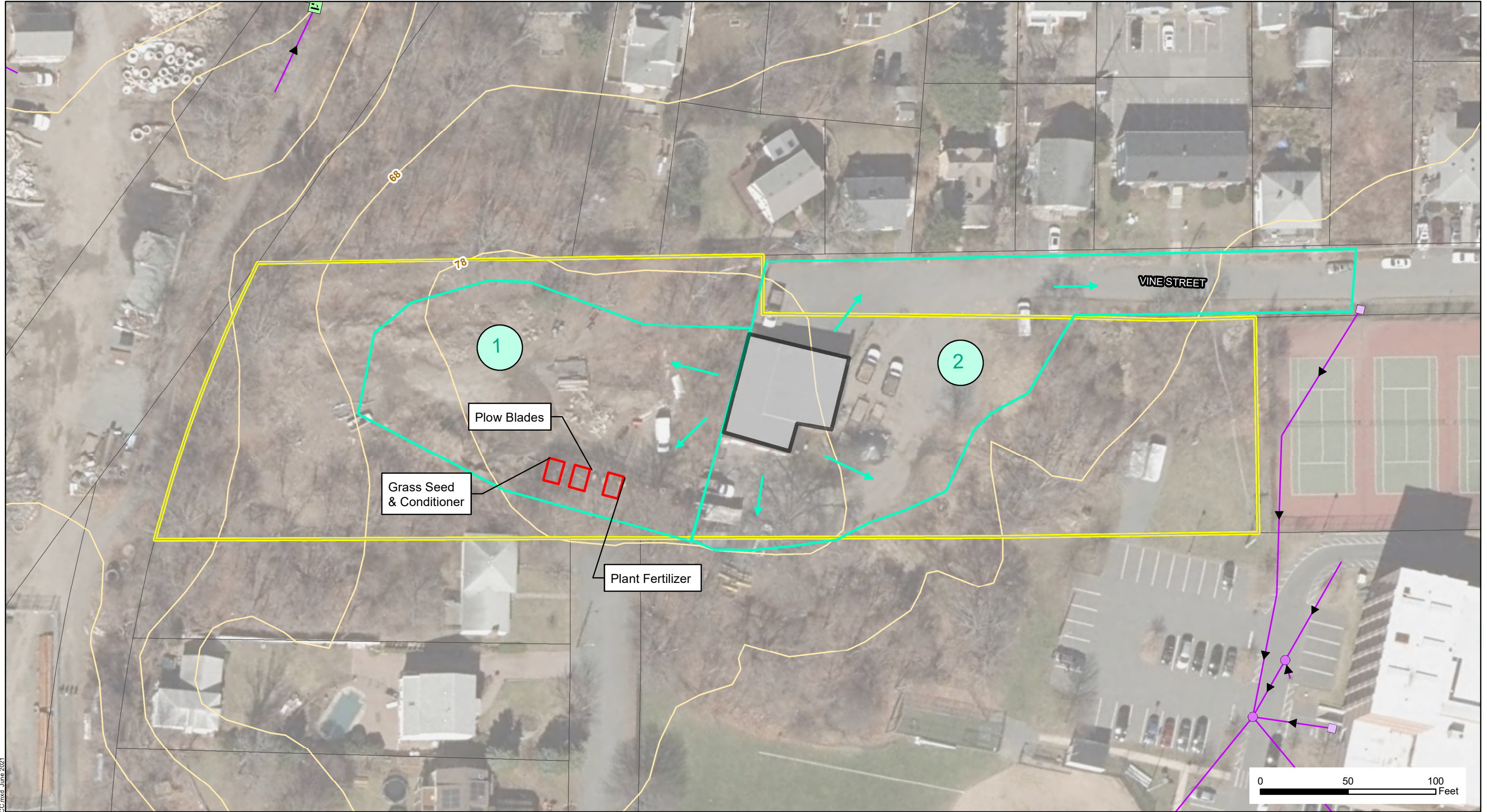


Title



Date

FIGURE 2-2



Z:\WP\Marblehead GIS\MXD\ParksGarage_CC.mxd June 2021

Engineering & Construction
BOBREK
PO BOX 2185
DANVERS, MA 01923
WWW.GOBOBREK.COM

Legend

- | | | |
|-----------------------------|-----------------------|--------------|
| Garage Parcel | 10' Contour (MassGIS) | Catch Basin |
| Parcel Boundary | Drain Pipe | Drain MH |
| Garage Building | Drainage Areas | Drain Inlet |
| Seasonal Storage Containers | Drainage Flow | Drain Outlet |

Marblehead
Parks & Recreation Garage
28 Vine Street
Marblehead, MA 01945

CLIENT INFO



NORTH

SWPPP
Figure 2-2
Parks Garage
Site Map

MAP TITLE

APPENDIX A:

SOP 4 SPILL RESPONSE AND CLEANUP
SOP 6 EROSION AND SEDIMENTATION CONTROL
SOP 7 FUEL AND OIL HANDLING PROCEDURES
SOP 11 OIL/WATER SEPARATOR

SOP 4: SPILL RESPONSE AND CLEANUP PROCEDURES

Contents

Introduction	2
Responding to a Spill	2
Procedures for Reporting Spill Response	3
Maintenance and Prevention Guidance	4
Related Standard Operating Procedures	5

Introduction

Municipalities are responsible for any contaminant spill or release that occurs on property they own or operate. Areas of concern include any facilities that use or store chemicals, fuel oil or hazardous waste, including schools, garages, DPW yards, and landfills. Implementation of proper spill response and cleanup procedures can help to mitigate the effects of a contaminant release.

Responding to a Spill

In the event of a spill, follow these spill response and cleanup procedures:

1. Notify a member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility safety officer.
2. Assess the contaminant release site for potential safety issues and for direction of flow.
3. With proper training and personal protective equipment, complete the following:
 - a. Stop the contaminant release;
 - b. Contain the contaminant release through the use of spill containment berms or absorbents;
 - c. Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers;
 - d. Clean up the spill;
 - e. Dispose of all contaminated products in accordance with applicable federal, state and local regulations.
 - i. Products contaminated with petroleum shall be handled and disposed of as described in MassDEP policy WCS-94-400, Interim Remediation Waste Management Policy for Petroleum Contaminated Soils, <http://www.mass.gov/dep/cleanup/laws/94-400.pdf>.
 - ii.
 - iii. 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.
 - iv. Waste oil contaminated products:
 1. Perform the "one drop" test to ensure absorbents do not contain enough oil to be considered hazardous. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.
 2. 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.
 - 3. If absorbents do not pass the “one drop” test they should be placed in separate metal containers with tight fittings 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, however **in the case of an emergency call 911**;
- Contact the MassDEP 24-hour spill reporting notification line, toll-free at **(888)-3104-1133**; a.
- The following scenarios **are exempt** from MassDEP reporting requirements:
- i. Spills of less than 10 gallons of petroleum and do not impact a water body;
 - ii. Spills of less than one pound of hazardous chemicals and do not present an imminent health or safety hazard;
 - iii. Spills from passenger vehicle accidents;
 - iv. Spills within a vault or building with a watertight floor and walls that completely contain all released chemicals.

Procedures for Reporting Spill Response

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

Where was the release sent/what was contaminated, addressing:

- a. Pavement;
- b. Soil;
- c. Drains;
- d. Catch Basins;

- e. Water Bodies;
 - f. Public Street; and
 - g. Public Sidewalk.
4. The concentration of the released contaminant.
 5. What/who caused the release.
 6. Is the release being contained and/or cleaned up, or is the response complete.
 7. Type and amount of petroleum stored on site, if any.
 8. 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:

1. 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;
2. Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site;
3. 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;
 - 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, 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.
4. 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;
5. Maintain a oil and grease spill response kit with the following materials, at a minimum, at each facility:

- a. 6.5 gallon bucket with screw top lid and handle
- b. 10 gallons of sand
- c. 200 pounds of Speedi Dry absorbent
- d. Drain covers
- e. Spill containment berms
- f. (4) 3' absorbent socks
- g. (16) 16" x 18" absorbent pads
- h. Goggles
- i. Nitrile gloves
- j. Disposable bags to dispose of used materials
- k. Laminated contacts list shall include the following names and numbers:
 - i. Safety Officer;
 - ii. Facility Supervisor;
 - iii. Local Fire Department;
 - iv. MassDEP spill report notification line;
 - v. MassDEP Regional Office;
 - vi. Hazardous Waste Compliance Assistance Line;
 - vii. Household Hazardous Products Hotline;
 - viii. Massachusetts Department of Fire Services;
 - ix. Licensed Site Professionals Information.

Related Standard Operating Procedures

- 1. SOP 7, Fuel and Oil Handling Procedures

SOP 6: EROSION AND SEDIMENTATION CONTROL

Contents

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Controlling Erosion and Sediment through Design and Planning	2
Controlling Erosion and Sediment on Construction Sites	2
Controlling Erosion and Sediment by Proper Maintenance of Permanent BMPs	3
Related Standard Operating Procedures	4

Introduction

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.
1. Erosion and sediment control devices shall be inspected by the contractor regularly, and maintained as needed to ensure function.

2. In the SWPPP or other document, the contractor shall clearly identify the party responsible for maintaining erosion and sediment control devices.
3. 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.
4. Existing vegetation should be maintained on site as long as possible.
5. 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.
6. Stockpiles shall be stabilized by seeding or mulching if they are to remain for more than two weeks.
7. Disturbed areas shall be protected from stormwater runoff by using protective Best Management Practices (BMPs).
8. Clean water shall be diverted away from disturbed areas on construction sites to prevent erosion and sedimentation.
9. Sediment traps and sediment barriers should be cleaned out regularly to reduce clogging and maintain design function.
10. Vegetated and wooded buffers shall be protected.
11. 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.
12. Vegetation shall be allowed to establish before introducing flows to channels.
13. Regular light watering shall be used for dust control, as this is more effective than infrequent heavy watering.
14. Excessive soil compaction with heavy machinery shall be avoided, to the extent possible.
15. 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 PROCEDURES

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Delivery of Drummed Materials	3
Removal of Waste Oil from the Facility	4
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Introduction

Spills, leaks, and overfilling can occur during handling of fuels and petroleum-based materials, even in small volumes, representing a potential source of stormwater pollution. This Standard Operating Procedure addresses 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”.

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

1. There is no smoking while fuel handling is in process or underway.
2. 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.
3. The delivery vehicle’s hand brake is set and wheels are chocked while the activity is being completed.
4. Catch basins and drain manholes are adequately protected.
5. No tools are to be used that could damage fuel or oil containers or the delivery vehicle.
6. No flammable liquid shall 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.
7. Local traffic does not interfere with fuel transfer operations.
8. The attending persons should watch for any leaks or spills
 - a. Any small leaks or spills should be immediately stopped, and spilled materials absorbed and disposed of properly. Refer to SOP 4, “Spill Response and Cleanup Procedures”, for examples of spill cleanup and response materials.
 - b. In the event of a large spill or one that discharges to surface waters or an engineered storm drain system, the facility representative shall activate the facility’s Stormwater Pollution Prevention Plan (SWPPP) and report the incident as specified within.

Delivery by Bulk (Tanker) Truck

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

1. The truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures”, for examples of spill cleanup and response materials.

3. The facility representative shall check to ensure that the amount of delivery does not exceed the available capacity of the tank.
 - a. 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.
4. The truck driver and the facility representative shall both remain with the vehicle during the delivery process.
5. The truck driver and the facility representative shall inspect all visible lines, connections, and valves for leaks.
6. When delivery is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
7. The delivery vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
8. The facility representative shall 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.
9. The facility representative shall 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 shall include the following:

1. The truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures", for examples of spill cleanup and response materials.
3. The facility representative shall closely examine the shipment for damaged drums.
 - a. If damaged drums are found, they shall be closely inspected for leaks or punctures.
 - b. Breached drums should be removed to a dry, well-ventilated area and the contents transferred to other suitable containers.
 - c. Drums shall be disposed of in accordance with all applicable regulations.
4. Drummed materials shall not be unloaded outdoors during wet weather events.
5. The truck driver and the facility representative shall both remain with the vehicle during the delivery process.
6. Drums shall be handled and unloaded carefully to prevent damage.
7. Upon completion of unloading, the facility representative shall 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.
8. The facility representative shall check to ensure that the proper amount of fuel 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 for the draining of bulk oil tanks shall include the following:

1. The disposal truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures", for examples of spill cleanup and response materials.
3. The facility representative shall verify that the volume of waste oil in the tank does not exceed the available capacity of the disposal hauler's vehicle.
4. The truck driver and the facility representative shall both remain with the vehicle during the tank draining process.
5. When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
6. The disposal hauler vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
7. The facility representative shall 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.
8. The facility representative shall collect a receipt from the truck driver.

Attachments

1. Fuel Delivery Checklist

Related Standard Operating Procedures

1. SOP 4, Spill Response and Cleanup Procedures

Fuel Delivery Checklist

FUEL DELIVERY FORM

TOWN OF _____

Date: _____
Time of Arrival: _____
Time of Departure: _____
Truck Number: _____
Name of Truck Driver: _____
Name of Town Employee: _____

BEFORE UNLOADING:

Is all spill response equipment and personal protective equipment in place?

Yes ☐ No ☐

In the case of bulk fuel delivery, does tank capacity exceed the amount of delivery?

Yes ☐ No ☐ N/A ☐

In the case of drum fuel delivery, are all drums free of leaks and punctures?

Yes ☐ No ☐ N/A ☐

COMMENCE UNLOADING. REMAIN WITH VEHICLE AT ALL TIMES.

AFTER UNLOADING IS COMPLETE:

Have all fuel containers, including the vehicle, been inspected for leaks?

Yes ☐ No ☐

Has the ground at the unloading point been inspected for evidence of leaks?

Yes ☐ No ☐

If there are any leaks or spills, has the material been properly cleaned?

Yes ☐ No ☐

Has the correct amount of fuel been delivered?

Yes ☐ No ☐

Has a receipt been collected?

Yes ☐ No ☐

SOP 11: OIL/WATER SEPARATOR (OWS) MAINTENANCE

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Introduction

Oil/water separators (OWS), also known as gas/oil separators, are structural devices intended to provide pretreatment of floor drain water from industrial and garage facilities. An OWS allows oils (and substances lighter than water) to be intercepted and be removed for disposal before entering the sanitary sewer system. Substances heavier than water settle into sludge at the bottom of the unit. The remaining water passes through the unit into the sanitary sewer system.

OWS units are generally required where petroleum-based products, wastes containing petroleum, or oily and/or flammable materials are used, produced, or stored. OWS units should not be used to manage stormwater or flow from vehicle washing facilities. High flow rates through an OWS will reduce the structure's ability to separate materials. Detergents and solvents can emulsify oil and grease, allowing the particles to enter the sewer, so these should not be disposed of in drains entering the OWS.

General OWS Maintenance Requirements

1. Each OWS at a facility may receive different materials in different quantities, so the cleanout schedule may not be the same for every OWS at a facility.
2. Employees performing inspections of an OWS must be properly trained and be familiar with the maintenance of that specific structure, since function can vary based on design. Third-party firms may be utilized to perform quarterly inspections.
3. Do not drain petroleum, oil, or lubricants directly to an OWS. The structures are designed to manage these materials at low and medium concentrations in sanitary sewage, not as slug loads.
4. Do not drain antifreeze, degreasers, detergents, fuels, alcohols, solvents, coolant, or paint to the OWS.
5. Separator compartment covers should be tightly sealed to ensure floor drainage only enters the first compartment of the OWS.
6. Drains should be kept free of debris and sediment to the maximum extent practicable.
7. Spill cleanup materials should be maintained in the area served by the OWS. For more information on spill cleanup and response materials, refer to SOP 4, "Spill Response and Cleanup Procedures".

OWS Inspection Procedures

Daily inspection of an OWS should include a visual examination of the area served by the OWS for evidence of spills or leaks.

Weekly inspections of an OWS should include the following:

1. Visually examine the area served by the OWS for evidence of spills or leaks.
2. Inspect the point of discharge (i.e., sewer manhole) for evidence of petroleum bypassing the OWS.
3. Inspect drains for any signs of unauthorized substances entering the OWS.

4. Examine the OWS for signs of leaks or any malfunction.

Quarterly inspections of an OWS should include the following:

1. Complete tasks noted as appropriate for daily and weekly inspection.
2. Complete the Quarterly OWS Inspection Checklist, attached, during the inspection.
3. Take the following measurements to benchmark function of the OWS:
 - A. Distance from rim of access cover to bottom of structure
 - B. Distance from rim of access cover to top of sludge layer
 - C. Depth of sludge layer ($C = A - B$)
 - D. Distance from rim of access cover to the oil/water interface
 - E. Distance from rim of access cover to the top of the liquid surface
 - F. Depth of oil layer ($F = D - E$)

OWS Cleaning Procedures

Cleaning of the OWS is required when there has been a spill to the OWS that exceeds ten gallons of oil, one gallon of detergent or solvent, or any material prohibited by the owner of the sanitary sewer. Cleaning is also required when the levels of accumulated sludge and/or oil meet the manufacturer's recommended levels for cleaning. This will vary based on the manufacturer of the OWS. If the manufacturer's recommendations are unknown, the following guidelines are appropriate for determining when to clean:

1. When sludge accumulates to 25% of the wetted height of the separator compartment; or
2. When oil accumulates to 5% of the wetted height of the separator compartment; or
3. When 75% of the retention capacity of the OWS is filled.

Cleaning should be performed a minimum of once per year. When cleaning is required, it shall be performed by licensed OWS maintenance companies. Materials removed from the OWS must be disposed of in accordance with Massachusetts Hazardous Waste Regulations, 310 CMR 30.00.

Documentation of Cleaning and Service

The operator of the premises where the OWS is located shall maintain a log describing the date and type of all inspections, service and maintenance performed in connection with the Separator. Documentation shall include the identity of the inspector (or the identity of the person or entity that performed the service and/or maintenance). Records shall also document the amount of residue removed from the OWS each time it was cleaned, and how removed materials were disposed. This documentation shall be maintained for a minimum of six years.

Attachments

1. Quarterly OWS Inspection Checklist

Related Standard Operating Procedures

1. SOP 4, Spill Response and Cleanup Procedures

OIL/WATER SEPARATOR (OWS) QUARTERLY INSPECTION CHECKLIST

Facility:

OWS Location:

Inspected By:

Date:

Visual Inspection	Are there any signs of spills or leaks in the general area?	
		Yes No
	Is there any evidence of petroleum bypassing the OWS?	
		Yes No
	Are there any unauthorized substances entering the OWS?	Yes No
	Does the OWS exhibit any signs of leaks or malfunctions?	
		Yes No

If you answered "Yes" to any of the above questions, further inspection, repair, and/or cleaning may be necessary.

	A	Distance from rim of access cover to bottom of structure	
	B	Distance from rim of access cover to top of sludge layer	
	C = A - B	Depth of sludge layer	

Measurements	D	Distance from rim of access cover to the oil/water interface	
	E	Distance from rim of access cover to the top of the liquid surface	
	$F = D - E$	Depth of oil layer	

If the values for “C” and/or “F” are greater than those in the manufacturer’s recommendations, the OWS must be cleaned by a licensed OWS maintenance company.

APPENDIX B

SPILL OR LEAK DOCUMENTS

Significant Spills, Leaks or Other Releases

SPILL 1

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	
Actions taken in response to release:	
Measures taken to prevent recurrence:	

SPILL 2

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	

Actions taken in response to release:	
Measures taken to prevent recurrence:	

SPILL 3

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	
Actions taken in response to release:	
Measures taken to prevent recurrence:	

APPENDIX C

TRAINING ACTIVITY DOCUMENTS

**Illicit Discharge Detection and Elimination (IDDE)
Employee Training Record
YEAR 3
Town of Marblehead, Massachusetts**

Date of Training: 6/15/2021

Training By: Julia Miller, Bobrek Engineering

PLEASE PRINT CLEARLY

Name	Department
Andrew Felt	Health
R. Titus	D.P.W
Peter Stacey	DRAINS
J. Bortwell	Highway
Jim Lowe	DPW
MATT CASHMAN	DPW
Bethany Spangler	WIS
Erik Fields	Water Dept.
Jason R Gulliland	Fire Dept
David Lihmann	DPW
Jana Lemieux	DPW
Don Meyer	DPW
CHARLES QUIGLEY	ENG'G
Collin King	DPW
Margaret Wheeler	DPW
Ruth	DPW
Joe John	Tree

APPENDIX D

INSPECTION FORMS AND REPORTS

Marblehead Parks Garage

Stormwater Site Inspection Report

General Information			
Facility Name	Marblehead Parks and Recreation Garage		
Date of Inspection	May 5, 2021	Start/End Time	9:00 – 9:30
Inspector's Name(s)	John Bobrek, P.E.		
Inspector's Title(s)	President of Bobrek Engineering & Construction		
Inspector's Contact Information	<u>john@gobobrek.com</u>		
Inspector's Qualifications	Professional Engineer		
Weather Information			
Weather at time of this inspection?			
☐ Clear ☐ Cloudy ☒ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds ☐ Other: Temperature: 57 degrees			
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

	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	Floor Drains	☒ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

Areas of Materials or Activities exposed to stormwater

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Spill Response kit	☒ Yes ☐ No ☐ N/A	☒ Yes ☐ No	
2	Material loading/unloading and storage areas	☒ Yes ☐ No ☐ N/A	☒ Yes ☐ No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
3	Equipment operations and maintenance areas	☒ Yes ☐ No ☐ N/A	☐ Yes ☒ No	Paint was observed stored on floor coolants, sealants/adhesives, detergents and stored on open shelving, - recommend storing in secure cabinets to prevent leakage
4	Fueling areas	☒ Yes ☐ No ☐ N/A	☐ Yes ☒ No	Small gas cans in garage stored on floor, recommend storing in secured cabinets to prevent leakage.
5	Waste Oil area	☒ Yes ☐ No ☐ N/A	☒ Yes ☐ No	Located inside garage in temporary holding barrels for long periods of time- Recommend scheduling regular pickups to dispose of excess oil.

Non-Compliance

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

Flammable chemicals and paint were observed on open shelving or on the floor. Recommend multiple secured storage cabinets to mitigate leakage.

Additional Control Measures

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

Notes

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

Observed missing railing along a retaining wall and large drop at the entrance, safety hazard should be repaired immediately.

Print inspector name and title:



John Bobrek, P.E 5/5/21

Photo 1: Missing railing piece



Photo 2: Paint stored on floor



**Photo 3: Spray paint and coolants, lubricants etc
Stored on open shelves**



QUARTERLY SITE INSPECTION CHECKLIST

TOWN OF MARBLEHEAD

PARKS GARAGE

Date: July 7, 2021 Time: 1:30 PM
 Inspector(s) Name(s): Maggie Wheeler, Marblehead DPW and Julia Miller, Bobrek Engineering

Weather Conditions During Inspection: Sunny, 85 Degrees
 Description of Any Discharge Occurring at the Time of the Inspection: No Discharge

Conduct a thorough inspection of the entire facility and grounds.

Areas to Inspect		Good	Action Needed?	Action Completed?
Potential Pollutant Sources:	Description of problem:			
Material loading/unloading and storage areas		X		
Equipment operations and maintenance areas	Paint was observed stored on floor coolants, sealants/adhesives, detergents, and stored on open shelving - Recommend storing in secure cabinets to prevent leakage.			X
Fueling areas	Small gas cans in garage stored on floor, recommend storing in secured cabinets to prevent leakage.			X
Waste Oil area (in garage)	Located inside garage in temporary holding barrels for long periods of time - Recommend scheduling regular pickups to dispose of excess oil.			X
Spill Response kit		X		
General Facility Grounds & Outfall:		Good	Action Needed? (Routine)	Action Completed? (Date)
Inspect catch basins, outfalls, compost piles, detention basin, and drainage swales for evidence of damage, erosion or any discharge of pollutants.		X		
Ensure that facility grounds show no signs of poor housekeeping (e.g., materials, residues, or trash that may come in contact with stormwater).		X		
Ensure there are no spots, pools, puddles, or other traces of oil, grease, or other chemicals on the ground around the facility, either liquid or solid.		X		
Ensure there is no evidence of offsite tracking of materials and no blowing of raw, final, or waste materials outside of the operational areas.		X		
Ensure there are no leaks or spills from equipment, drums or other containers, or containers in poor condition outside the facility.		X		

Transfer Station
Stormwater Pollution Prevention Plan
Marblehead, MA



Bobrek Engineering & Construction

PO BOX 2185

Danvers, MA 01923

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JUNE 2021

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APPENDIX A

SOP 4 SPILL RESPONSE AND CLEANUP
SOP 6 EROSION AND SEDIMENTATION CONTROL
SOP 7 FUEL AND OIL HANDLING PROCEDURES
SOP 11 OIL/WATER SEPARATOR

APPENDIX B

SPILL OR LEAK DOCUMENTS

APPENDIX C

TRAINING ACTIVITY DOCUMENTS

APPENDIX D

INSPECTION FORMS AND REPORTS

SECTION 1 – Introduction

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

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

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

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

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

The SWPPP shall contain the following elements:

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

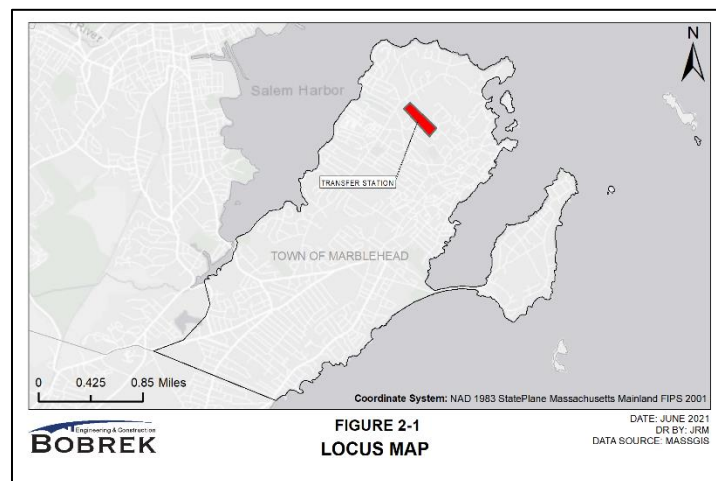
This SWPPP accomplishes these requirements by:

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

SECTION 2 – Detailed Facility Assessment

2.1 Facility Summary

The Transfer Station is located at 5 Woodfin Terrace and is owned and operated by the Town of Marblehead (the Town) Health Department. The Locus Map in **Figure 2-1** shows the location of the facility within the Town. The property consists of a capped landfill and the transfer station, which in total occupies 15.140 acres of land with an additional 0.46 acres off Green Street. A site map is provided as Figures 2-2 and 2-3.



The Site was previously operated as a municipal solid waste landfill. Landfill operations closed in 1975, and the waste was consolidated and capped in accordance with a MassDEP approved closure permit. The Site is composed of the vegetated cap for the landfill that is designed to shed stormwater and prevent contact with the waste. Drainage swales were installed to control stormwater runoff and prevent contamination to abutting

properties and waterways. In 2017 construction was complete, and the Transfer Station and a 3.5-acre yard waste and composting area were opened to Marblehead residents.

2.2 Site Inspection

The site inspection associated with the development of this SWPPP was completed on May 5, 2021. The inspection was conducted by John Bobrek, P.E. and Julia Miller from Bobrek Engineering and Construction and Maggie Wheeler, Staff Engineer from the Town. 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 has been prepared and designated the task of maintaining 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: Robert Dever

Office Phone: 781-631-1750

Title: DPW Director

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.

Leader: Maggie Wheeler

Office Phone: 781-631-1750

Title: Staff Engineer

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

Member: Andrew Petty

Office Phone: 781-631-0212

Title: Director of Public Health

Responsibilities: Assists in all components of the stormwater program, as needed.

2.4 Facility Description

The Marblehead Health Department operates the Transfer Station to provide residents with a safe and secure location to discard of and/or recycle common household items. The Transfer Station accepts leaf litter, yard waste, compost, trash, mixed paper, cardboard, glass, aluminum, plastic, scrap metal, clothes, light bulbs, tires, mattresses, electronics, and waste oil for a small fee. The Transfer Station also offers a Swap Shed for residents to drop off usable items for other residents to take at no charge. Additionally, Household Hazardous Waste Collection Days occur four times a year at the Site and are run by the Health Department in coordination with Clean Harbors Inc. The Transfer Station does not process or dispose of any waste onsite. All waste materials and compost are hauled offsite by a contracted vendor for reuse, recycling, or disposal.

- 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
- Structural stormwater pollution control measures
- Aboveground storage tanks (indoors and outdoors)
- Chemical storage areas
- Materials stockpiles
- Waste disposal areas.

2.5 Facility Structures

The Site includes an office trailer, transfer station building, waste collection containers, leaf/tree debris drop-off area, composting areas, material compactors, and aboveground waste oil storage tank as shown on Figures 2-2 and 2-3. The facility is bound by residential housing on three sides and by Steer Swamp Conservation Area (this includes Joe Brown's Pond) to the east. Additionally, an unnamed stream flows through the property from west to east.

2.6 Site Drainage

The topography of the property creates three generally flat sections separated by multiple steep slopes. Elevations in the far northern section generally range from 66 to 68 feet (above mean sea level) before dropping to 29 feet in the northwestern section of the property. The western section includes the main trucking entrance from Green Street into the Transfer Station. The majority of stormwater runoff in the northwestern portion of the Site is collected and pre-treated by two oil/grit separators. The southwestern area is generally flat, ranging in elevation from approximately 82 to 64 feet. The northeastern section includes the steepest parts of the Site ranging in elevation from approximately 76 to 39 feet. Many of the operations occur in the central portion of the Site where drainage swales direct stormwater runoff to a detention basin. There are approximately seven outfalls onsite. All outfalls discharge to the unnamed stream running through the property and eventually to Steer Swamp Conservation Area. There are no drinking water supply wells at the facility, and the facility is not located within a Zone II drinking water protection area. The Site is serviced by the municipal water supply.

2.6.1 Receiving Waters

The Site is located within the North Coastal Watershed and is generally divided into four drainage areas. Structural stormwater control measures have been designed to collect and infiltrate stormwater onsite. The landfill cap is designed to shed stormwater offsite while attenuating peak flows and preventing erosion cover material. Figures 2-2 and 2-3, delineates the four drainage areas and illustrate the location of the subsurface collection systems, structural control measures, outfalls, and receiving waterbodies.

The unnamed stream flows into Steer Swamp which converges with Joe Brown's Pond just east of Gingerbread Hill before discharging to Gas House Basin and eventually to Marblehead Harbor. As designated in Massachusetts Surface Water Quality Standards (314 CMR 4.00), the streams discharging to Marblehead Harbor are considered Class SA waterbodies. Class SA waterbodies are designated as an excellent habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth, and other critical functions, and for primary and secondary contact recreation. MassDEP does not list the unnamed stream as an impaired waterbody in the Massachusetts Year 2018 Integrated List of Waters. This SWPPP and identified BMPs are intended to address the potential

pollutants associated with the activities at this Site. Exposed activities and potential pollutant sources are further described in Section 3.2.

Drainage Area 1 (Entrance to Site)

Drainage Area 1 includes the northwestern corner of the Site. This includes the main entrance to the Transfer Station, office trailer, scale, parking area and some waste collection areas (waste oil, TVs, and monitors). The bituminous asphalt pavement is graded to sheet flow stormwater toward a catch basin near the entrance which connects to a subsurface collection system composed of two major trunk lines. The trunk lines converge at a catch basin located outside the southwestern corner of the Transfer Station Building loading dock. Stormwater is then pretreated through an inline oil/grit separator before discharging through Outfall 4005 to the unnamed stream.

Drainage Area 2 (Swap Shed to Compost)

Drainage Area 2 includes the northeastern portion of the Site and the majority of the landfill cap. This includes the northern half of the compost operation, swap shed, winter snow storage area, and residential drop-off areas for clothes, mattresses, household chemicals, electronics, trash, cardboard, paper, scrap metal, glass, aluminum, and plastic. Stormwater runoff from the vegetated slopes of the landfill is infiltrated into overlying soils of the cap or travels downgradient via sheet flow to the rip rap lined drainage swale discharging to the detention basin located at the Site perimeter. The bituminous asphalt pavement is graded to sheet flow stormwater downgradient toward the drainage swale. Two catch basins located offsite on Blueberry Road also discharge to the detention basin through Outfall 2796. Stormwater collected in the detention basin discharges through an outlet control structure and is conveyed to Outfall 4017 that discharges to the unnamed stream at the northern most corner of the Site.

Drainage Area 3 (Green Street)

Drainage Area 3 includes the northwestern and southwestern portion of the Site. This includes the Transfer Station Building loading zone, truck/vehicle entrance (via Green Street), stockpile of pre-cast concrete manhole fixtures, and the southern half of the compost operation. Stormwater runoff from the composting operation mainly travels downgradient via sheet flow to the southwest prior to being absorbed by compost piles and/or entering a rip rap lined drainage swale which connects to the detention basin and eventually to Outfall 4017. Stormwater runoff from the far northwestern side of the composting operation travels downgradient via sheet flow to another rip rap lined drainage swale that connects to a catch basin and eventually discharges to the unnamed stream. The bituminous asphalt pavement located near the Transfer Station Building loading zone is graded to sheet flow stormwater downgradient toward catch basins which connect to the inline oil/grit separator before discharging through Outfall 4005. The bituminous asphalt pavement located near the Y intersection of the Green Street truck entrance is graded to sheet flow stormwater downgradient toward catch basins which connect to a second oil/grit separator before discharging through Outfall 4016 to the unnamed stream. Outfall 4012 is designed to accommodate overflow from the stormwater diversion manhole during heavy storm events. The catch basin located closest to Green Street discharges to Outfall 2530 and to the unnamed stream. Residential and street runoff also discharges to the unnamed stream through Outfall 4021.

Drainage Area 4 (Slope)

Drainage Area 4 occupies the far southeastern portion of the Site. This portion of the Site does not include any buildings, paved areas, or storage materials. Stormwater runoff from slopes of the landfill is infiltrated into overlying soils of the cap or travels downgradient via sheet flow to a rip rap lined drainage swale at the toe of slope near the southern corner of the Site.

2.7 Site Activities

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 Map (**Figure 2-2 & Figure 2-3**).

The primary potential pollutant sources at the Transfer Station are materials that are stored onsite or brought onsite and exposure during loading, unloading and transport operations. When not properly protected from precipitation and runoff, these activities can impact stormwater and transport pollutants from the Site to downstream waters. The following activities occur at the facility:

- Compost Production or Storage
- Facility or Building Maintenance
- Stockpile storage
- Salt storage (seasonal)
- Snow dump (seasonal)
- Solid waste management (including scrap metal)
- Waste Handling and Disposal
- Waste oil storage.

The following activities occur indoors or under a roof and are not exposed to stormwater. Therefore, these activities are not addressed in this SWPPP.

1. **Universal Waste Storage:** The Transfer Station accepts mercury-containing fluorescent lamps, mercury-containing devices and batteries that must be managed in accordance with MassDEP's Universal Waste Regulations. These materials are stored inside fully enclosed containers to prevent damage and potential release to the environment.
2. **Hazardous Waste Storage:** The Transfer Station is currently registered with MassDEP as a Large Quantity Generator (LQG) of hazardous waste and assigned EPA IP MAR000505115. The Transfer Station continuously collects and properly disposes of hazardous waste from residents. Apart from the waste oil tank, all hazardous waste containers are stored inside buildings or in closed containers in accordance with MassDEP's Hazardous Waste Regulations. The waste oil is stored in a UL-142 listed 528-gallon double-walled steel vertical aboveground storage

tank. The tank is a Meyers Waste Oil Storage System manufactured by King Metal Fabricators, Ltd. The double-walled construction provides secondary containment for the entire capacity of the primary tank, and the interstitial inspection port provides a means to detect a release. The fill port is located on the top of the tank and is equipped with a welded steel safety funnel with a closable lid. A stack on top of the tank allows it to vent. The tank bottom supports are made of a structural iron construction for maximum strength and corrosion resistance. The tank is designed to contain flammable liquids and withstand mild impacts from cars, light trucks, small equipment, and other objects. The fill gauge on the oil tank is currently malfunctioning and the department is looking into a new waste oil tank.

Oil and Hazardous Materials Storage: Apart from the waste oil tank, drums and smaller containers of oil and chemicals are stored inside buildings.

2.7.1 Compost Production or Storage

Potential Sources of Stormwater Pollution

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

Pollution Prevention

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

2.7.2 Salt Storage

Potential Sources of Stormwater Pollution

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

Pollution Prevention

To prevent stormwater pollution, all salt piles should be enclosed and covered in sheds to prevent exposure to precipitation. Salt sheds should be constructed on level ground with

an impervious base on which to store the salt. The shed should prevent disturbance or migration of the salt by wind.

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

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

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

2.7.3 Stockpiles

Potential Sources of Stormwater Pollution

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

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

Pollution Prevention

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

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

Sediment barriers should be placed around the perimeter of the storage site to prevent any runoff carrying sand from entering storm drains and surface waters. If the weather becomes dry and windy, regular light watering of the stockpile and surrounding area will provide

effective dust control. Please refer to SOP 6, “Erosion and Sedimentation Control,” included in **Appendix A**, for more information.

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

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

2.7.4 Solid Waste Management

Potential Sources of Stormwater Pollution

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

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

Pollution Prevention

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

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

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, 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, Marblehead does have permission to dispose of snow into Marblehead Harbor. When this option is necessary, requirements of “Snow Disposal Guidance” (BRPG01-01) issued by MassDEP on March 8, 2001, shall be followed.

2.7.7 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. Petroleum Products
4. Detergents

Pollution Prevention

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

Solid Waste

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

Hazardous Materials and Wastes

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

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” in **Appendix A**.

Detergents

1. Never dump wastes containing detergents into 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.

2.7.8 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 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**.

2.8 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.

2.9 Location of Leak and Spill Cleanup Materials

Leak and spill cleanup materials are stored in the corner of the site next to the chemical storage to facilitate rapid response. The spill response kit consists of a 30-gallon drum with the following materials: Pads Sorbent Socks, Universal Sorbent Pillows, nitrile gloves, safety goggles; emergency response guidebook, and disposal bags.

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:

- Street wash waters

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

2.11 Existing Stormwater Monitoring Data

Stormwater monitoring at the Transfer Station is done through the annual MS4 outfall screening and inspections. There are seven outfalls located in or near the Transfer Station discharging stormwater. Please refer to the Town's IDDE Plan for historical information.

2.12 Significant Material Inventory

Materials stored include those specified in **SECTION 2.7**, "Site Activities." An inventory of these materials included in **Table 2-1**, 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 Map in **Figures 2-2 and 2-3**.

**Table 2-1. Significant Material Inventory
Transfer Station Facility**

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Petroleum-Based Compounds					
Waste Oil	Outside Transfer Station Building	528 Gal	Petroleum hydrocarbons	E	Not Likely
Other:					
Total Volume of Oil At Facility = 528 Gal					
Non-Petroleum Significant Materials					
Solid Waste, Cardboard, Paper, Glass, Plastics and Aluminum	Material Storage Containers in middle of site	7 – 10 CY Dumpsters	Particulate matter, solids, metals	E	Not Likely
Solid Waste, for Disposal	Transfer Station Building	2 - 65 CY Dumpster	Particulate matter, solids, metals, residual liquids	C	Not Likely
Spill response material (Speedi Dri or similar)	Chemical Storage Area	One Spill Response Kit in Barrel	Particulate matter, solids, residual oil.	E	Not likely

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 site does not have aboveground oil storage capacity that exceeds 1,320 gallons.

2.14 List of Significant Leaks or Spills

No significant spills or leaks have occurred on the site in the last three years. Forms included in **Appendix B** will be used to document any spill or leak that occurs at the facility in the future.

2.15 Structural BMPs

Compost piles in Drainage Areas 2 and 3 are strategically oriented to contain and absorb stormwater runoff on the pavement. The infiltrated stormwater along with oxygen, carbon, and nitrogen allows micro-organisms to break down organic matter and produce compost. Routine attention is paid to the grades and placement of compost piles at the Transfer Station to prevent stormwater runoff from leaving the Site.

Drainage Swales

Drainage swales are located in Drainage Areas 2, 3, and 4 along the perimeter of the closed landfill. All drainage swales are lined with rip rap stone to prevent erosion, reduce flow velocities, and remove pollutants. The drainage swale run perpendicular to the slope to collect and convey stormwater to the detention basin. Transfer Station personnel inspect the drainage swales to evaluate their condition, identify problems needing maintenance, remove sediment and litter and, as necessary, repair eroded areas.

Detention Basin

The detention basin is located in the eastern perimeter of the property and receives stormwater from Drainage Area 2 and the eastern part of Drainage Area 3. The detention basin temporarily stores and infiltrates runoff and maximizes the removal of pollutants from stormwater runoff through settling and both uptake and filtering by vegetation. Detention basins typically remove 70% of total suspended solids. In addition to pollutant removal, the basin also serves to attenuate peak discharge into the receiving stream. The detention basin is equipped with a rip rap sediment forebay acting as the emergency spillway allowing stormwater to flow over to the secondary basin during an extreme storm event. Both basins include an overflow pipe connecting to an open drainage manhole before entering the subsurface collection system that discharges to the unnamed stream through Outfall 7 (4017). Transfer Station personnel conduct quarterly visual inspections of the detention basin to ensure proper function. The sediment forebay in the basin will be dredged to remove accumulated sediment and the rip rap will be replaced as necessary.

Oil/Grit Separators

There are offline water quality units in Drainage Area 3 that are designed to pretreat stormwater in the collection system prior to discharge into the unnamed stream. The oil/grit separators are underground storage tanks with three chambers designed to remove heavy particulates, floating debris, and hydrocarbons from stormwater. Stormwater first enters a

flow diversion structure manhole and is directed to the first chamber of the oil/grit separator. A weir structure in the diversion manhole is designed to allow stormwater to overflow and bypass the oil/grit separator if the volume of water exceeds the flow capacity of the unit. Stormwater then enters the first chamber where heavy sediments and solids drop out. The flow moves into the second chamber where oil and grease are removed and further settling of suspended solids takes place. Oil and grease are stored in this second chamber for future removal. After moving into the third outlet chamber, stormwater enters the particle separator where excess floatables are removed before the clarified stormwater runoff is discharged through an outfall to the unnamed stream. Each unit is equipped with manholes that allow access to the chambers for visual inspection and maintenance. Transfer Station personnel conduct quarterly visual inspections of the oil/grit separators to ensure proper function. As necessary, the units are maintained by using a vactor truck to remove sediment, floatable oil, grease, trash, and other debris from the chambers.

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.
- All fluid products and wastes are kept indoors.
- Fueling of small equipment is completed indoors.
- All floor drains present within garage bays drain to an UST that is cleaned out annually
- 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.
- 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.
- Storage drums and containers are not located close to storm drain inlets.
- All hazardous material storage areas and containers have proper signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment.
- All materials, waste oil storage containers, and gas cans are properly labeled.
- Speedi Dri (or similar absorbent) is readily available and used for appropriate spills.
- 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.
- Only the amount of materials required to complete a job are obtained.
- 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 will be 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 Transfer Station maintains a supply of spill cleanup materials for all areas on site, and will maintain this inventory. An inventory of spill containment, control, and cleanup materials and spill kits maintained at the site was shown in **Table 2-1**.

3.2 Preventative Maintenance

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

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

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

3.3 Best Management Practices

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

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

1. Follow Standard Operating Procedures(s) during delivery of waste oil to the equipment/waste oil storage bay. These SOPs are included in **Appendix A**.
2. Follow Standard Operating Procedures during delivery of bulk oil to the emergency generator and bulk fuel to the Fuel Island. These SOPs are included in **Appendix A**.
3. Minimize the volume of gasoline stored within the buildings and on the site.
4. Clean up any oil spills observed in the parking lot, garages, or other surfaces in a timely manner.
5. Monitor all material deliveries.
6. Inspect all storage tanks prior to filling activities for spills, leaks and corrosion.

3.4 Spill Prevention and Response

The primary method of spill management at the Transfer Station is spill prevention. This has been emphasized through the proper design and containment for the waste oil tank and material storage systems, material handling procedures, personnel training and regular inspections. All Transfer Station personnel are trained to immediately report spills and releases to a member of the Pollution Prevention Team to ensure prompt corrective action.

Trained Transfer Station employees may respond to small leaks or spills that do not pose significant risks to health or safety. If a major oil or hazardous materials release occurred at the facility, the Director of Public Health or his/her designee would contact outside responders (i.e., fire department or spill response contractor).

If visible leaks are detected, they are promptly stopped, and preventive maintenance is performed to ensure that the cause of the leak is addressed. The Transfer Station maintains absorbent materials in spill kits near the waste oil tank to stop and contain small releases. Transfer Station personnel are trained to place absorbent booms and/or drain covers/mats on catch basins, and any other drainage pathway to prevent dispersion. Spill equipment is used only by trained personnel who are familiar with the hazards posed by the spilled material and are knowledgeable of how to manage the spill cleanup residue.

The Pollution Prevention Team will ensure that spilled oil and contaminated debris are recovered and properly managed. Waste oil and saturated absorbent material are classified as hazardous waste in Massachusetts and must be appropriately managed according to applicable local, state, and federal regulations. Specifically, these materials should be placed in a closed, compatible container such as a steel 55-gallon drum and labeled with the words "HAZARDOUS WASTE," "OIL CONTAMINATED DEBRIS," and "TOXIC." The Director of Public Health or his designee will coordinate the transport and disposal of the waste materials at an appropriately licensed offsite facility.

3.4.1 Oil Releases to Water

If oil is discharged¹ into waters of the state by means of a discharge to a stormwater drainage system or any water body, the Director of Public Health or his/her designee will immediately report the incident to:

- **MassDEP** (888) 304-1133
(24-Hour Statewide Number to Report a Spill of Oil or Hazardous Material)
- **National Response Center (NRC)** (800) 424-8802
(The NRC Operator will notify U.S. Coast Guard, District 1, and EPA, Region 1 as appropriate).

3.4.2 Oil Release to Land

A sudden, continuous, or intermittent release of oil to the environment must be immediately reported to MassDEP (within two hours of discovery) if it meets ANY of the following criteria:

- 10 gallons or more is released within any period of 24 consecutive hours or less;
- An unknown quantity is released within any period of 24 consecutive hours or less;
- Any quantity of oil or waste oil that results in the appearance of a sheen on surface water is released;
- Any release of oil, 10 gallons or more or an unknown quantity within any period of 24 consecutive hours or less, that is indirectly discharged to the environment by means of discharge to a stormwater drainage system or sanitary sewerage system;
- Any release of any oil, in any quantity or concentration, that poses or could pose an Imminent Hazard, as described in 310 C.MR 40.0321 and 40.0950; or
- A release to the environment indicated by the measurement of oil in a private drinking water supply well at concentrations equal to or greater than a Category RCGW-1 Reportable Concentration, as described in 310 CMR 40.0360 through 40.0369 and listed at 310 CMR 40.1600.

MassDEP (888) 304-1133
(24-Hour Statewide Number to Report a Spill of Oil or Hazardous Material)

¹ For the purposes of this notification, “discharge” refers to the definition as found in 40 C.F.R. Part 110, which is a *harmful quantity* of spilled oil which results in:

- 1) Violation of applicable water-quality standards;
- 2) Production of a film, sheen or discoloration on the water surface or adjoining shoreline; or
- 3) Deposition of a sludge or emulsion beneath the water surface or upon the adjoining shoreline.

The ONLY exception to these release reporting requirements is when the release meets one of the following criteria:

- The release of oil occurs during normal handling and transfer operations and the release is completely captured by an oil/water separator. However, if the release bypasses the oil/water separator or exceeds the capacity of the oil/water separator notification is required;
- A release inside a building that is completely contained within the building; or
- A release of gasoline or diesel fuel due to the rupture of the fuel tank of a passenger vehicle as a result of an accident involving that vehicle.

When calling MassDEP to report on incidents, the Director of Public Health will need to provide the following information:

- Name and telephone number of caller;
- Location of release or threat;
- Date and time release occurred;
- Identify type of notification (310 CMR 40.0300);
- Name of oil(s) released or of which there is a threat of release;
- Approximate quantity of oil(s) released or of which there is a threat of release;
- Source of release or threat of release;
- Brief description of the release;
- Name and telephone number of owner/operator of the Site where the release occurred or at which there is a threat of release;
- Name and telephone number of the contact person where the release occurred or at which there is a threat of release;
- A description of the Immediate Response Action (IRA) taken or proposed to address the release or threat of release;
- Names of other federal, state, or local government agencies that have been notified and/or have responded to the release or threat of release; and
- Any other information that is relevant to assessing the degree of hazard posed by the release or threat of release of oil.

Note that spills of hazardous materials other than oil, or releases of oil that do not meet the above criteria may also require reporting to the MassDEP under the Massachusetts Contingency Plan (MCP). For example, a release of oil from an underground storage tank generally requires reporting to MassDEP within 72 hours. Because the rules are complex, in the event of any spill or oil or hazardous materials, the Director of Public Health should consult with a Licensed Site Professional (LSP) for determination of whether additional reporting or actions are required.

3.4.3 Written Notification for Oil Spills

Following verbal notification of a spill requiring immediate (two hour) notification, a completed Release Notification Form (RNF) must be submitted to MassDEP within 60 days. It is the responsibility of the Director of Public Health to ensure that the proper notifications are made. In addition, the Transfer Station must make written notification to the EPA whenever the facility has:

- Discharged more than 1,000 gallons of oil in a single discharge event, or
- Discharged more than 42 gallons (1 barrel) of oil in each of two discharge events to the navigable waters² of the United States or adjoining shorelines within any twelve-month period.

If either of the above criteria is met, the Transfer Station must file a written report within 60 days with the Regional Administrator of the EPA. It is the responsibility of the Director of Public Health to ensure that the proper notifications are made. In accordance with 40 C.F.R. § 112.4(a), this written report will contain the following information:

- Facility name and location;
- Name of the person reporting the event;
- Date, time, and place of release;
- Names, addresses, and telephone numbers of all persons potentially responsible for or liable for the release;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- The corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements (including any third-party damages and costs of containment and removal operations);
- Description of the facility including maps, flow diagrams, and topographical maps, as necessary;
- The cause of the discharge, including an analysis of the system or subsystem in which the failure occurred, and the amount and type of material released;
- Additional preventative measures taken or contemplated to minimize the possibility of recurrence; and
- Such other information as the authorities may reasonably require pertinent to the discharge.

Information submitted to the Regional Administrator must be sent to:

EPA Region 1
SPCC Enforcement Coordinator
Mail Code OESO4-4
5 Post Office Square
Suite 100
Boston, MA 02109-3912

² The definition of “navigable waters” is complex and subject to interpretation. The Director of Public Health should coordinate with technical consultants or legal counsel in the event he or she is uncertain whether a release to “navigable waters” has occurred.

SECTION 4 – Plan Implementation

4.1 Employee Training

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

The DPW along with the Department of Health are responsible for stormwater management training. The DPW coordinates training related to stormwater management on at least an annual basis to review specific responsibilities for implementing this SWPPP 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 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 director of the DPW or qualified third party is responsible for completing this inspection.

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

- The inspection date and time

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

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

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

4.3 Recordkeeping and Reporting

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

This SWPPP shall be kept at the DPW 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 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 Site 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 Site is in compliance with the 2016 Massachusetts MS4 Permit.

4.4 Triggers for SWPPP Revisions

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

- An increase in the quantity of any potential pollutant stored at the facility;

- The addition of any new potential pollutant (not already addressed in this SWPPP) to the list of materials stored or used at the facility;
- Physical changes to the facility that expose any potential pollutant (not presently exposed) to stormwater;
- Presence of a new authorized non-stormwater discharge at the facility; or
- Addition of an activity that introduces a new potential pollutant.

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

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

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

SECTION 5 – SWPPP Certification

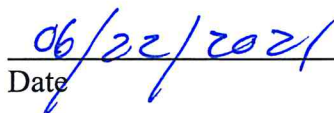
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage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



Authorized Official

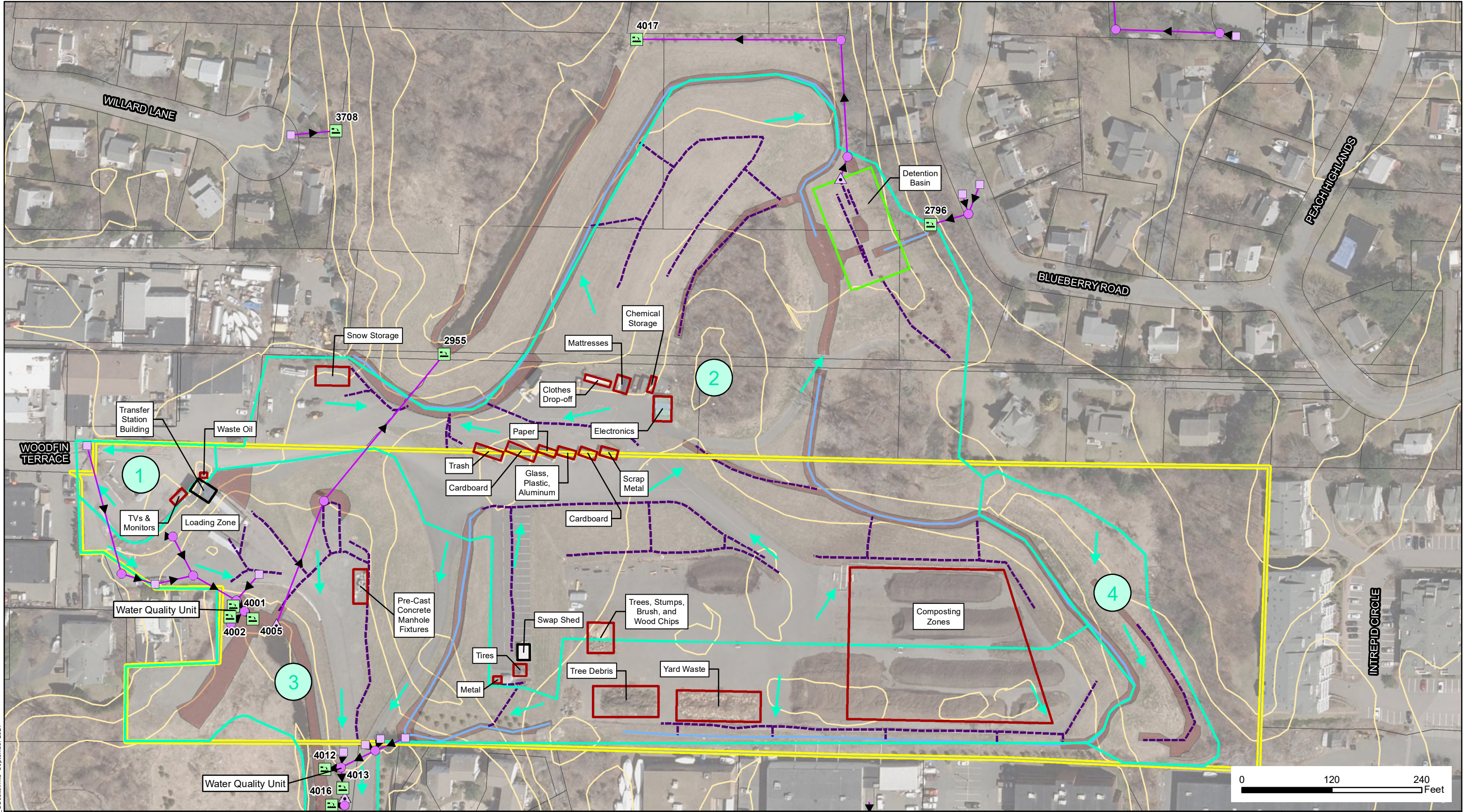


Title



Date

FIGURE 2-2



Z:\WP\Marblehead GIS\MXD\TransferStation_SitePlan_Credits.mxd September 2021



Engineering & Construction
BOBREK
PO BOX 2185
DANVERS, MA 01923
WWW.GOBOBREK.COM

Legend

- | | | |
|---|--|---|
|  Marblehead Transfer Station |  Drain Outlet |  Transfer Station Drainage Areas |
|  10' Contour (MassGIS) |  Drain Pipe |  Building |
|  Catch Basin |  Stormwater Underdrain |  Material Storage |
|  Drain MH |  Swale |  Rip Rap |
|  Drain Inlet |  Transfer Station Drainage Flow |  Parcel Boundary |

Marblehead
Transfer Station
5 Woodfin Terrace
Marblehead, MA 01945

CLIENT INFO

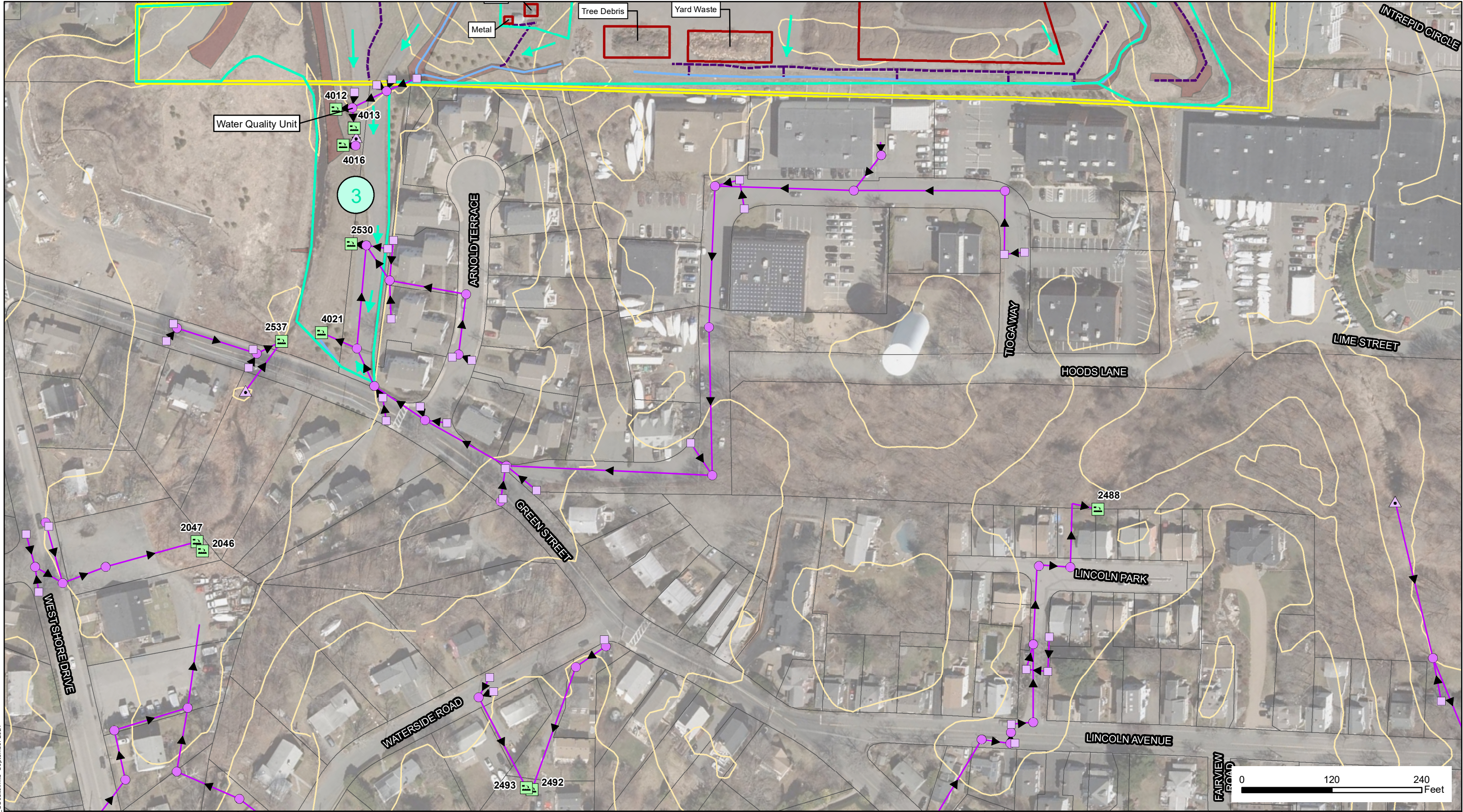


NORTH

SWPPP
Figure 2-2
Transfer Station
Site Map

MAP TITLE

FIGURE 2-3





Engineering & Construction
BOBREK
PO BOX 2185
DANVERS, MA 01923
WWW.GOBOBREK.COM

Legend

- Marblehead Transfer Station
- 10' Contour (MassGIS)
- Catch Basin
- Drain MH
- Drain Inlet

- Drain Outlet
- Drain Pipe
- Stormwater Underdrain
- Swale
- Transfer Station Drainage Flow

- Transfer Station Drainage Areas
- Building
- Material Storage
- Rip Rap
- Parcel Boundary

Marblehead
Transfer Station
5 Woodfin Terrace
Marblehead, MA 01945

CLIENT INFO



NORTH

SWPPP
Figure 2-3
Transfer Station
Site Map

MAP TITLE

APPENDIX A:

SOP 4 SPILL RESPONSE AND CLEANUP
SOP 6 EROSION AND SEDIMENTATION CONTROL
SOP 7 FUEL AND OIL HANDLING PROCEDURES
SOP 11 OIL/WATER SEPARATOR

SOP 4: SPILL RESPONSE AND CLEANUP PROCEDURES

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Introduction

Municipalities are responsible for any contaminant spill or release that occurs on property they own or operate. Areas of concern include any facilities that use or store chemicals, fuel oil or hazardous waste, including schools, garages, DPW yards, and landfills. Implementation of proper spill response and cleanup procedures can help to mitigate the effects of a contaminant release.

Responding to a Spill

In the event of a spill, follow these spill response and cleanup procedures:

1. Notify a member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility safety officer.
2. Assess the contaminant release site for potential safety issues and for direction of flow.
3. With proper training and personal protective equipment, complete the following:
 - a. Stop the contaminant release;
 - b. Contain the contaminant release through the use of spill containment berms or absorbents;
 - c. Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers;
 - d. Clean up the spill;
 - e. Dispose of all contaminated products in accordance with applicable federal, state and local regulations.
 - i. Products contaminated with petroleum shall be handled and disposed of as described in MassDEP policy WCS-94-400, Interim Remediation Waste Management Policy for Petroleum Contaminated Soils, <http://www.mass.gov/dep/cleanup/laws/94-400.pdf>.
 - ii.
 - iii. 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.
 - iv. Waste oil contaminated products:
 1. Perform the "one drop" test to ensure absorbents do not contain enough oil to be considered hazardous. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.
 2. 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.
 - 3. If absorbents do not pass the “one drop” test they should be placed in separate metal containers with tight fittings 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, however **in the case of an emergency call 911**;
- Contact the MassDEP 24-hour spill reporting notification line, toll-free at **(888)-3104-1133**; a.
- The following scenarios **are exempt** from MassDEP reporting requirements:
- i. Spills of less than 10 gallons of petroleum and do not impact a water body;
 - ii. Spills of less than one pound of hazardous chemicals and do not present an imminent health or safety hazard;
 - iii. Spills from passenger vehicle accidents;
 - iv. Spills within a vault or building with a watertight floor and walls that completely contain all released chemicals.

Procedures for Reporting Spill Response

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

Where was the release sent/what was contaminated, addressing:

- a. Pavement;
- b. Soil;
- c. Drains;
- d. Catch Basins;

- e. Water Bodies;
 - f. Public Street; and
 - g. Public Sidewalk.
4. The concentration of the released contaminant.
 5. What/who caused the release.
 6. Is the release being contained and/or cleaned up, or is the response complete.
 7. Type and amount of petroleum stored on site, if any.
 8. 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:

1. 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;
2. Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site;
3. 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;
 - 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, 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.
4. 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;
5. Maintain a oil and grease spill response kit with the following materials, at a minimum, at each facility:

- a. 6.5 gallon bucket with screw top lid and handle
- b. 10 gallons of sand
- c. 200 pounds of Speedi Dry absorbent
- d. Drain covers
- e. Spill containment berms
- f. (4) 3' absorbent socks
- g. (16) 16" x 18" absorbent pads
- h. Goggles
- i. Nitrile gloves
- j. Disposable bags to dispose of used materials
- k. Laminated contacts list shall include the following names and numbers:
 - i. Safety Officer;
 - ii. Facility Supervisor;
 - iii. Local Fire Department;
 - iv. MassDEP spill report notification line;
 - v. MassDEP Regional Office;
 - vi. Hazardous Waste Compliance Assistance Line;
 - vii. Household Hazardous Products Hotline;
 - viii. Massachusetts Department of Fire Services;
 - ix. Licensed Site Professionals Information.

Related Standard Operating Procedures

- 1. SOP 7, Fuel and Oil Handling Procedures

SOP 6: EROSION AND SEDIMENTATION CONTROL

Contents

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Controlling Erosion and Sediment through Design and Planning	2
Controlling Erosion and Sediment on Construction Sites	2
Controlling Erosion and Sediment by Proper Maintenance of Permanent BMPs	3
Related Standard Operating Procedures	4

Introduction

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.
1. Erosion and sediment control devices shall be inspected by the contractor regularly, and maintained as needed to ensure function.

2. In the SWPPP or other document, the contractor shall clearly identify the party responsible for maintaining erosion and sediment control devices.
3. 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.
4. Existing vegetation should be maintained on site as long as possible.
5. 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.
6. Stockpiles shall be stabilized by seeding or mulching if they are to remain for more than two weeks.
7. Disturbed areas shall be protected from stormwater runoff by using protective Best Management Practices (BMPs).
8. Clean water shall be diverted away from disturbed areas on construction sites to prevent erosion and sedimentation.
9. Sediment traps and sediment barriers should be cleaned out regularly to reduce clogging and maintain design function.
10. Vegetated and wooded buffers shall be protected.
11. 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.
12. Vegetation shall be allowed to establish before introducing flows to channels.
13. Regular light watering shall be used for dust control, as this is more effective than infrequent heavy watering.
14. Excessive soil compaction with heavy machinery shall be avoided, to the extent possible.
15. 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 PROCEDURES

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Delivery by Bulk (Tanker) Truck	2
Delivery of Drummed Materials	3
Removal of Waste Oil from the Facility	4
Attachments	4
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Introduction

Spills, leaks, and overfilling can occur during handling of fuels and petroleum-based materials, even in small volumes, representing a potential source of stormwater pollution. This Standard Operating Procedure addresses 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”.

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

1. There is no smoking while fuel handling is in process or underway.
2. 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.
3. The delivery vehicle’s hand brake is set and wheels are chocked while the activity is being completed.
4. Catch basins and drain manholes are adequately protected.
5. No tools are to be used that could damage fuel or oil containers or the delivery vehicle.
6. No flammable liquid shall 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.
7. Local traffic does not interfere with fuel transfer operations.
8. The attending persons should watch for any leaks or spills
 - a. Any small leaks or spills should be immediately stopped, and spilled materials absorbed and disposed of properly. Refer to SOP 4, “Spill Response and Cleanup Procedures”, for examples of spill cleanup and response materials.
 - b. In the event of a large spill or one that discharges to surface waters or an engineered storm drain system, the facility representative shall activate the facility’s Stormwater Pollution Prevention Plan (SWPPP) and report the incident as specified within.

Delivery by Bulk (Tanker) Truck

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

1. The truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures”, for examples of spill cleanup and response materials.

3. The facility representative shall check to ensure that the amount of delivery does not exceed the available capacity of the tank.
 - a. 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.
4. The truck driver and the facility representative shall both remain with the vehicle during the delivery process.
5. The truck driver and the facility representative shall inspect all visible lines, connections, and valves for leaks.
6. When delivery is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
7. The delivery vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
8. The facility representative shall 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.
9. The facility representative shall 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 shall include the following:

1. The truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures", for examples of spill cleanup and response materials.
3. The facility representative shall closely examine the shipment for damaged drums.
 - a. If damaged drums are found, they shall be closely inspected for leaks or punctures.
 - b. Breached drums should be removed to a dry, well-ventilated area and the contents transferred to other suitable containers.
 - c. Drums shall be disposed of in accordance with all applicable regulations.
4. Drummed materials shall not be unloaded outdoors during wet weather events.
5. The truck driver and the facility representative shall both remain with the vehicle during the delivery process.
6. Drums shall be handled and unloaded carefully to prevent damage.
7. Upon completion of unloading, the facility representative shall 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.
8. The facility representative shall check to ensure that the proper amount of fuel 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 for the draining of bulk oil tanks shall include the following:

1. The disposal truck driver shall check in with the facility upon arrival.
2. The facility representative shall 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 Procedures", for examples of spill cleanup and response materials.
3. The facility representative shall verify that the volume of waste oil in the tank does not exceed the available capacity of the disposal hauler's vehicle.
4. The truck driver and the facility representative shall both remain with the vehicle during the tank draining process.
5. When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
6. The disposal hauler vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
7. The facility representative shall 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.
8. The facility representative shall collect a receipt from the truck driver.

Attachments

1. Fuel Delivery Checklist

Related Standard Operating Procedures

1. SOP 4, Spill Response and Cleanup Procedures

Fuel Delivery Checklist

FUEL DELIVERY FORM

TOWN OF _____

Date: _____
Time of Arrival: _____
Time of Departure: _____
Truck Number: _____
Name of Truck Driver: _____
Name of Town Employee: _____

BEFORE UNLOADING:

Is all spill response equipment and personal protective equipment in place?

Yes ☐ No ☐

In the case of bulk fuel delivery, does tank capacity exceed the amount of delivery?

Yes ☐ No ☐ N/A ☐

In the case of drum fuel delivery, are all drums free of leaks and punctures?

Yes ☐ No ☐ N/A ☐

COMMENCE UNLOADING. REMAIN WITH VEHICLE AT ALL TIMES.

AFTER UNLOADING IS COMPLETE:

Have all fuel containers, including the vehicle, been inspected for leaks?

Yes ☐ No ☐

Has the ground at the unloading point been inspected for evidence of leaks?

Yes ☐ No ☐

If there are any leaks or spills, has the material been properly cleaned?

Yes ☐ No ☐

Has the correct amount of fuel been delivered?

Yes ☐ No ☐

Has a receipt been collected?

Yes ☐ No ☐

SOP 11: OIL/WATER SEPARATOR (OWS) MAINTENANCE

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OWS Cleaning Procedures	3
Documentation of Cleaning and Service.....	3
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OIL/WATER SEPARATOR (OWS) QUARTERLY INSPECTION CHECKLIST	5

Introduction

Oil/water separators (OWS), also known as gas/oil separators, are structural devices intended to provide pretreatment of floor drain water from industrial and garage facilities. An OWS allows oils (and substances lighter than water) to be intercepted and be removed for disposal before entering the sanitary sewer system. Substances heavier than water settle into sludge at the bottom of the unit. The remaining water passes through the unit into the sanitary sewer system.

OWS units are generally required where petroleum-based products, wastes containing petroleum, or oily and/or flammable materials are used, produced, or stored. OWS units should not be used to manage stormwater or flow from vehicle washing facilities. High flow rates through an OWS will reduce the structure's ability to separate materials. Detergents and solvents can emulsify oil and grease, allowing the particles to enter the sewer, so these should not be disposed of in drains entering the OWS.

General OWS Maintenance Requirements

1. Each OWS at a facility may receive different materials in different quantities, so the cleanout schedule may not be the same for every OWS at a facility.
2. Employees performing inspections of an OWS must be properly trained and be familiar with the maintenance of that specific structure, since function can vary based on design. Third-party firms may be utilized to perform quarterly inspections.
3. Do not drain petroleum, oil, or lubricants directly to an OWS. The structures are designed to manage these materials at low and medium concentrations in sanitary sewage, not as slug loads.
4. Do not drain antifreeze, degreasers, detergents, fuels, alcohols, solvents, coolant, or paint to the OWS.
5. Separator compartment covers should be tightly sealed to ensure floor drainage only enters the first compartment of the OWS.
6. Drains should be kept free of debris and sediment to the maximum extent practicable.
7. Spill cleanup materials should be maintained in the area served by the OWS. For more information on spill cleanup and response materials, refer to SOP 4, "Spill Response and Cleanup Procedures".

OWS Inspection Procedures

Daily inspection of an OWS should include a visual examination of the area served by the OWS for evidence of spills or leaks.

Weekly inspections of an OWS should include the following:

1. Visually examine the area served by the OWS for evidence of spills or leaks.
2. Inspect the point of discharge (i.e., sewer manhole) for evidence of petroleum bypassing the OWS.
3. Inspect drains for any signs of unauthorized substances entering the OWS.

4. Examine the OWS for signs of leaks or any malfunction.

Quarterly inspections of an OWS should include the following:

1. Complete tasks noted as appropriate for daily and weekly inspection.
2. Complete the Quarterly OWS Inspection Checklist, attached, during the inspection.
3. Take the following measurements to benchmark function of the OWS:
 - A. Distance from rim of access cover to bottom of structure
 - B. Distance from rim of access cover to top of sludge layer
 - C. Depth of sludge layer ($C = A - B$)
 - D. Distance from rim of access cover to the oil/water interface
 - E. Distance from rim of access cover to the top of the liquid surface
 - F. Depth of oil layer ($F = D - E$)

OWS Cleaning Procedures

Cleaning of the OWS is required when there has been a spill to the OWS that exceeds ten gallons of oil, one gallon of detergent or solvent, or any material prohibited by the owner of the sanitary sewer. Cleaning is also required when the levels of accumulated sludge and/or oil meet the manufacturer's recommended levels for cleaning. This will vary based on the manufacturer of the OWS. If the manufacturer's recommendations are unknown, the following guidelines are appropriate for determining when to clean:

1. When sludge accumulates to 25% of the wetted height of the separator compartment; or
2. When oil accumulates to 5% of the wetted height of the separator compartment; or
3. When 75% of the retention capacity of the OWS is filled.

Cleaning should be performed a minimum of once per year. When cleaning is required, it shall be performed by licensed OWS maintenance companies. Materials removed from the OWS must be disposed of in accordance with Massachusetts Hazardous Waste Regulations, 310 CMR 30.00.

Documentation of Cleaning and Service

The operator of the premises where the OWS is located shall maintain a log describing the date and type of all inspections, service and maintenance performed in connection with the Separator. Documentation shall include the identity of the inspector (or the identity of the person or entity that performed the service and/or maintenance). Records shall also document the amount of residue removed from the OWS each time it was cleaned, and how removed materials were disposed. This documentation shall be maintained for a minimum of six years.

Attachments

1. Quarterly OWS Inspection Checklist

Related Standard Operating Procedures

1. SOP 4, Spill Response and Cleanup Procedures

OIL/WATER SEPARATOR (OWS) QUARTERLY INSPECTION CHECKLIST

Facility:

OWS Location:

Inspected By:

Date:

Visual Inspection	Are there any signs of spills or leaks in the general area?	
		Yes No
	Is there any evidence of petroleum bypassing the OWS?	
		Yes No
	Are there any unauthorized substances entering the OWS?	Yes No
	Does the OWS exhibit any signs of leaks or malfunctions?	
		Yes No

If you answered "Yes" to any of the above questions, further inspection, repair, and/or cleaning may be necessary.

	A	Distance from rim of access cover to bottom of structure	
	B	Distance from rim of access cover to top of sludge layer	
	C = A - B	Depth of sludge layer	

Measurements	D	Distance from rim of access cover to the oil/water interface	
	E	Distance from rim of access cover to the top of the liquid surface	
	$F = D - E$	Depth of oil layer	

If the values for “C” and/or “F” are greater than those in the manufacturer’s recommendations, the OWS must be cleaned by a licensed OWS maintenance company.

APPENDIX B

SPILL OR LEAK DOCUMENTS

Significant Spills, Leaks or Other Releases

SPILL 1

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	
Actions taken in response to release:	
Measures taken to prevent recurrence:	

SPILL 2

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	

Actions taken in response to release:	
Measures taken to prevent recurrence:	

SPILL 3

Date of incident:	
Location of incident:	
Description of incident:	
Circumstances leading to release:	
Actions taken in response to release:	
Measures taken to prevent recurrence:	

APPENDIX C

TRAINING ACTIVITY DOCUMENTS

**Illicit Discharge Detection and Elimination (IDDE)
Employee Training Record
YEAR 3
Town of Marblehead, Massachusetts**

Date of Training: 6/15/2021

Training By: Julia Miller, Bobrek Engineering

PLEASE PRINT CLEARLY

Name	Department
Andrew Felt	Health
R. Titus	D.P.W
Peter Stacey	DRAINS
J. Bortwell	Highway
Jim Lowe	DPW
MATT CASHMAN	DPW
Bethany Spangler	WIS
Erik Fields	Water Dept.
Jason R Gulliland	Fire Dept
Paul Lihmann	DPW
Jana Lemieux	DPW
Don Meyer	DPW
CHARLES QUIGLEY	ENG'G
Collan King	DPW
Margaret Wheeler	DPW
Ruth	DPW
Joe John	Tree

APPENDIX D

INSPECTION FORMS AND REPORTS

Stormwater Site Inspection Report

General Information			
Facility Name	Marblehead Transfer Station		
Date of Inspection	May 5, 2021	Start/End Time	11:30-12:00
Inspector's Name(s)	John Bobrek, P.E.		
Inspector's Title(s)	President of Bobrek Engineering & Construction		
Inspector's Contact Information	<u>john@gobobrek.com</u>		
Inspector's Qualifications	Professional Engineer		
Weather Information			
Weather at time of this inspection? ☐ Clear ☐ Cloudy ☒ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds ☐ Other: Temperature: 57 degrees			
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: <i>Sheen in stormwater observed around un-covered waste oil tank.</i>			

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Spill Response kit (outside)	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
2	Trash loading/unloading and storage	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
3	Material storage – Yard Waste	✓ Yes ☐ No ☐ N/A	✓ Yes ☐ No	
4	Waste Oil (outside)	✓ Yes ☐ No ☐ N/A	☐ Yes ✓ No	Waste Oil Tank requires repairs, fill gauge broken and area should be wiped down from oil drips. Needs containment and cover

Non-Compliance

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

- *Waste oil recycling area uncovered and exposed to stormwater*
- *Waste oil recycling area not adequately protected from vehicles*
- *Oil fill gauge on tank broken and should be replaced to not allow stormwater to enter waste oil recycling tank.*

Additional Control Measures

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

Roadway around transfer station building, scale and waste oil tank in general disrepair allowing debris to fall from vehicles and general stormwater sediment tracking throughout the site. This area should be repaired.

Notes

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

None

Print inspector name and title:



John Bobrek, P.E 5/5/21

Photo 1: Waste Oil Tank not contained or covered with damaged fill gauge



Photo 2: Oil Slick running off container



Photo 3: Oil Leaking out of Tank



QUARTERLY SITE INSPECTION CHECKLIST

TOWN OF MARBLEHEAD

TRANSFER STATION

Date: July 7, 2021

Time: 2:15 PM

Inspector(s) Name(s): Maggie Wheeler, Marblehead DPW and Julia Miller, Bobrek Engineering

Weather Conditions During Inspection: Sunny, 85 Degrees

Description of Any Discharge Occurring at the Time of the Inspection: No Discharge

Conduct a thorough inspection of the entire facility and grounds.

Areas to Inspect		Good	Action Needed?	Action Completed?
Potential Pollutant Sources:	Description of problem:			
Parking Lots & Vehicle Traffic Areas		X		
Waste Oil Tank	FILL GAUGE STILL BROKEN		X	
Waste Collection Areas/Containers (TVs/monitors, mattresses, chemical storage, clothes drop-off, electronics, waste compactors)		X		
Equipment & Vehicle Storage Area		NA		
Snow Storage (winter)		NA		
Compost Pile Area		X		
Swap Shed		X		
Material Stockpiles (tires, metal, and concrete pipes)		X		
Outfall 1		X		
Outfall 2		X		
Outfall 3		X		
Outfall 4		X		
Outfall 5		X		
Outfall 6		X		
Outfall 7		X		
General Facility Grounds & Outfall:		Good	Action Needed? (Routine)	Action Completed? (Date)
Inspect catch basins, outfalls, compost piles, detention basin, and drainage swales for evidence of damage, erosion or any discharge of pollutants.		X		
Ensure that facility grounds show no signs of poor housekeeping (e.g., materials, residues, or trash that may come in contact with stormwater).		X		
Ensure there are no spots, pools, puddles, or other traces of oil, grease, or other chemicals on the ground around the facility, either liquid or solid.		X		
Ensure there is no evidence of offsite tracking of materials and no blowing of raw, final, or waste materials outside of the operational areas.		X		
Ensure there are no leaks or spills from equipment, drums or other containers, or containers in poor condition outside the facility.		X		