STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Transfer Station

Town of Hanover

June 2020 Revised September 2020





TABLE OF CONTENTS

| SECTI | ON 1 INTRODUCTION | 1 |
|-------|---|-----|
| SECTI | ON 2 DETAILED FACILITY ASSESSMENT | 3 |
| 2.1 | FACILITY SUMMARY | |
| 2.2 | SITE INSPECTION | |
| 2.3 | Pollution Prevention Team | |
| 2.4 | FACILITY DESCRIPTION | 4 |
| 2.5 | FACILITY STRUCTURES | 4 |
| 2.5 | 5.1 Additional Site Features | 4 |
| 2.6 | SITE DRAINAGE | 5 |
| 2.6 | 5.1 Receiving Waters | 5 |
| 2.6 | 5.2 Applicable TMDLS | 5 |
| 2.7 | SITE ACTIVITIES | 6 |
| 2.7 | 7.1 Solid Waste Management | 6 |
| 2.7 | 2.2 Use or Storage of Pesticides or Fertilizers | 7 |
| 2.7 | 7.3 Vehicle and Equipment Storage | 7 |
| 2.7 | 7.4 Waste Handling and Disposal | 8 |
| 2.7 | 5 | |
| 2.7 | | |
| 2.8 | VEHICLE AND EQUIPMENT INVENTORY | |
| 2.9 | LOCATION OF LEAK AND SPILL CLEANUP MATERIALS | |
| 2.10 | Allowable Non-Stormwater Discharges | |
| 2.11 | Existing Stormwater Monitoring Data | |
| 2.12 | SIGNIFICANT MATERIAL INVENTORY | |
| 2.13 | APPLICABILITY OF SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) REQUIREMENTS | |
| 2.14 | DESCRIPTION OF SIGNIFICANT MATERIAL STORAGE AREAS | |
| 2.15 | LIST OF SIGNIFICANT LEAKS OR SPILLS | |
| 2.16 | STRUCTURAL BMPS | |
| | 6.1 Pretreatment Structural BMPs | |
| | 6.2 Treatment Structural BMPs | |
| 2.17 | SEDIMENT AND EROSION CONTROL | 14 |
| SECTI | ON 3 NON-STRUCTURAL CONTROLS | .15 |
| 3.1 | GOOD HOUSEKEEPING | 15 |
| 3.2 | Preventative Maintenance | 16 |
| 3.3 | Best Management Practices | 16 |
| 3.4 | SPILL PREVENTION AND RESPONSE | 16 |
| SECTI | ON 4 PLAN IMPLEMENTATION | .18 |

| SECTIO | ON 5 SWPPP CERTIFICATION | 21 |
|--------|------------------------------|----|
| 4.4 | TRIGGERS FOR SWPPP REVISIONS | 19 |
| 4.3 | RECORDKEEPING AND REPORTING | 19 |
| 4.2 | SITE INSPECTION REQUIREMENTS | 18 |
| 4.1 | EMPLOYEE TRAINING | 18 |

LIST OF TABLES

| Table 1: Vehicle Inventory | 10 |
|---|----|
| Table 2: Exhisting Stormwater Monitoring Data | 11 |
| Table 3: Significant Material Inventory | 11 |
| Table 4: Significant Leaks or Spills | 14 |

LIST OF FIGURES

Figure 1: Locus Map

Figure 2: Site Map

LIST OF APPENDICES

Appendix A: Standard Operating Procedures

Appendix B: Spill Documentation Forms

Appendix C: Training Documentation and Attendance Sheets

Appendix D: Facility Inspection Forms

SECTION 1 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been developed for the Town of Hanover 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 Town of Hanover Transfer Station is located at 118 Rockland Street, Hanover, MA 02339 and is owned and operated by the Town of Hanover. The Locus Map in Figure 1 shows the location of the facility within the Town of Hanover.

The Department of Public Works is primarily responsible for activities at, and maintenance of, the facility.

2.2 SITE INSPECTION

The site inspection associated with the development of this SWPPP was completed on June 2, 2020. The inspection was conducted by Ann Marie Petricca and Vern Lincoln, of Environmental Partners.

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

2.3 POLLUTION PREVENTION TEAM

A Pollution Prevention Team for the Hanover Transfer Station 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: Kurt Kelley **Title:** Superintendent of Public Works Office Phone: 781-826-3189

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

Member: Ken Storey Title: Foreman

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. Maintains spill kits at the Hanover Transfer Station.

2.4 FACILITY DESCRIPTION

The primary purpose of Town of Hanover Transfer Station is to operate the Town's waste transfer and recycling operations. Activities at the site are described in SECTION 2.7

The facility covers approximately 13.49 acres, and contains the structures and other features shown on the Site Map in Figure 2 and described in detail in the following sections. Components shown on the site map, if present, include:

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

2.5 FACILITY STRUCTURES

Carpentry, electrical, and minor maintenance activities are completed in the Maintenance Shed. Small equipment, signage, and tools are stored in this building as well. The Maintenance Shed contains no floor drains and is fully enclosed.

Latex paint, primer, spray paint, and similar products are stored in a Miscellaneous Recyclables Area. These enclosures and building contains no floor drains and are partially to fully enclosed.

2.5.1 Additional Site Features

Aboveground Storage Tanks

Aboveground storage tanks (ASTs) at the Hanover Transfer Station are used for storage of waste oil and waste anti-freeze. An inventory of significant materials is included in SECTION 2.12.

Both ASTs are located at the eastern portion of the property for collection and storage of waste oil and waste anti-freeze. The ASTs are partially covered, and roof drainage discharges to the north.

Tight Tanks

There are no know tight tanks at the Hanover Transfer Station.

Parking Areas

There are no designated parking areas at the Hanover Transfer Station. The traffic pattern is designed for residents to drive through the facility, drop off their waste and recycling, and exit the property without extended parking. The entire waste collection and recycling area is impervious surface.

2.6 SITE DRAINAGE

No stormwater from adjacent properties impact the Hanover Transfer Station property.

Sheet Flow

Drainage from the impervious surfaces at the Hanover Transfer Station is directed partially to the catch basins located around the site, including, at the solid waste hauling station beneath the solid waste drop off area and within the recycling area at the south end of the property.

Engineered Drainage

Additional assessment is required at the Transfer Station to determine the nature and discharge of onsite catch basins and drainage system. Existing solid waste transfer station inspection reports indicate that the catch basins infiltrate onsite. Although older site plans show the catch basins discharge along the west end of the property.

Engineered drainage at the Transfer Station includes approximately five catch basins, three drain manholes, and two BMPs along Rockland Street. Maintenance of the catch basin structures, including sediment removal, is completed by the Department of Public Works or their contractor.

2.6.1 Receiving Waters

The good housekeeping practices, preventative maintenance and Best Management Practices implemented at the facility are methods to limit potential negative impacts to stormwater. These practices are discussed in SECTION 3 of this SWPPP. Additional investigations of the engineered drainage need to be performed to determine if the catch basins infiltrate onsite or, if they discharge offsite, where the outfall(s) are located. The unnamed stream to the west of the transfer station property is a tributary to Iron Mine Brook, which is identified as a Category 5 Total Maximum Daily Load (TMDL) Required.

2.6.2 Applicable TMDLS

Additional investigations of the engineered drainage need to be performed to determine if the catch basins infiltrate onsite or, if they discharge offsite, where the outfall(s) are located.

2.7 SITE ACTIVITIES

The following activities occur at the facility:

- Landscaping
- Residential drop off solid waste and segregated items, (including paint, propane and other compressed gases) and handling, and storage by Transfer Station Staff.
- Solid waste management (including scrap metal, and residential C&D materials)
- Tool storage
- Vehicle and equipment storage
- Waste Handling and Disposal
- Waste oil and anti-freeze storage.

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

No solvent-based parts washers were observed in any structure at the Transfer Station. The Town of Hanover is a member of the South Shore Recycling Cooperative and holds a hazardous waste collection day at the Hanover Transfer Station two times per year. All hazardous waste is hauled offsite that day. Any oil and/or hazardous materials are collected by a third party vendor contracted by the Town of Hanover on an annual basis, at a minimum. These materials are properly labeled and stored using appropriate Best Management Practices.

The Department of Public Works does not apply, utilize or store fertilizers, herbicides, or pesticides at the Transfer Station.

2.7.1 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 and include municipal solid waste, residential C&D materials, TV/VCRs*, White Goods and Metals*, Refrigerators/Freezers*, Mattresses, Batteries, Sofas/Stuffed Chairs, Tires*, Computers, Microwave Ovens, Propane Tanks, Fluorescent Bulbs, and Wood and Asphalt, Brick, Concrete materials from Construction within Hanover. Most of these materials are sent offsite for recycling.

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" included in Appendix A.

2.7.2 Use or Storage of Pesticides or Fertilizers

Potential Sources of Stormwater Pollution

The Town does not utilize or store pesticides or fertilizers at the Transfer Station.

Pollution Prevention

The Town does not utilize or store pesticides or fertilizers at the Transfer Station.

2.7.3 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.

2.7.4 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 that contribute to stormwater pollution, including:

- 1. Solid Waste
- 2. Hazardous Materials and Waste
- 3. Pesticides and Fertilizers
- 4. Petroleum Products
- 5. Detergents

Pollution Prevention

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

Solid Waste

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

Hazardous Materials and Wastes

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

Pesticides, Fertilizers and Petroleum Products

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

Detergents

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

Additional Recommendations

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 that 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 case a defect is found, immediately repair, replace or properly dispose.

2.7.5 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" in Appendix A.

Waste oil should be stored indoors or under a covered structure to prevent exposure to precipitation, unless specifically designed for outdoor storage. If stored outdoors, then care must be taken to ensure that the outside of the tank is clean to avoid discharge of waste oil to stormwater receptors. Floor drains, 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, waste oil should be recycled or reduce the amount generated.

2.7.1 Anti-Freeze Storage

Potential Sources of Stormwater Pollution

When not stored properly, anti-freeze can be a potential source of hazardous material in stormwater. Anti-freeze containers can leak, and spills can occur while during transportation activities.

Pollution Prevention

All anti-freeze storage 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 anti-freeze is stored and facility personnel should be familiar with the procedures outlined in SOP 4 "Spill Response and Cleanup Procedures" in Appendix A. Anti-freeze should be properly disposed.

Anti-freeze should be stored indoors or under a covered structure to prevent exposure to precipitation, unless specifically designed for outdoor storage. If stored outdoors, then care must be taken to ensure that the outside of the tank is clean to avoid discharge of anti-freeze to stormwater receptors.

2.8 VEHICLE AND EQUIPMENT INVENTORY

Vehicles and major equipment stored and maintained at the facility are shown in Table 1.

| Vehicle/Equipment Type | Number on Site |
|---|----------------|
| Roll-off Containers | |
| CAT Backhoe | 1 |
| Yard-All (for moving transfer trailers) | 1 |
| International 6 wheel 25000 GBW for moving containers | 1 |
| Small Compactors | 3 |

Table 1: Vehicle Inventory

2.9 LOCATION OF LEAK AND SPILL CLEANUP MATERIALS

Leak and spill cleanup materials are stored at Transfer Station in order to facilitate rapid response. Speedy-dry and sorbent pads are stored down below in the building at the solid waste compactor pit.

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. No allowable non-stormwater discharges are identified at the Transfer Station facility.

2.11 EXISTING STORMWATER MONITORING DATA

Records for any stormwater monitoring data collected from the Transfer Station shall be properly documented in a Table 2, below and kept on file at the Transfer Station and DPW Office.

Table 2: Existing Stormwater Monitoring DataTransfer Station

| Building or Area | Location | Type of Monitoring |
|------------------|----------|--------------------|
| | | |
| | | |
| | | |
| | | |
| | | |

2.12 SIGNIFICANT MATERIAL INVENTORY

Materials stored include those specified in SECTION 2.7, "Site Activities". An inventory of these materials at the Transfer Station is included in Table 3, 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.

| Material | Storage Location | Quantity | Potential Pollutant | Covered (C) or Enclosed (E) | Likelihood of Contact with Water |
|----------------------------------|------------------|----------|---------------------------|--------------------------------|--|
| Petroleum-Based Co | ompounds | | | | |
| Diesel fuel | | | Petroleum hydrocarbons | | |
| Gasoline | | | Petroleum hydrocarbons | | |
| Hydraulic Fluid (for compactors) | | | Petroleum hydrocarbons | Enclosed | Low |
| Motor Oil | | | Petroleum hydrocarbons | | |
| Fuel Oil, No. 2 | | | Petroleum hydrocarbons | | |
| Fuel Oil, No. 6 | | | Petroleum hydrocarbons | | |
| Lubricants (onsite equipment) | | | Petroleum hydrocarbons | Enclosed | Low |
| Transmission Fluid | | | Petroleum hydrocarbons | | |

Table 3: Significant Material Inventory Transfer Station

| Material | Storage Location | Quantity | Potential Pollutant | Covered (C) or Enclosed (E) | Likelihood of Contact with Water | | | |
|--------------------------------------|------------------|--------------|----------------------------|--------------------------------|--|--|--|--|
| Waste Oil | Miscellaneous | | Petroleum | Tank | Low | | | |
| | Recyclables Area | | hydrocarbons | | | | | |
| Other: | | | | | | | | |
| | То | tal Volume o | f Oil at Facility = | | | | | |
| Non-Petroleum Significant Materials | | | | | | | | |
| Antifreeze | Miscellaneous | | Ethylene glycol; | Tank | Low | | | |
| | Recyclables Area | | potential source of BOD | | | | | |
| Spray Lubricant | | | Petroleum | | | | | |
| | | | hydrocarbons | | | | | |
| Adhesives and | | | Volatile and | | | | | |
| sealants | | | semi volatile | | | | | |
| | | | organic | | | | | |
| | | | compounds | | | | | |
| Aggregates | | | Sediments | | | | | |
| Animal Wastes | | | Fecal | | | | | |
| Asphalt | C&D Area | | Sediments | Open Roll-off | Low | | | |
| Batteries, Used | Miscellaneous | | Lead, sulfuric | | Low | | | |
| Lead Acid | Recyclables Area | | acid; possible | | | | | |
| | | | particulate | | | | | |
| | | | matter and | | | | | |
| | | | residual oil | | | | | |
| Brake Fluid | | | Volatile organic | | | | | |
| | | | compounds; | | | | | |
| | | | non-petroleum | | | | | |
| | | | based oil | | | | | |
| Coolant (new or | | | Volatile organic | | | | | |
| used) | | | compounds | | | | | |
| Deicer- Calcium Chloride (liquid) | | | Chlorides | | | | | |
| Deicer- Road Salt | | | Chlorides | | | | | |
| Detergents | | | Surfactants | | | | | |
| Paint, Latex | Miscellaneous | | Petroleum | Covered | Low | | | |
| , | Recyclables Area | | constituents, | | | | | |
| | | | including | | | | | |
| | | | volatile and | | | | | |
| | | | semi volatile | | | | | |
| | | | organic | | | | | |
| | | | compounds | | | | | |
| Paint, Oil-Based | | | Petroleum | | | | | |
| | | | constituents, | | | | | |
| | | | including | | | | | |
| | | | volatile and | | | | | |

| Material | Storage Location | Quantity | Potential Pollutant | Covered (C) or Enclosed (E) | Likelihood of Contact with Water |
|------------------|--------------------|----------|------------------------|--------------------------------|--|
| | | | semi volatile | | |
| | | | organic | | |
| | | | compounds | | |
| Paint, Spray | | | Petroleum | | |
| | | | constituents, | | |
| | | | including | | |
| | | | volatile and | | |
| | | | semi volatile | | |
| | | | organic | | |
| | | | compounds | | |
| Sand | | | Sediments | | |
| Solvents | | | Volatile organic | | |
| | | | compounds | | |
| Solid Waste, | Recycling Area | | Miscellaneous | Enclosed | Low |
| Recyclable | | | debris/solids, | | |
| | | | particulate | | |
| | | | matter, metals | | |
| Solid Waste, for | Solid Waste Pit | | Particulate | Covered | Low |
| Disposal | | | matter, solids, | | |
| | | | metals | | |
| Solid Waste, C&D | C&D Disposal Area | | Particulate | Open Roll-off | Yes |
| | (Residential Only) | | matter, solids, | | |
| | | | metals | | |
| Spill response | Solid Waste | | Particulate | Enclosed | |
| material (Speedy | compactor pit | | matter, solids, | | |
| Dry or similar) | | | residual oil. | | |

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 Hanover Transfer Station does have aboveground oil storage capacity that exceeds 1,320 gallons and, therefore, a SPCC Plan is not required.

2.14 DESCRIPTION OF SIGNIFICANT MATERIAL STORAGE AREAS

Many activities at the Transfer Station that involve the storage of materials are included in Table 5 and occur within contained garages or bays. Waste oil and anti-freeze are stored in aboveground storage tanks next to the administrative building. Residents drop off waste oil and anti-freeze and these materials are only handled and transferred to the above ground storage tank by a Hanover DPW employee.

2.15 LIST OF SIGNIFICANT LEAKS OR SPILLS

No significant leaks or spills have occurred at the Transfer Station in the last three years. Any significant leaks or spills should be recorded in the following Table 4.

Table 4: Significant Leaks or Spills Transfer Station

| Building or Area | Location | Type of Monitoring |
|------------------|----------|--------------------|
| | | |
| | | |
| | | |
| | | |
| | | |

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 Transfer Station to maintain water quality.

2.16.1 Pretreatment Structural BMPs

• Deep sump catch basins (if the solid waste transfer station inspection reports are correct)

2.16.2 Treatment Structural BMPs

• Vegetated infiltration basin

2.17 SEDIMENT AND EROSION CONTROL

The transfer station is mostly paved. The facility is clean and well swept, minimizing any sedimentation from entering the Town of Hanover storm drain system. Additional assessment is required to determine if the storm drain system at the Transfer Station discharges to a nearby surface water body or if the catch basins infiltrate stormwater onsite.

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 recommended good housekeeping measures at the facility:

- All fluid products and wastes are kept indoors or in tanks designed for outdoor storage.
- Fueling of small equipment is completed indoors.
- 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.
- Oil/water separators and catch basins are maintained regularly and properly.
- Speedi Dri (or similar absorbent) is readily available and used for appropriate spills.
- Spill kits are located in areas where fluids are stored or where activities may result in a spill.
- Tools and materials are returned to designated storage areas after use.
- Waste materials are properly collected and disposed of.
- Different types of wastes are separated as appropriate.
- Regular waste disposal is arranged.
- Work areas are clean and organized.
- Work areas are regularly swept or vacuumed to collect metal, wood, and other particulates and materials.
- Obtain only the amount of materials required to complete a job.
- Materials are recycled when possible.
- Staff is familiar with manufacturer directions for proper use of materials and associated Safety Data Sheets (SDSs).
- Staff is familiar with proper use of equipment.
- Bollards, berms, and containment features are in place around areas and structures where fluids are stored.
- Drip pans are used for maintenance operations involving fluids and under leaking vehicles and equipment waiting repair.

The facility maintains a supply of spill cleanup materials on site, and will maintain this inventory. Spill containment, control, and cleanup materials and spill kits are maintained at the Transfer Station down below in the building at the solid waste compactor pit.

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.
- Waste anti-freeze 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 during delivery of waste oil to the waste oil storage tank. 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 <u>or</u> 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.

Superintendent of Public Works is responsible for stormwater management training for the Transfer Station 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 actives 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 Transfer Station 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 Stormwater Pollution Prevention Team Leader is responsible for ensuring that inspections are performed. The Transfer Station Foreman is responsible for completing the quarterly 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 Main Office on Pond Street and shall be updated if any of the conditions in SECTION 2.21 occur. The SWPPP and records shall be made available to state or federal inspectors and the general public upon request.

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

Inspections of the Transfer Station 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 Transfer Station is in compliance with the 2016 Massachusetts MS4 Permit.

4.4 TRIGGERS FOR SWPPP REVISIONS

The Town of Hanover 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 that 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

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.

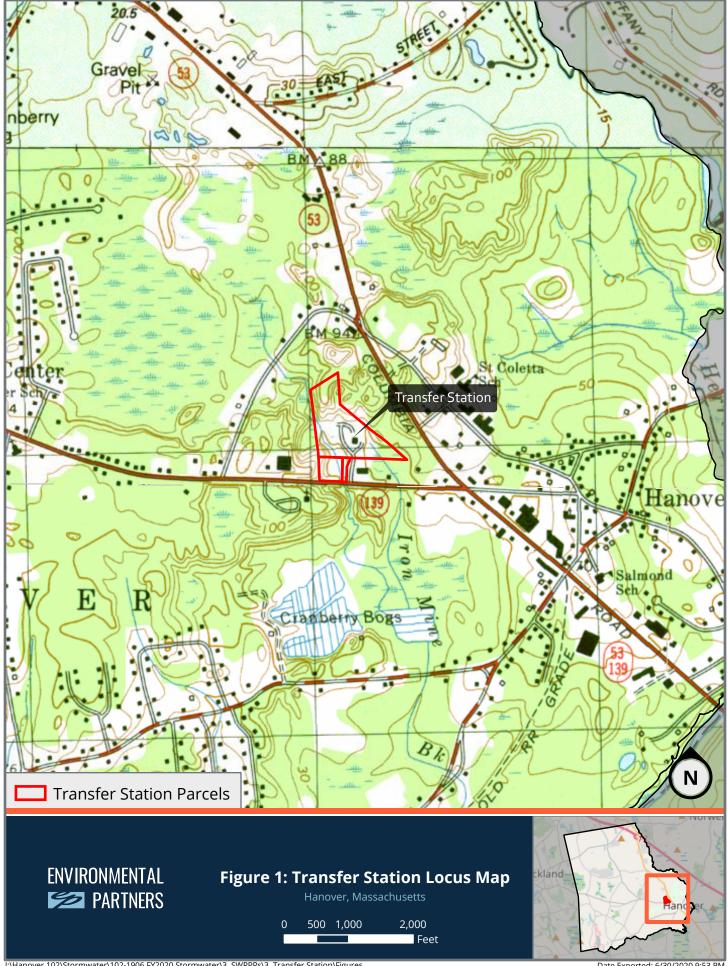
Authorized Official

Acting Town MANAger

-72-7070

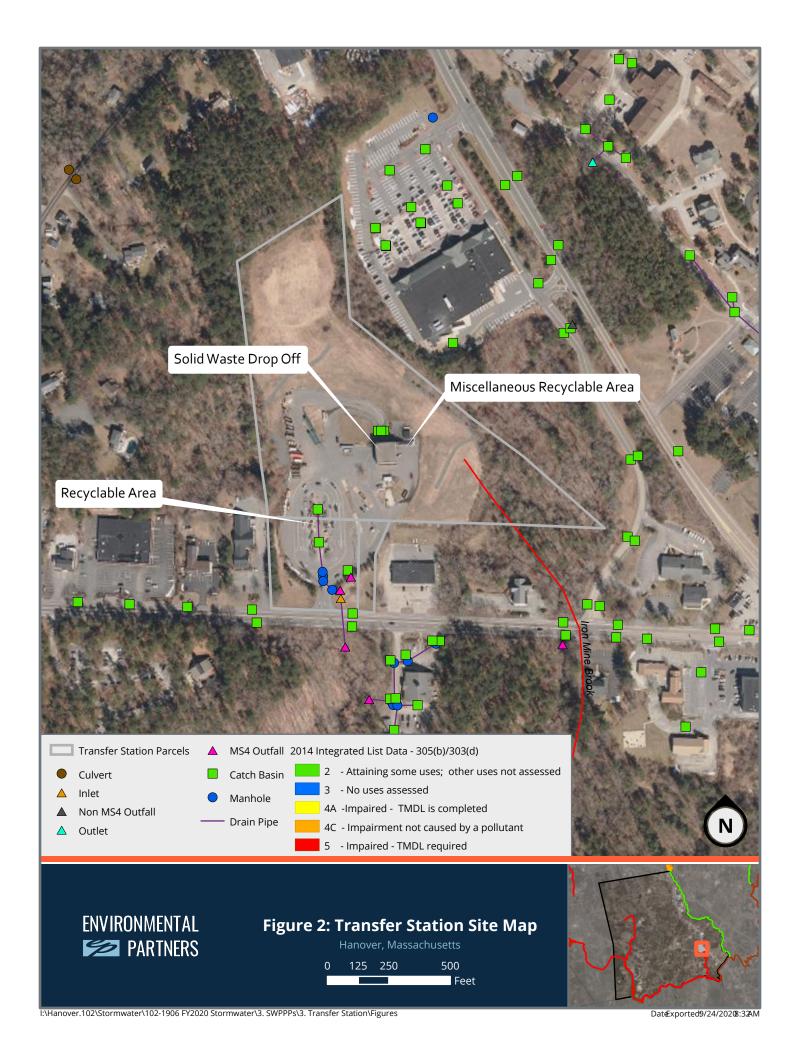
Date

FIGURES



I:\Hanover.102\Stormwater\102-1906 FY2020 Stormwater\3. SWPPPs\3. Transfer Station\Figures

Date Exported: 6/30/2020 9:53 PM



APPENDIX A

Standard Operating Procedures



STANDARD OPERATING PROCEDURE 3: CATCH BASIN INSPECTION AND CLEANING

Introduction

Catch basins help minimize flooding and protect water quality by removing trash, sediment, decaying debris, and other solids from stormwater runoff. These materials are retained in a sump below the invert of the outlet pipe. Catch basin cleaning reduces foul odors, prevents clogs in the storm drain system, and reduces the loading of suspended solids, nutrients, and bacteria to receiving waters.

During regular cleaning and inspection procedures, data can be gathered related to the condition of the physical basin structure and its frame and grate and the quality of stormwater conveyed by the structure. Observations such as the following can indicate sources of pollution within the storm drain system:

- Oil sheen
- Discoloration
- Trash and debris

Both bacteria and petroleum can create a sheen on the water surface. The source of the sheen can be differentiated by disturbing it, such as with a pole. A sheen caused by a oil will remain intact and move in a swirl pattern; a sheen caused by bacteria will separate and appear "blocky". Bacterial sheen is not a pollutant but should be noted.

Observations such as the following can indicate a potential connection of a sanitary sewer to the storm drain system, which is an illicit discharge.

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

Each catch basin should be cleaned and inspected at least annually. Catch basins in high-use areas may require more frequent cleaning. Performing street sweeping on an appropriate schedule will reduce the amount of sediment, debris, and organic matter entering the catch basins, which will in turn reduce the frequency with which structures need to be cleaned.

Cleaning Procedure

Catch basin inspection cleaning procedures should address both the grate opening and the basin's sump. Document any and all observations about the condition of the catch basin structure and water quality on the Catch Basin Inspection Form (attached).

Catch basin inspection and cleaning procedures include the following:

- 1. Work upstream to downstream.
- 2. Clean sediment and trash off grate.
- 3. Visually inspect the outside of the grate.
- 4. Visually inspect the inside of the catch basin to determine cleaning needs.
- 5. Inspect catch basin for structural integrity.
- 6. Determine the most appropriate equipment and method for cleaning each catch basin.
 - a. Manually use a shovel to remove accumulated sediments, or
 - b. Use a bucket loader to remove accumulated sediments, or
 - c. Use a high pressure washer to clean any remaining material out of catch basin while capturing the slurry with a vacuum.
 - d. If necessary, after the catch basin is clean, use the rodder of the vacuum truck to clean downstream pipe and pull back sediment that might have entered downstream pipe.
- 7. If contamination is suspected, chemical analysis will be required to determine if the materials comply with the Massachusetts DEP Hazardous Waste Regulations, 310 CMR 30.000 (<u>https://www.mass.gov/files/documents/2016/08/xl/310cmr30_7883_54357.pdf</u>). Chemical analysis required will depend on suspected contaminants. Note the identification number of the catch basin on the sample label, and note sample collection on the Catch Basin Inspection Form.
- 8. Properly dispose of collected sediments. See following section for guidance.
- 9. If fluids collected during catch basin cleaning are not being handled and disposed of by a third party, dispose of these fluids to a sanitary sewer system, with permission of the system operator.
- 10. If illicit discharges are observed or suspected, notify the appropriate Department (see "SOP 10: Addressing Illicit Discharges").
- 11. At the end of each day, document location and number of catch basins cleaned, amount of waste collected, and disposal method for all screenings.
- 12. Report additional maintenance or repair needs to the appropriate Department.

Disposal of Screenings

Catch basin cleanings from storm water-only drainage systems may be disposed at any landfill that is permitted by MassDEP to accept solid waste. MassDEP does not routinely require stormwater-only catch basin cleanings to be tested before disposal, unless there is evidence that they have been contaminated by a spill or some other means.

Screenings may need to be placed in a drying bed to allow water to evaporate before proper disposal. In this case, ensure that the screenings are managed to prevent pollution.

Attachments

1. Catch Basin Inspection Form

Job No.: Town:

Inspector:

Date:



CATCH BASIN INSPECTION FORM

| Catch Basin I.D. | | | _ | | | arge from Struc charge to Outfal | | s 🗌 | No 🗌 |
|--|------------|-----------|--------------------|---------------------------------|---|--|--|----------|-----------------|
| Catch Basin Label: | Stenci | | Ground Ins | et [| S | ign 🗌 Nor | ne 🗌 | Other_ | |
| Basin Material: Corrugated metal Stone Brick Other: | | ed metal | | Catch Basin Condition: | | Good Deor Fair Crumbling | | | |
| Pipe Material: Concrete PVC Clay Tile Other: | | | Pipe Measurements: | | | | Inlet Dia. (in): d= Outlet Dia. (in): D= | | |
| Required Maintenance | / Problems | (check) | all that annly |) • | | | | | |
| | | | | | Dir Dir Co Era Re Ne Other: | nnot Remove Co tch Work prosion at Structu osion Around Str move Trash & D ced Cement Arou Description of Heavy Moderate Slight Trickling | ructure d Structure & Debris Around Grate | | |
| *If the outlet is submer above the outlet invert. | | | | roxin | nate hei | ght of water | Yes | | No 🗌 |
| Flow | | ervations | | | | | Circle the | ose pres | ent: |
| Standing Wate | r Colo | r: | | | | | Foam | | Oil Sheen |
| (check one or both) Odor: | | | | | | Sanitary Waste Bacterial Sheen | | | |
| | | | Dry > 24 | nours | | Wet | | waste | Dacterial Sheen |
| Sample of Screenings Collected for Analysis? Yes Comments: | | | | | No | | Orange St | taining | Floatables |
| | | | | Excessive sediment Other: | | Pet Waste Optical Enhancers | | | |

STANDARD OPERATING PROCEDURE 4: SPILL RESPONSE AND CLEANUP PROCEDURES

Introduction

Municipalities are responsible for any contaminant spill or release that occurs on property they own or operate. Particular 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. Products saturated with petroleum products or other hazardous chemicals require special handling and disposal by licensed transporters. Licensed transporters will pick up spill contaminated materials for recycling or disposal. Save the shipping records for at least three years.
 - iii. Waste oil contaminated 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.
- a. 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;
 - a. Auburn: (508)-832-7800
 - b. Charlton: (508)-248-2299
 - c. Dudley: (508)-949-8040
 - d. Holden: (508)-210-5650
 - e. Leicester: (508)-892-7022
 - f. Millbury: (508)-865-5328
 - g. Oxford: (508)-987-6012
 - h. Paxton: (508)-791-6600
 - i. Shrewsbury: (508)-841-8522
 - j. Spencer: (508)-885-3555
 - k. Sturbridge: (508)-347-2525
 - l. Webster: (508)-949-3876
 - m. West Boylston: (508)-835-3233
- 5. Contact the MassDEP 24-hour spill reporting notification line, toll-free at (888)-3104-1133;
 - n. 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;
 - 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.
- 4. Where was the release sent/what was contaminated, addressing:
 - a. a. Pavement;
 - b. b. Soil;
 - c. c. Drains;
 - d. d. Catch Basins;
 - e. e. Water Bodies;
 - f. f. Public Street; and
 - g. g. Public Sidewalk.
- 5. The concentration of the released contaminant.
- 6. What/who caused the released contaminant.
- 7. Is the release being contained and/or cleaned up, or is the response complete.
- 8. Type and amount of petroleum stored on site, if any.
- 9. Characteristics of contaminant container, including
 - a. Tanks;
 - b. Pipes;
 - c. Valves.

Maintenance and Prevention Guide

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

To protect against contaminant release adhere to the following guidance:

- Ensure all employees are properly trained to respond in the case of a spill, understand the nature and properties of the contaminant and understand the spill control materials and personnel safety equipment. Maintain training records of current personnel on site and retain training records of former personnel for at least three years from the date last worked at the facility;
- Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site;
- 3. Implement good management practices where chemicals and hazardous wastes are stored;
 - d. Ensure storage in closed containers inside a building and on an impervious surface;

- e. If storage cannot be provided inside, ensure secondary containment for 110 percent of the maximum volume of the storage container;
- f. Locate storage areas near maintenance areas to decrease the distance required for transfer;
- g. Provide accurate labels, MSDS information and warnings for all stored materials;
- a. Regularly inspect storage areas for leaks;
- b. Ensure secure storage locations, preventing access by untrained or unauthorized persons;
- c. Maintain accurate records of stored materials.
- Replace traditional hazardous materials such as pesticides and cleansers with nonhazardous 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.

Attachments

1. Spill Response and Cleanup Contact List

SPILL RESPONSE AND CLEANUP CONTACT LIST

| | Phone Number | Date and Time contacted |
|--|----------------------------------|----------------------------|
| Safety Officer: | | |
| Facility Supervisor: | | |
| Fire Department: | | |
| MassDEP 24-Hour Spill Reporting | (888)-304-1133 | |
| MassDEP Regional Offices: | | |
| Northeast Regional Office | (978) 694-3200 | |
| Southeast Regional Office | (508) 946-2700 | |
| Central Regional Office | (508) 792-7650 | |
| Western Regional Office | (413) 784-1100 | |
| Hazardous Waste Compliance Assistance Line | (617) 292-5898 | |
| Household Hazardous Products Hotline | (800) 343-3420 | |
| Massachusetts Department of Fire Services | (978) 567-3100 or (413) 587-3181 | |
| Licensed Site Professionals Association (Wakefield, MA) | (781) 876-8915 | |
| Licensed Site Professionals Board | (617) 556-1091 | |

STANDARD OPERATING PROCEDURE 7: FUEL AND OIL HANDLING PROCEDURES

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.
 - b. 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.
- 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.

Delivery of Drummed Materials

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.
- 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.
- 6. When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
- 7. The disposal hauler vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
- 8. 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.
- 9. The facility representative shall collect a receipt from the truck driver.

Attachments

1. Fuel Delivery Checklist

STANDARD OPERATING PROCEDURE 11: OIL/WATER SEPARATOR (OWS) MAINTENANCE

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

OIL/WATER SEPARATOR (OWS) QUARTERLY INSPECTION CHECKLIST

| | Are there any signs of spills or leaks in the general area? | Yes 🗌 | No 🗌 |
|-------------------|---|-------|------|
| Visual Inspection | Is there any evidence of petroleum bypassing the OWS? | Yes 🗌 | No 🗌 |
| Visual Inspection | 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.

| | А | Distance from rim of access cover to bottom of structure |
|--------------|--|---|
| | В | Distance from rim of access cover to top of sludge layer |
| Measurements | $\mathbf{C} = \mathbf{A} - \mathbf{B}$ | Depth of sludge layer |
| Weasurements | D E | Distance from rim of access cover to the oil/water interface |
| | | Distance from rim of access cover to the top of the liquid surface |
| | $\mathbf{F} = \mathbf{D} - \mathbf{E}$ | 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 Documentation Forms

Significant Spills, Leaks or Other Releases

Instructions:

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

Date of incident: Insert Date of Incident Location of incident: Insert Location of Incident Description of incident: Insert Description of Incident Circumstances leading to release: Describe circumstances leading to release Actions taken in response to release: Describe actions taken in response to release Measures taken to prevent recurrence: Describe measures taken to prevent recurrence

Date of incident: Insert Date of Incident Location of incident: Insert Location of Incident Description of incident: Insert Description of Incident Circumstances leading to release: Describe circumstances leading to release Actions taken in response to release: Describe actions taken in response to release Measures taken to prevent recurrence: Describe measures taken to prevent recurrence

Date of incident: Insert Date of Incident Location of incident: Insert Location of Incident Description of incident: Insert Description of Incident Circumstances leading to release: Describe circumstances leading to release Actions taken in response to release: Describe actions taken in response to release Measures taken to prevent recurrence: Describe measures taken to prevent recurrence

Date of incident: Insert Date of Incident Location of incident: Insert Location of Incident Description of incident: Insert Description of Incident Circumstances leading to release: Describe circumstances leading to release Actions taken in response to release: Describe actions taken in response to release Measures taken to prevent recurrence: Describe measures taken to prevent recurrence





APPENDIX C

Training Documentation and Attendance Sheets

Employee Training

Instructions:

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

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

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

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





APPENDIX D

Facility Inspection Form

Site Inspection Reports

Instructions:

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

Using the Sample Site Inspection Report

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





| | Stormwater Site Inspection Report | | | | | | |
|---------------------|-----------------------------------|-------------------------|--|---|--|--|--|
| General Information | | | | | | | |
| | lity Name | | Insert Name | | | | |
| | of Inspection | Insert Date | Insert Date Start/End Time Insert Start/End Time | | | | |
| Insp | ector's Name(s) | Insert Name | Insert Name | | | | |
| Insp | ector's Title(s) | Insert Title | | | | | |
| Insp | ector's Contact Information | Insert Conta | act Info | | | | |
| Insp | ector's Qualifications | Insert qualit | fications or add refe | rence to the SWPPP | | | |
| | | We | eather Information | | | | |
| Cl | ther: | □ Sleet □ Te | emperature: | ☐ High Winds | | | |
| | s, describe: Describe | u uischarges or | ponutants occurred | since the last inspection. These the | | | |
| | | | | | | | |
| | there any discharges occur | ring at the time of | of inspection? □Yes | ⊔No | | | |
| If yes | s, describe: Describe | | | | | | |
| Cont | rol Measures | | | | | | |
| | | | | our SWPPP on your site map and | | | |
| | | | | on-site). Carry a copy of the ensure that you are inspecting all | | | |
| | required control measures at | | ections. This list will | ensure mai you are inspecting all | | | |
| | - | | npleted, and note the | person that completed the work in | | | |
| t | he Corrective Action Log. | | - | | | | |
| | Structural Control | Control | If No, In Need of | Corrective Action Needed and Notes | | | |
| | Measure | Measure is Operating | Maintenance, Repair, or | (identify needed maintenance and repairs, or any failed control measures that need | | | |
| | | Effectively? | Replacement? | replacement) | | | |
| 1 | Insert Control Measure | Yes No | ☐ Maintenance | Describe Corrective Actions | | | |
| | Name | | Repair | | | | |
| 2 | Incort Control Manager | Yes No | Replacement Maintenance | Describe Corrective Astisted | | | |
| 2 | Insert Control Measure | | Repair | Describe Corrective Actions | | | |
| | Name | | Replacement | | | | |
| 3 | Insert Control Measure | Yes No | Maintenance | Describe Corrective Actions | | | |
| | Name | | Repair | | | | |
| 4 | | Yes No | Replacement | Describe Ocean ative A. I' | | | |
| 4 | Insert Control Measure | | MaintenanceRepair | Describe Corrective Actions | | | |
| | Name | | Replacement | | | | |
| 5 | Insert Control Measure | □Yes □No | Maintenance | Describe Corrective Actions | | | |
| | Name | | Repair | | | | |
| | | | Replacement | | | | |
| 6 | Insert Control Measure | □Yes □No | MaintenanceRepair | Describe Corrective Actions | | | |
| | Name | | Replacement | | | | |
| 7 | Insert Control Measure | Yes No | Maintenance | Describe Corrective Actions | | | |







| | Structural Control | Control | If No, In Need of | Corrective Action Needed and Notes |
|----|---------------------------|--------------|---------------------|--|
| | Measure | Measure is | Maintenance, | (identify needed maintenance and repairs, or |
| | | Operating | Repair, or | any failed control measures that need |
| | | Effectively? | Replacement? | replacement) |
| | Name | | Repair | |
| | | | Replacement | |
| 8 | Insert Control Measure | □Yes □No | Maintenance | Describe Corrective Actions |
| | Name | | Repair | |
| | | | Replacement | |
| 9 | Insert Control Measure | □Yes □No | Maintenance | Describe Corrective Actions |
| | Name | | Repair | |
| | Nume | | Replacement | |
| 10 | Insert Control Measure | □Yes □No | Maintenance | Describe Corrective Actions |
| | Name | | 🗖 Repair | |
| | Tiulio - | | Replacement | |

Areas of Materials or Activities exposed to stormwater

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

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





| | Area/Activity | Inspected? | Controls Adequate (appropriate, effective, and operating)? | Corrective Action Needed and Notes |
|----|---------------|----------------|--|------------------------------------|
| | | | | |
| 11 | (Other) | □Yes □No □ N/A | □Yes □No | Describe Corrective Actions |
| 12 | (Other) | □Yes □No □ N/A | □Yes □No | Describe Corrective Actions |

Non-Compliance

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

Additional Control Measures

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

Notes





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

Print inspector name and title:

Signature:_____Date:_____





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

Instructions:

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





| Quarterly Visual Assessment Form- additional form when stormwater discharge is occurring (Complete a separate form for each outfall you assess) | | | | | |
|---|--|---|--|--|--|
| Name of Facility: Name of Facility Outfall Name: Name "Substantially Identical Outfall"? No Yes (identify substantially identical outfalls): | | | | | |
| Person(s)/Title(s) collecting sample: Name/Title | | | | | |
| Person(s)/Title(s) examining sample: Name/Title | | | | | |
| Date & Time Discharge Began (approx.): Enter date and time | Date & Time Visual Sample Collecte Enter date and time | d: Date & Time Visual Sample Examined: Enter date and time | | | |
| Nature of Discharge: 🦳 Rainfall 📃 Snowmel | t | | | | |
| | Parameter | | | | |
| Parameter Color None Other (describe): Odor Musty Sewage Sulfur Sour Solvents Other (describe): Other (describe): Clarity Clear Slightly Cloudy Cloudy Opaque Floating Solids No Yes (describe): Setted Solids* No Yes (describe): Suspended Solids No Yes (describe): Foam (gently shake sample) No Yes (describe): Oil Sheen Flecks Globs Sheen Other Obvious Indicators No Yes (describe): | | | | | |
| * Observe for settled solids after allowing the sample to sit for | * Observe for settled solids after allowing the sample to sit for approximately one-half hour. | | | | |
| Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary). Insert details | | | | | |
| A. Name: | B. Tit | le: | | | |
| C. Signature: | D. Da | ite Signed: | | | |







1900 Crown Colony Drive, Suite 402 Quincy, MA 02169 P: 617.657.0200 F: 617.657.0201

envpartners.com