



STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Nahant Street Yard Waste Site
Town of Wakefield, MA

June 2020



ENVIRONMENTAL
 **PARTNERS**

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SECTION 1 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been developed by the Town of Wakefield 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 Nahant Street Yard Waste Site is located at 251 Nahant Street and is owned and operated by the Town of Wakefield. The Locus Map in Figure 2-1 shows the location of the facility.

The Department of Public Works is 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 16, 2020. The inspection was conducted by Katelyn Burke, E.I.T.. Site tour and information provided by Dana Brickett, Environmental Compliance Officer of Wakefield DPW.

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 Nahant Street Yard Waste Site has been prepared and designated the task of developing, implementing, maintaining, and revising, as necessary, the SWPPP for this facility. Table 2-1 includes the list of Pollution Prevention Team members.

Table 2-1: Pollution Prevention Team Members

Nahant Street Yard Waste Site

Name	Title	Division
Kristopher Ahern	Working Foreman	Water
Dana Brickett	Foreman Mechanic	Fleet
Neil Burgess	Mechanic	Fleet
Mark Forward	Working Foreman	Highway
John Furrier	Working Foreman	Cemetery
Joseph Gaudreau	Working Foreman	Highway
Blaine Hiltz	Working Foreman	Highway
James Laughlin	Working Foreman	Parks
Robert Leblanc	Working Foreman	Forestry & Park
Matthew Morris	Plumber – Working Foreman	Buildings
Mackenzie O'Keefe	Craftsman	Buildings
Louis Perriello	Working Foreman	Water

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

Pollution Prevention Team Leader 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.

Pollution Prevention Team Member 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. Assists in all components of the stormwater program, as needed. Maintains spill kits at the Nahant Street Yard Waste Site.

2.4 FACILITY DESCRIPTION

The primary purpose of the Nahant Street Yard Waste Site is to provide a facility for Wakefield residents to dispose of leaves, grass, clippings, shrubs and brush. Activities at the site are described in SECTION 2.7

The facility covers approximately 29 acres, and contains the structures and other features shown on the Site Map in Figure 2-2 and described in detail in the following sections. Components shown on the site map include:

- Direction of surface water flow
- Salt storage areas
- Materials stockpiles
- Waste disposal areas

2.5 FACILITY STRUCTURES

Storage of Deicing Materials

Salt and sand/salt mix at the Nahant Street Yard Waste Site are stored in 3 buildings located to the rear of the site. Two of the buildings are completely enclosed, so the materials are fully contained within the buildings. The storage area for sand/salt mixture is covered.

The good housekeeping measure used to minimize the exposure resulting from adding or removing stored materials includes sweeping the loading area regularly and when salt has accumulated on the paved surface.

2.5.1 Additional Site Features

Aboveground Storage Tanks

Aboveground storage tanks (ASTs) at the Nahant Street Yard Waste Site are used for storage of light bulbs, trash can lids, trash barrels, white goods (refrigerators, water heaters, freezers, washing machines, etc.). These are held in enclosed containers located near the entrance to the site.

Another container located further north on site is used by the Parks Department to store rubber pellets for soccer fields.

Parking Areas

There are two informal parking areas located at the Nahant Street Yard Waste Site. One of these parking areas is a paved impervious surface and the other consists of compacted dirt. The dirt lot is used primarily for visitors to the Nahant Street Yard Waste Site, Town-owned cars for daily use by Nahant Street Yard Waste Site employees, and employees' personal vehicles.

The impervious lot is currently being used by the Wakefield Municipal Gas and Light Department to park their vehicles.

2.6 SITE DRAINAGE

No stormwater from adjacent properties flows onto the Nahant Street Yard Waste Site property.

Sheet Flow

Stormwater generated by impervious surfaces at the Nahant Street Yard Waste Site sheet flows off of the impervious surfaces and onto unpaved grassy areas. Mill River is located within 500 feet to the north of the site, and due to the site's topography, the stormwater flow is directed overland towards the adjacent wetlands and eventually discharges into the river.

Engineered Drainage

The Wakefield Yard Waste Site was constructed prior to the promulgation of stormwater management standards that required the collection and treatment of stormwater by Best Management Practices (BMPs).

There is no closed drainage system on-site. There are no known flooding issues that are created by stormwater generated by the site.

2.6.1 Receiving Waters

The final point of discharge for stormwater from this site is Mill River. Mill River has been categorized as a 303(d) List (Impaired) surface water. The impairment of this river, assigned the unique identifier MA93-31, is considered a Category 5, meaning that more than one designated use is impaired and that a TMDL will be required.

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

Table 2-2: Impaired Waters Receiving Drainage from the Facility

Nahant Street Yard Waste Site

Water Body Name	ID	Category	Impairment(s)
Mill River	MA93-31	5	<ul style="list-style-type: none">• Dissolved Oxygen• Escherichia Coli (E. Coli)• Fecal Coliform• Total Suspended Solids (TSS)• Turbidity

The types of impairments documented for this surface water body are related to bacterial and suspended solids impairments. The activities and materials at the Nahant Street Yard Waste Site have the potential to affect these impairments.

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

2.6.2 Applicable TMDLS

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

- 50120-50123 Final Pathogen TMDL for the North Coastal Watershed (CN 155.0), October, 25, 2012

2.7 SITE ACTIVITIES

The following activities occur at the facility:

- Compost Production or Storage
- Sand storage
- Salt storage
- Solid waste management (including scrap metal)
- Waste Handling and Disposal

Below is a discussion of site activities and the potential pollutant sources associated with each, as well as measures taken to minimize pollution. Locations of each activity are shown on the Site Plan (Figure 2-2). The Town's Hazardous Materials Storage and Handling SOP and Vehicles and Equipment O&M Document is provided in Appendix A.

The Nahant Street Yard Waste Site 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 Nahant Street Yard Waste Site. No solvent-based parts washers were observed in any structure at the Nahant Street Yard Waste Site.

The Wakefield Department of Public Works does not apply or utilize fertilizers, herbicides, or pesticides at any facility owned or managed by the Town. As such, no fertilizers, herbicides, or pesticides are stored at the Nahant Street Yard Waste Site.

2.7.1 Compost Production or Storage

Potential Sources of Stormwater Pollution

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

Pollution Prevention

The compost storage area is uncovered and located directly next to the brush pile. It should be contained by silt fence or concrete barriers and located in an area that does not receive a substantial amount of runoff from upland areas and does not drain directly to a waterbody. The compost shall be kept in neat, separate piles from all other materials.

2.7.2 Stockpiles and Sand Storage

Potential Sources of Stormwater Pollution

Sand stored in piles for use during construction and during winter plowing and deicing activities represents a potential source to stormwater pollution. Stockpiled materials such as gravel, loam, and crushed rock represent a similar source of pollution. When stored unprotected outdoors, sand piles and material stockpiles are exposed to precipitation. When the resulting eroded material enters the stormwater system, the sediment can quickly fill the sumps of stormwater management features, 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 "Erosion and Sedimentation Control," included in Appendix A, for more information.

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

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

2.7.3 Salt Storage

Potential Sources of Stormwater Pollution

Salt stored in piles for use during winter plowing and deicing operations represents a potential major contributor to stormwater pollution. When stored in unprotected areas outdoors, salt is exposed to precipitation, causing leachate with high concentrations of chloride that can be discharged to receiving waters. 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 removed immediately. 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.

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

2.7.4 Solid Waste Management

Potential Sources of Stormwater Pollution

Solid waste production and storage locations present a 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 "Spill Response and Cleanup".

2.7.5 Waste Handling and Disposal

Potential Sources of Stormwater Pollution

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

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

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

Pollution Prevention

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

Solid Waste

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

Pesticides, Fertilizers and Petroleum Products

1. Do not handle materials more than necessary.
2. Store materials in a dry, covered, contained area.
3. Clean up spills immediately and in accordance with SOP "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 described above the development of 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.

2.8 ALLOWABLE NON-STORMWATER DISCHARGE

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. Non-stormwater discharges, as defined

in the MS4 Permit, do not occur on this site, and therefore do not represent a significant contribution of pollution to the MS4 or the waters of the United States.

2.9 EXISTING STORMWATER MONITORING DATA

Stormwater monitoring has not occurred at the Nahant Street Yard Waste Site.

2.10 SIGNIFICANT MATERIAL INVENTORY

Materials stored include those specified in Section 2.7, "Site Activities". An inventory of these materials at the Nahant Street Yard Waste Site is included in Table 2-3, which also reviews the likelihood for each identified material to come in contact with stormwater. The type of container has also been identified.

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

Table 2-3: Significant Material Inventory
Nahant Street Yard Waste Site

Material	Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Water
Deicer – Road Salt	Storage Building		Chlorides	E	Low
Salt/Sand Mix	Storage Area		Chlorides/Sediments	C	Low

2.11 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 Nahant Street Yard Waste Site does not have aboveground oil storage capacity that exceeds 1,320 gallons. There are no aboveground oil storage facilities on this site.

2.12 DESCRIPTION OF SIGNIFICANT MATERIAL STORAGE AREAS

Many activities at the Nahant Street Yard Waste Site which involve materials included in Table 2-3 occur within contained garages or bays.

Within the Salt/Sand Storage buildings, deicing materials including salt and sand are stored. An inventory of these materials is included in Table 2-3, which also reviews the likelihood of each identified material to come in contact with stormwater. The type of container has also been

identified. Delivery of deicing materials to this location is monitored by a Nahant Street Yard Waste Site employee. The site also contains a compost area and stockpiles of brush, asphalt, and concrete. The locations of these material storage areas are provided on the Site Plan in Figure 2-2.

2.13 LIST OF SIGNIFICANT LEAKS OR SPILLS

No significant leaks or spills occurred at the Nahant Street Yard Waste 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.

2.14 STRUCTURAL BMPS

As described above, the site was developed prior to the development of the Massachusetts Stormwater Management Guidelines. The site does not contain any stormwater management best management practices.

2.15 SEDIMENT AND EROSION CONTROL

Site topography at the Nahant Street Yard Waste Site allows partial sheet flow drainage of stormwater and any associated sedimentation to discharge overland to the adjacent wetlands and the Mill River. At this time, no methods are in place to prevent or correct erosion.

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:

- No fertilizers, herbicides, or pesticides are stored or used at the facility.
- 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.
- Materials are recycled when possible.
- Staff is familiar with proper use of equipment.

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 that should be practiced at the facility. The Town of Wakefield should work towards insuring that these procedures are followed:

- 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.
- Material storage tanks and containers are regularly inspected for leaks.
- All material and bulk deliveries are monitored by facility employees.

3.3 BEST MANAGEMENT PRACTICES

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

1. Clean up any oil spills observed in the parking lot, or other surfaces in a timely manner.
2. Monitor all material deliveries.

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 Environmental Manager of the Wakefield DPW is responsible for stormwater management training for Nahant Street Yard Waste Site 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 Nahant Street Yard Waste Site be inspected at least once each calendar quarter when the facility is in operation (at least one inspection must be conducted during a period when stormwater discharge is occurring). The Environmental Compliance Officer of Wakefield DPW 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 Department of Public Works at Town Hall 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 Nahant Street Yard Waste 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 Nahant Street Yard Waste 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

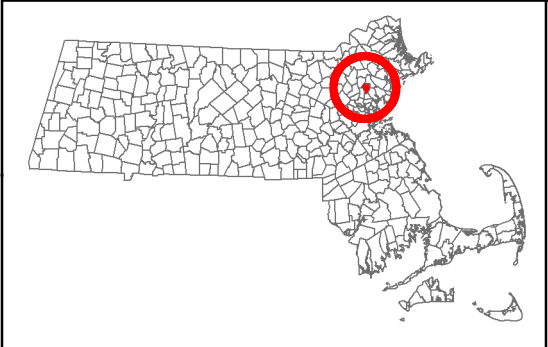
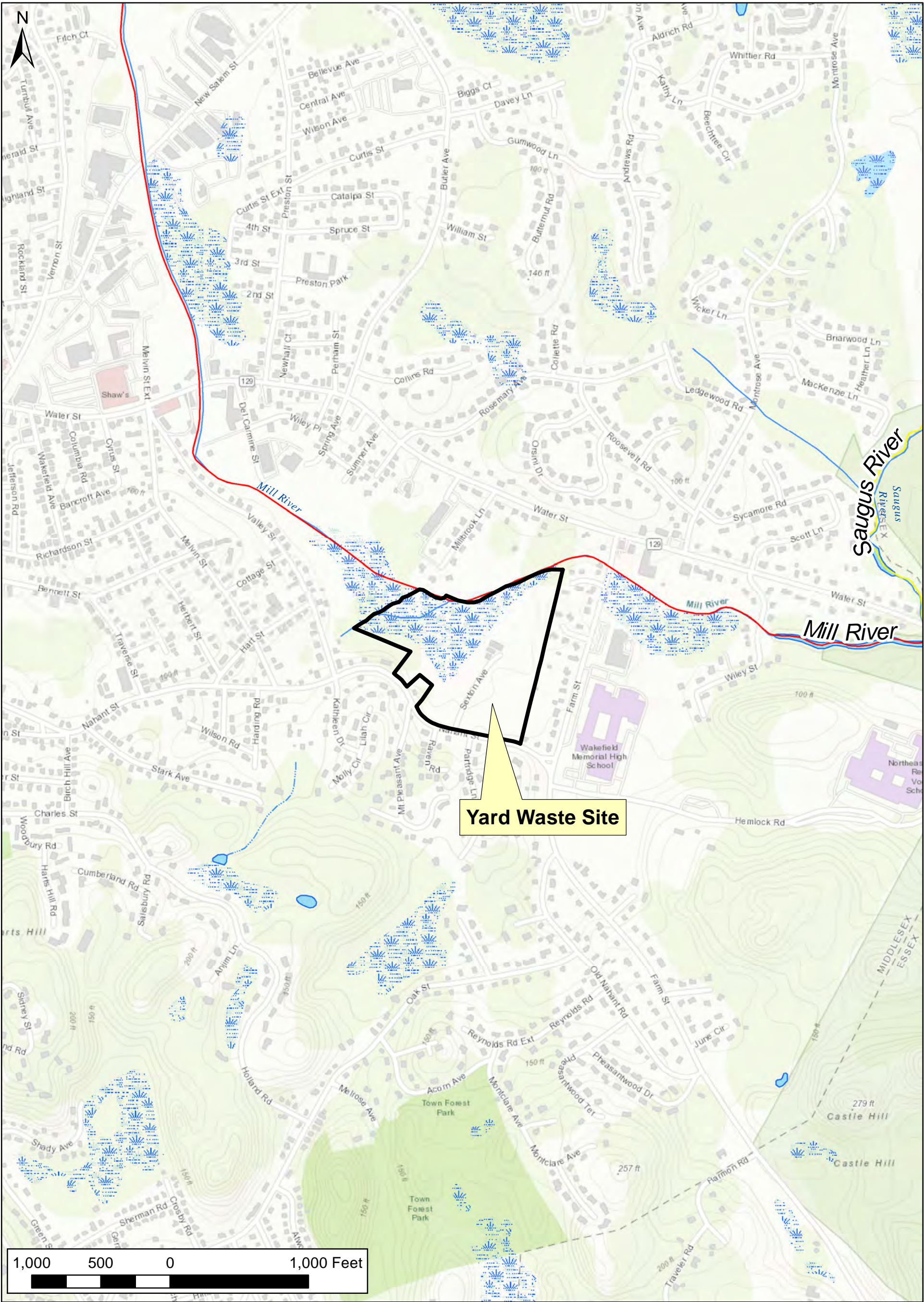
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage 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

FIGURES



**Figure 2-1. Locus Map
Nahant Street Yard Waste Site
Wakefield, Massachusetts**



APPENDIX A

Standard Operating Procedures

STANDARD OPERATING PROCEDURE:

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;
 - 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.
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:

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;
 - 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.
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.

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:

EROSION AND SEDIMENTATION CONTROL

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:

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

Controlling Erosion and Sediment on Construction Sites

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

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

Controlling Erosion and Sediment by Proper Maintenance of Permanent BMPs

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

1. Responsibility for maintaining erosion and sediment control devices shall be clearly identified.
2. Erosion and sediment control devices shall be inspected following heavy rainfall events to ensure they are working properly.
3. Erosion control blankets shall be utilized when seeding slopes.
4. Vegetated and wooded buffers shall be protected, and left undisturbed to the extent possible.
5. Runoff shall not be diverted into a sensitive area unless this has been specifically approved.

6. Sedimentation basins shall be cleaned out once sediment reaches 50% of the basin's design capacity.
7. Snow shall not be plowed into, or stored within, retention basins, rain gardens, or other BMPs.
8. Easements and service routes shall be maintained, to enable maintenance equipment to access BMPs for regular cleaning.



Hazardous Materials Storage and Handling

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

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

- North Ave: vehicle and equipment storage and maintenance facility
- Nahant St. Yardwaste Site: public works materials storage yard
- Broadway: Water Treatment Plant

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

Procedures:

Handling, Loading, and Unloading

- Avoid loading and unloading materials in the rain. If necessary, provide cover.
- Retrace areas where materials have been transferred to identify spills. If spills are found, immediately clean them up. Follow Spill Prevention, Control, and Countermeasure (SPCC) procedures.
- Time delivery and handling of materials during favorable weather conditions whenever possible (e.g., avoid receiving loads of sand during windy weather).
- Inspect containers for material compatibility and structural integrity prior to loading/unloading any raw or waste materials.



- Use dry cleanup methods (e.g., squeegee and dust pan, sweeping, and absorbents as last step) rather than hosing down surfaces.

Material Storage

- Confine material storage indoors whenever possible. Cover floor drains, in the case of a spill. Floor drains lead to oil water separator before leading to sanitary sewer system.
- Confine outdoor material storage to designated areas that are covered, on impervious surfaces, away from high traffic areas, and outside of drainage pathways.
- Store containers on pallets to facilitate leak inspection, mitigate contact with vermin, and prevent contact with wet floors that can cause corrosion.
- Store materials and waste in materially compatible containment units.
- Keep hazardous materials in their original containers.
- Clearly label all storage containers with the name of the chemical, the expiration date, and handling instructions.
- Provide secondary containment for storage tanks and drums with sufficient volume to store 110 percent of the volume of the material.
- Provide sufficient aisle space to allow for routine inspections and access for spill cleanup.
- Inspect storage areas for spills or leaks and containment units for corrosion or other failures.

Waste Treatment, Disposal, and Cleanup

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

Employee Training

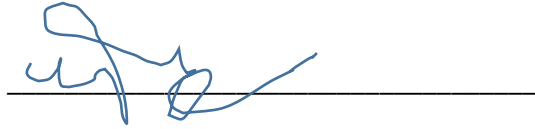
- Employees who handle and use hazardous materials are trained twice annually on these procedures.
- Employees are trained annually on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Revising the SOP

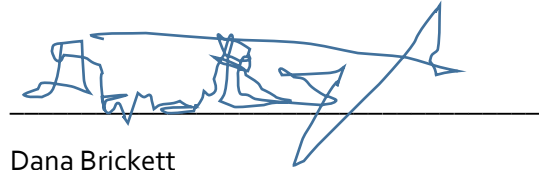
- These procedures are reviewed annually and updated as needed.

Effective

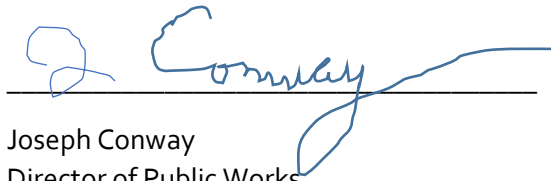
1/1/2020

A handwritten signature in blue ink, appearing to be 'Dennis Gorman', written over a horizontal line.

Dennis Gorman
Fleet Supervisor

A handwritten signature in blue ink, appearing to be 'Dana Brickett', written over a horizontal line.

Dana Brickett
Environmental Compliance Officer

A handwritten signature in blue ink, appearing to be 'Joseph Conway', written over a horizontal line.

Joseph Conway
Director of Public Works



Operations and Maintenance of Municipal Vehicles and Equipment

Regular maintenance of both municipal and contracted vehicles and heavy equipment not only prolongs the life of municipal assets but also helps reduce the potential for leaking of fluids associated with normal wear and tear. Potential pollutants include fuels, oil, antifreeze, brake fluid, solvents, and battery acid. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to help reduce the discharge of pollutants from the MS4 as a result of leaks from vehicles and equipment. If services are contracted with respect to vehicles and equipment, this SOP should be provided to the contractor. The contract should also specify that the contractor is responsible for compliance with all applicable laws.

The Town of Wakefield performs a variety of operations and maintenance activities for municipally owned and operated vehicles and equipment in accordance with NPDES regulations.

Procedures:

Vehicle Storage

- Monitor vehicles and equipment for leaks and use drip pans as needed until repairs can be performed.
- When drip pans are used, avoid overtopping.
- Drain fluids from leaking or wrecked vehicles and parts as soon as possible. Dispose of fluids properly.
- Store and park vehicles on impervious surfaces and/or under cover or indoors whenever possible.

Vehicle Maintenance

- Conduct routine inspections of heavy equipment and vehicles to proactively identify maintenance needs or potential leaks.
- Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
- Recycle or dispose of waste properly and promptly.
- Sweep and pick up trash and debris as needed.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches.



Body Repair and Painting

- Send out to third party body shop

Fueling

- Fueling areas should be evaluated to ensure pollutants do not enter the drainage system. Follow procedures in Fuel and Oil Handling SOP.

Material Management

- Store materials and waste in labeled containers under cover and in secondary containment.
- Chemicals should not be combined in containers.
- Hazardous waste must be labeled and stored according to hazardous waste regulations. Follow the procedures in Hazardous Materials Storage and Handling SOP.
- Carefully transfer collected fluids from containers into designated storage areas as soon as possible.
- Store new and used batteries securely to avoid breakage. Store indoors or in secondary containment to contain potential acid leaks. Recycle used batteries.
- Conduct periodic inspections of storage areas to detect possible leaks.
- When washing, use oil/ water separator, dry cleanup methods whenever possible (speedy dry), and perform drip test.
- Wash or hose down storage areas into oil/ water separator. Use dry cleanup methods whenever possible.
- Keep lids on containers. Store them indoors or under cover to reduce exposure to rain.
- Inspect and maintain all pretreatment equipment, including interceptors, according to the manufacturer's maintenance schedule and at least once per year.
- Proper spill protocol should be followed to prevent chemicals from entering the drainage system. Follow Spill Prevention, Control, and Countermeasure (SPCC) procedures.

Parts Cleaning

- Use designated areas for cleaning equipment and vehicle. Do not wash or rinse parts outdoors. If parts cleaning equipment is not available then capture parts cleaning fluids.
- Recycle excess cleaning solution.
- Use biodegradable solution, steam cleaning, or pressure washing of parts instead of solvent cleaning. Cleaning equipment must be connected to an oil/water separator.
- When using solvents for cleaning, drain parts over the drip pan to avoid drips to the floor. Utilize an absorbent mat to remove excess solution. Prior to disposal, use drip test. If excess liquid remains, follow Hazardous Materials Storage and Handling SOP.

Indoor Vehicle Washing

- Vehicles and equipment should be washed indoors.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of biodegradable, phosphate-free detergent is

preferred.

- Detergents should not be used in areas where oil/water separators do not provide pre-treatment of drainage.
- Floor drains should be connected to oil/water separator before out letting to the sanitary sewer.
- Designate separate areas for routine maintenance and vehicle cleaning to prevent contamination of wash water by motor oils, hydraulic lubricants, greases, or other chemicals.
- Dry cleanup methods should be used within garage facilities. Do not wash down floors and work areas with water.
- Bring small vehicles to commercial washing stations (e.g. police cruisers).
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities. Follow SPCC procedures.

Heavy Equipment Washing

- Vehicles and equipment should be washed indoors.
- Maintain these areas with frequent mechanical removal and proper disposal of waste.
- Impervious surfaces with floor drains discharge directly to an oil/ water separator.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of biodegradable, phosphate-free detergent is preferred.
- Detergents should not be used in areas where oil/water separators do not provide pre-treatment of drainage.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities. Follow SPCC procedures.

Engine and Steam Washing

- Vehicles and equipment should be washed indoors.
- Maintain drip pans and smaller containers to contain motor oils, hydraulic lubricants, greases, etc. and to capture and collect spills or noticeable leaks observed during washing activities, to the extent practicable. Follow the SPCC procedures.
- Where use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of a biodegradable, phosphate-free detergent is preferred.
- Avoid cleaning with solvents except in dedicated solvent parts washer systems. Make use of pressure washing and steam cleaning.
- Recycle clean solutions and rinse water to the maximum extent practicable.
- Wash water should discharge to an oil/water separator. Detergents should not be used in areas where oil/water separators do not provide pre-treatment of drainage.

Employee Training

- Employees who perform work on municipal vehicles or equipment are trained (4) times per year on these procedures and the proper operation of related equipment.
- Employees are trained annually on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Revising the SOP

- These procedures are reviewed annually and updated as needed.

Effective

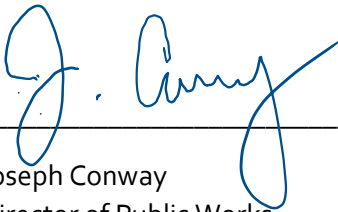
1/1/2020



Dennis Gorman
Fleet Supervisor



Dana Brickett
Environmental Compliance Officer



Joseph Conway
Director of Public Works

APPENDIX B

Spill Documentation Forms

Significant Spills, Leaks or Other Releases

Instructions:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



APPENDIX C

Training Documentation and Attendance Sheets

Employee Training

Instructions:

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

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

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

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



APPENDIX D

Facility Inspection Form

Site Inspection Reports

Instructions:

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

Using the Sample Site Inspection Report

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



Stormwater Site Inspection Report

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

Control Measures

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

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



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

Areas of Materials or Activities exposed to stormwater

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

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



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

Non-Compliance

Describe any incidents of non-compliance observed and not described above:
[Describe Non-compliance](#)

Additional Control Measures

Describe any additional control measures or changes to the SWPPP needed to comply with the permit requirements:
[Describe Additional Controls Needed](#)

Notes



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

[Additional Notes](#)

Print inspector name and title:

Signature: _____ **Date:** _____



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

Instructions:

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



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

(Complete a separate form for each outfall you assess)

Name of Facility: **Name of Facility**

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

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

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

Date & Time Discharge Began (approx.):
Enter date and time

Date & Time Visual Sample Collected:
Enter date and time

Date & Time Visual Sample Examined:
Enter date and time

Nature of Discharge: ☐ Rainfall ☐ Snowmelt

Parameter

Color ☐ None ☐ Other (**describe**):

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

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

Floating Solids ☐ No ☐ Yes (**describe**):

Settled Solids* ☐ No ☐ Yes (**describe**):

Suspended Solids ☐ No ☐ Yes (**describe**):

Foam (gently shake sample) ☐ No ☐ Yes (**describe**):

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (**describe**):

Other Obvious Indicators ☐ No ☐ Yes (**describe**):
of Stormwater Pollution

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

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

A. Name:

B. Title:

C. Signature:

D. Date Signed:





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