

Town of Middleton



The following documents constitute the Town of Middleton's Standard Operating Procedures for management of the following:

Spill Response and Clean Up

Fuel and Oil Handling

Storage and Use of Pesticides and Fertilizer

Streets and Parking Lots

Hazardous Materials Storage and Handling

Operations and Maintenance of Municipal Buildings and Facilities

SOP 4: Spill Response and Cleanup

Introduction

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

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

Procedures

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

Responding to a Spill

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

- If the facility has a Stormwater Pollution Prevention Plan (SWPPP), notify a member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility safety officer. If not, continue to follow the procedures outlined below.
- Assess the contaminant release site for potential safety issues and for direction of flow.
- Complete the following:
 - Stop the contaminant release.
 - Contain the contaminant release through the use of spill containment berms or absorbents.
 - Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers.
 - Clean up the spill.
 - Dispose of all contaminated products in accordance with applicable federal, state and local regulations.
 - i. Soil contaminated with petroleum should be handled and disposed of as described in MassDEP policy WCS-94-400, Interim Remediation Waste Management Policy for Petroleum Contaminated Soils (<https://www.mass.gov/files/documents/2016/08/mq/94-400.pdf>).
 - ii. Products saturated with petroleum products or other hazardous chemicals require special handling and disposal by licensed transporters. Licensed transporters will pick up spill contaminated materials for recycling or disposal. Save the shipping records for at least three years.
 - iii. Waste oil contaminated industrial wipes and sorptive minerals:
 - 1. Perform the "one drop" test to ensure absorbents do not contain enough oil to be considered hazardous, as described in the MassDEP Waste Oil

Management Guide

(<https://www.mass.gov/files/documents/2018/12/18/oilwiper.pdf>).

2. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.
 3. If absorbents pass the “one drop” test they may be discarded in the trash unless contaminated with another hazardous waste.
 - a. It is acceptable to mix the following fluids and handle them as waste oil:
 - i. Waste motor oil
 - ii. Hydraulic fluid
 - iii. Power steering fluid
 - iv. Transmission fluid
 - v. Brake fluid
 - vi. Gear oil
 - b. **Do not mix** the following materials with waste oil. Store each separately:
 - i. Gasoline
 - ii. Antifreeze
 - iii. Brake and carburetor cleaners
 - iv. Cleaning solvents
 - v. Other hazardous wastes
 4. If absorbents do not pass the “one drop” test they should be placed in separate metal containers with tight fitting lids, labeled “Oily Waste Absorbents Only.”
- If you need assistance containing and/or cleaning up the spill, or preventing it from discharging to a surface water (or an engineered storm drain system), contact your local fire department using the number listed below. **In the case of an emergency call 911.**
 - Middleton Fire Department: 978-774-2466
 - Contact the MassDEP 24-hour spill reporting notification line, toll-free at **888-304-1133**;
 - The following scenarios **are exempt** from MassDEP reporting requirements (see the MassDEP factsheet on oil and hazardous materials handling for more information: <https://www.mass.gov/files/documents/2016/08/xm/spillmgm.pdf>).
 - i. Spills that are less than 10 gallons of petroleum and do not impact a water body
 - ii. Spills that are less than one pound of hazardous chemicals and do not present an imminent health or safety hazard
 - iii. Fuel spills from passenger vehicle accidents
 - iv. Spills within a vault or building with a watertight floor and walls that completely contain all released chemicals

Reporting a Spill

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

1. Your name and the phone number you are calling from.
2. The exact address and location of the contaminant release.
3. Specifics of release, including:

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

Maintenance and Prevention Guidance

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

- Ensure all employees are properly trained to respond in the case of a spill, understand the nature and properties of the contaminant, and understand the spill control materials and personnel safety equipment. Maintain training records of current personnel on site and retain training records of former personnel for at least three years from the date last worked at the facility.
- Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site.
- Implement good management practices where chemicals and hazardous wastes are stored:
 - a. Ensure storage in closed containers inside a building and on an impervious surface wherever possible.
 - b. If storage cannot be provided inside, ensure secondary containment for 110 percent of the maximum volume of the storage container.
 - c. Locate storage areas near maintenance areas to decrease the distance required for transfer.
 - d. Provide accurate labels, Material Safety Data Sheets (MSDS) information, and warnings for all stored materials.
 - e. Regularly inspect storage areas for leaks.
 - f. Ensure secure storage locations, preventing access by untrained or unauthorized persons.
 - g. Maintain accurate records of stored materials.
- Replace traditional hazardous materials such as pesticides and cleansers with non-hazardous products

such as bio-lubricants which can reduce response costs in the case of a spill. Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

Employee Training

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

Attachments

1. Spill Response and Cleanup Contact List

Spill Response and Cleanup Contact List

Contact	Phone Number	Date and Time Contacted
Safety Officer: Kenneth Gibbons	978-490-0772	
Facility Supervisor: Paul Goodwin	978-880-4757	
Fire Department	978-774-2466	
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	

SOP 7: Fuel and Oil Handling

Introduction

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

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

Procedures

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

General Guidelines

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

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

Delivery by Bulk (Tanker) Truck

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

- The truck driver should check in with the facility upon arrival.
- The facility representative should ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP 4: Spill Response and Cleanup for examples of spill cleanup and response materials.

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

Delivery of Drummed Materials

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

- The truck driver should check in with the facility upon arrival.
- The facility representative should ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP 4: Spill Response and Cleanup for examples of spill cleanup and response materials. The facility representative should closely examine the shipment for damaged drums.
 - If damaged drums are found, they should be closely inspected for leaks or punctures.
 - Breached drums should be removed to a dry, well-ventilated area and the contents transferred to other suitable containers.
 - Drums should be disposed of in accordance with all applicable regulations.
- Drummed materials should not be unloaded outdoors during wet weather events.
- The truck driver and the facility representative should both remain with the vehicle during the delivery process.
- Drums should be handled and unloaded carefully to prevent damage.
- Upon completion of unloading, the facility representative should inspect the unloading point and the drums to verify that no leaks have occurred, that any leaked or spilled material has been cleaned up and disposed of properly, and that the unloaded drums are not leaking.
- The facility representative should check to ensure that the proper amount of fuel or other material is delivered, and collect a receipt from the truck driver.

Removal of Waste Oil from the Facility

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

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

Employee Training

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

Attachments

1. Fuel Delivery Checklist

Related Standard Operating Procedures

- SOP 4: Spill Response and Cleanup

FUEL DELIVERY FORM
TOWN OF MIDDLETON

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

BEFORE UNLOADING:

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

Yes ☐ No ☐

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

Yes ☐ No ☐ N/A ☐

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

Yes ☐ No ☐ N/A ☐

COMMENCE UNLOADING. REMAIN WITH VEHICLE AT ALL TIMES.

AFTER UNLOADING IS COMPLETE:

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

Yes ☐ No ☐

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

Yes ☐ No ☐

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

Yes ☐ No ☐

Has the correct amount of fuel been delivered?

Yes ☐ No ☐

Has a receipt been collected?

Yes ☐ No ☐

DELIVERY IS COMPLETE.

SOP 12: Storage and Use of Pesticides and Fertilizer

Introduction

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

Procedures

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

Storage

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

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

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

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

Use and Application of Fertilizers

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

- Fertilizers should only be applied by properly trained personnel.
- Never apply fertilizers in quantities exceeding the manufacturer's instructions. Instead, apply small amounts throughout the growing season.
- Time fertilizer application methods for maximum plant uptake, usually in the fall and spring (e.g., between April 15 and October 15). When applying at the beginning and end of planting season, take into consideration the slower uptake rate of fertilizer by plants and adjust the fertilizer application accordingly.
- Never apply fertilizer during a drought, when the soil is dry or frozen, when it is raining, or immediately before expected rain.
- Fertilizer should be applied when the ground temperature is above 55° F.
- Apply fertilizers in amounts appropriate for the type of vegetation to minimize losses to surface water and groundwater. Use the results of the soil test to determine optimal fertilizer timing and application rates.
- Where applicable, till fertilizers into the soil rather than dumping or broadcasting (proper application techniques will depend on the type of soil and vegetation).
- Do not hose down paved areas after fertilizer application if drainage will enter into an engineered storm drain system or drainage ditch.
- Limit irrigation after fertilizer application to prevent runoff (approximately 1/2 inch of water per application for a week following application).
- Turn off irrigation systems during periods of adequate rainfall.
- Do not over-apply fertilizer in late fall to "use it up" before winter. The effectiveness of fertilizer does not reduce when stored.
- If phosphorus fertilizer is used when re-seeding, mix the phosphorus into the root zone. Do not apply directly to the soil surface.
- Avoid combined products such as "weed and feed," which do not target specific problems at the appropriate time.

Use and Application of Pesticides and Herbicides

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

Use and Application of Pesticides

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

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

Employee Training

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

Related Standard Operating Procedures

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

SOP 16: Streets and Parking Lots

Introduction

Regular sweeping of streets and municipally-owned parking lots is important for maintaining clean and safe roadways. It also plays a vital role in keeping pollutants like sand, trash, and leaves out of the MS4. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees on street and parking lot sweeping procedures and frequencies to reduce the discharge of pollutants to the storm drainage system and receiving waters. If sweeping services are contracted, this SOP should be provided to the contractor. The contract should specify that the contractor is responsible for compliance with all applicable laws.

Streets and municipally-owned parking lots are swept annually in the spring by an outside vendor.

Procedures

The Town of Middleton will implement the following street and parking lot sweeping procedures to reduce the discharge of pollutants from the MS4:

Sweeping Frequency

- All streets should be swept and/or cleaned a minimum of once per year in the spring (with the exception of rural uncurbed roads with no catch basins or high speed limited access highways).
- Sweep as soon as possible after snow melt and following winter activities such as sanding to capture sand and debris before it is washed into the storm drainage system.
- Consider more frequent sweeping for targeted areas based on pollutant load reduction potential, inspections, pollutant loads, catch basin cleaning or inspection results, land use, impaired waters, or other factors.

For rural uncurbed roadways with no catch basins and limited access highways, the Town of Middleton will either meet the minimum frequencies above, or develop and implement an inspection, documentation, and targeted sweeping plan outlining reduced frequencies within two (2) years of the effective date of the MS4 Permit, and submit such plan with its year one annual report.

Sweeping Practices

- Street sweeping should be conducted in dry weather. Sweeping should not be conducted during or immediately after rain storms.
- Dry cleaning methods should be used whenever possible, with the exception of very fine water spray for dust control. Avoid wet cleaning or flushing of the pavement.
- When necessary, enact parking bans to facilitate sweeping on busy streets.
- Sweep in a manner that avoids depositing debris into storm drains.

- Sweeping equipment (mechanical, regenerative air, vacuum filter, tandem sweeping) should be selected depending on the level of debris. Brush alignment, sweeper speed, rotation rate, and sweeping pattern should be set to optimal levels to manage debris.
- Routinely inspect and perform maintenance on sweeping equipment to reduce the potential for leaks. See SOP 21: Operations and Maintenance of Municipal Vehicles and Equipment for more information.

Sweepings Reuse and Disposal

- The reuse of sweepings is recommended by MassDEP. If street sweepings are reused (e.g., as anti-skid material or fill in parking lots), they should be properly filtered to remove solid waste, such as paper or trash, in accordance with their intended reuse. All reuse and/or disposal of street sweepings will be managed in accordance with current MassDEP policies and regulations.
- Sweepings intended for reuse can be stored for up to one year in approved temporary storage areas. Storage areas should be protected to prevent erosion and runoff and should be located away from wetland resource areas and buffer zones, surface water, or groundwater.
- Sweepings are classified as solid waste. If not reused, they should be disposed of at solid waste disposal sites.
- For additional information on approved reuses of sweepings and storage/disposal policies, refer to MassDEP policy #BAW-18-001: Reuse and Disposal of Street Sweeping (<https://www.mass.gov/files/documents/2018/05/14/street-sweepings.pdf>).
- Middleton will store sweepings intended for reuse at Oakdale Cemetery in accordance with MS4 regulations.

Documentation and Reporting

The following information should be documented and included in each annual report:

- Number of miles cleaned or the volume or mass of material removed (refer to the sweeping log in the attachments).

Attachments

1. Street and Parking Lot Sweeping Log

Related Standard Operating Procedures

1. SOP 21: Operations and Maintenance of Municipal Vehicles and Equipment

Street Sweeping Log
Middleton, Massachusetts

Date	Operator	Weather Conditions	Streets/Parking Lots Swept	Number of Miles Swept	Volume/Mass of Material Removed	Corrective Action Taken/Recommended

SOP 17: Hazardous Materials Storage and Handling

Introduction

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

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

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

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

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

Procedures

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

Handling, Loading, and Unloading

- Avoid loading/unloading materials in the rain and/or provide cover.
- Retrace areas where materials have been transferred to identify spills. If spills are found, immediately

clean them up. Follow procedures in SOP 4: Spill Response and Cleanup.

- Time delivery and handling of materials during favorable weather conditions whenever possible (e.g., avoid receiving loads of sand during windy weather).
- Inspect containers for material compatibility and structural integrity prior to loading/unloading any raw or waste materials.
- Use dry cleanup methods (e.g., squeegee and dust pan, sweeping, and absorbents as last step) rather than hosing down surfaces.

Material Storage

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

Waste Treatment, Disposal, and Cleanup

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

Employee Training

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

Related Standard Operating Procedures

1. SOP 4: Spill Response and Cleanup

SOP 20: Operations and Maintenance of Municipal Buildings and Facilities

Introduction

Municipal buildings and facilities (schools, municipal offices, police and fire stations, municipal pools, parking garages, etc.) often house various chemicals, such as petroleum products and hazardous materials. As a result, these buildings and facilities are potential sources of pollutant discharges to the storm drainage system. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees on the use, storage, and disposal of chemicals and other stormwater pollutants to reduce the discharge of pollutants from the MS4. If services are contracted, this SOP should be provided to the contractor. The contract should specify that the contractor is responsible for compliance with all applicable laws.

The Town of Middleton performs a variety of operations and maintenance activities at its municipally owned and operated buildings.

Within two years of the effective date of the MS4 Permit, the Town of Middleton will create an inventory of all municipal buildings and facilities and update this inventory annually (refer to the attached buildings and facilities inventory sheet).

Procedures

The Town of Middleton will implement the following procedures for municipally owned or operated buildings and facilities to reduce the discharge of pollutants from the MS4:

Handling, Storage, Transfer, and Disposal of Trash and Recyclables

All liquid and solid waste must be disposed of properly. Some of the most common sources of pollution at municipal facilities are a result of littering, improper collection of debris, and improper disposal of solid or liquid waste.

- All waste and recycling receptacles must be leak-tight with tight-fitting lids or covers.
- Keep lids on dumpsters and containers closed at all times unless adding or removing material. If using an open-top roll-off dumpster, cover it and tie it down with a tarp unless adding materials.
- Place waste or recycling receptacles indoors or under a roof or overhang whenever possible.
- Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
- Do not locate dumpsters over or adjacent to catch basins.
- Prior to transporting waste, trash, or recycling, ensure that containers are not leaking (double bag if needed) and properly secure containers to the vehicle.
- Clean and sweep up around outdoor waste containers regularly.

- Clean up any liquid leaks or spills with dry cleanup methods.
- Arrange for waste or recycling to be picked up regularly and disposed of at approved disposal facilities.
- Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster or recycling or trash container (see SOP 17: Hazardous Materials Storage and Handling).
- Do not wash trash or recycling containers outdoors or in parking lots.
- Conduct periodic inspections of solid and liquid waste storage areas to check for leaks and spills.
- Conduct periodic inspections of work areas to ensure that all wastes are being disposed of properly.
- In dumpster areas, regularly pick up surrounding trash and debris and regularly sweep the area.
- In compactor areas, regularly check the hydraulic fluid hoses and reservoir to ensure that there are no cracks or leaks. Regularly sweep the area.

Building Maintenance

- When power washing buildings and facilities, ensure that the washwater does not flow into the storm system. Containment or filtering systems should be provided.
- Paint and other chemicals should not be applied on the outside of buildings when it is raining or prior to expected rain.
- When sanding, painting, power washing, etc., ensure that sites are properly prepared (e.g., use tarps) and cleaned (e.g., use dry cleaning methods) especially if they are near storm drains. Protect catch basins when maintenance work is conducted upgradient of them.
- When painting, use a drop cloth and clean up any spills immediately.
- Do not leave open containers on the ground where they may accidentally tip over.
- Buildings should be routinely inspected for areas of potential leaks.
- Do not discharge chlorinated pool water into the stormwater system. Water must be properly dechlorinated and tested before it is discharged.
- Streets and parking lots surrounding municipal buildings and facilities should be swept and kept clean to reduce runoff of pollutants and debris to the stormwater system.
- Streets and parking lots around buildings and facilities will be swept in accordance with the procedures in SOP 16: Streets and Parking Lots.

Storage of Petroleum Products and Potential Pollutants

- Floor drains in storage areas should be disconnected from the stormwater system.
- Routinely inspect buildings and facilities for areas of potential leaks.
- For storage and handling procedures of petroleum products and potential pollutants, refer to SOP 17: Hazardous Materials Storage and Handling and SOP 7: Fuel and Oil Handling Procedures.
- For storage and handling procedures for fertilizers, pesticides, and herbicides, refer to SOP 12: Fertilizers, Pesticides, and Herbicides.
- All municipal buildings and facilities should be periodically inspected to address potential pollutant sources (e.g., leaks).

Spill Prevention Plan

- Spill prevention plans such as Spill Prevention Control and Countermeasure (SPCC) Plans should be in place where applicable, based on inventories of material storage and potential pollutants. Coordinate with the local fire department if necessary.
- Spill SOPs are outlined in SOP 4: Spill Response and Cleanup.

Employee Training

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

Attachments

1. Inventory of Municipal Buildings and Facilities

Related Standard Operating Procedures

1. SOP 4: Spill Response and Cleanup
2. SOP 7: Fuel and Oil Handling
3. SOP 12: Storage and Use of Pesticides and Fertilizer
4. SOP 16: Streets and Parking Lots
5. SOP 17: Hazardous Material Storage and Handling

**Inventory of Municipal Buildings and Facilities
Middleton, Massachusetts**

Name of Building/Facility	Location	Manager/Contact – Name, Position, Department, Phone Number	Potential Stormwater Pollutant Sources (e.g., trash containers, fertilizers, fuel)
Memorial Hall	48 South Main Street	Bradford Swanson, Assistant Assessor Board of Assessors 978-774-2099	N/A
Oakdale Cemetery	82 Maple Street	Paul Goodwin, DPW Superintendent Public Works 978-777-0407	Fuel
Howe Manning School	26 Central Street	Stephen Clifford, Director of Facilities Tri-Town School Union 978-887-0771	Trash containers
Fuller Meadow School	143 South Main Street	Stephen Clifford, Director of Facilities Tri-Town School Union 978-887-0771	Trash containers
Council on Aging	38 Maple Street	Paul Goodwin, DPW Superintendent Public Works 978-777-0407	N/A
Police Department	65 North Main Street	James DiGianvittorio, Chief Police Department 978-774-4424	N/A
Fire Department	4 Lake Street	Thomas Martinuk, Chief Fire Department 978-774-2466	N/A
Flint Public Library	1 South Main Street	Melissa Gaspar, Director Flint Public Library 978-774-8132	N/A

Public Works Building	195 North Main Street	Paul Goodwin, DPW Superintendent Public Works 978-777-0407	Fuel, road salt
Middleton Transfer Station	Natsue Way	Paul Goodwin, DPW Superintendent Public Works 978-777-0407	Fuel

June 2020



Standard Operating Procedures

Middleton, Massachusetts

Department of Public Works

Parks and Cemetery Management

Issue Date:

06/2020

Approved by:

Public Works Director (or similar)

MA Small MS4 General Permit Requirement Summary:

Part 2.3.7.a.i.

Within two (2) years from the effective date of the permit, the permittee shall develop, if not already developed, written (hardcopy or electronic) operations and maintenance procedures for [Parks and open space]. These written procedures shall be included as part of the SWMP.

Part 2.3.7.a.ii.1.

Establish procedures to address the proper use, storage, and disposal of pesticides, herbicides, and fertilizers including minimizing the use of these products and using only in accordance manufacturer's instruction. Evaluate lawn maintenance and landscaping activities to ensure practices are protective of water quality. Protective practices include reduced mowing frequencies, proper disposal of lawn clippings, and use of alternative landscaping materials (e.g., drought resistant planting). Establish pet waste handling collection and disposal locations at all parks and open space where pets are permitted, including the placing of proper signage concerning the proper collection and disposal of pet waste. Establish procedures to address waterfowl congregation areas where appropriate to reduce waterfowl droppings from entering the MS4. Establish procedures for management of trash containers at parks and open space (scheduled cleanings; sufficient number). Establish procedures to address erosion or poor vegetative cover when the permittee becomes aware of it; especially if the erosion is within 50 feet of a surface water.

Municipal Parks and Open Space Inventory

The following is a list of properties covered by these procedures. This inventory shall be updated annually during SWMP review.

Park	Address/Location	Lawn Mowing	Landscaping	Fertilizing	Pesticide/Herbicide	Trash mgmt.	Pet waste mgmt.	Waterfowl mgmt.	Other maintenance:
Rubchinuk Park	131 East Street	X	X						
Fuller Meadow Fields	143 South Main Street	X	X						
Howe Manning Fields	26 Central Street	X	X						
Tragert Town Common	48R South Main Street	X	X						
Oakdale Cemetery	83 Maple Street	X	X						
Natsue Way Fields	Natsue Way	X	X						

Standard Operating Procedures

Middleton, Massachusetts

Department of Public Works

Issue Date:

06/2020

Parks and Cemetery Management

Personnel

The following personnel are responsible for municipal parks and cemetery management. Employees performing the procedures in this SOP shall attend annual stormwater pollution prevention training.

Name	Responsibility
Scott Saulnier	Oakdale Cemetery
Ken Gibbons	Parks

Lawn Mowing

Occurs at the following parks:

Rubchinuk fields, Fuller Meadow fields, Howe Manning fields, Tragert Town Common, Oakdale Cemetery, Natsue way fields.

On the following schedule: Weekly

Responsible Personnel:

As assigned by the DPW Superintendent and/or Deputy Superintendent

Standard Operating Procedures:

- Lawns shall be mowed to a height of 3.5".
- Mowing pattern shall vary to prevent ruts and promote even growth.
- Grass clippings shall be mulched using a mulching mower to avoid entering the storm drain system.

Pesticide, Herbicide, and Fertilizer Use

Occurs at the following parks: as necessary

On the following schedule: fertilizer spring/fall

Except during drought conditions or preceding heavy rainfall.

Standard Operating Procedures

Middleton, Massachusetts

Department of Public Works

Parks and Cemetery Management

Issue Date:

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Responsible Personnel:

The following chemicals are utilized for municipal parks and cemetery management:

Chemical	Use	Storage Location*	Disposal (per manufacturer's instructions)
Fertilizer		DPW inside	

*All storage locations

- have secondary containment *and/or* are located under cover;
- contain spill response materials including spill kit;
- shall be inspected at the following frequency: monthly by the DPW Deputy Superintendent.
- The chemical inventory in the SOP shall be updated at least annually.

Standard Operating Procedures:

- Chemicals shall be reordered by the DPW Deputy Superintendent quarterly to minimize excess storage/disposal.
- Integrated Pest Management strategies shall be provided by an outside vendor as needed.
- Pesticides, Herbicides, and Fertilizers shall be applied following manufacturer's instructions.

Other Landscaping

Involves the following (*add as appropriate*):

- Weeding
- Planting/reseeding
- Pruning
- Leaf litter removal

Occurs at the following parks:

Rubchinuk fields, Fuller Meadow fields, Howe Manning fields, Tragert Town Common, Oakdale Cemetery, Natsue Way fields

On the following schedule: as necessary

<p>Standard Operating Procedures <i>Middleton, Massachusetts</i> <i>Department of Public Works</i></p> <p>Parks and Cemetery Management</p>	<p>Issue Date: 06/2020</p>
<p>Responsible Personnel: As assigned by DPW Superintendent and/or Deputy Superintendent</p> <p>Standard Operating Procedures:</p> <ul style="list-style-type: none"> → Landscaping waste shall be disposed of at Oakdale Cemetery so as to avoid entering the storm drain system. → Weeding shall be done manually where possible to reduce herbicide use. → Leaf litter shall be disposed of at Oakdale Cemetery so as to avoid entering the storm drain system. 	
<p>Trash Management</p> <p>Trash cans and/or dumpsters are located at the following parks: N/A</p> <p>Emptying and replacing bags/inspecting for leaks shall take place on the following schedule: N/A</p> <p>Responsible Personnel:</p> <p>Parks shall be inspected and cleaned for litter on the following schedule: Weekly on Wednesday</p> <p>Responsible personnel: As assigned by DPW Superintendent and/or Deputy Superintendent</p> <p>Pet waste receptacles and/or bags are located at the following parks: N/A</p> <p>Additional pet waste receptacles, signage, bags, etc. shall be ordered by the DPW Deputy Superintendent based on the results of park inspections.</p>	

Standard Operating Procedures

Middleton, Massachusetts

Department of Public Works

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Parks and Cemetery Management

Other Park Management

Procedures for addressing waterfowl congregation and waste at specific parks: N/A

Choose and explain one or several options: (signage related to feeding geese) (decoys) (tall grasses near waterbodies or other structural changes) (dogs) (audio repellent) (other)

Specific Parks:

Responsible personnel:

Procedures for addressing the emptying and cleaning of water features: N/A

- Allow _____ hours for dechlorination
- Store disinfection chemicals indoors in secondary containment
- Train staff on spill response procedures at least annually

Specific Parks:

Responsible personnel:

Procedures for washing or cleaning park impervious surfaces:

- Sweeper frequency
- Direction of wash water to pervious surfaces

Specific Parks:

Natsue Way fields

Responsible personnel:

Procedures for correcting areas experiencing erosion:

- Temporary stabilization measures
- Sediment and erosion control measures
- Re-establish grass or native plants

Standard Operating Procedures <i>Middleton, Massachusetts</i> <i>Department of Public Works</i> Parks and Cemetery Management	Issue Date: 06/2020