

# Town of Oxford

## Stormwater Pollution Prevention Plan

Department of Public Works  
Facility  
34 Charlton St.

Revised October 7, 2020

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## SECTION 1 – Introduction

This Stormwater Pollution Prevention Plan (SWPPP) has been developed for the Oxford Department of Public Works (DPW) Facility 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 DPW Facility is located at 34 Charlton Street and is owned and operated by the Town of Oxford. The Locus Map in Figure 2-1 shows the location of the facility.

The Department of Public Works is primarily responsible for activities at the DPW facility as well as maintenance of the facility.

### 2.2 Site Inspection

The site inspection associated with the development of this SWPPP was completed on September 21, 2020. The inspection was conducted by Peter Gerhard, DPW Project Manager.

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

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

- Implementing, administering and revising the SWPPP
- Regularly inspecting stormwater control structures
- Conducting stormwater training
- Recordkeeping

**Leader:** Sean Divoll  
**Title:** DPW Director

**Office Phone:** 508-987-6006  
**Cell Phone:** 508-365-9222

**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.

Figure 2-1. Locus Map



Figure 2-2. Site Map

See Appendix E: DPW Facility Site Map

## 2.5 Facility Structures

### Main Building

The Main Garage building is located at the eastern side of the property along Rawson Ave. This building consists of two garages; the Mechanics Garage and the Main Garage. The Mechanics Garage contains two (2) floor drains, which discharge to an oil/water separator. Activities in this garage include the following:

- Equipment and vehicle maintenance and repair
- Tool storage
- Motor oil storage

The Main Garage contains a catch basin that is connected to the site drainage system. Activities in this garage include the following:

- Equipment and vehicle storage
- Waste oil storage and burner
- Office and breakroom facilities

### Charlton Street Garage

The Charlton Street Garage building is located on the south side of the property along Charlton St. This building contains no floor drains and is fully enclosed. Activities in this garage include the following:

- Equipment and vehicle storage
- Sign workshop
- Tool storage

### Vehicle Rinse Areas

The current vehicle rinse area is located outside and to the west of the Charlton Street Garage. The area has a gravel surface allowing for water to infiltrate into the ground. Wash water also sheet flows to the gravel area to the west or into the Charlton St. drainage system.

(A 2019 Town Meeting vote rejected a proposal to construct a new facility that would have included a vehicle wash bay with a floor drain connected to an oil/water separator. The Town will initiate designing an upgraded system to capture wash water either in a tight tank or discharge to an oil/water separator.)

### Salt Shed

Road salt and liquid calcium chloride are stored in the Salt Shed. This building is enclosed and the materials are fully contained within the building. The good housekeeping measure used to minimize the exposure resulting from adding to or

removing stored materials include sweeping the loading/unloading area regularly or when salt has accumulated on the paved surface.

The Town of Oxford utilizes nine (9) sanders and 42 snow plows on its vehicles to adequately maintain roads. These devices are stored outside of the Charlton Street Garage on pavement.

### **2.5.1 Additional Site Features**

#### Aboveground Storage Tanks

There are five aboveground storage tanks (AST) at the DPW Facility used for storage of heating oil for heating and diesel for the emergency generator. The AST's are located under the generator, which is located outside of the Main Garage on the west side of the building, one heating oil storage tank in the tire room, two waste oil for heating tanks in the Main Garage, and one heating oil storage tank in the Mechanics Garage.

#### Fuel Islands

An island containing two fuel pumps; one for gasoline and one for diesel is located in the southeast side of the facility near the Rawson Ave. entrance. It is used on a 24-hour basis for fueling of all Town of Oxford vehicles. A positive limiting barrier is installed for the containment of spills at the dispensers. The fuel island is not covered. The location of the fuel island is such that all users are visible to personnel at the facility via security cameras.

#### Emergency Generators

An emergency generator located on the west side of the Main Garage provides backup power to the facility during outages. The Kohler Power Systems Generator contained within a double-walled fuel tank located on a concrete pad. The generator is surrounded by protective bollards.

#### Oil/Water Separators

There is one oil/water separator at the DPW Facility located west of the Main Garage. This pretreatment structure has a cleanout manhole and is pumped on an annual basis. The DPW is responsible for contracting this work and maintains records on the pumpout activities. This oil/water separator provides treatment of flow from the Main Garage. Floor drains in all areas where oil materials are used and/or where vehicles are stored receive pretreatment via this oil/water separator.

#### Solid Waste Management

There is one dumpster at the DPW Facility located next to the salt shed. This dumpster is kept closed when not in use.

### Materials for Use by Residents

A sand pile is located on the west side of the facility for use by Town residents. The location of the sand pile is such that it slopes to the gravel area and no material flows into the stormwater system on the site.

### Parking Areas

There are several designated parking areas at the DPW Facility, each of which is an impervious surface. These parking lots are used primarily for visitors to the DPW Facility, the Town of Oxford-owned cars for daily use by the DPW Facility employees, and employees' personal vehicles; the DPW Facility trucks and/or heavy equipment are not kept in these parking areas.

The total number of parking spaces at The DPW Facility is approximately nine (9).

## **2.6 Site Drainage**

No stormwater from adjacent properties impacts the DPW Facility property.

### Sheet Flow

Drainage from the impervious surfaces at the DPW Facility is directed to center of the property into the site drainage system. Sheet flow from the gravel portion of the site (west) sheet flows to a slightly depressed area in the center of the gravel area

### Engineered Drainage

Engineered drainage at the DPW Facility includes four catch basins and two manholes that connect to the Charlton St. drainage system. Maintenance of the catch basin structures, including sediment removal, is completed by the DPW three times a year.

#### **2.6.1 Receiving Waters**

The final point of discharge for stormwater from this site is the French River. The French River has been categorized as a 303(d) List (Impaired) surface water. The impairment of this river, assigned the unique identifier MA42-04, is considered a Category 5, "Waters requiring a TMDL".

Impairments of this water body are shown in **Table 2-1**, below.

**Table 2-1. Impaired Waters Receiving Drainage from the Department of Public Works Facility**

Water Body Name	ID	Category	Impairment(s)
French River	MA42-04	5	Mercury in Fish Tissue

The types of impairments documented for this surface water body are related to mercury in fish. Mercury is a naturally occurring metallic element that is toxic to people and wildlife. It is found in many common items including:

Thermometers

Fluorescent bulbs

Thermostats

Some topical disinfectants, older medications, nasal sprays, ointments, and contact lens solutions.

Certain bleaches, detergents, stain removers, and soaps.

Batteries, latex paint, and pesticides made before 1990;

Button batteries found in watches, calculators, hearing aids, and electronics;

Pilot lights in gas appliances; and

Switches in certain automatic shut-off irons, car trunks, fire alarms, and septic tanks.

When a product containing mercury is broken, thrown in the trash, or poured down the drain, it cycles through the environment, polluting air and water, and accumulating in fish.

The activities and stored materials at the DPW Facility do not 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.

## 2.7 Site Activities

The following activities occur at the facility:

- Fueling Operations
- Chemical unloading, handling, and storage (including paint, flammables, fertilizers, and pesticides)
- Painting
- Sand storage
- Salt storage
- Snow dump (seasonal)
- Solid waste management (including scrap metal)
- Tool storage
- Vehicle and equipment storage
- Vehicle and equipment maintenance/repair (including oil changes)
- Vehicle and equipment washing
- Waste oil storage.

Below is a discussion of site activities and the potential pollutant sources associated with each, as well as measures taken to minimize pollution. Locations of each activity are shown on the Site Plan (Figure 2-1).

The DPW Facility 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 DPW Facility.

Any hazardous materials are collected by a third party vendor contracted by The Town of Oxford on an annual basis. Waste materials from the DPW Facility operations include used motor vehicle fluids that cannot be utilized for the waste oil burner, such as used antifreeze and brake fluid. Any oil that may be contaminated with antifreeze, brake fluid, paint, or other additive that makes it unburnable in the waste oil furnace is also collected by a third party vendor instead of being used in the waste oil furnace. These materials are properly labeled and stored using appropriate Best Management Practices between the time of generation and disposal.

### **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 catch basin structures, rendering them ineffective.

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

#### Pollution Prevention

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

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

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

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

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

### **2.7.3 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 unprotected outdoors, salt is exposed to precipitation, causing leachate with high chloride that can be discharged to the receiving water. Salt delivery and loading activities can contribute pollutants to stormwater if the material is not handled with care, and if spills from handling operations are not promptly cleaned up.

#### Pollution Prevention

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

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

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

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

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

#### **2.7.4 Solid Waste Management**

##### Potential Sources of Stormwater Pollution

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

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

##### Pollution Prevention

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

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

#### **2.7.7 Vehicle and Equipment Storage**

##### Potential Sources of Stormwater Pollution

Vehicle and equipment storage activities are a potential source of pollution due to the diesel fuel, gasoline, oil, hydraulic fluid, antifreeze and similar hazardous material or fuel the machinery may contain. In addition, vehicles or machinery may pick up pollutants during the course of offsite activities or at other facilities, and then deposit these pollutants at the storage facility.

##### Pollution Prevention

Regular visual inspection and maintenance of vehicles and equipment can greatly reduce the potential for pollution by finding and addressing leaks before pollution of the environment occurs. When in storage, vehicles and equipment should be kept on a covered slab or within a building with a common drain. Discharge to this drain shall be managed by an oil/ water separator (refer to SOP 11, Oil/Water Separator Maintenance, included in Appendix A) to remove oils and gasoline. Vehicle washing activities shall not be completed in areas served by an oil/water separator.

No equipment should be kept in an area where leaks could result in pollutants entering catch basins, channels leading to outfalls, or the engineered storm drain system. If vehicles and equipment are stored outdoors, catch basins or engineered drainage system structures should include devices intended to remove oils and sediments prior to entering the system. These treatment devices should be inspected and replaced at the frequency recommended by the manufacturer.

### **2.7.8 Vehicle and Equipment Maintenance/Repair**

#### Potential Sources of Stormwater Pollution

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

#### Pollution Prevention

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

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

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

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

### **2.7.9 Vehicle and Equipment Washing**

#### Potential Sources of Stormwater Pollution

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

#### Pollution Prevention

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

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

abandoned. Dry clean-up methods such as vacuuming and sweeping shall be used whenever possible to avoid washing down floors with water.

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

The current DPW Facility is located within a Zone II wellhead protection area and is not equipped with a tight tank to contain wash water. The current vehicle washing protocol utilizes a contracted vehicle washing service to clean vehicles at the end of the winter. This service includes capturing and removing the wash water. Catch basins are blocked while the vehicles are washed. During other times of the year, vehicles may be rinsed with water only; no detergents are used.

### **2.7.10 Waste Handling and Disposal**

#### Potential Sources of Stormwater Pollution

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

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

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

#### Pollution Prevention

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

##### *Solid Waste*

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

*Hazardous Materials and Wastes*

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

*Pesticides, Fertilizers and Petroleum Products*

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

*Detergents*

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

In addition to the pollution prevention requirements a waste management plan is recommended. The plan shall include employee training and signage informing individuals of the hazards associated with improper storage, handling and disposal of wastes. It is imperative that all employees are properly trained and follow the correct procedures to reduce or eliminate stormwater pollution. Routine visual inspection of storage and use areas is critical. The visual inspection process shall include identification of containers or equipment which could malfunction and cause leaks or spills. The equipment and containers shall be inspected for the following:

1. Leaks
2. Corrosion
3. Support or Foundation Failure
4. Other Deterioration

In the case a defect is found, immediately repair or replace.

**2.7.11 Waste Oil Storage**Potential Sources of Stormwater Pollution

When not stored properly, waste oil can be a potential source of petroleum in stormwater. Waste oil containers can leak, and spills can occur while during transportation activities.

Pollution Prevention

All waste oil containers should be properly labeled and stored with secondary containment. Containers should be regularly inspected for rust, leaks, or other signs of deterioration. Defective containers should be promptly removed and replaced. A spill response kit should be located wherever waste oil is stored. Facility personnel should know where the spill kit is located and be familiar with the procedures outlined in SOP 4 Spill Prevention, Response and Cleanup Procedures in Appendix A. Used oil filters should also be properly disposed.

Care should be taken when transferring used oil to and from storage containers. For additional information see SOP 7 Fuel and Oil Handling Procedures found in Appendix A.

Waste oil should be stored indoors or under a covered structure to prevent exposure to precipitation. Floor drain in waste oil storage areas should drain to an oil/water separator rather than the storm drain system. See SOP 11 Oil/Water Separator Maintenance in Appendix A for further information.

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

## 2.8 Vehicle and Equipment Inventory

Vehicles and major equipment stored and maintained at the DPW Facility are shown in Table 2-2.

**Table 2-2. Vehicle Inventory**

Year	DPW ASSET #	DPW TRUCK #	MAKE	MODEL	VIN	TYPE
1988	0342	N/A	INGERSOLL RAND	COMPRE	169552U88329	AIR COMPRESSOR
1994	0364	N/A	CRONKHITE	510A	473B21619R1101181	TRAILER
1996		N/A	HUDSON	UTILIT	10HHSE180T1000499	TRAILER
2001	0073	55	INTERNATIONAL	5600	1HTXEAHR21J000721	DUMP/SANDER
2002	0081	34	INTERNATIONAL	2554	1HTGBAAR82H505464	DUMP/SANDER
2002	0099	56	JOHN DEERE	410G	T0410GX904520	BACKHOE
2002	0091	49	FORD	550	1FDAF56F92ED27512	AERIAL
2002	0096	N/A	BANDIT	200T	4FMUS15182R018092	CHIPPER

Year	DPW ASSET #	DPW TRUCK #	MAKE	MODEL	VIN	TYPE
2005	0086	44	INTERNATIONAL	700SER	1HTWDAAR05J037605	SANDER
2005	0083	32	INTERNATIONAL	700SER	1HTWDAAR95J037604	SANDER
2005	0394	N/A	FORD	EXP.	1FM2U73W25UB57111	SUV
2006	0501	M-1	FORD	E250	1FTNE24L26DB38471	VAN
2006	0076	33	INTERNATIONAL	5600	1HTXEAHR06J178098	DUMP/SANDER
2006	0071	43	JOHN DEERE	544J	DW544JZ604270	WHEEL LOADER
2006	0094	54	FORD	F350	1FDWF37P16ED01381	DUMP
2006	0092	53	FORD	F350	1FDWF37P06EC60404	UTILITY
2007	0084	37	INTERNATIONAL	7400	3HTWDAARX7N458151	SANDER
2007	0093	58	FORD	F350	1FDWF37P47EB31258	DUMP
2007	0075	59	INTERNATIONAL	700SER	1HTWDAAR67J554877	DUMP
2008	0502	M-2	FORD	F150	1FTRF12W48KB48276	PICKUP
2008	0503	M-3	FORD	CR.VIC	2FAFP71V98X146098	CAR
2008	0074	31	INTERNATIONAL	7400	1HTWDAAR28J045709	DUMP/SANDER
2008	0072	60	INTERNATIONAL	7400/(700SER INS INFO)	1HTWDAAR08J045711	DUMP/SANDER
2010	0087	61	TRACKLESS	MT6	MT51189	TRACKLESS
2012	0085	36	INTERNATIONAL	7400	1HTWDAAR6CJ648168	CATCH BASIN
2012	0078	39	FORD	F350	1FDRF3HT3CEC50194	DUMP
2011	0499	N/A	CAM	5CAM	5JPBU1721BP026682	TRAILER
2011	0097	N/A	INTERSTATE	10BST	1JKBST108BM011104	TRAILER
2012	0077	48	FORD	F350	1FDRF3HT3CEC50195	DUMP
2013	0500 / 0426	N/A	FORD	E250	1FTNS2EW4EDA33821	VAN
2015	0385	15-51	JOHN DEERE	544K	1DW544KZCFE669123	WHEEL LOADER
2007	0383	N/A	UTILIT	UNIT	48BTE202X7A089355	TRAILER
2016	0396	16-50	FORD	F550	1FDUF5HT5GEB08215	DUMP
2016	0395	FT-1	TRIPLE CROWN	-	1XNSW4X67F1062272	TRAILER
2017	0413	17-42	FORD	F550	1FDUF5HT4HDA02815	DUMP
2017	0407	17-30	FORD	F250	1FT1W2B66HEC25645	PICKUP

Year	DPW ASSET #	DPW TRUCK #	MAKE	MODEL	VIN	TYPE
2018	0419	18-40	MACK	GU432	1M2AX34C0JM010877	DUMP/SANDER
2019	0425	19-45	JOHN DEERE	315SL	1T0315SLAJF343151	BACKHOE
2019	0424	19-47	ELGIN	PELICAN	NP41618	SWEEPER
2019	0429	19-57	FORD	F550	1FDUF5HT1KDA11818	DUMP
2019	0532	19-A1	FORD	ESCAPE	1FMCU9GDIKUB11176	CAR
2019	0533	19-A2	FORD	ESCAPE	1FMCU9GD7KUB90966	CAR
2020	0539	20-52	FORD	F-150	1FTMF1CB3LKD34308	PICKUP
2020	0543	20-54	FORD	F-350	1FDRF3H69LEC50307	1 TON DUMP

## 2.9 Location of Leak and Spill Cleanup Materials

Leak and spill cleanup materials are stored at the DPW Facility in order to facilitate rapid response. Locations and types of leak and spill cleanup materials are identified in Table 2-3.

**Table 2-3. Leak and Spill Cleanup Materials**

Building or Area	Location	Materials Available
Main Garage	Next to waste oil tank	Spill Kit
Mechanics Garage	Outside of mechanic's office	Spill Kit
Charlton Street Garage	Next to garage doors	Two Spill Kits
Fuel Island Area	Next to dispenser	Spill Kit

Spill Kits consist of the following: Speedi-Dry, absorbent pads, containment socks and disposal bags. Two replacement Spill Kits are located in the Tire Storage area in the Main Garage.

## 2.10 Allowable Non-Stormwater Discharges

A non-stormwater discharge is defined as any discharge or flow to the engineered storm drain system that is not composed entirely of stormwater runoff. Allowable non-stormwater discharges include:

- Firefighting activities
- Water line flushing
- Landscape irrigation
- Diverted stream flows

- Rising ground water
- Uncontaminated ground water infiltration (as defined at 40 CFR § 35.2005(20))
- Uncontaminated pumped ground water
- Discharge from potable water sources
- Foundation drains
- Air conditioning condensation
- Irrigation water, springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual resident car washing
- Flows from riparian habitats and wetlands
- De-chlorinated swimming pool discharges
- Street wash waters
- Residential building wash waters without detergents.

It has been determined that there are no non-stormwater discharges at the DPW Facility.

## 2.11 Existing Stormwater Monitoring Data

There is no historical stormwater monitoring data for the DPW Facility. Any future data will be tracked in Table 2-4.

**Table 2-4. Existing Stormwater Monitoring Data**

Building or Area	Location	Type of Monitoring

## 2.12 Significant Material Inventory

Materials stored include those specified in Section 2.7, Site Activities. An inventory of these materials at the DPW Facility is included in Table 2-5, which also reviews the likelihood for each identified material to come in contact with stormwater. The type of container has also been identified. Oil, gasoline, and other petroleum-based materials are listed separately in the table.

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

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

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
<b>Petroleum-Based Compounds</b>					
Diesel fuel	Underground Tank		Petroleum hydrocarbons	N/A	Not Likely
Gasoline	Underground Tank		Petroleum hydrocarbons	N/A	Not Likely
Hydraulic Fluid	Mechanics Garage	100 gallons	Petroleum hydrocarbons	Enclosed	Not Likely
Motor Oil	Boxes	500 gallons	Petroleum hydrocarbons	Enclosed	Not Likely
	Drums	500 gallons	Petroleum hydrocarbons		
Lubricants	Mechanics Garage	varies	Petroleum hydrocarbons	Enclosed	Not Likely
Transmission Fluid	Mechanics Garage	100 gallons	Petroleum hydrocarbons	Enclosed	Not Likely
Waste Oil	Main Garage	500 gallons	Petroleum hydrocarbons	Enclosed	Not Likely
<b>Total Volume of Oil At Facility =</b>					
<b>Non-Petroleum Significant Materials</b>					
Antifreeze	Main Garage	50 gallons	Ethylene glycol; potential source of BOD	Enclosed	Not Likely
Spray Lubricant	Mechanics Garage		Petroleum hydrocarbons	Enclosed	Not Likely
Adhesives and sealants	Main Garage	25 cans	Volatile and semivolatile organic compounds	Enclosed	Not Likely
Brake Fluid	Mechanics Garage	3 gallons	Volatile organic compounds; non-petroleum based oil	Enclosed	Not Likely
Coolant (new or used)	Mechanics Garage	25 gallons	Volatile organic compounds	Enclosed	Not Likely
Deicer- Ice-B-Gone	2 Tanks	1500 gallons	Food Byproducts	Enclosed	Not Likely

Material	Storage Location	Quantity	Potential Pollutant	Covered (C) or Enclosed (E)	Likelihood of Contact with Stormwater
Deicer- Road Salt	Salt Shed	300 Tons	Chlorides	Enclosed	Chance, but Controlled
Paint, Spray	Mechanics Garage	25 cans	Petroleum constituents, including volatile and semivolatile organic compounds	Enclosed	Not Likely
Sand	Lot	varies	Sediments	Open	Chance, but Controlled
Solvents			Volatile organic compounds	Enclosed	Not Likely
Solid Waste, Recyclable	Dumpster	1	Miscellaneous debris/solids, particulate matter, metals	Open	Chance, but Controlled
Solid Waste, for Disposal	Dumpster	1	Particulate matter, solids, metals	Covered	Chance, but Controlled
Spill response material (Speedi Dri or similar)	Each Garage	1 in each garage	Particulate matter, solids, residual oil.	Enclosed	Not Likely

## 2.13 Applicability of Spill Prevention, Control and Countermeasure (SPCC) Requirements

Under federal regulations 40 CFR Part 112 (and Amendments), a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required when a facility has an aboveground oil storage capacity greater than 1,320 gallons, when including containers with a capacity of 55 gallons or more. The DPW Facility does have aboveground oil storage capacity that exceeds 1,320 gallons and an SPCC Plan was developed in 2000. The plan was reviewed in 2002 and amendments noted. The Town will review and update the SPCC Plan in FY21.

## 2.14 Description of Significant Material Storage Areas

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

Fueling of all the Town of Oxford vehicles occurs at the Fuel Island located at the southeast side of the DPW Facility near the Rawson Ave. entrance. All bulk delivery of fuel to the Fuel Island is monitored by a DPW employee.

The DPW Facility emergency generator is fueled with diesel fuel as needed. The diesel fuel is delivered to the storage tank which is located on the west side of the Main Garage. All bulk delivery of fuel to the emergency generator is monitored by a DPW employee.

Waste oil and other used motor fluids are stored in the Main Garage. Waste oil is stored in tanks and drums, all of which have internal containment or are located on appropriate containment pallets. All delivery of waste oil to the facility occurs within the Main Garage and is monitored by a DPW employee.

Chemicals used at the DPW Facility are listed in Table 2.5. Delivery of all chemicals to the facility is monitored by a DPW employee.

Road salt is stored in the Salt Shed and liquid calcium chloride is stored in tanks outside of the Salt Shed. Delivery of deicing materials is monitored by a DPW employee.

## 2.15 List of Significant Leaks or Spills

No significant leaks or spills have occurred at the DPW Facility in the last three years. If any significant leaks or spill occur, they will be listed in Table 2-6.

**Table 2-6. Significant Leaks or Spills**

Building or Area	Material	Volume
		NONE

Forms included in Appendix B will be used to document any spill or leak that occurs at the facility in the future.

## 2.16 Structural BMPs

Structural BMPs include onsite constructed systems that provide pretreatment or treatment of stormwater flows. The following structural BMPs are presently used at The DPW Facility to maintain water quality.

- Deep sump catch basins
- Oil/Water Separators

## 2.17 Sediment and Erosion Control

Sediment and erosion control is not needed at the site due to the topography of the land. Control measures will be implemented if conditions change and such that erosion and sedimentation is identified.

## SECTION 3 – Non-Structural Controls

### 3.1 Good Housekeeping

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

- All fluid products and wastes are kept indoors with the exception of Ice-B-Gone which is stored outside in polyethylene tanks that are fully contained.
- Fueling of small equipment is completed indoors.
- All floor drains present within garage bays drain to an oil/water separator.
- Spill materials and cleanup kits are maintained at all locations where oil materials are used, stored, or may be present, including at Fuel Islands.
- Used spill cleanup materials are disposed of properly.
- Materials are stored indoors or in covered areas to minimize exposure to stormwater.
- No fertilizers, herbicides, or pesticides are stored or used at the facility.
- Lead-acid batteries are stored indoors and within secondary containment.
- Hazardous materials storage lockers with spill containment are used. Storage areas are located away from vehicle and equipment paths to reduce the potential of accident related leaks and spills.
- Storage drums and containers are not located close to storm drain inlets.
- All hazardous material storage areas and containers have proper signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment.
- All materials, waste oil storage containers, and gas cans are properly labeled.
- Oil/water separators and catch basins are maintained regularly and properly.
- Speedi-Dri (or similar absorbent) is readily available and used for appropriate spills.
- Spill kits are located in areas where fluids are stored or where activities may result in a spill.
- Tools and materials are returned to designated storage areas after use.
- Waste materials are properly collected and disposed of.
- Different types of wastes are separated as appropriate.
- Regular waste disposal is arranged.
- Work areas are clean and organized.
- Work areas are regularly swept or vacuumed to collect metal, wood, and other particulates and materials.
- Obtain only the amount of materials required to complete a job.
- Materials are recycled when possible.
- Staff is familiar with manufacturer directions for proper use of materials and associated Safety Data Sheets (SDSs).
- Staff is familiar with proper use of equipment.

- Bollards, berms, and containment features are in place around areas and structures where fluids are stored.
- Drip pans are used for maintenance operations involving fluids and under leaking vehicles and equipment waiting repair.

The facility maintains a supply of spill cleanup materials at many buildings on site, and will maintain this inventory. An inventory of spill containment, control, and cleanup materials and spill kits maintained at The DPW Facility was shown in Table 2-3.

### 3.2 Preventative Maintenance

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

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

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

### 3.3 Best Management Practices

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

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

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

5. Monitor all material deliveries.
6. Inspect all storage tanks prior to filling activities for spills, leaks and corrosion.

### 3.4 Spill Prevention and Response

The following procedures apply to the facility:

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

## SECTION 4 – Plan Implementation

### 4.1 Employee Training

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

The DPW Director is responsible for stormwater management training for the DPW Facility 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 the DPW Facility be inspected at least once each calendar quarter when the facility is in operation (at least one inspection must be conducted during a period when stormwater discharge is occurring).

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

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

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

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

## 4.3 Recordkeeping and Reporting

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

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

#### **4.4 Triggers for SWPPP Revisions**

The Town of Oxford 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.

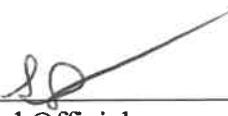
Changes in activity may include an expansion of operations, or changes in any significant material handling or storage practices which could impact stormwater.

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

\_\_\_\_\_  
DPW DIRECTOR  
Title

\_\_\_\_\_  
10/9/2020  
Date

*Instructions: The SWPPP must be signed by a ranking elected official or by a duly authorized representative of that person. A person is a duly authorized representative only if:*

- 1. The authorization is made in writing;*
- 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and*
- 3. The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.*

## **Appendix A**

### **Standard Operating Procedures**

SOP 3: Catch Basin Inspection and Cleaning

SOP 4: Spill Prevention, Response and Cleanup

SOP 6: Erosion and Sedimentation Control

SOP 7: Fuel and Oil Handling Procedures

SOP 11: Oil/Water Separator Maintenance



# TOWN OF OXFORD

# DPW

DEPARTMENT OF PUBLIC WORKS

## Standard Operating Procedures

### SOP 3: Catch Basin Inspection and Cleaning

Issue Date:

6/30/2019

#### Purpose of SOPs:

Procedures for inspecting, cleaning and maintenance of catch basins, frequency of cleaning, disposal of debris, and recordkeeping to prevent pollution from entering the stormwater drainage systems. This SOP meets the requirements of the Massachusetts Small MS4 General Permit Part 2.3.7.a.iii.2.

#### Equipment Inventory:

The following is a list of catch basin cleaning equipment:

Equipment Number	Make	Description	Other Notes
Truck 36	International 7400	CB Cleaner	Stetco Clamshell Bucket

#### Inspection and Cleaning Procedures

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

1. Work upstream to downstream.
2. Clean sediment and trash off grate.
3. Visually inspect the outside of the grate.
4. Visually inspect the inside of the catch basin to determine cleaning needs.
5. Measure (in feet) and record Depth to Sediment. Calculate and record Depth of Sediment as follows:

Depth of Sediment equals Depth of Sump minus Depth to Sediment.

If the Depth of Sump has not already been determined for the catch basin, take measurements of the following and record on the Catch Basin Inspection and Cleaning Form:

- Depth to Bottom of Basin
- Depth to Lowest Invert
- Depth of Sump equals Depth of Bottom of Basin minus Depth to Lowest Invert

6. Inspect catch basin for structural integrity.
7. Visually inspect inside of catch basin for standing water and record height, color and odor on the *Catch*

# Standard Operating Procedures

## Catch Basin Inspection and Cleaning

Issue Date:

6/30/2019

### *Basin Cleaning and Inspection Form.*

8. Record observations of any possible pollutants or illicit discharges including oil sheen, bacterial sheen, orange staining, foam, sanitary waste, floatables, pet waste, optical enhancers, excessive sediment or any other non-stormwater indicator.
9. Remove sediment from catch basin using clam shell and deposit material into dump truck.
10. If contamination is suspected, collect a sample for chemical analysis to determine if the materials comply with the Massachusetts DEP Hazardous Waste Regulations, 310 CMR 30.000 (<http://www.mass.gov/dep/service/regulations/310cmr30.pdf>). Chemical analysis required will depend on suspected contaminants. Note the identification number of the catch basin on the sample label, and note sample collection on the *Catch Basin Inspection and Cleaning Form*.
11. Properly dispose of catch basin cleanings. See following Storage and Disposal section for guidance.
12. If illicit discharges are observed or suspected, notify the appropriate Department (see *Standard Operating Procedures for Addressing Illicit Discharges*).
13. At the end of each day, document location and number of catch basins cleaned, amount of waste collected, and disposal method for all screenings. Use attached *Catch Basin Cleaning Log*.
14. Report additional maintenance or repair needs to the Operations Manager.

### Maintenance of Cleaning Equipment

1. Bucket loader will be checked for leaks once per week. Immediately contain and properly clean up any spills.
2. Regular preventative maintenance to prolong equipment use such as greasing moving parts and minor adjustments occur four times per year.
3. Parts are replaced as needed.
4. Equipment is washed at the DPW garage located at 34 Charlton St., Oxford to trap grease, oils and sediment.

### Inspection and Cleaning Schedule

1. Catch basin cleaning will primarily take place between the months of April and May.
2. Priority catch basins are identified according to the *Catch Basin Cleaning Optimization Plan* and are listed below. The priority catch basin list will be reassessed and updated at a minimum of every spring prior to cleaning and as denoted in the optimization plan.
3. A map of the municipal stormwater system including catch basins is located at [https://www.town.oxford.ma.us/sites/oxfordma/files/uploads/oxford\\_stormwater\\_map.pdf](https://www.town.oxford.ma.us/sites/oxfordma/files/uploads/oxford_stormwater_map.pdf)

Priority Catch Basins	Reason

# Standard Operating Procedures

## Catch Basin Inspection and Cleaning

Issue Date:

6/30/2019


### Storage and Disposal

1. If contamination is suspected, the cleanings will be temporarily stored at 34 Charlton St. on an impervious surface. A third party is contracted to handle suspected contamination.
2. Catch basin cleanings are stored at the Rocky Hill Road Waste Facility. The material is removed annually by a third party contractor.
3. **Measurement of Volume:** The amount of material removed from the catch basins shall be determined daily based on the volume filled in the truck. The amount shall be recorded in cubic yards with a list of the catch basins cleaned in *Catch Basin Cleaning Log*.

### Training

1. Employees are trained annually on this procedure and the proper operation of equipment. Employees are also trained on stormwater pollution prevention, spill and response, and illicit discharge detection and elimination procedures.

### Record Keeping

1. Records are kept at the DPW Garage, 34 Charlton St., Oxford and in the online *Oxford Stormwater Control Panel* at: [mapsonlin.net/oxfordma/dpw.php](http://mapsonlin.net/oxfordma/dpw.php).
2. A *Catch Basin Inspection and Cleaning Form* (paper or electronic) is completed for every catch basin inspected and cleaned.
3. The *Catch Basin Cleaning Log* is updated daily to record the streets cleaned, number of catch basins cleaned, number of catch basins inspected and the amount of material removed.
4. A list of employees implementing the SOPs and the completion of their training(s) can be found in the *Town of Oxford Good Housekeeping Plan* located at the DPW Headquarters, 450 Main St., Oxford.

### Revising the SOPs

1. These procedures are reviewed annually and updated as needed.

# SOP 4: Spill Prevention, 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 on maintenance activities and prevention guidance and to help reduce the discharge of pollutants from the MS4 as a result of spills or releases.

## Procedures

The Town of Oxford will implement the following maintenance and prevention activities, spill response and cleanup procedures to reduce the discharge of pollutants from the MS4:

### 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.

**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:

**In the case of an emergency call 911.**

Assess the contaminant release site for potential safety issues and for direction of flow.

**In any of the following cases, call 911:**

- **Release greater than five gallons**
- **Release of an unknown substance**
- **Release to a waterbody or stormwater system**
- The Oxford Fire Department will contact the MassDEP Spill Response Team when warranted.
- Notify a member of the facility's Pollution Prevention Team and the facility supervisor

**If an emergency response is not needed, follow these procedures:**

- Notify a member of the facility's Pollution Prevention Team and the facility supervisor
- 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 the OXFORD FIRE DEPARTMENT: 508-987-0156 or call 911.
- Fill out the attached Spill Response and Cleanup Contact Form.

### Reporting a Spill

When contacting emergency response personnel 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

### **Employee Training**

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

### **Attachments**

1. Spill Response and Cleanup Contact List Form

## SOP 6: EROSION AND SEDIMENTATION CONTROL

Erosion and sedimentation from land-disturbing human activities can be a significant source of stormwater pollution. This Standard Operating Procedure describes methods for reducing or eliminating pollutant loading from such activities.

### *Controlling Erosion and Sediment through Design and Planning*

Prevention of erosion and sedimentation is preferable to installing treatment devices. Consistent application and implementation of the following guidelines during the design and review phases can prevent erosion and sedimentation:

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

### *Controlling Erosion and Sediment on Construction Sites*

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

1. Erosion and sediment control features should be constructed before initiating activities that remove vegetated cover or otherwise disturb the site. These shall be installed consistent with the approved site plans and with manufacturer's instructions.
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.

*Related Standard Operating Procedures*

1. SOP 5, Construction Site Inspection
2. SOP 9, Inspection of Constructed Best Management Practices

## SOP 7: Fuel and Oil Handling

### 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.

### Procedures

The Town of Oxford 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 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 the Spill Prevention, Response and Cleanup SOP.
  - 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 the Spill Prevention, Response and Cleanup SOP 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 the Spill Prevention, Response and Cleanup SOP 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 the Spill Prevention, Response and Cleanup SOP 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 annually 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**

- Spill Prevention, Response and Cleanup

## SOP 11: OIL/WATER SEPARATOR (OWS) MAINTENANCE

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

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

### *General OWS Maintenance Requirements*

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

### *OWS Inspection Procedures*

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

Weekly inspections of an OWS should include the following:

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

Quarterly inspections of an OWS should include the following:

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

*OWS Cleaning Procedures*

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

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

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

*Documentation of Cleaning and Service*

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

*Attachments*

1. Quarterly OWS Inspection Checklist

*Related Standard Operating Procedures*

1. SOP 4, Spill Prevention, Response and Cleanup Procedures

## **Appendix B**

### **Significant Spills, Leaks or Other Releases**

Date of incident:

Location of incident:

Description of incident:

Circumstances leading to release:

Actions taken in response to release:

Measures taken to prevent recurrence:

## **Appendix C**

### **Training Documentation and Attendance Sheets**

<b>Training Date:</b>	
<b>Training Description (including duration and subjects covered):</b>	
<b>Trainer:</b>	
<b>Employee(s) trained</b>	<b>Employee signature</b>

## Appendix D

### Stormwater Site Inspection Report

General Information	
Facility Name	
Date of Inspection	Start/End Time
Inspector's Name(s)	
Inspector's Title(s)	
Inspector's Contact Information	
Inspector's Qualifications	
Weather Information	
<b>Weather at time of this inspection?</b> <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: _____	
<b>Have any previously unidentified discharges of pollutants occurred since the last inspection?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If yes, describe:</b>  	
<b>Are there any discharges occurring at the time of inspection?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If yes, describe:</b>  	

#### 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		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	

**Areas of Materials or Activities exposed to stormwater**

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

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	
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	
3	Fueling areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	
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	
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	
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	
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	
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	
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	
10	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	

**Non-Compliance**

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

## Additional Control Measures

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

## Notes

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

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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

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

(Complete a separate form for each outfall you assess)

Name of Facility:

Outfall Name: "Substantially Identical Outfall"?  No  Yes

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

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

Date &amp; Time Discharge Began (approx.): Date &amp; Time Visual Sample Collected: Date &amp; Time Visual Sample Examined:

Nature of Discharge:  Rainfall  Snowmelt

## Parameter

Color  None  OtherOdor  None  Musty  Sewage  Sulfur  Sour  Petroleum/Gas \_\_\_\_\_  
 Solvents  OtherClarity  Clear  Slightly Cloudy  Cloudy  Opaque  OtherFloating Solids  No  YesSettled Solids\*  No  YesSuspended Solids  No  YesFoam (gently shake sample)  No  YesOil Sheen  None  Flecks  Globs  Sheen  Slick  
 OtherOther Obvious Indicators of Stormwater Pollution  No  Yes

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

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

A. Name:

B. Title:

C. Signature:

D. Date Signed:

**Appendix E**  
**DPW Facility Site Map**

