
Town of Westport

GOOD HOUSEKEEPING MANUAL: FULL VERSION

A Guide to Good Housekeeping Best
Practices to Prevent Stormwater
Pollution

May 2020



Table of Contents

Introduction	3
MS4 Facilities Inventory	6
Inventory Figure	7
Vehicle and Equipment Inventory	8
Best Management Practices (BMP) Sheets	9
BMP 1 – Road Sand/Salt Application and Storage	10
BMP 2 – Snow Stockpiling/Removal	13
BMP 3 – Materials Management	14
BMP 4 – Hazardous Materials Storage	17
BMP 5 – Vehicle Fueling, Maintenance and Storage	21
BMP 6 – Vehicle Washing	24
BMP 7 – Spill Prevention and Response	26
BMP 8 – Lawn and Grounds Maintenance	30
BMP 9 – Street and Parking Lot Sweeping	32
BMP 10 – Catch Basin Cleaning	36
BMP 11 – Pet Waste and Litter/Waterfowl Management	41
BMP 12 – Mosquito Control	42
BMP 13 – Waste Management	43
BMP 14 – Building Operations	45
BMP 15 – Oil/Water Separators	47
BMP 16 – Bio-Retention	48

Appendix

A: Parks and Open Space Operations and Maintenance Procedures

B: Catch Basin Cleaning Program

Introduction

2016 MS4 Permit

The 2016 MS4 Permit requires that the Town of Westport address six (6) Minimum Control Measures (MCMs). These measures include the following:

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

As part of MCM6, the Town developed this Good Housekeeping Manual which includes an inventory of all Town owned parks and open spaces, buildings and facilities where pollutants are exposed to stormwater runoff, and vehicle and equipment usage and staging areas, and written operations and maintenance procedures for the municipal operations at the aforementioned properties. Beyond maintaining these properties, the Town is also responsible for keeping all MS4 infrastructure in good working order. The Town has developed a written program detailing operation and maintenance for that MS4 infrastructure which is included in this Good Housekeeping Manual.

The Town of Westport is unique, in that only a portion of the Town is regulated under the MS4 Permit. Implementing the best management practices contained in this Good Housekeeping Manual is only required for the facilities within the MS4-related area. Additional facilities that are located outside of the MS4 area but have operations within the MS4 are mentioned in this Manual, such as the Highway Department and the Transfer Station, but are not required to comply. The Town recognizes the importance of minimizing stormwater pollution and therefore may implement these practices at Town-owned and operated facilities outside of the regulated area, to the extent they are practicable and relevant.

How to Use this Manual

The pollution prevention and good housekeeping controls outlined in this document and referred to as best management practices (BMPs), are standard operating procedures for Town personnel and for use at all applicable Town-owned facilities and drainage infrastructure within the MS4. These BMPs are intended to serve as guidance on good housekeeping practices as they relate to reducing pollutants in runoff from municipal operations.

Each of the BMP fact sheets provides a description of the practice, the pollution prevention approach, suggested practices, inspection procedures, and maintenance procedures. For those tasks that have a regulatory reporting

component (e.g. volume of material removed from a catch basin), appropriate tracking log examples or inspection forms are included. These logs/forms will facilitate compilation of data required for NPDES annual reporting.

The BMP fact sheets provide **Targeted facilities and operations**, which include public school properties, a Fire Department facility, the Library, as well as municipal activities that take place throughout the Town. Examples of these types Town-wide activities include roadway and drainage system maintenance. The potential pollutants associated with these targeted facilities and operations are identified below this list as **Targeted constituents** on each BMP fact sheet.

Manual Updates

This Manual is intended to be a 'living document' that is updated as necessary to meet the Town's needs while striving to reduce pollution "to the maximum extent practicable" under the NPDES MS4 Permit.

Under each BMP, a space for "**Notes / Specific Procedures**" has been included so that unique conditions, problem areas, protocol specifics, or changes can be documented by the Town.

Annual Reporting

This document, as updated, should be included in the Annual Reports provided to the Massachusetts Department of Environmental Protection (MassDEP) and the United States Environmental Protection Agency (US EPA). Note that specific BMPs (such as the catch basin cleaning and street sweeping BMPs) are required elements of the Permit and specific data pertinent to execution of these tasks must be reported in the Annual Report.

Document Limitations; Other Regulatory Requirements

It should be noted that this document outlines best practices and procedures but does not include all best management practices required for the Briggs Road Fire which requires a written Stormwater Pollution Prevention Plan (SWPPP) under the Permit. Other facilities may be covered under the Multi-Sector General Permit (MSGP), which has additional requirements not included in this document. Lastly, facilities adjacent to wetlands may have Wetlands Protection Act Orders of Conditions for certain maintenance activities in proximity to wetland resources.

Manual Distribution & Training Log*

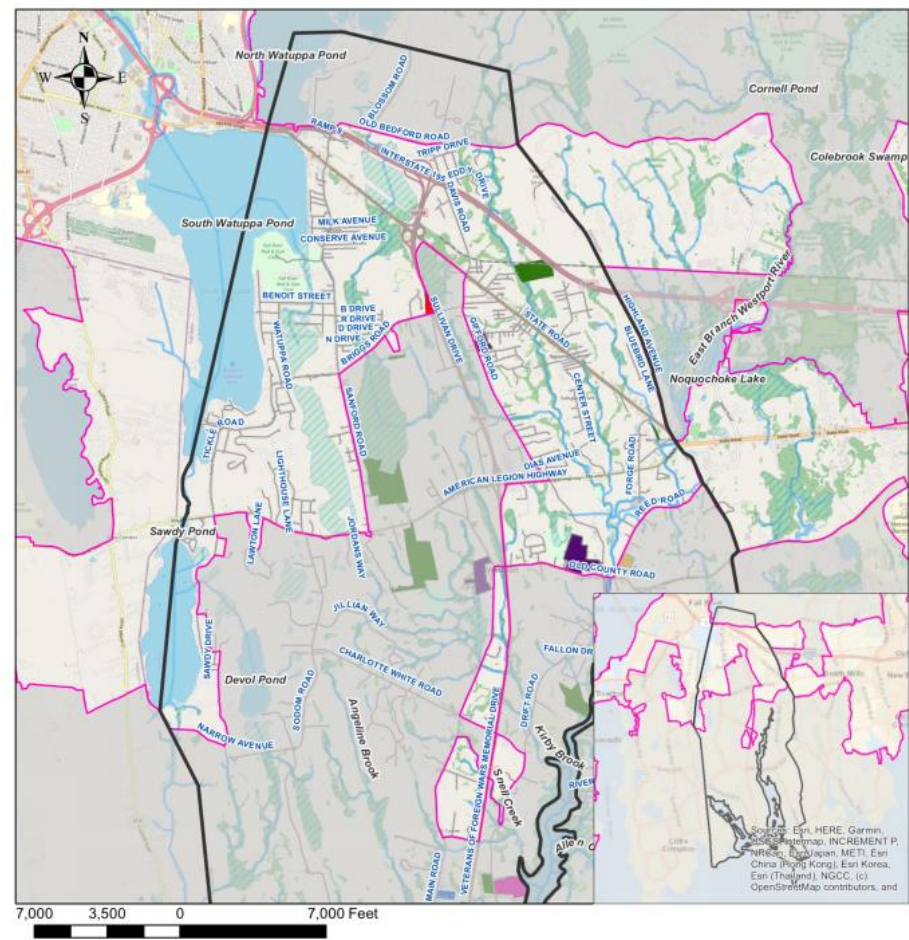
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* Training records should be included in Annual Report.

MS4 Facilities Inventory

Facility Name	Address	Department	Applicable BMPs
Macomber Primary School	154 Gifford Rd, Westport, MA	School Department	1, 2, 3, 7, 8, 9, 10, 13, & 14
Westport Elementary School	380 Old County Rd, Westport, MA	School Department	1, 2, 3, 7, 8, 9, 10, 13, 14, & 16
Westport Library	408 Old County Rd, Westport, MA	Westport Free Public Library	1, 2, 3, 7, 8, 9, 10, 13, & 14
Briggs Road Fire Station	85 Briggs Rd, Westport, MA	Fire Department	1, 2, 3, 5, 6, 7, 8, 9, 10, 13, & 14
Skateboard Park	154 Gifford Rd, Westport, MA	School Department	1, 2, 7, 9, 10, & 13

Inventory Figure



MAY 2020

Town of Westport, MA
Facilities Inventory Map



LEGEND

- | | |
|--------------------------------------|-------------------------------------|
| Town Owned/Managed Facilities | — River or Stream |
| ■ Cemetery | ■ Surface Waterbody |
| ■ Fire Department | ■ Wetland |
| ■ Town Buildings | ■ 2010 Census Urbanized Areas (MS4) |
| ■ Open Space | ■ Westport Townline |
| ■ Recreation | ■ Non-MS4 Area |
| ■ School | |



Vehicle and Equipment Inventory

Type of Vehicle/Equipment (Sweeper, Sander, Tractor, Truck, etc.)	Description	Storage Location	Number of Items

Commented [AF1]: The Town is required to complete an inventory of all **buildings, facilities, parks and open spaces, and vehicles and equipment** with a potential for pollution into the MS4. We populated this information on the prior page (Page 7) for the section on buildings, facilities, parks and open spaces. Are you able to help us to complete the inventory for the **vehicles and equipment** stored at these locations, please?

Best Management Practices (BMP) Sheets

BMP 1 – ROAD SAND/SALT APPLICATION AND STORAGE

DESCRIPTION

Westport's current policy is to use salt or sand (or a combination of these materials) on streets and Town-owned parking lots. Currently, road salt, and sand are stored inside at the Highway Department Garage, which is not within the MS4. Proper storage is necessary to prevent contamination to surface and ground water supplies. Salts are very soluble—once in contact with water there is no way to remove salt. The major reasons for keeping salt covered and controlling use are that salt:

- Kills vegetation
- Corrodes infrastructure
- Blocks storm drains and swales
- Increases sedimentation to streams and rivers
- Small quantities (5% road salt) contain phosphorus, nitrogen, copper, and cyanide

POLLUTION PREVENTION APPROACH

Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater system to the maximum extent practicable.

SUGGESTED BEST MANAGEMENT PRACTICES

Proper Storage

Currently the Town stores all roadway maintenance materials at the Highway Department Garage that is located outside of the MS4 area. Therefore, due to the location of the Garage, storage and inspection procedures are not included in this manual. If in the future the Town moves the storage location, the Town will update this portion of the manual.

Proper Disposal

Disposal of sand/salt mixtures should not be done in the following areas:

- Wetlands
- Any surface waters
- Well locations and public drinking supplies

Proper Removal

- Street cleaning of all Town roadways within the MS4 at least once per year.
- Catch basin cleaning completed as necessary to ensure that no catch basin within the MS4 is ever greater than 50% full.

TARGETED FACILITIES AND OPERATIONS

- All Town-Owned Facilities within the MS4
- Street Rights-of-Way within the MS4
- Highway Department Services within the MS4

TARGETED CONSTITUENTS

- Sediment
- Salt
- Nutrients
- Trash
- Metals
- Oil & Grease
- Organics
- Low Dissolved Oxygen

REFERENCE

- Westport Snow & Ice Policy
- MassDEP Guidelines on Road Salt Storage (Updated January 1996)

NOTES / SPECIFIC PROCEDURES:

(List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)

BMP 1 – ROAD SAND/SALT APPLICATION AND STORAGE

Proper Use

- Establish a low salt area near any water bodies or residential areas.
- Regulate the amount of road salt applied to prevent over-salting of motorways and increasing runoff concentrations.
- Vary the amount of salt applied to reflect site-specific characteristics, such as road width and design, traffic concentration, and proximity to surface waters.
- Provide calibration devices for spreaders in trucks to aid maintenance workers in the proper application of road salts.
- Establish air temperature and snow depth conditions favorable for successful use of salt.
- Use alternative materials, such as sand or gravel, in especially sensitive areas.
- Use environmentally friendly products alternative to traditional deicing salt.

INSPECTION PROCEDURES

Currently the Town stores all roadway maintenance materials at the Highway Department Garage that is located outside of the MS4 area. Therefore, due to the location of the Garage, inspection procedures for the salt and sand piles are not included in this manual. If in the future the Town moves the storage location, the Town will update this portion of the manual.

- Inspect salt application equipment including calibration equipment and spreaders.
- Inspect for excessive amounts of salt on roads.

MAINTENANCE PROCEDURES

- Service trucks and calibrated spreaders regularly to ensure accurate, efficient distribution of salt.
- Educate and train operators on hazards of over-salting to roads and environment at the beginning of the snow season as part of meetings with supervisors and drivers.

BMP 1 – ROAD SAND/SALT APPLICATION AND STORAGE

MAINTENANCE LOG BMP 1 - Road Sand/Salt Application & Storage

Control Measure Maintenance Records (copy information below for each control measure)

Control Measure or Equipment:

Regular Maintenance Activities:

Regular Maintenance Schedule:

Date of Action:

Reason for Action: ☐ Regular Maintenance ☐ Discovery of Problem

If Problem,

- Description of Action Required:
- Date Control Measure Returned to Full Function:
- Justification for Extended Schedule, if applicable:

Notes:

Control Measure Maintenance Records (copy information below for each control measure)

Control Measure or Equipment:

Regular Maintenance Activities:

Regular Maintenance Schedule:

Date of Action:

Reason for Action: ☐ Regular Maintenance ☐ Discovery of Problem

If Problem,

- Description of Action Required:
- Date Control Measure Returned to Full Function:
- Justification for Extended Schedule, if applicable:

Notes:

BMP 2 - SNOW STOCKPILING/REMOVAL

DESCRIPTION Proper snow management in terms of stockpiling and removal can prevent or minimize runoff and pollutant loading impacts. Snow piles can contain trash, nutrients, sediments, salt, sand, and vehicle pollutants (petroleum, antifreeze, and oil) that can directly be carried into surface waters during snowmelt. Snow removal is completed in accordance with Best Management Practices and procedures outlined herein. POLLUTION PREVENTION APPROACH Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable. SUGGESTED BEST MANAGEMENT PRACTICES The Town does not regularly stockpile snow. During extreme conditions when stockpiling is necessary, the following practices should be applied: • Do not stockpile snow near or within direct drainage to surface waters. • Do not stockpile snow in wooded areas, around trees, or in vegetated buffer zones due to sediment and salt damage to vegetation. • Stockpile snow in pervious areas where it can slowly infiltrate. • During plowing activities on pervious surfaces, blading (plow lowers blade below ground surface level and plows the upper layers of soil in addition to overlying snow) should be avoided to prevent erosion. INSPECTION PROCEDURES • Check snow piles for debris that could be windblown. MAINTENANCE PROCEDURES • Contain sediments as snow melts and removed every Spring from snow storage areas. This includes sweeping roadways and parking lots or other impervious areas. • During plowing activities, avoid blocking drainage structures including catch basins, swales, and channels.	<u>TARGETED FACILITIES AND OPERATIONS</u> • Street Rights-of-Way within MS4 • All Town Owned Facilities within MS4 • Highway Department Services within MS4 <u>TARGETED CONSTITUENTS</u> • Sediment • Salt • Nutrients • Trash • Oil & Grease <u>REFERENCE</u> • Westport Snow & Ice Policy <u>NOTES / SPECIFIC PROCEDURES:</u> (List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)
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BMP 3 - MATERIALS MANAGEMENT

DESCRIPTION

Materials management entails the selection of the individual product and quantity, the correct use and storage of the product, and the proper disposal of associated waste(s). It is important to be responsible with common chemicals and solvents including paints, cleaners, and automotive products to reduce contamination to stormwater runoff.

POLLUTION PREVENTION APPROACH

Proper management reduces the likelihood of accidental spills or releases of hazardous materials into storm drains or during storm events. In addition, health and safety conditions at the facility will improve.

Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable.

SUGGESTED BEST MANAGEMENT PRACTICES

Material Inventory

- Identify all hazardous and non-hazardous substances by reviewing purchase orders and conducting a walk-through of each Town facility within the MS4 area.
- Compile Material Safety Data Sheets (MSDS) for all chemicals. These should be readily accessible to all facility employees and submitted to the Westport Fire Department when applicable.
- Label all containers of significant materials that include cleaners, fuels, and other hazards.
- Identify handling, storage, and disposal requirements of all chemicals.
- Use environmentally friendly or non-hazardous substitutes when appropriate that include but not limited to H₂O, Orange₂, Orange Thunder, and Simple Green®.
- Keep hazardous materials and waste off the ground.
- All drums and containers should be in good condition and properly labeled.
- Loose materials including any gravel piles should be covered or placed in shelter when possible.

Solid Waste

- Trash storage bins, dumpsters, and disposal areas should be clean and free of debris, especially those located near catch basins.
- Dumpsters should be maintained in good condition, inspected regularly, and securely closed.
- All equipment and materials should be stored properly, and work areas should be kept clean.

TARGETED FACILITIES AND OPERATIONS

- All Town-Owned Facilities within MS4
- All Fleet Vehicle and Equipment Operations

TARGETED CONSTITUENTS

- Sediment
- Nutrients
- Trash
- Metals
- Oil & Grease
- Organics
- Low Dissolved Oxygen

NOTES / SPECIFIC PROCEDURES:

(List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)

BMP 3 - MATERIALS MANAGEMENT

- Waste shall be disposed of according to local, state, and federal laws.
- Temporary trash storage should be inspected weekly before it is taken to the Westport Transfer Station and Recycling Center located at 72 Hixbridge Road during open hours on Sunday, Monday, Thursday, Friday, or Saturday. The Transfer Station and Recycling Center is not located within the MS4.
- Piled debris, including sweepings, construction, and wood debris should be inspected weekly before it is taken off-site.

INSPECTION PROCEDURES

- Physical on-site verification of sealed floor drains (or redirected to sanitary sewer).
- Regular inspection of material storage areas (inside and outside) to verify items are not exposed to precipitation and are covered or in enclosed areas.
- Regular inspection and cleaning of oil/water separators by qualified contractor or facility personnel.
- Inspect stormwater discharge locations and on-site stormwater drainage infrastructure (e.g., catch basins) regularly (for contaminants, soil staining, plugged discharge lines and other maintenance needs).

MAINTENANCE PROCEDURES

- Repair or replace any leaking/defective containers and replace labels as necessary.
- Maintain caps and/or covers on containers.
- Maintain aisle space for inspection of products/wastes.
- Routinely clean workspaces.
- Properly collect/dispose of waste.
- Routinely maintain and inspect vehicles and equipment.
- Train employees routinely when new products enter the facility on proper use, storage, disposal, and safety concerns. MSDS sheets should be reviewed and readily accessible in a central facility location.
- Review any Spill Prevention, Control, and Countermeasure (SPCC) Plan if applicable for the facility. SPCC Plans are in place for specific facilities with petroleum products.
- Adhere to SWPPP maintenance requirements if facility is required to have a SWPPP.

BMP 3 - MATERIALS MANAGEMENT

MAINTENANCE LOG BMP 3 - Materials Management

Control Measure Maintenance Records (copy information below for each control measure)

Control Measure or Equipment:

Regular Maintenance Activities:

Regular Maintenance Schedule:

Date of Action:

Reason for Action: ☐ Regular Maintenance ☐ Discovery of Problem

If Problem,

- Description of Action Required:
- Date Control Measure Returned to Full Function:
- Justification for Extended Schedule, if applicable:

Notes:

Control Measure Maintenance Records (copy information below for each control measure)

Control Measure or Equipment:

Regular Maintenance Activities:

Regular Maintenance Schedule:

Date of Action:

Reason for Action: ☐ Regular Maintenance ☐ Discovery of Problem

If Problem,

- Description of Action Required:
- Date Control Measure Returned to Full Function:
- Justification for Extended Schedule, if applicable:

Notes:

BMP 4 - HAZARDOUS MATERIAL STORAGE

DESCRIPTION

It is important to properly store hazardous materials to prevent them from contaminating stormwater runoff. Common hazardous materials that may be present in Town-owned facilities within the MS4 include:

- Cleaning agents: solvents, drain cleaners, and bleach
- Vehicle maintenance fluids: motor oil, gasoline, antifreeze, degreasers, and radiator flush
- Water treatment chemicals
- Paints

POLLUTION PREVENTION APPROACH

Proper management reduces the likelihood of accidental spills or releases of hazardous materials during storm events. In addition, health and safety conditions at the facility will improve.

Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable.

SUGGESTED BEST MANAGEMENT PRACTICES

Loading/Unloading

- All facilities should have proper procedures in place for loading and/or unloading hazardous materials, especially in areas located near catch basins.
- Do not conduct loading and unloading of exposed hazards during wet weather, whenever possible.
- Load and unload only at designated loading areas.
- If feasible, load and unload all materials and equipment in covered areas such as building overhangs at loading docks.
- Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections.

Storage

- When possible, store hazardous materials and wastes indoors.
- Storage of reactive, ignitable, or flammable liquids must comply with the Massachusetts Fire Prevention Regulations for the Storage of Flammable and Combustible Materials (527 CMR 14.03).
- Place containers in a designated area that is paved, free of cracks and gaps, and impervious, in order to contain leaks and spills. The area should also be covered.
- Provide secondary containment for hazardous materials and waste placed outdoors.
- Keep containers away from high traffic areas.
- Cover all containers and drums or place under shelter, if stored outdoors.

TARGETED FACILITIES AND OPERATIONS

- All Town-Owned Facilities within MS4
- All Fleet Vehicle and Equipment Operations

TARGETED CONSTITUENTS

- Sediment
- Nutrients
- Trash
- Metals
- Oil & Grease
- Organics
- Low Dissolved Oxygen

REFERENCE

- Westport Household Hazardous Waste Disposal at NEDT [Households Hazardous Products Collection Center](#)
[83 Gilmore Drive, Sutton, MA](#)

NOTES / SPECIFIC PROCEDURES:

- This BMPs may not be enough to meet all regulatory compliance obligations for specific materials, container types (e.g. UST/AST), or volumes of material, kept at municipal facilities. If there are specific regulatory compliance guidelines for a material, those guidelines should supersede this guidance.

BMP 4 - HAZARDOUS MATERIAL STORAGE

- MSDSs should be supplied for all stored materials at a specific facility, and in readily accessible location for all facility employees.
- Maintain a log inventory of materials stored at the facility.
- Chemicals should be kept in original labeled containers.
- Containers should not be overfilled.
- Store containers on pallets.
- Properly stack containers and drums.
- Storage areas should be enclosed.
- Minimize storage on-site.
- Keep storage areas clean and organized.
- Certain materials are accepted by NEDT Household Hazardous Products Collection Center for a fee. NEDT Household Hazardous Products Collection Center is located at 83 Gilmore Drive, Sutton, MA; operation hours are Tuesdays and Thursdays from 9:00 am to 4:00 pm or by appointment.
- Contractors should be responsible for delivery, storage and waste disposal practices.
- Containers should not be glass.
- Segregate reactive/incompatible materials (such as chlorine and ammonia).
- Place drip pans under container spouts.
- Install overfill protection on storage tanks/drums.
- Lock storage areas and provide warning signs.

INSPECTION PROCEDURES

- Check loading and unloading equipment regularly for leaks, including valves, pumps, flanges and connections.
- Look for dust or fumes during loading or unloading operations.
- Inspect storage areas regularly for leaks or spills.
- Conduct routine inspections and check for external corrosion of material containers.
- Check for structural failure, spills and overfills due to operator error, failure of piping system.
- Check for leaks or spills during pumping of liquids or gases from truck or rail car to a storage facility or vice versa.
- Visually inspect new tank or container installations for loose fittings, poor welding, and improper or poorly fitted gaskets.
- Inspect tank foundations, connections, coatings, and tank walls and piping system. Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system.
- Replace containers that are leaking, corroded, or otherwise deteriorating with ones in good condition. If the liquid chemicals are corrosive, containers made of compatible materials must be used instead of metal drums.
- Label new or secondary containers with the product name and hazards.

BMP 4 - HAZARDOUS MATERIAL STORAGE

MAINTENANCE PROCEDURES

- Conduct regular inspections and make repairs as necessary. The frequency of repairs will depend on the age of the facility.
- Check loading and unloading equipment regularly for leaks.
- Sweep area regularly with dry broom.
- Conduct major clean-out of loading and unloading area and any sumps annually in the Fall.
- Repair or replace any leaking/defective containers and replace labels as necessary.
- Maintain caps and/or covers on containers.
- Maintain aisle space for inspection of products/wastes.
- Train employees on proper procedures and when new hazardous materials are used.

BMP 4 - HAZARDOUS MATERIAL STORAGE

MAINTENANCE LOG BMP 4 - Hazardous Material Storage

Control Measure Maintenance Records (copy information below for each control measure)

Control Measure or Equipment:

Regular Maintenance Activities:

Regular Maintenance Schedule:

Date of Action:

Reason for Action: ☐ Regular Maintenance ☐ Discovery of Problem

If Problem,

- Description of Action Required:
- Date Control Measure Returned to Full Function:
- Justification for Extended Schedule, if applicable:

Notes:

Control Measure Maintenance Records (copy information below for each control measure)

Control Measure or Equipment:

Regular Maintenance Activities:

Regular Maintenance Schedule:

Date of Action:

Reason for Action: ☐ Regular Maintenance ☐ Discovery of Problem

If Problem,

- Description of Action Required:
- Date Control Measure Returned to Full Function:
- Justification for Extended Schedule, if applicable:

Notes:

BMP 5 - VEHICLE FUELING, MAINTENANCE AND STORAGE

DESCRIPTION

Vehicle repair and service (e.g. parts cleaning and fueling), replacement of fluids (e.g. oil change), and outdoor equipment storage and parking (dripping engines) can impact water quality if stormwater runoff from areas with these activities occurring on them becomes polluted by a variety of contaminants. Spills and leaks that occur during vehicle and equipment fueling can contribute hydrocarbons, oil and grease, as well as heavy metals to stormwater runoff. It only takes 1 gallon of oil to contaminate 1 million gallons of drinking water.

The main location for maintenance, storage, and fueling of Town vehicles is at the Highway Department Garage which is located outside of the MS4 area and is therefore not included in this manual.

POLLUTION PREVENTION APPROACH

It is important to properly store and discard vehicle fluids including oil, transmission fluid, antifreeze, and lubricants to prevent surface and groundwater contamination from spills or improper disposal.

Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable.

SUGGESTED BEST MANAGEMENT PRACTICES

General Practices

- Store fluids in labeled, plastic or metal container with a lid away from drains and catch basins.
- Place flammables in a fire safe cabinet.
- Place drip pans under leaking vehicles, valves, spigots, and pumps.
- Routinely check for leaking vehicles.
- Do not do any vehicle maintenance near storm drains.
- Vehicle maintenance should be done in covered facility.
- Install inlet catch basin equipped with a small sedimentation basin or grit chamber to remove large particles from stormwater in highly impervious areas.

Fueling

- Ensure that all fueling activities are not conducted near storm drains and dry wells or that procedures are in place to control any spills.
- Fuel storage tanks should be placed on impervious surfaces with no cracks or gaps; secondary containment is recommended.
- Provide barriers such as posts, guard rails, or bollards where tanks are exposed, to prevent collision damage with vehicles.
- Post signs at the fuel dispenser or fuel island warning vehicle owners/operators against "topping off" of vehicle fuel tanks.

TARGETED FACILITIES AND OPERATIONS

- Briggs Road Fire Station
- All Town-owned facilities storing vehicles and equipment within the MS4

TARGETED CONSTITUENTS

- Sediment
- Nutrients
- Trash
- Metals
- Oil & Grease
- Hydrocarbons

NOTES / SPECIFIC PROCEDURES:

(List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)

BMP 5 - VEHICLE FUELING, MAINTENANCE AND STORAGE

- Label drains within the facility boundary, by paint/stencil (or equivalent), to indicate whether they flow to an oil/water separator, directly to the sewer, to a storm drain or into a drywall.

Vehicle Maintenance

- Provide a designated area for vehicle maintenance on an impervious surface.
- Keep equipment clean; don't allow excessive build-up of oil and grease.
- If possible, perform all vehicle fluid removal or changing inside or under cover:
 - Keep a drip pan under the vehicle while you unclip hoses, unscrew filters, or remove other parts.
 - Promptly transfer used fluids to the proper waste or recycling drums. Don't leave drip pans or other open containers lying around.
 - Keep drip pans or containers under vehicles or equipment that might drip during repairs.
 - Do not change motor oil or perform equipment maintenance in non-appropriate areas.
- If temporary work is being conducted outside: Use a tarp, ground cloth, or drip pans beneath the vehicle or equipment to capture all spills and drips.
- If equipment (e.g., radiators, axles) is to be stored outdoors, oil and other fluids should be drained first. This is also applicable to vehicles being stored and not used on a regular basis.

Disposal

- Recycle or properly dispose of fluids.
- Dump full pans into 55-gallon drums.
- Dispose of debris including oil filters, oil cans, rags, and clean-up supplies.
- Do not dump vehicle fluids down storm drains.
- Interior floor drains should discharge to holding tanks or be sealed.

Used Oil

- Recycle used oil.
- Do not mix wastes with used oil.

INSPECTION PROCEDURES

- Identify locations of floor drains and catch basins and know where they discharge to. Floor drains should be connected to the sanitary sewer system and catch basins should be connected to the drainage system.
- Regularly inspect vehicles and equipment for leaks and repair immediately.
- Inspect fuel storage tank foundations, connections, coatings, and tank walls and piping system. Look for corrosion, leaks, cracks,

BMP 5 - VEHICLE FUELING, MAINTENANCE AND STORAGE

scratches, and other physical damage that may weaken the tank or container system. • Inspect fueling areas, catch basin inserts, containment areas, and drip pans on a regular schedule. MAINTENANCE PROCEDURES • Sweep the maintenance area on a regular basis, if it is paved, to collect loose particles. Wipe up spills with rags and other absorbent material immediately. Do not hose down the area to a storm drain. • Clean oil/water separators, sumps and on-site treatment/recycling units at appropriate intervals. • Keep ample supplies of spill cleanup materials onsite. Cleanup spills immediately. • Properly train employees on fueling and handling oil and waste oil.	
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BMP 6 - VEHICLE WASHING

DESCRIPTION

Wash water from vehicle and equipment cleaning activities performed outdoors or in areas where wash water flows onto the ground can contribute toxic hydrocarbons and other organic compounds, oils and greases, nutrients, phosphates, heavy metals, and suspended solids to stormwater runoff.

Many Town-owned vehicles are washed in the wash-bays located at the Highway Department Garage which is outside of the MS4 area. If the location of vehicle washing changes, this BMP will be updated.

POLLUTION PREVENTION APPROACH

If vehicle washing is necessary elsewhere, implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable.

SUGGESTED BEST MANAGEMENT PRACTICES

General

- Use biodegradable, phosphate-free detergents for washing vehicles as appropriate. Products include Simple Green® biodegradable car wash cleaner.
- Mark the area clearly as a wash area.
- Post signs stating that only washing is allowed in wash area and that discharges to the storm drain are prohibited. Facility employees should know where catch basins are.
- Provide a trash container in wash area.
- Those that use facility to wash vehicles (e.g., students) should be informed of proper washing protocols.

Vehicle and Equipment Cleaning

- Install sumps or drain lines to collect wash water or construction of a berm around the designated area and grading of the area to collect wash water as well as prevent stormwater run-on.
- Consider washing vehicles and equipment inside the building if washing/cleaning must occur on-site.
- If washing must occur on-site and outdoors:
 - Use designated paved wash areas. Designated wash areas must be well marked with signs indicating where and how washing must be done. This area must be covered or bermed to collect the wash water and graded to direct the wash water to a treatment or disposal facility.
 - Cover the wash area when not in use to prevent contact with rainwater.
- Use hoses with nozzles that automatically turn off when left unattended. Use high-pressure, low-volume sprays.

TARGETED FACILITIES AND OPERATIONS

- Town-owned facilities within the MS4

TARGETED CONSTITUENTS

- Sediment
- Nutrients
- Trash
- Metals
- Oil & Grease

NOTES / SPECIFIC PROCEDURES:

(List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)

BMP 6 - VEHICLE WASHING

- Perform pressure cleaning and steam cleaning off-site to avoid generating runoff with high pollutant concentrations. If done on-site, no pressure cleaning and steam cleaning should be done in areas designated as protection areas for public water supply.

Disposal

- Filter and recycle wash water if possible.
- If discharging to an oil/water separator, do not use detergents that disperse oil in wash water and make oil/water separators ineffective with oil passing to the sanitary sewer system. It is best to use high pressure water with no cleaning agent. If using a cleaner, it must be a non-emulsifying product such as QOR-110 ("Quick Oil Release").

INSPECTION PROCEDURES

- Inspect floor drain systems regularly – use only those that discharge to a sanitary sewer.
- Identify the need for cleaning of catch basins, oil/water separators.

MAINTENANCE PROCEDURES

- Maintain a figure of on-site storm drain locations to avoid discharges to the storm drainage system.
- Take precautions against excess use of and spillage of detergents.
- Clean vehicles only where wash-water can be captured for proper disposal.

BMP 7 - SPILL PREVENTION AND RESPONSE

DESCRIPTION

It is important to have a plan in place in the event a spill should occur, so contaminants do not mix with stormwater runoff. A spill prevention and response plan can be effective at reducing the risk of contamination to surface and groundwater contamination—but only with proper personnel training, the availability of cleanup supplies, and when management ensures procedures are followed.

POLLUTION PREVENTION APPROACH

- Create a well thought out and implemented spill prevention and response plan.
- Post a response checklist in any hazardous waste storage area with contact information (including emergency phone numbers), and spill containment procedures.
- Train personnel.
- Regularly update plan, checklists, and contact information.
- Regularly inspect spill potential areas.
- Facilities with aboveground storage tanks (ASTs) and underground storage tanks (USTs) greater than 1,320 gallons and 42,000 gallons must have SPCC Plans in place.

SPILL PREVENTION AND RESPONSE PLAN

An effective Spill Prevention and Response Plan may include one or more of the following:

- Description of the facilities, the address, activities and materials involved.
- Identification of key spill response personnel and hospital contacts.
- Identification of the potential spill areas or operations prone to spills/leaks.
- Identification of which areas should be or are bermed to contain spills/leaks.
- Facility map identifying the key locations of areas, activities, materials, structural BMPs, etc.
- Material handling procedures and safety measures for each kind of waste.
- Spill response procedures including:
 - Assessment of the site and potential impacts
 - Containment of the material
 - Notification of the proper personnel and evacuation procedures
 - Clean up of the site
 - Disposal of the waste material
 - Proper record keeping procedures
- Plan to protect all storm drains in the event of a spill.
- Descriptions of spill response equipment, including safety and cleanup equipment.

TARGETED FACILITIES AND OPERATIONS

- All Town-Owned Buildings within the MS4
- Street and Public Rights-of-Way within the MS4

TARGETED CONSTITUENTS

- Nutrients
- Metals
- Oil & Grease
- Hydrocarbons
- Organics

NOTES / SPECIFIC PROCEDURES:

(List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)

BMP 7 - SPILL PREVENTION AND RESPONSE

SUGGESTED BEST MANAGEMENT PRACTICES

Spill/Leak Prevention

- If possible, move material handling indoors, under cover, or away from storm drains or sensitive water bodies.
- Properly label all containers so that the contents are easily identifiable.
- Berm storage areas so that if a spill or leak occurs, the material is contained.
- Cover outside storage areas either with a permanent structure or with a seasonal one such as a tarp so that rain will not come into contact with the materials.
- Check containers (and any containment sumps) often for leaks and spills. Replace containers that are leaking, corroded, or otherwise deteriorating with containers in good condition. Collect all spilled liquids and properly dispose of them.
- Store, contain, and transfer liquid materials in such a manner that if the container is ruptured or the contents spilled, they will not discharge, flow or be washed into the storm drainage system, surface waters, or groundwater.
- Place drip pans or absorbent materials beneath all mounted taps and at all potential drip and spill locations during the filling and unloading of containers. Any collected liquids or soiled absorbent materials should be reused/recycled or properly disposed of.
- For Town programs that involve material transport, only transport the minimum amount of material needed for the daily activities and transfer materials between containers at a municipal yard where leaks and spills are easier to control.
- If paved, sweep and clean storage areas monthly, do not use water to hose down the area unless all the water will be collected and disposed of properly (e.g., in an oil/water separator).
- Install a spill control device (such as a tee section) in any catch basins that collect runoff from any storage areas if the materials stored are oil, gas, or other materials that separate from and float on water. This will allow for easier cleanup if a spill occurs.
- If necessary, protect catch basins while conducting field activities so that if a spill occurs, the material will be contained.
- Keep ample supplies of spill cleanup materials such as Speedi Dry and absorbent boom pads onsite.

Spill Clean Up

- Small non-hazardous spills:
 - Use a rag, damp cloth or absorbent materials for general cleanup of liquids.
 - Use brooms or shovels for the general cleanup of dry materials
 - If water is used, it must be collected and properly disposed of. The wash water cannot be allowed to enter the storm drain.
 - Dispose of any waste materials properly.

BMP 7 - SPILL PREVENTION AND RESPONSE

- Clean or dispose of any equipment used to clean up the spill properly.
- Large non-hazardous spills
 - Use absorbent materials for general cleanup of liquids.
 - Use brooms, shovels or street sweepers for the general y of dry materials.
 - If water is used, it must be collected and properly disposed of. The wash water cannot be allowed to enter the storm drain.
 - Dispose of any waste materials properly.
 - Clean or dispose of any equipment used to clean up the spill properly.
- For hazardous or very large spills, the Fire Department and/or a private cleanup contractor may need to be contacted to assess the situation and conduct the cleanup and disposal of the materials.
- Chemical cleanups of material can be achieved with the use of absorbents, gels, and foams.
- Remove the adsorbent materials promptly and dispose of according to regulations.
- If the spilled material is hazardous, then the used cleanup materials, including rags, are also hazardous and must be sent to a certified laundry facility or disposed of as hazardous waste.

Reporting

- Report any spills immediately to the identified key municipal spill response personnel.
- Report spills in accordance with applicable reporting laws. Spills that pose an immediate threat to human health or the environment must be reported immediately to the Fire Department at 911, the Town's Board of Health at 508-636-1015, and the Highway Department at 508-636-1020.
- Large spills including those over 10 gallons should be reported to the Fire Department at 911 and the Highway Department at 508-636-1020.
- Federal regulations require that any oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hour). An oil spill over 10 gallons that reaches a surface water, sewer, storm drain, ditch, or culvert leading thereto requires MassDEP notification at 508-792-7650.
- After the spill has been contained and cleaned up, a detailed report about the incident should be generated and kept on file. The incident may also be used in briefing staff about proper procedures.

INSPECTION PROCEDURES

- Inspect secondary containment systems and oil/water separators periodically to identify any operational problems.
- Inspect containers for leaks, areas near storm receiver inlets and outlets, and floor drains for indications of spills.

BMP 7 - SPILL PREVENTION AND RESPONSE

MAINTENANCE PROCEDURES • Pump out oil/water separators as needed. • Protect drains with oil absorbent materials. • Clean out receivers on regular schedule. • Remove spilled salt from roadway salting procedures.	
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BMP 8 – LAWN AND GROUNDS MAINTENANCE

DESCRIPTION Nutrient loads generated by suburban lawns as well as municipal properties can be significant, and recent research has shown that lawns produce more surface runoff than previously thought. Pesticide runoff can contribute pollutants that contaminate drinking water supplies and are toxic to both humans and aquatic organisms. POLLUTION PREVENTION APPROACH It is important to reduce pesticides, herbicides, fertilizers, and lawn debris from entering surface and ground water supplies by washing and cleaning up with as little water as possible, following good landscape management practices, preventing and cleaning up spills immediately, keeping debris from entering the storm drains, and maintaining the stormwater drainage system. Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable. SUGGESTED BEST MANAGEMENT PRACTICES <i>Landscaping Activities</i> • Do not apply any chemicals (insecticide, herbicide, or fertilizer) directly to surface waters, unless the application is approved and permitted by MassDEP • Use mulch or other erosion control measures on exposed soils. • Check irrigation schedules so pesticides will not be washed away and to minimize non-stormwater discharge. • Place temporarily stockpiled material away from watercourses and drain inlets, and berm or cover stockpiles to prevent material releases to the stormwater drainage system. • Use hand or mechanical weeding where practical. • Employ mowing techniques to maintain a healthy lawn and minimize chemical use—no more than 1" of lawn should be removed from each mowing (grasses kept at 2.5" to 3.0" high are more heat resistant than close-cropped grass). • Keep mower blades sharp and leave clippings in place after mowing. • Water plants in the early morning. <i>Fertilizer and Pesticide Management</i> • Follow manufacturers' recommendations and label directions. • Do not apply insecticides within 100 feet of surface waters such as lakes, ponds, wetlands, and streams. • Use fewer toxic pesticides that will do the job, whenever possible and use the minimum amount needed. Avoid use of copper-based pesticides if possible. • Do not use pesticides/fertilizers if rain is expected.	TARGETED FACILITIES AND OPERATIONS • All Town-Owned Facilities with lawns and grounds within the MS4 • Street and Public Rights-of-Way within the MS4 TARGETED CONSTITUENTS • Sediment • Nutrients • Trash • Metals • Bacteria • Oil and Grease • Organics • Low Dissolved Oxygen REFERENCE • Westport River Watershed Alliance – <i>Clean Water Starts at Home</i> NOTES / SPECIFIC PROCEDURES: (List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)
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BMP 8 – LAWN AND GROUNDS MAINTENANCE

- Do not mix or prepare pesticides/fertilizers for application near storm drains.
- Perform a soil analyses prior to applying fertilizers to determine the appropriate nutrients required for soil conditions.
- Calibrate fertilizer distributors to avoid excessive application.
- Apply pesticides/fertilizers only when wind speeds are low.
- Work fertilizers into the soil rather than dumping or broadcasting them onto the surface.
- Irrigate slowly to prevent runoff and then only as much as is needed.
- Dispose of empty pesticide/fertilizer containers according to the instructions on the container label.
- Use up the pesticides. Rinse containers and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Implement storage requirements for pesticide products with guidance from the local Fire Department and the Massachusetts Department of Agricultural Resources.
- Provide secondary containment for pesticides.

Debris Removal

- Use yard waste as mulch and topsoil.
- Compost or mulch yard waste.
- Sweep up yard debris instead of hosing down.
- Clean pavement and sidewalk if fertilizer/pesticide is spilled on these surfaces before applying irrigation water.
- Do not leave yard waste in the street or sweep it into storm drains or streams.

INSPECTION PROCEDURES

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring.
- Minimize excess watering, and repair leaks in the irrigation system as soon as they are observed.
- Inspect and remove accumulated debris from grounds.
- Routinely monitor lawns to identify problems during their early stages.
- Identify nutrient/water needs of plants.
- Inspect for problems by testing soils.

MAINTENANCE PROCEDURES

- Sweep paved areas regularly to collect loose particles.
- Wipe up spills with rags and other absorbent material immediately.
- Do not hose down the area to a storm drain.
- Maintain sharp mower blades

BMP 9 - STREET AND PARKING LOT SWEEPING

DESCRIPTION

Street and parking lot sweeping includes self-propelled equipment to remove sediment from paved surfaces that can enter storm drains or receiving waters. Sweeping is most effective for removing coarse particles, leaves, and trash. Regularly sweeping reduces catch basin cleaning. The MS4 Permit requires that the Town sweep All streets except for rural uncurbed roads with no catch basins or high-speed limited access highways at least once per year in the Spring. shall be swept and/or cleaned a minimum of once per year in the spring

POLLUTION PREVENTION APPROACH

Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable.

SUGGESTED BEST MANAGEMENT PRACTICES

- Adhere to the Town's cleaning schedule – as needed.
- Town parking lots should be checked regularly by Facility personnel and swept when needed.
- Any visible sediment should be swept up (including sand/salt mixtures and granular material).
- Control the number of points where vehicles leave the Facilities to allow sweeping to be focused on certain areas in parking lots.
- Sweep up the smallest particles feasible.
- Sweep in pattern to keep spilled material from being pushed into catch basins.
- Before sweeping, manually rake sand from any turf areas on surfaces to be swept.
- Use hand-held tools to assist with mechanical equipment.
- If possible, recycle Fall leaf sweepings by composting.
- The Highway Department should maintain a log or schedule of sweeping activities they conduct. Information should include mileage, number of sweepings removed, and heavily sedimented areas for street rights-of-way.
- Facilities should maintain a log or schedule for their facility parking lots. Information should include number of sweepings removed, heavily sedimented catch basins, and date of sweeping activities. By recording heavily sedimented areas, prioritizations can be made to sweep these areas or clean catch basins more frequently.

INSPECTION PROCEDURES

- Regularly inspect streets and Town-owned parking lots within the MS4 for debris.

MAINTENANCE PROCEDURES

- Adjust broom frequently to maximize efficiency of sweeping operations.
- After sweeping is finished, properly dispose of sweeper wastes.

TARGETED FACILITIES AND OPERATIONS

- All Town-Owned Facilities within the MS4
- Street Rights-of-Way within the MS4
- Highway Department Services

TARGETED CONSTITUENTS

- Sediment
- Nutrients
- Salt
- Trash
- Metals
- Oil & Grease
- Organics

REFERENCE

- [Reuse and Disposal of Street Sweepings, MassDEP Policy # BAW-18-001](#)

NOTES / SPECIFIC PROCEDURES:

(List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)

BMP 9 - STREET AND PARKING LOT SWEEPING

- | | |
|---|--|
| <ul style="list-style-type: none">• Do not use kick brooms or sweeper attachments that tend to spread dirt.• When unloading sweeper, make sure there is no dust or sediment release.• Inspect sweepers to check that they are properly maintained and repaired. | |
|---|--|

BMP 9 - STREET AND PARKING LOT SWEEPING

Street Sweeping & Parking Lot Maintenance Activity Log

[illegible]

BMP 9 - STREET AND PARKING LOT SWEEPING

MAINTENANCE LOG BMP 9 - Street & Parking Lot Sweeping

Control Measure Maintenance Records (copy information below for each control measure)

Control Measure or Equipment:

Regular Maintenance Activities:

Regular Maintenance Schedule:

Date of Action:

Reason for Action: ☐ Regular Maintenance ☐ Discovery of Problem

If Problem,

- Description of Action Required:
- Date Control Measure Returned to Full Function:
- Justification for Extended Schedule, if applicable:

Notes:

Control Measure Maintenance Records (copy information below for each control measure)

Control Measure or Equipment:

Regular Maintenance Activities:

Regular Maintenance Schedule:

Date of Action:

Reason for Action: ☐ Regular Maintenance ☐ Discovery of Problem

If Problem,

- Description of Action Required:
- Date Control Measure Returned to Full Function:
- Justification for Extended Schedule, if applicable:

Notes:

BMP 10 - CATCH BASIN CLEANING

DESCRIPTION

It is important to remove sediments from catch basins that can have a high concentration of pollutants including metals and hydrocarbons. These sediments can clog downstream drainage systems and transport pollutants to nearby water bodies.

POLLUTION PREVENTION APPROACH

Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable.

SUGGESTED BEST MANAGEMENT PRACTICES

- Prioritize inspection and maintenance for catch basins located near construction activities.
- Ensure that no catch basin at any time will be more than 50 percent full
- Document catch basins with sumps more than 50 percent full during two consecutive inspections/cleanings
- US EPA recommends cleaning basins when solids reach one-third the depth from the basin bottom to the invert of the lowest pipe into or out of the basin.
- Target cleaning for early Spring or late Fall.
- Clean manually or with equipment (i.e., bucket loaders).
- Properly dispose of catch basin material or store until contractor picks up cleanings (MassDEP and US EPA requires chemical analysis to determine if substance is hazardous waste).
- Repair damaged catch basins including outlet traps.
- Install hoods if catch basins do not have them.
- Inform employees that catch basins are part of the stormwater drainage system and not the sanitary sewer system.
- The DPW should maintain a log of cleaning activities. Information should include the amount of cleanings removed (volume or weight) and areas with heavily filled basins.
- Facilities should maintain a log of cleaning activities on their parking lots. Information should include amount of cleanings removed, heavily filled catch basins, and dates cleaned by the Highway Department.

INSPECTION PROCEDURES

- Inspect catch basins, grates, and ditches at least once per year (best times are before the start and before the end of the rainy season).
- Inspections should be incorporated during routine cleaning, as part of reconstruction contracts, and through requests made by residents or other Town departments.

TARGETED FACILITIES AND OPERATIONS

- All Town-Owned Facilities within the MS4
- Street Rights-of-Way within the MS4
- Disposal of Removed Solids

TARGETED CONSTITUENTS

- Sediment
- Nutrients
- Trash
- Metals
- Oil & Grease
- Organics

REFERENCE

- [MassDEP Management of Catch Basin Cleanings](#)
- Appendix B: Catch Basin Cleaning Program

NOTES / SPECIFIC PROCEDURES:

(List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)

BMP 10 - CATCH BASIN CLEANING

MAINTENANCE PROCEDURES

- Clean catch basins based on the cleaning schedule or as needed. Catch basins should be checked for sediment levels in sump. Those in areas that accumulate a significant amount of sediment should be cleaned more frequently.
- During catch basin repairs, any hoods missing should be replaced.

BMP 10 - CATCH BASIN CLEANING

Catch Basin Maintenance Log

[illegible]

CATCH BASIN INSPECTION FIELD SHEET

CATCH BASIN INSPECTION SHEETS

Background Data

City: Westport, MA	Street:	Catch Basin ID: CB-
Owner: ☐ City ☐ State ☐ Private ☐ Other: _____	Nearest House/Utility Pole #:	
Today's date:	Time (Military):	
Investigators:	Form completed by:	
A: Depth Rim to Lowest Outlet Invert (in.):	B: Depth Rim to Top of Sediment (Before Cleaning) (in.):	
C: Depth Rim to Bottom of Sump after Cleaning (in.):	D: Depth of Sump = A – C (in):	Catch Basin Sump % Full = (C-B) / D:
Land Use in Drainage Area (Check all that apply): ☐ Industrial ☐ Urban Residential ☐ Suburban Residential ☐ Commercial ☐ Ongoing Construction Site ☐ Open Space/Wooded ☐ Institutional Other: _____ Known Industries: _____		
Notes:		

CATCH BASIN INSPECTION FIELD SHEET

Visual/Sensory Observations of Potential Illicit Discharge?

Are Any Visual/Sensory Observations Present? ☐ Yes ☐ No *(If No, Skip Entire Section)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Flow	☐	Flow Source:	☐ 1 – Trickle	☐ 2 – Moderate	☐ 3 – Substantial
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint color	☐ 2 – Moderately visible	☐ 3 – Clearly visible
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

BMP 11 - PET WASTE AND LITTER / WATERFOWL MANAGEMENT

DESCRIPTION

Pet droppings have been found to be important contributors of pollution in surface waterbodies where there are high populations of dogs. Studies have shown that a typical dog dropping can have as many as 3 billion fecal coliform and can carry many diseases that could make water unsafe for contact.

Waterfowl waste not only raises bacteria concentrations to levels unsafe for water contact recreation, but it is also a source of nutrients that allow excessive growth of algae and rooted aquatic plants in receiving waters. Feeding of waterfowl by streams and ponds encourages waterfowl congregation in those areas.

POLLUTION PREVENTION APPROACH

Provide pet waste and waterfowl management awareness and education programs with the following elements:

- Encouraging residents to clean up after their pets and to properly dispose of such wastes that may be deposited in their yards, streets and parks.
- Posting signs in local parks describing the problem and urging cleanup and proper disposal of pet wastes.
- Discourage feeding of waterfowl at local parks, particularly where adjacent to waterways. Produce educational material and/or post signage as appropriate.
- Continue maintaining pet waste stations at all Town Parks.
- Provide pet waste information to dog owners during annual pet license renewal.

SUGGESTED BEST MANAGEMENT PRACTICES

- Put waste in the trash.
- Restrict dog access to areas of parks where swales, steep slopes and streams are.
- Provide vegetated buffers of prescribed widths between dog parks and waterways, swales, storm drain inlets, gullies, and steep slopes.
- Incorporate public outreach elements like signage and informational brochures into and around parks.
- Continue to implement and maintain pet waste stations in Town owned Parks based on park inspections.

INSPECTION PROCEDURES

- Routinely inspect common dog walking areas for pet waste.
- Evaluate pet waste/water fowl waste management and document targeted effort to address "problem" areas.

MAINTENANCE PROCEDURES

- Remove and properly dispose of pet waste.

TARGETED FACILITIES AND OPERATIONS

- All Town-Owned Parks, Playgrounds, and Reservations within the MS4
- Sidewalk and Street Rights-of-Way within the MS4
- Areas surrounding waterbodies with bacteria/pathogen impairments: Bread and Cheese Brook, East Branch of the Westport River, Snell Creek, and Kirby Brook

TARGETED CONSTITUENTS

- Bacteria
- Nutrients
- Organics
- Low Dissolved Oxygen

Reference

- Westport River Watershed Alliance – *The Shocking Truth About Your Dog's Poop*
- Appendix A: Parks and Open Space Operations and Maintenance Procedures

NOTES / SPECIFIC PROCEDURES:

(List identified problem or priority areas, document changes in protocol, or unique conditions along with date(s) of implementation and personnel initials)

BMP 12 – MOSQUITO CONTROL

DESCRIPTION

Standing water can facilitate the reproduction of mosquitos that spread diseases such as eastern equine encephalitis (EEE) and West Nile virus.

POLLUTION PREVENTION APPROACH

Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable.

Identify ways to improve locations with standing water to reduce the need for additional larvicide applications.

SUGGESTED BEST MANAGEMENT PRACTICES

- Adhere to manufacturer's application standard operating procedures
- Design new catch basins to limit the potential for standing water and mosquito reproduction.
- Minimize installation of BMPs that will collect stormwater for only brief periods then stagnate until the next event.
- Maintain and cleanout sediment traps and basins and all drainage structures to allow for positive water drainage.

INSPECTION PROCEDURES

- Inspecting stormwater treatment structures for standing water and mosquito breeding locations.
- Identify additional maintenance needs to prevent water pooling and promote positive water drainage

MAINTENANCE PROCEDURES

- Eliminate unnecessary locations with standing water in stormwater treatment structures.
- Complete routine maintenance to ensure excess vegetation or sediment are not impeding water drainage.

TARGETED FACILITIES AND OPERATIONS

- Select Town-owned catch basins within the MS4.

TARGETED CONSTITUENTS

- Sediment
- Stagnant water

REFERENCE

Minnesota Stormwater Manual
– *Mosquito Control and Stormwater Management*

BMP 13 – WASTE MANAGEMENT

DESCRIPTION

Improper storage and handling of solid wastes can allow toxic compounds, oils and greases, heavy metals, nutrients, suspended solids, and other pollutants to enter stormwater runoff.

POLLUTION PREVENTION APPROACH

The discharge of pollutants to stormwater from waste handling and disposal can be prevented and reduced by tracking waste generation, storage, and disposal; reducing waste generation and disposal through source reduction, re-use, and recycling; and preventing run-on and runoff.

Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable.

SUGGESTED BEST MANAGEMENT PRACTICES

General

- Cover storage containers with leak proof lids or some other means. If waste is not in containers, cover all waste piles (plastic tarps are acceptable coverage) and prevent stormwater run-on and runoff with a berm. The waste containers or piles must be covered except when in use.
- Use drip pans or absorbent materials whenever grease containers are emptied by vacuum trucks or other means. Grease cannot be left on the ground. Collected grease must be properly disposed of as garbage.
- Sweep and clean the storage area regularly. If it is paved, do not hose down the area to a storm drain.
- Dispose of rinse and wash water from cleaning waste containers into a sanitary sewer if allowed by the local sewer authority. Do not discharge wash water to the street or storm drain.
- Transfer waste from damaged containers into safe containers.
- Take special care when loading or unloading wastes to minimize losses.

Controlling Litter

- Post “No Littering” signs and enforce anti-litter laws.
- Provide a sufficient number of litter receptacles for the facility.
- Clean out and cover litter receptacles frequently to prevent spillage.

Waste Collection

- Keep waste collection areas clean before contractor picks up.
- Inspect solid waste containers for structural damage or leaks regularly. Repair or replace damaged containers as necessary.
- Secure solid waste containers; containers must be closed tightly when not in use.
- Place waste containers under cover if possible.
- Do not fill waste containers with washout water or any other liquid.
- Ensure that only appropriate solid wastes are added to the solid waste container. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be disposed of in solid waste containers (see chemical/ hazardous waste collection section below).

TARGETED FACILITIES AND OPERATIONS

- All Town-Owned Facilities within the MS4

TARGETED CONSTITUENTS

- Sediment
- Nutrients
- Trash
- Metals
- Oil & Grease
- Organics
- Low Dissolved Oxygen

BMP 13 – WASTE MANAGEMENT

• Do not mix wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal. <i>Good Housekeeping</i> • Use the entire product before disposing of the container. • Keep the waste management area clean at all times by sweeping and cleaning up spills immediately. • Use dry methods when possible (e.g. sweeping, use of absorbents) when cleaning around restaurant/food handling dumpster areas. If water must be used after sweeping/using absorbents, collect water and discharge through grease interceptor to the sewer. • Stencil storm drains on the facility's property with prohibitive message regarding waste disposal. <i>Chemical/Hazardous Wastes</i> • Select designated hazardous waste collection areas on-site. • Store hazardous materials and wastes in covered containers protected from vandalism, and in compliance with fire and hazardous waste codes. • Place hazardous waste containers in secondary containment. • Make sure that hazardous waste is collected, removed, and disposed of only at authorized disposal areas. <i>Run-on/Runoff Prevention</i> • Prevent stormwater run-on from entering the waste management area by enclosing the area or building a berm around the area. • Prevent the waste materials from directly contacting rain. • Cover waste piles with temporary covering material such as reinforced tarpaulin, polyethylene, polyurethane, polypropylene, or hypalon. • Cover the area with a permanent roof if feasible. • Cover dumpsters to prevent rain from washing waste out of holes or cracks in the bottom of the dumpster. • Move the activity indoor after ensuring all safety concerns such as fire hazard and ventilation are addressed. INSPECTION PROCEDURES • Inspect and replace faulty pumps or hoses regularly to minimize the potential of releases and spills. • Check waste management areas for leaking containers or spills. • Repair leaking equipment including valves, lines, seals, or pumps promptly. MAINTENANCE PROCEDURES • Maintain equipment for material tracking program.	
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BMP 14 – BUILDING OPERATIONS

DESCRIPTION Typical building operations include cleaning operations such as outside pressure washing of buildup and repairs. POLLUTION PREVENTION APPROACH Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable. SUGGESTED BEST MANAGEMENT PRACTICES <i>Pressure Washing of Buildings, Rooftops, and Other Large Objects</i> • In situations where soaps or detergents are used and the surrounding area is paved, pressure washers must use a waste/water collection device that enables collection of wash water and associated solids. A sump pump, wet vacuum or similarly effective device must be used to collect the runoff and loose materials. The collected runoff and solids must be disposed of properly. • If soaps or detergents are not used, and the surrounding area is paved, wash water runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff. • If you are pressure washing on a grassed area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the grass and not drain to pavement. Ensure that this practice does not kill grass. <i>Building Repair, Remodeling, and Construction</i> • Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain. • Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily. • Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning. • Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer drain. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal. Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at the beginning of the work day, and accumulated dirty runoff and solids must be collected and disposed of before removing the containment device(s) at the end of the work day. • If you need to de-water an excavation site, you may need to filter the water before discharging to a catch basin or off-site. In which case you	<u>TARGETED FACILITIES AND OPERATIONS</u> • All Town-Owned Facilities within the MS4 <u>TARGETED CONSTITUENTS</u> • Sediment • Nutrients • Trash • Metals • Oil & Grease • Organics • Low Dissolved Oxygen
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BMP 14 – BUILDING OPERATIONS

should direct the water through hay bales and filter fabric or use other sediment filters or traps. • Store toxic material under cover with secondary containment during precipitation events and when not in use. A cover would include tarps or other temporary cover material. INSPECTION PROCEDURES • Sweep paved areas regularly to collect loose particles and wipe up spills with rags and other absorbent material immediately; do not hose down the area to a storm drain.	
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BMP 15 – OIL/WATER SEPARATORS

DESCRIPTION Oil/Water separators/interceptors are important to prevent gasoline, oil or sand from getting into the drainage systems. In the following places they are always required • Repair garages where motor vehicles are serviced and repaired, and where floor drainage is provided • Commercial motor vehicle washing facilities • Gasoline Stations with grease racks, grease pits or wash racks • Facilities which have oily and/or flammable waste as a result of manufacturing, storage, repair or testing • Public storage garages with floor drainage • Any place where solid, oil, gasoline or other volatile liquids can enter the drainage system POLLUTION PREVENTION APPROACH Implement applicable suggested Best Management Practices to reduce the influx of pollutants to the stormwater drainage system to the maximum extent practicable. SUGGESTED BEST MANAGEMENT PRACTICES • Frequent sweeping of areas discharging to the separator, depending on use. • Target cleaning for early Spring or late Fall. • Use oil absorbent materials on any liquid spills, such as oil or hydraulic fluid leaks. • The facility manager should maintain a log of cleaning activities. Information should include frequency of cleanings. • It is important to remove sediments from garage floors that can have a high concentration of pollutants including metals and hydrocarbons. These sediments can clog downstream drainage systems and transport pollutants to nearby water bodies INSPECTION PROCEDURES • Oil/Water Separators/interceptors should be inspected twice per year (best times are before the start and before the end of the rainy season). MAINTENANCE PROCEDURES • Clean Oil/Water Separators when necessary. • Drains and grates should be free of debris or sediments. • Dipping pans should be used under vehicles or spigots. • Spill absorbent material should be ready for use. • Floors should be kept clean and spill materials should be cleaned up in a timely manner.	<u>TARGETED FACILITIES AND OPERATIONS</u> • All Town-Owned Facilities within the MS4 • Street Rights-of-Way within the MS4 • Disposal of Removed Solids <u>TARGETED CONSTITUENTS</u> • Sediment • Nutrients • Trash • Metals • Oil & Grease • Organics • Low Dissolved Oxygen
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BMP 16 – BIO-RETENTION

DESCRIPTION

Bio-retention areas allow for runoff to be filtered through a soil medium that removes different pollutants before the runoff enters the stormwater drainage system. The Bio-retention facility needs to be maintained frequently for the first year and then annually after that.

Rain gardens (less complex bioretention areas) are located at Westport Public School Buildings.

POLLUTION PREVENTION APPROACH

The suggested Best Management Practices should be used to reduce the influx of pollutants into the storm water drainage system and increase the longevity of the bio-retention basin

SUGGESTED BEST MANAGEMENT PRACTICES

- It is recommended that the area be cleaned once in the early spring and once in the late fall.
- The area should be cleaned with hand tools, rakes, shovels and light construction equipment. Vehicles should not be driven on the bio-retention area.
- All damage should be repaired and mulch areas that are exposed should be fixed.
- Facilities and personal in-charge of the bio-retention area should keep inspectional logs and cleaning activity logs.

INSPECTION PROCEDURES

- Bio-retention areas should be inspected after every rainfall over a half inch of rainfall for the first year.
- Inspection of the bio-retention area should be daily for the first month to ensure the area is taking properly.
- The bio-retention area should be inspected once a month during the growing season and once in the beginning of Spring and at the end of Fall.

MAINTENANCE PROCEDURES

Bio-retention areas should be kept free of debris and weeds to ensure a properly working infiltration and stormwater management area. Routine maintenance should be done year round and does not require much effort if area is well kept.

After planting:

- The area should be watered daily for two weeks unless significant rainfall has occurred
- Inspect the bio-retention area for any signs of erosion.

TARGETED FACILITIES AND OPERATIONS

- All Town-owned property within the MS4
- Town-owned parking lots within the MS4
- Street Rights-of-Way within the MS4
- Westport Public Schools

TARGETED CONSTITUENTS

- Sediment
- Nutrients
- Trash
- Metals
- Oil & Grease
- Organics
- Low Dissolved Oxygen

REFERENCE

- University of Minnesota- Rain gardens and Maintenance
- "Vermont Rain Garden Manual"
- Westport LID Guidance (February, 2012
- [Westport River Watershed Alliance, Water Quality Improvements](#)

BMP 16 – BIO-RETENTION

- Re-mulch any area where bare soil has become exposed or mulch layer has been significantly reduced.
- If necessary use stones to stabilize drainage paths within the bio-retention area. If it is possible use a wetland grass mixture if the area will hold the seeds

After first rainfall:

- The bio-retention area should be free of standing water within 72-hours of rainfall. No standing water should be visible within the bio-retention area. If the area has not drained continue to monitor, soil remediation or an improved under drain system may be needed.
- Ensure that mulch has not moved and settled in clumps.
- If applicable, inspect all inlets and outlet structure to ensure that runoff has drained properly with the basin.

One month of planting:

- Inspect all plants to ensure that they are free of pest and diseases; do not use any toxic pesticide or other toxic methods to remove pest and diseases. The toxic substance will enter the ground and the storm sewer system.
- Make repairs to all areas in and around the bio-retention area that appear to be worn down.
- Add mulch to areas that are bare or insufficient mulch coverage exist.
- Remove any weeds from the area, ensure that all root system from the weeds have been destroyed. Do not use any toxic substances to remove weeds.

The following seasons:

- Every 6 months or in spring and fall, whichever comes first, add 1" of mulch.
- Once every 2 to 3 years, in the spring, apply a new 3" layer of mulch in the entire bio-retention garden.
- If plants are showing signs of pest, disease or are growing poorly, remove the plant(s) and replace. Inspect the plants surrounding the area to ensure that there is not a greater problem.
- During times of extended drought look for features of stress, wilting, spotted brown leaves, loss of leaves, poor plant health, etc.)
- Area should be watered, when needed, in the early morning when maximum absorption.
- Prune excess growth annually or more often. Trimmed material may be recycled in with the mulch.
- Weed the area regularly; however the area should not be mowed.

FACILITY INSPECTION LOG – STORMWATER POLLUTION PREVENTION

General Information			
Facility Name			
Date of Inspection		Start/End Time	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Weather Information			
Weather at time of this inspection?			
☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds ☐ Other: Temperature:			
Have any previously unidentified discharges of pollutants occurred since the last inspection? ☐ Yes ☐ No			
If yes, describe:			
Are there any discharges occurring at the time of inspection? ☐ Yes ☐ No			
If yes, describe:			

Control Measures: Number the structural storm water control measures 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		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
2		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

FACILITY INSPECTION LOG – STORMWATER POLLUTION PREVENTION

	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)
3		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
4		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
5		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
6		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
7		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
8		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
9		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
10		☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

FACILITY INSPECTION LOG – STORMWATER POLLUTION PREVENTION

Areas of Materials or Activities exposed to storm water

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	
2	Equipment operations and maintenance areas	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	
3	Fueling areas	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	
4	Outdoor vehicle and equipment washing areas	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	
5	Waste handling and disposal areas	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	
6	Erodible areas/construction	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	
7	Non-storm water/ illicit connections	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	

FACILITY INSPECTION LOG – STORMWATER POLLUTION PREVENTION

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
8	Salt storage piles or pile containing salt	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	
9	Dust generation and vehicle tracking	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	
10	(Other)	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	

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

Additional Control Measures: Describe any additional control measures needed to comply with the permit requirements:

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