

Everett, Massachusetts

Stormwater Pollution Prevention Plan (SWPPP)

June 2020

**DEPARTMENT OF PUBLIC WORKS
19 NORMAN STREET**



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Stormwater Pollution Prevention Plan (SWPPP)

Everett, Massachusetts

DEPARTMENT OF PUBLIC WORKS 19 NORMAN STREET

Prepared by: BETA GROUP, INC.
Prepared for: City of Everett

June 2020

SWPPP Certification

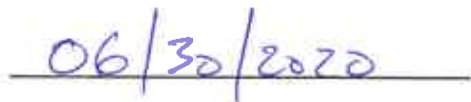
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Authorized Official



Title



Date

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INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been developed by BETA Group, Inc. (BETA) on behalf of the City of Everett (the City), Massachusetts, Department of Public Works (DPW) to address the requirements of the United States Environmental Protection Agency (EPA) 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 PERMIT. This SWPPP is outlined as follows:

1. *Pollution Prevention Team*
2. *Description of Facility*
3. *Identification of Stormwater Controls*
4. *Management Practices*
5. *Site Inspections*

1.0 POLLUTION PREVENTION TEAM

The Everett DPW has assigned a Pollution Prevention Team (PPT) for this SWPPP. PPT team members and contact information are summarized below. The role of the PPT is to develop, implement, maintain, and revise as necessary, this SWPPP. The PPT also has the following responsibilities:

Name:	Gregory St. Louis, P.E.	Title:	Executive Director	Department	Department of Public Works
Phone:	617.944.0247	Email:	greg.stlouis@ci.everett.ma.us		
Responsibilities: MS4 Coordinator, IDDE Program, Good Housekeeping, Reporting & Record Keeping					

Name:	Michael Hornig, PE	Title:	Associate	Company	BETA Group
Phone:	781.255.1982	Email:	MHornig@beta-inc.com		
Responsibilities: MS4 Consultant to the City					

2.0 DESCRIPTION OF FACILITY

2.1 FACILITY SUMMARY

The DPW facility is located at 19 Norman Street in Everett, Massachusetts (the site) and is owned and operated by the City. Information provided in this, and the following sections is based on observations made during a site visit on April 14, 2020. During the site visit, BETA personnel were escorted by Mr. Greg St. Louis, Executive Director of Public Works and Engineering for the City, who provided a general overview and layout of facility operations, activities performed and material storage information.

The site consists of an irregular-shaped parcel that includes 4.02 acres of land improved with three buildings: a main building used for administration and vehicle maintenance and storage; a building used by the Water Department for administration and vehicle and supply storage; and a salt storage shed. Areas at the site not covered by buildings are paved. The site's location is depicted on the **Site Map** included in **Appendix A**. Pertinent site details, including layout, location of any stormwater outfalls, receiving waters and structural controls, are depicted on the **Site Map**.

2.2 SITE MAP

The facility consists of approximately 4 acres and contains the structures and other features identified above, shown on the **Site Map** and described in detail in the following sections.

Components shown on the site map include as applicable:

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

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2.2.1 INVENTORY OF BUILDING

The site includes the following buildings and structures and their use:

Table 2.1 - Inventory of Buildings

No.	Use	Floor Drain
1	Administration/Vehicle Storage and Maintenance	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
2	Water Department Administration and Vehicle Storage	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
3	Salt Storage	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N

2.2.2 PARKING AREAS

Employee parking is provided in the area adjacent to the south of Building 1.

2.2.3 INVENTORY OF VEHICLES & EQUIPMENT

The City maintains an inventory of vehicles and heavy equipment. A copy of the inventory is included in **Appendix B**.

2.3 SITE DRAINAGE & RECEIVING WATERS

Stormwater runoff at the site is collected via a series of on-site catchbasins where it is conveyed via subsurface piping along Norman Street to Kelvin Street, then south toward the Revere Beach Parkway. Stormwater runoff from the site ultimately outfalls to wetlands located approximately 0.25 miles southwest of the site. Floor drains located in Buildings 1 and 2 discharge to a water quality unit (oil/water/grit separator) which discharges to the sanitary sewer. Surface runoff flow direction, drainage structures and features are indicated on the **Site Map**.

2.4 POTENTIAL POLLUTANT SOURCES

An inventory of activities performed at the site and associated potential stormwater pollutants is provided in **Appendix C**. Locations of activities and potential stormwater pollutants are indicated in on the **Site Map**.

3.0 STORMWATER CONTROLS

Structural stormwater controls including drainage structures, pipes and conveyances; stormwater best management practices (BMPs) and outfall(s) are shown on the **Site Map**. These controls, used and maintained in accordance with good engineering practices, manufacturer's specifications and management practices detailed in **Section 4.0** below, address the quality of discharges from the site.

4.0 MANAGEMENT PRACTICES

The following sections summarize the management practices (non-structural stormwater controls) to be implemented at the site to mitigate the potential for potential pollutants to impact stormwater.

4.1 MINIMIZE OR PREVENT EXPOSURE

To the extent practicable, either locate materials and activities inside or protect them with storm-resistant coverings in order to prevent exposure to rain, snow, snowmelt and runoff (although significant enlargement of impervious surface area is not recommended). Materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged directly or indirectly to surface waters or to the MS4 or if discharges are authorized under another NPDES permit.

Fueling Areas

Vehicle fueling activities can result in gasoline and diesel fuel entering the storm drain system. Spills can occur by topping off fuel tanks and during deliveries. If possible, fueling areas should be placed under cover in order to minimize exposure. Best management practices for fueling areas include the following:

- Deliveries to fuel tanks and fueling of vehicles and equipment should occur on impervious surfaces with proper containment. Spill response kits should be readily accessible at fueling and maintenance areas.
- Fuel dispenser containment features (grooves in concrete pad perimeter) should be kept free of debris.
- Fueling areas owned or operated by the municipality should be covered.

Vehicle Storage¹

Rainfall on vehicles and equipment storage areas has the potential to collect pollutants and result in high loads of nutrients, metals, and hydrocarbons in stormwater runoff. To prevent this, best management practices include the following:

- All vehicles, equipment and hazardous waste storage containers should receive regular maintenance and be inspected for leaks or defective parts.
- Vehicles and equipment should be stored on a covered slab or within a building with a common drain that discharges to an oil/water separator.
- Outdoor storage of vehicles and equipment should not occur in areas that drain to the storm drain system unless adequate devices are in place to remove oil, sediment and other pollutants.
- Vehicles with fluid leaks should be stored indoors or containment be provided until repaired.

Vehicle and Equipment Maintenance¹

Vehicle and equipment maintenance shall be conducted in a manor to reduce the discharge of pollutants by following these best management practices:

¹ Buildings 2 and 3 are used for vehicle storage and maintenance. Floor drains in these buildings are connected to a water quality unit for oil and grit separation. This unit discharges to the sanitary sewer.

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- Conduct routine inspections of heavy equipment and vehicles to proactively identify maintenance needs or potential leaks.
- Use drip pans as needed until repairs can be performed and when drip pans are used, avoid overtopping.
- Drain fluids from leaking or wrecked vehicles and parts as soon as possible. Dispose of fluids properly.
- Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
- Recycle or dispose of waste properly and promptly.
- Conduct all body repair and painting work indoors.
- Minimize waste from paints and thinners. Calculate paint needs based on surface area.
- Do not wash or hose down storage areas unless there is prior approval to collect and discharge the water into the sanitary sewer. Use dry cleanup methods (vacuum, sweep) to clean up metal filings and dust and paint chips from grinding, shaving and sanding. Sweep debris from wet sanding after allowing it to dry overnight on the shop floor. Dispose of waste properly; never dump waste into storm or sanitary sewers.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches.
- Store materials and waste in labeled containers under cover and in secondary containment.
- Chemicals should not be combined in containers.
- Carefully transfer collected fluids from containers into designated storage areas as soon as possible.
- Waste liquids (oil, antifreeze, etc.) should be properly stored on-site and routinely disposed by licensed waste haulers at licensed disposal facilities.
- Store new and used batteries securely to avoid breakage. Store indoors or in secondary containment to contain potential acid leaks. Recycle used batteries.

Parts Cleaning

Cleaning of parts can transport pollutants into the storm drain system or surface waters. The MS4 Permit does not authorize these types of discharges. Best management practices to avoid this include the following:

- Use designated areas for engine, parts, or radiator cleaning. Do not wash or rinse parts outdoors. If parts cleaning equipment is not available, then capture parts cleaning fluids.
- Recycle cleaning solution. Never discharge waste to the sanitary sewer or storm sewer.
- Use steam cleaning or pressure washing of parts instead of solvent cleaning. Cleaning equipment must be connected to an oil/water interceptor prior entering the sanitary sewer.
- When using solvents for cleaning, drain parts over the solvent tank to avoid drips to the floor. Catch excess solutions and divert them back to tank. Allow parts to dry over the hot tank.

Vehicle and Equipment Wash Waters

Washing down of maintenance and fueling areas, as well as equipment and vehicles can transport pollutants into the storm drain system or surface waters. The MS4 Permit does not authorize these types of discharges. Best management practices to ensure that vehicle wash waters are not discharged to the municipal system or surface waters include the following:

- Vehicles and equipment should be washed inside whenever possible to reduce runoff to the stormwater system.
- Grassy and pervious (porous) surfaces may be used to promote direct infiltration of wash water, providing treatment before recharging groundwater and minimizing runoff to an adjacent stormwater system. Pervious surfaces or other infiltration-based systems should not be used within wellhead protection areas or within other protected resources.
- Avoid discharge of any wash water directly to the storm drainage system or surface water (e.g., stream, pond, or drainage swale)
- Do not use solvents except in dedicated solvent parts washer systems.
- Wash vehicles with non-toxic, phosphate-free, biodegradable cleaners
- Wash vehicles on an asphalt lot using a collection system with containment berms and discharge to water quality devices that will remove pollutants. Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.
- Floor drains should be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface water bodies or engineered storm drain systems should be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
- Designate separate areas for routine maintenance and vehicle cleaning. This helps prevent contamination of wash water by motor oils, hydraulic lubricants, greases, or other chemicals.

Earth Material Stockpile Areas

Stockpiling material on the site may be needed temporarily or permanently depending on the time or year or City projects. BMPs for protecting stockpiles include adequate cover or temporary stabilization as well as temporary sediment perimeter controls at the base of the stockpile.

- Divert stormwater runoff around stockpile areas.
- Cover stockpiles with plastic, geotextile or temporary seed.
- Temporary sediment perimeter controls, including silt fence, filters socks, or fiber rolls, may be placed a short distance from the base of the stockpile. Maintaining a short distance from the base of the stockpile to the perimeter control is important as it allows water to pond, if needed.

4.2 GOOD HOUSEKEEPING

All exposed areas that are potential sources of pollutants, shall be kept clean using such measures as sweeping at regular intervals. Ensure that trash containers are closed when not in use, keep storage areas well swept and free from leaking or damaged containers; and store leaking vehicles needing repair indoors.

Sweeping and Cleaning of Parking Lots

Vehicle surfaces can collect a variety of contaminants such as sediments, oil, grease, and metals during daily activities. The MS4 permit requires that parking lots are swept, and surrounding areas of the facility are kept clean to reduce runoff of pollutants.

Parking lot sweeping and cleaning follows the same schedule as street sweeping, at least twice per year in Spring and Fall, with additional sweeping as need for specific sites.

Waste Management

All liquid and solid waste must be disposed of properly. Some of the most common sources of pollution at municipal facilities are a result of littering, improper collection of debris, and improper disposal of solid or liquid waste. Best management practices for handling, storage, transfer and disposal of trash and recyclables include the following:

- All waste and recycling receptacles must be leak-tight with tight-fitting lids or covers.
- Keep lids on dumpsters and containers closed at all times unless adding or removing material. If using an open-top roll-off dumpster, cover it and tie it down with a tarp unless adding materials.
- Place waste or recycling receptacles indoors or under a roof or overhang whenever possible.
- Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
- Do not locate dumpsters over or adjacent to catch basins.
- Prior to transporting waste, trash, or recycling, ensure that containers are not leaking (double bag if needed) and properly secure containers to the vehicle.
- Clean up any liquid leaks or spills with dry cleanup methods.
- Arrange for waste or recycling to be picked up regularly and disposed of at approved disposal facilities.
- Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster or recycling or trash container.
- Do not wash trash or recycling containers outdoors or in parking lots.
- Conduct periodic inspections of solid and liquid waste storage areas to check for leaks and spills.
- Conduct periodic inspections of work areas to ensure that all wastes are being disposed of properly.
- In dumpster areas, regularly pick up surrounding trash and debris and regularly sweep the area.
- In compactor areas, regularly check the hydraulic fluid hoses and reservoir to ensure that there are no cracks or leaks. Regularly sweep the area.

4.3 PREVENTATIVE MAINTENANCE

All equipment and systems shall be regularly inspected, tested, maintained, and repaired to avoid situations that may result in leaks, spills, and other releases of pollutants to stormwater and receiving waters. Inspections shall occur at a minimum once per quarter.

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Use Storage and Disposal of Potential Pollutants

Potential pollutants or hazardous wastes that may be used and stored in or around municipal building and facilities include pesticides, paints, cleaners, petroleum products, fertilizers, and solvents. Careful handling and proper storage of these products are the best means of preventing spills and pollution to the environment. Best management practices include the following:

- Storage and handling areas should be covered or enclosed to reduce potential contact with stormwater and wind.
- Potential pollutants should be transported using approved methods and containers to minimize the chance of spillage, and by employees that have familiarity with the potential environmental and human health hazards of the products.
- Proper spill kits applicable to the products being used at each specific building or facility should be easily accessible and marked clearly so employees can follow procedures quickly and effectively. Leaks or spills should be cleaned up in a timely manner.
- Establish separate storage areas for these types of products with measures in place to contain any spill leaking out of the storage area.
- A designated person should be responsible for these areas.
- The storage area should be inspected frequently, kept clean and in good order with proper labels and signs, and consistent disposal practices.
- Floor drains in storage areas should be disconnected from the stormwater system.
- Routinely inspect buildings and facilities for areas of potential leaks.
- Paint and other chemicals should not be applied on the outside of buildings when it is raining or prior to expected rain.
- When sanding, painting, power washing, etc., ensure that sites are properly prepared (e.g., use tarps) and cleaned (e.g., use dry cleaning methods) especially if they are near storm drains. Protect catch basins when maintenance work is conducted upgradient of them.
- When painting, use a drop cloth and clean up any spills immediately.
- Do not leave open containers on the ground where they may accidentally tip over.
- Do not discharge chlorinated pool water into the stormwater system. Water must be properly dechlorinated and tested before it is discharged.
- Ensure that the washwater does not flow into the storm system. Containment or filtering systems should be provided.

4.4 SPILL PREVENTION AND RESPONSE

The permittee shall minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, the permittee shall have procedures that include:

- Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.

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- Response procedures that include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing, and cleaning up leaks, spills and other releases. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR section 264 and 40 CFR section 265. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the Pollution Prevention Team; and
- Contact information for individuals and agencies that shall be notified in the event of a leak, spill, or other release. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR section 110, 40 CFR section 117, or 40 CFR section 302, occurs during a 24-hour period, the permittee shall notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR section 110, 40 CFR section 117, and 40 CFR section 302 as soon as the permittee has knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency, public health or drinking water supply agencies, and owners of public drinking water supplies. Contact information shall be in locations that are readily accessible and available.

Spill Prevention Plans

The City has spill kits and prevention and control plans in place for all buildings and facilities where hazardous wastes are stored or used. These are coordinated with the fire department as necessary.

Per the Massachusetts Clean Water Toolkit Fact Sheet for Spill Prevention and Control Plans, it is recommended that Spill Prevention and Control Plans (SPCP) clearly state measures to stop the source of a spill, contain the spill, clean up the spill, dispose of contaminated materials, and train personnel to prevent and control future spills. The SPCP should define material handling procedures and storage requirements and outline actions necessary to reduce spill potential and impacts on stormwater quality. The plan can be a procedural handbook, or a poster placed in several locations at the site.

4.5 EROSION AND SEDIMENT CONTROL

Structural and non-structural control measures shall be used at the facility to stabilize and contain runoff from exposed areas and to minimize or eliminate onsite erosion and sedimentation. Efforts to achieve this may include the use of flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion.

Erosion Control

Site maintenance activities include erosion control, specifically with respect to poor vegetation cover and particularly within 50 feet of surface water. Best management practices include the following:

- Prevention of erosion and sedimentation is preferable to installing treatments devices.
- Protect vegetated and wooded buffers and leave vegetated areas undisturbed to the extent possible.
- Inspect sites regularly for locations of poor vegetation cover, erosion and sedimentation and channelization. If stabilization is required, corrective actions should be identified and implemented as soon as possible.

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- If exposed, soils should be stabilized by mulching, seeding with fast-growing native grass and/or planted with native tree and shrubs. Use erosion control blankets when seeding slopes.
- If necessary, slow stormwater runoff velocities with conveyance measures such as riprap channels or vegetated swales, check dams, level spreaders and outlet protection, etc.
- A buffer/filter strip should be left around surface waters. No fertilizers or pesticides should be applied in the buffer/filter strip except where necessary.

4.6 MANAGEMENT OF RUNOFF

The permittee shall manage stormwater runoff from the facility to prevent or reduce the discharge of pollutants. This may include management practices which divert runoff from areas that are potential sources of pollutants, contain runoff in such areas, or reuse, infiltrate or treat stormwater to reduce the discharge of pollutants.

Catchbasin Cleaning Program

All catchbasins on the site are to be included in the catchbasin inspection and cleaning optimization program.

Stormwater Management BMP Maintenance

Stormwater BMPs for this facility (excluding catch basins) are to be inspected quarterly and maintained as necessary to provide optimum treatment of stormwater runoff. The City will keep a log of stormwater management structures inspected and report on the condition and maintenance performed. BMPs are included in the SWPPP inspection form provided in **Appendix D**.

The following are maintenance activities and procedures for each type of BMP on the site based on the Massachusetts Stormwater Handbook:

STRUCTURAL PRETREATMENT BMPs**WATER QUALITY UNIT (OIL/GRIT SEPARATOR)**

Water quality units, also referred to as oil/grit separators, are underground storage tanks with chambers designed to remove heavy particles, floating debris and hydrocarbons from stormwater. These units are typically considered a pretreatment BMP for land uses with higher potential pollutant loads and risk of petroleum spills. Cleaning these units is important to prevent sediment from re-suspending and discharging during future storm events. Inspection and maintenance should include the following:

- Inspect and clean unit – cleaning includes removal of accumulated oils and grease and sediment using a vacuum truck or other ordinary catch basin cleaning device
- Polluted water or sediments removed from an oil grit separator unit should be disposed of in accordance with all applicable local, state and federal laws and regulations including M.G.L.c. 21C and 310 CMR 30.00.

Additional guidance for Structural BMP operations and maintenance can be found in the latest version of the Massachusetts Department of Environmental Protection Stormwater Handbook, Volume 2, Chapter 2, located at: <http://www.mass.gov/eea/docs/dep/water/laws/i-thru-z/v2c2.pdf>

4.7 SALT STORAGE PILES OR PILES CONTAINING SALT

For storage piles of salt or piles containing salt used for deicing or other purposes (including maintenance of paved surfaces) for which the discharge during precipitation events discharges to the permittee's MS4, any other storm sewer system, or to a Water of the US, the permittee shall prevent exposure of the storage pile to precipitation by enclosing or covering the storage piles. As of July 1, 2020, such piles shall be enclosed or covered. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. The permittee is encouraged to store piles in such a manner as not to impact surface water resources, ground water resources, recharge areas, and wells.

4.8 EMPLOYEE TRAINING

The permittee shall regularly train employees who work in areas where materials or activities are exposed to stormwater, or who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel), including all members of the Pollution Prevention Team. Training shall cover both the specific components and scope of the SWPPP, and the control measures required under this part, including spill response, good housekeeping, material management practices, any best management practice operation and maintenance, etc. EPA recommends annual training.

The permittee shall document the following information for each training:

- The training date, title and training duration
- List of municipal attendees
- Subjects covered during training

4.9 MAINTENANCE OF CONTROL MEASURES

The permittee shall maintain all control measures, required by the permit in effective operating condition. The permittee shall keep documentation onsite that describes procedures and a regular schedule for preventative maintenance of all control measures and discussions of back-up practices in place should a runoff event occur while a control measure is off-line. Nonstructural control measures shall also be diligently maintained (e.g., spill response supplies available, personnel trained).

5.0 SITE INSPECTIONS

Inspect all areas that are exposed to stormwater and all stormwater control measures. Inspections shall be conducted at least once each calendar quarter (winter, spring, summer and fall). The quarters begin on January 1, April 1, July 1 and October 1. More frequent inspections may be required if significant activities are exposed to stormwater. Inspections shall be performed when the facility is in operation. At least one of the quarterly inspections shall occur during a period when a stormwater discharge is occurring.

The permittee shall document the following information for each facility inspection:

- 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

If during the inspections, or any other time, the permittee identifies control measures that need repair or are not operating effectively, the permittee shall repair or replace them before the next anticipated storm event if possible, or as soon as practicable following that storm event. In the interim, the permittee shall have back-up measures in place.

A SWPPP inspection form is provided in **Appendix D**. The permittee shall report the findings from the Site Inspections in the annual report.

6.0 RECOMMENDATIONS

Based on BETA's April 14, 2020 site visit, we are providing the following recommendations to attain or maintain compliance with the MS4 permit requirements.

1. The current vehicle fueling area is uncovered. Petroleum is a potential stormwater pollutant and releases during vehicle fueling may enter the storm drain if occurring during a rain event. We recommend that a cover or roof structure be installed over the vehicle fueling area to mitigate potential stormwater pollutants from entering the storm drainage system. We also recommend that a spill kit be placed in close proximity to the vehicle fueling area.
2. Current vehicle washing at the site results in washwater discharge directly to the stormwater drainage system at the site. Such discharges are not authorized under the MS4 permit. We recommend one or more of the following be performed to eliminate this discharge:
 - a. Construct a wash rack to collect and discharge washwaters to the sanitary sewer system (with authorization from the local sewer authority) via a water quality system such as an oil/water or grit separator.
 - b. Procure 3rd party vehicle washing services. These operations are equipped to handle fleet vehicle washing and resulting washwater. This would eliminate the discharge of washwater to the storm drain system at the site.
3. Construction, landscaping material and debris stockpiles located on the northwestern portion of the site are uncovered and located upgradient of on-site catchbasins. Stormwater runoff in this area could potentially contain stormwater pollutants such as sediment, debris and nutrients that impact stormwater. We recommend implementing procedures described in **Section 4.1** to mitigate this issue.
4. In order to address the concerns of items 1-3 noted above, the City may consider installing a water quality unit near the west driveway or further downstream (before the wetlands) to treat all of the stormwater on the site and/or replace select catch basins with stormwater treatment devices.
5. Several empty barrels were observed during our site inspection. We recommend that these barrels either be placed under covered area, or removed from the site if not in use.

APPENDIX A – Site Map

Map 1 of 1
DPW Facility

19 Norman Street

City of Everett, MA
SWPPP Map

Stormwater Legend

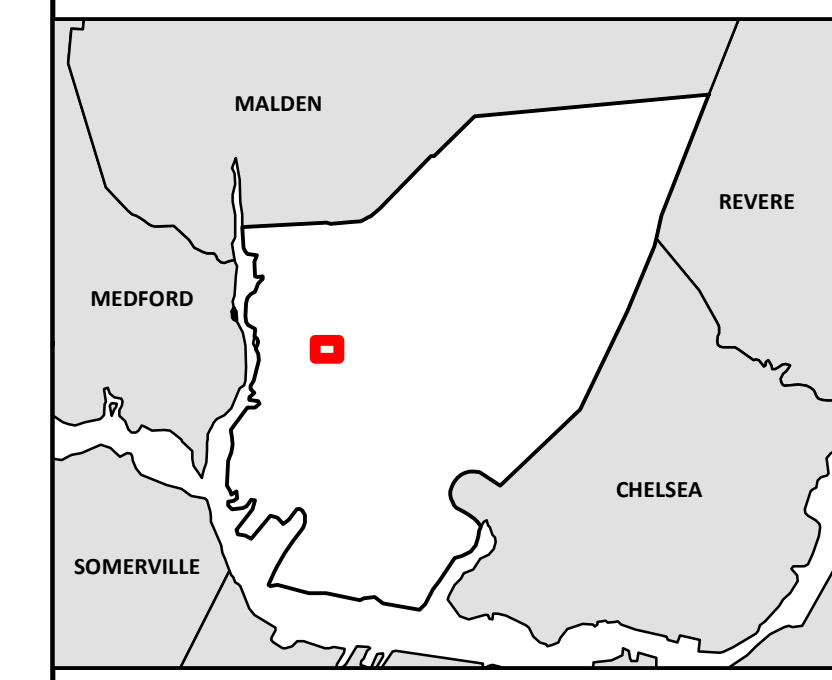
- City-Owned Catch Basin
- City-Owned Manhole
- Pipe
- Surface Water Flow Direction



0 20 40 Feet

Plot Date: 5/13/2020

Map Location



De-icing Materials
(2) 1500-gal ASTs

Construction
Material Storage

Building 2
Water Department
Administration,
Vehicle & Equipment Storage

Vehicle Fueling

Building 3
Salt Storage

PARLIN STREET

Scrap Dumpster

Vehicle Washing

Oil/Water Separator
for Bldg 1&2 floor drain
connection to Sanitary Sewer

Building 1
Administration,
Vehicle Maintenance & Storage

Vehicle Equipment
& Storage

Employee Parking

NORMAN STREET

LAUREL COURT

Stormwater discharges to wetlands
adjacent to Revere Beach Parkway
between Santilli Circle & Sweetser Circle

APPENDIX B – Vehicle Inventory

APPENDIX C –Summary of Site Activities and Potential Stormwater Pollutants

APPENDIX C: Summary of Site Activities and Potential Stormwater Pollutants

Activity	Description	Building Reference	Material Inventory	Potential Stormwater Pollutants	Quantity	Potential Exposure to Stormwater	Management Practices	
							Structural	Non-structural
Vehicle Fueling	Fueling of Town-owned and operated vehicles	N/A	Diesel Fuel Gasoline	Petroleum Hydrocarbons	10,000-gal UST 10,000-gal UST	High - during a spill, uncovered fueling area	N/a	Spill Kit in Close Proximity
Vehicle Maintenance	Maintenance and Storage of Town-owned and operated vehicles and equipment	1	Motor Oil Hydraulic Fluid Lubricants Transmission Fluid Waste Oil Antifreeze Coolant Brake Fluid	Petroleum Hydrocarbons Petroleum Hydrocarbons Petroleum Hydrocarbons Petroleum Hydrocarbons Petroleum Hydrocarbons Ethylene glycol Ethylene glycol Glycols	Varies	Low - in covered bldg	Floor Drains to oil/water/grit separator; discharges to sanitary sewer	Maintenance conducted inside building, good housekeeping, catchbasin and oil/water separator cleaning
Vehicle Washing	Washing of Town-owned and operated vehicles	1	Detergents	Surfactants Washwater	Varies	High - vehicle washwater discharges directly to catchbasins and storm drain	N/A	Good housekeeping practices
Construction Materials	Storage and handling of construction materials and miscellaneous maintenance products (gravel, loam, aggregates, etc.)	N/A	Aggregate Fill Mulch Brush/Compost Castings, blocks Scrap Metal	Sediment, debris Sediment, debris Sediment, debris Nutrients, debris Metals Metals	Varies	High - materials not covered and stored upgradient of catchbasins	N/A	Routine inspection and maintenance, sweeping and good housekeeping practices
Salt Storage	Storage and handling of salt for winter roadway applications	3	Salt	Chlorides	1,300 ton (approx.)	Low - covered storage	Covered storage	Routing sweeping Good housekeeping practices
Above Ground Storage Tanks	Deicing materials	3	Brine	Sediment/chlorides	1,500-gal	Low - stored in covered area	Covered storage	Spill Kit in Close Proximity Good housekeeping practices
		3	Magnesium Chloride		1,500-gal	Low - stored in covered area		
	Waste oil	1	Waste Oil	Petroleum Hydrocarbons	500-gal	Low - stored in covered area with secondary containment		
Emergency Generators	Multiple mobile generators	N/A	Diesel Fuel	Petroleum	Varies	Low - petroleum products are stored in generator in a covered building	Covered storage	Spill Kit on-site
Solid Waste Management	Multiple trash trucks	N/A	Solid waste	Debris, metals	Varies	Low - potential pollutants are covered and contained. Routinely removed	Covered storage	Solid waste removal Good housekeeping practices
Parking Areas	Parking for Town employees	1	N/A	Sediment, oil from vehicles	Varies	High - stormwater discharges to on-site catchbasins	Catchbasin maintenance	Routine sweeping Good housekeeping practices
Administration	Town administrative offices, and public meeting space	1	Miscellaneous equipment and supplies	Cleaning supplies	Varies	Low - stored in covered areas	Covered storage	Good housekeeping practices

APPENDIX D – SWPPP Inspection Form

Report No. _____

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTION FORM

Location:	Department of Public Works: 19 Norman Street	Date:		Last Insp:	
		Arrive:		Leave:	
Inspector:					
Recent Rainfall:		Current Weather:			
Unidentified Discharges? Spills?					
Add. Info:					

CONTROL MEASURES/ACTION REQUIRED: YES NO
(INSPECT FOR ALL APPLICABLE CONTROLS LISTED)

Control	Condition	Required Action	Completed (by)	Date
<input type="checkbox"/> Fuel Dispensing Area BMPs			<input type="checkbox"/>	
<input type="checkbox"/> Vehicle Washing Area BMPs			<input type="checkbox"/>	
<input type="checkbox"/> Vehicle Repair Indoors			<input type="checkbox"/>	
<input type="checkbox"/> Pavement Sweeping			<input type="checkbox"/>	
<input type="checkbox"/> Trash Management			<input type="checkbox"/>	
<input type="checkbox"/> Spill Prevention & Response			<input type="checkbox"/>	
<input type="checkbox"/> Erosion & Sediment Controls			<input type="checkbox"/>	
<input type="checkbox"/> Manage Runoff			<input type="checkbox"/>	
<input type="checkbox"/> Salt Storage Area			<input type="checkbox"/>	
<input type="checkbox"/> Oil/Grit Separator			<input type="checkbox"/>	
<input type="checkbox"/> Other			<input type="checkbox"/>	

FAILED CONTROL MEASURES REQUIRE REPLACEMENT: YES NO

Control	Condition	Required Action	Completed (by)	Date
<input type="checkbox"/>			<input type="checkbox"/>	

SWPPP CHANGES: YES NO

Control	Change	Completed (by)	Date
<input type="checkbox"/>		<input type="checkbox"/>	

MANAGEMENT PRACTICES

1. Minimize or Prevent Exposure: To the extent practicable either locate materials and activities inside, or protect them with storm-resistant coverings in order to prevent exposure to rain, snow, snowmelt and runoff (although significant enlargement of impervious surface area is not recommended). Materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged directly or indirectly to surface waters or to the MS4 or if discharges are authorized under another NPDES permit.
2. Good Housekeeping: Keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals. Ensure that trash containers are closed when not in use, keep storage areas well swept and free from leaking or damaged containers; and store leaking vehicles needing repair indoors.
3. Preventative Maintenance: Regularly inspect, test, maintain, and repair all equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater to receiving waters. Inspections shall occur at a minimum once per quarter.
4. Spill Prevention and Response: Minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, the permittee shall have procedures that include:
 - a. Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
 - b. Response procedures that include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing, and cleaning up leaks, spills and other releases. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR section 264 and 40 CFR section 265. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the Pollution Prevention Team; and
 - c. Contact information for individuals and agencies that shall be notified in the event of a leak, spill, or other release. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR section 110, 40 CFR section 117, or 40 CFR section 302, occurs during a 24-hour period, the permittee shall notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR section 110, 40 CFR section 117, and 40 CFR section 302 as soon as the permittee has knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency, public health or drinking water supply agencies, and owners of public drinking water supplies. Contact information shall be in locations that are readily accessible and available.
5. Erosion and Sediment Control: Use structural and non-structural control measures at the facility to stabilize and contain runoff from exposed areas and to minimize or eliminate onsite erosion and sedimentation.
6. Management of Runoff: Manage stormwater runoff from the facility to prevent or reduce the discharge of pollutants. This may include management practices which divert runoff from areas that are potential sources of pollutants, contain runoff in such areas, or reuse, infiltrate or treat stormwater to reduce the discharge of pollutants.
7. Salt Storage Piles or Piles Containing Salt: Prevent exposure of the storage pile to precipitation by enclosing or covering the storage piles. Such piles shall be enclosed or covered within two (2) years of the permit effective date. Implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Store piles in such a manner as not to impact surface water resources, ground water resources, recharge areas, and wells.