

June 2020



OPERATIONS AND MAINTENANCE PROGRAM

For

BRIDGEWATER STATE UNIVERSITY
Bridgewater, Massachusetts

Prepared for:

BRIDGEWATER STATE UNIVERSITY
131 Summer Street
Bridgewater, MA 02324

Prepared by:

NITSCH ENGINEERING, INC.
2 Center Plaza, Suite 430
Boston, MA 02108

Nitsch Project #11917.2



Bridgewater State University¹ (BSU) has formalized its Operations and Maintenance (O&M) activities into this written O&M Program as required in Part 2.3.7 of the United States Environmental Protection Agency's (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 "2016 Small MS4 Permit" or "the Permit."

This O&M Program has a goal of preventing or reducing pollutant runoff and protecting water quality from all BSU operations. The O&M Program includes the following components:

1. Inventory of BSU facilities within the categories of parks and open space, buildings and facilities (where pollutants are exposed to stormwater runoff), and vehicles and equipment with procedures described for each maintenance activity identified;
2. Operations and maintenance procedures for BSU infrastructure; and
3. Stormwater Pollution Prevention Plan (SWPPP) for BSU facilities where pollutants are exposed to stormwater.

This written document also supplements the BSU Facilities Management and Planning Department



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1.1.2 Lawn Mowing

- Remove debris, pet waste and trash from landscaped areas prior to mowing.
- Collect grass clippings and leaves after mowing. Blowing organic waste materials onto adjacent impervious surfaces or washing them into the street, gutter, or storm drains is strictly prohibited.
- Properly recycle or dispose of organic waste after mowing, weeding, and trimming.
- Reduce mowing frequencies wherever possible.



- When selecting the optimal type of fertilizer to use on an area, consider the soil test results, type of turf, and type of turf use. In accordance with nitrogen impaired receiving water requirements, use slow-release fertilizers and reduce fertilizer use where possible.
- Calibrate application equipment regularly to ensure proper application and loading rates.
- Mix fertilizers using clean application equipment under cover in an area where accidental spills will not enter surface water or groundwater and will not contaminate the soil.
- Never apply fertilizers in quantities exceeding the manufacturer's instructions. Instead, apply small amounts throughout the growing season.
- Time fertilizer application methods for maximum plant uptake, usually in the fall and spring (e.g., between April 15 and October 15). When applying at the beginning and end of planting season, take into consideration the slower uptake rate of fertilizer by plants and adjust the fertilizer application accordingly.



1.1.9 Other Maintenance Activities

- Conduct periodic inspections of the irrigation system. Repair broken sprinkler heads as soon as possible. Only irrigate at a rate that can infiltrate into the soil to limit runoff. Avoid irrigating close to impervious surfaces such as parking lots and sidewalks.
- See section 2.3 for Winter Road Maintenance for information on proper snow disposal and storage procedures. Any damage done to vegetated areas caused by plows or deicing materials should be repaired as early as possible in the spring.
- All portable toilets should be staked down in flat, secure locations where they are less likely to be knocked down or blown over. They should be placed in a location that would retain any spillage from washing into the MS4 or receiving waters. Ensure routine maintenance and cleaning of portable toilets.
- Wastewater from power washing signs, structures, or bleachers cannot be discharged into the stormwater system.
- When painting park equipment, use a drop cloth and clean up any spills immediately.
- Do not leave open containers on the ground where they may accidentally tip over.



1.2 Buildings and Facilities

The following BSU facilities are included in the inventory for buildings and facilities where pollutants are exposed to stormwater runoff:

Building/Facility	Address/Location	Petroleum	Dumpsters	Building	Parking lots	Spill Prevention	Other maintenance:
Operations Center	200 Great Hill Drive	x	x				

1.2.2 Dumpsters

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

- All waste and recycling receptacles must be leak-tight with tight-fitting lids or covers.
- Keep lids on dumpsters and containers closed at all times unless adding or removing material. If using an open-top roll-off dumpster, cover it and tie it down with a tarp unless adding materials.
- Place waste or recycling receptacles indoors or under a roof or overhang whenever possible.
- Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
- Do not locate dumpsters over or adjacent to catch basins.
- Prior to transporting waste, trash, or recycling, ensure that containers are not leaking (double bag if needed) and properly secure containers to the vehicle.
- Clean up any liquid leaks or spills with dry cleanup methods.
- Arrange for waste or recycling to be picked up regularly and disposed of at approved disposal facilities.
- Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster or recycling or trash container (see section 4.4.4 of the SWPPP).
- 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.

1.2.3 Building Maintenance

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



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1.2.6 Vehicles and Equipment

The following BSU facilities are included in the inventory for vehicles and equipment:

Vehicles/Equipment	Address/Location	Vehicle	Vehicle maint.	Body	Fueling areas	Material mgmt.	Parts Cleaning	Vehicle	Other maintenance:
Operations Center	200 Great Hill Drive	x	x	x	x	x	x	X	
Parking Garage	Great Hill Drive	X							
Central Steam Plant	34 Park Ave. Rear	x							

1.3.1 Vehicle Storage

- Monitor vehicles and equipment for leaks and use drip pans as needed until repairs can

- Fueling areas should be covered.
- Fueling areas should be evaluated to ensure that pollutants (e.g., gasoline or oil) do not enter the MS4. Follow the procedures in section 4.2 of the SWPPP.

1.3.5 Material Management

- Store materials and waste in labeled containers under cover and in secondary containment.
- Chemicals should not be combined in containers.
- Hazardous waste must be labeled and stored according to hazardous waste regulations. Follow the procedures in section 4.4.4 of the SWPPP.
- Carefully transfer collected fluids from containers into designated storage areas as soon as possible.
- Store new and used batteries securely to avoid breakage. Store indoors or in secondary containment to contain potential acid leaks. Recycle used batteries.
- Conduct periodic inspections of storage areas to detect possible leaks.
- 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 whenever possible.
- Keep lids on containers. Store them indoors or under cover to reduce exposure to rain.
- Inspect and maintain all pretreatment equipment, including interceptors, according to the manufacturer's maintenance schedule and at least once per year.
- Proper spill protocol should be followed to prevent chemicals from entering the stormwater system. Follow the procedures in section 4.1 of the SWPPP.

1.3.6 Parts Cleaning

- 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.

1.3.7 Vehicle and Equipment Washing

- Vehicle and equipment washing areas should be evaluated to ensure that pollutants (e.g., gasoline or oil, sediment, detergents) do not enter the MS4. Follow the procedures in section 4.3 of the SWPPP.

2.0 Infrastructure Operations and Maintenance



BSU has developed written O&M procedures to formalize the maintenance activities that are being undertaken to address stormwater infrastructure O&M requirements of the 2016 Massachusetts MS4 Permit. Th





4.0 Employee Training

Regular employee training is required for employees who work in areas where materials or activities are exposed to stormwater, or who are responsible for implementing activities identified in this O&M Program.

EH&S is responsible for stormwater management training for Facilities Management employees. This position coordinates training related to stormwater management on at least an annual basis to review specific responsibilities for implementing this O&M Program, what and how to accomplish those responsibilities, including SWPPP implementation.

Employees responsible for the fueling or lubrication of vehicles or equipment stored at the facility (w/ll) - 2.0 (w/ll) - 2.9 (t) 1.7 (y) - 4.8 (w) - 2. rn or e0 - 1.1sl.9 (ng) - 6 (or l) - 2.8 (ubr4.6 (H&) - 3.5 (S) 177554

