

SOP 16: Streets and Parking Lots

Introduction

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

Streets and municipally-owned parking lots are swept annually in the Spring/Early Summer. Sweeping during and after construction activities within parking lots and roadways are done with mechanical and manual sweeping daily in the course of construction.

Streets and municipally-owned parking lots are swept annually in the Spring/Early Summer. This is an annual contract with an outside vendor. Sweeping during/after "in house" construction activities are done with a mechanical sweeping device mounted to a piece of town equipment and by hand. If the construction activity is a contractor, they are responsible to perform sweeping under the inspection and direction of the Town. This is on an as needed basis, but done daily when necessary.

Procedures

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

Sweeping Frequency

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

The vast majority if not all of roadways in Boxford are treated with sand during winter weather. There may be slight exceptions to this on a storm by storm basis. Occasionally, areas that are more susceptible to freezing or areas with higher slopes are sanded more frequently than other areas. In the event that we have any higher than expected accumulation of sand, it is removed by mechanical sweeping device which attaches to a piece of equipment. The roadways that are susceptible are not filtered by MS4 regulated areas. The entire town is under this procedure.



- For rural uncurbed roadways with no catch basins and limited access highways, Boxford will either meet the minimum frequencies above, or develop and implement an inspection, documentation, and targeted sweeping plan outlining reduced frequencies within two (2) years of the effective date of the MS4 Permit, and submit such plan with its year one annual report.
- There are no TMDL/IMPAIRED WATER requirements for nitrogen or phosphorous, in Boxford. Should an impairment or TMDL be identified, Boxford will conduct more frequent sweeping for municipally owned streets and parking lots. Sweeping will be performed in these areas a minimum of two times per year, once in the spring (following winter activities such as sanding) and at least once in the fall (Sept. 1 – Dec. 1; following leaf fall) to reduce runoff to the identified IMPAIRED CATCHMENTS/WATERBODIES. TARGETED STREETS/PARKING LOTS will be listed if identified.
- There are no TMDL/IMPAIRED WATER requirements for metals in Boxford. If identified, Boxford will increase street sweeping frequency in commercial areas, high density residential areas, or drainage areas with a large amount of impervious area. Identified streets will be targeted to reduce runoff to the IMPAIRED WATERBODIES OR CATCHMENTS: (List if required).
- The Town of Boxford annual report will include the sweeping schedule developed above to target areas with high pollutant loads.
- The Boxford annual report will include the street sweeping schedule developed above to target areas with high pollutant loads.

Sweeping Practices

- Street sweeping should be conducted in dry weather. Sweeping should not be conducted during or immediately after rain storms.
- Dry cleaning methods should be used whenever possible, with the exception of very fine water spray for dust control. Avoid wet cleaning or flushing of the pavement.
- When necessary, enact parking bans to facilitate sweeping on busy streets.
- Sweep in a manner that avoids depositing debris into storm drains.
- Sweeping equipment (mechanical, regenerative air, vacuum filter, tandem sweeping) should be selected depending on the level of debris. Brush alignment, sweeper speed, rotation rate, and sweeping pattern should be set to optimal levels to manage debris.
- Routinely inspect and perform maintenance on sweeping equipment to reduce the potential for leaks. See SOP 21: Operations and Maintenance of Municipal Vehicles and Equipment for more information.

Sweepings Reuse and Disposal

- The reuse of sweepings is recommended by MassDEP. If street sweepings are reused (e.g., as anti-skid material or fill in parking lots), they should be properly filtered to remove solid waste, such as paper or trash, in accordance with their intended reuse. All reuse and/or disposal of street sweepings will be managed in accordance with current MassDEP policies and regulations.
- Sweepings intended for reuse can be stored for up to one year in approved temporary storage areas. Storage areas should be protected to prevent erosion and runoff and should be located away from wetland resource areas and buffer zones, surface water, or groundwater.



- Sweepings are classified as solid waste. If not reused, they should be disposed of at solid waste disposal sites.
- For additional information on approved reuses of sweepings and storage/disposal policies, refer to MassDEP policy #BAW-18-001: Reuse and Disposal of Street Sweeping (<https://www.mass.gov/files/documents/2018/05/14/street-sweepings.pdf>).
- The Town of Boxford will store sweepings intended for reuse at the Department of Public Works (7A Spofford Street) in accordance with MS4 regulations. Street sweepings will be disposed of at an approved solid waste site by covered transport in a dump truck.

Documentation and Reporting

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

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

Employee Training

- Employees who perform street and parking lot sweeping are trained annually on these procedures and the proper operation of related equipment.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Attachments

1. Street and Parking Lot Sweeping Log

Related Standard Operating Procedures

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



**Street Sweeping Log
Boxford, Massachusetts**

Date	Operator	Weather Conditions	Streets/Parking Lots Swept	Number of Miles Swept	Volume/Mass of Material Removed	Corrective Action Taken/Recommended
05/14 to 06/04 (weekday and dry weather) 15 days total	Immaculate Power Sweeping	Dry	Various in Town	193 Curb Miles	Aprox. 450 tons	none
05/01 to 06/30 (weekday and dry weather, aprox. 5 days total)	DPW employees (JF, MR, JP,)	Dry	Parking lots (town hall, police dept., fire departments, Counsel on Aging and various areas as needed.	Parking lots areas	10 tons	none

