

# Standard Operating Procedure (SOP) Parking Lot and Roadway Maintenance

Date: 07/15/2022

Version: 1

Review Frequency: Annual

## Reasons for Procedure

Radford University (RU) is subject to a General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4). The permit requires RU to develop, implement, and enforce a MS4 Program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, to ensure compliance with water quality standards, and to satisfy the appropriate water quality requirements of the Clean Water Act and its attendant regulations. This permit authorizes RU to discharge stormwater pursuant to the Virginia Stormwater Management Program and the Virginia Stormwater Management Act.

### 1.0 Purpose

The purpose of this procedure is to describe the proper means for maintaining parking lots and roadways at RU. Improperly maintained parking lots and roadways can result in contaminated stormwater runoff. Discharge of these contaminants into a storm drain is considered an “Illicit Discharge.” Illicit discharges can result in significant fines from regulatory agencies. This SOP has been developed to minimize or prevent pollutant discharges from these activities.

### 2.0 Scope

This procedure applies to all parking lots and roadways throughout the RU campus.

### 3.0 Procedures

#### 3.1 Sweeping

- Perform regular maintenance on street sweepers to prevent spills and leaks.
- Street sweepers shall be cleaned out in accordance with the manufacturer’s instructions.
- Swept material shall be disposed of properly and in manner to prevent debris from coming into contact with stormwater.
- Store swept material in a location that will prevent stormwater contamination and dispose of sweeping in a timely manner.
- Sweeper shall be washed in a fully contained area that drains to a holding tank or sanitary sewer.
- Sweep the roadway and gutter sections to prevent debris from accumulating and entering storm drain inlets.
- Increase the sweeping schedule prior to the rainy season to prevent stormwater contaminated runoff.
- Restrict parking as needed to facilitate sweeping.

- Keep accurate logs to track streets swept and streets requiring sweeping.
- Log the amount of debris collected and adjust the frequency as needed to prevent excess accumulation of debris.

### 3.2 Maintenance

- Maintain equipment to prevent spills and leaks.
- Inspect roadways and parking lots for deterioration.
- Perform preventative maintenance such as crack sealing, slurry sealing, patching, pavement overlays and shoulder replacement to prevent stormwater contamination.
- Cover manholes and catch basins prior to performing maintenance to prevent oil and debris from entering the storm drain system.
- Remove weeds, sediments and other debris from cracks and other portions of the roadway to ensure proper adhesion of materials being placed.
- Perform work on clean and dry surfaces only.
- Apply sealants and slurries in a smooth and uniform manner.
- Remove excess sealants or spills and dispose of properly.
- For shoulder repairs install silt fence or other BMPs to prevent the transport of sediment or other fines via stormwater runoff.
- Ensure shoulders are stabilized prior to the removal of silt fence or other temporary BMPs.
- Ensure cracks are properly sealed and potholes patched prior to performing pavement overlays.
- Apply tack coats for pavement overlays uniformly and only apply to areas that will receive a pavement overlay.
- If milling is required ensure sweeping is conducted simultaneously or prior to opening the roadway to thru traffic.
- Perform testing on asphalt to ensure the proper mix is being applied and at the appropriate temperature.
- Remove loose debris from equipment prior to transportation.
- Sweep all loose debris after placement and prior to reopening the roadway and/or parking lot.
- Remove manhole and catch basin inlet protection after all loose debris has been swept.
- Record the location and date of maintenance in a database or map.

### 3.3 Snow Removal and De-icing

- Store de-icing material under a covered storage area such as the Facilities Maintenance and Operations salt storage bay.
- Load material into equipment on a level surface that will allow collection of the material or will allow material to be re-stockpiled under cover or that will allow capture of the runoff.
- Maintain snow removal, loading, and de-icing spreaders and equipment to prevent leaks and spills.
- Application equipment shall be washed in a fully contained area that

drains to a holding tank or sanitary sewer.

- Calibrate spreaders to minimize the amount of de-icing material used and still be effective.
- Provide spill clean-up kits in equipment in case of hydraulic line rupture or other spills.
- Take care when connecting plows to prevent hydraulic line ruptures and cleanup any spilled hydraulic fluid.
- Park trucks loading with de-icing material indoors when possible.
- Distribute the minimum amount of de-icing material to be effective on roads, parking lots, and sidewalks.
- If sand is used, sweep the residual sand as soon as weather allows.
- Sweep remaining de-icing materials as soon as weather allows.
- Do not pile snow in front of storm drain inlets.
- Record the location and date of maintenance in a database or map.

#### 4.0 Annual Review of Procedure/ Training

All managers and personnel who maintain parking lots and roadways are responsible for reviewing this procedure with all employees who have these job duties at least once each year. Any project managers who hire contractors to perform these job duties are required to convey the requirements of this procedure to the contractors.