



Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Snow and Deicing Operations	
Date:	July 31, 2015
Purpose of SOP:	To minimize or prevent pollutant discharge from operations associated with snow removal and deicing.
MS4 Permit Reference	Section II.B.6.a
Responsible Party	Robert B. Boxer, PE, Director of Public Works

This SOP is designed to minimize, to the extent practical, the impacts of snow removal and deicing operations on local water quality while still ensuring public safety. This includes the storage and application of sand, salt, and other deicing chemicals.

1. Responsible Parties

- a) Town Staff. The Street Maintenance and Construction Activity Center of the Department of Public Works is responsible for snow removal and deicing operations in the Town’s road right-of-way and on Town property. Other staff members may engage in minor treatment of sidewalks and building entrances using bagged or boxed deicing materials.
- b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with snow removal or deicing operations within the Town’s road right-of-way or on Town property.

2. Salt and Deicer Storage

- a) Cover from Precipitation. Salt and other chemical deicers will be stored in a covered structure or container at all times, unless active loading or spreading is occurring. Containment structures should be permanent in their construction and made of materials that are not subject to salt corrosion. Temporary storage of salt and other chemical deicers is not recommended; however, if materials must be stored outside of a permanent structure, the storage must be on a temporary basis only. Temporary storage piles must be covered with a tarp and adequately secured at all times when not being actively worked.
- b) Impervious Bottom. Salt and other chemical deicers will only be stored on an impervious surface such as a concrete slab or an asphalt parking lot. The use of a tarp or other

material as an impervious bottom is not adequate, unless specifically designed and certified by a professional engineer.

- c) Management of Run-on and Run-off. Salt, sand, and other deicer materials must be stored away from storm drain inlets and other conveyance structures. Storage structures must provide adequate barriers to prevent run-on into the storage pile, and minimize erosion from the pile. All run-off from salt and other chemical deicer piles must be eliminated at all times. Any run-off containing salt material must be captured and either returned to the storage pile, managed as salt brine, or discharged to a sanitary sewer system.

3. Sand and Deicer Use

- a) Deicing Material. Prior to each winter season, the Town will assess deicing materials, and to the extent practical, will select the materials and mix that has the least impact on water quality while still effectively meeting the Town's public safety needs.
- b) Anti-icing. Liquid anti-icing materials may be applied prior to storm events to prevent the bond between winter precipitation and the road surface. This can effectively reduce the amount of deicing material necessary for a storm event. Anti-icing applications should be conducted per manufacturer's recommendations.
- c) Equipment Calibration. All equipment will be calibrated in accordance with the manufacturer's instructions and the specified applications rates for the material being applied. Calibration will include plowing speed and applicable spreader settings. The manufacturer's instructions will be kept at the Town Shop and referenced prior to each winter storm event.
- d) Application Rate. The Town will use the lowest application rate that will effectively treat surfaces to meet safety needs.
- e) Loading. When loading salt, sand, or other deicers, care will be taken to not overfill the truck or tank.

4. Sand and Deicer Clean Up

- a) Clean-Up. Loading areas will be swept frequently to prevent salt or sand build-up and run-off. At a minimum, loading areas should be inspected and swept following each storm event or other period when handling occurs.
- b) Street Sweeping. The Town conducts routine street sweeping beginning in spring to clean up debris and other materials that collect during winter months, including salt, sand, and other deicers.
- c) Small Applications. To the extent practical, small amounts of salt, sand, and deicing materials applied to sidewalks or building entrances by Town staff will be swept up and disposed of properly when weather conditions allow.

- d) Vehicle Washing. Spreading and other equipment used during deicing operations will only be washed inside the Town Shop facility in the bay designed for that purpose. Wash water from that facility enters the sanitary sewer system.

5. Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve snow and deicing operations. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.