

Town of Binghamton Highway Department

Best Management Practice

Snow Plow Washing

The Town of Binghamton Highway Department is located at 865 Hawleyton Rd Binghamton, NY 13903. The land that the town of Binghamton Highway garage is located on was purchased in 1957 by our town's four fathers. The building was built in 1958 at its present location. Improvements to the building and the land have been on an ongoing objective to the administration of the town of Binghamton.

On-Going Objectives:

- Proper removal of salt, sand and grime from equipment
 - General practices
 - Employee training
 - Drainage of Town property
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Description:

The Application and storage of deicing materials, most commonly salts such as sodium chloride, can lead to water quality problems for surrounding areas. Salts, gravel, sand, and other materials are applied to highways and roads to reduce the amount of ice during winter storm events. Salts lower the melting point of ice, allowing roadways to stay free of ice buildup during cold winters. Sand and gravel increase traction on the road, making travel safer.

Pollution Prevention:

- Facilities should be located on flat sites away from surface water and on impervious surfaces that are easily protected from overland runoff.
 - Use diversion berms to minimize run-on to storage areas.
 - DO NOT wash snowplow equipment outside except at the Road & Bridge Vehicle Wash area which has the benefit of the oil and grease trap to collect pollutants.
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Suggested Protocols:

- Upon returning to the garage, use compressed air inside the storage shed to remove excess salt, sand and other particles from equipment body.
 - Washing of snow plows should take place only at wash rack to trap grease, oils and sediment.
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Impacts of Materials:

- Salt (NaCl)
 - Deplete the oxygen supply needed by aquatic animals and plants
 - Leach into the ground and change the soil composition, making it hard for plants to survive
 - Leach into the groundwater, which sometimes flows to surface water; both are sources of drinking water
 - Deteriorate paved surfaces, buildings, infrastructures, and the environment
 - Sand
 - Bury the aquatic floor life, fill in habitats, and cloud the water
 - Erode the stream banks and other landscapes as it is carried to the surface waters by storm water runoff
 - Cause premature deterioration of floor surfaces as it is tracked into buildings
 - Lose its effectiveness after becoming embedded in snow and ice
 - Enter catch basins, storm drains, and surface waters if it is not swept up each spring
 - Contribute to plugged storm drains, which can cause flooding
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Training:

- Train drivers to improve methods of washing and cleaning equipment.
 - Train drivers to report areas of “over salting” to allow possible cleanup and to reduce salt runoff.
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Further Detail of the BMP:

Training of employees, calibrating equipment, and use of brine solutions or other materials for certain situations need to be continuously evaluated to increase effectiveness and reduce potential environmental impacts. Use of temperature sensor technology in pavements and on vehicles is continuing to improve. As the technology improves, the costs will continue to decrease and become a more viable option.