

STORMWATER BMPS: SALT, SAND AND DEICER STORAGE & SNOW DISPOSAL AT MUNICIPAL YARDS

AFFECTED FACILITIES

These BMPs apply at all municipal or county facilities where salt (rock salt), salt/sand mix or liquid magnesium chloride are stored or loaded and where snow is disposed of (dumped after transport from its original location).

BACKGROUND

Rock salt or other de-icing products can severely damage surface waters. When stored in large quantities, run-on and run-off from salt storage areas can quickly dissolve large volumes of salt and carry it into surface waters. Rock salt or sand/salt mix spread on streets, parking areas, sidewalks and walking paths can be picked up when snow is removed and dumped in disposal areas. Snow can also pick up debris and sediment. Surface waters must be protected from run off from snow disposal areas.

BEST MANAGEMENT PRACTICES

- Sand/salt mixture or rock salt should be stored on impervious paved areas (asphalt or concrete) and these areas should be bermed to adequately protect the salt from escaping.
- Covering the salt/sand mix and/or *Ice Slicer* is required.
- When loading salt/sand mix or liquid deicer, care should be taken not to overfill the truck or tank. Loading areas and yards should be swept frequently to prevent salt or sand build-up and run-off. Place berms or waddles where runoff leaves the yard to contain any salt waste.
- Snow disposal areas should be located at least 500 feet from any storm drain inlets, drainage ditches, or surface waters. The area should be sited to minimize the transport of pollutants from snowmelt.
- Snow storage areas should be maintained to reduce erosion and to ensure easy removal of accumulated pollutants or sediments such as sand, road dirt, trash and salts.
- Avoid snow storage on pavement, concrete, near gutters or storm drains or on other impervious surfaces.

REQUIRED STRUCTURES AND EQUIPMENT

- Snow disposal areas should be located at least 500 feet from any storm drain inlets, drainage ditches or surface waters.
- Salt/sand storage facilities should be totally enclosed within salt domes or fabricated buildings with impervious walls and floors.

INSTALLATIONS REQUIRED FOR NEW CONSTRUCTION OR RENOVATIONS

- New salt/sand storage facilities must be totally enclosed in structures such as salt domes or fabricated buildings with impervious walls and floors

REQUIRED EMPLOYEE AND CONTRACTOR TRAINING

- Train all current employees who work with salt storage facilities or snow plowing on this BMP.
- Train all new hires and job transferees who work with salt storage facilities or snow plowing on this BMP.
- Conduct refresher training for all employees who work with salt storage facilities or snow plowing as needed.
- Contracts should stipulate that all contracted employees are trained in stormwater pollution prevention BMPs.

REQUIRED MAINTENANCE

- Inspect and maintain salt storage facilities. Repair any gaps in covers or berms promptly.
- Sweep municipal yards frequently to pick up any salt residue or sand/salt that may be spilled.

RECORDS

- Keep records of employee and contractor training.

EXAMPLES

- Colorado Department of Transportation

REFERENCES

1. Colorado's Phase II Municipal Guidance, October 2001
2. *California Stormwater BMP Handbook*, January 2003
3. *Knoxville (TN) BMP Manual, Activities & Methods*, January 2001
4. *City of Tacoma: Surface Water Management Manual (Vol. IV Source Control BMPs)*, January 2003
5. *Municipal Facility Runoff Control Plan* (City of Lakewood, CO)
6. *Best Management Practices for Industrial Storm Water Pollution Control* (Santa Clara Valley, CA)
7. Storm Water Fact Sheet: Minimizing Effects from Highway Deicing, US EPA (832-99-016), Sept. 1999