

Storing rock salt in a covered dome helps to protect surface and ground water from chloride contamination.

## DO

- ✓ Check for, and correct, deficiencies in salt storage units.
- ✓ Keep salt dry by covering the dome entrance or the face of the salt pile with
- ✓ Sweep the storage areas clean before salt delivery and sweep up spilled salt after delivery.
- ✓ Move delivered salt into storage immediately.
- ✓ If salt is stored on an uncovered concrete or asphalt pad, shape the salt pile to avoid pooling water and cover immediately with a tarpaulin weighted with sand bags, cinder blocks, tires on ropes, etc.
- ✓ Store dry calcium chloride indoors on pallets.
- ✓ Load salt trucks on a paved surface.
- ✓ Sweep the paved staging area prior to loading trucks and sweep spilled salt back into storage.
- ✓ Load what is needed for the job and return unused product to storage.
- ✓ Use grading, berms, swales, curbs and dikes to prevent stormwater run-on and run-off; direct downspouts away from storage and loading areas.

## **Tips & Tricks**

7.1 Road Salts

- ! Traffic dividers can be used to improve stockpiles of salt.
- ! UK Environmental Management can assist with Stormwater best management practice (BMP) selection
- ! UK Environmental Mgmt. 859-323-6280

#### DON'T

- **★** Don't leave salt unprotected from weather.
- **★** Don't store salt on permeable surfaces.
- ➤ Don't use building walls as a backing for loading.
- **★** Don't overfill storage areas.

# Materials & Waste Management

▲ Dry calcium chloride or rock salt that becomes dirty is to be worked into future snow and ice operations.

# **Facility Checklist**

- $\square$  Check *EACH* salt delivery operation.
- ☐ Check salt pads *DAILY* for proper cover with tarps and signs of runoff when in use.
- ☐ Check salt storage domes and sheds *DAILY* during snow and ice season (October to April) for water-tight roof & floors, tarpaulin covers for entrances, ventilation fans, lights, and building damage. Immediately report repair needs to the facility superintendent.
- ☐ Check salt storage areas for white chloride deposits **DAILY** during snow and ice season and WEEKLY during the rest of the year.
- ☐ Check salt domes, sheds and pads **MONTHLY** between May and September for structural integrity and runoff issues.
- ☐ Check salt pads *ANNUALLY* during summer for cracks and wear; repair as needed.
- ☐ To prevent salt tracking watch for and move salt away from storage entrances where rain is blown in.

# If...Then

- ➤ If bags of dry calcium chloride break open, sweep up and put into a new bag or clean container for future use.
- ➤ If rainfall pools around salt storage areas, construct a drainage ditch, dikes or re-grade the area to send runoff to an area treated by a Stormwater Best Management Practice.
- If possible, the entrances of new salt storage facilities will face away from prevailing weather.

Training: 1 per Year Season: Fall		
Relevant Environmental Programs	<ul><li>○ Air Quality</li><li>○ 401/404/WQC</li><li>● KPDES</li><li>● MS4</li></ul>	<ul><li>GWPP</li><li>Waste</li><li>Pesticides</li><li>SPCC</li></ul>

Page 1 of 2 Last Revision: 2/12/2013

### INFORMATION SOURCES

- 401 KAR 5:031. Surface Water Standards.
- 401 KAR 5:050. KPDES Effluent Standards
- 401 KAR 5:055. Scope and applicability of the KPDES Program
- 401 KAR 5:065. KPDES permit conditions.
- 401 KAR 5:070. Provisions of the KPDES permit.
- Kentucky Transportation Cabinet. *Environmental Awareness: A Road Master Training Course*. Undated. (Unit 4, KPDES Permit, Good Housekeeping BMP; Unit 5 pages 5-9 & 10, 13 to 15 and 5-19, p32)
- Kentucky Transportation Cabinet and Kentucky Transportation Center. 2005. Environmental Handbook for Management of Highways and Transportation Facilities. (Fact Sheet 2.4.1)
- New York State Department of Transportation. Environmental Handbook for Transportation Operations A Summary of the Environmental Requirements and Best Practices for Maintaining and Constructing Highways and Transportation Systems. Environmental Analysis Bureau. April, 2006. 33-35, 42.
- Salt Institute. *The Snowfighter's Handbook: A Practical Guide for Snow and Ice Control.* 1999. Alexandria, Virginia. SI-1999-R.

City of Bowling Green. 2006. Environmental Handbook for City of Bowling Green Facilities Management. (Fact Sheet 7.1)

### **NOTES**

1) UK Environmental Management is located at 355 Cooper Drive, Lexington, KY 40506-0490, 859-323-6280, ehs.uky.edu/env.

7.1 Road Salts