## Education and Outreach for Source Protection Road Salt/Snow Storage

Audiences	Key Content
All Audiences (e.g. landowners; property managers)	<ul> <li>Excess road salt can affect our drinking water.</li> <li>Look for calcium chloride or magnesium chloride salt products. These products work best. Use only what you need to melt the snow or ice on your driveway or sidewalk. Do not over salt.</li> <li>The best solution is to stop snow and ice from accumulating by shoveling and sweeping as soon as possible after or during a snowfall. Divert snow away from storm sewers. Pile snow so that it will not run across paved surfaces when it melts. Snow may melt during the day and freeze on the pavement at night requiring more salt.</li> <li>Salt is best used between 0° and -12° C. Below -18° C salt does not work.</li> <li>Follow weather conditions to determine when to shovel and apply salt. Do not apply salt if it is raining or if rain is expected. It will only wash away.</li> <li>Sweep up loose salt, sand and de-icer to stop it from being washed into water sources when a melt occurs. Return salt to your salt storage. It is still useful and effective for melting ice.</li> </ul>
Facilities with bulk salt storage on site (e.g., malls; parking lots)	<ul> <li>Unprotected salt can be washed into the environment by rain or snow. You should:         <ul> <li>store salt on waterproof pads with a cover – preferably with a permanent roof;</li> <li>store liquid de-icing chemicals on waterproof pads in tanks protected by cement posts/walls.</li> </ul> </li> </ul>



Municipalities (e.g., public works	• The storage and application of road salt, as well as the storage of snow, can potentially contaminate drinking water sources.
departments;	There are alternatives to road salt for de-icing paved
transportation	surfaces:
divisions)	<ul> <li>use low or non-chloride products;</li> </ul>
	<ul> <li>many de-icers that combine ingredients with salt work effectively and reduce the amount of salt needed.</li> </ul>
	Best practices for achieving safe conditions with limited salt
	include:
	<ul> <li>proactive snow and ice control;</li> </ul>
	<ul> <li>recognizing that salt works best when paired with mechanical removal:</li> </ul>
	$\circ$ using variable application rates based on weather
	<ul> <li>conditions and traffic;</li> <li>using liquid de-icers, either by themselves or in combination with road salt.</li> </ul>

## RESOURCES

Using the resources below you can find information and best practices on road salt management and de-icing operations (including alternatives to road salt, technologies for de-icing) and snow storage and disposal.

GUIDELINES ON SNOW DISPOSAL AND DE-ICING OPERATIONS IN ONTARIO		
Link	Guidelines on Snow Disposal and De-icing Operations in Ontario	
Author Date Published Notes	Ontario Ministry of the Environment and Climate Change Revised February 2011 Information about snow disposal options and land site criteria,	
	storage.	

## **OTHER INFORMATION**

- Environment Canada\*
  - o Code of Practice: The Environmental Management of Road Salts
- Ontario Ministry of Transportation
  - o Road Salt Management Keeping Ontario's Roads Safe in Winter
- Transportation Association of Canada\* (TAC)
  - o Road Salt and Snow and Ice Control Primer (December 1999)
- Smart About Salt Council
  - Smart About Salt program
- Salt Institute\*
  - Safe and Sustainable Salt Storage <u>Salt Storage Handbook</u> <u>Practical Recommendations for Storing and Handling Deicing Salt</u> (Revised 2013)
- Your local municipal office or conservation authority.

\*This organization requires written credit for use of excerpted materials.

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