

Getting Smart About Salt



Winter Salt Management Program

By Lyndon McLean

Winter salt is an inexpensive and easy way to deal with icy patches. Trucks salting roadways and neighbours spreading a little de-icer on the front sidewalk are familiar sight. But as a tragedy such as the collapse of the Algo Centre Mall in Elliot Lake shows, there can be high costs associated with overuse of salt and a lack of facility maintenance.

The Smart About Salt Council is an independent, not-for-profit organization dedicated to protecting the environment through programs that improve management of winter salt used to control ice on sidewalks, parking lots and roadways. The council was started by its partners, the Region of Waterloo, Landscape Ontario Horticultural Trades Association, Building Owners and Managers Association of Ottawa, and Ontario Good Roads Association.

In response to concerns over rising levels of sodium and chlorides in municipal drinking water, the Region of Waterloo took action. One of the first large municipalities to recognize that winter salt use is a major problem, they developed an active strategy for more efficient salt use on its

roads. But they also developed the Smart About Salt program, designed to teach private contractors and property managers the best practices of salt management that help to reduce its use while still ensuring that public safety is not compromised.

From building owners to snow removal contractors to the general public, each partner has an important stake in ensuring that its members and constituents understand the program's value in protecting the environment. All partners encourage everyone to participate in and promote this program. For example, the Region of Waterloo now requires all of its contractors that apply salt on its building properties to be registered in the Smart About Salt program, as contracts are renewed.

The Smart About Salt Council promotes good snow and ice management practices with the aim of reducing salt use on Canada's roadways, parking lots and sidewalks. The council researches and disseminates snow and ice best practices from the snow operations, property owner/manager and

public safety perspective, as well as developing and administering education and training programs. These programs assist organizations involved in snow and ice operations to operate in a manner consistent with ensuring public safety while protecting the environment.

What Can You As A Facilities Manager Do?

The best advice, according to Smart About Salt Executive Director Leanne Lobe, is to look for ways to manage and reduce ice around facilities. Salt is the least expensive way to manage ice, but it and other alternatives are sources of chlorides that damage property and contribute to environmental problems. Less ice means less salt and other chlorides - and a safer environment.

There are several ways you can manage ice around your facility, including:

- Look at pooling - this tells you where you'll have ice issues
- Spot treat ice - instead of covering an area with salt, use what you need to deal with the problem area.

Smart About Salt's Guiding Principles

Mission:

To protect freshwater from winter salt applied on facilities

Vision:

All facilities professionally designed and managed to improve winter safety and reduce salt use

Values (3 Cs):

Collaboration: We believe there is strength in numbers and that together we can address the complex social, economic and environmental issues related to winter safety.

Credibility: We recognize that clear, defensible standards and transparency are critical to achieving our mission.

Continuous Improvement: We commit to continuous improvement for our programs and expect the same from our members.

Goals (5 Ps):

Programs that develop and recognize industry leaders

Partnerships that support our mission and vision

Policies that improve industry standards

People that are inspired, committed and engaged

Performance that is measurable and defensible

WHY SALT?

Winter salt is economical to purchase, readily available and an effective tool for keeping surfaces clear of ice. However, it's important to manage its use to reduce the negative impact winter salt can have on our environment.

Salt damage costs us all. As individuals, it affects our clothes, shoes, animal friends, lawns, gardens, and vehicles. In our communities, it damages sidewalks, roads, buildings, and bridges and leads to increased maintenance costs.

Effects of Winter Salt on our urban environment...

- **Buildings:** outside structures (bricks/concrete/sidewalks), doorways and flooring may become damaged, increasing repair costs.
- **Vehicles:** salt accelerates rusting, causing damage and increasing repair costs.
- **Clothing:** salt can stain and potentially ruin footwear and clothing.

On our natural environment...

- **Drinking water sources:** damaging sodium and chloride from winter salt eventually makes their way to drinking water wells in some communities. High chloride levels may make drinking water taste salty.
- **Vegetation (plants/trees/shrubs):** if sprayed with salt, vegetation can lose its hardiness to the cold and be killed by freezing temperatures and high salt levels.
- **Aquatic life:** salt changes water density, which can negatively affect the seasonal mixing of lake waters. This mixing is important to increase oxygen levels required by aquatic life for survival.
- **Wildlife:** animals are attracted to salt on or by the road, which increases the threat of collisions with vehicles.
- **Pets:** salt trapped on paws can irritate and crack skin.

BE SMART ABOUT THE SALT YOU USE!

- Maintain documentation - keep track of areas that present problems, when a contractor is called, why and how much salt is used.
- If you do a site assessment and have issues, what are you doing about them? Is there an opportunity to close problem areas during winter? If so, this will reduce risks and improve safety.
- Ask yourself: How much salt is enough? What is the true cost to your infrastructure?

Smart About Salt offers the Certified Site program that meets their criteria for designation. Eligible sites include properties such as government buildings and schools, as well as multi-unit residential buildings (condominiums, apartments and townhouse complexes) and industrial and commercial properties (shopping plazas, large factories, arenas and light industrial complexes).

By becoming certified, you can:

- Reduce your winter salt management costs
- Reduce infrastructure damage to bricks, doorways and sidewalks
- Reduce damage to property without compromising safety
- Qualify for insurance premium discounts
- Demonstrate your commitment to environmental stewardship

Visit <http://smartaboutsalt.com/sites> for information about the application process or call (647) 722-5699 for more information.

Winter Tips

Winter salt helps keep our roads, parking lots, and pathways clear of snow and ice; however, as populations, traffic, and infrastructure grow, so does our reliance on salt - which isn't necessarily a good thing. It is possible to stay safe this winter and minimize the impact of salt on the environment.

Get Smart About Salt

To keep driveways and sidewalks clear of snow and ice:

1. **Shovel first.** When you remove snow and ice by shovelling, you'll need less salt, and it can be more effective. Get out there as early as you can and keep up with storms. You may even decide that salt isn't needed.
2. **For icy patches:**
 - Use a traction aid like kitty litter or sand to reduce the potential to slip.
 - Sprinkle de-icing material on icy areas only and follow the manufacturer's instructions for working temperatures and application rates.
 - Give de-icing material time to do its work.
3. **Prevent future icy buildups:**
 - **Redirect downspouts** away from walkways and driveway.
 - **Shovel unsalted snow to lower areas** or onto lawns to direct melting snow away from paved areas.
4. **If hiring a snow removal contractor to clear driveways or lots, use certified Smart About Salt contractors.** They're trained in reducing salt use while maximizing effectiveness and safety.

Get a Grip on Snow and Ice

While salt can make winter safer, it's only part of the answer. Do your part. Protect yourself from slips and falls.

- **Wear sturdy footwear** designed for snow and ice to help protect yourself from slips and falls. Boots should have a good tread for traction with low, wide heels. Check out "The (anatomy of a) winter boot" at http://smartaboutsalt.com/Resources/Documents/SAS_WinterBootAnatomy.pdf for buying proper winter footwear.
- **Be road-ready.** This includes putting on snow tires on your vehicle, slowing down on the road and giving yourself extra time to arrive at your destination. Drive for the conditions, and make sure you give plow drivers plenty of space to do their work.
- **Use a traction aid** like kitty litter or sand to reduce the potential to slip. ▶