**MELT/TRACTION MATERIALS**
Buying the cheapest product is not always the least expensive and more is not always better!

- Consider using magnesium chloride instead of sodium chloride. Though it costs more, a molecule of magnesium chloride provides twice as much chloride as a molecule of sodium chloride. Magnesium chloride is also more effective at lower temperatures and it is less corrosive and far less damaging to landscaping. That means a reduction in your client’s capital and maintenance costs!

- Use coarser aggregate for sanding. This will improve winter traction and reduce the loss of effectiveness due to burial with continued snowfall thus reducing re-application! Coarser aggregate also contains less “antifreeze” salt (added to reduce clumping) and is easier to spread uniformly. All these factors can greatly reduce material volumes!

**Application**
When and how you apply materials make a big difference in how well they work, how much you apply, and ultimately how much it costs you!

- Lightly apply deicers just before or just as snow begins to fall. This will help prevent formation of a bond between the ice and the ground surface, making it easier to shovel or plow later.

- Do not apply deicers during the middle of a storm. They may appear to work right after application, but with continued snowfall, will dilute and refreeze to form an even icier surface.

- Do apply deicers at the end of the storm after you have removed the last of the new fallen snow. This application will be most effective because it takes advantage of heat from the sun, traffic, or warming ambient temperatures and will help the deicer maintain antifreezing potency as the snow and ice melts.

- Sweep or shovel surfaces free of slush and melted snow as soon as possible. A given concentration of salt is effective down to a certain temperature. As temperatures fall following a storm, slush will refreeze necessitating reapplication of deicer.

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**WHAT TO DO WITH ALL THAT SNOW!**

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**SNOW STORAGE AND DISPOSAL PRACTICES FOR LOCAL CONTRACTORS & PROPERTY OWNERS**

The importance of storm water best management practices

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Fairbanks Storm Water Advisory Committee (FSWAC)
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fnsb.gov/383/Fairbanks-Storm-Water-Management-Program
**BEST MANAGEMENT PRACTICES (BMPs)** Contractors responsible for snow removal are frequently responsible for the application of sand, gravel, and deicers. Implementing best management practices when applying these materials will greatly reduce the amount of contaminants in plowed snow and will likely reduce operation costs!

The following best management practices can be easily applied and will help avoid fines and costly cleanups.

- Avoid dumping snow into any waterbody, ice-covered or standing-water, including road drainage ditches, gravel pits, or storm drain inlets...it is illegal! And is considered an illicit discharge
- After breakup, remove and properly dispose of trash and litter from the site.
- Fencing a site will prevent litter from blowing or drifting.

**Storage and Disposal Sites**

Location, location, location!
The key to selecting effective snow storage and disposal sites is to locate them adjacent to, or on, pervious surfaces in upland areas (300’+ from waterbodies) where drainage to surface waters or storm drains is not possible and where the water table is low. At such locations, snow melt can filter into the soil, leaving behind dirt and debris which can be removed after breakup. The best disposal sites are lands that drain into site-specific detention basins or are protected by dikes or swales around the perimeter. Some dos and don’ts when selecting a site:

- If a site must be located near a waterbody (~300-500’), maintain a vegetated buffer between the site and waterbody. Slow runoff with swales around the perimeter of the snow piles.
- Avoid sites near wellheads or other areas that could potentially affect groundwater including gravel pits.
- Choose sites where there is little risk of human exposure after breakup. Accidental ingestion of contaminated soils can impact human health.

**Know the Codes**

If your storage area is:

- 1 acre or greater anywhere within the Fairbanks Urbanized Area you are required to implement a Permanent Storm Water Control Plan (PSWCP) and submit a Stormwater Pollution Prevention Plan prior to construction.
- Any ground disturbance within city limits of 10,000 sf or greater requires an Erosion & Sediment Control Plan.
- The AK Department of Environmental Conservation requires a plan review for snow disposal sites of any size, anywhere within the state (18 AAC 72.600).

**Additionnal Resources**

Fairbanks Area Regulation Details: 
[fnhb.gov/383/Fairbanks-Storm-Water-Management-Program](fnhb.gov/383/Fairbanks-Storm-Water-Management-Program)

Online Design Guides: 
[Anchorage Stormwater Manual Volume 1 December 2017 (Ch. 8)](fnhb.gov/383/Fairbanks-Storm-Water-Management-Program)