



**STANDARD OPERATING
PROCEDURE (SOP)
14.3
De-Icing Chemicals**

SOP No.: 14.3

Topic: MS4 Stormwater

SOP Name: De-Icing Chemicals

Introduction and Background:

CSU uses de-icing chemicals (de-icers) on roads, sidewalks, steps and ramps. De-icers are used to reduce ice formation and provide traction. In certain winter conditions and on steps and ramps, de-icers are necessary for the safe mobility of drivers, cyclists and pedestrians.

CSU stores and uses de-icers in bulk for roads, and from hand-held dispensers for steps, ramps and walkways. Granular de-icers are used, no liquid de-icers are stored or used at CSU. This SOP describes methods of de-icer storage and use so that impact to stormwater is minimized.



Bulk De-Icer Storage:

CSU purchases de-icer in bulk for use on roads. It is a naturally-occurring granular magnesium chloride and powdered rock that is mined and sold for this purpose. CSU stores the bulk de-icer in a covered salt shed on South Campus. The shed's concrete apron is sloped and managed to minimize the release of salt to waterways.



Bulk De-Icer Use:

CSU's grounds crews apply the bulk de-icer on paved roads as needed during winter weather conditions after plowing and brooming. Grounds crews are trained to use the de-icer in a way that protects drivers and pedestrians from slipping, but also minimizes potential impacts to stormwater. Key points include:

- Plow and broom to the extent possible
- Do not overload the de-icer spreader
- Sweep the bulk storage apron after loading
- Try to minimize clumping and uneven application.
- Clean trucks and equipment in designated areas that contain excess salt and minimize its release to waterways.

Hand-Held De-Icers

Facilities and other campus personnel use granular de-icers as-needed on steps, ramps and walkways. Periodic training sessions are provided to facilities employees emphasizing the need to use just the right amount of a de-icer without leaving clumps and mounds that cause unnecessary stormwater pollution. In addition, CSU provides de-icer posters to users in an effort to educate campus personnel that de-icers can pollute stormwater.



Affected/Involved Departments:

- Grounds
- Facilities Management
- Building proctors

Thank you for helping prevent stormwater pollution!

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