



Caltrans Division of Research,
Innovation and System Information

Research

Notes

Maintenance

JANUARY 2023

Project Title:
Evaluation of a Portable Snow
Melter for Use in Caltrans
Maintenance Yards

Task Number: 4133

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Completion Date: July 30, 2023

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Evaluation of a Portable Snow Melter for Use in Caltrans Maintenance

This project plans to research a snow melter system to improve current snow clearing operations in District 3.

WHAT IS THE NEED?

Caltrans must remove snow from its maintenance yards. Current operations involve shoveling snow into trailers and hauling it to a remote location to be offloaded. This requires numerous staff and time to operate necessary equipment to shovel and transport snow. Use of a snow melter system could free up staff, reduce maintenance and operation costs of the trucks, and reduce risk involved in transporting as the snow melter operates on site, providing overall increased efficiency.

WHAT ARE WE DOING?

This project plans to assess the suitability of snow melter systems for Caltrans operations. The Division of Maintenance has agreed to independently procure a commercially available snow melter system, with the Advanced Highway Maintenance and Construction Technology (AHMCT) Research Center developing features for evaluation, support field tests, obtain operator feedback, and provide a summary report for the evaluation.

At this time, the Division of Maintenance anticipates procuring a Snow Dragon SND900 model for evaluation. Researchers anticipate working with District 3 Maintenance personnel operating in Kingvale, Truckee, Tahoe City, or South Lake Tahoe to perform field testing in real world conditions.

WHAT IS OUR GOAL?

The goal of this project is to determine if use of a snow melter system can provide overall reduced costs and reduce risks involved in transporting snow.



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WHAT IS THE BENEFIT?

Use of a commercially available snow melter system could free up staff to perform other pressing winter maintenance tasks, cause less wear and tear on haul trucks, reduce fuel cost, and reduce the possibility of accidents while transporting snow off site for both Caltrans and the public. A portable system could support operations in multiple facilities a region and may allow for more efficient snow removal in the districts.

WHAT IS THE PROGRESS TO DATE?

A kickoff meeting was held on December 14th to introduce the panel, background, and research project. The Kingvale maintenance yard was chosen for testing in coordination with District 3 panel members. The AHMCT research team is in the process of procuring the snow melter system and is anticipating delivery in January. For the most current project information, please contact the Task Manager.