

State Planning and Research Program Quarterly Report

PROJECT TITLE: *pH Waiver for Deicing Products and the Qualified Products List*

OBJECTIVES: This project aims to help Clear Roads determine the appropriate pH range for deicing products listed on the Qualified Product List (QPL).

PERIOD COVERED: January 1 to March 31, 2024

PARTICIPATING AGENCIES: Minnesota Department of Transportation, Clear Roads Technical Advisory Committee, Washington State University (Prime), and Monte Vista Associates LLC (Subcontractor).

PROJECT MANAGER:
Hafiz Munir / Tom Peters

LEAD AGENCY: MnDOT

PRINCIPAL INVESTIGATOR:
Xianming Shi, WSU

SP&R PROJECT NO:
MnDOT Contract No.
1052957

Federal Project Number:
TPF-5(479)

PROJECT IS:

 Planning
 X Research & Development

ANNUAL BUDGET: FY22: \$124,154;
FY23: \$25,377; Total: \$149,531

PROJECT EXPENDITURES TO DATE: \$7,812

WORK COMPLETED:

The PI worked with the project TAC to hold the kickoff meeting online, on December 1, 2023. Then the PI submitted the presentation slides and the draft meeting notes.

In Jan. 2024, there was a contract amendment signed and approved, as follows: During the project kickoff meeting, the project subcommittee agreed that it would serve the project better to test samples of “targeted” deicer products with pH values of a certain range. To identify these (about ten) targeted deicers, a survey of the Clear Roads membership needs to be conducted. This will expand Task 1 (Literature Review) but will not add any funds to the task or project budget.

Task 1 (Literature Search): 75% complete. The team has made significant progress in the synthesis of the gathered literature. We have identified nearly all the “targeted deicers”, but still need help from vendors or State DOTs who know products of CMA or products with high organic content. Then we will seek their pH and percent corrosion rate (PCR) data from historical records.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Project management activities.

Task 1 (Literature Review): to complete.

Task 2 (Developing the Testing Plan): to initiate and ideally to complete.

STATUS AND COMPLETION DATE:

This project is about two months behind schedule. We will try to catch up in the next quarter and deliver the Task 1 draft deliverable (and possibly Task 2 draft deliverable) by April 31, 2024.