

**State Planning and Research Program  
Quarterly Report**

**PROJECT TITLE:** *Efficacy, Cost, and Impacts of Non-Chloride Deicers: An Educational Primer and Product Information Sheets*

**OBJECTIVES:** The goal of this project is to synthesize available information on non-chloride deicers to allow for a more comprehensive understanding by winter maintenance professionals and allow for easy comparison between products and with sodium chloride (salt brine, rock salt). This will be accomplished through a literature search, survey, and evaluation of currently used standards and tests. Laboratory testing may be used to provide supplemental information. The outcomes will include a comprehensive literature review document, one to two-page product summaries and product information sheets for key non-chloride deicers.

**PERIOD COVERED:** October 1, 2022 – December 31, 2022

**PARTICIPATING AGENCIES:** Minnesota Department of Transportation and the Clear Roads Technical Advisory Committee

**PROJECT MANAGER:**  
Hafiz Munir / Tom Peters

**SP&R PROJECT NO:**  
MnDOT Contract No.  
1048127

**PROJECT IS:**

Planning  
 Research & Development

**LEAD AGENCY:** MnDOT

Federal Project Number:  
TPF-5(353)

**PRINCIPAL INVESTIGATOR:**  
Laura Fay, WTI, Montana State University

**ANNUAL BUDGET:** \$114,946

**PROJECT EXPENDITURES TO DATE:** \$40,000

**WORK COMPLETED:**

- The kickoff meeting was held April 29, 2022. The kickoff meeting presentation and notes were submitted May 11, 2022.
- The Task 1 Literature Review was submitted August 25, 2022. A meeting was held September 12, 2022 to discuss the deliverable and next steps. The meeting slides, notes, and draft Task 2 surveys were submitted September 13, 2022. The revised Task 1 Literature Review was submitted for approval September 29, 2022.
- Task 2 Surveys were submitted to MSU IRB and approved October 11, 2022. Task 2 Surveys were disseminated October 25, 2022. The online survey tool was closed November 28, 2022. The Task 2 Survey Results were submitted for review December 12, 2022. A meeting was scheduled for the next quarter to discuss the deliverable.
- Task 3 QPL Evaluation & Lab Testing Recommendations – work has begun on this task.
- Task 4 Educational Primers – work has begun on this task.

**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**

- Hold the Task 2 Surveys meeting to discuss the deliverable, receive feedback, revise and submit for approval.
- Develop the Task 3 QPL Evaluation & Lab Testing Recommendations document and submit for review.
- Schedule a meeting to review the Task 3 deliverable.
- Continue work on the Task 4 Educational Primers.

**STATUS AND COMPLETION DATE:** No issues to report at this time.