

**State Planning and Research Program  
Quarterly Report**

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

**OBJECTIVES:** This project aims to develop recommendations for pre-wetting rates and evaluate the difference between applying pre-wet in the chute vs. on the chain flight or in a mix chamber.

**PERIOD COVERED:** October 1 – December 31, 2023

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

Washington State University – Prime

Monte Vista Associates LLC – Subcontractor

**PROJECT MANAGER:**

Hafiz Munir / Tom Peters

**SP&R PROJECT NO:**

MnDOT Contract No.  
1052957

**PROJECT IS:**

       Planning  
  X   Research & Development

**LEAD AGENCY:** MnDOT

**PRINCIPAL INVESTIGATOR:**

Xianming Shi, Washington State University

Federal Project Number:  
TPF-5(479)

**ANNUAL BUDGET:** FY22: \$124,154;  
FY23: \$25,377

**PROJECT BUDGET:** \$149,531

**PROJECT EXPENDITURES TO DATE:** \$3,906

**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.

**Task 1** (Literature Search): 30% complete. The team has gathered some relevant literature and started the literature search process.

**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 on schedule. The contract end date is April 30, 2025.