

Virginia Transportation Research Council
Contract/Grant Progress Report

Project No: TPF5 (045) **Starting Date:** 3/1/2003 **Target Completion Date:** 12/31/07
Project Title: Development of Performance Guidelines for the Selection of Bituminous Hot-Poured Crack Sealants
Performing Agency: University of Illinois
Principal Investigator(s): Imad L. Al-Qadi
Date of This Report: 05/31/07 **Next Report Due Date:** 8/31/07

Project Description

The project will establish performance guidelines for the proper selection of hot-poured crack sealants. The guidelines will be in the spirit of the Performance Grade (PG) system for bituminous binders with some modifications to the equipment, data analysis procedure, and testing methods.

Research Activities Pursued This Period:

- An update on all sealant tests was presented to the panel at the April 2007's meeting in Ottawa.
- For DTT, data interpretation and analysis of results is completed. Variation between operators was completed utilizing five sealants. Testing of selected sealants collected from the field is underway.
- For BBR, testing of selected sealants collected from the field is underway. Testing of the 15 aged sealants is completed and variations due to operator were determined.
- For DTT adhesion, testing is underway and is expected to be completed in six weeks.
- For blister test, testing of 15 sealants (unaged) was completed. Variation between operators is underway. In addition, testing of five selected aged sealants is underway.

Problems Encountered:

- Variation in the DDT adhesion specimen molds was noted. Results from testing using those molds were discarded. New molds were manufactured; another set of tests is being conducted.
- Delays in DTT testing due to problems in the DTT equipment occurred several times during the past quarter. That required on-site maintenance as well as replacing some parts. The DTT device has been working fine for the past two weeks.

Activities Planned for Next Period:

- Complete the sealant adhesion DTT testing.
- Conduct blister testing on aged sealants.
- Finalize the BBR and DDT tests.

Budget Status:

Current FY Project Budget: \$74,236*		Project Budget Lifetime: *\$20,000
Current FY Expenditures: \$131,505	as of 04/30/07	Expenditures LTD: \$687,831
Percent Expended this FY: 177%*		Percent Expended LTD: 84%

* this represent the number in the budget; the project was extended to 12/31/07

Timetable: Project is (check):

- On Schedule
- Behind Schedule * (explain above)
- Ahead of Schedule

Preparer's Signature: Imad Al-Qadi

Date: 05/31/07