

Virginia Transportation Research Council  
Contract/Grant Progress Report

<b>Project No:</b> <u>TPF5 (045)</u>	<b>Starting Date:</b> <u>3/1/2003</u>	<b>Target Completion Date:</b> <u>12/31/07</u>
<b>Project Title:</b> <u>Development of Performance Guidelines for the Selection of Bituminous Hot-Poured Crack Sealants</u>		
<b>Performing Agency:</b> <u>University of Illinois</u>		
<b>Principal Investigator(s):</b> <u>Imad L. Al-Qadi</u>		
<b>Date of This Report:</b> <u>8/31/07</u>	<b>Next Report Due Date:</b> <u>11/30/07</u>	

**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:**

- For DTT, testing of selected sealants collected from the field has been completed. Comprehensive project report is being prepared.
- For BBR, preparation of the comprehensive project report is underway; a draft was submitted to the panel.
- For DTT adhesion, experimental program for seven sealants and four substrates has been completed. For Blister test, testing of non-aged sealants was completed, variation within laboratory was checked and test procedure was established. Seven aged and non-aged sealants with aluminum were tested using the finalized test procedure. Blister test procedure is being used to study the effect of sealant viscosity, loading rate and temperature on interfacial bonding. The comprehensive report for adhesion DTT and blister test is being prepared.
- A meeting with review panel will take place to review the adhesion procedure on October 22 in Champaign, IL on October 22.

**Problems Encountered:**  
No major problems were encountered

**Activities Planned for Next Period:**

- The threshold for the BBR, DTT and Adhesion test will be determined.
- The executive summary of the BBR, cohesive and adhesive DTT, and Blister will be prepared.

**Budget Status:**

Current FY Project Budget: \$74,236*	Project Budget Lifetime: *\$820k
Current FY Expenditures: \$185,323 (as of 07/31/07)	Expenditures LTD: \$741,649
Percent Expended this FY: 250%*	Percent Expended LTD: 90.5%

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

**Timetable:** Project is (check):

On Schedule	<input checked="" type="checkbox"/>
Behind Schedule *	<input type="checkbox"/> (explain above)
Ahead of Schedule	<input type="checkbox"/>

Preparer's Signature: <u>Imad Al-Qadi</u>	Date: <u>08/31/07</u>
---	-----------------------