

**Greenbook Committee of Public Works Standards, Inc.**

**New Materials and Methods Subcommittee Surface**

**Slurry Seal Subtask Force**

**MINUTES**

**Tuesday, November 1, 2016**

**Presiding: Blaine Thomann, Co-Chair  
Todd Vargason, Co-Chair**

**1. Called to Order: 1:01 PM**

**2. Self-Introductions (from sign-in sheet):**

Name	Agency / Co.	Tel.	E-mail
Camille Adler	OC Public Works	714-719-1723	<a href="mailto:camille.adler@ocpw.ocgov.com">camille.adler@ocpw.ocgov.com</a>
Lance Allan	Roy Allan Slurry Seal	562-645-3363	<a href="mailto:lance@raslurry.com">lance@raslurry.com</a>
Morey Bouzari	L.A. County Public Works	626-476-7778	<a href="mailto:mbouzari@ladpw.org">mbouzari@ladpw.org</a>
Steve Deis*	County of Fresno		<a href="mailto:Sdeis@co.fresno.ca.gov">Sdeis@co.fresno.ca.gov</a>
Doug Ford	Pavement Coatings	714-826-3011	<a href="mailto:dford@pavementcoatings.com">dford@pavementcoatings.com</a>
Catherine Dungca*	City of San Diego		<a href="mailto:Cdungca@sandiego.gov">Cdungca@sandiego.gov</a>
Amir Ghavibazoo	Twining, Inc.	562-900-5258	<a href="mailto:aghavibazoo@twininginc.com">aghavibazoo@twininginc.com</a>
John Schmidt*	Granite Construction	805-879-5390	<a href="mailto:John.schmidt@gcinc.com">John.schmidt@gcinc.com</a>
Brian Smith	L.A. County Public Works	626-458-1731	<a href="mailto:Bsmith@dpw.lacounty.gov">Bsmith@dpw.lacounty.gov</a>
Blaine Thomann	OC Public Works	714-667-4996	<a href="mailto:B.thomann@ocpw.ocgov.com">B.thomann@ocpw.ocgov.com</a>
Todd Vargason	ERGON	909-829-0505	<a href="mailto:Todd.vargason@ergon.com">Todd.vargason@ergon.com</a>
Tom Williams	Labelle-Marvin, Inc.	714-546-3468	<a href="mailto:twilliams@labellemarvin.com">twilliams@labellemarvin.com</a>
Frank Hoffman	P.M.I.	760-603-0961	<a href="mailto:frank@pmitechnology.com">frank@pmitechnology.com</a>
Mike Burris	P.M.I.	760-603-0961	<a href="mailto:mike@pmitechnology.com">mike@pmitechnology.com</a>
Ozzie Fierro	L.A. County Public Works	626-476-7612	<a href="mailto:ofierro@dpw.lacounty.gov">ofierro@dpw.lacounty.gov</a>
Robert Mariz	P.M.I.	760-802-6580	<a href="mailto:robert@pmitechnology.com">robert@pmitechnology.com</a>
Matthew Conarroe	Western Emulsion	818-631-9098	<a href="mailto:matthew.conarroe@westernemulsion.com">matthew.conarroe@westernemulsion.com</a>
John Moore	OC Public Works	714-245-4515	<a href="mailto:John.moore@ocpw.ocgov.com">John.moore@ocpw.ocgov.com</a>
Leland Pace	P.M.I.	760-603-8961	<a href="mailto:leland@pmitechnology.com">leland@pmitechnology.com</a>
Steve Olsen*	Teifer		<a href="mailto:Steve.olsen@telferpavements.com">Steve.olsen@telferpavements.com</a>
Coyla McKinney*	Alon Asphalt		<a href="mailto:cmckinney@ppcla.com">cmckinney@ppcla.com</a>
Doug Martin	Doug Martin Slurry	714-441-0513	<a href="mailto:doug@dougmartinconstruction.com">doug@dougmartinconstruction.com</a>
Mike Marchini	APS		<a href="mailto:mmarchini@americanpavementsystems.com">mmarchini@americanpavementsystems.com</a>

\*denotes call-in attendance

### 3. Approval of Minutes from Last Meeting

No prior minutes – task force's first meeting.

### 4. Old Business

N/A

### 5. New Business

- a. Discussed the scope of the new task force (Co-Chairs and participants)
  - 1) To consider alternatives to the Wet Track Abrasion Test (WTAT) or modifications to the WTAT in an effort to produce better repeatability of test results between labs.

### 6. General Discussion

Participants engaged in a discussion of the existing WTAT, including:

- The difficulty of making a slurry patty in the field within 45 seconds per ASTM D 3910
- Fabricating a slurry patty is much easier to do in the lab than in the field
- Asking what the best course of action is when the abrasion test fails to meet the specification
- Some slurry jobs with failing WTAT results turn out to last for up to five years, while slurry samples that pass the WTAT do not
- Not all agencies are following the WTAT per Greenbook Standards
- Questioning how the Greenbook came up with maximum permissible loss of 50g for type I and 60g for type II slurry
- Difficulty of producing repeatable WTAT results between labs has been an issue for a long time
- Many in industry don't like the WTAT
- A suggestion was made that an extraction test may be a good alternative to the WTAT
- Some of the additives used in slurry today, like aluminum sulfate, result in a good slurry product, but not good WTAT results
- No known WTAT failures on central mixes used
- Most places outside the U.S. do not use the WTAT
- Slurry Seal jobs should last for five years
- The WTAT has a lot of variability
- There may be a slurry test that better represents the field conditions compared to the WTAT
- Why stick with the WTAT when it is not doing a good job of measuring the slurry's performance just because there is no other option
- Field inspectors on slurry jobs need to be better trained
- The Greenbook is too severe on the reductions
- What are other agencies within the U.S. outside of California using instead of the WTAT
- More labs are now performing the WTAT than in the past
- The WTAT focuses narrowly on percent wear and consistency while ignoring all other potential problems with the slurry product
- The Greenbook can require a certificate of training for a field inspector supervising the job
- Training of those sampling and performing the WTAT is just as important as training field inspectors
- Caltrans does not use the WTAT – they rely solely on field inspection and sampling of the raw materials in the field
- Newer trucks show the percent of additives which is a real value for the field inspector
- The Greenbook requires trucks be calibrated annually

### 7. General Consensus

Co-Chairs and participants agreed to the following:

- Find out what other test(s) besides the WTAT is being performed on slurry
- Determine if there is a reasonable alternative to testing the slurry that does not include the WTAT
- If no alternatives are available, a modification of the WTAT requirements in Greenbook should be explored

#### **8. Date of Next Meeting**

The next meeting will be held on Tuesday, December 6, 2016 in conference room A, County of Orange, 1152 E Fruit Street, Santa Ana, CA 92701.

#### **9. Adjourn: 3:00 PM**

Submitted by:

Blaine Thomann, Co-Chair  
OC Public Works  
714-667-4996  
[Blaine.thomaan@ocpw.ocgov.com](mailto:Blaine.thomaan@ocpw.ocgov.com)

Todd Vargason, Co-Chair  
Ergon  
909-829-0505  
[Todd.vargason@ergon.com](mailto:Todd.vargason@ergon.com)