

PCCAS Paving Asphalt Committee Meeting
May 3, 2011
Notes by D. Goss, Jr.

- B. Neitzke called the meeting to order approximately 8:00am.
- Self-introductions were made.
- B. Neitzke presented the Antitrust admonition to the group.

- G. Way reviewed the Asphalt Rubber Task Group meeting from May 2, 2011. ([Click here for presentation](#))
 - ASTM & FHWA-ETG are working on PG grading for field-blend asphalt rubber.
 - Experimenting with new DSR geometries (cup & bob).
 - Discussion followed about the need and applicability of the solubility test.
 - L. Santucci presented research by UC-PRC on Warm Mix Asphalt (WMA) in asphalt rubber. ([Click here for presentation](#))
 - Phases I & II employed WMA with DGAC & DGAC controls.
 - Phase III employed WMA with RHMA plus RHMA controls.
 - In all phases, WMA performed equally well as the controls.
 - Caltrans expects to allow WMA at contractor's option in near future.
 - E. Hitti reviewed presentation to AAPT (March 2011) on comparison of PG-TR grades to PMA grades. ([Click here for presentation](#))
 - Performance-related tests were used to compare binders.
 - Moisture sensitivity (T283 & MRR)
 - Dynamic modulus (E*)
 - Rutting resistance (APA & RLT triaxial test)
 - Fatigue Cracking resistance (Flexural beam test)
 - Resistance to thermal cracking (TSRST)
 - Conclusion: PG-TR grades performed well compared to NV PMA grades in performance-related tests.
 - Demonstration projects in CA and NV were reviewed.
 - Conclusion: PG-TR performing equally well to controls in projects.
 - Research continues to evaluate PG-TR grades in WMA systems.
 - M. Belshe (RPA) reviewed on-going discussion with Caltrans regarding appropriate temperatures for opening pavement to traffic.
 - Current CT guideline is 160F mid-depth pavement temperature.
 - FHWA, NVDOT, & WADOT do not have any requirements.

- S.M TeclMariam reviewed work by the Round Robin Task Group on the MSCR test. ([Click here for presentation](#))
 - Handling & testing of samples were meticulously detailed in method & time frames.
 - Testing done with & without PAV degassing.
 - Three objectives were targeted:
 - Length of time to allow DSR samples in molds.
 - Variability measurements of MSCR parameters Jnr & Percent Recovery.
 - Whether or not to require degassing for the DSR.
 - Testing is completed, but data is still being analyzed.
 - Regarding interest in MSCR test among agencies:
 - NVDOT intends to keep current "plus" tests.
 - CADOT intends to keep current "plus" tests.

- WADOT and Federal Lands are interested but concerned about the variability of the test.
- Use of Recycled Asphalt Shingles (RAS) was reviewed and discussed by the group.
 - NVDOT is currently not evaluating RAS.
 - WADOT is evaluating the use of RAS.
 - CADOT is also evaluating the use of RAS, but has done no projects.
 - D. Little Jr. reported that Texas DOT allows 5% RAS based upon binder replacement value of 20% of the mix binder.
 - S. Houston reported that AMAP is developing a plan to study the impact of RAP & RAS on HMA.
- Agency Updates on Warm Mix Asphalt (WMA)
 - CADOT is aggressively adopting WMA technology.
 - Standard approval process for WMA technology has been finalized.
 - Intent is to allow WMA at contractor option (using an approved technology).
 - NVDOT is not currently pursuing the use of WMA technology.
 - May consider small projects.
 - Some use of WMA has been done by local agencies.
 - WADOT has employed WMA in test sections.
 - In 2010 began allowing WMA at contractor's option, using any nationally recognized technology.
 - 16 projects have been completed thus far.
 - Plans to core projects and test in the Hamburg Wheel Tester (HWT).
 - Federal Lands use of WMA is similar to WADOT.
 - Allows at contractor option.
 - Contractor must describe mix design and acceptance protocol.
 - D. Little Jr. reported that TXDOT has used over 3 million tons of WMA in past 3 years, and WMA is expected to be mandated there in 2013. TXDOT bases acceptance upon plant mix tested in the HWT. Advera & Evothorm are the predominant technologies used in Texas.
- CADOT Update on PPA Research
 - Laboratory study has been completed at the Asphalt Institute.
 - CADOT will evaluate the study in the near future.
 - If the performance of PPA modified mixes is equal to or better than controls, then Caltrans will consider constructing test strips.
- Update on Asphalt Research Consortium (ARC) – Nathan Morian (NVDOT)
 - UNR is working with Western Research Institute, U. of Madison, Wisconsin and others on numerous research projects on Recycled Asphalt Pavement, Cold In-Place Recycling, Moisture Damage, Fatigue Damage, etc.
 - Time frame for completion of research is 2012.
 - UNR is studying the aging of binders and that effect upon thermal cracking.
 - Reports and updates are available on the web at www.arc.unr.edu/Index.htm.
- FHWA Expert Task Group (ETG) Issues
 - General discussion followed regarding ETG activities in the areas of Models, Binders, and Mixtures.

- User-Agency Updates – Projects and Issues for Upcoming Season
 - WADOT – Joe DeVol
 - Continued interest in WMA
 - Reviewing the use of the Hamburg Wheel Tester (HWT)
 - Looking into RAP and RAS
 - Alaska DOT – S.M. TecléMariam
 - Experimenting with dry process asphalt rubber.
 - Working on thermal cracking problems.
 - Oregon DOT
 - Contractors have proposed use of higher RAP percentages.
 - WMA is being used intermittently, on a job by job basis.
 - NVDOT – Reid Kaiser
 - Currently using RAP at 15 percent in DGAC.
 - Plan to do two Terminal Blend asphalt rubber projects each year.
 - Second Field Blend asphalt rubber project planned for 2011 in Las Vegas.
 - Federal Lands – Brad Neitzke
 - WMA is allowed in all contracts.
 - Smoothness bonus is being adjusted down.

- Training Opportunities
 - Larry Santucci – UC Pavement Research Center
 - Local Technical Assistance Program (LTAP) is “on hold” due to contractual conflict with CADOT.
 - Roger Smith – CalAPA
 - Several classes being offered.
 - Asphalt 101
 - Caltrans Section 39 Update
 - Construction Practices
 - Asphalt Institute
 - Various classes offered through the Asphalt Academy and Webinars.
 - Visit <http://www.asphaltinstitute.org/public/education/index.asp>.

- Next Meeting Date – Tentatively scheduled for October 25, 2011 in Reno, NV.