

Paving Asphalt and Mixture Committee Minutes of the
Pacific Coast Conference on Asphalt Specifications
March 4, 2008
Reno, NV

Brad Neitzke called the meeting to order and welcomed the attendees. He gave a brief description of the items we need to handle today with regard to the up coming conference. Brad also indicated that the agenda would be adjusted to make the discussion proceed more smoothly.

John D'Angelo started the meeting with an update on the work ongoing on polyphosphoric acid(PPA) by the Federal Highway Administration. John pointed out that the effect of PPA was highly dependent on the base asphalt being treated. A test has been developed by FHWA to determine qualitatively the phosphates in the asphalt which would be an indicator of PPA in the product. The primary concern is the moisture susceptibility that may be an issue with the use of PPA. Evidence from testing would suggest that there is potential of increasing the moisture susceptibility especially at higher PPA concentrations due to water absorption. The effect of antistrips was also considered and Hamburg Rut Tests were performed to determine the effect of the acid modification and various anti-strip techniques. The testing was performed using one asphalt, therefore only one crude source was considered. The addition of PPA may increase the moisture susceptibility of the mix. With the addition of lime there was no adverse effect when PPA is used and the lime treated aggregate prevented stripping. Two different aggregates were examined with differing results. There appears to be an aggregate dependency based on the test results. In addition to moisture susceptibility, the effect of PPA on fatigue was also considered. The samples examined were a control, a PPA only modification and SBS plus PPA. [Click here for presentation.](#)

The next presentation by John D'Angelo focused on the development of the Multiple Stress Creep Recovery test and specification. This is a high temperature test aimed at improving the Superpave Performance Graded products. It provides a better understanding of the role modification. The multiple stress creep compliance procedure should be considered as a replacement for all plus tests. In this test, the effect of stress on a polymer modified asphalt is shown which was not the case with the original Superpave tests and specification. The correlation of the MSCR test with rutting was much better than the current Superpave parameter, $G^*/\sin \delta$. The new parameter from this test is J_{nr} , a non-recoverable stress type parameter. Testing has indicated that a half reduction in J_{nr} results in a half reduction in rutting as measured by accelerated rut testing. Using J_{nr} as a criteria does not change any current grading of neat (unmodified) products. The testing should be done at the environmental temperature of the pavement. Future work with this procedure will focus on durability and fatigue. [Click here for presentation.](#)

George Way provided an update on the activities of the Asphalt Rubber Task Group. The first issue of the task group presented was the proposed PG-TR specification, a specification for a terminal blend ground tire rubber. Don Goss presented the

background on the development of the specifications for PG-TR. [Click here for presentation](#). He then went on to provide a response to a negative vote by Gaylon Baumgardner ([Click here to view letter from Paragon](#)). It was pointed out that the product that was address by Gaylon's comments was not the same product for which the letter addressed. Edgard Hitti gave a presentation on the work done in Nevada using tire rubber. The paper was presented at the Transportation Research Board. George Way provided for an open discussion of the specification.

Motion by Don Goss that the PCCAS Paving Asphalt Committee recommend the proposed PG-TR specification for consideration by the Pacific Coast Conference on Asphalt Specification at the upcoming conference meeting for use as an optional specification with the three changes made by the committee. The three changes are:

1. Removal of the specification requirement for a maximum phase angle
2. Add a report requirement for data from TP 70, the multiple stress creep recovery test
3. Make the PAV temperature for PG76-22TR conform to M320 wording of 100 C with an option of 110 C

Version of specification without the above amendments is attached. [Click here](#).

The motion was second by Dean Weitzel and approved by the Committee. There were dissenting votes by Jack Van Kirk, Doug Stech and Rick Holmgreen.

Dean Weitzel made a presentation on Nevada's use of ground tire rubber. [Click here for presentation](#).

Shauna Teclemariam provided a progress report on the Round Robin Task Group. The task group will conduct a round robin of the Multiple Stress Creep Recovery test.

There was a discussion on the Technician Certification program needs and whether or not to have a presentation by the Asphalt Institute on their program. The decision was to invite someone from Asphalt Institute to give a presentation to the Conference for informational purposes only.

Bob Humer gave a report on activities of the Asphalt Institute in the western region.

The next discussion was centered on recommended charges by the Committee to the Conference. The charges to be presented at the Conference will be:

- Continue the evaluation of modifications to the PG specification and asphalt mixture tests.
 - Make recommendations to appropriate agency, ASTM, AASHTO on improvements to test procedures.

- Investigate the Multiple Stress Creep Recovery test and possible effects to the PG specification.
- All Task Groups continue work on specified direction as directed by the Committee.
 - Continue activities to develop performance specifications for asphalt rubber products.

Bob Staugaard presented information on the next conference. The conference will meet on May 20 & 21, 2008, which is a Tuesday and Wednesday in Portland, Oregon. Bob also outlined the preliminary agenda.

The next meeting will be September 16, 2008, in Reno, NV.

The meeting was adjourned at 4:05 PM.