

## 5-13-11 Asphalt Working Group Meeting

The meeting was called to order by Jeff Benedict (Valero) at 7:30 a.m. The goal of the meeting was to work out differences with industry's proposed 325 and agency suggestions, primarily MCDOT's.

Discussion of industry concerns with MCDOT's max rubber content of 22% (by weight of asphalt cement) becomes difficult to constantly meet rubber binder parameters without adding more rubber.

Syd Anderson (PHX) is in favor of letting the binder design drive the rubber content.

A discussion of MCDOT's binder content for rubber mixes was held with industry voicing their concern that lower viscosity rubber binder and higher binder content could lead to pavements that may bleed. Industry is also concerned with higher binder contents in conventional mixes for MCDOT. Industry presented the updated version of 325. A review of what changes and what drove the changes was discussed. Notations of interest are: remove references to 710, make it a stand-alone document, add criteria that are specific to asphalt rubber (stability, flow, etc.).

Peter Kandaris (SRP) believes that the material portion should be broken out and put in section 717. This would mirror conventional hot mix sections 321 and 710. This was met with general agreement. Syd Anderson (PHX) suggested adding language for a test strip for larger agency projects. This was agreed with a provision for small projects to waive this requirement.

Brian Gallimore voiced his concern with 325.8.1 "surface prep" with burning and torching pavements should not be allowed. This too was met with agreement.

John Shi (MCDOT) spoke about his concerns with excess rubber keeping the binder from contributing "binding" in his rubber mixes. He described his data cloud that showed consistently lower binder and higher voids. After long discussions with industry, and agency people the binder spec was contributing to raveling on his projects. He stated a rubber project in Sun City paved a year ago was raveling. Industry commented that there are a wide range of reasons for a pavement to ravel. Binder content is just one reason. John did agree with this. Phil Feliz (W.T.I.) and Sam Huddleston (MACTEC) discussed current rubber content in asphalt rubber binder. They both estimated that one in twenty designs have rubber contents below 18%. They further stated how the binders used years ago were consistently over 20% by weight of binder. John Shi did offer a rubber project place 12 years ago and how well it had performed. This is believed to have the higher rubber content in the mix. John was going to investigate the project records to determine the rubber binder used. Industry asked John to look over the proposed 325 for comments, specifically, gradations, volumetric, and voids. Industry agreed to have a "window" wide enough for MCDOT's lower void criteria to fit. John Shi asked for a COP hi volume ARAC design to review. This will be provided after the meeting.

Phil Feliz and Sam will research rubber contents in recent and past years, for John Shi. As a final discussion John Shi agreed to allow binder design to control rubber content. Industry agreed to provide a binder (void) range that gives John (MCDOT) enough leverage over the contractor.

The meeting was adjourned at 8:55 AM



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