

Agenda

- Roll call and introductions. ✓ = in attendance

Emulsion Binder Subcommittee	
Co-Chairs: Chris Lubbers✓ and Mike Voth✓	
Rejuvenator Working Group	Modifiers Working Group
Codrin Daranga ✓	Barry Baughman✓
Colin Durante ✓	Kevin Carlson
Andrew Hanz✓	Kevin McGlumphy
Brian Pfeifer✓	Guy Sisler✓
Hassan Tabatabaee✓	Scott Watson✓
Huachun “Dave” Zhai✓	
Guest: Marla Weigel✓	

- Activities for Rejuvenator Working Group

- Definitions

Good discussion on the need for developing definitions for rejuvenators. Group believes this is an important step in improving understanding and eventually gaining greater acceptance. Perhaps definition development should be included in the scope of the NCHRP 10-114 effort. Our Subcommittee can support, and we’ll plan to further discuss in Indianapolis.

- NCHRP 10-114, Developing Performance and Safety Specifications for Rejuvenating Seals- Completion TBD.

The 4 objectives of the study as listed on the NCHRP website are abbreviated in the 4 bullet points below. This appears quite ambitious given that only \$300k of funding is available. It was clarified by the group that perhaps the posted problem statement was outdated, because the primary outcome of the study is expected to be the 3rd bullet underlined below. Additional clarification will be provided from Colin Franco who is the chair of the panel.

- Determine extent rejuvenating fog seals penetrate pavement
- Determine how rejuvenating materials impact underlying pavement
- Determine how to measure and quantify performance in a lab and in the field
- Determine the dosage of rejuvenators required to provide desired performance

Also discussed was the hope that this NCHRP study would leverage the data and research on rejuvenating seals completed by NCAT as well as research currently underway at MNRoads. These studies should be referenced in the RFP at the least and perhaps reports from these studies could be included as attachments to add emphasis. Need to follow up on particular action to take during Indianapolis meeting.

- Panel Roster

See attachment for list of panel members. Seems light on industry and academia

representatives that are knowledgeable of the technology. We'll plan to inquire with Colin about the need or possibility to add members to the panel.

- Activities for Modifiers Working Group
 - NCHRP 9-63, A Calibrated and Validated National Performance-Related Specification for Emulsified Asphalt Binder- Completion May 2023
 - Asphalt Institute, Mike Anderson, Lead PI

Codrin and Chris, who are both panel members of the study, provided a high-level status update of the study. Mike Anderson will be presenting on the study in Indianapolis. No specific action items are expected from our Subcommittee in the short-term.
 - Update to AASHTO M 316 – CHFRS-2P

Chris and Mike discussed the request by the Montana DOT to update the Pen range for CHFRS-2P in AASHTO M 316. The current Pen range is 100 – 175 dmm. The proposal is to consider updating to 90 – 150 dmm, which Montana currently uses successfully. Texas has been successful using an even lower minimum Pen value of 80 dmm (but in a different climate). So perhaps multiple grade ranges could be added following the manner used for CRS-2hP, 2P, & 2sP specs in M 316. To be discussed further in Indianapolis. Brian indicated he would need a proposal by late January to include in the AASHTO COMP tech section 2a mid-year meeting.
 - Two additional items to discuss in Indianapolis:
 - *Polymer-modified emulsion specs for Slurry Seals*
 - *Demulsibility standards for Polymer-modified rejuvenating emulsion (PMRE) in AASHTO MP 43, Materials for Emulsified Asphalt Scrub Seal – Scott Watson will share concerns.*