

AASHTO TSP•2 - Emulsion Task Force (ETF) Meeting

JUNE 29, 2023

Meeting Notes

Attendees:

Name	Organization
Russell Milan	Michigan Paving and Material
Brian Pfeifer	Illinois DOT
Colin Franco	Rhode Island DOT
Matt Teto	Indus
Eric Biehl	Ohio DOT
Todd Shields	NCPP
Rex Eberly	NCPP
Andrew Eicher	Asphalt Materials
Adriana Vargas	NCAT
Raquel Moraes	NCAT
Darren Hazlett	University of Texas
Kevin McGlumphy	Associated Asphalt
Kevin Carlson	Jebro
Travis Walbeck	NCAT
Todd Thomas	Asphalt Materials
Rick Church	FP2
Aaron Roy	Nouryon
Mike Voth	FHWA
Dave Welborn	Ingevity/ISSA
Steve Loeffler	PRI Asphalt
Ronald Mensah	Bakelite Synthetics
Ryan Lynch	Bakelite Synthetics
Nathan Awwad	Indiana DOT
Katie DeCarlo	Heritage Research Group
Stormy Brewster	Marathon Petroleum
Larry Tomkins	Ergon
Ted Flanigan	Wright Asphalt Products
Marla Weigel	Mathy
Danielle Knudtson	Mathy
John Murphy	Ultrapave
Stephanie Smith	Flint Hills Resources
Michael Durante	Pavement Technology, Inc.
Colin Durante	Pavement Technology, Inc.
Dingxin Cheng	CP2 Center
Andrew Braham	University of Arkansas
Jerry Geib	Minnesota DOT
Sallie Houston	Arkema
Kelly Morse	Illinois DOT
Shelly Cowley	Paragon Technical Services

Thursday, June 29th

7:45 a.m. – 8:00 a.m. **Welcome, Introductions/ Roll Call and Housekeeping** **Franco, Lubbers**

This will be Colin's second last ETF meeting, as he is retiring at the end of the year. Chris Lubbers was unable to attend today's meeting.

8:00 a.m. – 8:15 a.m. **ETF Review** **Lubbers**
a. Approval of Meeting Minutes (Nov/Dec 2022)

Minutes approved.

b. Agenda Review

8:15 a.m. – 8:30 a.m. **AASHTO Committee on Materials & Pavements Update** **Pfeifer**
a. TS 2a – Emulsified Asphalts

COMP ballot had M-316, passed with changes recommended by Montana DOT. Will be published late July or early August.

Two of the cold recycle provisional standards also passed and are now full standards.

AASHTO and ASTM working to harmonize all of their asphalt standards. Close on T-59. Also working on T-50.

Tennessee DOT has contacted the ETF about the Saybolt Viscosity test method.

The next standard for consideration will be the performance grading of emulsions, once the NCHRP 09-63 study wraps up or the project provides an interim provisional standard.

b. TS 5b – Bridge & Pavement Preservation **Ilg**

Slurry, Scrub, Tack, and CIR construction guides have been submitted, being TS balloted now.

8:30 a.m. – 9:00 a.m. **Research Project Updates** **Hazlett, Braham, Franco Morse**
a. NCHRP 9-62 Rapid Tests and Specifications for Construction of Asphalt-Treated Cold Recycled Pavements

NCHRP 9-62 CIR test method for rapid opening to traffic. Trying to figure out which AASHTO COMP specific subcommittee this would go to. Need to make sure ETF continues to push on this to get it balloted. The NCHRP report was published, but not yet approved by AASHTO.

ETF to reach out to Casey (AASHTO) for permission to publish on the ETF website. Kelly suggested we submit again to Larry Ilg (Oregon DOT) or maybe 5C Curt Turgeon to get on a ballot.

- b. NCHRP 14-43 Construction Guide Specifications for Cold Central Plant Recycling and Cold In-Place Recycling

Guides have been submitted to AASHTO COMP 5b. QC/QA plan will be developed later as stand-alone documents to submit to COMP 5c.

- c. NCHRP 14-44 Construction Guide Specifications for Slurry Seals, Scrub Seals, and Tack Coats

Has been submitted to AASHTO, being balloted.

- d. NCHRP 14-48 Construction Guide Specifications for Pavement Treatments - Sand Seals and Ultra-thin Bonded Surface Treatments

The project is ongoing and should be completed sometime in 2024. Once drafted and reviewed by the ETF it will then be submitted to AASHTO COMP 5b.

- e. NCHRP 10-134 Performance Based Tests for Asphalt Emulsion Treatments (NEW)

RNS was submitted for study and was approved. NCHRP is seeking panel members. The ETF members were encouraged to self-nominate on the myTRB website to be on the panel.

NCHRP 10-114 Developing Performance and Safety Specifications for Rejuvenating Seals

Raquel Moraes (NCAT) gave an update on this project. There has been a lack of research on these treatments. This is a 36-month study, that will develop a guide on selecting a rejuvenator's application rate, and how to measure performance. A draft specification will be developed to submit to AASHTO for approval. Presentation slides are posted on the ETF meeting website.

NCHRP 10-124 Development of Field Test to Determine Actual Percent Embedment of Chip Seal Aggregate

Adriana Vargas (NCAT) gave an update and outlined the work plan. This project has not officially started. Andrew Braham is the co-PI.

Phase I will identify 4 potential test methods to move forward for further study. Phase II will provide an evaluation of the 4 methods, and Phase III will entail both lab and field testing. Field tests will be validated. The project will take 36 months to complete. Presentation slides are posted on the ETF meeting website.

9:00 a.m. – 9:15 a.m.

Stakeholder Updates

- a. FP²
- b. AEMA
- c. ARRA
- d. ISSA
- e. FHWA (PPTFG)
- g. NCPP

FP2, AEMA, ARRA, ISSA – Rick Church – engaged in IIJA, Buy America Provision, supporting industry research, PG3 MnROAD next phase, Environmental Product Declarations, developing young leaders, developing new web-based training.

Feb 20-23 Inus Brook Tampa – PPRA meeting

NCPP – Todd Shields – National Meeting September 18

9:15 a.m. – 9:45 a.m.

Training and Certification

Eberly

Rex Eberly (NCPP) gave an update on the national training survey. Survey results indicated that designers (agency) and foremen/operators (contractors) are most in need of training. There is a need for “just in time” training for agency staff involved in project inspection.

NCPP is seeking the ETF’s help to keep certification moving and growing.

Presentation slides are posted on the ETF meeting website

10:00 a.m. – 10:40 a.m.

NCHRP 9-63 (EA-PG) Update

Anderson

Mike Anderson (Asphalt Institute) provided an update on the national performance-related specification for emulsified asphalt binders. The intent is to use existing test equipment and standardized test methods to extract and test the emulsified asphalt binders. Phase II is completed, and the final report is in progress. Phase III is a continuation study that is currently under consideration by NCHRP. The website indicates the project goes to 2027.

10:40 a.m. – 11:20 a.m.

Friction Surface Treatments

Mergenmeier

Andy Mergenmeier (FHWA) provided an update on FHWA’s Office of Innovation’s use of continuous friction measurement data on various friction treatments. Gave history of friction testing. A single friction number or value doesn’t fit all situations. Kentucky has done the most research into friction vs. safety.

11:20 a.m. – 11:50 p.m.

ETF-Past-Present-Future

Franco

Colin Franco (RI DOT) gave a recap of the history and makeup of the ETF. The ETF started as a subset of the PPETG in 2008. Currently, it is part of AASHTO’s TSP2 program. The ETF has accomplished a great deal and needs to continue to push forward with new guides, specs, demo projects, and performance-related tests.

11:50 a.m. -- 12:00 p.m.

Passing the Baton

Morse/ Lubbers /Franco

Kelly Morse (IDOT) thanked Colin on behalf of the entire ETF for his passionate leadership over the years and presented him with a plaque of appreciation.

Recommended that subcommittees meet more frequently virtually. Kelly will help leaders set up expectations for how many.

Asphalt Binders Subcommittee

Voth/ Lubbers

Future work

- Continue to provide ad hoc support to AASHTO Tech Sections 2a and 5b. This will include the harmonization effort between ASTM and AASHTO standards (TFASH). AASHTO T 59 and T 50 have been initially targeted for harmonization.
- Support for implementation of results/recommendations from the NCHRP 9-63 study. It was noted that this study has been extended with additional funding until 2027. ETF would like our subcommittee to consider developing a provisional AASHTO standard before 2027 to promote agency implementation and review of proposed testing approaches.
- Support for NCHRP 10-114
 - Need to define what is meant by rejuvenation and recommend where the definition would be housed (i.e., AASHTO terminology standard). Some may have the false notion that rejuvenators will reverse aging or set the clock back. Using terms such as the following to describe rejuvenation was considered satisfactory: anti-aging, recycling agent, and softening agent.
 - Raquel Moreas, NCAT, and PI for NCHRP 10-114 will be added to the emulsion binder subcommittee
 - Colin Franco will remain on the NCHRP panel after his retirement and will help steer the effort

QA, Education & Certification Subcommittee

Teto/Biehl

QA guides for CIR and CCPR are in final review and will be submitted to 5C soon ahead of the AASHTO COMP meeting. No other QA guides are in the pipeline currently. Based on the survey Rex completed, various targeted training is also available to be implemented.

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Research Subcommittee

Hazlett

The subcommittee brainstormed ideas and will resubmit an RNS that was not previously selected (optimal pavement marking materials for preservation treatments). The group discussed proposing a synthesis project to determine the state of the art on preservation equipment. The group will review research roadmaps to see what gaps exist and try to identify RNS that would bridge those identified gaps. The goal is to have RNS drafted before the upcoming COMP meeting to present the ideas and gain support from the appropriate TC (2a, 5b, or 5c).

The Fog Seal best practice guide has been passed on to Colin to be published on the ETF website.

Cold-in-place and cold central plant recycling best practice guides are in progress. Heritage has offered to help. By reviewing and adding photos. Once that is complete, it will be sent back to the best practice group for review. Should be able to be published soon.

Consideration was given to a best practice guide for scrub seal. Group felt it would be best to discuss the need for such guidance at the upcoming AASHTO COMP meeting. If interest is expressed, work will be initiated.

Construction guides for cold-in-place and cold central plant recycling are being balloted through COMP 5b. Kelly will check on what we can put on the ETF website. Thinking we can pull what is being balloted and post that.

Still need to develop a research needs statement for preservation treatment sampling and field test methods. ISSA and NCAT did a project for micro, which is completed, but looking for a continuation. Travis and Deng will provide a draft for the group to consider.

Discussion about:

- Ways to measure ready to open to traffic for chip seal and micro surface. This could be something an agency could include in its specifications.
- Guidance on the use of RAP for chip seals and slurry seals.
- Clearinghouse for experiences, maybe NCPP's website?
- NCPP could be a leader in getting in front of new practices and tracking where things have been implemented or piloted.

BREAKOUT SESSION 2

2:30 p.m. – 4:00 p.m.

Messaging & Implementation Subcommittee

Tomkins/ Brewster

Larry Tomkins (Ergon) gave a recap of the Chip, Micro, and Fog implementation projects and lessons learned. Larry described the different types of outreaches used to inform people what the ETF is and does. He further explained the training developed and best practices that are summarized in 1-page flyers, then the process to get agencies to implement projects.

Lessons learned:

- Outreach was crucial
- Goal was to get 12 jobs but had to cast a wide net to get that
- Finding good liaisons/points of contact and educating them on the mission was critical
- Review sessions were important
- Training
- Agencies fell into 3 categories
 - Happy with their existing spec and don't want to change
 - Want to do treatment, don't have an existing spec, so take new 100%
 - Middle – want to pick and choose parts but keep most of their own
- Amount of time to finalize everything was longer than originally expected
- Different ways to get a project to construction
- Needed to collect pavement conditions before treatment and pictures
- Challenge for liaisons to keep following up on where agencies were in the process
- Make sure to follow the checklist to get the required information
- Getting liaisons to be on the job when it was constructed
- Coordination of onsite visits for other agencies

- Getting good pictures, and the right ones
- Need to ensure feedback from agencies
- Postconstruction pavement conditions and pictures
- Determine who is going to follow up
- Project profile one-pagers
- Was much more time-consuming than originally expected
- Flexibility of the committees and liaisons
- Location of liaisons vs. agencies
- Improvement of specs to many states
- Established credibility with the AASHTO specs
- Learning experience!
- Developed and strengthened relationships
- A lot of good came out of the project

Make sure Rex advertises the ETF site and PPT training's that are available

4:30 p.m.

Close and Adjourn

Morse/ Lubbers

The meeting adjourned at 4:30 p.m.

The next meeting will be December 2023, TBA.