

AASHTO Subcommittee on Materials
Technical Section 2b
Asphalt
2013 Annual Technical Section Meeting
August 8, 2013 – 10:00 a.m.
Meeting Minutes

I. Call to Order/Opening Remarks/General Business

Call to Order – 10:00 a.m. See Appendix A for the Agenda.

We will be holding a mid-year web meeting. The chairman will coordinate the date of this meeting, and it will be announced to the tech section once the date is scheduled.

Chris Abadie volunteered to be the research liaison for TS 2b.

II. Roster

A roster was circulated for members and visitors to signify their attendance. See Appendix B for the Attendance Sheets.

III. Approve Technical Section minutes from August 9, 2012 meeting in Biloxi, Mississippi and the Mid-Year conference call from March 8, 2013.
(See Attachments #1 and 2 from the Agenda).

A motion was made by Pennsylvania and a second by Oklahoma to approve the minutes as written. The minutes were approved without objection.

IV. Old Business

A. 2012 SOM Ballot Items

Item 22: Concurrent ballot item to revise T 316, Viscosity Determination of Asphalt Binder Using Rotational Viscometer to allow the tester to start with a higher rpm rotation to obtain the required torque. Proposed revisions are presented on pages 19 - 20 of the 2012 Minutes and the motion and discussion are on page 6. 47-Affirmative, 0-Negative, 5-No Vote. Editorial comments addressed by TS Chairman. TS addressed Texas comment during the Mid-Year Conference call. AMRL has never seen an issue on the low side so there seems to be no reason to make a speed change on the low side. There are no further actions for the TS on this item. No further action was needed on this item.

Item 23: Concurrent ballot item to revise T 44, Solubility of Bituminous Materials to eliminate the 15 minute waiting period. Proposed revisions are presented on pages 21 - 22 of the 2012 Minutes and the motion and discussion are on page 6. 46-Affirmative, 1-Negative, 5-No Vote.

Iowa Department of Transportation (James Berger) (james.berger@dot.iowa.gov)	The discussion provided is not persuasive. Fifteen minutes is not a burden in my opinion and serves as a secondary check. Data showing the wait period is not needed should be provided as justification.
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There was one negative from Iowa regarding the balloted change to eliminate the wait period. The TS considered the negative. The change was made based on the AMRL comment that there is no purpose to the wait period since it is after all of the binder has been dissolved. A motion was made by Bill Bailey (Virginia) to find the negative non-persuasive. A second was made by Alan Rawson (New Hampshire). The motion carried.

Item 24: Concurrent ballot item to revise T 240, Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin Film Oven Test) to require to weigh the empty bottles if mass change is being determined. Proposed revisions are presented on pages 23 - 24 of the 2012 Minutes and the motion and discussion are on page 6. 47-Affirmative, 0-Negative, 5-No Vote. Chairman pleads temporary insanity for spelling empty as “emptl” and using as “wuing”. Corrections made editorially. No further TS action necessary.

Item 25: Concurrent ballot item to revise TP 70, Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR) to give more guidance on temperature to run the test, add conditioning cycles, and eliminate the calculation of % recovery difference between the 2 stress levels. Proposed revisions are presented on pages 25 - 29 of the 2012 Minutes and the motion and discussion are on page 6. 46-Affirmative, 1-Negative, 5-No Vote. The Nevada negative was addressed editorially.

Nevada Department of Transportation (Reid G Kaiser) (rkaiser@dot.state.nv.us)	Changes refer to "last" ten cycles at 3.2kPa. There are no "last" ten cycles, just a total of ten cycles. The "last" terminology should only apply to 0.1kPa.
	Chairman's Response: Changed editorially. Negative resolved.
South Carolina Department of Transportation (Milton O. Fletcher) (fletchermo@scdot.org)	Would like more guidance included in the standard concerning the MSCR test temperature. Should refer to regional or high pavement temp for the state and not the PG high temp grade. Also suggest adding that MSCR testing should not be performed at two different temperatures when using one sample.
Georgia Department of Transportation (Georgene M Geary) (ggeary@dot.ga.gov)	Would be good to discuss this at the mid-year webinar to make sure DSR manufacturers have time to make changes before standard is out in July.
Texas Department of Transportation (Darren Hazlett) (darren.hazlett@txdot.gov)	Additional guidance on temperature selection: This is even more language that assumes this procedure will never be used with any spec except MP19. Why not just use the temperature identified by the referring specification?

The Nevada negative was resolved editorially. A task force consisting of Matt Corrigan-FHWA (lead), John D'Angelo, and Darren Hazlett (TX), Lyndi Blackburn (AL), Mike Anderson (Asphalt Institute), Chris Abadie (LA), and Eileen Sheehy (NJ) was put together to develop further guidance on temperature selection for TP 70 since there seems to be a lot of confusion on what temperature the test should be run at.

Item 26: Concurrent ballot item to revise T 315, Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR) to accommodate the use of ground tire rubber as a modifier. Proposed revisions are presented on pages 30 - 32 of the 2012 Minutes and the motion and discussion are on pages 6 - 7. 42-Affirmative, 5-

Negative, 5-No Vote. Chairman decided to not adopt the balloted change due to the negatives.

Item 27: Concurrent ballot item to revise M 320, Performance Graded Asphalt Binder to accommodate the use of ground tire rubber as a modifier. Proposed revisions are presented on pages 33 - 35 of the 2012 Minutes and the motion and discussion are on pages 6 - 7. 41-Affirmative, 6-Negative, 5-No Vote. Chairman decided to not adopt the balloted change due to the negatives.

Item 28: Concurrent ballot item to revise MP 19, Performance Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) to accommodate the use of ground tire rubber as a modifier. Proposed revisions are presented on pages 36 - 39 of the 2012 Minutes and the motion and discussion are on pages 6 - 7. 42-Affirmative, 5-Negative, 5-No Vote. Chairman decided to not adopt the balloted change due to the negatives.

Negatives for Items 26 – 28:

Arkansas State Highway and Transportation Dept (Michael C Benson) (michael.benson@arkansashighways.com)	While the stated intent of the modification of this standard is to allow for the use of asphalt binder modified with ground tire rubber, the requested modifications will also open up the specification to allow other methods of asphalt binder modification.
Iowa Department of Transportation (James Berger) (james.berger@dot.iowa.gov)	Understandably these revisions are necessary to accommodate the use of CRM. However, there are unanticipated consequences when CRM is used without revisions to agency specifications surrounding construction practices. For example, many states have maximum temperatures for plant mixing and binder temperatures, which may need to be waived for CRM.
Mississippi Department of Transportation (James A. Williams) (jwilliams@mdot.state.ms.us)	Section 5.2 - Deleting "organic" from the description of the allowed modifiers opens the specification to any inorganic modifier at any dosage required to meet physical testing requirements. If the intent of the revision is to allow ground tire rubber to be used as a modifier, removing "organic" without some clarification from the description in 5.2 may have unintended consequences.
Washington State Department of Transportation (Thomas E. Baker) (bakert@wsdot.wa.gov)	This change does not require 99% solubility as tested by T44. If the binder does not meet this specification the agency must collect and analyze the residue to determine if this requirement may be waived. Recommend if solubility (T44) of 99% min is not met the supplier must certify the nature of the insoluble materials and submit a request for a waiver of this requirement, with the agency to have the right to verify independently. Recommend that asphalt binder with the inclusion of ground tire rubber be given its own test procedure or sub procedure as it needs to be a standalone procedure. There are years of national experience with the original standard T 320, and this change is proposing to accept larger particle size and higher percentage of insoluble material without the needed research to determine the effects of this change.
Minnesota Department of Transportation (Curt M Turgeon) (curt.turgeon@state.mn.us)	Negative. We have concerns about writing this language to allow GTR asphalts without stating that is the purpose. The way this is written it could possibly allow mineral filler and other fillers larger than 250um. Also SHRP determined that 250um was the max particle size where the DSR could be used under the present parameters. Approval to T315 ballot needs to be done before changes to M320 can be done. See comment to T315 ballot. A note should be added to define deleterious materials mentioned in 5.3. This is relevant to allowing GTR in this standard.
Utah Department of Transportation (Scott S Andrus) (scottandrus@utah.gov)	The proposed change will place the responsibility of selecting appropriate, non-soluble items in the hands of the specifier. The M320 as currently written prevents the use of mineral dust and other

	<p>plastomeric additives from being used to modify the binder with the intention of meeting the specification and not to improve performance. UDOT recommends that the ETG come to a consensus so that there is a consistent interpretation and application before moving ahead with changes to the current standard. As proposed this change may result in different acceptance conditions from specifier to specifier.</p>
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Due to the number of negatives, the Chairman did not make the changes to standards. As a result of the mid-year discussion, Chairman conducted a survey which is presented in Attachment #3 of the Agenda. There was not a clear consensus from the survey on whether GTR should be in stand-alone specifications. The ETG considered the data from the survey and has made further recommendations. See further discussion in Item V.A.1.

John Bukowski clarified that this new wording is proposed only if the TS wishes to keep GTR as a modifier.

B. Technical Section Ballots

1. **Technical Section Ballot MAT-2b-12-1** –Reconfirmed M 226, R 15, R 29. All passed with votes of 29-Affirmative, 0-Negative, 3-No Vote. Comments: Does anyone use M 226 or R 15? Review R 29 to make sure it is clear that BBR is optional. Comments discussed at mid-year conference call. Decision was that no action was needed on M 226 or R 15. NJ and AMRL will review R 29 for future considerations.

M 226, R 15, and R 26 were all confirmed. At the mid-year meeting a task force of Eileen Sheehy (NJ) and Maria Knake (AMRL) formed to address a comment on R 29 in regards to clarifying that the BBR test is optional. This task force will report by the next mid-year meeting.

2. **Technical Section Ballot TS 2b Reconfirmation Ballot 13-1** – Reconfirmed R 26, R 49, T 51, T 53, T 102, T 170, and T 228. All passed with votes of 26-Affirmative, 0-Negative, 4-No Vote. Only one comment on T 102 asking if anyone still used this test (the spot test). The Chairman had done a survey a few years ago that indicated on 2 states still used the test, but it was decided at that time to continue the test. No further action is needed.

C. Task Force Reports

1. R 26 Task Force – A task force comprised of Rick Kreider (Kansas), Reid Kaiser (Nevada), Maria Knake (AMRL) and Eileen Sheehy (New Jersey – task force chair) were to look at R 26 to see if there were any need for revisions. Eileen Sheehy reviewed R 26 with the NEAUPG which was satisfied with the current standard and did not request any modifications. Rick Kreider reported that the Combined State Binder Group (Iowa, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin) feels that R 26 is too generic and should be made much more specific. They provided 5 pages of additional requirements that they feel should be added to R 26. Reid Kaiser sent in comments from his area of the country – the overall consensus was that R 26 was too specific and needlessly restrictive. TS discussed this standard at the mid-year conference call. Consensus was to see what comments were generated by the reconfirmation. No comments came from the reconfirmation. Chairman suggests that no changes be made at this

time and the task force be dissolved. The task force's work has been completed and no further action is needed.

2. TP 92 Task Force – A task force comprised of Tim Ramirez (Pennsylvania) and Audrey Copeland (FHWA) were to look at the sample preparation portion of TP 92 – Determining the Cracking Temperature of Asphalt Binder Using the Asphalt Binder Cracking Device. Nelson Gibson and Tim Ramirez worked with the test developer Sangsu Kim to address comments from the original ballot. The Binder ETG reviewed and approved. We will consider with all of the Binder ETG recommendations in new business.

D. Other Old Business

1. Rewriting of Category C standards – No progress has been made in rewriting Category C standards. All of them are technically at variance with the “equivalent” ASTM, but the Chairman has made no progress in rewriting the standards. AMRL volunteered to assist the Chair with this review.
2. Rewriting T 48 – AMRL (Maria Knake) has requested that they rewrite T 48 – Flash and Fire Points by Cleveland Open Cup to incorporate use of an automated system for determining flash point. Maria Knake is working on a rewrite of T 48. It will be sent out to ballot when it is submitted
3. Mercury Thermometer Elimination – No progress has been made in updating standards. The Chairman will focus on this issue this year to update the standards that are not dependent on rate of temperature change. Research will be needed for standards that are dependent on the rate of temperature change.

Chairman has not put much effort into this issue this past year but will focus on reviewing and proposing revised language to allow alternative thermometric devices for those standards that do not depend on the rate of change of the temperature. The TS should expect to see these items balloted by TS ballot this year. AMRL volunteered to assist the chair with thermometer issues.

V. New Business

- A. **Binder ETG Update** – See Attachment #4 of the agenda for e-mail from John Bukowski regarding recommended changes in TS 2b standards for TS consideration.
 1. **M 320, MP 19, T 315** – Revise to accommodate GTR modified asphalt. To address the negatives from last year's ballot, revised wording is being proposed. ETG recommended revisions to M 320, MP 19 and T 315 are in Appendices D-1, D-2, and D-3. These modifications are to accommodate GTR in PG Binder specifications. A motion was made to move these standards forward to a concurrent ballot with a note added to T 315 stating that the 2 mm gap should be used specifically for GTR. Also, the ballot will address how nominal maximum particle size is defined. The motion was made by Virginia and a second by Pennsylvania. The motion passed unopposed.

2. **T 44** – Revise T 44 to replace trichloroethylene and 1,1,1-trichloroethane with toluene. Also add GTR and an alternate filter for modified asphalts. See Attachment #8 of the agenda. Note: The proposed changes in T 44 were not done in track changes and not all changes are highlighted in red.

Due to the multiple changes in T 44, Chairman recommended that this go to TS ballot. The chairman will try to clean up the language and get some additional information to support the changes for the ballot item.

3. **MP 19** – Revise Table 1 in MP 19 for maximum $J_{nr3.5}$ for Standard Traffic, “S” from 4.0 to 4.5 kPa^{-1} . ETG is recommending that the maximum J_{nr} for the standard traffic level (“s”) be changed to 4.5. See Appendix D-4. A motion was made to send this change to concurrent ballot by Oklahoma and a second by Pennsylvania. The motion passed.
4. **TP 70** – Revise section 7.3 and add 7.4 to clarify wording and ensure critical data are obtained. Also add a note regarding negative percent recovery. See Attachment #12 of the agenda for presentation regarding the changes. ETG is recommending changes to TP 70 which can be found in Appendix D-5. A motion was made by Virginia to move these changes to concurrent ballot. Pennsylvania seconded the motion. The motion passed.
5. **TP 92** – Revise TP 92 to address comments from the 2011 ballot. Recommendations by the TP 92 task force and the developer Dr. Sang Soo Kim and approved by the Binder ETG. Attachment #14 of the agenda for a presentation regarding the changes. See Appendix D-6 for proposed changes. A motion was made to move to concurrent ballot. Motion made by New Hampshire and second by Pennsylvania. The motion passed.
6. **T 313 and T 315** – Dave Anderson is working with Maria Knake on rewrite of BBR and DSR standards. Nothing has been submitted for our consideration at this time.

The TS may see proposed changes in the future. Maria mentioned that Dr. Anderson has been working on an acceptance procedure for asphalt binders and he would like to present what he proposes via webinar. The acceptance procedure has support from NEAUPG and Asphalt Institute. Maria will work with Dr. Anderson and the Chair and Vice Chair to set up a meeting date.

- B. Proposed New Standards** – Nelson Gibson proposing new test method -- DENT. See Attachment #15 of the agenda for the proposed test method. See Attachment #16 of the agenda for the Binder ETG’s discussion on this test method. Also see the following web site for background information on the test method:

<http://www.fhwa.dot.gov/publications/research/infrastructure/pavements/11045/index.cfm>

A new test method is proposed for TS consideration. See Attachment #15. ETG comments on the test method can be found in Attachment #16 were not positive. John D’Angelo mentioned that in some regions a great deal of variability in this test result. There are concerns on how well the results correlate to field conditions. It was agreed

that this item should go to Tech Section ballot to see if there is any interest. Comments from ETG and concerns brought up during this meeting will be included with the ballot.

- C. **AMRL Comments** – Maria Knake sent technical comments on R 29, T 44, and T 49 and an editorial comment on R 28. Chairman will take care of the editorial comment. TS to consider balloting R 29, T 44, and T 49.

A motion was made to send the changes recommended by AMRL on R 29 to concurrent ballot. See Appendix D-7. The motion was made by Pennsylvania, and a second by Virginia. The motion passed unopposed.

A motion was made to send the changes recommended by AMRL on T 44 to concurrent ballot. The motion was made by Illinois and a second by Oklahoma. The motion passed unopposed.

A motion was made to send the changes recommended by AMRL on T 49 to concurrent ballot. The motion was made by Virginia and a second by Illinois. The motion passed unopposed.

D. Standards Requiring Reconfirmation

R 26, R 28, R 49, T 51, T 53, T 102, T 179, T 228, and TP 78 are due to be reconfirmed in 2013. All were confirmed with no comment. M 320, T 48, T 201, T 202, T 313, T 315, and MP 19 are scheduled for reconfirmation in 2014 unless they are balloted for change.

- E. **TP 70 & MP 19** – NEAUPG has asked the TS to consider moving TP 70 and MP 19 to full standards. The Northeast plans to adopt MP 19 for specifying modified binders starting in January 2014. NEAUPG would also like the TS to consider modifications to TP 70 and MP 19 that would move the appendix regarding elastic response from TP 70 to MP 19 since it is more of a specification than a part of the test method. The Appendix would be an optional requirement in MP 19. See Appendices D-10 and D-11 for NEAUPG recommended changes to TP 70 and MP 19. Also, NEAUPG is asking the TS to consider moving these to Full Standards. A motion was made by New Hampshire to send these changes to concurrent ballot and to also ballot to make TP 70 and MP 19 full standards. A second was made by Illinois. The motion passed unopposed.

F. Research Needs

No research needs were proposed to be endorsed by TS.

G. New Task Forces

MSCR Temperature task force consisting of Matt Corrigan- FHWA (lead), John D'Angelo, Darren Hazlett (TX), Lyndi Blackburn (Alabama), Mike Anderson (Asphalt Institute), Chris Abadie (LA), and Eileen Sheehy was put together to develop further guidance on temperature selection for TP 70.

H. SOM Ballot Items

Review of standards to be sent to SOM Ballot based upon discussions during the meeting. The following table shows standards that are going to SOM Ballot this year.

Standard	Agenda Item #	Concurrent/SOM
M 320	V.A.1	Concurrent
MP 19	V.A.1	Concurrent
T 315	V.A.1	Concurrent
MP 19	V.A.3	Concurrent
TP 70	V.A.4	Concurrent
TP 92	V.A.5	Concurrent
R 29	V.C	Concurrent
T 44	V.C	Concurrent
T 49	V.C	Concurrent
TP 70	V.E	Concurrent
MP 19	V.E	Concurrent
TP 70 (to full standard)	V.E	Concurrent
MP 19 (to full standard)	V.E	Concurrent

I. Other New Business

Haleh Azari submitted data on precision estimates for some TS 2b standards. The chair will send them out for TS consideration.

Eric Weaver (FHWA) submitted some new standards to the Chair for review. These will be sent forth for TS ballot for consideration.

- VI. **Adjourn** (scheduled for 12:00)
Meeting adjourned at 11:52 AM.

Appendix A - Agenda

AASHTO Subcommittee on Materials Technical Section 2b – Asphalt 2013 Annual Technical Section Meeting August 8, 2013 – 10:00 a.m. Meeting Agenda

I. Call to Order/Opening Remarks/General Business

Call to Order – 10:00 a.m.

II. Roster

Please note any changes on the roster circulated and visitors please sign in.

III. Approve Technical Section minutes from August 9, 2012 meeting in Biloxi, Mississippi and the Mid-Year conference call from March 8, 2013. (See Attachments #1 and 2).

IV. Old Business

A. 2012 SOM Ballot Items

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Texas Department of Transportation (Darren Hazlett) (darren.hazlett@txdot.gov)	Shouldn't we allow for either a higher or lower speed? The torque may be out of range on either end of the scale.
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Item 23: Concurrent ballot item to revise T 44, Solubility of Bituminous Materials to eliminate the 15 minute waiting period. Proposed revisions are presented on pages 21 - 22 of the 2012 Minutes and the motion and discussion are on page 6. 46-Affirmative, 1-Negative, 5-No Vote. TS to address Iowa negative.

Iowa Department of Transportation (James Berger) (james.berger@dot.iowa.gov)	The discussion provided is not persuasive. Fifteen minutes is not a burden in my opinion and serves as a secondary check. Data showing the wait period is not needed should be provided as justification.
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5-No Vote. Chairman pleads temporary insanity for spelling empty as “empt” and using as “wuing”. Corrections made editorially. No further TS action necessary.

Item 25: *Concurrent ballot item to revise TP 70, Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR) to give more guidance on temperature to run the test, add conditioning cycles, and eliminate the calculation of % recovery difference between the 2 stress levels. Proposed revisions are presented on pages 25 - 29 of the 2012 Minutes and the motion and discussion are on page 6. 46-Affirmative, 1-Negative, 5-No Vote. Discuss Nevada negative and South Carolina, Georgia, and Texas comments. The Nevada negative was addressed editorially. Chairman suggests a task group to review the wording in regards to guidance on temperature.*

Nevada Department of Transportation (Reid G Kaiser) (rkaiser@dot.state.nv.us)	Changes refer to "last" ten cycles at 3.2kPa. There are no "last" ten cycles, just a total of ten cycles. The "last" terminology should only apply to 0.1kPa.
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Negatives for Items 26 – 28:

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Iowa Department of Transportation	Understandably these revisions are necessary to accommodate the use

Appendix A - Agenda

<p>(James berger) (james.berger@dot.iowa.gov)</p>	<p>of CRM. However, there are unanticipated consequences when CRM is used without revisions to agency specifications surrounding construction practices. For example, many states have maximum temperatures for plant mixing and binder temperatures, which may need to be waived for CRM.</p>
<p>Mississippi Department of Transportation (James A. Williams) (jwilliams@mdot.state.ms.us)</p>	<p>Section 5.2 - Deleting "organic" from the description of the allowed modifiers opens the specification to any inorganic modifier at any dosage required to meet physical testing requirements. If the intent of the revision is to allow ground tire rubber to be used as a modifier, removing "organic" without some clarification from the description in 5.2 may have unintended consequences.</p>
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<p>Minnesota Department of Transportation (Curt M Turgeon) (curt.turgeon@state.mn.us)</p>	<p>Negative. We have concerns about writing this language to allow GTR asphalts without stating that is the purpose. The way this is written it could possibly allow mineral filler and other fillers larger than 250um. Also SHRP determined that 250um was the max particle size where the DSR could be used under the present parameters. Approval to T315 ballot needs to be done before changes to M320 can be done. See comment to T315 ballot.</p> <p>A note should be added to define deleterious materials mentioned in 5.3. This is relevant to allowing GTR in this standard.</p>
<p>Utah Department of Transportation (Scott S Andrus) (scottandrus@utah.gov)</p>	<p>The proposed change will place the responsibility of selecting appropriate, non-soluble items in the hands of the specifier. The M320 as currently written prevents the use of mineral dust and other plastomeric additives from being used to modify the binder with the intention of meeting the specification and not to improve performance. UDOT recommends that the ETG come to a consensus so that there is a consistent interpretation and application before moving ahead with changes to the current standard. As proposed this change may result in different acceptance conditions from specifier to specifier.</p>

Due to the number of negatives, the Chairman did not make the changes to standards. Chairman conducted a survey which is presented in Attachment #3. There was not a clear consensus from the survey on whether GTR should be in stand-alone specifications. The ETG considered the data from the survey and has made further recommendations. We will discuss under new business.

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C. Task Force Reports

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D. Other Old Business

1. Rewriting of Category C standards – No progress has been made in rewriting Category C standards.
2. Rewriting T 48 – AMRL (Maria Knake) has requested that they rewrite T 48 – Flash and Fire Points by Cleveland Open Cup to incorporate use of an automated system for determining flash point.
3. Mercury Thermometer Elimination – No progress has been made in updating standards. The Chairman will focus on this issue this year to update the standards that are not dependent on rate of temperature change. Research will be needed for standards that are dependent on the rate of temperature change.

V. New Business

- A. **Binder ETG Update** – See Attachment #4 for e-mail from John Bukowski regarding recommended changes in TS 2b standards for TS consideration.

Appendix A - Agenda

1. **M 320, MP 19, T 315** – Revise to accommodate GTR modified asphalt. To address the negatives from last year’s ballot, revised wording is being proposed. See Attachments # 5, 6, and 7 for proposed revisions and rationale. TS to consider sending these three standards to concurrent ballot. NOTE: Not clear what the new section 4.2.5 in MP 19 has to do with GTR.
 2. **T 44** – Revise T 44 to replace trichloroethylene and 1,1,1-trichloroethane with toluene. Also add GTR and an alternate filter for modified asphalts. See Attachment #8. TS to consider sending this standard to ballot. Note: The proposed changes in T 44 were not done in track changes and not all changes are highlighted in red.
 3. **MP 19** – Revise Table 1 in MP 19 for maximum $J_{nr3.5}$ for Standard Traffic, “S” from 4.0 to 4.5 kPa^{-1} . See Attachment #9 for revision and Attachment #10 for additional information. TS to consider sending this standard to ballot.
 4. **TP 70** – Revise section 7.3 and add 7.4 to clarify wording and ensure critical data are obtained. Also add a note regarding negative percent recovery. See Attachment #11 for proposed revisions and Attachment #12 for presentation regarding the changes. TS to consider sending this standard to ballot.
 5. **TP 92** – Revise TP 92 to address comments from the 2011 ballot. Recommendations by the TP 92 task force and the developer Dr. Sang Soo Kim and approved by the Binder ETG. See Attachment #13 for proposed revisions and Attachment #14 for presentation. TS to consider sending this standard to ballot.
 6. **T 313 and T 315** – Dave Anderson is working with Maria Knake on rewrite of BBR and DSR standards. Nothing has been submitted for our consideration at this time.
- B. Proposed New Standards** – Nelson Gibson proposing new test method -- DENT. See Attachment #15 for the proposed test method. See Attachment #16 for the Binder ETG’s discussion on this test method. Also see the following web site for background information on the test method:
- <http://www.fhwa.dot.gov/publications/research/infrastructure/pavements/11045/index.cfm>
- TS to consider sending this standard to ballot.
- C. AMRL Comments** – Maria Knake sent technical comments on R 26, T 44, and T 49 and an editorial comment on R 28. Chairman will take care of the editorial comment. TS to consider balloting R 26, T 44, and T 49.
- D. Standards Requiring Reconfirmation**
R 26, R 28, R 49, T 51, T 53, T 102, T 179, T 228, and TP 78 are due to be reconfirmed in 2013. All were confirmed with no comment. M 320, T 48, T 201, T 202, T 313, T 315, and MP 19 are scheduled for reconfirmation in 2014 unless they are balloted for change.
- E. TP 70 & MP 19** – NEAUPG has asked the TS to consider moving TP 70 and MP 19 to full standards. The Northeast plans to adopt MP 19 for specifying modified binders starting in January 2014. TS to consider ballot to move TP 70 & MP 19 to full standard

Appendix A - Agenda

with modifications whatever modifications are balloted and adopted from this year's SOM ballot. NEAUPG would also like the TS to consider modifications to TP 70 and MP 19 that would move the appendix regarding elastic response from TP 70 to MP 19 since it is more of a specification than a part of the test method. The Appendix would be an optional requirement in MP 19. See Attachments #18 and 19 for proposed revisions. TS to consider balloting for revisions to MP 19 and TP 70 and also consider balloting to make MP 19 and TP 70 full standards.

F. Research Needs

Address any research needs proposed to be endorsed by TS.

G. New Task Forces

Review task forces that were established in the course of the meeting.

H. SOM Ballot Items

Review of standards to be sent to SOM Ballot based upon discussions during the meeting. The following table shows standards that are on the agenda for consideration for going to SOM Ballot this year.

Standard	Agenda Item #	Concurrent/SOM/No Ballot
<i>T 48</i>	<i>IV.D.2</i>	
<i>M 320</i>	<i>V.A.1</i>	
<i>MP 19</i>	<i>V.A.1</i>	
<i>T 315</i>	<i>V.A.1</i>	
<i>T 44</i>	<i>V.A.2</i>	
<i>MP 19</i>	<i>V.A.3</i>	
<i>TP 70</i>	<i>V.A.4</i>	
<i>TP 92</i>	<i>V.A.5</i>	
<i>R 26</i>	<i>V.C</i>	
<i>T 44</i>	<i>V.C</i>	
<i>T 49</i>	<i>V.C</i>	
<i>TP 70</i>	<i>V.E</i>	
<i>MP 19</i>	<i>V.E</i>	
<i>TP 70 (to full standard)</i>	<i>V.E</i>	
<i>MP 19 (to full standard)</i>	<i>V.E</i>	

VI. Adjourn *(scheduled for 12:00)*

8/8/13
10 AM

Appendix B - Sign in Sheets

2013 AASHTO's Subcommittee on Materials Meeting
Stateline, Nevada

Attendance Sheet for Breakout Session #1: Technical Session 2b- Asphalts

** If your name is not listed, please add your contact information to the end of the list. Thank you! **

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<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Abadie	Chris	LA DOTD	chris.abadie@la.gov	225-248-4131
<input type="checkbox"/>	<input type="checkbox"/>	Adams	Bill	Hancock Concrete	bill.adams@hancockconcrete.com	712-212-3344
<input type="checkbox"/>	<input type="checkbox"/>	Ahearn	William	Vermont Agency of Transp.	bill.ahearn@state.vt.us	802-828-2561
<input type="checkbox"/>	<input type="checkbox"/>	Ahlstrom	Gina	FHWA	gina.ahlstrom@dot.gov	202-366-4612
<input type="checkbox"/>	<input type="checkbox"/>	Ahmad	Riaz	iENGINEERING Corporation	rahmad@iengineering.com	703-722-2980
<input type="checkbox"/>	<input type="checkbox"/>	Allen	Chad	State of Vermont	chad.allen@state.vt.us	802-828-6924
<input type="checkbox"/>	<input type="checkbox"/>	Andersen	Roger	Potters Industires	andy.andersen@pottersbeads.com	941-266-8442
<input type="checkbox"/>	<input type="checkbox"/>	Arnold	Gene	Ergon Asphalt and Emulsions	gene.arnold@ergon.com	901-277-1700
<input type="checkbox"/>	<input type="checkbox"/>	Austin	Chuck	IHS	chuck.austin@ihs.com	256.489.3038
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Azari	Haleh	AASHTO	azari@aaprl.org	301-975-2112
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Babish	Andy	Virginia DOT	Andy.Babish@VDOT.Virginia.gov	804 328-3102
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bailey	Bill	Virginia DOT	Bill.Bailey@VDOT.Virginia.gov	804 328-3106
<input type="checkbox"/>	<input type="checkbox"/>	Baker	Thomas	Washington State DOT	BakerT@wsdot.wa.gov	360 709-5401
<input type="checkbox"/>	<input type="checkbox"/>	Ballen	Todd	3M	taballen@mmm.com	651-575-0851
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Barnhart	Tracy	AMRL	tbarnhart@amrl.net	2404364802
<input type="checkbox"/>	<input type="checkbox"/>	Baryluk	Greg	Advanced Drainage Systems, Inc.	greg.baryluk@ads-pipe.com	614-658-0126
<input type="checkbox"/>	<input type="checkbox"/>	Beakley	Josh	ACPA	jbeakley@concrete-pipe.org	972-894-2906
<input type="checkbox"/>	<input type="checkbox"/>	Beavin	Mike	Asphalt Institute	Mtbeavin@asphaltinstitute.org	859-608-1947
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Benson	Michael	Arkansas State Highway and Transp. Dept.	michael.benson@arkansashighways.com	501-569-2185
<input type="checkbox"/>	<input type="checkbox"/>	Bergold	Desna	WAQTC	dbconsulting.desna@gmail.com	801-721-7146
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Blackburn	Lyndi	Alabama DOT	blackburnl@dot.state.al.us	334-206-2203
<input type="checkbox"/>	<input type="checkbox"/>	Blackhurst	Don	Potters Industries LLC	don.blackhurst@pottersbeads.com	6106514316
<input type="checkbox"/>	<input type="checkbox"/>	Blair	Bruce	Lafarge	bruce.blair@lafarge.com	703 480 6622
<input type="checkbox"/>	<input type="checkbox"/>	Bohn	Greg	Advanced Drainage Systems, Inc.	greg.bohn@ads-pipe.com	614-588-6830
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Bradbury	Richard	Maine Department of Transportation	richard.bradbury@maine.gov	207-441-2474
<input type="checkbox"/>	<input type="checkbox"/>	Buckshaw	Dennis	AP/M Permaform	dennis@permaform.net	800-662-6465
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bukowski	John	FHWA/ Office of Infrastructure	john.bukowski@dot.gov	202-366-1287
<input type="checkbox"/>	<input type="checkbox"/>	Capehart	Rocky	Sprayroq, Inc	rcapehart@sprayroq.com	205-957-0020
<input type="checkbox"/>	<input type="checkbox"/>	Carlson	Doug	Liberty Tire Recycling	dcarlson@libertytire.com	602-751-6039
<input type="checkbox"/>	<input type="checkbox"/>	Carlson	Eugene	3M Company	ghcarlson1@mmm.com	651-737-3351
<input type="checkbox"/>	<input type="checkbox"/>	Carnate	Gerobin	Hawaii Department of Transportation	gerobin.carnate@hawaii.gov	(808) 832 3405 ext 131
<input type="checkbox"/>	<input type="checkbox"/>	Castle	Derrick	KYTC Division of Materials	Derrick.Castle@ky.gov	502-564-3160
<input type="checkbox"/>	<input type="checkbox"/>	Castrodale	Reid	Expanded Shale Clay & Slate Institute	rcastrodale@escsi.org	7049047999
<input type="checkbox"/>	<input type="checkbox"/>	Charoenpap	Richie	LA DOTD Materials & Testing	richie.charoenpap@la.gov	225-248-4131
<input type="checkbox"/>	<input type="checkbox"/>	Chestnut	Brian	Lane Enterprises, Inc.	bchestnut@lane-enterprises.com	717-532-5959x1207
<input type="checkbox"/>	<input type="checkbox"/>	Childs	Matt	American Concrete Pipe Association	mchilds@concrete-pipe.org	972-506-7216
<input type="checkbox"/>	<input type="checkbox"/>	Coombs	Shawn	Advanced Drainage Systems, Inc.	shawn.coombs@ads-pipe.com	704-457-8844
<input type="checkbox"/>	<input type="checkbox"/>	Cooper	Andrew	James Cox and Sons	andrew.cooper@jamescoxandsons.com	530-346-8322

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2013 AASHTO's Subcommittee on Materials Meeting
Stateline, Nevada

Attendance Sheet for Breakout Session #1: Technical Session 2b- Asphalts

** If your name is not listed, please add your contact information to the end of the list. Thank you! **

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<input checked="" type="checkbox"/>	<input type="checkbox"/>	Copeland	Audrey	National Asphalt Pavement Association	audrey@asphaltpavement.org	301-731-4748
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Corrigan	Matthew	FHWA	matthew.corrigan@dot.gov	202-366-1549
<input type="checkbox"/>	<input type="checkbox"/>	Cox	Kenneth	TCCC	kenneth.cox@dot.state.fl.us	352-316-2683
<input type="checkbox"/>	<input type="checkbox"/>	Crawford	Gary	Federal Highway Administration	Gary.Crawford@dot.gov	202-366-1286
<input type="checkbox"/>	<input type="checkbox"/>	Currence	Dan	Plastics Pipe Institute (PPI)	dcurrence@plasticpipe.org	469-499-1055
<input type="checkbox"/>	<input type="checkbox"/>	Daleiden	Jerry	Fugro	jdaleiden@fugro.com	512.977.1800
<input checked="" type="checkbox"/>	<input type="checkbox"/>	D'Angelo	John	D'Angelo Consulting, LLC	johndangelo@dangeloconsultingllc.com	571-218-9733
<input type="checkbox"/>	<input type="checkbox"/>	Davis	Kaye	Alabama DOT	chancellor@dot.state.al.us	3342062277
<input type="checkbox"/>	<input type="checkbox"/>	Douglass	Carl	Prinsco, Inc	carld@prinsco.com	320-222-6825
<input type="checkbox"/>	<input type="checkbox"/>	Dvorak	Dennis	Federal Highway Administration	dennis.dvorak@dot.gov	(708) 283-3542
<input type="checkbox"/>	<input type="checkbox"/>	Edwards	Dan	AIL Group	dedwards@ail.ca	817-713-9163
<input type="checkbox"/>	<input type="checkbox"/>	Evans	Bill	Ergon Asphalt & Emulsions Inc.	bill.evans@ergon.com	706-975-9339
<input type="checkbox"/>	<input type="checkbox"/>	FARLEY	PAUL	WV DIVISION OF HIGHWAYS	PAUL.M.FARLEY@WV.GOV	3045589880
<input type="checkbox"/>	<input type="checkbox"/>	Felag	Mark	RIDOT	mfelag@dot.ri.gov	401-641-8279
<input type="checkbox"/>	<input type="checkbox"/>	Ferry	Steve	Microbac Laboratories	steve.ferry@microbac.com	720-406-4800
<input type="checkbox"/>	<input type="checkbox"/>	Flowers	Tom	Ergon Asphalt & Emulsions Inc.	tom.flowers@ergon.com	903-258-6186
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	Frizzell	MacKenzie	Mississippi DOT	mlfrizzell@mdot.ms.gov	6625634271
<input type="checkbox"/>	<input type="checkbox"/>	Geary	Georgene	Georgia Department of Transportation	ggeary@dot.ga.gov	404-608-4712
<input checked="" type="checkbox"/>	<input type="checkbox"/>	GILLISPIE	AARON	WVDOT	AARON.C.GILLISPIE@WV.GOV	3045589892
<input type="checkbox"/>	<input type="checkbox"/>	Graves	Robin	Vulcan Materials Company	gravesr@vmcmail.com	2052983134
<input type="checkbox"/>	<input type="checkbox"/>	Griswold	Mike	State of Nevada DOT	mgriswold@dot.state.nv.us	775-888-7501
<input type="checkbox"/>	<input type="checkbox"/>	Gudiel	Francisco	LA DOTD Materials & Testing	francisco.gudiel@la.gov	225-248-4111
<input type="checkbox"/>	<input type="checkbox"/>	hahm	joel	Big R Bridge	jhahm@bigrbridge.com	970-347-2208
<input type="checkbox"/>	<input type="checkbox"/>	Hainsworth	Greg	Delaware DOT	gregory.hainsworth@state.de.us	302-760-2401
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hale	Steve	Nevada Department of Transportation	shale@dot.state.nv.us	775-888-7460
<input type="checkbox"/>	<input type="checkbox"/>	Hand	Adam	Granite Construction	adam.hand@gcinc.com	775-742-6540
<input type="checkbox"/>	<input type="checkbox"/>	Hanna	Amir	NCHRP/TRB	ahanna@NAS.EDU	2023341432
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Harman	Thomas	FHWA	tom.harman@dot.gov	410-962-7971
<input type="checkbox"/>	<input type="checkbox"/>	Hasty	Charles	Georgia Department of Transportation	chasty@dot.ga.gov	404-608-4708
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hazlett	Darren	Texas Department of Transportation	darren.hazlett@txdot.gov	512-416-2456 <i>want to join</i>
<input type="checkbox"/>	<input type="checkbox"/>	Hebeler	Gregory	Golder Associates Inc.	ghebeler@golder.com	770-496-1893
<input type="checkbox"/>	<input type="checkbox"/>	Heinen	Caroline	TxDOT	caroline.heinen@txdot.gov	512-506-5808
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<input type="checkbox"/>	<input type="checkbox"/>	Heyen	Wally	Nebraska Department of Roads	Wally.heyen@nebraska.gov	4024794677
<input type="checkbox"/>	<input type="checkbox"/>	Hite	Jeffery	CEMEX	jefferya.hite@cemex.com	8132204076
<input type="checkbox"/>	<input type="checkbox"/>	hitti	edgard	Paramount Petroleum Corporation	ehitti@ppcla.com	(775) 690-7424
<input type="checkbox"/>	<input type="checkbox"/>	Hoff	Trygve	American Concrete Pipe Association	thoff@concrete-pipe.org	514-506-4867

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2013 AASHTO's Subcommittee on Materials Meeting

Stateline, Nevada

Attendance Sheet for Breakout Session #1: Technical Session 2b- Asphalts

** If your name is not listed, please add your contact information to the end of the list. Thank you! **

Attending	TS Member	Last Name	First Name	Company	Email Address	Work Phone
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	Horan	Robert	Asphalt Institute	bhoran@asphaltinstitute.org	8045393036
<input type="checkbox"/>	<input type="checkbox"/>	Hornbuckle	greg	Neenah Foundry	greg.hornbuckle@neenahenterprises.com	314-614-3627
<input type="checkbox"/>	<input type="checkbox"/>	Horner	Ron	ND Department of Transportation	rhorner@nd.gov	701-328-6904
<input type="checkbox"/>	<input type="checkbox"/>	Horwhat	Robert	PennDOT	rhorwhat@pa.gov	717-787-4720
<input type="checkbox"/>	<input type="checkbox"/>	Hurguy	Bill	Arizona Department Of Transportation	bhurguy@azdot.gov	602-712-7286
<input type="checkbox"/>	<input type="checkbox"/>	Ingram	Steven	Alabama Department of Transportation	ingrams@dot.state.al.us	334-206-2335
<input type="checkbox"/>	<input type="checkbox"/>	Innis	Al	Holcim	al.innis@holcim.com	734-529-4183
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Irvine	Gary	Asphalt Institute	Girvine@asphaltinstitute.org	859-221-2605
<input type="checkbox"/>	<input type="checkbox"/>	Ishee	Mark	Ergon Asphalt & Emulsions Inc.	mark.ishee@ergon.com	6019333000
<input type="checkbox"/>	<input type="checkbox"/>	Jamshidi	Mostafa	Nebraska Department of Roads	moe.jamshidi@nebraska.gov	402-479-4671
<input type="checkbox"/>	<input type="checkbox"/>	Johnson	Chip	Sprayroq Inc.	cjohnson@sprayroq.com	205-957-0020
<input type="checkbox"/>	<input type="checkbox"/>	Johnson	Brian	AASHTO	bjohnson@amrl.net	240-436-4820
<input type="checkbox"/>	<input type="checkbox"/>	Johnson	James	AASHTO	jjohnson@ashto.org	85-422-3930
<input type="checkbox"/>	<input type="checkbox"/>	Jones	Cecil	Diversified Engineering Services, Inc	cecil.jones@nc.rr.com	919 616-5139
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Kaiser	Reid	State of Nevada DOT	rkaiser@dot.state.nv.us	775-888-7520
<input type="checkbox"/>	<input type="checkbox"/>	Kim	Deborah	AASHTO	dkim@ashto.org	202-623-5883
<input type="checkbox"/>	<input type="checkbox"/>	Kleinhans	Danielle	Concrete Reinforcing Steel Institute	dkleinhans@crsi.org	847-517-1200
<input type="checkbox"/>	<input type="checkbox"/>	Knake	Maria	AMRL	mknake@amrl.net	240-436-4804
<input type="checkbox"/>	<input type="checkbox"/>	Kottaka	Mari	Integrated Traffic Systems USA, Inc.	mari@ithermusa.com	7136405931
<input type="checkbox"/>	<input type="checkbox"/>	Krebs	Steven	WI DEPT OF TRANSPORTATION	steven.krebs@dot.wi.gov	608-246-7930
<input type="checkbox"/>	<input type="checkbox"/>	Kreider	Rick	Kansas Department of Transportation	RickK@ksdot.org	785-296-1195
<input type="checkbox"/>	<input type="checkbox"/>	Kuniega	David	PennDOT	dkuniega@pa.gov	717 787-3966
<input type="checkbox"/>	<input type="checkbox"/>	Kurdziel	John	Advanced Drainage Systems, Inc.	john.kurdziel@ads-pipe.com	614-658-0211
<input type="checkbox"/>	<input type="checkbox"/>	Kvach	Michael	Asphalt Pavement Alliance	mkvach@asphaltroads.org	301-918-8391
<input type="checkbox"/>	<input type="checkbox"/>	Lacinak	Henry	AASHTO	hlacinak@ashto.org	225-752-2877
<input type="checkbox"/>	<input type="checkbox"/>	Lane	Becca	Ministry of Transportation Ontario	Becca.Lane@ontario.ca	416 235 3512
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lauzon	Robert	Connecticut DOT	robert.lauzon@ct.gov	860-258-0312
<input type="checkbox"/>	<input type="checkbox"/>	Ledesma	Lorie	Integrated Traffic Systems USA, Inc.	sales@ithermusa.com	7136405931
<input type="checkbox"/>	<input type="checkbox"/>	Lenker	Steven	AASHTO	SLENKER@AMRL.NET	240-436-4770
<input type="checkbox"/>	<input type="checkbox"/>	Lewis	Timothy	Federal Highway Administration	Timothy.Lewis@dot.gov	(804)775-3348
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Lippert	David	Illinois Department of Transportation	David.Lippert@Illinois.gov	217-782-7200
<input type="checkbox"/>	<input type="checkbox"/>	Lowe	David	Fugro	roadware@fugro.com	905-567-2870
<input type="checkbox"/>	<input type="checkbox"/>	Lundy	Joe	JM Lundy Associates	jlundy@uta.edu	469-371-9037
<input type="checkbox"/>	<input type="checkbox"/>	Lutz	Robert	AASHTO	rlutz@amrl.net	2404364801
<input type="checkbox"/>	<input type="checkbox"/>	Malusky	Katheryn	AASHTO	kmalusky@ashto.org	202-624-3695
<input type="checkbox"/>	<input type="checkbox"/>	Matteson	Ron	Ergon Asphalt & Emulsions	ron.matteson@ergon.com	7855776990
<input type="checkbox"/>	<input type="checkbox"/>	McDonald	David	Epoxy Interest Group of CRSI	dmcdonald@epoxy.crsi.org	8475326762

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2013 AASHTO's Subcommittee on Materials Meeting
 Stateline, Nevada

Attendance Sheet for Breakout Session #1: Technical Session 2b- Asphalts

** If your name is not listed, please add your contact information to the end of the list. Thank you! **

Attending	TS Member	Last Name	First Name	Company	Email Address	Work Phone
<input type="checkbox"/>	<input type="checkbox"/>	McGough	Michael	NCSPA	mmcough@ncspa.org	7038124701
<input type="checkbox"/>	<input type="checkbox"/>	McNish	Crista	Advanced Drainage Systems, Inc.	crista.mcnish@ads-pipe.com	419-422-1305
<input type="checkbox"/>	<input type="checkbox"/>	Meiner	Heather	Hanson Pipe and Precast	heather.meiner@lehighhanson.com	972-653-3823
<input type="checkbox"/>	<input type="checkbox"/>	Melander	John	John M Melander Consultant	jmmelander@gmail.com	847-942-2332
<input type="checkbox"/>	<input type="checkbox"/>	Mergenmeier	Andy	Federal Highway Administration	andy.mergenmeier@dot.gov	410-962-7971
<input type="checkbox"/>	<input type="checkbox"/>	Metcalfe	Scott	Ergon Asphalt & Emulsions Inc.	scott.metcalfe@ergon.com	909-228-2159
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Metcalfe	Ross "Oak"	Montana Department of Transportation	rmetcalfe@mt.gov	406-444-9201
<input type="checkbox"/>	<input type="checkbox"/>	Milburn	Greg	Wyoming Dept. of Transportation	greg.milburn@wyo.gov	307-777-4070
<input type="checkbox"/>	<input type="checkbox"/>	Mitchell	Marc	Paramount Petroleum Corporation	mitchell@ppcla.com	(916) 539-0100
<input type="checkbox"/>	<input type="checkbox"/>	Mulder	Greg	Iowa Dept. of Transportation	greg.mulder@dot.iowa.gov	515239-1843
<input type="checkbox"/>	<input type="checkbox"/>	Mullis	Cole	Oregon Department of Transportation	cole.f.mullis@odot.state.or.us	503-986-3061
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Myers	Allen	Kentucky Transportation Cabinet	allen.myers@ky.gov	502-564-3160
<input type="checkbox"/>	<input type="checkbox"/>	Newman	Garth	WAQTC	garth.newman@itd.idaho.gov	208-334-8039
<input type="checkbox"/>	<input type="checkbox"/>	Orthmeyer	Robert	FHWA	robert.orthmeyer@dot.gov	708-283533
<input type="checkbox"/>	<input type="checkbox"/>	Pakes Ahlman, P.E.,	Angela	University of Wisconsin-Madison	apakes@sustainability.wisc.edu	608.890.4966
<input type="checkbox"/>	<input type="checkbox"/>	Pan	Charlie	State of Nevada DOT	cpan@dot.state.nv.us	775-888-7789
<input type="checkbox"/>	<input type="checkbox"/>	Pickens	Christopher	Bekaert Corp	chris.pickens@bekaert.com	4043860294
<input type="checkbox"/>	<input type="checkbox"/>	Proctor	Ryan	Ergon Asphalt & Emulsions, Inc	ryan.proctor@ergon.com	3032434607
<input type="checkbox"/>	<input type="checkbox"/>	Prowell	Jan	CCRL	jprowell@astm.org	2404364800
<input type="checkbox"/>	<input type="checkbox"/>	Radoszewski	Tony	Plastic Pipe Institute	tonyr@plasticpipe.org	469-499-1046
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Rafalowski	Michael	FHWA	Michael.Rafalowski@dot.gov	202-366-1571
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ramirez	Timothy	Penn Dot	tramirez@pa.gov	717-783-6602
<input type="checkbox"/>	<input type="checkbox"/>	Rangaraju	Prasad	Clemson University	prangar@clemson.edu	8646561241
<input type="checkbox"/>	<input type="checkbox"/>	Reaves	Dick	Troxler Electronic Laboratories, Inc.	dreaves@troxlerlabs.com	919-819-4551
<input type="checkbox"/>	<input type="checkbox"/>	Regimand	Ali	Instrotek, Inc.	aregimand@instrotek.com	919-875-8371
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Richins	Jason	AASHTO	jrichins@ashto.org	202 624-3632
<input type="checkbox"/>	<input type="checkbox"/>	Rothblatt	Evan	AASHTO	erothblatt@ashto.org	202-624-3648
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ruelke	Timothy	FDOT- State Materials Office	timothy.ruelke@dot.state.fl.us	352-955-6622
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Salomon	Delmar	Pavement Preservation Systems LLC	dsalomon@mindspring.com	2086721977
<input type="checkbox"/>	<input type="checkbox"/>	Santi	Mike	Idaho Transportation Department	fred.kreller@itd.idaho.gov	2083348402
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Savage	David	CMEC	davesavage@cmecc.org	4076283682
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Schiebel	Bill	Colorado Department of Transportation	bill.schiebel@state.co.us	3033986501
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Schieber	Greg	Kansas Department of Transportation	gregs@ksdot.org	785-296-7136
<input type="checkbox"/>	<input type="checkbox"/>	Seiders	Jeff	Raba Kistner Infrastructure	jseiders@rkci.com	512-904-9177
<input type="checkbox"/>	<input type="checkbox"/>	Seiter	Scott	Oklahoma DOT	sseiter@odot.org	405-521-2186
<input type="checkbox"/>	<input type="checkbox"/>	Sickels	Jon	Advanced Drainage Systems, Inc.	jon.sickels@ads-pipe.com	904-347-3311
<input type="checkbox"/>	<input type="checkbox"/>	Simons	Bryce	New Mexico DOT	bryce.simons@state.nm.us	505827-5191
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Smith	Greta	AASHTO	gsmith@ashto.org	2026245815

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Appendix B -- Sign in Sheets

2013 AASHTO's Subcommittee on Materials Meeting
 Stateline, Nevada

Attendance Sheet for Breakout Session #1: Technical Session 2b- Asphalts

** If your name is not listed, please add your contact information to the end of the list. Thank you! **

Attending	TS Member	Last Name	First Name	Company	Email Address	Work Phone
<input type="checkbox"/>	<input type="checkbox"/>	SMITH	TIM	Maryland State Highway Administration	TSmith2@sha.state.md.us	443-572-5037
<input type="checkbox"/>	<input type="checkbox"/>	SPRINGER	JACK	Federal Highway Administration	Jack.Springer@dot.gov	2024933144
<input type="checkbox"/>	<input type="checkbox"/>	Stallard	Tim	Michigan Department of Transportation	stallardt@michigan.gov	517-322-6448
<input type="checkbox"/>	<input type="checkbox"/>	Stoltzner	Kirk	EJ	kirk.stoltzner@ejco.com	509.209.0353
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Streifel	Callie	Nevada Department of Transportation	cstreifel@dot.state.nv.us	775-888-7460
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sullivan	Michael	MS Department of Transportation	msullivan@mdot.ms.gov	601-359-1666
<input type="checkbox"/>	<input type="checkbox"/>	Sutter	Larry	Michigan Tech Transportation Institute	lsutter@mtu.edu	906 487-2268
<input type="checkbox"/>	<input type="checkbox"/>	Tedford	Darin	State of Nevada DOT	dtedford@dot.state.nv.us	775-888-7784
<input type="checkbox"/>	<input type="checkbox"/>	Toliver	Timothy	Advanced Pipe Services	tim@4pipe.com	4193061129
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Toney	Reynolds	Oklahoma Department of Transportation	rtoney@odot.org	405.521.2677
<input type="checkbox"/>	<input type="checkbox"/>	Traylor	Rick	Rinker Materials Concrete Pipe Div	rick.traylor@cemex.com	832-590-5369
<input type="checkbox"/>	<input type="checkbox"/>	Tritsch	Steven	JC Supply & Manufacturing	Steve@jcsupply.us	913-475-1551
<input type="checkbox"/>	<input type="checkbox"/>	Trolinger	Bill	TDOT	Bill.Trolinger@tn.gov	6153504105
<input type="checkbox"/>	<input type="checkbox"/>	Turgeon	Curt	Minnesota DOT	curt.turgeon@state.mn.us	651 366 5535
<input type="checkbox"/>	<input type="checkbox"/>	Uherek	Greg	AASHTO	guherek@amrl.net	240-436-4840
<input type="checkbox"/>	<input type="checkbox"/>	Van Ness	Brian	Trinity Highway Products, LLC	brian.vanness@trin.net	2145898970
<input type="checkbox"/>	<input type="checkbox"/>	Veldboom	Lee	EJ	lee.veldboom@ejco.com	231.536.4448
<input type="checkbox"/>	<input type="checkbox"/>	Wade	Tony	Weissker	Tony.wade@weissker.com	903-538-2271
<input type="checkbox"/>	<input type="checkbox"/>	Wagner	David	IHS	david.wagner@ihs.com	407.619.4690
<input type="checkbox"/>	<input type="checkbox"/>	Walker	Ronald	Indiana Department of Transportation	rwalker@indot.in.gov	317-610-7251 x 204
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Way	George	Rubberized Asphalt Foundation	wayouta@cox.net	4809909451
<input type="checkbox"/>	<input type="checkbox"/>	West	Randy	NCAT	vinnie@eng.auburn.edu	(334) 844-6244
<input type="checkbox"/>	<input type="checkbox"/>	Williams	Dalton	Mississippi Department of Transportation	drwilliams@mdot.ms.gov	601-249-5202
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Williams	Kurt	Washington State DOT	WilliKR@wsdot.wa.gov	360-709-5410
<input type="checkbox"/>	<input type="checkbox"/>	Williams	James	MS Department of Transportation	jwilliams@mdot.ms.gov	601-359-1666
<input type="checkbox"/>	<input type="checkbox"/>	Wilson	Ashley	Hanson Pipe and Precast	ashley.wilson@lehighhanson.com	469-203-0436
<input type="checkbox"/>	<input type="checkbox"/>	Woods	Victoria	Invia Pavement Technologies	victoria.woods@mww.com	573-619-2903
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Wu	Peter	Georgia Department of Transportation	pwu@dot.ga.gov	404-608-4840
<input type="checkbox"/>	<input type="checkbox"/>	Youtcheff	John	Federal Highway Administration	jack.youtcheff@dot.gov	202 493 3090
<input type="checkbox"/>	<input type="checkbox"/>	Zwanka	Merrill	SCDOT	zwankame@scdot.org	803-737-6694

2013 AASHTO Subcommittee on Materials Meeting
 Stateline, Nevada

Attendance Sheet for Breakout Session #1: Technical Session 2b- Asphalts

Last Name	First Name	Company	Email Address	Work Phone	Check If You Would like to be a Technical Expert for this TS
Hazlett	Darren	TxDOT	darren.hazlett@txdot.gov	512 416 2456	<input checked="" type="checkbox"/>
Andrus	Scott	Utch DOT	scotlandruce@utah.gov	801 965 4859	<input type="checkbox"/>
Member ✓ Rawson	Alan	NH DOT	dot.state.nh.us arawson@	603-271-3151	<input type="checkbox"/>
Peoples	Chris	NC DOT	cpeoples@ncdot.gov	919-329-4000	<input checked="" type="checkbox"/>
Swirczek	DAVE	NDOT	dswirczek@dot.state.nv.us	775-888-7881	<input type="checkbox"/>
Frank Fee		Frank Fee, LLC	Frank.Fee@verizon.net	610 608 9703	<input type="checkbox"/>
DELMAR SALOMON	PAVEMENT PRESERVATION SYSTEMS LLC = PPS LLC		delmar@technipave.com	208-672-1977	<input type="checkbox"/>
Ala Mohseni					<input type="checkbox"/>
Ala Mohseni	Pavement Systems		ala_mohseni@yahoo.com	301 320 8680	<input checked="" type="checkbox"/>
Wu	Peter	GDOT	pwu@dot.ga.gov	404-608-4840	<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

2013 AASHTO Subcommittee on Materials Meeting
 Stateline, Nevada

Attendance Sheet for Breakout Session #1: Technical Session 2b- Asphalts

VISITORS

Last Name	First Name	Company	Email Address	Work Phone	Check If You Would like to be a Technical Expert for this TS
BOB HOZAN	BOB	ASPHALT INST	bhoran@asphaltinstitute.org	(801) 531-3086	<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
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					<input type="checkbox"/>

STATE	AASHTO	TYPE	RECONFIRM REQUIRED	TITLE
OK	M 226-80 (2012)	A	2016	Viscosity Graded Asphalt Cement
GA	M 320-10	A	2014	Performance Graded Asphalt Binder
IN	R 15-00 (2012)	A	2016	Asphalt Additives and Modifiers
CT	R 26-01 (2013)	A	2017	Certifying Suppliers of Performance Graded Asphalt Binders
CO	R 28-09 (2013)	A	2017	Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel
AZ	R 29-08 (2012)	A	2016	Grading or Verifying the Performance Grade of an Asphalt Binder
TN	R 49-09 (2013)	A	2017	Determination of Low-Temperature Performance Grade (PG) of Asphalt Binders
HI	T 44-13	B	2017	Solubility of Bituminous Materials
WI	T 48-06 (2010)	C	2014	Flash and Fire Points by Cleveland Open Cup
IL	T 49-07 (2011)	C	2015	Penetration of Bituminous Materials
KS	T 51-09 (2013)	C	2017	Ductility of Bituminous Materials
ME	T 53-09 (2013)	C	2017	Softening Point of Bitumen (Ring-and-Ball Apparatus)
LA	T 102-09 (2013)	A	2017	Spot Test of Asphaltic Materials
NH	T 111-11	A	2015	Inorganic Matter or Ash in Bituminous Materials
RI	T 179-05(2013)	B	2017	Effect of Heat and Air on Asphalt Materials (Thin-Film Oven Test)
VA	T 201-10	C	2014	Kinematic Viscosity of Asphalts (Bitumens)
AR	T 202-10	C	2014	Viscosity of Asphalts by Vacuum Capillary Viscometer
ID	T 228-09 (2013)	C	2017	Specific Gravity of Semi-Solid Bituminous Materials
UT	T 240-13	B	2017	Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin Film Oven Test)
WY	T 313-10	A	2014	Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)
MA	T 314-07 (2011)	A	2015	Determining the Fracture Properties of Asphalt Binder in Direct Tension (DT)
MD	T 315-10	A	2014	Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)
NV	T 316-13	A	2017	Viscosity Determination of Asphalt Binder Using Rotational Viscometer
FHWA	MP 19-10	A	2014	Performance Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR)
SC	TP 70-13	A	2017	Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer
KY	TP 78-09	A	2013	Detecting the Presence of Phosphorus in Asphalt Binder
	TP 92-11	A	2015	Determining the Cracking Temperatures of Asphalt Binder Using the Asphalt Binder Cracking Device (ABCD)

Appendix D – TS 2b Ballot Items

TS 2b Ballot Items

Item #	Ballot Item	SOM	Concurrent
1	Concurrent ballot item to REVISE M 320, Performance Graded Asphalt Binder to accommodate the use of ground tire rubber as a modifier. Proposed revisions are presented on pages 25-28 of the 2013 Minutes and the motion and discussion can be found on pages 2-5 of the 2013 Minutes.		X
2	Concurrent ballot item to REVISE MP 19, Performance Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) to accommodate the use of ground tire rubber as a modifier. Proposed revisions are presented on pages 29-32 of the 2013 Minutes and the motion and discussion can be found on pages 2-5 of the 2013 Minutes.		X
3	Concurrent ballot item to REVISE T 315, Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR) to accommodate the use of ground tire rubber as a modifier. Proposed revisions are presented on pages 33-36 of the 2013 Minutes and the motion and discussion can be found on pages 2-5 of the 2013 Minutes.		X
4	Concurrent ballot item to REVISE MP 19, Performance Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) to change the requirement for $J_{nr3.5}$ for standard grade asphalt. Proposed revisions are presented on pages 37-41 of the 2013 Minutes and the motion and discussion can be found on page 6 of the 2013 Minutes.		X
5	Concurrent ballot item to REVISE TP 70, Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR) to clarify wording and ensure essential data is recorded. Proposed revisions are presented on pages 42-44 of the 2013 Minutes and the motion and discussion can be found on page 6 of the 2013 Minutes.		X
6	Concurrent ballot item to REVISE TP 92, Determining the Cracking Temperatures of Asphalt Binder Using the Asphalt Binder Cracking Device (ABCD) to clarify the sample preparation/pouring. Proposed revisions are presented on pages 45-53 of the 2013 Minutes and the motion and discussion can be found on page 6 of the 2013 Minutes		X
7	Concurrent ballot item to REVISE R 29, Grading or Verifying the Performance Grade of an Asphalt Binder to allow the flash point to be done by another lab. Proposed		X

Appendix D – TS 2b Ballot Items

	revisions are presented on pages 54-58 of the 2013 Minutes and the motion and discussion can be found on page 7 of the 2013 Minutes		
8	Concurrent ballot item to REVISE T 44, Solubility of Bituminous Materials to allow the use of multiple flasks to complete the test. Proposed revisions are presented on pages 59-60 of the 2013 Minutes and the motion and discussion can be found on page 7 of the 2013 Minutes		X
9	Concurrent ballot item to REVISE T 49, Penetration of Bituminous Materials to allow air bubbles on the surface to be removed by flashing. Proposed revisions are presented on pages 61-62 of the 2013 Minutes and the motion and discussion can be found on page 7 of the 2013 Minutes		X
10	Concurrent ballot item to REVISE MP 19, Performance Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) to add Appendix 2 from MP 70 and change the way that binders are designated. Proposed revisions are presented on pages 63-70 of the 2013 Minutes and the motion and discussion can be found on page 7 of the 2013 Minutes		X
11	Concurrent ballot item to REVISE TP 70, Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR) to delete Appendix 2. Proposed revisions are presented on pages 71-72 of the 2013 Minutes and the motion and discussion can be found on page 7 of the 2013 Minutes		X
12	Concurrent ballot item to ADOPT MP 19, Performance Graded Asphalt Binder Using Multiple Stress Creep Recovery (MSCR) as a Full Standard including all changes adopted as a result of the 2013 SOM Ballot. The motion and discussion can be found on page 7 of the 2013 Minutes		X
13	Concurrent ballot item to ADOPT TP 70, Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR) as a Full Standard including all changes adopted as a result of the 2013 SOM Ballot. The motion and discussion can be found on page 7 of the 2013 Minutes		X