



COMMITTEE ON MATERIALS & PAVEMENTS

2018 Annual Meeting – Cincinnati, OH

Tuesday, August 7, 2018

1:00 – 3:00 PM EST

TECHNICAL SUBCOMMITTEE 2b

Liquid Asphalt

TS 2b 2018 Annual Meeting Summary		
Meeting Date:	8/7/2018	
Items approved by the TS for Committee and or Technical Subcommittee Ballot:		
Standard Designation	Page Numbers/Section Titles for Proposed Changes in Minutes	Technical Subcommittee and/or Committee?
T313	Update Precision Estimates [IV, B, TS Ballots, 1 in notes]	COMP
T315	Update Precision Estimates [IV, B, TS Ballots, 2 in notes]	COMP
T316	Update Precision Estimates [IV, B, TS Ballots, 3 in notes]	COMP
T350	Update Precision Estimates [IV, B, TS Ballots, 4 in notes]	COMP
T383	minor changes to the unit weight and sample size [IV, B, TS Ballots, 6 in notes]	COMP
M332	delete the Jnr Diff requirement for Extremely Heavy Traffic Binderse [IV, B, TS Ballots, 5 in notes]	COMP
New Task Forces Formed:		
Task Force Name	Summary of Task	Names of TF Members
None.		
Other Action Items:		
Several items going to reconfirmation.		

I. Call to Order and Opening Remarks

A. Brief summary of activities *(to ensure all attendees up to speed)*



II. Roll Call

Name	Company	EmailAddress	Designation	Type
Lyndi Blackburn	Alabama DOT	blackburnl@dot.state.al.us	Chair	Voting
Barry Paye	Wisconsin DOT	barry.paye@dot.wi.gov	Vice Chair	Voting
Katheryn Malusky	AASHTO	kmalusky@ashto.org	Liaison	Non-Voting
Brian Johnson	AASHTO Re:source	bjohnson@ashtoresource.org	Liaison	Non-Voting
Maria Knake	AASHTO Re:source	mknake@ashtoresource.org	Liaison	Non-Voting
Paul Burch	Arizona DOT Y	pburch@azdot.gov	Member	Voting
Jay Goldbaum	Colorado DOT Craig sitting in	Jay.Goldbaum@state.co.us	Member	Voting
Robert Lauzon	Connecticut DOT Y	robert.lauzon@ct.gov	Member	Voting
Wasi Khan	District of Columbia DOT Jason Griffin Y	wasi.khan@dc.gov	Member	Voting
Peter Wu	Georgia DOT Y	pwu@dot.ga.gov	Member	Voting
Eric Shishido	Hawaii DOT	eric.shishido@hawaii.gov	Member	Voting
Brian Pfeifer	Illinois DOT Y	brian.pfeifer@illinois.gov	Member	Voting
Richard Barezinsky	Kansas DOT Y	rick.barezinsky@ks.gov	Member	Voting
Allen Myers	Kentucky TC Y	allen.myers@ky.gov	Member	Voting
Jason Davis	Louisiana DOTD	jason.davis@la.gov	Member	Voting
Rick Bradbury	Maine DOT	Richard.Bradbury@maine.gov	Member	Voting
Sejal Barot	Maryland DOT Y	sbarot@sha.state.md.us	Member	Voting
John Grieco	Massachusetts DOT Y	John.Grieco@dot.state.ma.us	Member	Voting
Matt Strizich	Montana DOT Y, Oak now official	mstrizich@mt.gov	Member	Voting
Darin Tedford	Nevada DOT Charlie Pan	dtedford@dot.nv.gov	Member	Voting
Denis Boisvert	New Hampshire DOT Y	Denis.Boisvert@dot.nh.gov	Member	Voting
Donald Streeter	New York State DOT	donald.streeter@dot.ny.gov	Member	Voting
Chris Peoples	North Carolina DOT Clark	cpeoples@ncdot.gov	Member	Voting
Eric Biehl	Ohio DOT Y	eric.biehl@dot.ohio.gov	Member	Voting
Timothy Ramirez	Pennsylvania DOT Y	tramirez@pa.gov	Member	Voting
Michael Byrne	Rhode Island DOT Y	michael.byrne@dot.ri.gov	Member	Voting
Brian Egan	Tennessee DOT Y	brian.egan@tn.gov	Member	Voting
Scott Andrus	Utah DOT Y	scottandrus@utah.gov	Member	Voting

Membership List (continued)

Name	Company	EmailAddress	Designation	Type
Mladen Gagulic	Vermont AOT Y	mladen.gagulic@vermont.gov	Member	Voting
William Bailey	Virginia DOT Y	bill.bailey@vdot.virginia.gov	Member	Voting
Paul Farley	West Virginia DOT John Currence	paul.m.farley@wv.gov	Member	Voting
Becca Lane	Ontario MOT Y Ann Holt	Becca.Lane@ontario.ca	Assoc. Member	Voting
Chad Clawson	AASHTO	cclawson@ashto.org	AASHTO Staff	Non-Voting

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Henry Lacinak	AASHTO	hlacinak@ashto.org	AASHTO Staff	Non-Voting
Steven Lenker	AASHTO Re:source	slenker@ashtoresource.org	Member	Non-Voting
Robert Lutz	AASHTO Re:source	rlutz@ashtoresource.org	Member	Non-Voting
Eliana Carlson	Connecticut DOT	eliana.carlson@ct.gov	Member	Non-Voting
Kelly Morse	Illinois DOT	Kelly.Morse@illinois.gov	Member	Non-Voting
Jim Trepanier	Illinois DOT	james.trepanier@illinois.gov	Member	Non-Voting
Chandra Akisetty	Maryland DOT	cakisetty@sha.state.md.us	Member	Non-Voting
Anne Holt	Ontario MOT	anne.holt@ontario.ca	Member	Non-Voting
Pamela Marks	Ontario MOT	pamela.marks@ontario.ca	Member	Non-Voting
Michael Arasteh	FHWA	michael.arasteh@dot.gov	Ex Officio	Non-Voting
Tim Aschenbrener	FHWA	timothy.aschenbrener@dot.gov	Ex Officio	Non-Voting
Matthew Corrigan	FHWA	matthew.corrigan@dot.gov	Ex Officio	Non-Voting
Tom Harman	FHWA	tom.harman@fhwa.dot.gov	Ex Officio	Non-Voting
Robert Horan	AI	bhoran@asphaltinstitute.org	Friend	Non-Voting
Larry Tomkins	Ergon	larry.tomkins@ergon.com	Friend	Non-Voting
Victor Gallivan	Gallivan Consult.	lee@gallivanconsultinginc.com	Friend	Non-Voting
Judge Brown	Hunt Refining	jbrown@huntrefining.com	Friend	Non-Voting
James Willis	NAPA	rwillis@asphaltpavement.org	Friend	Non-Voting
Gary Fitts	Consultant	gfitts@satx.rr.com	Friend	Non-Voting

The chair welcomed members, friend and guests. A summary of the agenda for the meeting was briefly given.

III. Approval of Technical Subcommittee Minutes

2018 Mid-Year Minutes distributed with this agenda as **Attachment A**.

A motion was made by made and a second by Montana to approve the minutes. The minutes were approved unopposed.

IV. Old Business

A. COMP Ballot Items

Outstanding items from Mid-Year Meeting

B. TS Ballots (only one this year)

1. Description: Revision T 313 "Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)" to update the precision estimates.

Affirmative: 26 of 29

Negative: 0 of 29

No Vote: 3 of 29

Pennsylvania Department of Transportation (Timothy L Ramirez) (tramirez@pa.gov)

Affirmative with comments:

- 1) In the future when updating the Precision Estimates, consider including the analysis report that was performed as a ballot item attachment so that the proposed updated precision estimates can be referenced/reviewed in the analysis report.
- 2) In Note 19, 2nd line, revise from "AASHTO Re:source" to "AASHTO re:source".

A formal report was not completed.

Comment on re:source is editorial nature and will be addressed.

Maryland Department of Transportation (Sejal Barot) (sbarot@sha.state.md.us)

If the test value for stiffness is close to the maximum limit (suppose 295 mpa) and another lab test value is 310 mpa. Do we still consider COV tolerance beyond maximum limit for accepting multiple lab difference? Or is it the max of 300 mpa no matter what COV allowable limit is??

This is typically handled at the specifying agency’s discretion.

Arizona Department of Transportation (Paul Burch) (pburch@azdot.gov)

Would it be beneficial to provide separate Precision Estimates for polymer modified and non-modified binders? Would the 1s and d2s results differ if they were calculated separately?

Comment from John Malusky: we can look at creating two sets of limits, but given the R² values, there is a high correlation in the data, and it is questionable whether it would be worth pursuing this. FHWA noted that the data from the mobile trailer does not show a significant difference between modified and modified binders.

Georgia Department of Transportation (Peter Wu) (pwu@dot.ga.gov)

At the bottom of Table 1, it says “These values represent the 1s% and d2s% limits described in ASTM C670.

Below is what is stated in Section 3.2.6.1 of C670: “A difference limit (d2s) indicates the maximum acceptable difference between two results obtained on identical test specimen’s under the applicable system of causes. The (d2s%) limit is the maximum acceptable difference between two test results expressed as a percentage of their average. These difference limits are calculated by multiplying the appropriate standard deviation or coefficient of variation (CV) by the factor 1.96 √2, which for this Practices is taken to be equal to 2.8…….”

Table 1

Coefficient of Variation (1s%)	Acceptable Range of Two Test results (d2s%)	Corrected d2s%
2.3	6.6	6.4
0.9	2.6	2.5
5.5	15.7	15.4

Table 2

Coefficient of Variation (1s%)	Acceptable Range of Two Test results (d2s%)	Corrected d2s%
1.6	4.6	4.5
2.5	7.2	7.0
3.9	11.2	10.9
3.6	10.2	10.1
5.9	16.8	16.5
9.7	27.4	27.2

They are close, but not accurate per ASTM C670 (d2s% = 2.8 xCV)

Same problem with Table 1, Item#3 and #4.

Please make correction for d2s% in all Table 1 of Items #1, #2, #3 and#4.

Georgia is correct. This does change the values slightly. The range voted upon is in the center column, the corrected values are on the far right column. As you can see, this does make a slight difference. Does the subcommittee want to reballot this or stick with the values that were ballot? It was recommended that a footnote be added to the table to explain how the calculation was made, but overall people felt that the data should be kept as is.

Nevada Department of Transportation (Darin Tedford) (dtedford@dot.nv.gov)

It was noted that the prior PSP sample results that were used in the previous precision statements were not included in the statistical evaluation included in the proposed revision. Were there justifications whether in ASTM C670 or C802 for excluding the prior data set?

The procedure used to calculate the statements was based on an NCHRP protocol. A formal report was not completed, but the data included data since the last statements were done, but older data was not included to avoid variability.

2. Description: Revision T 315 - "Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)" to update the precision estimates.

Affirmative: 25 of 29

Negative: 1 of 29

No Vote: 3 of 29

Pennsylvania Department of Transportation (Timothy L Ramirez) (tramirez@pa.gov)

Affirmative with comments:

- 1) In the future when updating the Precision Estimates, consider including the analysis report that was performed as a ballot item attachment so that the proposed updated precision estimates can be referenced/reviewed in the analysis report.
- 2) It is assumed that the Table number will remain as Table "4" and the two Note numbers will remain as Note "29" and Note "30".
- 3) In Note 29, 2nd line, revise from "AASHTO Re:source" to "AASHTO re:source".

Maryland Department of Transportation (Sejal Barot) (sbarot@sha.state.md.us)

Adding a note that COV allowable variance is not applicable for the test values beyond maximum spec limit.

Arizona Department of Transportation (Paul Burch) (pburch@azdot.gov)

Would it be beneficial to provide separate Precision Estimates for polymer modified and non-modified binders? Would the 1s and d2s results differ if they were calculated separately?

Georgia Department of Transportation (Peter Wu) (pwu@dot.ga.gov)

At the bottom of Table 1, it says "These values represent the 1s% and d2s% limits described in ASTM C670.

Below is what is stated in Section 3.2.6.1 of C670: "A difference limit (d2s) indicates the maximum acceptable difference between two results obtained on identical test specimen's under the applicable system of causes. The (d2s%) limit is the maximum acceptable difference between two test results expressed as a percentage of their average. These difference limits are calculated by multiplying the appropriate standard

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deviation or coefficient of variation (CV) by the factor 1.96 √2, which for the purpose of this Practices is taken to be equal to 2.8.....”

Table 1

Coefficient of Variation (1s%)	Acceptable Range of Two Test results (d2s%)	Corrected d2s%
2.3	6.6	6.4
0.9	2.6	2.5
5.5	15.7	15.4

Table 2

Coefficient of Variation (1s%)	Acceptable Range of Two Test results (d2s%)	Corrected d2s%
1.6	4.6	4.5
2.5	7.2	7.0
3.9	11.2	10.9
3.6	10.2	10.1
5.9	16.8	16.5
9.7	27.4	27.2

They are close, but not accurate per ASTM C670 (d2s% = 2.8 xCV)

Same problem with Table 1, Item#3 and #4.

Please make correction for d2s% in all Table 1 of Items #1, #2, #3 and#4.

Nevada Department of Transportation (Darin Tedford) (dtedford@dot.nv.gov)

It was noted that the prior PSP sample results that were used in the previous precision statements were not included in the statistical evaluation included in the proposed revision. Were there justifications whether in ASTM C670 or C802 for excluding the prior data set?

Illinois Department of Transportation (Brian Pfeifer) (brian.pfeifer@illinois.gov)

Negative

After comparing Illinois DOT lab values vs. our producer’s qualification sample results, we have some concerns with the multi-laboratory precision values. Due to the tightening of the ranges, some results for ODSR and RTFO DSR results may fall out of the multi-laboratory ranges but not enough to be of major concern. Conversely, the PAV DSR would fall out of the significantly lowered range frequently. The problem with the use of proficiency sample results for statistical analysis for P&B is that proficiency samples are intended to provide an ideal situation for labs and technicians to demonstrate competencies and consistencies by the control of the samples and timing of delivery. This controlled process removes all the normal day-to-day, lab to lab potentials for differences in results. Routine samples tested at Agency and producer’s labs may be tested at vastly different times of the material’s life and/or handling conditions. These uncontrolled variables need to be considered when developing the P&B as they are used to verify data/result compliance between laboratories. We would like to see this value increased or kept at the previous levels.

The negative from Illinois was withdrawn.

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3. Description: Revise T 316 "Viscosity Determination of Asphalt Binder Using Rotational Viscometer" to update the precision estimates.

Affirmative: 25 of 29
Negative: 1 of 29
No Vote: 3 of 29

Pennsylvania Department of Transportation (Timothy L Ramirez) (tramirez@pa.gov)

Affirmative with comments:

- 1) In the future when updating the Precision Estimates, consider including the analysis report that was performed as a ballot item attachment so that the proposed updated precision estimates can be referenced/reviewed in the analysis report.
- 2) It is assumed that the two Note numbers will remain as Note "2" and Note "3".
- 3) In Note 2, 2nd line, revise from "AASHTO Re:source" to "AASHTO re:source".
- 4) In Note 3, 3rd line, revise from "or 0.018" to "or 0.014".

Maryland Department of Transportation (Sejal Barot) (sbarot@sha.state.md.us)

Adding a note that COV allowable variance is not applicable for the test values beyond maximum spec limit.

Georgia Department of Transportation (Peter Wu) (pwu@dot.ga.gov)

At the bottom of Table 1, it says "These values represent the 1s% and d2s% limits described in ASTM C670.

Below is what is stated in Section 3.2.6.1 of C670: "A difference limit (d2s) indicates the maximum acceptable difference between two results obtained on identical test specimen's under the applicable system of causes. The (d2s%) limit is the maximum acceptable difference between two test results expressed as a percentage of their average. These difference limits are calculated by multiplying the appropriate standard deviation or coefficient of variation (CV) by the factor 1.96 √2, which for the purpose of this Practices is taken to be equal to 2.8....."

Table 1

Coefficient of Variation (1s%)	Acceptable Range of Two Test results (d2s%)	Corrected d2s%
2.3	6.6	6.4
0.9	2.6	2.5
5.5	15.7	15.4

Table 2

Coefficient of Variation (1s%)	Acceptable Range of Two Test results (d2s%)	Corrected d2s%
1.6	4.6	4.5
2.5	7.2	7.0
3.9	11.2	10.9
3.6	10.2	10.1
5.9	16.8	16.5
9.7	27.4	27.2

They are close, but not accurate per ASTM C670 (d2s% = 2.8 xCV)

Same problem with Table 1, Item#3 and #4.

Please make correction for d2s% in all Table 1 of Items #1, #2, #3 and#4.

Nevada Department of Transportation (Darin Tedford) (dtedford@dot.nv.gov)

It was noted that the prior PSP sample results that were used in the previous precision statements were not included in the statistical evaluation included in the proposed revision. Were there justifications whether in ASTM C670 or C802 for excluding the prior data set?

Illinois Department of Transportation (Brian Pfeifer) (brian.pfeifer@illinois.gov)

Negative

Upon comparison of Illinois DOT lab data vs. producer's qualification sample results, the rotational viscometer multi-laboratory results varied by greater than the newly revised 10.5% range. The problem with the use of proficiency sample results for statistical analysis for P&B is that proficiency samples are intended to provide an ideal situation for labs and technicians to demonstrate competencies and consistencies by the control of the samples and timing of delivery. This controlled process removes all the normal day-to-day, lab to lab potentials for differences in results. Routine samples tested at Agency and producer's labs may be tested at vastly different times of the material's life and/or handling conditions. These uncontrolled variables need to be considered when developing the P&B as they are used to verify data/result compliance between laboratories. We would like to see this value increased or kept at the previous levels.

The negative from Illinois was withdrawn.

4. Description: Revise T 350 "Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)" to add precision estimates.

Affirmative: 25 of 29

Negative: 1 of 29 (Alabama – Administrative)

No Vote: 3 of 29

Pennsylvania Department of Transportation (Timothy L Ramirez) (tramirez@pa.gov)

Affirmative with comments:

- 1) In the future when including the Precision Estimates for the first time in a standard, consider including the analysis report that was performed as a ballot item attachment so that the proposed new precision estimates can be referenced/reviewed in the analysis report.
- 2) In Section 10.1.1, last line, revise from "Table 4" to "Table 1".
- 3) In Table 1, Column 1, should the text "Percent Recovery at 0.1 kPa" (in 2 locations in Column 1) be revised to "Average Percent Recovery at 0.1 kPa, R0.1" for consistency with terminology and calculation in T 350, Section 8.1.1 and the reporting requirements of T 350, Section 9.1.3 and to reference the parameter symbol, R0.1? There could be confusion here as there are single results and a n=10 average result with the n=10 average result being the reportable result.
- 4) In Table 1, Column 1, should the text "Percent Recovery at 3.2 kPa" (in 2 locations in Column 1) be revised to "Average Percent Recovery at 3.2 kPa, R3.2" for consistency with terminology and calculation in T 350, Section 8.1.2 and the reporting requirements of T 350, Section 9.1.4 and to reference the parameter symbol, R3.2? There could be confusion here as there are single results and a n=10 average result with the n=10 average result being the reportable result.
- 5) In Table 1, Column 1, should the text "Jnr at 0.1 kPa (kPa-1)" be revised to "Average Nonrecoverable Creep Compliance at 0.1 kPa, Jnr0.1 (kPa-1)" in two Table 1, Column

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- 1 locations for consistency with text in T 350, Sections 8.2.3 and 9.1.5? There could be confusion if the "Average" is not included or the correct parameter symbol is not referenced, "Jnr0.1".
- 6) In Table 1, Column 1, should the text "Jnr at 3.2 kPa (kPa-1)" be revised to "Average Nonrecoverable Creep Compliance at 3.2 kPa, Jnr3.2 (kPa-1)" in two Table 1, Column 1 locations for consistency with text in T 350, Sections 8.2.4 and 9.1.6? There could be confusion if the "Average" is not included or the correct parameter symbol is not referenced, "Jnr3.2".
 - 7) In Note 1, 2nd line, revise from "AASHTO Re:source" to "AASHTO re:source".
 - 8) In Note 1, 4th and 5th lines, suggest revising from "Average percent Recovery at 0.1 kPa results" to "The average of the Average Percent Recovery at 0.1 kPa results" for consistency with text in Sections 8.1.1 and 9.1.3. There could be confusion here as there is an average result of the four pairs and there is an n=10 average result that is the reportable test result.
 - 9) In Note 1, 5th and 6th lines, suggest revising from "Average percent Recovery at 3.2 kPa results" to "The average of the Average Percent Recovery at 3.2 kPa results" for consistency with the text in Sections 8.1.2 and 9.1.4. There could be confusion here as there is an average result of the four pairs and there is an n=10 average result that is the reportable test result.
 - 10) In Note 1, 6th line, suggest revising from "Average Jnr at 0.1 kPa results ranged" to "The average of the Average Nonrecoverable Creep Compliance at 0.1 kPa, Jnr0.1, results ranged".
 - 11) In Note 1, 7th line, suggest revising from "Average Jnr at 3.2 kPa results ranged" to "The average of the Average Nonrecoverable Creep Compliance at 3.2 kPa, Jnr3.2, results ranged".
 - 12) In Note 2, 1st line, revise from "two tests conducted on the same material" to "two tests conducted by the same technician on the same material".
 - 13) In Note 2, 1st line, suggest revising from "yield Jnr at 0.1 kPa results" to "yield Average Nonrecoverable Creep Compliance at 0.1 kPa, Jnr0.1, results"

Maryland Department of Transportation (Sejal Barot) (sbarot@sha.state.md.us)

Adding a note that COV allowable variance is not applicable for the test values beyond maximum spec limit.

Georgia Department of Transportation (Peter Wu) (pwu@dot.ga.gov)

At the bottom of Table 1, it says "These values represent the 1s% and d2s% limits described in ASTM C670.

Below is what is stated in Section 3.2.6.1 of C670: "A difference limit (d2s) indicates the maximum acceptable difference between two results obtained on identical test specimen's under the applicable system of causes. The (d2s%) limit is the maximum acceptable difference between two test results expressed as a percentage of their average. These difference limits are calculated by multiplying the appropriate standard deviation or coefficient of variation (CV) by the factor 1.96 $\sqrt{2}$, which for the purpose of this Practices is taken to be equal to 2.8....."

Table 1

Coefficient of Variation (1s%)	Acceptable Range of Two Test results (d2s%)	Corrected d2s%
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2.3	6.6	6.4
0.9	2.6	2.5
5.5	15.7	5.4

Table 2

Coefficient of Variation (1s%)	Acceptable Range of Two Test results (d2s%)	Corrected d2s%
1.6	1.6	4.5
2.5	7.2	7.0
3.9	11.2	10.9
3.6	10.2	10.1
5.9	16.8	16.5
9.7	27.4	27.2

They are close, but not accurate per ASTM C670 (d2s% = 2.8 xCV)

Same problem with Table 1, Item#3 and #4.

Please make correction for d2s% in all Table 1 of Items #1, #2, #3 and#4.

[A motion was made by Virginia and a second by Maine move to T313, T215, T316, and T350 to COMP ballot. The motion passed unopposed.](#)

- Description: Revise M 332, "Specification for Performance-Graded Asphalt Binder using Multiple Stress Creep Recovery" to delete the J_{nr} Diff requirement for Extremely Heavy Traffic Binders.

Affirmative: 26 of 29

Negative: 0 of 29

No Vote: 3 of 29

Illinois Department of Transportation (Brian Pfeifer) (brian.pfeifer@illinois.gov)

Regarding Table 1, note g, we are unclear about the value or how often this would come into play. Suggest further explanation of its need.

[The note will be clarified.](#)

- Description: Revise T 383, "Evaluation of Asphalt Release Agents" with minor changes to the unit weight and sample size.

Affirmative: 26 of 29

Negative: 0 of 29

No Vote: 3 of 29

Pennsylvania Department of Transportation (Timothy L Ramirez) (tramirez@pa.gov)

Affirmative with comments:

- 1) In Section 6.1.2, 1st line, a cautionary note that the word "sand" is missing from this balloted version of M 332. In the 1st line, revise from "unit weight bucket filled with to a total" to "unit weight bucket filled with sand to a total". The version of T 383 in the Materials Production Library includes the word "sand", but the version included with this ballot does not.

Kansas Department of Transportation (Richard A Barezinsky) (rick.barezinsky@ks.gov)

6.1.2. left out the word "sand" after "filled with"

[A motion was made by Maine and a second by Kansas to move T383 and M332 to Technical Subcommittee ballot. The motion passed unopposed.](#)

[A motion was made by Virginia and second by Maryland to move T383 and M332 to COMP once the technical subcommittee ballot has passed. The motion passed unopposed.](#)

C. Task Force Reports

Task Force 16-A:

Review the options available and write a procedure for checking TFO/PAV pans for excessive warping. Members: Delaware (Karl Zipf), Asphalt Institute (Mike Anderson), and AMRL (Maria Knake). Dave Anderson is working on a method for checking pan warping. [Maria Knake presented a brief update on Dave Anderson's behalf. A copy of the presentation is attached.](#)

Task Force 16-C:

Review contradictory statements in Section 12.1 and X1.8.1 regarding the linear region in T315 and consider revision to current guidance in standard. Members: Asphalt Institute (Mike Anderson), Virginia (Bill Bailey), Nevada (Charlie Pan), John D'Angelo (Consultant), Kathy Sokol.
[No updates.](#)

Task Force 17-A:

Precision and bias for T 350. Multiple Stress Creep Recovery and several other standards (T 240, Rolling Thin Film Oven Test; T 313, Bending Beam Rheometer; T 315, Dynamic Shear Rheometer; T 316, Rotational Viscosity). Members: Joe DeVol (WA) will lead the effort. Matthew Corrigan (FHWA), Bob Horan (Asphalt Institute), John Malusky (AASHTO re:source), Maria Knake (AASHTO), Bill Bailey (VA), and Lyndi Blackburn (AL).
[Tech Subcommittee Ballot covered most of these standards except for T 240. Discuss research ongoing concerning T 240.](#)
[No updates at this point. Discussions regarding T240 will be ongoing.](#)

Task Force 17-01:

This task force was formed to re-write T 228 which is currently a "C" standard. Task Force members are Leslie White (Montana), Maria Knake (AASHTO), and Georgene Geary (AASHTO Consultant). Email from Georgene – **Attachment B**.
[ASTM has made many changes that incorporate many of the differences in the AASHTO method. At this point a re-write may not be appropriate. The TS discussed several different options discussed in Georgene's email. A motion was made by Virginia and a second by Ohio to withdraw T228 and refer to D70 via TS ballot. The motion passed unopposed. There was another motion for this to move COMP ballot after TS Ballot, made by Virginia with a second from Maryland. The motion passed unopposed.](#)

Task Force 17-02:

This task force was formed to look at developing a new standard for long term aging, the determination of ΔT_c and a practice explaining how to use ΔT_c . Task Force members are Lyndi Blackburn (AL), Chris Peoples (NC), Anne Holt (ON), Tim Ruelke (FL), Rick Bradbury (ME), Brett Haggerty (TX), Bob Horan (Asphalt Institute), Denis Boisvert (NH), Jack Youtchef (FHWA), and Matt Corrigan (ETG liaison).
[Discuss results of web meeting held on July 24th.](#)
[It was the consensus of the task force to move forward with the development of a standard practice on how to determine \$\Delta T_c\$ and some general guidance on aging, etc.](#)

D. NCHRP Research

Committee on Materials and Pavements

- Project 20-07/Task 427: Updating the Thermometer Requirements for AASHTO Standards
This project was approved and is moving forward.
- Project 20-07/Task 400: Effect of elevation on Rolling Thin Film Oven Aging of Asphalt Binder
The laboratories that participating have sent in their binder. Testing will be done soon and results evaluated.

AFK20 is looking for research ideas, please pass them along if you have any.

V. New Business

A. Research Proposals

1. Quick turnaround RPS
2. Full NCHRP RPS

B. AASHTO Technical Service Programs Items

1. NTPEP Update
2. AASHTO re:source/CCRL - none

C. NCHRP Issues

- Ed Harrigan is available if you have any questions on asphalt-related NCHRP issues.

D. Correspondence, calls, meetings

E. Presentation by Industry/Academia

- Haleh Azari - Asphalt Binder and Mastic Testing using a DSR
Presentation is attached.

- Dave Anderson - RTFO Variability

- John Grieco (MA) – New England Regional QC Binder Plan Program –
Attachment C

The Northeast Asphalt User Producer Group has been working on standardizing the process of approving asphalt binder producers. There have been complaints from producers that they have to have multiple versions of QC plans depending upon the state buying the product. A NTPEP work plan has been developed.

- The plan is intended to reduce duplication of efforts.
- Many producers have several plants with the same QS plans.

F. Proposed New Standards

- Determination of REOB using XRF – submitted by Terry Arnold, FHWA Turner Fairbank – **Attachment D**

Comments are expected from members and industry experts so that we can move this into a standard format. The chair would like to send this out for TS ballot in Spring 2019.

G. Proposed New Task Forces

H. Standards Requiring Reconfirmation

Committee on Materials and Pavements

- R 029-15 “Grading or Verifying the Performance Grade (PG)Asphalt Binder”
- T 049-15, “Penetration of Bituminous Materials” – ASTM D5/D5M-13
- T 111-11 (2015), “Mineral Matter or Ash in Asphalt Materials”
- T 201-15, “Kinematic Viscosity of Asphalts (Bitumens)” ASTM D2170/D2170M-10
- T 202-15, “Viscosity of Asphalts by Vacuum Capillary Viscom” ASTM D2171/D2171M- 10
- TP 092-14 (2018), “Determining the Cracking Temperature of Asphalt Using the Asphalt Binder Cracking Device (ABCD)” **Adopt or Drop**
A survey of states showed that nobody is using this standard in specifications. A few states have the equipment are using it for research purposes. A motion was made by Virginia to send this to a full standard, with a second with New Hampshire. The motion passed unopposed.
- TP 101-12 (2018), “Estimating Fatigue Resistance of Asphalt Binders Using the Linear Amplitude Sweep” **Revise or 1-Yr. Extend**
Will be balloted to extend.
- TP 113-15, “Determination of Asphalt Binder Resistance to Ductile Failure Using Double-Edge-Notched Tension (DENT) Test” **Revise or 2-Yr. Reconfirm**
Will be balloted for reconfirmation
- TP 127-17, “Determining the Fracture Energy Density of Asphalt Binder Using the Binder Fracture Energy (BFE) Test” **Revise or 2-Yr. Reconfirm**
Will be balloted for reconfirmation

I. COMP Ballot Items (including any ASTM changes/equivalencies/harmonization)

VI. Open Discussion

NTPEP is working on a work plan for warm mix asphalt. There are very little asphalt expertise in NTPEP, so please consider becoming involved.

VII. Adjourn

The meeting adjourned at 3:00 PM exactly.

ATTACHMENTS

Attachment A – 2018 Mid-Year Webinar Minutes

Attachment B – Email on T 228

Attachment C – New England Regional QC Binder Plan Program

Attachment D – Proposed Standard Determining REOB using XRF