

SUBCOMMITTEE ON MATERIALS

2017 Annual Meeting – Phoenix, AZ

Wednesday August 9, 2017

8:00 – 10:00 AM

TECHNICAL SECTION 1c

Aggregates

I. Call to Order and Opening Remarks

A. Brief summary of activities

Meeting called to order at 8:03am. Welcome, announcements, and introduction by chair and attendees. Special note: this will be Lisa Zigmund’s last SOM meeting as she will be retiring. Congratulations and thanks for all of your hard work and effort!

II. Roll Call/Roster

Voting members

Name	State	Present
Scott Seiter (Chair)	Oklahoma	X
Lisa Zigmund (V-Chair)	Ohio	X
Steven Ingram	Alabama	X
Michael San Angelo	Alaska	
Paul Burch	Arizona	X
Michael Benson	Arkansas	
Robert Lauzon	Connecticut	
Wasi Khan	District of Columbia	
John Shoucair	Florida	X
Peter Wu	Georgia	X
Mike Santi	Idaho	X
Jim Trepanier	Illinois	
Rick Barezinshy	Kansas	X
Rick Bradbury	Maine	X
Sejal Barot	Maryland	X
John Staton	Michigan	X
Curt Turgeon	Minnesota	
Mick Syslo	Nebraska	
Darin Tedford	Nevada	
Donald Streeter	New York	
Ron Horner	North Dakota	
Mickey Cronin	Ohio	X
Becca Lane	Ontario	X
Greg Stellmach	Oregon	X
Mark Felag	Rhode Island	
Magdy Beshara	Saskatchewan	

Michael Doran	Tennessee	X
Darren Hazlett	Texas	X
Andy Babish	Virginia	X
Paul Farley	West Virginia	X

Non-voting Members, Friends, Liaisons

Name	Affiliation	Present
David Savage (friend)	CMEC	
Robin Graves (friend)	Vulcan	
Jan Prowell (friend)	CCRL	
Desna Bergold (friend)	D B Consulting	
Cecil Jones (friend)	Diversified Engr.	
James Willis (friend)	NAPA	
Dick Reaves (friend)	Troxler	
Tim Aschenbrener (member)	FHWA	
Evan Rothblatt (liaison)	AASHTO	
John Malusky (liaison)	AASHTO Re:source	X
Matthew Bluman (liaison)	AASHTO Re:source	X
Amanda Moser (member)	AASHTO Re:source	
Greg Uherek (member)	AASHTO Re:source	
Steven Lenker (member)	AASHTO Re:source	
Maria Knake (member)	AASHTO Re:source	
Joseph Williams (member)	AASHTO Re:source	
Roger Adkins (other)	AASHTO Re:source	
Jasmine Gilmore (other)	AASHTO Re:source	
Pete Holter (other)	AASHTO Re:source	
John Giannini (member)	Connecticut DOT	
Wood Hood (member)	Maryland DOT	
Anne Holt (Assoc. member)	Ontario	
Carole Anne MacDonald	Ontario	
Sean Parker (member)	Oregon DOT	

III. Approval of Technical Section Minutes

A. Thursday February 2, 2017 mid-year webinar (Attachment 1)

Motion: ME, second: FL: Discussion: None; All in favor. Motion carries. Minutes approved.

IV. Old Business

A. TS Ballots (Attachment 2)

Ballot No. 1 - to rewrite T2 as an R-XX (Practice). This ballot was to address a significant number of comments from the last ballot. **TN-** they have reviewed the changes and they are going to withdraw their negative vote. **OR-** for clarification purposes, this standard should become an "R" standard and not be a "T". **FL – move to take this to full SOM Ballot, Second, ME- No discussion, all were in favor. Motion carries.**

Ballot No. 2- ballot was for T113 to address issues with hazardous chemicals used in the standard. **VA move to take this to full SOM Ballot, Second: MI, Discussion: none; All in favor, motion carries.**

B. Task Force Reports

- i. TF 11-01: T 112 Revision (KS, NE, AK, AMRL) **KS** -Work has been in progress for the last few months. **TF 11-01 (ACTION ITEM)**- will submit a draft for revision before the mid-year meeting (webinar).
- ii. TF 13-01: AIMS standards TP 81, PP 64 (FL, OH, AZ, TRB) – Product of NCHRP Project. **FL**- research project was completed. U of FL did create an alternate software program to minimize issue with color. Software has been sent to Pine. Pine has tested and saw improvement. Not aware if Pine has released any software upgrades. There is still interest in using the device. FL is going to continue to test and gather data. **FL - Motion to move TP 81 and PP 64 to full standards: Second: ME, Discussion: MD-** is this going to give us more information than petrographic analysis? **FL-** Yes. It looks at surface characteristics and it can be of value. **Vote: all in favor, motion carries. These two items will be moved to Subcommittee ballot.**
- iii. TF 15-01: T 11 (WAQTC, NJ, ME, AMRL) **WAQTC (Garth)**- Mechanical washing device. How long can it go? 10 minute mark seemed to be the point of where agg started to degrade. The TS approved the additional verbiage will appear in the next ballot.
- iv. TF 15-02: T104 revision (TN, AMRL) **TN**- Results of survey by 24 responses. 75% of labs are using T104 as test method. Also, asked what kind of salt was being used. Most labs reported the same type of salt. Purity range was between 99-99.9% salt. **AASHTO re:source** - PSP data indicated that a majority of users were using salt of high purity. Data showed a slight lowering of the coefficient of variation for within-lab (repeatability). **TF15-02 (ACTION ITEM)**-will work of some revised terminology for review of TS by mid-year webinar.
- v. TF 15-03: Centrifuge method for LWA, (LA, FL, KS, Jeff Speck)- As you are looking at the ballot item, it gets the aggregate into a true SSD situation for LWAs. The three-minute spin seemed to get reliable results for absorption. Specifically designed for fine aggregates used in concrete.
- vi. TF 16-01: T 27 sieving sufficiency (ME, AASHTO, Gilson, FL)-**ME**- Last meeting we presented information from a survey on sieving sufficiency. Over 30% of labs had a difficult time in meeting the criteria. Had a call to discuss options to move forward. Try to secure some funding for a formalized study. RP was developed.

V. New Business

A. Research Proposals

1. -20-7 RPS

- ii. The Sieving Thoroughness Task Force has prepared as 20-7 Research Problem Statement to investigate the issue of sieving thoroughness of mechanical shakers. The objective is to revise the sieving thoroughness provisions of T 27 and T 30. **(Attachment 3) ME** - Proposal is in attachment #3 RPS -Sieving Thoroughness. Goal is for a single entity to acquire all equipment and perform testing. **FL- motion to endorse the RSP. Second: MI- Discussion: VA- would an outcome be possible different shake times per sieving device? ME-** hopefully the results of the study can pinpoint that. **Re:source-** PSP data already asks for type of shaker used, but not shake time. Labs have asked to specify a shake time but that would increase the variability of results due to different shaking devices. **Vote: all in favor, motion carries.**

1. Full NCHRP RPS

- iii. Sustainable use of Aggregate Sources in Highway Pavements – Best Value Engineering **(Attachment 4)** – Proposal is in Attachment #4- What challenges are aggregate suppliers running into? How can we increase sustainability? Is there any change that can be made to specifications to allow for additional aggregates to be used? The goal is to determine if there is a way to implement a wider range of acceptable aggregates. **FL-** is this being restricted to pavement aggregates? FL has not seen any analytical issues with using other aggregates for ditch paving or sidewalks. Could a “second tier” aggregate be used? It is getting more difficult to expand permits for quarries in FL. **MO-** considering using RCA. Many quarries are running out of reserves. **MI-** what is this

limited to bound/unbound materials? **Chair-** we can redefine or clarify the objectives and scope in the RPS. **ME-** consider raising the estimated budget. **VA-** recommend trying to narrow the purpose study. **Chair-** There is already and ongoing synthesis (NCHRP 48-10). Maybe we should look at the results of that to better define the scope of this RPS. This RPS will be tabled. **Chair (ACTION ITEM)-** will look to see if an update will be made regard the results of the synthesis during the mid-year webinar.

- B. AASHTO Re:source/CCRL - Observations from Assessments?
 - i. Email from Bryan Johnson 6/28/17: Discussion by Maryland SHA and AASHTO Re:source about a proposal to add E1911, Standard Test method for Measuring Paved Surface Frictional Properties Using the Dynamic Friction Tester, as an aggregate laboratory test to the AASHTO Accreditation Program. **MD-** Sejal gave presentation on using the Dynamic Friction Tester. See presentation. Discussion with FHWA and AASHTO to see if ASTM Method can be added to scope of AASHTO Accreditation Program? **NCAT-** the device that MD uses is the same device that NCAT has. Chair recommends starting a Task Force regarding the use of this method. **TF 17-01** will be created. **MD** will chair. **Other members of the TF will include TN, LA, FL, WV, FHWA, re:source)**
 - ii. Email from John Malusky 7/31/17: T11 comment: "I'm collecting some information from some of our QAs regarding the "wetting agent" for Procedure B. Some labs are using sodium hex and the appear to be getting higher % passing values. Once I get something more organized I'll let you know." – **AASHTO re:source (ACTION ITEMS)** will create and send out a survey to SOM to ask labs what they are using. We can also add the question to the PSP round.
- C. NCHRP Issues
 - i. FYI: There is an on-going NCHRP Synthesis 48-10: Aggregate Quality Requirements for Pavements. A survey was sent out in February of this year.
- D. Correspondence, calls, meetings
- E. Presentation by Industry/Academia
- F. Proposed New Standards
- G. Proposed New Task Forces
- H. Standards Requiring Reconfirmation
 - i. M 6: Fine Aggregate for Hydraulic Cement Concrete **Robin Graves-** C33 changed the fine agg specification. -No. 200 was moved into grading table. Need to look to harmonize M6 with C33.
 - ii. M 43: Sizes of Aggregate for Road and Bridge Construction
 - iii. T 11: Materials Finer Than #200 Sieve in Mineral Aggregates by Washing
 - iv. T 19: Bulk Density ("Unit Weight") and Voids in Aggregate – **Colin Lobo-** Changes with ASTM C29 and sample preparation. Consider looking at ASTM C29 to compare changes.
 - v. T 27: Sieve Analysis of Fine and Coarse Aggregates
 - vi. T 85: Specific Gravity and Absorption of Coarse Aggregate
 - vii. T 326: Uncompacted Void Content of Coarse Aggregate
 - viii. T 335: Percentage of Fracture in Coarse Aggregate
 - ix. TP 120: Pore Index for Carbonate Coarse Aggregate (2 yr confirmation)
- I. SOM Ballot Items (including any ASTM changes/equivalencies)
 - i. PP 64: Determining Aggregate Source Shape Values from Digital Image Analysis Shape Properties – Need a ballot to adopt as a full standard
 - ii. TP 81: Determining Aggregate Shape Properties by Means of Digital Image Analysis – Need a ballot to adopt as a full standard

VI. Open Discussion

VII. Adjourn

Adjournment at 9:52pm