

SUBCOMMITTEE ON MATERIALS (SOM)

2017 Annual Meeting – Phoenix, AZ

Wednesday, August 9, 2017

1:00 p.m. – 3:00 p.m. MST

TECHNICAL SECTION (TS) 2c

Asphalt-Aggregate Mixtures

- I. **Call to Order and Opening Remarks**
 - A. Provide brief summary of activities (*to ensure all attendees up to speed*)
 - B. Introduce new vice chair, Rick Bradbury (Maine)
 - C. Express gratitude to former vice chair, Matthew Corrigan (FHWA)

- II. **Roll Call** – Signify attendance on tablet computer

- III. **Approval of TS 2c Minutes from Mid-Year Web Meeting (January 26, 2017) – ATTACHMENT 1**

- IV. **Old Business**
 - A. Review of 2016 SOM Ballot 16-03 (Rolling Ballot 3, November 2016-January 2017)
 1. Item 25, AASHTO R 67 [*Sampling Asphalt Mixtures after Compaction (Obtaining Cores)*]
 - a. No changes proposed to practice at this time
 2. Item 26, AASHTO R 79 [*Vacuum Drying Compacted Asphalt Specimens*]
 - b. Practice revised according to ballot comments – **ATTACHMENT 2**
 3. Item 27, AASHTO T 275 [*Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Paraffin-Coated Specimens*]
 4. Item 28, AASHTO T 324 [*Hamburg Wheel-Track Testing of Compacted Asphalt Mixtures*]
 5. Item 29, AASHTO T 362 [*Quantitative Determination of the Percentage of Lime in Asphalt Mixtures*]
 6. Item 30, AASHTO TP 114 [*Determining the Interlayer Shear Strength of Asphalt Pavement Layers*]
 7. Item 31, AASHTO TP 128 [*Evaluation of Oxidation Level of Asphalt Mixtures by a Portable Infrared Spectrometer*]
 8. Item 1, AASHTO M 156 [*Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures*]
 9. Item 2, AASHTO T 331 [*Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method*]
 10. Item 3, AASHTO TP 82 [*Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Water Displacement Measured by Pressure Sensor*]
 11. Item 4, AASHTO TP 115 [*Determining the Quality of Tack Coat Adhesion to the Surface of an Asphalt Pavement in the Field or Laboratory*]
 - B. 2017 TS 2c ballot
 1. Ballot # 1 (May 2017) – **ATTACHMENTS 3, 4, AND 5**
 - a. Express gratitude to Georgene Geary (GGfGA Engineering)
 - b. Item 1, AASHTO T 195 [*Determining Degree of Particle Coating of Asphalt Mixtures*]
 - i. Ballot results – 27 affirmative/0 negative/7 not returned
 - ii. Comments from Arizona, Ohio, Pennsylvania, and Wisconsin
 - iii. Return comments to Georgene Geary for incorporation as appropriate
 - c. Item 2, AASHTO T 168 (R XYZ) [*Sampling Asphalt Mixtures*]

- i. Ballot results – 22 affirmative/5 negative/7 not returned
 - ii. Negative votes from Alaska, Idaho, Pennsylvania, Utah, and Wisconsin
 - iii. Comments from Arkansas, Florida, Kansas, Maine, Maryland, Texas, and Washington
 - iv. Proposal from Western Alliance for Quality Transportation Construction (WAQTC) for AASHTO T 168 (R XYZ) – **ATTACHMENT 6**
 - v. Request Georgene Geary to coordinate with WAQTC to address negative votes and comments from TS ballot and possibly combine two versions of practice
 - vi. Another TS ballot in early 2018
- C. Task Force Reports
- 1. Task Force 2c-2008-02
 - a. Rich Barezinsky, Chair (Kansas), Matthew Corrigan (FHWA), Oak Metcalfe (Montana), and Tim Ramirez (Pennsylvania)
 - b. Provide recommendations for amplitude and frequency for mechanical agitation devices in AASHTO T 209 [*Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)*]
 - i. NCHRP 20-07 research submittal, *Develop criteria that establish the amount of energy required to maintain fully-animated particles of loose asphalt within the test procedure AASHTO T 209*, selected for funding in September 2015 (NCHRP 20-07, Task 391)
 - c. Task force awaiting results of research project for incorporation into AASHTO T 209 as appropriate
 - d. Estimated completion date of late 2017
 - 2. Task Force 2c-2010-01
 - a. Matthew Corrigan, Chair (FHWA) and Jim Bibler (Gilson Company)
 - b. Incorporate comments from 2009 SOM ballot into AASHTO TP 82 [*Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Water Displacement Measured by Pressure Sensor*]
 - c. Consider subsequent comments and questions regarding TP 82
 - d. Any additional members or activity?
 - 3. Task Force 2c-2012-01
 - a. Scott Andrus, Chair (Utah), Bill Schiebel (Colorado), Matthew Corrigan (FHWA), Oak Metcalfe (Montana), Tim Ramirez (Pennsylvania), Darren Hazlett (Texas), and Joe DeVol (Washington)
 - b. Implement findings from NCHRP 20-07, Task 361, study into AASHTO T 324 (*Hamburg Wheel-Track Testing of Compacted Asphalt Mixtures*)
 - c. Generally maintain AASHTO T 324 to reflect latest features and ideas
 - d. Update from Scott Andrus (Utah)
 - 4. Task Force 2c-2015-01
 - a. Garth Newman, Chair (Idaho), Mike San Angelo (Alaska), Matthew Corrigan (FHWA), Rick Bradbury (Maine), James Williams (Mississippi), Oak Metcalfe (Montana), Tim Ramirez (Pennsylvania), and Kurt Williams (Washington)
 - b. Address negative votes and incorporate comments as appropriate from 2014 SOM ballot into AASHTO T 209 [*Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)*]
 - c. Suggestions from Richard Giessel (Alaska)
 - i. Clarify application of vacuum in method summary
 - ii. Improve figure depicting arrangement of testing apparatus
 - iii. Modify and add notes concerning removal of water vapor
 - d. Update on progress?
- D. Standards Pending Revision
- 1. All AASHTO standards related to measuring or calculating specific gravity
 - a. Issue resulting from FHWA negative vote on AASHTO T 166 [*Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens*] as presented on 2015 SOM ballot
 - b. Add “gas-free distilled water” to Apparatus section
 - c. Concern about availability of distilled water in remote laboratories
 - d. Richard Giessel (Alaska) provided guidance for using non-distilled water and correction factors
 - e. Discussion at 2016 TS 2c meeting did not produce consensus

- f. Awaiting recommendations from WAQTC for future technical section ballot
- g. Update on progress?
- E. Previous Correspondence
 - 1. Tennessee-suggested practice for preparing pavement cores for asphalt binder content or gradation testing
 - a. Include in AASHTO R 67 [*Sampling Asphalt Mixtures after Compaction (Obtaining Cores)*]?
 - b. Tennessee distributed survey in August 2016 to query SOM for existing practices
 - c. Update on progress?
 - 2. Inquiry from Brian Johnson from AASHTO re:source regarding AASHTO T 209 [*Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)*]
 - a. Precision estimates in T 209 do not specify nominal-maximum aggregate size
 - b. Precision estimates in T 209 are probably not accurate for 37.5-mm nominal-maximum mixtures
 - c. Should T 209 identify nominal-maximum aggregate sizes to which precision estimates apply?
 - d. Should TS 2c attempt to define precision estimates for 37.5-mm nominal-maximum mixtures in T 209?

V. New Business

- A. Research Proposals
 - 1. 20-7 RPS
 - 2. Full NCHRP RPS
- B. AASHTO Re:source/CCRL - Observations from Assessments?
- C. NCHRP Issues
 - 1. Update from Amir Hanna (NCHRP)
- D. Correspondence, calls, meetings
 - 1. WAQTC suggestion to change “hot mix asphalt (HMA)” to “asphalt mixture” in AASHTO T 308 [*Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method*]
 - a. Revisions will be performed editorially
 - 2. WAQTC-proposed revisions to AASHTO T 355 (*In-Place Density of Asphalt Mixtures by Nuclear Methods*) – **ATTACHMENT 7**
 - a. Allow thin-layer gauge as alternate
 - b. Add third alternate method to place gauge parallel to direction of travel and perform 4-minute reading in back-scatter mode
- E. Presentation by Industry/Academia
- F. Proposed New Standards
- G. Proposed New Task Forces
- H. Standards Requiring Reconfirmation or Extension
 - 1. AASHTO R 47-14 [*Reducing Samples of Hot Mix Asphalt (HMA) to Testing Size*]
 - 2. AASHTO T 164-14 [*Quantitative Extraction of Asphalt Binder from Hot Mix Asphalt (HMA)*]
 - 3. AASHTO T 269-14 (*Percent Air Voids in Compacted Dense and Open Asphalt Mixtures*)
 - 4. AASHTO T 287-14 (*Asphalt Binder Content of Asphalt Mixtures by the Nuclear Method*)
 - 5. AASHTO T 305-14 (*Determination of Draindown Characteristics in Uncompacted Asphalt Mixtures*)
 - 6. AASHTO TP 82-10 (2017) [*Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Water Displacement Measured by Pressure Sensor*]
 - a. Provisional test method must be promoted to full standard or deleted
 - b. Future of AASHTO TP 82?
- I. SOM Ballot Items (including any ASTM changes/equivalencies)

VI. Open Discussion

VII. Adjourn