

# WAQTC QAC COMMITTEE MEETING MINUTES

**LEADER:** Garth Newman, ITD

**FACILITATOR:**

**RECORDER:** Linda Hughes

**DATE:** February 1-4, 2010

**TIME:**

**LOCATION:** Salt Lake City, Utah

**MEMBERS PRESENT:**

Garth Newman, ITD

Sean Parker, ODOT

Jon Ogden, UDOT

Amy Rico, UDOT

Linda Hughes, WSDOT

Bruce Wasill, FHWA

Greg Christensen, AKDOT & PF

Misty Miner, MDOT

**MEMBERS ABSENT:**

Joanne Nakamura, HDOT

Brian Legan, NMDOT

**MEETING OBJECTIVES:**

1. Concrete test methods
2. Aggregate test methods
3. Asphalt test methods
4. Soils test methods
5. Exams
6. Committee business / wrap-up



ISSUE	DISCUSSION / DECISION	ACTION REQUIRED BY:
<p><b>3. Asphalt test methods</b></p>	<p><b>T 166:</b> Add <b>D 7227 Rapid Drying of Compacted Asphalt Specimens Using Vacuum Drying Apparatus</b> as an alternate method of drying the core.</p> <p><i>The test procedure should be included but according to studies it needs at least two cycles to completely dry the specimen. Attach the Auburn research document as a support document. Tech section 2D chairman is the contact.</i></p> <p><b>T 209:</b> The procedure requires the sample be obtained according to T 168.</p> <p><i>Need to change the procedure so the laboratory sample is not obtained in accordance with T 168.</i></p> <p><b>T 209:</b> The procedure states:  <math>C =</math> mass of the water displaced by the sample at 25°C (77°F), g.</p> <p><i>Change the equation for C to:</i>  <math>C =</math> mass of the <b>sample in</b> water displaced by the sample at 25°C (77°F), g.</p> <p><b>T 209:</b> 9.5.2 states “<i>Mass Determination in Air</i>—Fill the flask or any one of the pycnometers with water and adjust the contents to a temperature of <math>25 \pm 1^\circ\text{C}</math> (<math>77 \pm 2^\circ\text{F}</math>). Determine the mass of the container and contents, completely filled, in accordance with Section 8.2 within <math>10 \pm 1</math> min after completing Section 9.4. Designate this mass as <i>E</i>.</p> <p><i>Add a statement that the 10 min. starts after the pressure is released and change the reference from 9.4 to 9.5.</i></p> <p><b>T 308:</b> Section 8.5 references Section 5, it should be Section 6.  <i>Change 8.5 to read: Prepare the specimen as described in Section 6.</i></p>	<p>Garth</p>

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<p><b>3. Asphalt test methods cont.</b></p>	<p><b>T 308:</b> 10.1.5 requires ‘Total percent loss’ be reported, there is no reference to this in the test procedure. <i>Remove 10.1.5</i></p> <p><b>T 312:</b> Editorial change required. <i>Add See Note 4 to the end of 8.7.1 as show:.</i></p> <p><i>The compaction temperature is the mid-point of the range of temperatures where the unaged binder has a viscosity of <math>0.28 \pm 0.03</math> Pa·s when measured in accordance with T 316. <u>See Note 4.</u></i></p> <p><b>T 312 &amp; Volumetrics training material:</b> Jon Ogden provided a copy of the Utah material for T 312 and Volumetrics for review of the committee. <i>This will be a start for the supplemental module for Volumetric HMA.</i></p> <p><b>Discussion on Volumetric Qualification:</b> Sean is asking that there are not two stand-alone items. Alaska does not use volumetric and the Asphalt has to be the same for all States.</p>	<p>Greg</p>

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<b>3. Asphalt test methods cont.</b>	<p>Recommendations included:</p> <p><b>Changing the Asphalt Qualification to Basic Asphalt Qualification</b></p> <p><a href="#">AASHTO T 168, Sampling of Bituminous Paving Mixtures</a>  <a href="#">AASHTO R 47, Reducing Samples of Hot Mix Asphalt to Testing Size</a>  <a href="#">AASHTO T 329, Moisture Content of Hot Mix Asphalt (HMA) by Oven Method</a>  <a href="#">AASHTO T 308, Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method</a>  <a href="#">AASHTO T 30, Mechanical Analysis of Extracted Aggregate</a>  <a href="#">AASHTO T 209, Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt Paving Mixtures</a>  <a href="#">AASHTO T 166, Bulk Specific Gravity of Compacted Hot Mix Asphalt Using Saturated Surface-Dry Specimens; and</a>  <a href="#">AASHTO T 275, Bulk Specific Gravity of Compacted Bituminous Mixtures Using Paraffin-Coated Specimens</a>  <a href="#">AASHTO T 40, Sampling Bituminous Materials</a></p> <p>The asphalt qualifications would change to include:  T 312 &amp; Volumetrics calculations</p>	
<b>4. Soils test methods</b>	<p><b>T 89:</b> Question about whether the determinations are required to proceed from the dry stage to the wet stage.</p> <p><i>All States present work the material from dry to wet. The test will be understood to be from dry to wet.</i></p> <p><b>T 99/T180:</b> In 12.1a ‘mold factor,’ taken from a table, is used to calculate the wet density in the alternate method the mold volume is used.</p> <p>Discussion: The alternate method is more accurate; dividing by the actual value. The dimensional tolerances of the mold can create a difference between operators and if the molds range the edges of the tolerances the discrepancy exceeds the precision and bias allowance.</p>	

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<p><b>4. Soils test methods cont.</b></p>	<p><b>Poll of Attendees WFLD-</b> Agrees the procedure should be changed to be actual volume</p> <p>Colorado-already uses volume</p> <p>Oregon- would be ok with change use factor now increase tolerance to 0.0005 same as ASTM</p> <p>Alaska- would be ok with change use factor now increase tolerance to 0.0005 same as ASTM</p> <p>Utah- ok with change and agrees it is more accurate increase tolerance to 0.0005 same as ASTM</p> <p>Montana- uses the mold factor. Agrees that volume is the more accurate and that a changed tolerance will need to be changed also. It will be tough to fight this battle in the State</p> <p>Washington- already use this method</p> <p>Idaho-will create a burden initially but this is a more accurate method.</p> <p><i>WAQTC is in agreement that a change should be made and the procedure fixed.</i></p> <p><b>Further discussion of change to AASHTO T 99/T 180:</b></p> <p>Change should reflect the dimensions of the mold given in ASTM D 698/D 1557. Reference Garth's copy for the change in the dimensions.</p> <p>Check to see if Alaska personnel can create a drawing of the mold with dimensions for insertion into the procedure. Include drawing in Table 1. See Garth's records for changes.</p> <p>Need changes to the precision of balances to change the accuracy of reporting to the tenth.</p> <p><i>T 180 will require the same changes as T 99. Drawing in ASTM works for both.</i></p>	<p>Greg</p>

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<p><b>4. Soils test methods cont.</b></p>	<p><b>T 99/T180:</b> Section 5.2 has too many separate and distinct operations, due in part to the addition of the remains of 5.2.1, obtaining mass of mold plus base plate.</p> <p><i>Recommend that in the future it be divided for clarity. Decision was to not address the editorial change at this time because it muddies the water for the procedural change of getting rid of the mold factor and using the more accurate volume.</i></p> <p><b>T 99/T 180:</b> Section 14.1.4 requires “In Methods C and D, indicate if the material retained on the 19.0-mm sieve was removed or replaced.” The replacement method is no longer allowed.</p> <p><i>Remove 14.1.4.</i></p> <p><b>T 99/180/224/272:</b> There are references in these procedures to the replacement method.</p> <p><i>References to the replacement method need to be removed.</i></p> <p><b>T 310:</b> Wording has changed on calibration.</p> <p><i>Recommend replacing with verbiage from D 6938.</i></p>	
<p><b>5. Exams</b></p>	<p><b>Question for the Executive Committee</b> (new tests) Should the QAC track the new exams? There is a risk if we do not have a professional vet the questions. Is the risk acceptable?</p> <p><b>Meeting with Troy from Utah:</b> Utah changed the exams to make them more challenging and to force the technicians to study the material. Bill Redford wrote the new exams and the questions were not user friendly.</p> <p>Troy agreed that the questions needed to be brought to a level that is reasonable. He and his group have been handling problems that the new tests have generated.</p> <p><i>Utah will work with the WAQTC and use the new tests.</i></p> <p><b>Proposal to Exec Committee for Exams:</b> Make one new test (test #4) with the new questions and use in 2011. Let the States review the test results and see how it is progressing.</p>	<p>Garth</p>

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	<p>The questions will be all new and each State will vet the questions and send a report to ????. Question came up as to whether the WAQTC would purchase scantrons or similar unit to track the success of the tests.</p> <p><b>Action Item</b> Greg is going to work on two complete new tests and have them ready for review of the QAC by the July.</p>	<p>Greg</p>
<p><b>6. Committee Business</b></p>	<p><b>Question by Sean Parker ODOT- Is there a summary of the changes the QAC has submitted to the SOM's?</b>                      Answer: Garth- Tracking documents summarizing changes are with KBA currently. The documents have been requested.</p> <p><b>Question for the Executive Committee (new modules):</b> How do we handle the addition of modules to the qualification when all States do not use them? Administrative manual does not cover this issue. We have encountered this problem in the addition of a volumetric portion to the HMA qualification. There is a loggerhead because it will cause a problem for States changing their qualifications.</p> <p>The problem that has been encountered is the addition of a module to the qualification which will eliminate the qualification of personnel in States that do not have the additional module if we try to roll everything into one qualification.</p>	