# WAQTC QAC COMMITTEE MEETING MINUTES

**LEADER:** Garth Newman, ITD  
**FACILITATOR:** Desna Bergold  
**RECORDER:** Desna Bergold  
**DATE:** June 27, 2012  
**TIME:** 8:00 Pacific  
**LOCATION:** Teleconference

## MEMBERS:
- Garth Newman, ITD  
- Sean Parker, ODOT  
- Wendy Tripp, UDOT  
- Linda Hughes, WSDOT  
- Greg Christensen, AKDOT  
- Desna Bergold, DB  
- Misty Miner, MDOT  
- Brian Legan, NMDOT  
- Alan Hotchkiss, CDOT  
- Ryan Hixson, FHWA

## MEETING ITEMS:
1. Volumetric module – from Wendy Tripp  
2. T 312 – Short form and PowerPoint – Desna - tabled  
<table>
<thead>
<tr>
<th>ISSUE</th>
<th>DISCUSSION / DECISION</th>
<th>ACTION REQUIRED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td>Garth Newman, Chair, welcomed the group.</td>
<td></td>
</tr>
<tr>
<td>Volumetric module</td>
<td>Garth introduced the main topic: How to move forward on the volumetric properties Test Method (TM)? There has been some feedback and comments on the draft that was sent out 6/21/12. There is also some polishing that needs to be done i.e. formatting, grammar, sequence etc.</td>
<td></td>
</tr>
</tbody>
</table>
| | Sean Parker, ODOT, had made comments addressing the G<sub>b</sub>. There has been discussion on the temperature of the asphalt binder at which the specific gravity is determined (60 or 77°). Although this is an issue that needs to be addressed it is up to the States Materials Engineers to work out.  
   
   *This will be addressed in the Instructor’s note but will not be addressed in the manual at this time.*  
   
   Sean Parker ODOT pointed out that since the mix design is performed in advance of production the asphalt binder inventory may have turned over so the G<sub>b</sub> should be verified at time of production. Garth feels this is not a problem for their state and quite possibly others. The supplier may need to be contacted to determine if the G<sub>b</sub> has changed for production.  
   
   *This will be included as an instructor’s note.* | Desna |
| | Garth proposed that Desna Bergold work on the draft Wendy Tripp, UDOT, put together. She will incorporate comments received and input from this meeting.  
   
   The stakeholders need to be considered, those states that may immediately use the TM. Desna will need to be certain to solicit feedback from Misty Miner, MDT. Misty was unable to attend this meeting and MDT will be one of the states to use this.  
   
   *Desna will work with Garth and Linda and contact Misty.* | Desna, Garth, Misty |
| | The data needs to be introduced from the JMF and the sample test results. A section of ‘given’ information to be used in the example calculations needs to be included. Perhaps using a Table with example JMF information and a separate Table with test results on the specific sample. The agency JMF should be introduced in the training and a note for Instructors to introduce agency specific JMF (mix design) and sample work sheets that include sample specific test results.  
   
   The formulas and calculations need to be in a sequence that flows logically.  
   
   *Include three tables: the existing table, a table for JMF and at test result table. Include instructor’s note to introduce agency specific forms.* | Desna |
<table>
<thead>
<tr>
<th>ISSUE</th>
<th>DISCUSSION / DECISION</th>
<th>ACTION REQUIRED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The flow will be addressed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Since this is not a test method should it be a TM? Discussion ensued.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leave it and address later if anyone feels it’s necessary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sean introduced his other comments: He didn’t understand the reason for the all of the Appendices. The group discussed the terms section at an earlier meeting and decided the lengthy term definitions created a training issue and decided the term definitions need to be separated from the discussion of the terms. A terminology section with shorter definitions will be included toward the beginning (from UDOT Superpave) for reference but not included in the PowerPoint.</td>
<td>Desna</td>
<td></td>
</tr>
<tr>
<td>Appendix 1 and 2 will be combined in a shorter version and included as a terms section near the front but not included in the PowerPoint.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sean proposed some language for the VMA discussion. He has a great description of VMA that is very effective.</td>
<td>Desna</td>
<td></td>
</tr>
<tr>
<td>This needs to be introduced into the training piece.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion needs to be added to the TM about: The design creates a mix with the “Specified” properties which builds the Job Mix Formula (JMF) ** Some agencies require a test strip which allows the contractor to tweak the JMF. Once the test strip data is approved / accepted the revised JMF is used for production Paving using field production HMA Values</td>
<td>Desna and Garth</td>
<td></td>
</tr>
<tr>
<td>Desna will work with Garth on this section.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desna will include an outline of the TM with the minutes for review.</td>
<td>Desna</td>
<td></td>
</tr>
</tbody>
</table>
Volumetric Properties of HMA proposed TM outline

1. Significance
2. Scope
3. Terminology
4. Introduction
5. Data inputs – Table 1
6. Volumetric properties
   a. \( V_a \)
      i. Definition
      ii. Discussion of importance
      iii. Formula
   b. VMA
      i. Definition
      ii. Discussion of importance
      iii. Formula
   c. VFA
      i. As above
   d. \( P_s \)
      i. As above
   e. \( G_{se} \)
      i. As above
   f. \( P_{ba} \)
      i. As above
   g. \( P_{be} \)
      i. As above
   h. DP
      i. As above
7. Discuss mix design and production VMA values
   a. \( G_{sb}, G_b, \) target asphalt binder, etc. may change during production.
8. Table 2 – JMF or production VMA Properties
9. Table 3 – test results inputs
10. Sample calculations using Tables 2 and 3.
11. Appendix with pull out formula sheet.