Warm Mix Asphalt Technologies
Technical Committee Meeting Minutes
Quarterly Conference Call – Fall 2017
Thursday, November 21st, 2017 – 9:30 am EST

1. Attendance

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Role</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paye, Barry C</td>
<td>Wisconsin Department of Transportation</td>
<td>Chair</td>
<td>Voting</td>
</tr>
<tr>
<td>Hall, Heather</td>
<td>Tennessee Department of Transportation</td>
<td>Vice Chair</td>
<td>Voting</td>
</tr>
<tr>
<td>Sirianni, Jonathan</td>
<td>AASHTO</td>
<td>Liaison</td>
<td>None</td>
</tr>
<tr>
<td>Ingram, Steven</td>
<td>Alabama Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Saboundjian, Steve</td>
<td>Alaska Department of Transportation and Public Facilities</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Goldbaum, Jay</td>
<td>Colorado Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Rilko, Wayne Andrew</td>
<td>Florida Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Charoenpap, Richie</td>
<td>Louisiana Department of Transportation and Development</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Davis, Jason</td>
<td>Louisiana Department of Transportation and Development</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Burke, Gloria L</td>
<td>Maryland Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Brum, Mark John</td>
<td>Massachusetts Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Meyerhoff, Mike</td>
<td>Missouri Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Oesch, Dan</td>
<td>Missouri Department of Transportation</td>
<td>Member</td>
<td>Non-Voting</td>
</tr>
<tr>
<td>Metcalf, Ross Oak</td>
<td>Montana Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Pan, Changlin</td>
<td>Nevada Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Ilg, Larry D</td>
<td>Oregon Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Selkinghaus, Cliff B</td>
<td>South Carolina Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Short, Temple</td>
<td>South Carolina Department of Transportation</td>
<td>Member</td>
<td>Non-Voting</td>
</tr>
<tr>
<td>Shi, Bin</td>
<td>Utah Department of Transportation</td>
<td>Member</td>
<td>Voting</td>
</tr>
<tr>
<td>Corrigan, Matthew</td>
<td>Federal Highway Administration</td>
<td>Ex Officio</td>
<td>Non-Voting</td>
</tr>
<tr>
<td>Woods, Victoria Lynn</td>
<td>InVia Pavement Technology</td>
<td>Other</td>
<td>Non-Voting</td>
</tr>
<tr>
<td>Greg Shuler</td>
<td>Florida Department of Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melissa Barrs</td>
<td>Florida Department of Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danny Lane</td>
<td>Tennessee Department of Transportation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Action Items

   a. AI: Jason Davis replacing currently listed Louisiana member on Task Force for anti-strip qualification
      i. Status: Complete

   b. AI: Antistrip task force needs to put together another conference call
      i. Status: Still need to set up a call

   c. AI: Jon will check member list to see who’s still interested in being part of the TC
      i. Status: Discussed in a recent internal NTPEP meeting. Going to canvas all TC members in each TC in the near future.

   • Ronnie with NTPEP is going to canvas all of NTPEP TCs about participation.
3. Update Program Status
   a. Products currently being evaluated by FLDOT
   b. 2018 submission cycle(s)
      • Right now there is one confirmed submission for the upcoming cycle, with another application in progress
      • May have more last minute additions because some states have indicated the need to use NTPEP for the 2018 cycle.
         o Other states anticipating requiring it, but not formally in place yet
            ▪ Giving manufacturers a year grace period
      • We had talked about 4 submission cycles
         o Where does FL want to be, what works?
            ▪ Receiving multiple products can cause a delay in getting data out the door
            ▪ A rolling submission cycle would work
               • AI: Jonathan will check with Vince to see what needs to happen within DataMine for this to happen
                  o SSC TC already does this

4. DataMine 3.0 Update
   a. WMA module has been updated, and made available on the live site
      • Module was recently made available for Florida to use.
         o Had to work through a few bugs before the data could be input
      • Data has been uploaded for the most recent product submission
      • Data from prior submission cycle will be entered by Florida in the near future.

5. Anti-Strip Work Plan
   a. Several states sent anti-strip qualification requirements; still lacking for specific testing required
   b. Still need to formalize task force and set up teleconference
      • Work Plan with comments about needed edits for anti-strip are available on the invite for this quarterly call.
      • This would be a subset of the WMA TC
         o Its own Work Plan, but falls under WMA
         o May be some issues with manufacturers who have products that fall within both categories
            ▪ They would need to indicate the intended use of their product
      • May need to look at renaming the TC to more clearly designate what is available for testing
         • M332 has become a formalized testing protocol
            o Need to update Work Plan to refer to this test method
               ▪ Needs to be balloted
      • Page 3 of Work Plan
         o Is anyone using E-star or Flow Number to accept an additive?
- This might be overkill, and several states indicated that there is not a lot of benefit
  - Eliminate AMPT testing protocol?
    - Affirmative
    - Needs to be formalized and balloted
      - Barry will put together the changes within the Work Plan
      - Fees likely to change
        - Once ballot is approved Jonathan can work with Florida to restructure the fees
      - Industry rep agrees with the removal of AMPT
        - Because it is based on the mix, this should be handled by the state
        - Should try to avoid having separate submissions because so many WMA products also act as anti-strip
          - Somehow have one application where you can submit the product once for both testing sets
          - Could look at homogenizing the testing so that the same methods are used between the different product types where it makes sense (moisture)
  - Work Plan development was originally research focused, and then went through revisions to make it more laboratory testing focused.
    - Chemical fingerprinting was not voted into the Work Plan, but we should take a look at adding this in.
      - Having some sort of way to fingerprinting is likely a valuable tool to make sure we have the correct product
      - TN, OR indicated they would be on board with this change
      - Other technical committees have had some issues with getting useful information that will allow you to actually zero in on a single product through the fingerprinting
      - Was noted that you can tell between acid-base and amine-base products, but within the same family is becomes more difficult to discern differences
    - Need to look at what needs tweaked within the Work Plan to accommodate Anti-Strip
      - TSR and Hamburg wheel likely should be kept in
      - Keep the same types of tests, but tweak the parameters to accommodate anti-strip testing
      - Discussion about the type and number of mixes that are created for testing
        - Adding another aggregate source would essentially double the work load
        - No way we can do every formulation, every design
          - Should utilize this testing as a first line to look and say that the product does what it says it should do, and then the states likely need to do additional testing in order to make sure it works for specific applications
        - Industry noted that the aggregate source is not going to give the information you want here
They were designed around the binders used, not the aggregates

Want to update the Work Plan to remove AMPT. Add MASCR, some sort of spectroscopy.

- May need to look at contracting another testing firm to complete some of this type of testing. FL indicated that they are not experts in some of this and that the testing is too important to try and learn on
- Florida mentioned issues with 4 in. vs 6 in. specimens for moisture testing
  - Based on how the pucks retain the moisture, may get incorrect results on strength because of the way the moisture enters the pucks.
  - Other states indicated that they also utilize the 4 in. specimens
  - Noted that the AASHTO standard references a 6 in specimen
  - This would have to be made clear within the Work Plan

AI: Barry will put together the changes within the Work Plan for ballot. Hopefully by the middle of December

Barry received volunteers to help with Work Plan Edits

- Jay – Colorado
- Victoria – Ingenvity
- Charlie Pan – Nevada
- Richard Williammee – Texas
- Jason Davis - Louisiana

6. WMA Work Plan
   a. At a minimum, need to review for editorial updates

   See above comments

7. Acceptance Criteria Development
   - Is there a formal collection of Acceptance Criteria Documents?
     - AI: Jonathan will look into this and get back to Barry this week

8. Promoting the Program
   - AI: Barry will follow up with Collaborative Aggregates to see if they are still interested in putting something together
   - Oak and Barry have been promoting the program at meetings they attend

9. Open Discussion
   - NEXT MEETING: The week of March 5th, 2018