Section 39 STG Meeting

Sacramento, Ca

Group Memory

6/19/2014

Next Meeting dates

July 23 (Sacto) 9:30-2:30

August 13 (San Diego)

Sep 17 (Sacto)

Oct 21 (San Diego)

Nov 19 (Sacto)

Desire outcome for next meeting:

Continue to work, resolve issues.

Section 39 issues: (5/20/2014 Industry concerns list)

1. Aggregate temperature (when using RAP)
2. Minor asphalt AASHTO T283 requirements
3. Define the parameters for Minor HMA (less than 1000 tons, 500 tons etc.)
4. Use of cores vs. nondestructive density gauges
5. Mix laydown temperatures and for WMA technologies

1. **Purpose:**
   1. 1. Close out issues from last meeting.
   1. 2. Look at the list of items Industry wants to discuss.
   1. 3. Update on the spec.

2. **Spec update Joe**
   2. 1. The spec was posted on April 18th. It was sent out to industry.
   2. 2. (Comment From 6/20/2014) Latest update of spec is from May 30, 2014.
   2. 3. There are a few issues that fell through the cracks.
   2. 4. Automatic sampling issue: There was an oversight in that this was not taken out, but this will be changed. The contractors will need to RFI the RE to request a no-cost CCO to remove the "automatic sampling device at the plant" requirement.
   2. 5. If you find anything we agreed to that is not in the spec, please tell Kee or Joe about it.
   2. 6. The Spec that governs is the spec that is in effect on the day the job advertises.
   2. 7. **(Comment From 6/20/2014) Joe will send the change to section 39 to remove the "automatic sampling device from the plant" and replace with "plant."**

3. **Issue 1 from industry concerns of 5/20/2014: Aggregate temperature**
   3. 1. Caltrans is not able to make an instantaneous decision about the final value for aggregate temperature.
   3. 2. Industry concern is that 375 degrees mix at the plant will not produce hot enough mix.

3. 3. Caltrans needs data from industry on what other DOT's do, who follow 25% RAP, 40% binder replacement. The sooner CT gets the data, the sooner they can make a decision.
3. 4. Phil Stolarski sent out questions – CT is looking at issues including heating temperatures for aggregate when mixing HMA and RAP.
3. 5. CT is waiting for information to be compiled from other states, then CT will look at it and determine the issue and share with industry for discussion and consensus.
3. 6. **(Comment From 6/20/2014) Caltrans will review and report back based on the survey data presented today at the next meeting.**
3. 7. (Comment From 6/20/2014) Industry concern: Binder content and gradation are the tools available to make changes. They need to know right away what the gradation is. Delays caused by testing turn around time can be a problem. CT Comment: We are willing to do post-plant gradation. Industry comment: How does this address turnaround time?

4. **Issue 2 from industry concerns of 5/20/2014: Minor asphalt AASHTO T283 requirements (5/20/2014 Comment)**
   4. 1. Industry comment: If I have an aggregate that is proven to pass and does not have a stripping requirement, why would I need to put the liquid anti-strip treatment in?
   4. 2. CT response: Under 39-7.02D – CT will add "Unless dry tensile strength is greater than 100 PSI and wet tensile strength is greater than 70 PSI…"
   4. 3. (Comment From 6/20/2014) CT Comment: This will be eventually be changed – the issue is resources at OE.

5. **Issue 3 from industry concerns of 5/20/2014: Define the parameters for Minor HMA (less than 1000 tons, 500 tons etc.)**
   5. 1. CT will put out a DIB defining what minor HMA is. (will be 1000 tons total project paving or less)
   5. 2. CT will send out a note to the DME's on this.
   5. 3. Check with your DME for appropriate use of minor HMA.
   5. 4. Industry: Minor HMA will also require gradation, AC Content, air void, VMA, and field compaction. Since only Hamburg and TSR strength are waived it will also require a job mix formula verification if one does not have one. Was this discussed during the superpave meetings? CT Response: Yes. Acceptance is based on production.
   5. 5. Industry wants to take a look at minor HMA in regards to density requirements. CT response: Please bring specific items back so we can address them.
   5. 6. (Comment From 6/20/2014) CT: DME's got a notice on minors, defining what a minor HMA project is -– This was sent out via e mail to all district materials engineers. I

6. **Issue 4 from industry concerns of 5/20/2014: Use of cores vs. nondestructive density gauges**
   6. 1. Industry comment: We are not prepared to discuss this issue at this time.
   6. 2. At this point in time, CT is adamant about the use of cores for checking density and does not foresee a movement away from this.

7. **Issue 5 from industry concerns of 5/20/2014: Mix laydown temperatures and for WMA technologies**
   7. 1. Industry comment: Do the atmospheric and surface temps for HMA apply to WMA?
   7. 2. CT: The temps apply to all Type A HMA whether or not WMA is used.
   7. 3. CT: For method compaction, min. temps are specified because we do not measure compaction.

8. **Additional issue: QC/QA Issue: Does industry data count?**
   8. 1. Industry: We are depending on test results coming back from CT. We have material on the ground already while we await test results from CT. Turn-around time for acceptance test results is an issue. CT response: This is not the forum for this issue. That issue needs to go to the RPC.
   8. 2. CT: Samples are split, and contractors always have the right to go to a third party lab for dispute resolution and testing when there are test result differences in split samples. CT and industry should work their differences out at the lowest level possible.

8. 3. CT is responsible for QA sample taking and splitting.
8. 4. (Comment From 6/20/2014) This item is closed because this group does not have the authority to resolve the issue.

9. **Additional issue: RAP language needs clarification.**
   9. 1. Current spec allows 40% binder replacement on lower courses, but limits the aggregate replacement to 25%. Will not allow for 40% binder replacement. Was this intentional?
   9. 2. CT and industry agree that this has been clarified already. Response from CT: yes this was intentional. This will be clarified in the RAP / RAS spec.
   9. 3. (Comment From 6/20/2014) This has been resolved per previous comment.

10. **Additional issue: Windrow length**
    10. 1. Industry: A 150 foot windrow impedes production – Windrow length should be dependent on temperature.
    10. 2. Industry will gather all the comments on this issue and bring them to the table.
    CT: We can get this on the list of issues to discuss – length of windrows vs. Temperature. This is an additional bullet for the Section 39 scope of work.
    10. 3. (Comment From 6/20/2014) Industry concern: Temperature checked on the surface with a gun are producing different results than the older method of checking with a thermometer probe at mid-depth.
    10. 4. (Comment From 6/20/2014) **CT: We will check with Construction to see if the method for measuring temperature can be addressed in the construction manual. CT (JOE) will come up with a procedure to address the method for measuring pavement temperature.**

11. **Additional issue: CTM 125**
    11. 1. Industry concern: Height of windrow may need to be redefined.
    11. 2. Industry will provide Caltrans with actual windrow dimensions based on actual field conditions.
    11. 3. **(Comment From 6/20/2014) CT: Joe will look at the dimensions and revise CTM 125 accordingly – probably a range to allow a little latitude.**

12. **Additional issue: Cure time for plant samples (May be for any sample)**
    12. 1. Industry concern: When samples are taken early in the production process at the plant, cure time should be taken into account.
    12. 2. CT Response: CT agrees. CT and contractor must be doing the exact same thing. CT and industry should revisit cure time required for plant produced samples.
    12. 3. (Comment From 6/20/2014) CT comment: We are directing the laboratories to do exactly what the contractors are doing. Industry comment: The spec does not require the district to do what the contractor does. This needs to be specified. Exactly what temperature should the oven be when the sample is placed inside? How long should the sample be in the oven? What temperature should the sample be (what is "cold" ??) when it is placed in the oven?
    12. 4. **(Comment From 6/20/2014) Joe will draft up something related to temperature and time. It needs to be simple, clear and enforceable on both sides.**
    12. 5.

13. **Additional issue: CEM Forms**
    13. 1. Will CT provide writable PDF Forms? Tabled for now – we will have to use what the Forms Unit at CT comes up with.
    13. 2. (Comment from 6/20/2014) Industry comment: Forms were writeable in the past. CT: We do not have any control over forms management. Resolved for now.

14. **Additional issue: Lab vs. Field data on Hamburg**
    14. 1. Industry comment: Hamburg and T283 lab vs. field testing. There is a need to collect lab data for Hamburg.

14. 2. CT is tracking data on all projects. The results are available but the specific projects are not tied to the data. The data will tell us what results were obtained, but not which project or which contractor was involved. Those attributes are treated as confidential.
14. 3. CT Note to industry: Separate submittal of Hamburg and T 283 data on CEM requires prior approval from the RE. Be sure and get this (documented) approval prior to submitting CEM form without TSR and HWT data. \
14. 4. (Comment From 6/20/2014) CT Comment: It would be nice to have a contact person identified for every job when you send data to CT.

15. **Additional issue: WMA and requirement for foaming test – LP 12**
    15. 1. Issue: No labs are interested in doing this test.
    15. 2. CT: We need to look at this issue. CT will have a discussion and bring back an opinion. Concern is that binder suppliers will add anti—foaming agents to the binder.
    15. 3. **(Comment From 6/20/2014) No progress on this issue since last meeting. Kee and Joe need to discuss what is appropriate. Report in July. S**

16. **Additional issue: Production of dual-grade binders**
    16. 1. Can binder suppliers make a two-grade binder –
    16. 2. Some refineries can certify binders as dual grade.
    16. 3. CT response: If you want to submit a dual grade binder for a mix design, you should include documentation at the initial submittal for both the 64-10 and the 64-16 grades, and denote that you are submitting the mix design under the contract as a 64-10. It should be indicated in the submittal remarks box on the form that the binder meets both grades.
    16. 4. The life of the mix design will refer back to the original submittal approval.
    16. 5. (Comment From 6/20/2014) CT: Long term goal is to incorporate dual grade into the CT binder COC program. This is resolved.

17. **RAP/RAS Spec will be out at the end of the fourth week of June –**

18. **Additional Issue (Comment From 6/20/2014) Definition of minor HMA projects**
    18. 1. There needs to be additional defining criteria for minor HMA projects.
    18. 2. CT will look at this to see if designers are reading the spec wrong.
    18. 3. **CT will add in training "if the work is constrained on four sides," use the item for "replace AC surface." CT will look at existing method criteria for appropriateness.**
    18. 4. **This issue is resolved for now.**

New Issues brought on 6/19/2014:

19. **Review of CT 304:**

There are 2 industry comments (see attached)

CT 304: Thermometers accurate to 5F or less. The previous version was accurate to 1F.

19. 1. **(Comment From 6/20/2014) CT will look at the comments on CT304 and incorporate them as appropriate.**

20. **SuperPave Pilot Projects Data**

See attached report. Industry test data missing.

"We have to submit binder content on every sub-lot and submitted to the RE. They are not shown on data for Dist. 4. How does this data collection process work?"

20. 1. This was discussed earlier today.

21. **Section 39 Scoping Document**

    21. 1. (I don't see anything in the Superpave specs that are based on traffic loading since we have a fixed number of gyrations for the HMA mixes and variable for the RHMA).

What assurance do we have that CTM's will continue to be included?

    21. 2. (Comment From 6/20/2014) Fixed number of gyrations based on typical heavy traffic loading.
    21. 3. (Comment From 6/20/2014) We need clarification from industry on issue relating to CTMN question.

22. **Why do we need to use 6" gyratory vs. 4" Hveem for TSR's?**

    22. 1. (Comment From 6/20/2014) CT will require 4 inch specimens for TSR at this time will be required to use the gyratory compactor.

23. **SP for Local Agencies**

After reviewing the group memory from last meeting, I think there should be a discussion on whether or not we need a streamlined version of Superpave spec for local agency use, the definition of the minor HMA may not be attractive enough for local agency to use. And the existing standard Superpave specification has a lot more testing and paperwork (such as TSR dry and wet strength, Hamburg test, these tests conducted on plant produced mix as part of the lab mix design etc) than the previous new section 39 specification which is already overkill for some small local jobs, even the minor HMA has the TSR strength requirement. A lot of efforts spent are not necessary justified with the value provided, at least no proven values yet at this time.

My concern is that many local agencies will closely follow Caltrans spec and requires a lot of unnecessary work load from the producer and contractor, particularly it can be an issue for the smaller job. Since Caltrans specification always changes, some consideration should also be in place for how that will affect the local agency who may uses various versions of the Caltrans specification if they are not that closely (monthly update??) following the Caltrans spec.

    23. 1. (Comment From 6/20/2014) CT: We are developing a low volume HMA mix for TI below 7 (=/-) which will be a relaxed Type A mix.

24. **Explore possibility of reducing D 2172 Solvent Extractions for RAP production/LP-9**

Would it make sense to use the RAP production samples as LP-9 samples? From a technical perspective is there anything that would prevent that?

    24. 1. **(Comment From 6/20/2014) CT needs to review to ensure consistency between the mix design and the specification QC requirement.**

25. **Evaluating the need for the TSR test**

What data do we need to collect to make a decision regarding the continued need for the TSR test? (will the HWT suffice).

    25. 1. (Comment From 6/20/2014) Discussed earlier today.

26. **Additional Issue: BG Dust return on Drum Plants for WMA using a dry additive**

What is Caltrans expectation for a drum plant?

    26. 1. (Comment From 6/20/2014) Expectation is 100% return.

27. **Additional issue Mix design 39-1.01 D(2)**

When you have a failed JMF you should be able to make the same adjustment in mix design as adjusting the non-verified mix design for RHMA.

27. 1. **(Comment From 6/20/2014) CT: Concern is that allowing the gyrations that vary then for all failed mix designs will be dropped to the minimum binder content, and the gyrations adjusted accordingly. CT will discuss this and report back.**

28. **Next steps:**
    28. 1. CT will gather data and report back at the next meeting.
    28. 2. Spec changes are in the works. The plan is to lift the moratorium on July 1.
    28. 3. Industry will follow up on the issues above where indicated.