

PMPC Executive Committee/Concrete Task Group Meeting Minutes

Date: December 15, 2022

Time: 8:30 am- 10:00 am

Location: Webex Meeting

Facilitator: Tom Pyle

Attendees: Tom Pyle, Raymond Tritt, Christa Siegenthaler for Gudmund Setberg, Brandon Milar, Charley Rea, Kuo-Wei Lee, Tim Greutert, Joseph Dongo, Mark Hill, Kelly Lorah, George Butorovich, Keith Hoffman, ~~Chu Wei~~, Ian Sun Chee Fore

1. Introductions/Review Agenda
2. Action Items from PMPC EC + CTG meeting held on 09/15/2022:
 - a. Concrete Related Research and Spec Development Outside PMPC (Reference Document)
 - i. (Charley) Caltrans provided their list of “other,” non-PMPC, concrete work that is going on at the Department, including research, other areas of the department, and the districts (note: after the meeting, I noticed there is an effort to update mass concrete specs, so I have inquired why that is not a PMPC project).
 - ii. District 8 Innovation Projects
 1. More robust training for CT and Industry staff
 - a. Field staff
 - b. District designers
 2. Any spec changes that will come in a form of a scoping document or decision documents
 - a. **Action Item:** Maged will send the updates to Kelly (**Follow up in 2 weeks with Tim**) **DONE**
3. Urgent Issues (All):
 - a. Keith – the CTG did have a meeting over overall plan on sustainability workplan – covers several bin lists items on the MQA bin list
 - b. Kuo-Wei – Section 90 – IQA – tend to run several months - would need owner approval before moving forward – CTG will work out the details
4. CTG Work Products
 - a. Tracking Concrete Mix Designs in DIME (Keith):
 - i. 3rd time around – goal issues and concerns details to be worked out.
 - ii. Take the implementation out of DIME; DIME group can implement the IT coding.
 - iii. Almost done with the effort – 8 milestone; updating Scoping Document will be sent soon.
 - b. Performance Based Alkali–Silica Reaction (ASR) Mitigation (Keith):
 - i. Another rewrite of the scoping document. Will discussed in the post EC-CTG meeting.
 - ii. All tied to 25% SPFs
 - iii. Will focus on Performance Based spec.
 - iv. 20% ash would mitigate ASR. Need to consider for greenhouse gas.
 - v. Looking into Performance, durability, and sustainability.
 - vi. Scoping Document has been routed to CTG for signatures, will then go to EC for approvals. From these documents lead to conversations about Sustainability and Durability, so they can integrate all these scoping documents that have to do with SCMS mix design into one.

- vii. Going into the scoping document it was industries perspective that we could address durability and sustainability and still produce an ASR document, but because it was so integrated into Caltrans, CTG had to step aside and just look at one side of the aggregates and find a way to address durability and sustainability and even define what subjects are important to Caltrans.
 - c. Blended Supplementary Cementitious Materials (SCMs):
 - i. Done – report looks good. EC had no comments. Is now routed for signatures.
 - d. Replacing the Compaction Method to Determine the Application Rate of Lime for Soil Stabilization:
 - i. Final report is done, route for signatures to the CTG for review and approval.
 - 1. Comment from EC.
 - ii. Will discuss more in the post meeting.
 - iii. Tim's concerns – implementation concerns – got answers from Keith - Tim signed 12/14/2022
 - e. Replacing the R-Value Testing for Unbound Materials with an Alternate Test Method:
 - i. This is on Hiatus. Work group is currently on hold pending the testing results is done. Working with UCPRC to get the testing done.
 - ii. UCPRC is working with Industry for testing material.
 - iii. The team narrowed down to a handful that UCPRC is doing more in-depth correlation study.
 - iv. Tom - We used R-Value for a long time and there are a few machines that can run these tests. No new development. UCPRC current contract ends in June (per Nick Burmas).
 - 1. **Action Item:** Kuo-Wei to reach out the UCPRC on the status and when they will be complete with their data collection.
 - v. Tim – when it comes into design – CalME from UCPRC helps.
5. Scoping Documents
- a. Full: Specification Improvement of Concrete Pavements with RSC (will be discussed in post meeting) (Joseph)
 - i. Tim - Implementation plan – how do staff know they are on the right track. Got his answers from METs; Tim has signed the document.
 - b. Concrete in Marine Environment (Joseph)
 - i. Received more comments, CTG routed for review and comments
 - c. Concrete Pavement Specified by Fixed Value of Compressive Strength (Keith)
 - i. EC signed
 - ii. Would save time for testing for all projects they do.
 - iii. Tom – are we going to screen out unsuitable aggregates?
 - 1. Keith – the mix design hasn't gone away. Specifically for the strength.
 - d. Short: Use of Low Nuclear Density Gauge to Determine Compaction of Unbound Materials
 - i. EC signed
 - 1. There are 2 low nuclear efforts, one of them being from Foundation subtask group doing for subgrade.
 - ii. Safety is the benefit.
 - iii. Approach: show test for both gauges; one producer – maybe other competitive models. Looks at what is on the market and not use just one product maker.
 - iv. Tim - Caltrans produce evaluation program – there is an input to propose (i.e. equipment and materials) it starts a 90 day clock to response to their proposals.
6. Decision Document
- a. Lime, and/or Cement to Dry Up Soils
 - i. Allows the contractor to use either lime or cement for drying out the site.

- ii. Charley – on the signature block – Deepak and Marco Astrada – Marco is not the lead/Industry Chair. Skipping the step of not having the Subtask group not signing. Missing signature block
 - iii. Keith – might need to update the SOP if it's not include.
 - 1. Charley – SOP is not explicit to the signature block requirement.
 - 2. Keith agrees – that it should be signed by the subtask group
 - 3. Kuo-Wei – Marco was a proponent of this
 - b. Tie Wires in Dowel Bar Assemblies
 - i. EC had comments – EC approved the DD – no fatal flaws.
 - 1. Brandon had comments, Dulce responded. Brandon is good with those comments.
 - c. Surface Skid Resistance Test for Concrete Pavement Acceptance
 - i. Keith - Proposed to take the skid testing requirement out for new pavement operations. We're the only state requiring skid resistance testing. Correlate the old values with the new machines. The portable machines are problematic and always need to recalibrate
 - ii. Joe – Legal is involved.
 - iii. George – is it in the SOP that needs Legal's involvement. There are some liability concerns that needs Legal's input. Would be nice to know prior to it going to Legal.
 - iv. Tom – in the past, along the lines of Smoothness – 1 method of measure; ran multiple tests before implementation
 - 1. Keith – correlations study is the main focus – the calculations are in the study.
 - 2. George – this might need to be go from decision document to scoping document due to the changes.
 - a. Will wait to hear back from Joe.
 - v. Tom – do we need to use similar testing apparatus as done with Fog Seals?
 - 1. Keith – this study is mostly looking at the use of the portable machines (pelican cases). The current machine goes off the scale. Other machines should work with high friction. Other items will need to be looked at. Should not be a spec change.
 - 2. Maintenance isn't responsible for high friction surface treatment; Maintenance doesn't
 - 3. Tim – is align with tom's comments about high friction and look forward to scoping document.
 - vi. Ray – meets with CHP quarterly (April)
- 7. Review bin list (Due to time, this was not covered)
 - a. CIP STG
 - b. Foundation STG
 - c. MQA STG
- 8. Open Discussions
 - a. Membership – Tim – onboard new people/membership looking to hear from CTG perspective
 - i. George – working on scoping document – reach out to industry to help and get someone involved in the document. Getting easier to get new people.
 - 1. Encourage Caltrans to reach out to the districts for new members. They are our end users.
 - ii. Mark – does the same on his side; a good process to get new members to keep things moving
 - iii. Keith – add additional members to the task group?
- 9. Action Item

- a. Kuo-Wei to reach out the UCPRC on the status and when they will be complete with their data collection.
- b. Keith - Skid test correlation study document to Ray. Will give to Ray before Lunch.
- c. EC will discuss about adding new task members to the task groups.

Website: [Pavement and Materials Partnering Committee | Caltrans](#)

For all meeting minutes please visit:

- EC Meetings: [Pavement & Materials Partnering Committee \(PMPC\) Meeting Minutes | Caltrans](#)
- ATG Meetings: [Asphalt Task Group | Caltrans](#)
- CTG Meetings: [Concrete Task Group | Caltrans](#)