## PMPC Concrete Task Group (TG+STG Chairs/Leads) Meeting Minutes Date: March 10, 2021

Time: 10:00 AM – 12:00 PM Location: Webex/Conference Call

Facilitator: Keith Hoffman

Attendees: George Butrovich, Bruce Carter, Dulce Rufino, Nathan Forrest, Mark Hill, Keith Hoffman, Kuo-Wei Lee, Patrick Lo (also for Deepak Maskey), Doug Mason, Samir Ead (for Ken Solak), Chu Wei, Kelly Lorah

Not in Attendance: Don Vivant

- 1. Introductions/Review Agenda/Past Action Items
  - a. Keith The EC meeting is coming up soon.
- 2. Introductory Urgent Issues
  - a. Staff Changes at METS (Nathan)
    - i. Patrick Joe Harline is the new permanent senior of the Concrete Materials Testing branch. I am currently acting until Joe settles in, then we'll discuss his role.
- 3. Concrete Pavement Updates
  - a. Pavement Smoothness
    - Dulce (Screen sharing Concrete Pavement Smoothness Project Tracking database) The database has been updated to meet the needs of Headquarters. More data was collected.
    - ii. Keith We will need to follow-up after the data is collected to see if this sheet has the desired outcome.
    - iii. Dulce Yes. We are going to analyze what we have and create reports with this information.
    - iv. Chu Obtaining more data is always a priority.
    - v. Bruce We don't have enough data at the moment, but we are still compiling.
    - vi. Dulce This sheet is intended to track whether incentives are too easy or difficult to obtain. We're aiming for a balance.
    - vii. Samir This data would be helpful to find tune the specs as well.
  - b. Pavement Acceptance Based on Compressive Strength
    - Dulce The Compressive Strength Acceptance report is still in draft.
       It's being formatted. We have 36 states strength acceptance requirements at the moment. We haven't decided which way we're going to go.

- ii. Bruce We're going to look at the specifications to determine whether to go with 28 or 42 days.
- c. Maturity to Estimate Open to Traffic Strength
  - i. Dulce We're still creating the Maturity report. We have a table comparing the states on their specs. The WG made some decisions and summarized them. There are states that allow open to traffic maturity.
  - ii. Kuo-Wei This WG is on schedule for milestone 2 (summary).
- 4. Foundation Updates
  - Patrick I am covering for Deepak. Not much has happened with the WGs since the last meeting.
  - Replace R-Value Testing for Unbound Materials
     Replace Compaction Method to Determine the Application Rate of Lime for Soil Stabilization
    - i. Patrick The short scoping documents are still in the works.
    - ii. Kuo-Wei We're still waiting on a fourth industry member to finalize the scoping documents and allow full scoping documents to be created.
  - c. Lime, Cement, or Cement-Kiln Dust Modification of Pavement Foundation
    - i. Patrick The scoping document has been submitted for approval.
    - ii. Doug The scoping documents has minor issues with the kiln dust. It's not available anymore. Hopefully we'll get comments back from the EC later today.
- 5. M&QA Updates
  - a. Type 1L Cement
    - i. Patrick Several comments were received. The WG is addressing them. The WG is working on milestone 3 and are on track. OSU is still on track and should send their report in April. The ASTM 1260 ASR test results looks promising.

# ACTION ITEM: Patrick to look into to having presentation by OSU to be available to DES, SC, SC Concrete Committees, and CTG

- b. Tracking Concrete Mix Designs
  - i. Patrick Comments should be received by today. This should be sent to the CTG by the end of the week. Construction is working on E-Ticketing. This allows batch tickets to be sent through DIME electronically. If the WG joined into the project, we could streamline the process. Extra language was added to the scoping document.
  - ii. Mark Tracking samples to the ticket number in DIME would be helpful.
  - iii. Patrick I will let the WG know.

- iv. Keith We need to communicate with METS IT to discuss the limitations of DIME.
- v. Mark I encourage Caltrans to attach a ticket number to a sample.
- vi. Keith I agree that this would be a helpful feature; the only question is if DIME can handle it.
- vii. Chu Has E-Ticketing been implemented yet?
- viii. Patrick It hasn't been implemented yet. We need to figure out what we need and how to accomplish it. We want to make sure it works before we switch over to it.

#### c. Allowing Blended SCM

 Patrick – The WG had a meeting last week. There has been discussion between industry and Caltrans. A scoping document will be sent to the STG on 3/12.

#### d. Performance-Based ASR Testing

- i. Patrick Kick-off meeting occurred 2/26. Scoping document to be sent to STG by 3/31. Caltrans would like to set limits to SCM content.
- ii. Bruce We are working on the scoping document. We're trying to avoid having Fly-Ash shortage issues in the future.
- iii. Mark There is concern with having a performance-based spec linked to a shortage of SCMs. If we write performance-based, we should be able to change the SCM change equation.
- iv. Patrick We believe that a performance-based spec would be used outside of a fly-ash shortage. We're aware of the equation issue and are looking into it.
- v. Bruce This is meant to be a solution if there is a SCM shortage in the long-term. We are trying to also have a short-term solution. If you have a short-term solution, please let us know.
- vi. Patrick We've been handling the current shortage issues on a project basis. Many of the projects that are having shortage issues have found alternatives to use.
- vii. George Industry has been paying out of pocket to continue forward to limit issues.
- viii. Patrick We have to follow our specs and there are other sources of SCMs that are options.
- ix. George/Mark Industry worked hard to make this problem seem smaller than it is.
- x. Patrick We are looking into more alternatives.
- xi. Bruce That's what the performance-based spec is trying to accomplish. We're looking long-term. We're trying to mitigate future short-falls.

- xii. Patrick We are looking into the spec and finding new SCMs as options. This can be added to the bin list and would be another WG effort.
- 6. DES Concrete Technology Committee
  - a. Crackless Bridge Deck and Approach Slabs
    - i. Patrick Not much has occurred outside of tracking projects.
       ACTION ITEM: Patrick get a list of bridge decks that have cracking
  - b. Corrosion Specification
    - i. Patrick We have a couple of engineers looking at the requirements. We brought the findings to our meeting and discussed the safety concerns and the performance spec to allow contractors to make their own mixes. They're taking another look at it and determined that this may be a PMPC effort. We will bring the revised specs to the CTG.
    - Keith There's no rule that doesn't allow industry to be involved in this. If there are industry members on the WG, this would be allowed.
       ACTION ITEM: Patrick See if industry members are interested in joining the Corrosion specification.
  - c. Report on SCMs Supply and ASTM/ACI
    - i. Patrick This is the 5-year look ahead. Dominika is working on this.
    - ii. Keith This is a 5-year update on the last one we did 4 years ago. That meeting was scheduled but has been rescheduled. The goal is to complete this by the end of the fiscal year.
  - d. 4x8 Cylinders
    - Patrick CPD 20-28 was posted in January. The revised standard spec should be coming out in April. You may see this on some project.
       There are still language changes to be made.
    - ii. Samir That is correct. This is in the works and should be updated soon.
    - iii. Patrick Can this be removed from the update?
    - iv. Chu What specification will this apply to?
    - v. Patrick Applies to CT 540
    - vi. Keith This also directs the aggregate sizes.
  - e. Mass Concrete
    - i. Patrick We're still verifying the accuracy of the cement content and other metrics. We're still collecting information from projects to determine if it will work across the board.
- 7. Review of Bin List/Scoping Documents
  - a. Keith The STGs should be updating the bin lists for the next fiscal year. Those end up on the larger bin list. As we complete one of the scoping

documents, we move onto the next item on the STG's bin list. Please stay on top of that. In a few months, we will ask for updated/prioritized bin lists. We will still have the lists for each STG.

#### ACTION ITEM: Kelly – get status updates from STGs for EC meeting.

- 8. Roundtable / Review Action Items / Next Meeting
  - a. Kuo-Wei We have a temporary SPE (Shaila Chowdhury) starting next Monday. She will be there until Sergio backfills the position (approximately 4 months).
  - b. Chu We are hiring a Structural Engineer position in FHWA, so if you can think of candidates, please recommend they apply.
  - c. Samir I may speak with Keith and Patrick offline regarding the CT 523.
  - d. Mark I had a contractor call me due to beams not aging in time, though the acceptance beams were done in time, to open to traffic in Central California.
    - i. Samir There was an issue on the way the beams were not protected after fabrication.
  - e. Mark There's a report from MIT that is starting to quantify the amount of CO<sup>2</sup> that concrete pavement is absorbing. This may be a good thing to look at for sustainability.

#### Action Items from 03/10/21:

- Look into to having presentation by OSU to be available to DES, SC, SC Concrete Committees, and CTG – <u>Patrick</u>
  - a. Patrick Sent e-mail request to Lance on 03/10. OSU is planning to deliver final presentation after all testing has been completed.
- 2. Get a list of bridge decks that have cracking Patrick
  - a. Patrick Reached out to SC Tech Team Chair for data on 03/11.
- 3. See if industry members are interested in joining the Corrosion specification <u>Patrick</u>
  - a. Patrick Contacted Nathan Forrest to see if any industry members are interested to assist on 03/11.
- 4. Get status updates from STGs for EC meeting <u>Kelly</u> 03/18/20 a. Kelly Done.

#### Action Items from 12/09/20:

1. Set up meeting with all stakeholders to discuss SCM, either short-term or other options – <u>Dominika</u> – January

#### Action Items from 11/10/20:

1. Send out the list of impacted (by flyash shortage) projects – <u>Patrick/Kelly</u> – 11/17/20 – **Ongoing** 

### Previous Action Items:

- 1. STGs to develop revised bin lists and submit to CTG STGs 8/21/20
- 2. Send revised PCP Phase III scoping document to CTG Dulce 6/10/20
- 3. Look at CT 523 data exchange availability Ken 6/19/20