

PMPC Sponsors/Steering Committee/ Executive Committee Meeting Minutes

Date: July 15, 2021

Time: 8:30 am-10:00 am

Location: Webex Meeting

Attendees: Shaila Chowdhury, Charley Rea, Sergio Aceves, Cory Binns, Ramon Hopkins, Nick Burmas, Raymond Tritt, Ruth Fernandes, Nina Choy, Brandon Milar, Douglas Mason, Tom Pyle, Kuo-Wei Lee, Keith Hoffman, Janice Benton, Jackie Wong

1. Introduction

- I. Meeting started with roll call and Shaila welcoming everyone to the Quarterly meeting.
 - a. Nina informed the group that SP&I is being rolled over to Structures Design as part of the Engineering Services reorganization.
 - b. Shaila went thru the agenda items.

2. Opening Comments (PMPC Sponsors, Steering Committee):

- I. Cory: Welcome everyone! Challenge the group to have 1st hybrid meeting with face to face meeting for the next meeting. At the last meetings, we touched on the on the Caltrans Strategic Plan and how it focuses on climate change. I want to see the changes for pushing recycling strategies.
- II. Janice: Want to let everyone know you will be seeing some new faces for the chief engineer and upper management as Director Toks is setting his management team. We appreciate the partnership with industry with the innovative strategies being presented.
- III. Sergio: Good morning everyone! Sustainability and climate change are two of things that are very important to the Department. While investigating adding recycled products to our materials and pavements, we still need to get the same or better performance for the pavement and life when using recycled products. Even though we struggle at times, we are accomplishing more, and we see a well-functioning committee.
- IV. Ramon: Lot of momentum in the committee with the collaboration with our industry partners. Appreciate the efforts of industry supporting us.
- V. Nick: Nothing gets implemented without industry partnership! It is beneficial to the department to develop pavement contracts on what is the hottest topic out there with industry.
- VI. Nina: Wanted to give a shout out in the collaboration of specifications with industry, seen in on the Portland Limestone Cement (PLC) specification and coordination with stakeholders. Division of Engineering Services is going through a reorganization to be more efficient and some people are being moved around.

3. Action Items:

Action item from 01/21/2021 meeting:

- I. Look into status of corrosion specification and workplan and provide update. (Kevin) *METS has been actively working with METS internal committees and the DES Concrete Tech committee on updating Section 90-1.02H Concrete in Corrosive Environments. Next step, to coordinate with PMPC and have a draft by the end of July that will then go to Structure Specifications to refine and coordinate with spec stakeholders. If we follow the publishing schedule, it's realistic for this to be ready to go to OCCS in January for the April 2022 publishing. Note, Section in 90-1.02H pertaining to the sulfate section (corrosive allowance) was updated and went to OCCS last week for the October 2021 publishing. Industry expressed concern that DES is not sufficiently incorporated into the PMPC process. They start on*

concrete specifications without going through the process of getting the concept approved, a scoping document approved, or creation of a work group with industry. The proposed corrosion specification is the latest instance.

a. Action Item. Cory will look into how to better and more quickly get DES involved in PMPC.

- II. Shailla and Doug to contact asset management regarding a presentation to the PMPC executive committee. (Doug/Shaila) *Completed*
- III. Cory recommended the EC have a conversation about the Strategic Plan. (Shailla) *Completed.*

4. PMPC Accomplishments – Asphalt Workgroup (Tom)

- I. Tom gave a presentation on the Asphalt Task Group's accomplishments covering in-place recycling, asphalt pavement smoothness, tack coats, statistical pay factor, California test method 125, Hamburg wheel track test, post plant gradation, recycled asphalt shingles and recycled asphalt pavement being used in HMA or RHMA mixes.
- II. Working groups are working on asphalt that last longer and reduces GHGs.
- III. Cory: I am asking about the smoothness specification; do we have a specification that meets expectations for construction and industry?
 - a. Tom: We set goals for the state at 60 inch/mile for deflection which represents a very smooth road. We didn't think it would be this fast to develop the specification, but we were very close with the last version.
 - b. Brandon: It was at the start of the formation of the PMPC and it was the first work product, the revised smoothness specification for asphalt and concrete. We looked at 2 years of construction data and we were close to right on for the equations for improvement. The process worked well. When we looked at the beginning profile to final road profile, we are seeing significant improvements to smoothness in pavement. We did tighten up some issues we found with areas of localized roughness.
 - c. Ray: Construction had some issues early on with the administration and understanding of the specification, but no issues lately.
- IV. Cory: Are we going to touch on the in-place recycling (IPR) in the pilot program? The evolution of the IPR, what are the next steps for this product as it improves or evolves.
 - a. Tom: We looked at Canada's process. We looked at two different approaches, emulsion, and foamed asphalt recycling. We are starting to look at the process and procedures for how to recycle in-place so we can learn how to do more of this type of strategy.
- V. Janice: Are you going to touch on getting pilot projects later in the presentations? Yes

5. PMPC Accomplishments – Concrete Workgroup (Keith and Kuo-Wei)

- I. Keith and Kuo-Wei gave a presentation on the major accomplishments of the Concrete Task group such as Portland Limestone Cement (PLC), Supplementary Cementitious Materials (SCM) 5-Year Look Ahead report, maturity method for opening traffic and compressive strength for pavement acceptance for concrete. PLC production uses less energy and produces less GHGs (10-12% average reduction) then ordinary Portland cement research found no performance issues with the modification.
- II. Charley: There were all big things for the concrete and cement industry. Just wanted to mention in your presentation that in your presentation you say cement production produces 5-8% of global CO₂, in California that number is 1.8% GHG for concrete.
- III. Janice: Talking about SCMs and supply, what other SCMs are available?
 - a. Keith: We are looking into blended SCMs and ASR equations for those. We have alternatives such as slag, natural pozzolans, and fly ash. Looking at imported sources for temporary or buried fly ash as possible alternatives.

IV. Charley: Natural pozzolans are a mined product and would be locally mined in California.

6. Pilot Project Update (Shaila & Tom)

- I. Shaila and Tom went through their presentation on promoting innovation through pilot projects. Pilot strategies help us gather an understanding of what works and what doesn't work and helps develop statewide guidance based on those lessons learned. We have a big push for pilot projects this year and we have been working with districts statewide trying to implement these critical pilot projects. We have had some success but a lot of work ahead of us on this. Recognizing the importance of piloting new strategies, the Maintenance Executive Board in March approved a decision document on a pilot program within the HM program allowing us to set aside \$8 million dollars off the top of the HM1 program for projects utilizing pilot strategies. New innovative strategies pose some risks for failure and can sometimes cost more money in the beginning of their use. This set aside funding helps incentivize districts to try out new strategies and assists the pavement program to work with districts to implement and monitor new strategies. Tom went through the pilot project they are tracking the performance on and the work products pilots still needed for evaluation.
- II. Charley: Been disappointing from the industry side, particularly since almost none of the pilot projects selected so far from the \$8 million has been for PMPC projects; almost all the money has gone to other activities. This is particularly a concern since we have been alerting Caltrans for at least a year to the lack of pilot projects for PMPC projects, and then were told the \$8 million would be dedicated to PMPC projects. This is particularly a concern since some of the PMPC projects, such as for high RAP and RAS, offer the greatest sustainability benefits, and progress on completing these specifications is long overdue. We have been waiting a year and a half for some of the work product to be incorporated into a project as a pilot such as the Up to 40% RAP and RAS pilots. We still have no pilots for RAP work product, and this has huge potential for a reduction in GHGs and costs. We need help to get the pilot projects for the work products taken on and programmed so we can properly evaluate the specifications we are developing. Industry asked that the Sponsors look into how we can get pilot projects initiated for PMPC projects, particularly High RAP and RAS.
- III. Sergio: Points well taken. This is an opportunity to work with industry to make change through change orders. Having districts take on new specifications has always been a struggle.
- IV. Brandon: Change order is quickest way to do it. Pilot projects are looking for information through a lot of testing. Asset management is an issue, risk of failure to district and for them to not meet their performance target. We need help with these important tasks.
- V. Sergio: We do have the \$8 million dollars incentive on the HM side, HM does not involve asset management.
- VI. Janice: We get the message; asset management is an issue with getting pilots to get district commitment.
- VII. Brandon: If industry can help with the effort in the District, we will.
- VIII. Cory: Any criteria for a 40% RAP project? If not **Action Item: Develop criteria for pilot project selection for 40% RAP in HMA.**

7. Industry Update

- I. Ran out of time, some industry items came out in last topic.

8. Open Discussion (ALL)

- I. Not applicable, ran out of time.

9. Decisions Made

- I. None

10. Action Items.

- I. Cory will look into how to better and more quickly get DES involved in PMPC. (Cory)

II. Develop criteria for pilot project selection for 40% RAP in HMA. (Tom)

Next Meeting scheduled for Oct 21, 2021