

PMPC Sponsors/Steering Committee/ Executive Committee (EC) Meeting Minutes

Date: January 20, 2022

Time: 9:00 am-10:00 am

Location: Webex Meeting

Attendees: Tom Pyle, Charley Rea, Sergio Aceves, Cory Binns, Nick Burmas, Dara Wheeler, Raymond Tritt, Nabeelah Abi-Rached, Tom Ostrom, Brandon Milar, Tim Greutert, Gudmund Setberg, Greg Berry, Douglas Mason

1. Introduction

- I. Meeting started with introductions of Sponsors, Steering Committee, and EC. Tom welcomed everyone to the Quarterly meeting.
 - a. Tom reviewed the agenda items with the group and explained change to 1-hour meeting.
 - b. Tom said the PMPC is working as a well-oiled machine due to SOP.

2. Action Items from 10/21/2021:

- I. Make sure PMPC process engages at all levels, sub task group (STG), task group (TG), and EC for Specification Development in Structures. (All) EC feels this action item is completed.

3. Pilot Project Update (Tom)

- I. Tom gave an update on the status of pilot projects, efforts to date with PDAC discussions with district directors, how many pilot projects to date. the \$8 million dollar innovation fund, how important the pilot projects are to the development of specifications/test methods, and how we need district participation and support. Next steps are to continue to work with districts and stakeholders to get additional pilot projects, develop brief sheets for the sponsors to share the successes of the PMPC to encourage more active district participation. Tom thanked Charley for challenging the PMPC to do more.
- II. Nabeelah: On the pilot projects, what performance metrics are we sharing with districts to where we are with implementing the specification.
- III. Tom: Each case is a specification or a test method development, each work product will have a final report with lessons learned. Meeting with district maintenance and material engineers.
- IV. Nabeelah: How are we breaking down the silos with understanding the changes in the specifications?
- V. Tom: PMPC is made up of METS, Pavement and Construction and each group is sharing information with designers, construction staff, and METS.
- VI. Sergio: The Executive Committee was meeting with districts one on one with the Project Development and Construction managers to discuss the importance of PMPC pilot projects. I agree with Nabeelah, we need to continue with the district one on ones to state and share our PMPC goals.
- VII. Cory: We also need to share our goals with Planning, Safety and others to let them know and get the message out there, what the PMPC is trying to do, not just the technical aspect of what we do but why it is important to the department.
- VIII. Brandon: Success of the PMPC and innovation requires collaboration between Caltrans and Industry. If we want to break down the silos, we need active district participation in the PMPC. Travel and resources have been cut from districts and district participation is limited due to limited overhead resources in district.

- IX. Cory: Can you share more on district involvement with the PMPC?
 - X. Tom: We met with districts in our Roadshows with Project Delivery and Maintenance Deputies and their staff. We still have a couple districts to visit and revisit districts we have already visited. Our goal is how to get the districts more involved. We will circle back with districts on the status of the pilot projects in their district.
 - XI. Tom O: We need to have some internal discussions with Steering Committee and Executive Committee on the coordination.
 - XII. Nabeelah: With district resourcing, we are under running resources. So not sure why districts cannot participate.
 - XIII. Sergio: The gist is we need district involvement understanding the climate action direction the department is taking with our specifications.
4. PMPC Work Products (Brandon/Charley)
- I. PMPC is looking into sustainability on the asphalt side with work products like recycled asphalt pavement (RAP) and recycled asphalt shingles (RAS) being added to hot mix asphalt, using existing materials in roadways or items destined for landfills in our paving. This reduces aggregate demand on the dwindling California aggregate sources. As you might be aware or maybe not, it is quite difficult to get permits for aggregate mining in the state of California. If we don't use more recycling of pavements, industry aggregate suppliers will eventually have to import all aggregate from outside of California, increasing GHGs and costs depending on its method of transportation to California.
 - II. One of the asphalt items coming up in the PMPC is balanced mix design. As we increase the amount of reclaimed asphalt pavement (RAP), recycled asphalt shingle (RAS), recycled plastic, recycling agents, and/or others nontraditional additives, balance mix design would focus on a performance based hot mix asphalt design mix accommodating recycled materials.
 - III. On the concrete side, the Foundation sub task group (STG) is working on some practical items for changes in testing facilities. Concrete STG has been working on how to open concrete to traffic faster by testing and ways of modernizing concrete overlays. The MQ&A STG is also looking into sustainability and making sure GHG reduction are getting addressed, the big one for them is the Portland Limestone Cement (PLC) or Type 1L cements. The group is now looking into blended supplementary cementitious materials (SCMs), performance-based alkali silica reactivity (ASR), and some smaller technical things like Data Interchange for Materials Engineering (DIME). Concrete is looking at a couple decision documents for neoprene caps and use of lime/cement for drying up subgrade as an alternative.
 - IV. Question came up about PLC and adding limestone to the mix. Tom Ostrom said the Executive group were briefed on Senate Bill 596 on the implementation of type 1L cements.
 - V. Tim: There are 9 cement plants that provide cement in California. We are working with the plants to transition. Having some issues with supply chain. PLC is a further reduction in GHGs since we are already reduced cement content by using fly ash and SCMs.
 - VI. Nebeelah: We need to measure our impacts! Need to establish a baseline and what we expect to see with our changes.
 - VII. Tim: I like your point on tracking PLC, don't have a good source on how to track. DIME might help in this area to get data.
5. PMPC How We Operate
- I. Tim gave a short presentation on how the PMPC operates, business processes, how we strive to be transparent by placing PMPC documents (Standard Operating Procedures, minutes, scoping & decision documents) on the PMPC internet website as a trail of bread crumbs for our successors.
6. Open Discussion (ALL)

- I. Cory: What else is out there on the horizon, different materials to recycle and use, like experimentation with plastics and other things we should be considering?
 - II. Brandon: As engineers we solve problems, environmental aspect of our business is front and center in everything we look at. Starting to look at equity issue with air quality requirements with fugitive dust. It could be a process we use or just need to use our toolboxes differently.
 - ‡ Charley: The Concrete Task Group still needs to address specifications to allow use of recycled concrete aggregate in concrete and performance specifications for concrete. On the asphalt side, the plastic in HMA pilot paving project in summer of 2020 wasn't a PMPC initiative, but something Caltrans undertook on their own. It is the type of specification change that should go through the PMPC before doing pilot projects.
 - II. Cory: Just worried we are not looking into the future with materials.
 - III. Tim: We work with FHWA, University of California Pavement Research Center, and Division of Research, Innovation and System Information on future items or materials being looked at.
 - IV. Tom O: Limestone research was hand in hand research and development with Oregon State University to develop the specification based on their testing and research of the product.
 - V. Tom P: Pavement started to put together a 1, 3, 5, and 10-year roadmap for the future of Pavement. We are going and participating to industry meetings/conference and working with industry and academia on research items.
 - VI. Sergio: PMPC's bin lists is what is coming down the pipeline, not years into the future. Can we look at how we develop the bin list and put a lens on the bin list to get us where we want to go for the long-term goal.
 - VII. Cory: I prefer more time for the meeting versus the shortened version and echo Sergio's comments.
7. Decisions Made
 - I. None
 8. Action Items.
 - I. None

Next Meeting scheduled for April 21, 2022