

PMPC Materials and QA STG Meeting Minutes

Date: Wednesday – December 12, 2019

Time: 1:30 PM – 3:00 PM

Location: OSM Building, Rm 514

Phone Bridge: (866) 676-8836 – Code: 6275887

Facilitator: Jacquelyn Wong (CT Chair)

Attendees: Robert Hightower (Ind), Jacquelyn Wong (CT), David Lim (CT), Nathan Forrest (Ind), Spencer Adams (CT, Scribe), Deepak Maskey (CT), Brett Soldano (CT), Roberte Foley (Ind)*

*by phone

1. Introduction (Phone*)

Robert Hightower (Ind)	Jacquelyn Wong (CT)	Brett Soldano (CT)
Roberte Foley (Ind) *	David Lim (CT)	Nathan Forrest (Ind))
Spencer Adams (CT, Secretary)	Deepak Maskey (CT)	

2. Scoping Document Update/Briefing by WG Chairs

Use 4x8 cylinders for compressive strength test (Jackie for Patrick)

- Patrick compiled collected QA data on 4x8 and 6x12 cylinder
- 52 samples (52 sets of cylinder specimens were collected, set equals 2-6x12 and 3-4x8)
- 4x8 cylinders always break lower, 5.41% difference measured after throwing out 2 outliers
- Will need to update specs where 6x12 are specified, pursuing July 2020 RSS for change and incorporation
- Brought up issue of going 4x8 on QC and Caltrans being 6x12, needs to be consistent
- Tell Patrick he needs to go through Jeff's group for specification change, SSRD

Concrete Mix Design Naming System (Brett)

- Assigned to a person in Jeff's spec development group to process already
- Aiming for next RSS posting July 2020
- **Send the spec changes to Jackie (Brett Soldano)**
- Industry under impression unique number must be printed on ticket (Robert Hightower)
 - Nothing in spec requiring unique mix number on actual batch ticket
 - For example, Cemex uses mixes regionally so mix numbers need to have the batch plant number making them unique. (RF)
 - Cemex may change materials and resubmit the same mix number with changed materials.
 - Cemex doesn't want to have to create a new mix number every time the materials are changed due to material shortages, if they perform equivalent to the original mix.
 - Mix number doesn't have to change, but the sub-identifier has to be unique (e.g. Mix Version)
- Spec was written that if you change a mix material, then the mix design is different.
- Main goal with this project is for DIME is to collect unique numbers and have DIME track it so it can be reviewed for individual materials and track down common materials between mixes.

- Industry to look at language and how it is written to see how it should be handled for regions with material shortages. how to create a changed version for DIME/Caltrans
- Pulled up spec section revision proposed under 90-1.01C(b) Mix Design
- CommandQC already has the ability to track all material changes and tracks versions, batches and batch weights down to each batch.
- Next step, SSRD will route for comments.

Recycled Crushed Concrete Aggregate for use in Cast In-Place Concrete Pavement (Deepak)

- Waiting for “Go-Ahead” from TG
- Report was drafted in Working Group, based on CP2C Center comments
- Few Recommendations
 - Aggregate replacement (30%+) Course
 - Use in lower lift of 2 lift pavement
- Not compromising quality using RCA
 - Need to go into detail in specs for how much to use and how to use it.
- Currently only using “Known” concrete for RCA to get going because we already know the quality to get implemented and open availability to other sources later.
- “Known” means looking up what aggregate was used in the RCA originally
- Treating RCA as always reactive unless tested to determine otherwise so for fly ash, assume 25% fly-ash replacement.

Flex Beam Test Method (CT 523/ASTM C78) (Jackie)

- Will follow ASTM C78 and C31
- Spec change and test method change aligned to implement in April 2020
- Responsibility of initial curing requirements placed on contractor.
- Change order language available to change active contracts ahead of April
- CCO spec language approved by Feds and going through construction for CPD posting
- CPD can change active contracts with no cost change order.
 - With agreement between Contractor and R.E.

3. Open discussion

PMPC Bin List (Jackie)

- 2 Items
 - Type 1L Research
 - EC wanted to see a short scoping document
 - Main purpose is to implement of research findings
 - Allow Blended SCMs
- We still have 4 active items in our subtask group

April RSS

- METS is not a mandatory concurrence stakeholder for Section 40
- Some potential new items to note, Flex Beams change to 3 beams reason supposedly for purpose of determining a standard deviation
 - FHWA supporting specs with percent within limits methodology
 - Material producers typically want more beams for better averages

- Regarding the proposed language for the flex beam curing environment proposed for Section 40 (based off Michigan DOT spec), some language is already in ASTMs so is redundant to restate in specification

SCM Shortage

- Do we need to further address the needs of projects in California? Navajo plant has officially shut down so 500,000 tons of fly ash removed from supply chain.
- Caltrans allows multiple SCMs so these other options are potentially the next steps
- Several new products have been added to the AML e.g. new natural pozzolans, non-domestic fly ash, metakaolin, etc.

ACTION ITEMS:

1. **Send the mix design naming spec changes to Jackie to distribute (Brett Soldano)**

2020 Meetings: We will continue to set our quarterly meeting to coincide with TG. Either day before or week before.