

Virginia Ready Mixed Concrete Association

Concrete Technical Committee Meeting

July 18, 2018

Meeting Minutes:

The meeting was called to order by George Kuhn, Chairman at 10:00 am.

After a review of the Anti-Trust statement, self-introductions of the meeting attendees were made.

Those present were:

George Kuhn	Teck Chua	Marie Derby
Andy Faulconer	Kevin Goode	Derek Imperial
Kisia Kimmons	Bob Neal	Michael Robinson
Jennifer Greenwood	David van Wyhe	Brian Sheffler
John Lockett	Mitch Crenshaw	

A review of the April 25, 2018 meeting minutes was skipped in order to discuss future Coop meetings with VDOT. The following comments re: COOP changes were discussed:

- Future meetings will be changed to include designated members, from VDOT and VRMCA, only.
- This reduction in the size of participants returns the COOP meeting to its original format.
- A review of the history of the Technical Committee / COOP meetings was discussed.
- The Chair of the VRMCA Technical Committee must notify the VRMCA Board of Directors who will be the designated participants and the Board will approve those nominated.
- George Kuhn suggested that VRMCA should be represented by five people, including three producer members and two associate members.
- A motion was made to approve the five member COOP committee.
 - An amendment was suggested by Darrell Wilson that the Chair of the Technical Committee should be a member of the COOP committee.
 - The amended motion was seconded by Andy Faulconer and was approved by the committee.
- The following committee members were selected to participate in today's COOP meeting, including:
 George Kuhn, Committee Chair and Chandler Concrete

Teck Chua, Vulcan Materials
David van Wyhe, Lynchburg Ready-Mix
Mitch Crenshaw, Luck Stone Corp.
Brian Sheffler, GRT / MAPEI

Andy Faulconer voiced concern that the meeting agenda and discussions are dominated by VDOT items. A reasonable amount of time should be dedicated to commercial project specifications, which would



attract participation from other Association members whom are not usually present. "How do we incorporate "Industry related issues" into our meeting agenda?"

Darrell Wilson suggested that meeting notifications, via email, should be distributed well in advance of the meeting encouraging participation.

Due to time constraints, Bob Neal discussed the Technical Bulletin's and provided an update for each one. The following Bulletins were discussed:

Technical Bulletin 1: Sampling Ready Mixed Concrete, Where and Why

Technical Bulletin 2: Interpreting Compressive Strength Test Results of Concrete

Technical Bulletin 3: Code Requirements for Curing of Test Cylinders for Acceptance Strength Tests

Technical Bulletin 4: Code Requirements for Concrete Test Cylinder Molds
Technical Bulletin 5: Within-Test Strength Variability, How Much is Too Much

Motion was approved to accept the updates to TB 1-5 inclusive of the corrections suggested by Michael Robinson and George Boykin.

Technical Bulletin 6: Quick Reference Guide for Residential Concrete Construction

- In a discussion of the information provided in the Table under Section II: Concrete Quality, the committee agreed that 4000 psi concrete should be recommended for driveways, walkways, porches, carport slabs, and steps exposed to weather and garage floor slabs.
- It was suggested by Derek Imperial that Bulletin 6 should reference the use of micro-fiber reinforcement. Andy Faulconer supported that suggestion and urged the committee to develop language regarding the use of micro-fiber reinforcement.
- Derek and Andy will develop such language and suggest where that information should be placed in Bulletin 6. The update Bulletin will be distributed via email, to the committee members for review and approval with the plan to include all 6 TBs in the August 2018 newsletter publication.

Technical Bulletin 7: Bob Neal is working on this document and will present it to the group at the October 2018 meeting.

Also distributed for review was a document published by Bob Neal - Review of Codes, Specifications, and Guides Related to Concrete Requirements for Freezing and Thawing Exposure. A Weathering Probability Map for Concrete, published by the International Code Council, was also distributed to the committee.

VDOT Items (positions to take/recommend to the VDOT COOP Group):

TL 27's - Option 1

Option 2 & 3 – Mix Designs

Option 4 – When there is no 3-point curve or field performance data.

Examples of unusual mixes, such as SCC, Pervious & Shotcrete concrete were discussed. How can mixes stay approved over time?

Suggestions were made to update VDOT language to 2018 standards.

The consensus of the committee is to recommend to VDOT how the Industry would like to handle mix approvals over time.



TL 28's – If producers are able to print weights on batch tickets then a TL-28B (revised form without batch weights) could be completed.

This item will be discussed in the VDOT COOP meeting today.

Low Cracking – SRA Dosage Rates

- The maximum shrinkage allowed is 0.035% when tested in accordance with ASTM C157.
- With appropriate documentation SRA's can be used at a fixed dosage rate, such as 1.5 gals. per cubic yard.
- The committee will suggest to VDOT that SRA's should be placed on the Qualified Products
 List
- It was suggested that SRA's primary benefit is in the early curing phase, replacing bleed water loss.
- If a SRA is used at the 1.5 gallon per cubic yard dosage rate then ASTM C157 shrinkage testing should not be required.

-200 Fines (allowing increased 200's for Option 2 & 3 mixes) -

• The committee will push VDOT to allow for an increase in -200 fines for Option 2 & 3 mixes.

Retarder Set Time Evaluation -

• VDOT to provide testing criteria to validate performance of set retarding admixtures.

Admixture Dispensing Systems -

- A discussion to incorporate current direct dispensing technology which would not require the use of an admixture bottle system.
- Recommendation to revise language to state compliance with NRMCA Plant Certification requirements for admixtures.

ACI 318 Acceptance Criteria -

• It was suggested that VDOT use the acceptance language in ACI 318 when reviewing the acceptance of compressive strength results that are lower than f'_c .

Electronic Delivery Tickets -

• The use of electronic delivery tickets was discussed. If it is available, could this issue be part of a discussion with the VDOT Innovation Committee?

VRMCA Update:

Jennifer Greenwood discussed the following updates:

Updates to the VRMCA web site.



- Committee meeting minutes will be available on the back/member only side of the web site. There is a link to access the Technical Bulletins already on the front/public side
- VRMCA is ready to create videos. Jennifer needs the who, what, when, where and why information to start the process of creating videos. What information does the Technical Committee want to produce?
- The recent article on Water Cement Ratio's was one of the mostly read articles.
- Another suggestion is Who Owns This Concrete?
- A meeting with the Chairs of the Advisory Council's is scheduled for August 10 one topic of discussion will be working in concert with the other Association committees.

Future Direction of the Committee:

Michael Robinson announced that the ICC Code has scheduled public meetings on October 18th in Washington, D.C. He encouraged committee members to attend this meeting. Registration is available at iccsafe.org.

Michael also discussed a proposal to allow wood structures to be built up to 18 stories.

Future Meeting Dates:

October 24, 2018 January 23rd, 2019 (followed by a VDOT COOP meeting)

The meeting was adjourned at 12:06 pm.