WACA/WSDOT Meeting Agenda
For Wednesday, June 21, 2023

Day/Time: Wednesday, June 21, 2023, on Microsoft Teams, 10:00 AM – 12:00 PM.

In Attendance:

Henderson, Donny
Tomlinson, Mike (American Rock Products)
Muhich, Keith T
Frye, Sterling R (Redmond) USA
Norton, Patrick
Johnson, Matt
Diego Coca
Dave Germer
McKernan, Dan
Dafoe, Katharine
Davis, Steve
Hill, Kentin
Bender, Riley R.
Hammond, Mike
Waligorski, Kevin
Sears, Josh
Bower, Nate
See, Peter
Carlie, Karen
LaFevers, Elizabeth A (Vancouver) USA
Mizumori, Anthony
Emerick, John C.
Legaspi, Erica
Bruce (Guest)
Spencer Kull
Dave Gent - WAPA (Guest)
Ian
Michael Gardner
Liniger, Michael (American Rock Products)
Vincent, Ryan
Rob Shogren Lafarge (Guest)
Jason Stubna
Moore, Dean
Washington, Danika
McIver, Michael
Carl Labbe
Balick, Pete J (Seattle) USA

Next WACA Meeting Date: *Wednesday, September 6, 2023, on Microsoft Teams, 10:00 AM – 12:00 PM*

Future WACA Meeting Dates: *Wednesday, December 6, 2023, on Microsoft Teams, 10:00 AM – 12:00 PM*

Meeting Minutes:
The link below will take you to past meeting minutes and show upcoming WACA meeting dates.

https://partners.wsdot-sites.com/washington-aggregates-concrete-association/

New Business topics:

- **Cement / CAPS Program Update: Katie Dafoe/Steve Davis**
  - Discussion on the status of the CAPs program. Discuss any issues and/or challenges.
  - Katie – Suggestion: when sending in a no production report, please be very specific on what cement or fly ash it is for
    - Eg: Received a no production report for "CalPortland Asia I/II" we have so many different cements on the QPL, if you can be very specific for which location the sample is for, it makes it easier.
  - As far as monthly certs we're missing for the 1st quarter through April, I did not receive a February Cert from ENX Genesee Class F, Lafarge NewCem+ March cert, received one

that may be for April, but unsure, Grade 100 Lafarge NewCem April Cert, if you have those, it would be appreciated if you can get that in

- Physical samples: I have not received 2 for 1st quarter- Ash Grove Clancy Duraslag, Ash Grove Clancy Type III Cement. Did receive an email on the Ash Grove Clancy Type III last month that it should arrive "next week," but we did not receive it. If you have those or information for why they weren't submitted, please let me know.

- **E-Ticketing, E-Construction or Environmental Permit Concerns with using RCA in Construction: Kevin Waligorski / Dan McKernan**

  Questions from Industry:

  - Haul Hub progress and adoption – Introduction criteria and timeline.
  - Follow up on Vancouver's E-ticketing meeting.

  - Kevin: been point on e-ticketing, haven't made too much progress. Hoping to get a portal for this season. We had a meeting with FHWA in January, Bruce was there supporting the industry. We're leaning in the portal direction, but whatever process we use to acquire the system, we use our process. This was added to the RFP for phase 3 of e-construction tied in with Unifier. When moved to Phase 2 of the RFP, it hit a wall. It's spinning its wheels being tied to that, so we're continuing on with the process we're using to date, in line with the Std Spec. We're not there yet for the portal. We're in the RFP process to get a portal system on board. Suppliers are using different systems. We'll accept it as long as the information needed is provided. The portal is as much for us as the contractor, we just want consistency. We're proceeding as is, stay tuned as we work on kinks and process of e-ticketing and the portal system.
  - Bruce: FHWA meeting was very good. It was a collection of other states to help the DOT's process moving forward. Some states are ahead and very informed. Kevin, going forward, being stuck may not be a bad idea. With new direction and elements, is there a way to do an introductory webinar for the direction the DOT is considering/looking at so we can be more prepared when changes are implemented? I know we'll have an intro period, but is there anything to "grease the skid" so to speak to keep everyone on pace when you get ready to go?
  - Kevin: we've been looking at Haul Hub, they go to the supplier and take their data from their system and reformat to put it into the portal as we want to see it. I don't expect significant changes from the suppliers assuming they're already using an e-ticketing system. Haul hub started more on the paving and aggregate side, and are looking to implement the concrete side and be more uniform. As you know, the pause may not be a bad thing as they evolve their system. We may end up with a different supplier for the portal system anyway, as the process continues to work. We were looking at haul hub, but that may change. Appreciate your comments, when we get to the point of rolling out, we'll look into training and information sessions for the suppliers.
  - Bruce: We'll be working with haul hub moving forward. If you anticipate a change in a vendor portal, let us know so we can turn on direction if need be
  - Kevin: I don't anticipate changing, but we've been spinning wheels with the Phase 2 e-Construction larger RFP packages. One of the states at FHWA selected a program and had to backtrack their RFP process since they didn't do that to start with, even though they were well down the road of using an e-ticketing system, it wasn't haul hub, but we don't want to have to rework like that.

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Discussion with Department of Ecology on water quality and WSDOT progress on adoption and timeline.

Utilize more recycled concrete aggregate… one of the elements to impact, there's a cost and environmental impact (permitting). We're working with ecology to clarify the requirements when RCA is used, primarily with storm water and high pH water. We've been working with them periodically every few months. Getting to the point where we're in review of tracking an ongoing agreements document that's been itemizing some of the discussions. We'd like to get through this review on both sides and send out to comment, including to WACA, Region, HQ, and environmental staff. We're looking to release documents we've been working on before releasing anything that's finalized as far as documents that would supplement, specifically tying with construction stormwater permits.

- Bruce: It is a lot harder to get words off the paper than put them on. We have had this dance with ecology we've been doing for years. They have been described by the DOT as an obstructionist to recycling materials. I'm pretty familiar with the direction they're probably going to go with. You're right, this is construction stormwater permit. It's technically the contractor's permit, but WSDOT will have to manage this. Any way we can get a pre-draft to review so we can give some sage wisdom and industry experience on where we are and what we've done, etc. and be a part of the team, so when you do go for review, we don't have to do a back-and-forth tug o war on good and bad idea. We have a largely accepted general document, but we frankly don't view ecology as supportive in this effort
- Kevin: ecology has been good to work with on this project. Their main concern is high pH water that leads to surface water. As long as we manage water on site or identify the best management practices, they've been pretty open – infiltration, creating oxide treatment, etc. I wouldn't call them an obstructionist in this process. I suspect to get something out there.
- Bruce: If you're getting to a point of compliance definition, that makes sense. We've been struggling with them forever. They just want to do it at the bottom of the pile, it's the point of where the water leaves the site. Our experience has been frustrating and would love to have us help you come up with a really workable policy going forward and get the contractors working with you before it's too late and go all in the same direction and do all the good things ecology wants.
- Kevin: I believe we're in alignment. Their main concern is where it could potentially leave the site. They've been open to discussion. We're looking just on the construction site, we're not talking sand and gravel permits at the recycler facility. This is what we consider short term construction activities- from spreading RCA on the side and compacting, water used to compact, and make sure it's conditionally authorized use of water as long as it's not ponding and leaving the site, processing RCA on site, quantities of RCA, etc. We're just focusing on construction site use, and not at a recycler.

- **Type 1L Cements in Bridge Deck Overlays & Synthetic Fiber Reinforced Bridge Deck Concrete Update:**
  - Update by Anthony Mizumori.
  - Type IL Cements in Bridge Deck Overlays – Those should all be in the works. That issue will be closed. It looks like some versions of our overlay spec have been shared with the group in the following agenda item, so that Type IL should be included in that outgoing 24 book.

- Synthetic Fiber – 2 projects are under construction. A 3rd – SR9 Snohomish River Bridge – will include the synthetic fiber spec for a portion of the bridge deck as well. We've identified a 4th project – North Spokane Corridor US 395 Phase 3 ties into I-90. We have two 1500' long viaducts that are looking to include synthetic reinforced fiber in the bridge deck in that spec. This project could be one where we allow Fiber manufacturer's to qualify their fiber in appropriate dose ahead of time, so it can be included almost as an admixture rather than going through the full slew of testing on the mix. We want to see that if a fiber product and dose were approved by the fiber supplier, that we'd be getting similar results in the actual mix. I could see us possibly requiring testing on the actual mix for informational purposes. That wouldn't necessarily hold up the mix design, but it would provide useful data to us to validate the assumption that if we qualify fibers and doses, that potentially becomes a QPL item, we still see the same performance in the actual mixes with fiber included. The tests we're specifically looking at is ASTM C109, the flexural test or residual strength. If we move forward with the 4th project with a newer project, I'd look to share the special provision with the group in a future meeting with this group for feedback
- Still no actual bridge decks constructed, but looking to start doing a test on Purdy Creek SR-16
- Donny: I can get the special provision to Bruce prior to the next meeting to have feedback ahead of the next meeting
- Ad date for the 4th project in Spokane is early next year, will have time to develop this and an appropriate review.

- **Modified Concrete Overlay Spec Updates. On April 10th an email was sent for industry review of the proposed specification changes listed below. We did not receive any feedback and these changes have moved forward for implementation on 4/21/23.**

  - 6-21 Microsilica and Fly Ash Modified Concrete (new spec)
  - 6-22 Latex Modified Concrete Overlay (new spec)
  - 2-09 Structural Excavation (Update: Lean Concrete Changes)
  - 6-02 Concrete Structures (Update: Lean Concrete Changes)
  - 6-16 Soldier Pile and Soldier Pile Tieback Walls (Update: Lean Concrete Changes)
  - 6-20 Buried Structures (Update: Lean Concrete Changes)
  - 7-08 General Pipe Installation Requirements (Review)
  - 8-20 Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical (Update: Lean Concrete Changes)

- **Recycled Concrete Aggregates with MSE Walls: Dan McKernan Update**
  - I don't know where using RCA would be precluded from our spec unless it's going below the ordinary high water mark of the surface water from our state. All materials in section 9, we allow 100% RCA in there. I'm not sure what would prevent use of RCA according to our spec. Has this been denied before when submitted on a RAM?
    - Sterling Frye: yes, it has been denied when submitted on RAMs in the past. It was brought up in the first place because it was a product being rejected from Heidleberg Materials. For projects with MSE walls, should I forward the denied

submittal for approval so it actually gets reviewed? How should we move forward?

- Dan: is there a basis for denial? In the spec book we all 100% RCA below the ordinary high water mark
- Kevin Waligorski: 9-03.14(4) excludes recycled materials such as concrete rubble. It might have something to do with what type of reinforcement is being used. This may be where it's hung up?
- Bruce: Marco was working on this as well. There was a question about mechanical fastening systems with corrosion. There are other structural fastening systems that can be used by the contractor that may not have long term corrosion issues. If there's maybe a way to support using that as an alternative to move this forward a little bit.
- Kevin: There's pH requirements for geosynthetic or metallic reinforcement requirements. I'm wondering if that's where it's getting hung up?
- Bruce: Maybe there's a workaround
- Donny: Will look back at past minutes to see where Marco left off and send over to Kevin
- Anthony Mizumori: some of our MSE walls have composite reinforcement instead of metallic reinforcement, I wonder if those could be candidates. I would defer to Monique Pawelka, our wall specialist, if we go down that road.
- Pat: About the RAM process. If you have any RAMs on this subject, please send them to myself and Donny. The RAM process itself, the Construction Manual talks about proper processing of RAMs. The PEO cannot approve their own RAM and send it to the QA Materials section. Once the RAM engineer does not allow/rejects a material, to override the RAM, it must come back through the RAM engineer. Somebody from WSDOT cannot override a coded RAM from our section. If you are in question of the coding of a RAM, work through the PEO administering the process to expedite through the RAM engineer and myself, Pat Norton, of which I am the supervisor, and then Donny is our supervisor. If there's ever a question, first go through the PEO, then to us if you feel you're not getting resolution through the PEO. First, reach out to the PEO administering the contract, and then reach out to the RAM Engineer and CC myself and Donny. We'll make sure we'll do our due diligence and follow through. Always first go through the PEO administering the contract.

Additional Topics:

- **Standard Specifications 9-23.12 Natural Pozzolan:**
- **Naturally Occurring Asbestos in Aggregates:**
- **Discussion on Global Warming Potentials (GWPs) for Portland Cement:**
  - No updates currently.

Old Business:

The topics listed below will be removed from future meeting agendas unless there needs to be additional discussion.

- Proposed Standard Specifications Update: 5-05.3(1) Concrete Mix Design for Paving
- Proposed Standard Specifications Update: 6-02.3(A) Contractor Mix Design

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- Proposed Standard Specifications Update: 8-07.3(1) Aggregates and Proportioning / Precast Concrete Curb: Donny Henderson
- Proposed: Pea Gravel Approval: Donny Henderson
- Type I/II Cements no longer being produced: General Discussion with Industry on what the plan is moving forward regarding Type I/II cements.
- Question: Is there any interest from industry regarding joint QPL evaluations of Barged cementitious material? This topic was discussed briefly in the last WACA meeting.

Donny: Any other topics to put on for the next meeting, comments, or anything to address?

Bruce: Additional comments – want to know more about NOA Asbestos in Aggregates. We're working on that in another area. I'd like to make sure any discussions necessary are connected so we don't go off into two different directions. Any background information, please send to me, that would be most appreciated.

Update on GWP for Portland Cement – we're working with the DOT and WAPA on FHWA climate change where we're going to be evaluating concrete in asphalt paving projects over the next 12 months or so as a grant from FHWA that DOT and Minnesota DOT has received. It's not just about materials, it's about the whole construction process – fuel consumption, time, all different things contributing to the GWP of the project/process. It's not a complicated process, but it should be informative, FHWA will take this to learn more going forward. Here's the challenge, the asphalt industry has 52 projects to pick from instantly to choose for the study. We, however, don't have that many concrete paving projects going on. We have a concreate paving project going on in Idaho, just at the state line area, where we will be working with CRH because the materials, contractors, and processes will be similar. We're trying to find one with SDOT, they are anxious to participate in this. They have one project on the table that won't come up early enough for the process, another project underway – a rapid line out of Madison that has some project issues that will make it difficult to incorporate. So if any of you know of an upcoming project coming up with concrete paving around the state, we would love to know about it ASAP. They're really looking for highway paving since it's FHWA. We want more than one representative concrete project in this thing. I think Donny and his crew should take it up to the upper echelons that we need more concrete paving in the state of Washington.

Kevin: I've been tied to helping with the WSDOT side on the climate challenge and working with WAPA as well and outlining the 4 jobs being studied. I knew about working with City of Seattle and Spokane, but an issue is the portable plants. They can't get the EPD analysis of a portable plant. A commercial source is something they're looking for as well, but you're right, there aren't many projects to choose from right now.

Rob Shogren, Lafarge: What's the change with SS 9-23.12 Natural Pozzolan? Would be great if they opened up to different types like Class N, on the additional topics.

Donny: I haven't had an opportunity to get into that for anymore additional information, that's something I'm keeping on here because we need to get back to it. No real update on my end for that at this point.

Rob: Just a general topic and nothing to change at this point?

Donny: Yes, just something we've talked about in past meetings and want to keep it on the radar.

Sterling Frye: I went back to 2020 WSDOT Annual Report. There's a portion in there close to the conclusion that brings up an RCA working group. Is that this group, or is there an actual RCA working group outside of this meeting?

Bruce: That may be the working group we put together with Mike Tomlinson, Greg McKinnon, Jim Bernet, myself, Rob Molohon, Garrett, and Dave Jones initially. That was to put together the 3 tier system for sources, that came together really well. There's actually a current conversation that we were so focused on RCA for concrete at the time, we forgot about RCA for non-concrete product applications. We're in conflict with a project right now, we're getting caught in the narrowness of the RCA in concrete spec that is not allowing us to get beyond the 1% deleterious limit, so the material can go straight to the 25% and then get degradation and abrasion tests done so it can be used. That's a current conversation that we may need to revisit the spec to allow for non-concrete applications for RCA.

Sterling: Is that a group I can get a part of so I can better understand the RCA struggles you're having?

Bruce: I'd be happy to plug you in with conversations we are having now. For the most part, the group has not had a meeting in a while, we were satisfied and thought we put it to bed. We added the QPL, it's still a contractor-based decision on what they want to do and how they want to do it, if they want to do it – that's the biggest frustration. But I think we did a pretty good job of coming up with a process to be able to allow it, now we need to see if we can broaden it for non-concrete applications.

Sterling: It does say WSDOT is promoting and influencing, I'd agree with the ability to use RCA. But when you go to the summary, in 2020, there were 66 eligible projects and only 2% met the minimum of 25%. When you go to the reasoning, it said 83 of the contractors said they identified cost reasons for meeting the minimum of 25%, which to me, it doesn't make really any sense, when RCA is if you look across the board is 30-40% less per ton than any virgin material out there. Unless you're on the east side of the mountains, then it's closer to your urban markets where this stuff is being used. I'm a little confused there. Maybe someone can identify some issues there with the reasoning because it doesn't make any sense

Bruce: Cost aside, because we don't discuss cost, it's the contractors determining if they want to be able to use it. Either bids from people supplying or transporting material. There aren't a lot of sources in a lot of areas, that's why we did the QPL thing, so contractors have something readily available. There isn't a lot of return material coming back. There's a whole lot of challenges getting this up and running. To your point, it may be our job to educate others on what's available so people can have readily available supplies.

Sterling: So is WSDOT tracking usage rates?

Kevin: Yes, those are required to be tracked. And you're right, they're low, and they continue to be low.

Bruce: WSDOT has been a great supporter of doing this and overcoming contractor objections as to why they don't want to use it. That's the number one stumbling block.

Sterling: We run into that as well, I only brought up cost because it's stated in the conclusion of the report and there's a point in the Std Spec about saving money. The cost is the outlier.

Bruce: That was about the original legislation – Judy Clevin – put into the legislation. We didn't want to have that in there, but we knew it would be an instant offering up, but that's where that came from. WSDOT has been good partners in working this up. Credit to Chris Christopher and John Deffenbacher. They've tried. Contractors don't want the hassle of dealing with ecology and cost.

Mike Tomlinson: You're exactly right. It's a combination of specifications competing with RCA. The stuff that we actually try to fit it into because it's used highly with WSDOT projects, it's difficult to get it in. We don't make a real concerted effort to try to replace base course with it. We go after the common borrows, anything that doesn't need a degradation value, we'll go after. That's where it fails when competing with native materials. Otherwise, we probably wouldn't have any in our yard at all. We are very successful at selling it to non-public agencies otherwise. So there you go.

Bruce: does the group wants to pick this up to make it more attractive to meeting the goals of the legislation at a minimum of 25% and give contractors points for using RCA on projects? I don't know where that left of. We have more material coming in than we can get rid of. That's the challenge.

Kevin: On the Design Build side, I've work with Paul Johnson, there's template language for use for RCA, just getting designers to select that and make it one of the goals. I'm not aware that's been happening lately.

Bruce: Can we have a conversation about how to make it a stated goal?

Kevin: The idea is if there's potential for a job to use RCA, we'll put it in there. I can send you the language.

Anthony Mizumori: We have a research project for CSA in bridge deck overlays that was funded in this biennium, I think that's a good topic to bring to this group. Timing of the research is up in the air, it's a theme with UW who is competing for research funding in Florida. I don't know the timing of that, but it might be helpful to meet with this group and get feedback on mix formulation and constructability issues – anything that would be of interest. I'll let you know our timeline as it develops. Once the research team digs into it, that'll be good to meet up.