

# WACA/WSDOT Meeting Agenda For Wednesday, September 6, 2023

*Day/Time: Wednesday, September 6, 2023, on Microsoft Teams, 10:00 AM – 12:00 PM.*

## **In Attendance:**

Henderson, Donny	Adkins, Jason
Liniger, Michael (American Rock Products)	See, Peter
Sears, Josh	Forsyth, Heidi E (Redmond) USA
Vincent, Ryan	Bender, Riley R.
Norton, Patrick	Hammond, Mike
Landers, Steven L	Michael Gardner
Dave Germer	Diego Coca
Muhich, Keith T	Carlie, Karen
Balick, Pete J (Seattle) USA	Cherne, John M (Redmond) USA
Hill, Kentin	Spencer Kull
Kim Schofield (Guest)	Methvin, Dave ( Central Pre-Mix)
James	Bruce Chattin (Guest)
Rob - Lafarge (Guest)	Washington, Danika
McKernan, Dan	David Gent
Bower, Nate	Tomlinson, Mike (American Rock Products)
Legaspi, Erica	Dave Burg
Waligorski, Kevin	Frye, Sterling R (Redmond) USA
Davis, Steve	McIver, Michael
Dafoe, Katharine	Carl Labbe

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

**Future WACA Meeting Dates:** *Wednesday, March 6, 2024, 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 update.
  - Katie: most everyone did well for the 2<sup>nd</sup> quarter. We had 2 different producers for a total of 3 products that did not submit all of their monthly mill certs and 1 manufacturer with 1 quarterly sample missing. I don't want to assume that it's just from no production, but without receiving a "No Production" Report, I have no way of knowing. Otherwise, everyone did really really well
- **E-Ticketing, E-Construction or Environmental Permit Concerns with using RCA in Construction:** Kevin Waligorski update.
  - We've been talking about e-ticketing portal systems for a while now, and now it's been launched! We're up to speed on the history of how we've been moving along with the e-ticketing program. Last month, we sent out an announcement that we've signed up

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HaulHub to provide a free e-ticketing portal. For providers to be able to begin using right now, it's a voluntary sign up. I will include a link to a website with information.

- [Washington State Department of Transportation - HaulHub Technologies](#)
- Basically, it's a free portal system. We are signing up some contractors – Central Pre-Mix and Spokane is coming online for a big job that they're getting going. I know they're working with CalPortland. I think they were just contacted by Ellensburg Smith Company. And then there's already some paving companies like Granite Construction that uses it as their ticketing system, so it kind of just melds right in with the portal side. And I know Central Washington Asphalt has been contracting them too. So right now, it's a voluntary sign up. As we launched this system this winter, we'll be looking at updates of specs and adding it to more jobs specifically for next season as we try to roll this out.  
So that's kind of the big news on the ticketing side. It's out there. It's available for use for concrete suppliers, HMA, and aggregate suppliers. We did a FHWA peer exchange several months ago over last winter, so we finally have some movement on this. Any questions on this piece?
- Bruce: No, I was just going to say it's a very helpful meeting and Kevin, as you're moving forward on this, my only request is that we're conducting with HaulHub on Nov 16, also we're also having a webinar on this with HaulHub later in September, if not early October. I'll be sending everybody a notice for that.
- Kevin: Cecilia and I will be at the meeting in November. It really follows along our current specs. It's just a method for suppliers to transmit data into a portal that we see on the owner side, rather than having to work with all the different programs, we can see it in one portal system. It'll be a big help for both sides.
- Bruce: You're following the Iowa model that we saw in Vancouver?
- Kevin: When we saw in Vancouver, Iowa was using Connex. Delaware was using HaulHub. Iowa ran out before doing an RFP, so they had to backtrack and do an RFP process to make sure they were following all their rules and regulations. As I understand, they switched from Connex to HaulHub. It sounds pretty similar to what Iowa is doing.
- Bruce: As people have questions or need answers to provide some input, are they able to contact you directly, or how do you want to handle that on an ongoing basis?
- Kevin: Cecilia is the contact person. She is the one available to help suppliers get on board with any questions. Her contact information is on the e-mail from last month. You can also contact me, and I can connect you. Cecilia's e-mail address is: [mcneilc@wsdot.wa.gov](mailto:mcneilc@wsdot.wa.gov)
- Bruce: As things progress, assuming everything goes really wonderful, there will be some questions, I'm sure, different areas have different considerations. Will we be able to summarize somewhere where what questions may have come up and responses so that people have a way of looking it up?
- Kevin: The HaulHub website has online trainings to do self-guided training, they have a Q&A section on there, as well as webinar trainings. They have a good program working with suppliers to get them integrated, training users, and the ability to answer questions as well. They have contact information on their website that I've linked.  
I don't have a lot on the e-construction (Unifier program). The portal system was being tied to Phase 2 of the RFP for the next expansion of e-construction, so we went a separate way and got HaulHub signed up so we can get the tickets started this year and ramp up for more use next year.
- One more piece on the RCA in Construction – we've been meeting periodically over the past couple of months with Dept of Ecology to try and do a clarifying document on the use of RCA in construction. We have an ongoing agreement document with WSDOT and

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Dept of Ecology and is out for internal review right now. That process is getting nearer to the end. Once we get those comments from internal review, I will review with Bruce and whoever else is interested for comments or if there's anything we missed.

- Bruce: So yeah, as I've said before, I'd really like to have our folks support what you're trying to do, but ecology doesn't get involved in construction. They get involved in other things. So any way we can provide comments even selectively to the internal draft. It's a lot harder to get words off the paper than get them on. So hopefully when you're ready, we can fully participate. That would be really appreciated.
- Kevin: Yes, I would like to get you involved as well. We wanted to keep it internal for now, but my intention is to have some industry feedback as well.
- Dan McKernan: Kevin, concerning HaulHub, I know you were soliciting people interested in piloting it or using it. Have you got interest in that or are people starting to use it?
- Kevin: Yes, we have a big NSC job getting started in Spokane, the Spokane River Crossing. And with that job, Central Pre-Mix is signed up and submitting tickets through the system now on the concrete side. They've been working with CalPortland to get them integrated. They started working with them on some California jobs and now that's kind of transitioning to some of the Washington jobs. We've got some paving contractors that are in the system or are getting signed up. So we're kind of doing a voluntary rollout here that obviously we're getting towards the end of the construction season. We're easing into the portal system, but if anyone's interested in signing up, it's out there and ready to go. And we could work with suppliers to get them signed up
- **Standard Specifications 9-23.12 Natural Pozzolan:** We have gathered background information on previous specification updates/revisions and ongoing submittals. We have provided all this information to our Subject Matter Experts, and we are working with them during the review process.
  - SMEs are taking a look to see about possibly expanding the specification to include more natural pozzolans. We've had some change over in our specification engineer positions, the position is now filled and we were able to get the information about a week and a half ago. We can start moving through the process and have more conversations, and maybe pulling some industry folks into those conversations as well to make sure we're covering everything. It's moving not very fast at the moment, but moving in the right direction now. Donny is meeting with Garrett and Kurt once we get feedback from our SMEs.
- **Discussion on Global Warming Potentials (GWPs) for Portland Cement:** No direction from management or legislature at this time. Colorado has made headway on this and may have developed a good model, more research is needed. Is there any update on EPD's from NRMCA?
  - Another topic Donny will talk to Garrett about. Maybe we can do a smaller group meeting to discuss further and work together through the process.
  - Bruce: It's a growing area of discussion. We're going to be doing a workshop on that in October with ACI and NRMCA, but also, what people don't realize is that not all GWPs are the same. All you get is a number. They don't recognize product application. With durability such a high objective/requirement for WSDOT, you'll want some industry perspective for GWPs that will perform and not just have a nice GWP number. Any way we can help review, discuss, etc., would be most helpful.
- **Recycled Concrete Aggregates with MSE Walls: Dan McKernan Update**
  - Met with people with 9-03.14(4) doesn't allow RCA in MSE walls. Met with people at MATS lab, HQ Geotech, HQ Bridge. What it boils down to, we don't allow in MSE

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walls because RCA results in water with high pH in it. MSE wall reinforcing, especially poly reinforcing is susceptible to failure in a high pH environment.

- AAHSTO standards don't allow aggressive backfill for SE walls and high pH backfills are considered aggressive.
- 9-03.14(4) has pH limits and backfill containing RCA is likely to exceed that
- A recent project utilizing 100% RCA in a temporary MSE wall, the RCA was sampled and pH was 11.68-11.85, which exceed the limit for steel reinforced MSE walls. Through that investigation, it was determined that degradation of the reinforcement would progress at a rate where the factor of safety would be overcome in about 5 years. Bottom line, WSDOT is not willing to accept the real risk for failing MSE walls associated with high pH material interacting with the MSE wall reinforcement and the connection to the panel stems. These locations cannot be periodically inspected for deterioration. Even if the RCA is blended with other material to reduce the pH, we're concerned that if it's not perfectly blended, there's a risk of a pocket of straight RCA in contact with MSE wall reinforcing that panel connection, which could result in premature failure of the wall. No question was asked, why the emphasis in allowing RCA in critical application in these MSE walls when there are other ways RCA can be utilized? Applications like ballast, CSBC, common borrow, foundation materials, etc. I think those applications would provide or allow a lot more volume of the RCA to be utilized.
- Sterling Frye: have they tested with the blend or are they just saying no with the blend because of the perfection of blending at, say 25 or 30%?
- Dan: They had one spot they utilized in a temporary fill situation and it was straight RCA. But like I said, there's a concern that we can't inspect these locations behind the panels and we don't know how the blending would go. It's mostly the ground water when it gets in contact with it, it's saturated, and then I'm sure with less RCA and more native material or gravel that isn't RCA, theoretically, the pH would be lower, but it's the interaction with high pH material and the reinforcing that they're concerned about. It's the risk we see that we cannot inspect these locations to see how they're holding up. Once you build the wall, there's no access to the structural elements of it.
- Bruce: I've got a leaf blower going on behind me so if it pops up, I have my apologies. Dan, thanks for the report. Thanks for the efforts in looking into this. I think if there's way to test a hybrid, just so we can formally rule that out versus citing a potential, it would be appreciated. But then my other question becomes, is just the characteristics of pH as it goes inert over time. There's an initial spike, then it settles down after a period of time. And since it's not moving, there wouldn't be any more exposed surfaces exposed to water. It would basically re-calcify in place. Is that a consideration, the characteristics of pH?
- Dan: That did not come up during my discussion with these folks and it was basically that it's an unknown and it's a risk that we're unwilling to take on these walls.
- Bruce: I may be able to provide you some research on pH and its lifespan on how long it does or doesn't last or migrate. So if that's of interest, I can forward on to Donny to give to you.
- Heidi Forsyth: Can you forward that to the group? Or at least to me as well?
- Bruce: We understand the concern. We don't want to put anything somewhere it shouldn't be.
- Bruce: Working with Jim Burnett, Jon Deffenbacher, Kurt, Garrett, and Chris, we had our meeting last week on nuance on the recycled specification we worked on about 4 or 5 years ago. We missed an application for using RCA that contains asphalt as a lot of RCA that comes back does. We're going to explore the ability where RCA that has some asphalt commingled with it, will be exempt from 9-03.21(1)C where it has a 1% trigger

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for deleterious material, where asphalt is considered part of that deleterious material, and asphalt will always trigger the 1% by weight trigger. But by doing that, that section of the spec deals with using RCA in concrete applications. It doesn't address non-concrete applications like CSBC, which was an intended market for the material. Everybody kind of sees the loophole, if you will, not a loophole, but that obstacle to being able to move the material forward in that application. We're going to look at rewriting that section, adding a section where RCA material can be used for non-concrete applications and be able to go do deg and LA abrasion tests and other required tests as required that would also be able to work under Table F as well.

- Sterling: Are they just trying to increase the allowable that's allowed right now on Table F from 25% up?
- Bruce: No. Right now, the way it was playing out in Jim's scenario, because the material had >1% deleterious materials, including asphalt, nail, paper, etc., they're concerned about a lot of different types of deleterious materials, but the asphalt stopped the processing to the nail because of the 1% limitation. They want it very clean if you're going to be reusing it for concrete applications. Jim's argument was we can't use this in non-concrete applications because there was an inability to either get it retested or another test wouldn't prove any different results for CSBC, which is what he wanted to do. We're not touching that. We're going to allow an off-ramp of the material commingled with asphalt as it comes back to be used in non-concrete application, which the spec does not address, and I don't think we thought about that at the time. We were just working on increasing RCA in concrete. So we're going to have a discussion and I'm going to get the group back together and anybody else that would want to be part of that, let me know. We can include you in the summary of discussions.
- Sterling Frye, Heidi, John Cherne, Mike Gardner, Mike Tomlinson (ARP), to be added to these discussions
- Pat Norton: Is this the 4<sup>th</sup> category of RCA that we're possibly talking about?
- Bruce: Yes. The two approaches are either taking this out of Tier 3 or creating a Tier 4
- Pat: This is a topic that we've spoken about for a lot of years. Allowing things that, Bruce, back to the one that you said about the materials, there was more than a few nails. There was plastic, nails, wood, the percentage was very high. This is a different issue, where can we use it in non-concrete applications? And why not if we can't? This is a great conversation.
- Bruce: Agreed. I'm just citing what the report said or what the information that I saw from Garrett and some of their testing and they just did >1% and just referenced nails and other deleterious materials, but they was if that was a clean pile, but had asphalt in it, it still wouldn't be able to get out underneath that 1%.
- Pat: One area too, just thinking, is that RCA, our native stockpiles, we approve for a maximum of 5 years. This is an area in our RCA that we should look at also. Right now if we approve stockpiles or a facility for recycled aggregate, if it's approved, it's approved. We should also contemplate time periods for when it is approved, just my opinion.
- Bruce: Sure. All participation is welcome. We just want to clarify this, create that next opportunity for usage like you mentioned, because it's got the opportunity to probably increase usage going forward in traditional applications where it's completely acceptable. We just have a speed bump and we're going to try to work around that.
- Donny: I think Garrett was saying later this month, maybe getting together a smaller subcommittee group and getting all the people that we want involved in that conversation, and start working through that process. So that's good that it's moving in the right direction.

**No Update:**

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- **Type 1L Cements in Bridge Deck Overlays & Synthetic Fiber Reinforced Bridge Deck Concrete Update:** Anthony Mizumori stated that there is no update at this time.
- **Research Project for CSA Cements:** Anthony Mizumori stated that there is no update at this time.
- **Naturally Occurring Asbestos in Aggregates:** Was not able to locate the NOA Document.

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

- **Modified Concrete Overlay Spec Updates. On April 10<sup>th</sup> 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)
- Bruce requested a copy of the 2024 Spec book with changes. Donny to check with the new spec engineer and see if there's access to a track changes version of the 2024 spec book.