



January 26, 2023

Meeting Minutes – Concrete Technical Committee

Location: Teams Meeting
Date: January 26, 2023
Time: 9:00 am to 12:00 pm

Attendance

Committee Members:

WisDOT Members –

Bureau of Technical Services (BTS):

- Barry Paye – Director
- Erik Lyngdal – Chief Materials Engineer
- Jim Parry – Quality Assurance Supervisor
- Leslie Hidde – Concrete Quality Assurance Engineer
- Peter Kemp – Pavement Unit Supervisor
- Vacant* – Pavement Policy and Research Engineer
- Adam Johnson – Independent Assurance Program Coordinator
- Mark Finnell – Concrete Engineer Consultant (Behnke Materials)
- Signe Reichelt – Test Procedure Manual Consultant (Behnke Materials)

Bureau of Project Development (BPD):

- Mark Zander – Construction Standards Engineer
- Craig Pringle – Construction Oversight Engineer

Bureau of Structures (BOS):

- Aaron Bonk – Chief Structures Design Engineer

Bureau of Aeronautics (BOA):

- Lucas Ward – Chief Airport Construction Standards

Regional Representatives:

- Alan Rommel – NE Region TSS Chief – Management Liaison
- Travis Mikshowsky – SW TSS Supervisor – TSS Liaison
- Paulo Florio – SW Region Soils & Materials Engineer
- Matt Smith – SW Region Independent Assurance
- Kurt Flierl – SE Region Construction Project Manager
- Eric D Hanson – SE Freeways Project Manager
- Brent Ferguson – NC Region Independent Assurance
- Devin Harings – NW Region Pavement Engineer
- Matt Bertucci – NE Region Pavement Engineer

FHWA Members –

- James Pforr – Pavement & Materials/Asset Management Engineer



Industry Members –

- Sara Shoenmann – American Council of Engineering Companies Liaison
- Ed Anastas – A.W. Oakes
- Eric Glendenning – BARD Materials
- Paul Mathe – Carew Concrete
- Barry Bohman – Chippewa Concrete Services
- David Meyer – Continental Cement Company
- Dave Stanke – Kraemer North America
- Brian Borowski – Lafarge/Holcim
- Mark LaLonde – LaLonde Contractors
- Brad Diener – Lunda Construction
- John McConahy – Mapei
- Scott Grams – Michels Road & Stone
- Tom Ptaschinski – Ptaschinski Construction Company
- James Palmer – St. Mary's Cement Company
- Benny Walker – Todds Redi-Mix Concrete
- Mike Hammitt – Trierweiler Construction Company
- Heath Schopf – Vinton Construction Company
- Jackie Spoor – Wisconsin Concrete Pavement Association
- Kevin McMullen – Wisconsin Concrete Pavement Association
- Cherish Schwenn – Wisconsin Ready Mixed Concrete Association
- Matt Grove – Wisconsin Transportation Builders Association
- David Burt – Zenith Tech
- Andrea Breen – Zignego Ready Mix

Resource Members (as needed) –

- Tirupan Mandal – BTS Concrete Lab Supervisor – Aggregate Tech Committee Chair
- Brandon Lamers – BPD Construction Oversight, Standards, & Local Program Chief
- Chad Hayes – BPD Construction Oversight Engineer
- Adam Albers – BTS Concrete Materials Lab Coordinator
- Laura Shadewald – BOS Structures Development Chief
- Deb Bischoff – BTS QMP Engineer
- Zach Dittberner – Michels Road & Stone
- Tom Sand – Vinton Concrete Construction
- Tony Zignego – Zignego Company

Guest(s) –

- Christine Krall – BTS New Products Engineer

Agenda Items

1. Welcome and Introductions – L Hidde (~5 min)
 - a. Review etiquette during virtual meeting
 - b. Recording of Meeting
 - c. New CTC Members:
 - i. Eric D Hanson / Sara Schoenmann / David Burt



2. Review and Finalize Minutes – L Hidde (~5 min)
 - a. November 17, 2022 – **APPROVED AS WRITTEN**
3. Review of Action Items – L Hidde (~10 min)
 - a. Discussion on considering elimination of DT1926 Form (Automatic Controls and Tolerance Record for Portland Cement Concrete Plants)
 - i. Department to analyze concrete lab inspection process.
 - ii. Options to consider:
 1. NRMCA
 2. Self-Certification
4. Technical Committee Charter – L Hidde (~10 min)
 - a. Located in BOX: <https://wisdot.box.com/s/olukb4ylw6f857605s6p6flrl22vdplp>
 - b. Charter is finalized and is located at the box location above.
 - i. Liaisons (Management / Supervisor) please share with your counterparts so everyone understands the purpose of CTC and member expectations.
 - ii. Charter members will be updated as changes occur and will denote a date of membership updates.
5. Task Force Updates (~25 min)
 - a. Fast Track – L Hidde
 - i. The group is moving towards a performance based concrete mix design.
 - ii. Ultimate goal is to have SS 416 be only for the fast track items. This group has been working to move out items from SS 416 to other sections and those moves are in the proposed 2024 Specs.
 - b. Curb Shear – K McMullen
 - i. Asking each region to pilot a thickened edge and a 12” curb head.
 - ii. Tasked with updating the FDM and other documents to discourage use of bricks in the medians. Preference is to use a colored/stamped concrete instead of bricks.
 - iii. Updates to SDD’s for expansion material height, type and thickness.
 - iv. Memo sent to DOT maintenance sections regarding recommendations of how to fix the curb shears.
 - c. Structure Aggregate – L Hidde
 - i. TF is moving forward with a proposed option of contractor determining frequency of testing and stating in the QMP. No set frequency would be stated in the specification.
 - ii. TF is going to draft spec language and CMM guidance before bringing to CTC for implementation consideration.



- d. Buckling Research – L Hidde
 - i. Delaying implementation
- e. PEM Research – M Finnell
 - i. Delaying implementation
- 6. Cement APL – C Krall (~10 min)
 - a. Presentation on requirements for NTPEP.
 - b. DOT is moving to have NTPEP do the testing of cement for inclusion on the APL.
 - c. Costs are per sample per quarter. 1 test is required per quarter.
 - d. Further discussion on the process is forthcoming.
 - e. Discussion:
 - i. What is process for dispute resolution?
 - 1. NTPEP does have a dispute resolution process.
 - ii. What other states are involved and are other states willing to get on board?
 - 1. WI is looking to start and anticipates that other states will also be interested in this process.
 - f. ACTION: This will be implemented for 2024. The APL list will be updated before the November 2023 letting date. Test results will need to be to Christine prior to October 31, 2023.
- 7. Proposed 2024 Spec Updates – L Hidde / M Finnell (~70 min)
 - a. Walked through changes to SS 415 / 416 / 501 / 601 / 602 / 701 / 710 / 715
- 8. WCPA Conference – J Spoor / K McMullen (~5 min)
 - a. February 8-10th in Oshkosh, WI
 - b. 18 speakers & approximately 300 registrants
- 9. Sawing Depth Tolerances – K McMullen (~20 min)
 - a. Presentation: Joint Sawing Tolerance
 - b. +/- 1/4" tolerance proposed
 - c. Agreeance to move forward with updating the SDD's.
- 10. Maturity Memo – M Finnell (~10 min)
 - a. Memo on how to handle creating maturity and handle verification cylinders.
 - b. CMM to be updated with some additional guidance on questions that are not answered.
- 11. 2023 Mix Design Submittals – M Finnell (~5 min)
 - a. Memo on Quality Management Program Webpage:
<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/gmp/default.aspx>
- 12. Trial batching – K McMullen / M Finnell (~10 min)
 - a. Concurrence to move forward with 3 trial batches for 2024 spec.



13. Reorganization of Specifications

- a. BTS has been tasked with reorganizing the specifications for 2025.
 - i. Little to NO changes to 2025 specifications as it will be difficult to move and update at the same time.
- b. Pilot projects in 2024 using the reorganized spec and entering information into the AWP Materials system.

Action Items – CURRENT

1. Cement NTPEP presentation provided to all – L Hidde (January 2023)
2. Draft policy for Cement APL will be sent out to CTC – C Krall / M Finnell (February 2023)
3. Review proposed 2024 Spec changes and provide comments **BEFORE** February 6, 2023 – All CTC Members
 - a. Send changes to M Finnell / L Hidde / M Zander
4. Joint Sawing Tolerance presentation provided to all – K McMullen (January 2023)
5. Update SDD Joint details to add a +/- 1/4" tolerance to sawed joint depth – P Kemp (March 2023)
6. Maturity Memo to be sent out over BTS ListServ – M Finnell (February 2023)

Action Items – OLD

1. Task Force Membership – L Hidde – COMPLETE
 - a. Documented in CTC Charter
2. CTC Charter – Review and provide comments to Leslie by November 30 – Everyone - COMPLETE
3. Finalized Charter to CTC – L Hidde (December 2022) - COMPLETE
4. Rumble Strip spec & details to CTC – M Zander (December 2022) – COMPLETE
 - a. Located in BOX: <https://wisdot.box.com/s/p06625rjb4fsd95cq7d6z3hk2a51kel8>
5. Proposed 2024 Spec changes to CTC – L Hidde (December 2022) – COMPLETE
6. Buckling Research TF Membership Finalized – L Hidde (December 2022)
7. PEM Research TF Membership Finalized – M Finnell (January 2023)
8. Review DT1926 and consider elimination – BTS (January 2023)
 - a. Review tolerances – K McMullen

Action Items – Long Term

1. Concrete Strength Task Force – L Hidde / M Finnell – ON HOLD UNTIL WHRP Study Complete

Action Items – Sent to other Groups

1. IRI Committee Formation – J Parry / E Lyngdal
 - a. IRI Committee has started meeting
 - b. Some items may be incorporated into the 2024 specs. Info will be sent out to CTC if there is concurrence is reached in the committee.

Inter-Workgroup Topics

1. Cold Weather Paving – B Lamers / E Lyngdal
 - a. No update
2. Concrete Payment Unit – B Lamers / E Lyngdal
 - a. No update



Upcoming Meetings

2023		
January 26, 2023*	9:00 am to 12:00 pm	CTC (<i>Hybrid Meeting</i>)
February 8-10, 2023		WCPA Annual Conference
February 17, 2023	8:00 am to 10:00 am	TF: Fast Track
February 27, 2023	9:00 am to 11:00 am	TF: Curb Shear
March 17, 2023	8:00 am to 10:00 am	TF: Fast Track
March 27, 2023	9:00 am to 11:00 am	TF: Curb Shear
April 10-13, 2023		National Concrete Consortium
June 15, 2023	9:00 am to 12:00 pm	CTC
August 17, 2023	9:00 am to 12:00 pm	CTC
November 16, 2023	9:00 am to 12:00 pm	CTC

*Moving meeting to avoid conferences that BTS/Industry is attending.



Portland and Blended Cement (PBC)

What is NTPEP?

The National Transportation Product Evaluation Program (NTPEP) was established to minimize duplicate testing of transportation materials performed by AASHTO member states by providing a process where manufacturers/distributors submit their products to NTPEP for laboratory and/or field testing.

The results of the testing are shared with member departments through DataMine (data.ntpep.org) for their use in product quality verification.

Product Submission Guidelines

Producers/distributors of portland and blended cement whose products are intended for highway applications may elect to participate by submitting an application form through NTPEP's DataMine (data.ntpep.org)

Product Submissions – *Supply Types*

- Plant Product
 - The product is produced in a plant your organization has sole or partial ownership of.
- Terminal Product
 - The product is procured from a third party and distributed from a terminal, mill, bulk load out, or processing facility.

Terminal Products cont'd

After my third party product arrives in Terminal X, it is distributed to Terminal Y and Terminal Z. Do I need to submit the same product under Terminal Y and Terminal Z?

- *No, only the Terminal X product sample is required by the program. The program does not evaluate "Terminal to Terminal" products.*

When my third party product arrives at the port, there is not an initial bulk load out or processing. It is persistently transported and unloaded to terminals on a specific route. How would I submit this product?

- *This product would have multiple submissions; one for each terminal the third party producer delivers direct.*

Sampling Protocol – All Products

For each product submitted in NTPEP DataMine:

- The sample must be a minimum of 15 lbs (7 kg) and be stored in a clean, re-sealable metal or plastic container (such as a paint can).
- Products that have not changed are required to be resubmitted and tested every quarter.
- When a production facility does not produce cement in a given quarter, and no quarterly shipments will be made to NTPEP, the producer shall notify NTPEP with a Negative Report for each quarter of no production or shipment.

Register & Submit

<https://data.ntpep.org/Account/Register>

Registration

NTPEP DataMine registration is not required for public access of data. Only users with Manufacturer, State, Lead State, Testing Facility, Contractor or AASHTO role need to register. Please make sure you use your agency/corporate email address for the registration. Registration request with personal email addresses will not be approved.

Account Information * indicates required field(s).

Please provide your e-mail address.

E-Mail Address*:

Example: johndoe@domain.com

Cancel

Industry Registration Features:

- Multiple users can register against their organization while submitting separately for different locations/products
- Users may register as a parent company and request access for visibility of the company/-ies under their ownership, or partnership.

NTPEP DataMine – Product Listings

Find Products

Manufacturer / Distributor
All

Plant / Terminal Location
All

Calendar Year
 All
 2020
 2019
 2018
 More...

Cycle
All

Product Status
All

Product Type
All

Product Category
All

Foreign of Domestic/Canada
All

Supply Type
All

My DataMine

Home / Portland Blended Cement (PBC)

There are 8 of 8 product(s) currently selected based on Find Products criteria. [Export Data](#)

Products | Mill Certifications | Data Search | Saved Search

NTPEP Number	Manufacturer / Distributor	Plant / Terminal	Product Name	Status	Action
PBC-2020-02-003	Vexcon Chemicals	Bessemer City, NC	PowerCoat EpoxyHD	Completed	
PBC-2020-02-002	Vexcon Chemicals	Bessemer City, NC	PowerCoat Primer Pigmented	Completed	
PBC-2020-02-001	Klass Coatings	Bessemer City, NC	Si-Rex03	In Test	
PBC-2020-01-003	Textured Coating	Bakersfield, CA	Tex Cote XL 70 Bridgecot	Completed	
PBC-2020-01-002	ms	Bessemer City, NC	B&H Concrete Texture	In Test	
PBC-2020-01-001	ms	Bessemer City, NC	Macropoxy 646-Acrolon218 HS	Complete	
PBC-2020-01-004		Bakersfield, CA	TRI-METHOXANE	Complete	
PBC-2020-01-003	TK Products	Bessemer City, NC	TRI-SHEEN ACRYLIC	Complete	

Product Category:

- All
- Portland
- Blended

Supply Type:

- All
- Plant Product
- Terminal Product

The dropdown menu consist of the submittal cycles of the NTPEP numbers

Test Data
Release
History
Withdraw
Lock

NTPEP DataMine – Mill Certifications

Find Products

Manufacturer / Distributor
All

Calendar Year
 All
 2020
 2019
 2018
 More...

Month
All

Plant / Terminal Location
All

Product
All

My DataMine

[Home](#) / [Portland Blended Cement \(PBC\)](#)

There are 8 of 8 product(s) currently selected based on products criteria.

NTPEP Number	Manufacturer / Distributor	Plant / Terminal	Month / Year	Action
PBC-2020-02-003	Vexcon Chemicals	Bessemer City, NC	02/2020	
PBC-2020-02-002	Vexcon Chemicals	Bessemer City, NC	02/2020	
PBC-2020-02-001	Klass Coatings	Bessemer City, NC	02/2020	<input type="button" value="Export Mill Certification"/>
PBC-2020-01-003	Textured Coating	Bakersfield, CA	02/2020	
PBC-2020-01-002	Sherwin-Williams	Bessemer City, NC	01/2020	
PBC-2020-01-001	Sherwin-Williams	Bessemer City, NC	01/2020	
PBC-2020-01-004	TK Products	Bakersfield, CA	12/2019	
PBC-2020-01-003	TK Products	Bessemer City, NC	12/2019	

The NTPEP numbers that are referred to during the Mill Certification submission.

This column is populated with the first address in the eApp of the NTPEP number that is referred.

Export Mill Certification

Export Mill Certification

This option will download the single Mill Certificate document.

Selecting this NTPEP number will take the user to the corresponding NTPEP Product Information page.

Important Links

Work Plan & Fee Schedule:

- <https://ntpep.transportation.org/technical-committees/portland-and-blended-cement-pbc/>

DataMine PBC Module:

- <https://data.ntpep.org/PBC/Products>

DataMine Registration:

- <https://data.ntpep.org/Account/Register>



National Transportation Product Evaluation Program (NTPEP)

TESTING SERVICE FEE SCHEDULE for Portland and Blended Cement (2023 TEST CYCLE)

NTPEP Testing Fees for EACH product submitted:

PORTLAND CEMENT LABORATORY TESTING

\$1380 PER PRODUCT

“Laboratory Testing” fee is inclusive of all laboratory testing, report preparation and program management services by the host testing state. A portion of this fee is assigned for administrative management of the NTPEP Portland and Blended Cement program.

BLENDED CEMENT LABORATORY TESTING

\$1690 PER PRODUCT

“Laboratory Testing” fee is inclusive of all laboratory testing, report preparation and program management services by the host testing state. A portion of this fee is assigned for administrative management of the NTPEP Portland and Blended Cement program.

OPTIONAL TESTS FOR PORTLAND CEMENTS*

Early Stiffening of Hydraulic Cement (False Set)	\$105
Expansion of Mortar Bars stored in water	\$250
Heat of Hydration (using Isothermal Conduction Calorimetry)	\$415
Sulfate resistance (only Type V Portland cements)	\$555

OPTIONAL TESTS FOR BLENDED CEMENTS*

Heat of Hydration (only for MH or LH blended)	\$444
Water Requirement for LH	\$65
Sulfate Resistance (only for MS or HS Cements)	\$1,500

*The tests above can be requested for Portland **OR** Blended Cements, at the request of the manufacturer. The Manufacturer **MUST** email the liaison stating which tests they would like to add to their product **BEFORE** the invoice is issued.