



About the Presenter



- **Drew Waldrop** is the State Concrete Engineer with the Alabama Department of Transportation.
- He holds a Bachelor of Science degree in Civil Engineering from the University of Alabama and is a registered professional engineer in Alabama.
- He has been employed with ALDOT Bureau of Materials & Tests for over 11 years. He has served as the Chairman of the NTPEP Portland & Blended Cements Technical Committee since it was established as a task force in 2018.



OVERVIEW OF NTPEP PORTLAND & BLENDED CEMENT (PBC) TECHNICAL COMMITTEE

DREW WALDROP, P.E.
ALABAMA DOT
CHAIRMAN

BACKGROUND OF COMMITTEE

- 2018: NTPEP IMPLEMENTATION COMMITTEE ESTABLISHES TASK FORCE TO DEVELOP WORK PLAN FOR CEMENT
 - CONDUCTED SURVEY OF DOT REQUIREMENTS
 - SPECS FOR CEMENT – DEVIATION FROM M 85 AND M 240?
 - FREQUENCY OF TESTING?
 - OTHER REQUIREMENTS?

PROGRAM OVERVIEW

- TESTING PROGRAM FOR ALL TYPES OF PORTLAND (AASHTO M 85/ ASTM C150) AND BLENDED (AASHTO M 240/ASTM C595) CEMENTS
 - QUARTERLY SAMPLES FROM PARTICIPATING MILLS

PORTLAND CEMENTS

TEST	AASHTO STANDARD	ASTM STANDARD
Air Content of mortar, volume	T 137	C185
Fineness, by Air Permeability Apparatus	T 153	C204
Autoclave expansion	T 107/T 107M	C151
Compressive strength	T 106	C109
Time of Setting Vicat test	T 131	C191
Chemical Analysis (SiO_2 , Al_2O_3 , Fe_2O_3 , CaO , MgO , SO_3 , Na_2O_{eq} , ignition loss, insoluble residue, and CO_2)	T 105	C114

BLENDED CEMENTS

TEST	AASHTO STANDARD	ASTM STANDARD
Fineness, by: Sieving and Air-Permeability Apparatus	T 192	C430
Air Content of mortar, volume	T 137	C185
Density	T 133	C188
Autoclave expansion/contraction	T 107/T 107M*	C151
Compressive strength	T 106	C109
Time of Setting (Vicat test)	T 131	C191
Chemical Analysis (SiO_2 , Al_2O_3 , CaO , MgO , SO_3 , S^{2-} , ignition loss, insoluble residue, and CO_2)	T 105	C114

PROGRAM OVERVIEW

- OPTIONAL TESTS AVAILABLE FOR ADDITIONAL FEES

TEST	AASHTO STANDARD	ASTM STANDARD
Early stiffening of Hydraulic Cement (False set)	T 186	C451
Expansion of Mortar Bars stored in water	N/A	C1038
Heat of Hydration (using Isothermal Conduction Calorimetry)	N/A	C1702
Sulfate resistance (only type V portland cements)	N/A	C452
Heat of Hydration (required for MH or LH blended cements)	N/A	C1702
Water requirement (required for LH blended cements)	T 106	C109
Sulfate resistance (required for MS or HS cements)	N/A	C1012

PROGRAM OVERVIEW

- PRODUCER INFORMATION CLEARINGHOUSE FOR STATES
 - QMS SUBMITTED INITIALLY AND ANY TIME THERE IS A CHANGE
 - 6 MONTHS OF QC TEST DATA INITIALLY
 - MILL CERTS UPLOADED MONTHLY

TESTING FACILITIES

- 3 LABS AWARDED CONTRACTS
 - AMERICAN ENGINEERING TESTING, INC. – ST. PAUL, MN
 - SGS TEC SERVICES – LAWRENCEVILLE, GA
 - CTLGROUP – SKOKIE, IL
- LABS ARE REQUIRED TO MAINTAIN AASHTO ACCREDITATION
- ALL TESTING MUST BE COMPLETED WITHIN 2 MONTHS OF RECEIPT OF SAMPLE

DATAMINE MODULE – PRODUCT LISTINGS

The screenshot displays the 'Find Products' and 'My DataMine' sections of the Datamine module. The 'Find Products' section on the left includes filters for Manufacturer / Distributor, Plant / Terminal, Product Name, Status, Action, Product Type, Product Category, Range of Domestic/Canada, and Supply Type. The 'My DataMine' section on the right shows a table of products with columns for NTPP Number, Manufacturer / Distributor, Plant / Terminal, Product Name, Status, and Action. The table lists several products, including Power Coat (Spox) 40, Power Coat Primer Pigmented, Silux 03, Tex Coat XL 70 Bridgecoat, B&B Concrete Texture, Mopconopoly 546-Acrylic 25H-G, and TR-SHELV ACrylic. A tooltip for the 'Product Category' filter shows options: All, Pre Blend, and Blended. A tooltip for the 'Supply Type' filter shows options: All, Plant Product, and Terminal Product.

DATAMINE MODULE – MILL CERTS

Find Products

Manufacturer / Distributor: All

Calendar Year: 2020

Month: All

Plant / Terminal Location: All

My DataMine

Home / Portland Blended Cement (PBC)

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

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

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

Export Mill Certification

NTPEP Number	Manufacturer / Distributor	Plant / Terminal	Month / Year	Action
PBC2020-02-003	Vexcon Chemicals	Besemer City, NC	02/2020	
PBC2020-02-002	Vexcon Chemicals	Besemer City, NC	02/2020	
PBC2020-02-001	Klass Coatings	Besemer City, NC	02/2020	
PBC2020-05-003	Textured Coating	Bakersfield, CA	02/2020	
PBC2020-05-002	Shenwin-Williams	Besemer City, NC	05/2020	
PBC2020-05-001	Shenwin-Williams	Besemer City, NC	05/2020	
PBC2020-05-004	TK Products	Bakersfield, CA	12/2019	
PBC2020-05-005	TK Products	Besemer City, NC	12/2019	

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

This option will download the single Mill Certificate document.

DATAMINE MODULE – PRODUCT INFORMATION

Product Information

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

Search NTPEP Number: PBC2020-02-003

NTPEP Number: PBC2020-02-003

Test Data: [View] [Download] [History]

Manufacturer Information

Lehigh Hanson
300 E John Carpenter Freeway
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Phone: 937.453.5502
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Product Information

Submit Year: 2020
NTPEP Number: PBC2020-02-003
Submit Year Type: New
Manufacturer: LehighHanson
Product Number: Portland Blended Cement – 32263
Product Name: Portland 32263
Product Description: Description of the Portland 323 product
Product Type: Type A
Product Category: Portland
Foreign or Domestic/Canada: Foreign
Supply Type: Plant Product

Plant Location Information

Address: 7630 Rockledge Way, Valley View, OH, 44125
City: Valley View
State: Ohio
Country: US

Receiving Terminal Locations Information

Address	City	State	Country
5151, Higashiyama, Minami-ku, Nagoya, Japan	Higashi-ku	JP	
3 Springfield Road, London, UK	London	UK	
54 Janssen Rd, CA, California, US	Los Angeles	California	US

DATAMINE MODULE – PRODUCT TIMELINE

Product Information

Product Name: PowerCoat Epoxy HD

NTPEP Number: PBC2020-02-003

Submitted Year: 2020

Manufacturer

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Product Representative

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Timeline

Past Milestones: [X] Recommended Re-evaluation: [X] Informational Notes: [X]

2 month Re-evaluation Recommended: 02/2020

Date Released to Public: 02/2020

Date Released to Manufacturer: 02/2020

Date Released to DOT/State Dept: 02/2020

PROGRAM BENEFITS

- FOR DOTs:
 - Frees up DOT resources for project-level testing
 - As a supplement, provides independent 3rd party testing for comparison
- FOR INDUSTRY:
 - Eliminates or reduces redundant sampling for DOT

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