

HYDRAULIC CEMENT (PORTLAND & BLENDED CEMENT)

GENERAL

This evaluation procedure outlines the Tennessee Department of Transportation's (TDOT) approval process for both Portland and Blended Hydraulic cement.

SPECIFICATIONS

TDOT Standard and Supplemental Specifications, Section 901.01 - Hydraulic Cement
AASHTO M 85 – Standard Specification for Portland Cement
AASHTO M 240 – Standard Specification for Blended Hydraulic Cement

NOTICE TO ALL PRODUCERS

All existing cement producer facilities **DIRECTLY** supplying to TDOT-funded projects shall apply to the AASHTO Product Evaluation & Audit Solution (formerly NTPEP) program for the *Evaluation of Portland Blended Cement (PBC) Suppliers* designated PBC-22-01. This application must be submitted between Monday, November 6th, 2023, and Thursday, November 30th, 2023, to remain active on January 1, 2024. New cement products at audited facilities, including both domestically manufactured and/or imported sources, will be covered under the audit program. A representative sample reduced to 2-pints and the most recent mill certification will be required to add a new product to an audited facility.

Any producers that are inactivated as of January 1, 2024, will be required to enter the following new cement producer requirements for each product to be reactivated on the TDOT Producer List.

All new cement producer facilities after the enrollment period shall comply with the following procedures until the next application window in 2024.

CLARIFICATION (Updated 11/14/2023)

Our team is aware of facilities that are not described in our initial request for participation in the audit program. To address comments and questions surrounding these facilities, we are providing the following guidance:

We acknowledge that manufacturing mills and terminals are functionally and logistically different for our industry partners. Our list does not distinguish this difference and treats all producer listings as potential suppliers to our concrete producing partners.

1. Cement Mill – Manufacturing facility of hydraulic cement
2. Cement Import Terminal – Storage facility that imports hydraulic cement
3. Cement Local Terminal – Storage facility that: 1) stores material manufactured off site by an audited cement mill and/or an audited import terminal, 2) does not operate a cement

mill on site, 3) does not import material directly from a foreign source. These terminals are NOT required to be audited by the AASHTO Product Evaluation & Audit Solutions Portland Blended Cement Program.

AASHTO Product Evaluation & Audit Solution audits need to take place at facilities meeting the descriptions of a cement mill and/or an import terminal supplying **DIRECTLY** to a concrete ready-mix, precast, and/or prestressed facility completing work for TDOT. These locations will appear on the TDOT Producer List.

Notable exemption: If your cement mill ships to Tennessee *exclusively* through an import terminal, then your material is subject to testing via the import terminal audit. In this specific circumstance, you may elect to forego the audit for a cement mill if it is not necessitated by other state requirements.

NEW PRODUCER PROCEDURES

For a cement to be accepted onto the TDOT Producer List, the producer of the hydraulic cement must provide the following:

1. Quality Control Plan
 - a. Contact information including:
 - Mailing address
 - Representative's name, email, and phone number
 - b. Proof of laboratory accreditation
 - c. Safety Data Sheet(s) (SDS)
2. Material Certification including:
 - a. Name of manufacturer
 - b. Location and name of plant
 - c. Type and trade name of cement
 - d. Mill test report of chemical and physical analyses
 - e. Certification stating that the product meets the above specifications
 - f. Six (6) consecutive production cycles no older than the previous calendar year
3. A representative sample reduced to 2-pints submitted to the Materials and Tests Division

For a cement to be accepted onto the TDOT Producer List, a cement terminal supplying the hydraulic cement must provide the following:

1. The aforementioned requirements for all producers
2. Additional Quality Control Plan Information
 - a. Material Handling Plan
 - b. Material Storage Plan (to include location on facility site)
3. If applicable, foreign cement sources shall be included in handling and storage logistics
 - a. Must include Port of Entry into the United States
 - b. Domestic Producer generated mill certification on shipped material(s)

Cement mill locations must be accredited through the AASHTO Accreditation Program (AAP). This is a comprehensive accreditation program consisting of:

1. Establishment of a quality management system program
2. Participation in a proficiency testing program
3. A laboratory inspection program including:
 - a. Observation of testing proficiency
 - b. Inspection of laboratory equipment
4. The manufacturer's accreditation shall include the following AASHTO (ASTM) test methods: T105 (C114), T106 (C109), T107 (C151), T127 (C183), T129 (C187), T131 (C191), T137 (C185), T153 (C204), T154 (C266), T162 (C305), T186 (C451), T192 (C430), (C1437), (C1506)

COMMUNICATIONS

All sample submittals must be shipped to:

TDOT Chemical Laboratory
6601 Centennial Boulevard
Nashville, Tennessee 37243

All correspondence with the Materials and Tests Division must be sent via e-mail to:

TDOT.CementitiousMTR@tn.gov

AASHTO Product Evaluation and Audit Solution Webpage: <https://transportation.org/product-evaluation-and-audit-solutions/submit-a-product/>