

## Bureau of Materials Materials Approval Procedures

MAP Number: **104-15** 

Effective Date: <u>April 1, 2015</u>
Approved By: *Eileen Sheehy* 

# PROCEDURE FOR APPROVAL OF PORTLAND CEMENT AND BLENDED HYDRAULIC CEMENT

#### **PURPOSE:**

To establish a procedure to approve portland cement and blended hydraulic cement for addition to the NJDOT Bureau of Material's Qualified Products List (QPL).

#### **REFERENCES:**

New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction Sections 903.01

ASTM C 150 Standard Specification for Portland Cement

ASTM C 595 Standard Specifications for Blended Hydraulic Cements

### PROCEDURE:

## A. Manufacturer's Request for Approval.

The Manufacturer shall request in writing for the approval of the product. Include the following information in the request:

- 1. The name, address, and contact information for the manufacturer.
- 2. The name, type, and designation of product to be evaluated.
- 3. Certified test results from the manufacturer's laboratory or an independent laboratory. Ensure that the test results include all required test results required by ASTM C 150 or C 595 as summarized in Table MAP-104-1.
- 4. Materials Safety Data Sheet.

With the request the manufacturer shall submit two quart samples of cement for ME testing.

Mail the request for approval and sample to the following:

## Mailing Address (USPS):

Manager, Bureau of Materials (Thiokol Bldg. 4) New Jersey Department of Transportation P.O. Box 600

Trenton, NJ 08625-0600

## Street Address (UPS, FedEx, etc.):

Manager, Bureau of Materials (Thiokol Bldg. 4) New Jersey Department of Transportation 930 Lower Ferry Road West Trenton, NJ 08628

## B. Bureau of Materials Review.

The ME will review the certified test results submitted the by the cement manufacturer for compliance with ASTM C 150 or C 595 as applicable. If the test results do not comply, the ME will reject the source for approval. If the test results comply, the ME will test the submitted sample for approval.

Table MAP-104-1 Requirements for Cements	
Material	Specification Requirements
Portland Cement (Types I, II and III)	ASTM C 150, Tables 1 and 3
Low Alkali Portland Cement	ASTM C 150, Tables 1, 2, and 3
(Types I, II and III)	
Blended Hydraulic Cement	ASTM C 595, Tables 1, 2, and 3
(Types IS and IP)	

## C. Bureau of Materials Laboratory Testing

The ME will perform testing according to ASTM C 150 or C 595, as applicable, on the sample submitted by the manufacturer. For the source to be approved, the samples must meet the requirements in ASTM C 150 or C 595 as applicable.

## PROJECT ACCEPTANCE REQUIREMENTS:

Qualification of a product and addition to the QPL does not constitute a blanket approval of the material. The cement must be verified and approved in a concrete mix design in order to be used. The Contractor for each proposed project must submit the product and source as part of the concrete mix design on a Materials Questionnaire as specified in Section 106. The ME will approve the product and source on a project to project basis based on the specifications for the project. The ME will sample, test and accept the material according to the applicable Section of the *NJDOT Standard Specifications for Road and Bridge Construction*.

#### **DISQUALIFICATION:**

The ME may remove the product from the QPL for non-conformance with specification requirements or for a documented history of poor field performance. The manufacturer shall notify the ME, in writing, of any change in product formulation. Failure to notify the ME of changes in product formulation will result in disqualification.

## **REQUALIFICATION:**

The ME will reevaluate a product which has been disqualified and removed from the QPL only after submission of a formal request along with acceptable evidence that the problems causing the disqualification have been resolved.

The ME may require the manufacturer to requalify the product for any of the following reasons:

- 1. To ensure that obsolete products are not kept on the list, the ME may request written confirmation from the manufacturer that the product is still available and has not changed formulation. Failure to respond to the Bureau's written request will result in the product being removed from the list.
- 2. If the formulation of the product has changed, the ME may require that the new formulation be requalified.
- 3. If the Department's standard specifications change or if the referenced ASTM or AASTHO standards change, the ME may require requalification to ensure that the product meets the new specification.