



Bureau of Materials Materials Approval Procedures

MAP Number: **109-15**

Effective Date: April 1, 2015

Approved By: Eileen Sheehy

PROCEDURE FOR APPROVAL OF SILICA FUME FOR USE AS A MINERAL ADMIXTURE IN CONCRETE

PURPOSE:

To establish a procedure to approve silica fume 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 903.02.03 (C)
ASTHO M-307 Silica Fume Used in Cementitious Mixtures

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 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 AASTHO M-307, Table 1 and Table 2.
4. Materials Safety Data Sheet.

Mail the request for approval 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 information provided by the manufacturer to ensure that it meets the requirements of AASTHO M-307, Table 1 and Table 2. If the test results do not comply, the ME will reject the source for approval. If the test results comply, the ME will approve the silica fume.

PROJECT ACCEPTANCE REQUIREMENTS:

Qualification of a product and addition to the QPL does not constitute a blanket approval of the material. The silica fume 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.