

Bureau of Materials Materials Approval Procedures

MAP Number: 101-15

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

PROCEDURE FOR APPROVAL OF COARSE AGGREGATES, FINE AGGREGATES, AND DENSE GRADED AGGREGATE BASE COURSE

PURPOSE:

To establish a procedure to approve sources of coarse aggregates, fine aggregates and dense graded aggregates 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 901.01 through 901.10

PROCEDURE:

A. Producer's Request for Approval

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

- 1. The name, address, and contact information for the producer as well as directions and map to the source.
- 2. The rock type or recyclable product type of the aggregate product to be evaluated. The ME will only consider NJDOT acceptable rock types/recyclable products for approval. For a list of acceptable products, see the applicable section of NJDOT Standard Specifications.
- 3. The AASHTO or NJDOT size to be evaluated.
- 4. Test results for a minimum of three quality control samples per aggregate size over a several week period. Include all required tests to indicate compliance with NJDOT Standard Specifications, including gradation and any other tests indicated by the ME to be applicable for the approval of the particular aggregate product/sizes. The laboratory performing the quality control testing may be an independent testing laboratory or a laboratory maintained by the aggregate producer.

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 the quality control test results submitted by the producer for compliance with the applicable specification. If the test results do not comply, the ME will notify the producer. The ME will reevaluate the product only after submission of a formal request along with acceptable evidence that the problem causing the non-compliance has been resolved. If the test results comply, the ME will sample the source for Bureau of Materials testing.

C. Bureau of Materials Sampling and Laboratory Testing

The ME will visit the source to obtain a minimum of three samples per size of aggregate over a several week period. The ME will test the samples to confirm compliance with NJDOT specifications.

Qualification of a product and addition to the QPL is based on the results of field sampling and compliance testing by the ME of the three samples. If one of the three samples fails to comply with specifications, The ME will obtain and test a fourth sample. If three samples comply with the specifications, then the ME will approve the aggregate.

On a project specific basis, the ME may base approval on two samples. For aggregate sizes #1, #2 and #3, the ME will base approval on one sample but only from a previously approved quarry source. The QPL listing of these large size aggregates may be requested by the aggregate producer before any specified project.

PROJECT ACCEPTANCE REQUIREMENTS:

Qualification of a product and addition to the QPL does not constitute a blanket approval of the material. For aggregates used in Concrete and HMA, the aggregate must be verified and approved in a mix design in order to be used.

The Contractor for each proposed project must submit the aggregate and source on a Materials Questionnaire as specified in Section 106. The ME will approve the aggregate 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*.

The ME will approve Rip-Rap slope-protection, gabion basket stone, granite curb, and non-standard aggregate items on a project specific basis based on the specifications for the project. Additionally, granite, decorative granite facing, other stone facing may be inspected or certification supplied at the direction of the ME. The Contractor for each proposed project must submit the product and source on a Materials Questionnaire as specified in Section 106. The ME will field-inspect or sample and test these materials according to the Contract Documents.

DISQUALIFICATION:

The ME may remove aggregates from the QPL for non-conformance with the standard specifications or for a documented history of poor field performance.

The ME will periodically obtain and test samples from the source in an on-going quality assurance program. After two consecutive failures of the same aggregate size for any specified test, the ME will notify the aggregate producer of possible removal from the QPL for non-compliance. After allowing a minimum of two weeks for the aggregate producer to correct the quality problems, the ME will obtain an additional aggregate sample for testing. If this sample fails, the ME will disqualify the aggregate and remove the material from the QPL. If gradation of the material is the reason for non-compliance, the ME may downgrade the approval of the aggregate material to a lesser designation, e.g. "concrete sand" to "HMA (washed) sand" or "#57" to "*57 (3/4")".

Additionally, the Bureau of Materials must be notified in writing of any change to the quality control plan. Failure to notify the Bureau of Materials of changes will result in disqualification.

REQUALIFICATION:

The requalification process is identical to the approval process with the addition that any aggregate product which has been disqualified and removed from the QPL will be considered for reevaluation only after acceptable written evidence has been shown to the ME that the problem causing the disqualification has been resolved and material complying with NJDOT Standard Specifications is being produced.

Additionally, the Bureau of Materials may require the producer to requalify the product for any of the following reasons:

- 1. If the Department's standard specifications change, the ME may require requalification to ensure that the product meets the new specification.
- 2. If the aggregate producer builds and/or purchases a new aggregate plant or moves the existing aggregate plant to a new location.
- 3. If the aggregate producer encounters a different geologic classification than the type already listed on the QPL, e.g. quarries through granite/gneiss into a quartzite.