

State of Illinois
Department of Transportation
Bureau of Materials and Physical Research
Springfield

POLICY MEMORANDUM

Revised: January 1, 2008

3-08.0

This Policy Memorandum supersedes number 07-13 dated January 1, 2007

TO: REGIONAL ENGINEERS AND HIGHWAY BUREAU CHIEFS
EMULSIFIED ASPHALT MANUFACTURERS

SUBJECT: EMULSIFIED ASPHALT ACCEPTANCE PROCEDURE

DEFINITIONS

State - Illinois

Department - Illinois Department of Transportation

Bureau - Bureau of Materials and Physical Research at 126 East Ash Street, Springfield, Illinois 62704-4766.

Local Agency - Municipality or City, County or Road District

Source - Emulsified Asphalt Manufacturing Plant

Random Split Samples (IND) - Independent assurance samples taken at the source, witnessed by Department representatives, and tested by both the Bureau laboratory and the source laboratory to evaluate test equipment, procedures, and verify acceptability of source certified material.

Investigative Samples (INV) - Samples taken at the source or jobsite, witnessed by Department or local agency representatives, and tested by the Bureau laboratory to verify acceptability of source certified material.

Process Control Samples (PRO) - Samples taken and tested by the source for quality control.

MISTIC – (Materials Integrated System for Test Information and Communication) Department-wide database containing materials inspection and test information.

1.0 **PURPOSE**

1.1 To establish a procedure whereby the production of a source may be accepted for use on Illinois State or local agency projects based on a uniform certified quality control program.

2.0 **SCOPE**

2.1 This procedure shall apply to all sources that supply emulsified asphalts to State and local agency projects.

3.0 **PROCEDURE**

3.1 **SOURCE'S RESPONSIBILITY**

3.1.1 Submit to the Bureau by March 31st of each year, a certified statement that all materials to be furnished to State and local agency projects shall be tested according to the source quality control plan before shipment and shall conform to the Department's latest specification requirements for the type of materials furnished. This certified statement shall include the Department's required wording regarding material approval, contractual status, and performance standards. This certification shall be signed by a responsible officer of the source with authority to bind the source to contract. This certification shall also be notarized.

3.1.2 Certify in annual statement (3.1.1) that a routine procedure will be followed that makes a reasonable attempt to prevent the contamination of the material to be loaded into tank trucks or cars by the material previously carried.

3.1.3 Submit annually a detailed quality control plan to the Bureau for approval. The plan shall identify the source location, laboratory name and location, a complete description of the types and frequencies of the quality control tests to be performed.

3.1.4 Be responsible for inspection costs associated with the initial plant certification (3.2.2) and subsequent sampling inspections (3.3.3). The source is only responsible for payment if they are more than 50 miles outside the state line and if the inspections cannot be completed within one day's normal work hours of 8:00 A.M. to 4:30 P.M. The source shall pay for transportation, per diem (meals), lodging and incidental travel costs incurred by the Bureau inspector. The costs shall not exceed the limits established by the Department's travel regulations. At the Bureau's option, sampling arrangements may be made through a mutually approved private inspection agency.

- 3.1.5 Maintain records of quality control tests for a period of at least three years. Furnish the Bureau reports of specification compliance test results. These test results shall be submitted within one week of completion and on forms approved by the Bureau.
- 3.1.6.1 Maintain copies of bills of lading and of quantities of materials shipped for a period of at least three years.
- 3.1.7 Have the source primary laboratory facility (test methods and equipment) regularly inspected by AASHTO Materials Reference Laboratory (AMRL). The laboratory shall demonstrate all required tests for the products produced. A copy of the AMRL report on the lab inspection shall be provided to the Bureau, accompanied by documentation of resolution of any discrepancies in the AMRL report. Source satellite laboratory equipment and procedures shall be inspected regularly by AMRL or annually by the source's primary AMRL inspected laboratory staff. A copy of the report of the satellite laboratory inspection shall be sent to the Bureau. The cost of these inspections shall be borne by the source.

3.2 REQUIREMENTS FOR INITIAL CERTIFICATION

- 3.2.1 Sources requesting certified status for their facilities shall make application in writing to the Bureau. This application shall include an initial certified statement of compliance with the provisions of Article 3.1.1 and 3.1.2, a quality control plan (3.1.3), and a statement that AMRL inspection has been requested.
- 3.2.2 To be considered for certification, a source must have an acceptable quality history. The judgment of an acceptable quality history will be based upon the Department's historical data. In the event no quality history exists, one will be established over a period not to exceed three (3) months by testing a sufficient number of samples obtained from the source production and random split sampling. During this period, material from a source seeking certification will be accepted only if shipment is made from a pre-tested tank approved by the Department. Copies of bills of lading indicating the source of the material shall accompany each load and shall be presented at destination. The bills of lading shall include information required in Article 3.3.6. The source shall also note the MISTIC Test Identification approval number on each bill of lading.
- 3.2.3 When an acceptable quality history has been determined, source production will be accepted on the manufacturer's certification. The Department will place the source and qualified product(s) on the certified source list.

- 3.3 REQUIREMENTS DURING PERIOD OF CERTIFICATION
- 3.3.1 Finished emulsions shall be held in storage for a period of time that will enable the manufacturer's laboratory to perform all required tests according to the source's Quality Control Plan. Ductility and solubility in trichloroethylene shall remain a part of the specification but the source will not be required to perform these tests.
- 3.3.2 An evaluation of product uniformity based on the manufacturer's process control samples, random split samples, and investigative samples will be conducted by the Bureau to verify source laboratory testing and source product.
- 3.3.3 Unscheduled visits will be made to all sources periodically by an inspector from the Bureau. At this time, the inspector shall obtain investigative or random split samples. Investigative samples shall be taken from certified material ready for shipment.
- 3.3.4 The test results obtained on random split samples by the source and the Bureau shall be compared to determine differences in testing that may occur between the two laboratories. If it is found that the two laboratories differ significantly, this difference must be resolved to the mutual satisfaction of both laboratories. If it is determined that the source's quality control testing is not acceptable, the source shall be removed from the certified list.
- 3.3.5 Samples as obtained in Articles 3.3.2 and 3.3.3 shall be tested by the Bureau laboratory for conformance to the Department's specifications. A source shall be removed from the certified list if the test results obtained on the samples indicate a pattern of non-conformance to any specification requirement.
- 3.3.6 Copies of bills of lading shall accompany each load and be presented for filing at destination. The bills of lading shall contain the following information:
- a) Tank number from which material was drawn.
 - b) Sequence number identifying the tank test report.
 - c) Where used (contract number, section, county, etc.).
 - d) Consignee & destination.
 - e) Bill of lading number.
 - f) Date of shipment.
 - g) Type of material.
 - h) Name and location of source.
 - i) Weight per gallon at 15.6°C (60°F).
 - j) Gross, tare and net weights.
 - k) Type of material last transported.

3.4 REVOCATION OF A SOURCE'S CERTIFICATION

3.4.1 The Department may revoke a source's certification for any of the following reasons:

3.4.1.1 A certified source that fails to meet the Department's criteria for certified status.

3.4.1.2 A certified source that fails to follow a routine procedure to inspect the transport tanks, trucks, or cars does not make a reasonable attempt to prevent the contamination of materials.

3.4.1.3 A certified source that fails to follow its Bureau approved quality control plan.

3.4.2 The source may re-apply for certification status at the end of the revocation period. Re-application shall be in writing to the Bureau and include the specific steps taken to correct the cause for loss of certification.

3.5 ACCEPTANCE PROCEDURES

3.5.1 Material will be identified by the bill of lading accompanying the shipment. Department field representatives will check the bill of lading of each shipment to determine its type and source. This information will then be compared with data on the current list of certified sources to determine the status of the material.

3.5.2 When the information on the bill of lading and the information on the current list of certified sources is inspected and compared, one of the following three judgments will be made regarding the acceptability of the material:

(a) When the bill of lading shows a source location and qualified product which are on the list of certified sources, the material shall be accepted for use on State and local agency projects.

(b) When the bill of lading shows a source location or product which is not on the list of certified sources, but the bill of lading does contain the MISTIC test identification approval number, the material shall be accepted and used.

(c) When the bill of lading shows a source location or product which is not on the current list of certified sources and does not contain the MISTIC test identification approval number, the material will not be accepted for use on State and local agency projects.

4.0 **DOCUMENTATION**

- 4.1 Test results of random split samples, investigative samples, and process control samples shall be maintained at the Bureau and shall be made available to authorized agencies upon request and for review by the source.
- 4.2 The Bureau will maintain a list of certified sources. The list will include the name of the source, the source code number, the location of the source, and the source's qualified products. The Bureau will update the list when the status of any source changes. The approved certified source list is available on the Internet. To access, log onto the IDOT website <http://www.dot.il.gov>. The list is located under Doing Business/Materials/Approved Lists for Materials. A link is provided on the "Approved List for Materials" page to automatically receive an updated certified source list by e-mail. There is also an index link at the bottom of the page which provides the name and phone number of a contact person for questions concerning the list.
- 4.3 Personnel on projects receiving material from a source whose certification has been revoked will be notified immediately by the District office.
- 4.4. Copies of bills of lading shall accompany each load. In the case of emulsified asphalts delivered to the project, the bills of lading shall be maintained in the project files. When a contractor or subcontractor stores certified or State tested and approved emulsified asphalt for later delivery to a project, they must furnish a copy of the producer's bill of lading in addition to their shipping ticket.
- 4.5 When emulsified asphalt is used in bituminous plant mixtures, the bills of lading shall be maintained at the mix plant.



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