



Florida Department of Transportation

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JOSÉ ABREU
SECRETARY

THIS MEMO HAS EXPIRED

April 4, 2003

MEMORANDUM NO.: 12-03
EXPIRES ON AUGUST 1, 2003

TO: DISTRICT CONSTRUCTION ENGINEERS

FROM: Ananth Prasad, State Construction Engineer 

COPIES TO: Tom Malerk, Gale Page, Jim Musselman, Bob Burluson (FTBA), Jim Warren (ACA), Bob Boyer (Asphalt Institute), and Greg Schiess (FHWA)

SUBJECT: PROCEDURE FOR HANDLING ASPHALT BINDERS WITH POSITIVE SPOT TEST RESULTS

Due to temporary asphalt supply issues in the State of Florida, a number of asphalt terminal suppliers may not be able to routinely and consistently supply materials that meet the negative spot test requirement (AASHTO T102) in accordance with FDOT specification 916-1.

Therefore, please process the \$ 0.00 specification change on all applicable on-going projects that will have asphalt placed during April 1 through July 31, 2003.

The Specification change is as follows:

For asphalt binder incorporated into a mix to be placed on a Department's project between the dates of April 1, 2003 and July 31, 2003, the following procedure will be followed in addition to the requirements of FDOT specification 916-1 when the asphalt supplier in accordance with sampling and testing required by 916-1.3.3 has identified material that fails to meet the negative spot test requirement (herein after referred to as "POSITIVE SPOT" material).

**Procedure for Handling Asphalt Binders
With Positive Spot Test Results**

1. POSITIVE SPOT binder shall NOT be used in Friction Courses (ARB binder or PG76-22 binder).
2. Where the asphalt terminal supplier has identified POSITIVE SPOT material in accordance with sampling and testing required by 916-1.3.3, the supplier will be required to test and meet requirements of AASHTO MP1a for minimum critical cracking temperature of -12 C in accordance with AASHTO PP42 using Direct Tension (AASHTO T314 / TP3) after RTFO (AASHTO T240) and PAV (AASHTO R28 / PP1) at 212 F (100 C). Include this test result in the report for Specification Compliance in addition to the requirements identified in 916-1.3.4. This test requirement and the requirements of 916-1 must be met BEFORE shipping / certifying POSITIVE SPOT binders for use by FDOT.
3. The asphalt terminal supplier shall clearly identify / certify POSITIVE SPOT Superpave binder on the delivery ticket in accordance with 916-1.3.6 as meeting FDOT specification requirements AND meeting "FDOT POSITIVE SPOT PROCEDURE". This is important since it is the only documentation project personnel and the contractor have that they are using a POSITIVE SPOT binder.
4. The asphalt terminal supplier shall have the following additional tests run on POSITIVE SPOT asphalt binder for any new "lot" of material and at frequency of one per month (see 916-1.3.3)
 - a. Heptane / xylene equivalent Spot Test (AASHTO T-102)
 - b. 60°F Ductility (ASTM D113-99) after RTFO (AASHTO T240) and PAV (AASHTO R28 / PP1) at 212 F (100 C) and at 230 F (110 C)
 - c. DSR (AASHTO T315 / TP5) and Creep Stiffness (AASHTO T313 / TP1) after RTFO (AASHTO T240) and PAV (AASHTO R28 / PP1) at 230 F (110 C)

DCE MEMO 12-03

April 4, 2003

Page 3

- d. Direct Tension failure strain @ 1.0 mm/min (AASHTO T314 / TP3) after RTFO (AASHTO T240) and PAV (AASHTO R28 / PP1) at 212 F (100 C) and 230 F (110 C)

This data will be sent to the FDOT State Materials Office (Attention: Howie Mosley) along with a one-quart split sample of the material tested. Any other test data such as Heithaus Titration (ASTM D6703-01), Horizontal Weatherometer, etc that may assist the FDOT in addressing this issue of positive spot would be appreciated and should also be forwarded.

In addition, in order to have a basis of comparison to the tests on POSITIVE SPOT asphalt binder, all suppliers shall where possible identify asphalt binders meeting all FDOT specs (including negative spot) and run these additional tests and supply this data to the FDOT State Materials Office along with a one-quart split sample of the material tested.

5. Contractors using POSITIVE SPOT material shall keep this material segregated in separate tank at the asphalt plant.
6. The Contractor shall supply a list of projects / location / lift / date where POSITIVE SPOT material was used. The Contractor shall send this list to the FDOT State Materials Office (Attention: Howie Mosley).

This memorandum serves as a blanket approval to process a specification change and should be attached to the Field Supplemental Agreement/Work Order or the Supplemental Agreement.

If you have any questions, please contact Gale Page at (352)-337-3208 (suncom 642-3208).

AP/pw