

May 5, 2003

**MEMORANDUM
03-06**

TO: District Directors
District Construction Engineers
Toll Road Operations Engineer
District Area Engineers
District Project Engineers/Supervisors
District Materials and Tests Engineers

FROM: Timothy D. Bertram, Chief
Contracts and Construction Division

RE: PG Binder Sampling and Testing

Attached please find the PG Binder Sampling and Testing Program that INDOT has had in effect for 2003. The program is basically the same as was in place the last two years with the exception that any appeal tests must now be run in an accredited laboratory.

This program varies slightly from the Standard Specifications in the definition of lots and sublots and the appeal process. Also, the program replaces a part of the Standard Specification and therefore 902.01(a) beginning with line 24 through the end of 902.01(a) needs to be deleted.

The use of the PG Binder Sampling and Testing Program and the deletion of the section of the 902.01(a) as stated above does not require any formal change order or changes to contracts. You just need to be aware that the changes have taken place.

If you should have any questions on this issue please contact your Field Engineer.

TDB: ggp

Attachment



Indiana Department of Transportation

Materials and Tests Division

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April 21, 2003

To: Kurt Sommer, Crawfordsville DMTE
Robert Dahman, Ft. Wayne DMTE
Mark Montgomery, Greenfield DMTE
Lee Randell, LaPorte DMTE
David Hamilton, Seymour DMTE
Elliott Sturgeon, Vincennes DMTE

From: ^{MM} Mark Miller, Chief
Materials and Tests Division

Subject: PG Binder Acceptance Sampling and Testing Program

Effective September 1, 2001, the PG Binder Acceptance Sampling and Testing Program has been revised and the following supercedes all previous instructions pertaining to Section 902.01(a) of the Standard Specifications and Contract Special Provisions. Questions concerning this policy should be directed to David Andrews at (317) 610-7251 x 212 or by email at dandrewski@indot.state.in.us.

1. Lots and Sublots. A binder lot for each grade PG binder, per supplier, per HMA plant, will be based on one week of HMA production, Sunday morning through Saturday midnight. Lots will be further subdivided into sublots for each twelve-hour period when HMA is produced within a calendar day. A lot will contain a minimum of one subplot and a maximum of fourteen sublots. Testing will be performed on each binder lot.

2. Sampling. Samples shall be obtained at the HMA plant. Each sample will represent a subplot. Samples will be obtained during HMA production, in accordance with AASHTO T 40, by a HMA Certified Asphalt Technician or HMA Plant Operator and witnessed by an INDOT representative. A sample consists of two full one-quart metal cans supplied by the HMA production facility and labeled as follows:

Sample Date:
HMA Plant No.:
PG Supplier No.:
PG Grade:
PG Tank No.:
PG Lot and Sublot:
Sampling Marking No.:

An IT 530 will be prepared and signed by both the HMA Certified Asphalt Technician or HMA Plant Operator and the INDOT representative verifying that the sample was taken in accordance with AASHTO T 40, and the contents on the sample label are accurate. Contract number(s) represented by the PG binder will be shown in the remarks of the IT 530. The sample and IT 530 shall be given to the INDOT representative.

The INDOT representative will deliver the IT 530 and the PG binder samples to the respective District production laboratory for holding. A weekly log sheet (attached) will be filled out for each lot of PG binder. When the complete set of lot samples are received by the production laboratory, the lot samples, IT 530s, and the log sheet will be packaged and shipped to the appropriate laboratory for testing.

3. PG Binder Testing. PG binder testing will be performed on completed PG binder lots and will consist of either Complete or Partial testing. Complete PG binder testing consists of RTFO-DSR and PAV-BBR testing. Complete PG binder testing will be performed on the first subplot of the first lot of production for each grade of material for each supplier, per plant, and then randomly once every 10 lots. Partial PG binder testing consists of RTFO-DSR testing on a random subplot of each lot. Lots and/or sublots to be tested will be selected in accordance with Section 3.0 of ITM 802. Random lots designated for Complete testing will be selected upon the arrival of the first lot. Rotational viscosity and flashpoint tests are not required for Complete or Partial Testing.

If the test results from the Complete or the Partial testing are in accordance with the specifications, the entire PG lot of material is considered to be acceptable.

If the test results from a Complete test are not in accordance with the specification, the results will be reported to the DMTE and the INDOT Bituminous Engineer. The DMTE will

prepare a failed material report in accordance with 105.03, and the next PG binder lot will be selected for Complete Testing.

If the test results from the Partial test are not in accordance with the specification, the INDOT Laboratory will initiate a PAV-BBR test on the same subplot. The test results will be reported to the DMTE and the INDOT Bituminous Engineer. The DMTE will prepare a failed material report in accordance with 105.03, and the next PG binder lot will be selected for Complete Testing.

For any PG binder lot having test results not complying with the specifications, the remaining samples for that lot and all the backup samples will be held for 60 days for possible appeal testing. After 60 days, all samples may be disposed of. PG binder samples and backups for lots meeting specifications may be disposed of promptly.

The INDOT Bituminous Engineer will review the supplier's ASC program and the appropriate DMTE will review the HMA producers ITM 582 QCP for compliance for all failing Complete test results.

4. Appeals: All Contractor appeals will be in accordance with 902.01(a)3. The appeal samples will be analyzed in an AASHTO accredited laboratory. INDOT's PG Binder Laboratory at the Materials and Tests Division is an accredited laboratory.

^{pxo}
FZ/DHA/GWM

CC: R. Smutzer
T. Bertram
R. Yunker
L. Bandy
V. Gallivan
File

Attachment

INDOT Performance Grade Sample Log and Test Results for: _____
 (District)

Lot # _____ Week of: _____

	Computer Code	Name
HMA Source		
PG Supplier		
Grade		

Contracts supplied from this HMA Source, Supplier & PG Grade:

A _____, B _____, C _____, D _____, E _____, F _____, G _____

Date Sampled	Sublot Number	Tank Number	Sample Marking Number	Contracts Represented	Date In Lab	Date Out of Lab	C/P	Lab Number	RTFO DSR (G*) @ _____ °C	Phase Angle	RTFO DSR (G*/δ) @ _____ °C	BBR @ _____ °C stiffness	BBR @ _____ °C m-value
	1												
	2												
	3												
	4												
	5												
	6												
	7												
	8												
	9												
	10												
	11												
	12												
	13												
	14												

(Note: A new log is required when any of the following change: Lot, HMA Source, PG Supplier or Grade)

Signed by Submitter (name and number) _____ Date _____