"NEAUPG MODEL PGAB QC PLAN"

PERFORMANCE GRADED ASPHALT BINDER QUALITY CONTROL PLAN FOR XYZ ASPHALT PRODUCERS

For (Insert State Name)

For the Year 200X

XYZ Asphalt Producers 000 Thermal Crack Road UpNorth, N.A. 00000

Phone: Fax:

Submitted By:

QC Plan Administrator

Date

Approved By:

State Materials Engineer

Date

THE FOLLOWING QC PLAN FORMAT CONFORMS WITH THE REQUIREMENTS OF AASHTO R-26 AND HAS BEEN ACCEPTED BY THE NORTHEAST ASPHALT USER/PRODUCER GROUP (NEAUPG)

1.0 - PGAB Facility and Quality Control Information

(See R-26, Subsection 9.1)

- 1.1 Facility Type & Storage Information:
- 1.2 Facility Location(s):
- 1.3 QC Authorized Representative Name and Phone #:
- 1.4 QC Tests to be Performed on Each PGAB:
- 1.5 QC Laboratory Name, Location, and Accreditation/Qualifications

2.0 - Procedures for PG Binders Not in Compliance

(See R-26, Subsection 9.2)

- 2.1 Agency Notification (Immediate notification of the State required):
- 2.2 Identification of Material:
- 2.3 Ceasing of Shipment:
- 2.4 Notification Prior To Resuming Shipment:
- 2.5 Disposition of Non-compliant Material:

3.0 - Method and Frequency of Sampling & Testing

(See R-26, Subsection 9.3)

- 3.1 Initial Frequency of Sampling & Testing:
- 3.2 Reduced Frequency of Sampling & Testing:
- 3.3 Minimum Frequency of Specification Compliance Testing:
- 3.4 QC Sampling & Testing for Guiding Manufacturer:

4.0 – Documentation and Preparation of Monthly Summary Reports

(See R-26, Subsection 9.4)

5.0 – Procedures and Documentation for Transport Vehicles

(See R-26, Subsection 9.5)

6.0 - Procedures for Use of In-Line Blending

(See R-26, Subsection 9.6)

- 6.1 Initial Frequency of Sampling & Testing of Modified Binder:
- 6.2 Reduced Frequency of Sampling & Testing:
- 6.3 Minimum Frequency of Specification Compliance Testing:
- 6.4 QC Sampling & Testing for Guiding Manufacturer:

6.5 – Record of Proportions of Blended Material:

APPENDICES

- A. Laboratory Accreditation/Qualifications
- B. Example Random Sampling Report Forms (D 3665 & T 40)
- C. Example PG Asphalt Binder Worksheet & Test Results Report Form (M 320)
- **D.** Example Monthly Summary Report
- E. Example Bill of Lading & Loading Affidavit
- F. (Other Appendix Items as Determined Necessary to QC Plan)

APPENDIX A

Laboratory Accreditation/Qualifications

APPENDIX B

Example Random Sampling Report Forms (D 3665 & T 40)

IF the facility does not participate in Random sampling , please make a statement to that effect on this Appendix B sheet . NCDOT.

APPENDIX C

Example PG Asphalt Binder Worksheet & Test Results Report Form (M 320)

APPENDIX D

Example Monthly Summary Report

Goes Below Zero Asphalt Producers PG Asphalt Binder Sampling & Testing – Monthly Summary Report

TESTS PERFORMED	SAMPLE IDENTIFICATION & TEST RESULTS		
PG Binder Grade:			
Lot No.:			
Sample No.:			
Specific Gravity (T 228):			
Flash Point Temp. (°C) (T 48):			
Rotational Viscosity (T 316):			
Orig. Dynamic Shear (T 315):			
G*/sin δ, Min. 1.00 kPa			
Test Temp @ 10 rad/s (°C)			
RTFO Percent Change (T 240):			
RTFO Dynamic Shear (T 315):			
G*/sin δ, Min. 2.20 kPa			
Test Temp at 10 rad/s (°C)			
PAV Dynamic Shear (T 315):			
G*sin δ, Max. 5000 kPa			
Test Temp @ 10 rad/s (°C)			
PAV Creep Stiffness (T 313):			
S, Max. 300 Mpa			
Test Temp (°C) @ 60 s			
m-value, (slope), Min. 0.300			
PAV Direct Tension (T 314):			
Failure Strain, Min. 1.0%			
Test Temp @ 1.0 mm/min (°C)			
Physical Hardening Index, 24 Hrs.			
S (Mpa)			
Test Temp @ 60 s (°C)			
m-value			

(Rev. – May 21, 2003)

APPENDIX E

Example Bill of Lading & Loading Affidavit

(Rev. - February 29, 2000)

"NEAUPG Model PGAB QC Plan" Minimum Information Required on a Shipping Ticket (Bill of Lading)

NEAUPG recognizes that Shipping Tickets/Bills of Lading may vary between Supplier and, accordingly, provides no prescribed format. However, as a minimum, the following information must be clearly provided on all Shipping Tickets/Bills of Lading:

- 1. The information provided by the North Carolina Department of Transportation Standard Specifications for Roads and Structures Section 1020, Delivery and Acceptance of Asphalt Materials.
- 2. Name of Producer/Supplier and location
- 3. A statement that the material has been tested and meets AASHTO specifications or is being provided by an approved supplier under Approved Supplier Certification (ASC)
- 4. The grade of the binder material.
- 5. The rotational viscosity in Pascal-Seconds (Pa-S) at 135 and 165 degrees C
- 6. The recommended laboratory mixing and compaction temperature (degrees C for the PGAB)
- 7. Delivery ticket number
- 8. Date and time loaded (mm/dd/yyyy AM:PM)
- 9. Date and time shipped (mm/dd/yyyy AM:PM)
- 10. State project or purchase order number
- 11. NCDOT assigned batch number
- 12. Destination
- 13. Name of consignee
- 14. Trailer or car number
- 15. Producer's or Supplier's storage tank and batch number
- 16. Quantity loaded in tons or gallons (metric tons or liters)
- 17. Specific gravity or pounds per gallon (kg/L) at 60 degrees F (15.6 degrees C)
- 18. Loading temperature
- 19. Net gallons at 60 degrees F (15.6 degrees C)
- 20. Brand, grade and percentage or quantity of anti-strip additive
- 21. Stamp, write, print or attach the NCDOT Supplier's and NCDOT Transporter's Certification to the delivery ticket as described in Section 1020, Delivery and Acceptance of Asphalt Materials. For the latest issues of certifications, see the Materials and Tests Chemical Laboratory website.

(Rev. - December 3, 2012)

"EXAMPLE LOADING AFFIDAVIT"

Loading Affidavit – <u>ANYPLACE, USA</u> Terminal

Today's Date: Load Ticket	Load Ticket #	
Driver Name:		
Company:		
• I certify that the product in my current load is comparevious load.	atible with product res	idue from my
Current Load:		
Previous Load:		
• I certify that my trailer is <u>dry (free of moisture).</u>	YES	NO
• I certify that my truck/trailer is in <u>good mechanical</u> <u>condition.</u>	YES	NO
 All valves are operable, dome lids and gaskets are in place, there are no tank or piping leaks, and all drains and unloading valves are closed. 		NO
• I certify that my trailer is free of retained residue.	YES	NO
• I understand that if my truck contains retain which e cannot be filled without the express permission of au		

Driver Signature

Date

"N.C. DEPT. OF TRANSPORTATION SUPPLIER'S AND TRANSPORTER'S CERTIFICATION"

"Stamp, write, or print these certifications on the delivery ticket, or attach to the delivery ticket."

NCDOT Supplier's Certification:

This is to certify that this shipment of _____ gallons/liters or tons/metric tons of _____ grade asphalt including _____ gallons/liters of _____ anti-strip meet all requirements of NC Department of Transportation specifications.

Signed: _____

Authorized Representative of Supplier

Extracted from Section 1020: "When no anti-strip additive is included with the load, the supplier shall indicate zero (0) in the gallons field and "NA" in the anti-strip field on the above certification."

NCDOT Transporter's Certification:

Signed: _____

Authorized Representative of Transporter

Rev. – December 3,2012

APPENDIX F

(Other Appendix Items as Determined Necessary to QC Plan)

THIS SECTION SHOULD INCLUDE A COPY OF THE EXCEL SPREADSHEET YOU SUBMIT TO NCDOT WITH ALL THE QC AND IANC DATA.