



OKLAHOMA DEPARTMENT OF TRANSPORTATION

200 N. E. 21st Street

Oklahoma City, OK 73105-3204

DATE: May 1, 2006

TO: Resident Engineers

FROM: Reynolds Toney, Materials Engineer

SUBJECT: Changes to Acceptance Sampling Guide (Bituminous Binders)

ODOT Materials Division is implementing changes regarding the routine sampling and submission of field samples of bituminous binders. These changes will reduce the number of field samples required by changing from daily sampling to sampling once per some number of gallons of the material, as outlined below. Please communicate this information to 1) all personnel involved in sampling, testing, and acceptance of bituminous materials, and 2) all auditors responsible for ensuring the proper degree of sampling and testing has taken place on a project.

Changes:

- 1) Sampling frequency for PG Binders has been changed to 1 per 100,000 gallons. (About 1 every 8500 tons of HMA at 5% AC)
- 2) Sampling frequency for Bituminous Surface Treatments has been changed to 1 per 20,000 gallons.
- 3) No field samples of tack coat are required.
- 4) No field samples of prime coat are required.

As always, *if you suspect a specific problem with any material*, please call us. We will work with you to perform as much sampling and testing as is required to resolve the problem.

Benefits of the Changes:

- Less sampling by the Residency.
- More testing of Refinery samples by Materials Division.
- More Refinery inspections by Materials Division.
- Fewer testing problems with samples that have changed properties due to the time lag between sampling and testing, due to either laboratory backlog or untimely submission of samples.
- More time for Residency personnel to check asphalt binder invoices to ensure that the proper type of binder is purchased for each binder.

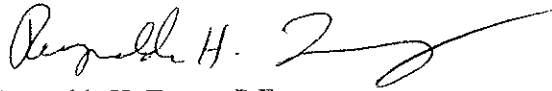
Implementation:

- Replace pages 12 through 16 of Appendix 700A with the attached copies.
- The changes are effective immediately on all ongoing projects and all future projects.
- Independent Assurance sampling will remain at the current frequency.

"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."

AN EQUAL OPPORTUNITY EMPLOYER

Sincerely,

A handwritten signature in black ink, appearing to read "Reynolds H. Toney". The signature is fluid and cursive, with a long, sweeping tail that extends to the right.

Reynolds H. Toney, P.E.
Materials Engineer

cc: Materials File
 George Raymond
 Reynolds Toney
 Scott Seiter
 Danny Gierhart
 Marcella Donovan
 John Benson

Spec. Section	Item	Mat'ls.	Tests	Test Method	Sampling Frequency	Sampling Location	Size of Sample
319S	Open Graded Bituminous Base		Cylinders				
→ → →	Bituminous Materials	708.03	Lab	Certification	Identify as being from an approved source. Check sample to Lab. 1 per day per one or more loads: 100,000 gallons.	Transport or Storage	1 qt.
	Aggregate	708	Quality & Mix Design	Lab	Sample from each source or Lab	Stockpile	15-65 lbs.
	Mixture	708	Asphalt Content	Tank Strap or ^{1*} T-26	Each day's run		
			Sieve Analysis	T-30, T-27, T-11	1 per 1,000 tons production	Truck ^{1*} Hot Bins ^{1*} Cold Bins	15-20 lbs.
320	Open Graded Portland Cement Base		All applicable tests and sampling frequency same as Section 318 except delete and equivalent.				
325	Separator Fabric For Bases		Lab	Certification	Each lot or shipment		1 sq. yd.
Section 400 Surface Courses							
402	Bituminous Surface Treatment						

^{1*}When applicable asphalt content may be determined with asphalt content gage and aggregate gradation by belt sample.

Spec. Section	Item	Mat'ls.	Tests	Test Method	Sampling Frequency	Sampling Location	Size of Sample
→ → →	Bituminous Binder	708.03	Lab	Certification	Identify as being from an approved source. Check sample each 10,000 gals. or day's run of more than 10,000 gals. 20,000 gallons.	Transport or Storage	1 qt.
→ → →	Prime	708.03	Lab	Same	Same No sample required.		
	Cover Aggregate	708.02	Quality	Lab	Quality sample each size, each source	Stockpile	1st sample 75 lbs. min. 2nd sample 50 lbs min.
			Sieve Analysis	T-27	Field test each 200 cu. yds. or 250 tons	Stockpile	40 lbs.
403	Traffic Bound Surface Course	703.03	Quality	Lab	Quality Sample each size, each source	Stockpile	1st sample 75 lbs min 2nd sample 50 lbs min
						Type "E" Only	200-250 lbs.
	Type A, B, C, D & E Aggregate		Sieve Analysis	T-27	Each 400 Cu. Yds. or 500 Tons	Roadway	50-60 lbs.
	Type C & E Aggregate		LL & PI	T-90	Same	Roadway	50 lbs.
405	Asphalt Surface Course (HMCL)						
	Bituminous Materials	708.03	Lab	Certification	Identify as being from approved source. Check sample to Lab. † per day per one or more loads.	Transport or Storage	1 qt.
	Aggregate	708	Quality & Mix Design	Lab	Sample from each source to Lab.	Stockpile	15-65 lbs.

Spec. Section	Item	Mat'ls.	Tests	Test Method	Sampling Frequency	Sampling Location	Size of Sample
			Sand Equivalent	T-176	1 per 5,000 tons production	Hot bins or cold feed	
	Mixture	708	Asphalt Content & Sieve Analysis	* L-26, T-27, T-11, T-30	1 per 1,000 tons	Truck	15020 lbs.
			Density of Laboratory Molded Specimens	L-8 L-14	1 per 1,000 tons production	Truck	3 specimens
			Rice Gravity	T-209	1 per 5,000 tons production	Truck	
			Road Density	L-14	3 per 1,000 tons	Roadway	6" core or square
			Nuclear Density ASTM-D-2950		3 per 1,000 tons	Roadway	Average of 4 2 min counts.
	Bridge Approach Slab Base		Visual Inspection		Approved Source		
406	Open Graded Friction Surface Course						
→ → → →	Bituminous Materials	708.03	Lab	Certification	Identify as being from an approved source. Check sample to Lab. 1 per day per one or two loads: 100,000 gallons.	Transport or Storage	1 qt.
	Aggregate	708	Quality & Mix Design	Lab	Sample from each source to lab.	Stockpile	15-65 lbs.
			Sand Equivalent	T-176	1 per 5,000 tons production	Hot Bins or Cold Feed	
	Mixture	708	Asphalt Content	Tank Strap or *L-26	Each day's run.		

*When applicable oil content may be determined with oil content gage and aggregate gradation by belt sample.

Spec. Section	Item	Mat'ls.	Tests	Test Method	Sampling Frequency	Sampling Location	Size of Sample
407	Tack Coat		Sieve Analysis	T-30, T-27, T-11	1 per 1,000 tons production	Truck	15-20 lbs.
→ → →	Bituminous Materials	708.03	Lab	Certification	Identify as being from an approved source. Check sample to Lab. 1 per 10,000 gals. <i>No sample required.</i>	Transport or Storage	1 qt.
408	Prime Coat						
→ → →	Bituminous Materials	708.03	Lab	Certification	Identify as being from an approved source. Check sample to Lab. 1 per 10,000 gals. <i>No sample required.</i>	Same	1 qt.
409	Slurry Seal Surface Treatment						
→ → →	Bituminous Materials	707.01	Lab	Certification	Identify as being from approved source. Check sample to Lab. 1 per day per one or more loads: 20,000 gallons.	Same	1 qt.
	Aggregate	707.01	Quality & Mix Design	Lab	Sample from each source to Lab.	Stockpile	15-35 lbs.
			Sand Equivalent	T-176	1 per 30,000 sq. yds.	Stockpile	
	Mixture	707.02	Asphalt Content & Sieve Analysis	*L-26, T-30, T-27 T-11	1 per 7,500 sq. yds.	Mixer Discharge	10-15 lbs.
410	Micro Surfacing	See Plans & Special Provisions					

*When applicable oil content may be determined with oil content gage and aggregate gradation by belt sample.

Spec. Section	Item	Mat'ls.	Tests	Test Method	Sampling Frequency	Sampling Location	Size of Sample
→ → →	Bituminous Material	Same	Lab	Certification	Identify as being from an approved source. Check sample to Lab. 1 per day per 1 or more loads: 20,000 gallons.	Transport	1 qt.
	Aggregate	Same	Quality & Mix Design	Lab	Sample from each source to Lab.	Stockpile	15-55 lbs.
			Sand Equivalent	T-176	1 per 1,250 tons	Same	10-55 lbs.
	Mixture	Same	Asphalt Content & Sieve Analysis	*L-26, T-27, T-11, T-30	1 per 250 tons	Mixer Discharge	Same
411	Plant Mix Asphalt Concrete Pavement						
→ → →	Bituminous Materials	708.03	Lab	Certification	Identify as being from an approved source. Check sample to Lab. 1 per day per one or more loads: 100,000 gallons.	Transport or Storage	1 qt.
	Aggregate	708	Quality & Mix Design	Lab	Sample from each source to Lab.	Stockpile	15-55 lbs.
			Sand Equivalent	T-176	1 per 5,000 tons production	Hot Bins or Cold Feed Belt.	
	Mixture	708	Asphalt Content & Sieve Analysis	*L-26, T-27, T-11 T-30	1 per 1,000 tons production	Truck	15-20 lbs.
			Stability & Density of Laboratory Molded Specimens	L-8, L-14, L-16	1 per 1,000 tons production	Truck	3 Specimens
			Rice Gravity	T-209	1 per 5,000 tons production	Truck	