



Acknowledgement

Stevenson Ganthier, PE Principal Engineer Bureau of Materials, NJ DOT

Bhavna Kabaria Assistant Engineer Bureau of Materials, NJDOT



Why worry about Tack Coat?

Core

Same Core Days Later!







Poor bond causes slippage and shoving, decreases durability (pavement life)

Direction of traffic





Slippage failure due to poor bonding of pavement layers





Lack of Tack Coat - No bonding between asphalt layers







TACK COAT EMULSION SAMPLING

Typical Tack Coat dispensing trucks





Tack Coat sampling <u>RE or Inspector's responsibility</u>

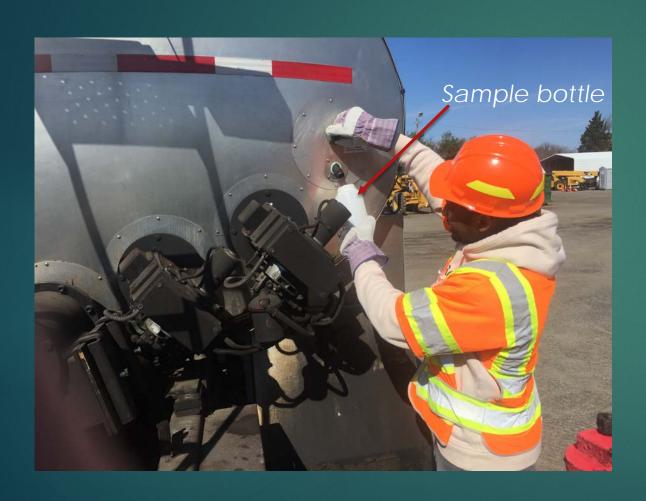
- ▶ 1) Certificate of Compliance is required from each truckload to the project. Make sure the grade of the emulsified asphalt is on the certificate in order to properly test the sample.
- ▶ 2) The NJDOT RE or inspector will witness the sampling. Collect one sample for each type of tack coat on the project.

Tack Coat sample will be collected every day.

- ▶ 3) Use a wide mouth jar of approximately one quart made of plastic or glass with a screw lid. The Bureau of Materials keeps one quart plastic containers in stock.
- ▶ 4) Mark the containers (<u>not</u> the lid) name/location of manufacturer, project name/DP#, product grade, lot number, tank number, date sampled, item #. Proper labeling of bottle....in after couple of slides
- ▶ 5) a. Witness truck driver takes sample from sample valve
 - b. " " " a nozzle on spray bar.
 - c. " " " wand").



Sampling from sampling valve...



Unscrew the cap on sampling spigot, turn valve on & allow min. one gallon to flow into "waste container" & discard.

Sample into one quart plastic container w/ screw top, screw lid back on tightly. Wear gloves (hot) and other appropriate safety equipment.



Sampling from Spray Bar Nozzle...



Allow at least 20 yards to run out before taking sample. Pull the nozzle ring to collect sample.

Sample into one quart plastic container w/ screw top, screw lid back on tightly. Wear gloves (hot) when obtaining sample.



Sampling from Application Device ("Wand")...



Allow minimum one gallon to flow into "waste container" and discard.

Sample into one quart plastic container w/ screw top, screw lid back on tightly. Wear gloves (hot) when obtaining sample.



Proper labeling of Sample Bottle

RE or his Inspector's responsibility



Mark the containers (not the lid) name/location of manufacturer, project name/DP#, product grade, lot number, tank number, date sampled, item #.



Construction Procedures Handbook

Section VI, Subsection T 10/03/2018

Construction Operations: Sampling Emulsified Asphalt for Microsurfacing, Slurry Seal, Tack Coat and Prime Coat

Note: This procedure <u>does not</u> cover the sampling of asphalt binder tack coat (PG64 and/or PG76). Metal quart cans are required for asphalt binder and extreme caution is needed due to high temperatures.

Caution: Bituminous products are stored at elevated temperatures. Always use appropriate safety equipment and precautions for hot liquids. (i.e. gloves and protective eyeware)



Truck calibration measuring device (only for that truck)







Tack Coat Ticket from Truck Operator

Log JD: TPJGAJE 168A131539	,
- ASPHALTYPAVING SYSTEMS	٠,
P.G. BOX 530, HAMMONTON, NJ, 08037 Tel: 609 861 4161	
Fax: 689 561 8920 Date: 87-28-16 Timo: 88:26:13	589
7	
Vehicle No. 9 Customer No. 50 /	100
	4
Customer: ASPHALT PAVING SYSTEMS	·)
FO BOX 530	
HAMMONYON, H.F. 08002	
Hin & Max Tomp.	, "x
OSS-1H 125 deg. F	Georgia I
CBS-19 PH 100 deg. E	The second
Products S COS-18PH ACT 63.4X PER: 57 SpGr: 0.000	W
Product Vinci 34.0 Lote: 1 Tanke: 6	7 47 4
Founds per Gallon: 8.38 This Naterial has been tested & for	nd *
to be in Conformance with the Dept	of.
GROSS 75300 LBS . of Transportation Space. Pa.	
TARE 25400/LES KET BOARD TARE	
HET SOUD US GALLONG, 6062.05	
SIGNATURE Job Aggregate.	
This Naterial was Free of	
Contamination Prior to Londing.	-

LB-88 RE's Responsibility





Thank you !!!



Safe driving on NJ roads

