Asphalt Emulsion Receiving Guide

March 2012

North Carolina Department of Transportation Materials and Tests Unit

1. Scope

1.1 The purpose of the NCDOT Asphalt Emulsion Receiving Guide is to aid field personnel on what to look for with shipments of Asphalt Emulsion.

2. Asphalt Emulsion QC/QA Program Background

- **2.1** The NC DOT Materials and Tests Unit is required to maintain the Departments Asphalt Emulsion QC/QA Program.
- 2.1 The Asphalt Emulsion Quality Control Quality Assurance Program is a comprehensive program designed to verify, assess, and track the quality of asphalt emulsions delivered to North Carolina Department of Transportation projects and maintenance operations. It is also used as a means for qualifying Producers/Suppliers to provide asphalt emulsions in this capacity.
- 2.2 The Producers are required to submit Quality Control (QC) plans to the Chemical Testing Engineer for review, submit monthly QC reports, and Excel spreadsheets capturing all the on-site and off-site testing done by the Producer to the Chemical Testing Engineer, and participate in Independent Assurance (IA) activities. Once these criteria have been met, the producer will then have all laboratories and technicians certified.
- **2.3** All laboratories, Producers' on-site, off-site, or independent, must meet a minimum set of criteria. The laboratories must either be AMRL accredited or NCDOT certified. The NCDOT certification process involves the qualification of all laboratory equipment, protocols, and testing procedures used. The qualification will be under the direction of the Chemical Testing Engineer and his staff.
- **2.4** In addition, each facility will have a minimum number of NCDOT certified technicians to perform sampling, testing, and record keeping duties during production of material that are used on NCDOT and Federal Aid projects.
- **2.5** The Materials and Tests Unit is tasked with performing Quality Assurance (QA) verification sampling, testing and record keeping confirming the operation of the Producer's quality control system and IA assessments and correlations of tests.
- **2.6** It is the intent of this program that acceptance or rejection of material be based on the total program. Therefore, a comparison of the QC and QA verification and other recent sample data may be used by the NCDOT for acceptance or rejection of a lot of material.

- **2.7** Participation in this program does not relieve the Producer of the responsibility of complying with all requirements of the *NCDOT Standard Specifications for Roads and Structures*.
- 2.8 The latest copy of the program can be found at :

http://www.ncdot.gov/doh/operations/materials/pdf/qc_qa_emulsion_ncdot_2008rev1.pdf

3. What to do When Receiving Asphalt Emulsion

- **3.1** The following is what should be done at a minimum when receiving a sample of asphalt emulsion on the project:
- **3.1.1** Verify the source of the emulsion. The source of the emulsion must be clearly recorded on the Bill of Lading (BOL). Be careful not to look at the main office address which may also be recorded. The material must come from a terminal on the Departments approved list. Examples of typical BOL's are shown in Appendix A.
- **3.1.2** Per the Asphalt emulsion QC/QA program all BOL's must have the NCDOT assigned batch number recorded. The batch number starts with the approved terminal number. This Batch number will have to be entered into HiCAMS when receiving tack on projects.
- **3.1.3** The BOL must have the supplier and transporters certifications recorded. The certification state that the material meets the NCDOT requirements and the transport tank was clean and free from contamination.
- **3.1.4** The net gallons must be recorded and match what is required for the project. For example the contractor may order 5000 gallons and only use 1000 gallons on a particular project. In this case 1000 gallons will need to be entered into HiCAMS for the quantity received.
- **3.1.5** The approved grade of the material must be recorded on the BOL. An example of the approved list of grades per facility can be found in Appendix B***.
 - *** Note this list changes periodically. The most up to date list can be found at http://www.ncdot.gov/doh/operations/materials/pdf/aspprodnc.pdf
- **3.2** If the BOL is lacking any of this information the product should not be received on the project.

Appendix A Example Bill of Lading

SAMPLE BOL - ASPHALT EMULSIONS – DUNN, NC – AT 13

ACOMALT ENALL CLONE INCO	/INAL ID	
ASPHALT EMULSION, INC.		DING OR DELIVERY TICKET
RICHMOND, VA DUNN, NC MANASSAS, VA	ATED BY SHIPPER	ADING WHEN MOVED IN VEHICLES OPER-
	A RECEIPT FOR P	BOL NUMBER
Subject to the tariffs or contract in effect on the date of the issue of this Bill	of Lading the prop	erty described below in apparent good order, is received by the carrier shown
		a special contract transportation will be subject to all the terms and conditions shipment will be performed in compliance with all applicable Rules, Regulations
and Laws.	ansponation of this s	impment will be performed in compliance with all applicable Rules, Regulations
This is to certify that the described materials are properly classified, describe	d, packaged, marke	d, and labeled, and are in proper condition for transportation, according to the
applicable rules, regulation and laws	ed by the carrier that	at the transportation of this shipment will be performed in compliance with all
Subject to Section 7 of Conditions of applicable bill of lading, if this shipmer	nt is to be delivered	to the consignee without recourse on the consignor, the consignor shall sign
the following statement: The carrier shall not make delivery of this shipment	without payment of f	reight and all other lawful charges.
and the second		
Signature of Consignor	sally for	lace
A STATE OF A		
I certify that the material shipped on this Bill of Lading r	meets State of Virgini	Whath Carolina Manufacture in Provide Courts of
Tennessee Highway Department specifications. The tra	insport tank was examined	mined and found suitable for loading. By:
		SUPPLIER CERTIFICATION
Authorize	od Signature	JUPPLIER CERTIFICATION
Trucker certifies that the cargo tank supplied for this shipment	t is a proper	SHIPPER
container for the transportation of this commodity and that prop	per placards	
have been applied.	S CERTIFICATI	ORVER Barbour
Concenting ing macerial upon loading, the		
produce on the prior load Haw C.B.A2	THE DESCRIBED	MATERIAL RECEIVED IN GOOD CONDITION AS NOTED
	Consisten	By
SEAL NUMBERS		By
PRODUCT HAZARDOUS CLASS TEMP G	RAV. GALLONS	CONSIGNEE/DESTINATION
C.R.S2 172 F 1.	01 4,474	NCDOT
OF	A REAL PROPERTY OF A READ REAL PROPERTY OF A REAL P	DESTINATIO
6	40pp	
	ALLÓNS	4800018160
		Appointment Time: Arrival Time:
	Ser Sugar	
		Departure Time:
We certify that all material being shipped on this invoice/b		
has been tested and approved under the Virginia Asphalt	Accortance	SCALE WEIGHTS
Program and that the material has been loaded into carrie	ers that are	
suitable for shipment such that no contamination has take	en place	2/24/2012 SHIPPING
	in place.	-7 - 3 - C - 1 - C - C - C - C - C - C - C - C
		DATE & TIME
TANK NUMBER BATCH NUMBER		32,400 LB T
B/L NO:21469 D =t : 10		2/24/2012
	•	7:24:20 AM
TANK NO. 9 (13-01817)		
		69,980 LB G
PROJ. NO:Union		32,400 LB T
		97,580 LB N
CARRIER Purvear		North Carolina Public Weighmaster
Barbaus	No. of the second s	License expires June 30, 2012
DRIVER Barbour		William Rowland - 321287
TRACTOR 206		1 that
TRACTOR TRAILER 137	and the second se	
INALEN 187		Herar With the
11		HAVADO UNLESS BIGNED
SIGNATURE		HANDO UNLESS BIONED

SAMPLE BOL - ASPHALT EMULSIONS - NEWPORT NEWS, VA - AT 56



SAMPLE BOL – ASPHALT EMULSIONS – RICHMOND, VA – AT 52

т	RMINAL ID	B	OL NUMBER
ASPHALT EMULSION, INC.	BILL OF LADING NOT A BILL OF LADING ATED BY SHIPPER OR O A RECEIPT FOR PRODU		32441
bject to the tariffs or contract in effect on the date of the issue of this rean, which carrier agrees to transport to the consignee and destination major or consignee in effect on the date of the issue of this Bill of La the carrier's tariffs legally on file. It is further agreed by the carrier that the Laws.	ding. In the absence of a spec te transportation of this shipme	ant will be performed in compliance with all	applicable Rules, Regulations
his is to certify that the described materials are properly classified, description of the Department of Transportation. It is further a pplicable rules, regulation and laws. subject to Section 7 of Conditions of applicable bill of lading, if this ship is following statement: The carrier shall not make delivery of this shipping takement.		services without recourse on the consi	ansportation, according to the formed in compliance with all gnor, the consignor shall sign
Signature of Consignor	gene		
I certify that the material shipped on this Bill of Lac JPPLIERS CERTINICATION Bipartment specifications	ting meets State of Verginia Ver ner Pansport tank was examined norized Signature Ma	d and found suitable for Reading	al By:
		Whitehurst Transpor	t, Inc.
Trucker certifies that the cargo tank supplied for this ship container for the transportation of this commodity and that	proper placallos	Harris, Tyrone	
have been applied.	- TRANSPORTER	RS CERTIFICATION	
in carridy this canhas is from af concaminating macanial upon landing. the gradues on the prior land was 0.0.0It		NTERIAL RECEIVED IN GOOD CONDITION	AS NOTED
SEAL NUMBERS	Consignee	NET GALLONS	
PRODUCT FRZARDONS CLASS TEMP	GRAV. GALLONS	CONSIGNEE/DESTINATION	
C. B. S2L 180 F		NCDOT Division 5	DESTINATION
Riemarks:	@60F	NCDOT Batch# 5200261	
Terminal 52		Granville	BATCH NUMBER
		Emergency contact: C	HENTREC
MATERIAL		800-424-9300	
We certify that all material being shipped on this inv	nino full of lading	SCALE WE	SHIPPING
two postible that all material being shipped on this inv	nhalt Acceptance		
	and an that are		DATE & TIME
has been tested and approved under the virginia into		9/1/2011 2:11:19 AM) DATE & TIME
has been tested and approved under the virginita very Program and that the material has been loaded into suitable for shipment such that no contamination has		2:11:19 AM) DATE & TIME
has been tested and approved under the viginitaries Program and that the material has been loaded into suitable for shipment such that no contamination has TANK NUMBER		2:11:19 AM)
Program and that the material has been loaded into suitable for shipment such that no contamination has		2:11:19 AM 38:449 I 9/1/2011 2:35:29 AM) вт
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has been tested and approved under the viginitaries Program and that the material has been loaded into suitable for shipment such that no contamination has TANK NUMBER B/L NO: 9 825112219 TANK NO: 9 825112219 PO# 4800018215	as täken place.	2:11:19 AM 38:449 I 9/1/2011 2:35:29 AM 79:080 30:440) вт LBG LBT
has been tested and approved under the viginitaries Program and that the material has been loaded into suitable for shipment such that no contamination has TANK NUMBER B/L NO:	as täken place.	2:11:19 AM 38.449 I 9/1/2011 2:35:29 AM 79.080 30.440) RT LBG LBT LBN WEIGHMASTE
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has been tested and approved under use Viginitarias Program and that the material has been loaded into suitable for shipment such that no contamination has TANK NUMBER B/L NO:	67.10%	2:11:19 AM 38:449 I 9/1/2011 2:35:29 AM 79:080 30:440 48:640 NORTH CAROLINA PUBLIC WEIGHMASTE UCENSE EXPIRES JUNE 3	R T LB G LB T LB N WEIGHMASTE CERTIFICATIO
has been tested and approved under the Viginitarias Program and that the material has been loaded inter suitable for shipment such that no contamination has TANK NUMBER 32441 Dist: 5 B/L NO: B/L NO: B/L NO: B/L NO: B/L NO: PO# 4800018215 PROJ. NO: PO# 4800018215 CARRIER Whitehurst Transport, Inc. Harris, Tyrope	67.10%	2:11:19 AM 38:449 I 9/1/2011 2:35:29 AM 79:080 30:440 48:640	R T LB G LB T LB N WEIGHMASTE CERTIFICATIO

	SAMPLE BOL – HAMMAKER EAST – RICHMOND, VA – AT 42
	TERMINAL ID
	HAMMAKER EAST LTD. Richmond Plant 7700 Fort Darling Road Richmond, VA 23237 TRUCK BILL OF LADING DELIVERY RECEIPT AND INVOICE
	BOL#: 420001265
	Charge To: NCDOT DV 1 HERTFORT CO BT SHIPPING DESTINATION Desitination: HERTFORD CO. N.C. Date: 10/3/2011 DATE & Carrier: 2739 Desitination: HERTFORD CO. N.C. Date: 10/3/2011 DATE & Truck ID: WHI-29 WHI-29 WHI-29 TIME TIME Truck/Trailer: 254 P.O. #: 4800018253 Time Out: 4:21 am Driver: J. WRIGHT VIII - 29 VIII - 29
	Product Description MATERIAL Tank: TANK NUMBER 5
	WT BP 8.35 TEMP 180 VISC 300 LOT 4200737
	The Material Referenced above is certified to meet NC D.O.T & VA D.O.T. Specifications for performance grade asphalt emulsions, AASHTO Materials Part II 14th Edition. We certify that all material being shipped on this invoice/bill of lading has been loaded under the supervision of our representative into carriers that are suitable for shipment of this material. <u>Gross:</u> 79460 30620 <u>Tare:</u> 79460 <u>Tare:</u> <u>CERTIFICATION</u> <u>48840</u> <u>5,849.10</u>
	NET GALLONS
	NORTH CAROLINA Qty Rate Amount PUBLIC WEIGHMASTER Mat. 5,849.10 GAL L. Norman Weightmaster Lic.# 32136 Freight
	INVALID UNLESS SIGNED Total
	NC Dept of Transportation Supplier's & Transporters Certification / Loading Affidavit - Richmond, VA Terminal VA Dept of Transportation Supplier's & Transporters Certification / Loading Affidavit - Richmond, VA Terminal
	This is to certify that this shipment of <u>Second</u> CAL of CRS-2 Signed: Hop Cins I certify that the product in my current load is compatative mitiliproduct residue from my previous load Current Load: CRS-2 Prev. Load: CRS-2L
	I centify that my trailer is in good mechanical condition All valves operable, dome lids // gaskets are in place, there are no tank or piping leaks, and all drains and unloading valves are closed I and the interval operation of authorized Representative of transporter) I centify that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained residue I understand that if my trailer is the or retained operation of the operation operatio
RTIFICATION	In Case of Emergency: 1,500-424-9300 CHEMTREC, IF DC USE 1-202-483-7616
	Non-Hazardous Elasbeeint Above 105' F. Protect From Freezing Warranty - All products manufactured by use are warranted to be first class materials and free from defects in material and workmanship. We make no warranty, expressed or implied, as to suitability of any of our products for any particular use, and we shall not be subject to liability from any damages resulting from their use in operation not under our direct control.

SAMPLE BOL – SEACO – COLUMBIA, SC – AT 26



SAMPLE BOL – BCI MATERIALS – CHARLOTTE, NC – AT 65

	BCI MATERIALS	Office: 704-334-5014	
	SHIPPING DATE AND 1 Date Printed: 05/12/2011 Time Printed: 7:39 AM	Website: www.BCIMaterials.co	om
	Date Loaded: 05/12/2011 Time Loaded: 7:37 AV Te	erminal Number: AT-65	ER
	Customer: Charlotte Asphalt W	VO Ticket Number:	1095
	Customer Number: 9900612050	Truck Number:	6201054
	Purchase Order Number: Asphalt Services	Tanker Number:	
	Project Name: Asphalt Services	Gross Tons:	16.15
	Project Address: 2911 N Graham St Charlotte	Tare Tons:	13.56
	NC	Net Tons:	2.59
	County: MATERIAL MECK	Liters:	2301.28
	Product: 232B5000001	CRS-1 Quantity Net Gallons:	607.93
ANK NUMBER	This is to certify that this shipment of 007.93 gallons of CRS-1 anti-strip meet all requirements of NC Department of Supplier Signed:	PUBLIC WEIGH LICENSE EXPIRES J ORAIG CHRISTENBL	MASTER IUNE 30, 22:13
			Christenbury
	This is to certify that this transport tank was clean and fr	ee from contaminating materials when loaded. The ma	terial
	transported on the previous load in this tanker was		RTIFICATION
	Signed:)	
	Date and Time Shipped If Other Than Date and Time Load	ed:	

SAMPLE BOL - HAMMAKER EAST - GREENSBORO, NC - AT 08



Appendix B Example Approved List of Grades per Facility

	Asphalt Products Available to NC by <u>Producers and Suppliers (Updated</u> <u>when QC plans are)'**</u> (** <u>Strikethrough P/S are not</u> <u>qualified to sell to NC!**</u>)	nalt Products Available to N ducers and Suppliers (Upda <u>when QC plans are)'**</u> (** <u>Strikethrough P/S are not</u> <u>gualified to sell to NC!**</u>)	o NC by odated			NTERNAL US ONLY				Yellow = New revision		
									_	No product in future.		
		Producer /	Type = nder) = nulsio	 		<<<(DIAGONAL) Indicates not qualified or sampled for NC even	AL) Indicate mpled for NC	s not C even	<u>Cxx-</u> <u>xx</u>	(DOUBLE UNDERLINE): Has furnished before but	Has e but	
# 0	Facility Name	Supplier Name	u)			though grade is in QC plan	is in QC plan			not in QC Plan	_	
AT2	Savannah, GA (#02)	NuStar Asphalt - Binder	Binder	PG 58-28		PG-64- 22	PG 67- 22	PG 70-22	PG 70-28	PG 76-22		
AT3	Wilmington, NC (#03)	NuStar Asphalt - Binder	Binder	PG 58-28		PG 64- 22						
AT5	<u>Morehead City, NC</u> (#05 EXPIRED)	SemMaterials, L.P.	Binder	I		РС 64- 22 -	I	P6 70-22	1	PG 76-22	1	I
АТ6	Inman, SC (#06)	Associated Asphalt	Binder	PG 58-28		PG 64- 22		PG 70-22		PG 76-22		
AT7	Black Mountain, NC (#07)	Hammaker East	Emulsion	CRS-1	CRS-1H	CRS-2	CRS- 2L			css-1		NovaBond
АТ8	Greensboro, NC (#08)	Hammaker East	Emulsion	CRS-1	CRS-1H	CRS-2	CRS- 2L		CRS- 2P	CMS-PX E	EPR-1	NovaBond
AT9	Dumfries, VA (#09)	NuStar Asphalt - Binder	Binder	PG 58-28		PG 64- 22		PG 70-22		PG 76-22		
AT10	Richmond, VA (#10)	Valer o	Binder			PG 64- 22	I	I	I	I	1	I
AT11	Charlotte, NC (#11)	NuStar Asphalt - Binder	Binder	PG 58-28		PG 64- 22		PG 70-22		PG 76-22		
AT12	Salisbury, NC (#12)	Associated Asphalt	Binder	PG 58-28		PG 64- 22		PG 70-22	PG 70-28	PG 76-22		
AT13	Dunn, NC (#13)	Asphalt Emulsion Inc.	Emulsion	EAP	CRS-1	CRS- CRS-2 2L	S- CRS- - 2P	CSS-1H	<u>CSS-</u> <u>1RP</u>	CQS-1H 1	CQS- 1HLM	Novabond

AT14	Wilmington, NC (#14-EXPIRED)	Central	<u>Emulsion</u>	ı	ı	I	1	ı	I	ı	ı	I	ı
AT15	Wilmington, NC (#15)	NuStar Asphalt - Binder	Binder	PG 52-28		PG 64- 22	PG 64-28		PG 70-22				
AT16	Chesapeake, VA (#16)	NuStar Asphalt - Binder	Binder	PG 52-28		PG 64- 22	PG 64-28		PG 70-22				
AT17	Black Mountain.NC(#17)	Hammaker East	Binder	1	1	PG 64- 22		1	1		I	1	I
0740	Charlander CO (#10)	NuStar Asphalt -				PG 64-							
0		Blacklidde		97-9 <u>0 A</u> J		*	1	CRS-	ı				
AT19	Greer, SC (#19)	Emulsions	Emulsion	CRS-1	CRS-1H	CRS-2		2L	CMS-PX	EPR-1	NTSS1HM		
	Greenville, SC (#20-					р <u>С 64-</u>							
N12 0	EXMIREU)	Patriot Aspnait	PINGE	87-90-54	1	*	•	1	77-01-01-1	•	ı	ı	1
	Winston-Salem, NC	Marathon Petroleum -				PG 64-							
AT21	(#21)	Binder	Binder			22							
	Gainesville, GA	Associated	i			PG 64-							
A125	(#25)	Asphalt	Binder			22							
AT26	Columbia, SC (#26)	S.E.A. Co Emulsions	Emulsion	CRS-1	CRS-1H	CRS-2	<u>CRS-</u> 2H	CRS-	FAP	CRS- 2P	HFMS-1	RS-1	
	Chattanooga, TN	ConocoPhillips -				PG 64-		1		i			
AT27	(#27)	Binder	Binder			22					PG 76-22		
		Associated				PG 64-				PO			
AT28	Bristol, VA (#28)	Asphalt	Binder			22			PG 70-22	70-28	PG 76-22		
		ConocoPhillips -	2070:C			PG 64-							
A123		SemMatoriale	DIIIO			77			77-01 01		77-0/ DJ		
<u>AT30</u>	chesapeake, vn (#30)	ochiwatchais, L.P.	Binder	I	I	57	I						
	Wilmington, NC	NuStar Asphalt -				PG 64-							
A131	(#31)	Binder	Binder			22			PG 70-22				
AT32	Greensboro, NC (#32)	Associated Asphalt	Binder	PG 58-28		PG 64- 22			PG 70-22		PG 76-22		
		NuStar Asphalt -				PG 64-							
AT33	Hopewell, VA (#33)	Binder	Binder	PG 58-28		22			PG 70-22				
		JT Russell &				PG 64-							
AT34	Charlotte, NC (#34)	Sons - Binder	Binder	I	I	55	I	I	I	I	I	I	I
AT26	<u>Арех, NC (#35-</u> ЕУБІРЕЛ)	Datriat Aenhalt	Bindor			РС 61 -							
				I	ı	22	1	1	1	1	1	1	1

		Marathon										
AT39	Knoxville, TN (#39)	Petroleum - Binder	Binder	PG 52-28	58-22	PG 64- 22		PG 70-22	70-28	PG 76-22		
AT40	Newport News, VA (#40)	NuStar Asphalt - Binder	Binder			PG 64- 22		PG 70-22	PG 70-28	PG 76-22		
AT42	Richmond, VA (#42)	Hammaker East	Emulsion	CRS-1	CRS-1H	CRS-2	CRS- 2L	CMS-PX				SSIN
AT43	Roanoke, VA (#43)	Associated Asphalt	Binder			PG 64- 22		PG 70-22		PG 76-22		
AT44	Garden City, GA (#44)	Ergon Asphalt	Binder				1	PG 70-22	р С 70-28	PG 76-22	56 85	\
AT45	Wilmington, NC (#45)	Oldcastle Materials - Binder	Binder			PG 64- 22						
AT46	Arden, NC (#46)	Emery Asphalt - Emulsions	Emulsion	CRS-1		CRS-2		CRS-2L	CRS- 2P			
AT47	York, PA (#47- PRIMEONLY)	SemMaterials, <u>L.P.</u>	Emulsion	CSS-1RP	I	I	I	I	I	I	ı	I
AT48	Wilson, NC (#48)	Valero	Emulsion			PG 64- 22						
AT49	Catlettsburg, KY (#49)	Marathon Petroleum - Binder	Binder			PG 64- 22						
AT50	Catlettsburg, KY (#50-EXPIRED)	Marathon Petroleum - Binder	Binder	I	I	I	1	PG 70-22	I	PG 76-22	I	1
AT61	Chattanooga, TN (#51)	Marathon Petroleum - Binder	Binder	ı		PG 64- 22	1		ı	PG 76-22	I	1
AT52	Richmond, VA (#52)	Asphalt Emulsion Inc.	Emulsion	CRS-1		CRS-2	CRS- 2L	<u>CRS-2P</u>	CQS- 1HLM	CQS-1H	TTCQ 8-1H	NovaBond
AT53	Roanoke, VA (#53)	Associated Asphalt	Emulsion	CRS-1		CRS-2	CRS	١.				
AT54	Healing Springs,NC(#54)	JT Russell & Sons - Binder	Binder		58-28	PG 64- 22		PG 70-22		PG 76-22		
AT55	Garden City, GA (#55)	Ergon Asphalt	Emulsion	CRS-1	CRS-1H	CRS-2		<u> </u>	CRS ² P			
AT56	Newport News, VA (#56)	Asphalt Emulsion Inc.	Emulsion	CRS-1		CRS-2	COS CRS- 1H 2L	CSS	CRS- 2P	NovaBond	RoadA	COS

		Associated				CRS			CSS	
AT57	AT57 Bristol, VA (#57)	Asphalt	Emulsion	CRS-1	CRS-2	21	ems-2		H H	
		JT Russell &			PG 64-					
AT58	AT58 Albemarle, NC (#58)	Sons - Binder	Binder	•	- 57	1	PG 70-22	1	ı	1
	Garden City, GA				PG 64-					
AT59	AT59 (#XX)	Ergon Asphalt	Binder	I	-	I	I	1	I	
		A&R Materials -			PG 64-					
AT60	AT60 Albemarle, NC (#60)	Binder	Binder		22					
		CW Matthews -			PG 64-					
AT61	Rockmart, GA (#61)	Binder	Binder		22		I			
		Southeast								
		Emulsions -			PG 64-					
AT62	AT62 Union, SC (#62)	Binder	Binder		22		I			
		NuStar Asphalt -			PG 64-					
AT63	AT63 Lithonia, GA (#63)	Binder	Binder		22		Ţ	PG 76-22	22	
		JT Russell &			PG 64-					
AT64	Branchville, VA (#64)	Sons - Binder	Binder		22					
АТ65	AT65 Charlotte NC (#65)	BCI Materials	Rinder	CRS-1	CRS-2			CQS- 1HI M		
0011			200	- 200	1000		I			