



2012 VAA Spring Meeting
April 13, 2012

Malcolm T. Kerley, P.E.
Chief Engineer

Updates from the State Materials Engineer

- **Web based data entry/analysis program**
- **Certification School Program Changes**
- **Asphalt Quality Task Force Activities**
- **In-Place Recycling Initiative**

Web Based data entry/analysis System

Incorporating automation and technology to optimize resources with support from the Asphalt and Aggregate Producers.

VDOT team members

CO IT Division staff

District Materials Engineers and staff

CO Materials Division

Wansoo Kim

Todd Rorrer

Tommy Schinkel

Bill Bailey

Industry team members

Trenton Clark, VAA

Billy Powers, Vulcan Materials

Mitchell Crenshaw, Luck Stone

Jeffrey Holsinger, Frazier Quarry

Kevin Vaughan, Vulcan Materials

Lisa Haun, Chemung Contractors

Dickie Maddox, Superior Paving

Jim Lewis, Branscome Paving Company

Marty Wallace, Adams Paving

Web Based data entry/analysis System

**MITS – Materials Information and Tracking System
For VDOT users; within the firewall**

**PLAID – Producer Lab Analysis and Information Details
System
For Contractors; only need internet connection,
accessible via Internet Explorer TM**

Web Based data entry/analysis System

What is accessible?

- **All Plant Level Quality Control Data**
 - Input Directly into the system at the Contractor Lab
- **All VDOT Plant Level Quality Assurance Data**
 - Input Directly into the system at the VDOT Lab
- **All Job Mix Formulas**
 - Submittals
 - Approvals
 - Reports or Approved TL-127 Cover Sheets
- **All Reports Associated with this data**
 - Individual Test Reports
 - Lot and Project Summary Reports
 - VDOT / Contractor Comparison Results on all data

Web Based data entry/analysis System

Current Status

- ✓ Testing Phase complete
- ✓ Chase down as many Bugs as possible (on going)
- ✓ Receive Final Approval of Materials Division and System Engineering
- ✓ Release to all VDOT and Contractor Users
- Begin State and District Level Training (currently)
- Refinement of the system with user input
- Add Functionality (Phase II and III)
 - Will incorporate Central Mixed Aggregate process in Phase II, implemented in 2013**

Certification Schools

In 2013 MCS Schools

- **Levels I and II for Field and Plant**
 - **Existing certification holders will be grandfathered in with both a Level I and Level II certification. They will have the option of recertifying in just Level I or both Levels.**
 - **Level I – Written exam**
 - **Level II – Written exam and Level I prerequisite**
 - **No proficiency exam**
 - **Density technicians will be monitored/evaluated under IA Program**

Certification Schools

In 2013 MCS Schools

- **Separate Fee Structure**
 - **Level I – \$fee**
 - **Level II – \$fee**

- **Course pre-requisites will be implemented for certain classes.**
 - **Level I prerequisite for Level II**

Certification Schools

Targeted Participants

VDOT Role	Field Level I	Field Level II	Plant Level I	Plant Level II	Mix Design
Material Field QA Technicians	X	X			
Material Plant QA Technicians			X	X	
Material Lab/Mix Technicians			X	X	X
CN Inspectors	X	X			

Certification Schools

Targeted Participants

Contractor Role	Field Level I	Field Level II	Plant Level I	Plant Level II	Mix Design
Field Personnel	X				
Paving Superintendent	X	X			
Field QC Technicians	X	X			
Plant Operations Personnel			X		
Plant Lab Technicians			X	X	
Plant Mix Design Technicians			X	X	X

Certification Schools

- **2 Levels of certification**
- **Separate Fee structure for each**
- **Course content and instruction will have greater focus on results/outcome**
- **Pre-requisites will become requirement**
- **Full implementation targeted for 2013 MCS season**
- **Density technicians will be monitored/evaluated under IA Program**

Asphalt Quality Task Force

Mission – To improve the quality of all asphalt concrete placed on VDOT roadways

Established in Fall of 2011 with the goal of improving the quality of all asphalt concrete placed on our VDOT network

Industry Members

Dave Helmick, Co-chair

David Branscome

Trenton Clark

Ed Dalrymple

Mark Schiller

Richard Schreck

VDOT/VCTIR

David Shiells, Co-chair

Bill Bailey

John Dowell

Rick Kibler

Kevin McGhee

David Lee

Asphalt Quality Task Force

- **Items being reviewed/considered in an effort to improve quality are;**

Ride-ability Specifications – Increase use of incentive only specification, potential for default specification; exception would be not to have ride spec, norm would be the ride spec in contract

Uniformity of Texture – assessment of technology to measure segregation

Asphalt Quality Task Force

- **Items being reviewed/considered in an effort to improve quality are;**

Longitudinal Joint Density specifications – incentives and disincentives for joint density

Pavement Management – use of “corridor strategies”; addressing multiple segments of a corridor in one project, not individual segments annually

Asphalt Quality Task Force

- **Items being reviewed/considered in an effort to improve quality are;**

Develop policy for use of high performing asphalt mixes; current research study underway with VCTIR reviewing performance characteristics and associated material characteristics of SMA

In Place Recycling Initiative

- **Stakeholder committee established in late summer of 2011 by State Materials Engineer, comprised of VDOT Materials, VCTIR staff, VDOT Maintenance, VDOT District staff, and industry representatives**

Charge of group;

- Develop specifications and project selection guidelines for consistent and effective statewide deployment of technology utilizing knowledge gained from recent projects.

Chairperson – Dr. Mohamed Elfino, ADA Materials

In Place Recycling Initiative

- **“Standardization” of Specifications**
 - Full Depth Reclamation
 - Cold In Place Recycling and use of mobile plant
- **Project Selection Guidelines**
 - Project size and scope
 - Roadway condition; intended for major rehabilitation within existing footprint of roadway
 - Identification of failure mode and location within pavement structure

In Place Recycling Initiative

- Status
- Final draft specifications and Project Selection guidelines to be vetted with stakeholders
- Issues to be resolved are testing protocol and pavement design input values
- Target to have complete and published by June for use in contract development for 2013 Maintenance work

Asphalt Coop Activities

- **Specification Developed for 4.75mm surface mixes,**
 - SM 4.75 potential for pavement preservation, preventive maintenance applications
- **Reviewing design methodologies for porous pavement structures,**
 - Potential application for commuter lots, environmentally sensitive local jurisdictions where storm water management is an issue

Discussion Items

- **Pavement Schedule Program**
- **Asphalt Quality Task Force**
- **Joint Asphalt Pavement Maintenance Committee**
- **District Meetings**
- **On-Call Contracts**
- **Specifications – No Surprises**
- **Delivery of work – 2012 Asphalt Seminars**
- **Industry Issues ??**

I-495 HOT Lane Project – At Rte. 66



VDOT 2012 Paving Season Asphalt Summary

	Plant Mix		Latex/Slurry Seal		Surface Treatment		TOTAL	
	#	Bids		Bids	#	Bids	#	Bids
Bristol	13	43,664,662	2	1,591,455	0	0	15	45,256,117
Salem	30	48,433,454	3	3,334,295	5	7,611,571	38	59,379,320
Lynchburg	12	15,173,315	2	1,640,310	6	6,636,923	20	23,450,548
Richmond	14	66,722,459	4	14,836,310	4	8,069,098	22	89,627,868
Hampton Roads	12	35,494,380	4	3,879,939	3	5,590,084	19	44,964,402
Fredericksburg	9	51,733,504	2	2,637,762	3	4,161,671	14	58,532,937
Culpeper	8	12,976,267	3	1,230,629	2	3,471,570	13	17,678,466
Staunton	23	34,917,951	5	2,529,133	3	1,361,092	31	38,808,176
NOVA	14	64,101,190	1	1,951,623	0	0	15	66,052,813
	135	373,217,181	26	33,631,456	26	36,902,010	187	443,750,646



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