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Western Regional Update

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Southeast Asphalt User Producer Group Summary Report

*West Region
Arkansas, Mississippi, Louisiana, Texas*

*Lexington, Kentucky
November 20th, 2002*

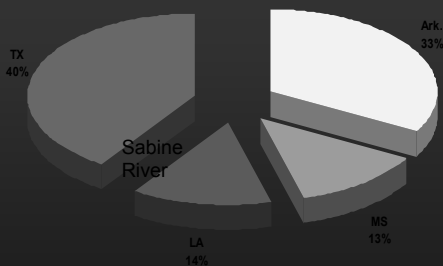
Arkansas, Louisiana, Mississippi and Texas

- Asphalt Quantities by State
- Binder Specifications and Testing
- Mixture Specifications
- Mixture Sampling and Testing
- Roadway Specifications

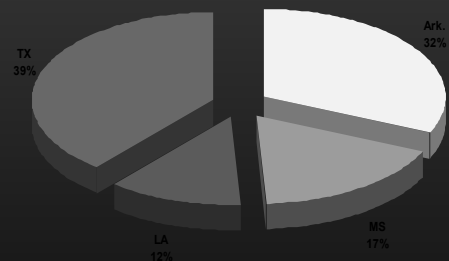
Informants

- Arkansas -Jerry Westerman
- Mississippi -Jimmy Brumfield
- Texas - Dale Rand
- Louisiana – Doug Hood

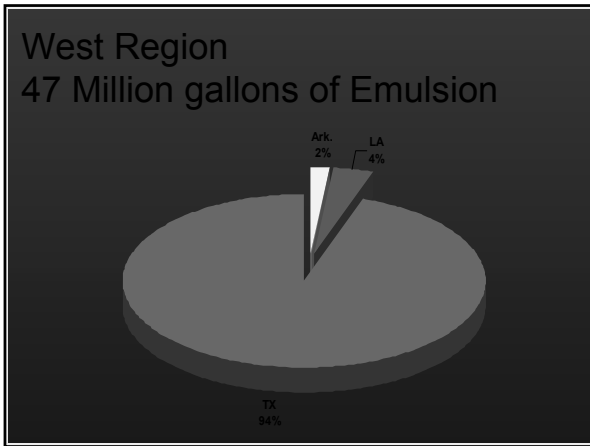
West Region 22 Million tons of HMAC



West Region 1.9 Million tons of liquid AC



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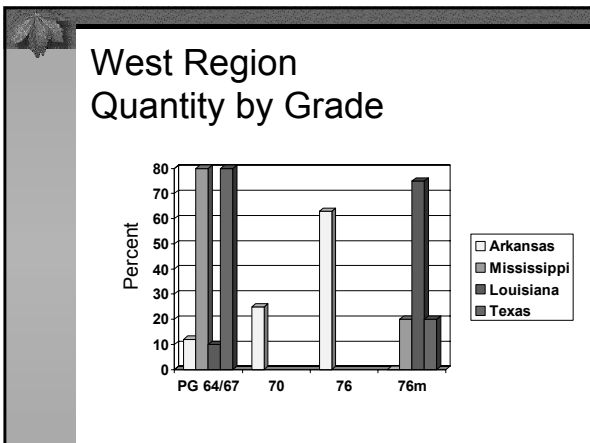
Typical Nominal Aggregate Sizes

- Surface:
 - 9.5mm - MS
 - 12.5mm – AR, TX
 - 19mm – LA
- Base
 - 19mm - MS
 - 25mm- LA, TX
 - 37.5mm – AR

	Ark.	MS	LA	TX
Mixture Million Tons	7.25	2.8	3.0	8.9
Liquid Asphalt, 1000 Tons	365	138	200	447

Emulsions

- AR, LA, MS; CRS-2P; Used for Surface treatment in each state 75% of the time
- TX: 20% CRS2-P; also use a wide range of other emulsions, Hot Ac's, and Rubber modified AC's



Liquid Specifications

- Direct supplier certification, all States
- Arkansas: Adding elastic recovery in 2003
- Mississippi: When modified, must start w/ PG 67-22, (w/ no blown asphalt)
- Louisiana: No liquid spec changes, looking for test to replace force ductility.
- Texas: Has a long list of liquid grades and specifications which include many types of modification including rubber modified AC's. PG grade determines min. Elastic recovery.

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Sampling and Testing

- Arkansas--QPL; QA Engineer directs sampling and testing; quantity based.
- Mississippi–
 - Test reports issued and forwarded during shipment.
 - Districts run Brookfield viscosity tests
 - Central Lab performs verification tests from samples taken at the Contractor's working tank.

Sampling and Testing

- Louisiana
 - New testing plan begins 2003
 - QPL, supplier self certified
 - District Labs test from working tank for verification
 - 9 District labs equipped with Bohlin Mechanical bearing DSR's

Mixture Specs - Pay Items

- Plant Voids – All States
- VMA_{based on G_{sb}} Mississippi and Louisiana
- VMA_{based on G_{se}} Arkansas and Texas
- Gradation- Mississippi
- Asphalt Content- Miss. and Ark.
- Anti-strip- Louisiana

Mix Specs for Pay, Continued

- AR, MS, and TX:
 - Average or Dev.from Average:
- LA
 - PWL

Mix Specs upcoming changes

- Texas –
 - Hamburg test required for design.
 - Variable Bonus/penalty schedule by mix type ie. SMA has a 10%;conventional has 5% max.
- Arkansas–
 - No Restricted Zone-(RZ)
 - All designs must pass loaded wheel test.

Mix Specs changes, con't

- Louisiana—
 - 12.5mm w/c mix allowed
 - VMA for plant production lowered by 0.5%;
 - Use three "levels" gyratory $N_d = 75, 100$ and 125
 - Removing restricted zone
- Mississippi –
 - Still use N_{max} and back calculate for design. Three N_d Gyration of 96, 86 and 68.
 - Recently developed Superpave specification for 4.75 mm mix.

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QA: Sampling and Testing

- Texas
 - Contractor takes a sample from the truck once every sub lot.
 - 4 sub lots=1 lot.
 - Bonus/penalty determined from pay adjustment schedule.
 - Sub lot size varies from 250 to 1000 tons.

QA sampling and testing

- Louisiana
 - LADOTD inspector at plant along with certified contractor inspector; truck samples taken at plant
 - 1 sample every sub lot; 5 sub lots per lot; pwl
- Mississippi
 - Contractor's QC based on daily tonnage produced (up to 4 random samples per day),
 - State QA a min. of 10% of QC samples;
 - Samples taken from truck at production plant.

QA sampling and testing

- Arkansas
 - Everything and Everyone Certified & allowed to perform Test
 - Contractor Tests each sub lot with 4 sub lots per lot
 - AHTD randomly samples 1 sub lot. When AHTD test, all 5 test are included in pay calculation.
 - Everything must verify.
 - Independent assurance by project for both contractor and AHTD.

Roadway requirements

- Texas
 - In-place density determined by taking 1 set of 2 cores for every sub lot.
 - Pay adjustment schedule w/ bonus & penalty .
 - No bonus paid if sub lots fail segregation or profile test.
 - Joint density tested each sub lot.
 - Ride specification (IRI) recently implemented

Roadway requirements

- Mississippi
 - Nuclear gauge used for density, with bias established (by 1st day cores) and verified every 5000 tons or 6 days.
 - Lots set by production,
 - Min. 92% of plant Gmm for 100% pay.
 - Will probably go to a 93% min. density

Roadway requirements

- Arkansas
 - Density required, smoothness specified with incentive but not for acceptance
- Louisiana
 - Density—PWL Changing from 5 cores to 3 cores per sub lot; 92% min. of Gmm.
 - Smoothness--Recently approved an IRI specifications;
 - No longitudinal joint requirements;

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MTV?

- **Arkansas-** Materials Handler Required
- **Louisiana-** MTV required;
- **Mississippi-** MTV required on surface lifts and top intermediate lifts;
- **Texas-** Mix must meet segregation spec

