

NEAUPG RAP Task Group Update

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NEAUPG RAP Task Group

- Formed in 2008
- Rising Liquid and Energy Prices, Warm Mix Technology “Sustainability”
 - National emphasis on increasing RAP use
 - FHWA RAP ETG
 - FHWA RAP Best Practices Guide
 - NCAT Research
 - NEAUPG- Northeast perspective
- Owner, Academia and Industry representatives
- Geographic expanse, we have “met” via conference calls“



NEAUPG RAP Task Group Members

■ Academia

- Walla Mogawer, UMASS
- Jim Mahoney, UCONN

■ Industry

- Ron Cominsky- PAPA
- Brian Dolan- MDA
- Chris Suttmeier- Peckham
- Jeff Pochily- Pike Industries
- John Ingraham- Tilcon, CT
- Ron Tardiff- Aggregate Industries
- Scott Laudone- Tilcon, NJ
- Wayne Byard- Traprock
- Cindy LaFleur- Callanan Industries

■ DOT

- Alan Rawson, NH
- Bruce Yeaton, ME
- Eileen Sheehy, NJ
- Karl Zipf, DE
- Dean Maurer, PA

- ** Looking for volunteers additional representatives from PA & RI



Survey of RAP specifications by State

- CT 15%
- NJ- 15% surface, 25% others (trial 25% in surface)
- MA- Mass Highway 10% in surface, up to 40% others
Excluded by Turnpike and City of Boston
- NH- 15% surface, others 20%, 30% (Drum), 20% “unknown” sources, Binder replacement
- ME- 15% all mixtures (DOT controls millings)
- NY 20% surface and intermediate, 30% in Base
- VT- 0-15% no PGB change, 15.1-24.9 grade bump softer, 25-50% recovery to PG 58-28
- PA- 15% no additional binder testing
- RI – 0%
- DE- 20% Base, 15% others



Owners barrier to using additional RAP

- Binder Grade (low temperature)
- RAP quality, consistency
- Comfort level with existing specifications
- Perception that producers unwilling to add PGB storage
- RAP specific gravity; RAP impact on volumetrics



Focal points for Task group

- 1. Binder grade changes (low temperature), and impact on mixture properties. (Jeff and Jo)
- 2. Best management practices for the handling and processing of RAP, Shingles
- 3. Use of Warm Mix technologies to increase RAP
- Gsb



RAP vs. Stone Consistency

■ 2008 Callanan Industries -*DOT Quality Stockpiles*

- RAP #4 Sieve, Variation expressed as weighted standard deviation by stockpile and number of tests = 4.1%
 - n = 136 tests
- Stone Production, #4 Sieve (#1A) variation measured in standard deviation weighted by stockpile (location) and number of tests is = 6.5%
 - n = 157



Oldcastle- New England Division

- RAP #4 Variation
(weighted by number
of tests per location)
= 5.1%
 - n= 744
- Stone #4 Variation
(weighted by number
of tests per location)
= 6.9%
 - n = 2983



Thanks Randy! NCAT

- 6 states, 70 stockpiles
- NCAT “Median” Sieve standard deviation (weighted by number of tests), is 4.8%
- $n = 2048$
- Better Roads Article, October 1, 2009
 - “Mean of standard deviations for RAP statistically less than virgin aggregates”



Future Plans of Group

- Winter Conferencing
 - Keep abreast of FHWA RAP ETG activities and recommendations
 - Discussion of Binder data
 - Integration of Warm Mix technologies to increase RAP
 - Discussion of Best Practices for RAP handling and processing
 - Pursue Mixture Testing (IDT)

