

SEAUPG 2002 CONFERENCE

Contractor's Issues

Paul Messersmith
APAC, Inc.
404-603-2775
pemessersmith@ashland.com

APAC Materials Services



Current Issues

- Environmental
- Compaction Verification
- Asphalt Supply

Environmental Issue

- Odors at the asphalt plant
- Sources of odor at a plant?
 - Liquid Anti-Strip
 - Asphalt Cement

Environmental Issue

- 2 different plants
 - 1 is about 30 yr. old
 - Single complainant last 6-8 years
 - 6 months to determine MFCT



Environmental Regulations

- 15A NCAC 2D.1806 / .1807
 - .1806 - "Control and Prohibition of Odorous Emissions"
 - Thou shalt not stink
 - .1807 - "Determination of Maximum Feasible Controls for Odorous Emissions"
 - Identify, eliminate, rank, evaluate and select control technologies

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Environmental Issue

- **Steps taken to determine Maximum Feasible Control Technology (MFCT)**
 - Different Anti-Strips
 - Odor Neutralization Additives
 - Capture / Control Technologies

Environmental Issue MFCT

- **Odor Neutralization Additives**
- **New liquid anti-strip**

Environmental Issue

- **Detection of “odor” is subjective and makes ranking control technologies difficult**
- **Potential for substantial capital expenses**

Compaction Verification Issue

- **Several different SGC's out there**
- **Different methods to calibrate**



Compaction Verification Issue

- **Not a new issue**
 - Marshall
 - Texas Gyrotory
- **Studies have shown that different Gmb results may be obtained with different SGC's**

Compaction Verification Issue

- **Case in point**
 - Single Plant
 - Two different jobs
 - Two different state districts
 - Mix sent to one district - no penalties
 - Mix sent to second district - penalties

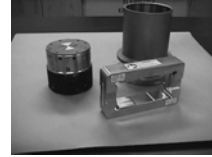
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Compaction Verification Issue

	Gravel 76-22 13 Samples	Limestone 76-22 14 Samples
QC - SGC Type A	2.285	2.384
QA - SGC Type B	2.312	2.417
Average Difference	0.027	0.033
	4 Samples	7 Samples
QC - SGC Type A	2.292	2.356
QA - SGC Type A	2.293	2.361
Average Difference	0.001	0.005

Compaction Verification Issue

- There is a difference between manufacturer's as well as within same models
- Strongly feel that there needs to be a correlation between SGC's with respect to internal angles



Asphalt Supply

- Acid modification of Asphalt
 - It is an inexpensive process
 - Can “bump” the PG grade up 2-3 grades

Asphalt Supply

- What happens when you add an Acid to a Base?
- Failing TSR's and lower grades of asphalt

Asphalt Supply

- Texas division
 - History of passing TSR results
 - TSR's started failing last summer
 - Seemed to be grade and supplier specific
 - Investigated by trying different Anti-strips and lime w/no success

Asphalt Supply

Binder Sample	Anti-Strip %	Grading	Actual Grading
A	0.75%	64-22	67.4-26.2
C	None	70-22	72.9-22.0

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Asphalt Supply

- **Supplier had a crude shortage right before problems started**
- **When they went back to original crude, results started passing again**
- **Need better communication between suppliers and producers**

Conclusion

- **Be prepared for environmental challenges**
- **Accept that there are differences between SGC's compaction results and then address and resolve those differences**
- **Communication between material suppliers and mix producers is critical**