

2005 Southeast Asphalt User Producer Group (SEAUPG)

Construction Quality Issues and PWL:
Florida Perspective

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Florida Perspective

DITTO

- Any Questions?



Florida Perspective on PWL

- Background
- What it does do
- What works
- What it doesn't do
- What it needs to make it work
- Perceptions on Perspectives



Background

- Joint Task Group
- Developed Spec Limits from Actual Construction Data
- Applied some Engineering Judgment to establish Specification Limits
- Pay Factors: #8, #200, Binder, Air Voids, Roadway Density
- Composite Pay Factor established
- 5% (#8) + 10% (#200) + 25% (Binder) + 25% (Air Voids) + 35% (Roadway Density)



Background (continued)

- Lot Size (2000/4000) tons
- QC tests 1 plant and 5 cores per sub
- 3 way split of samples (QC,VT,RT)
- Verification runs a split at end of LOT
- Compare? >> Pay
- Non-Compare? >> Resolution
- Independent Samples (FHWA)
- All Labs and Techs Qualified



Background (continued)

- Implemented in 2002
- Also implemented other major changes at same time – such as contractor paperwork (a mistake)
- Revised in 2005



What It Does Do

- Requires a completely different mindset.
- Makes companies decide whether they want to do DOT work or not.
- Increases contractors overhead cost.
- Makes you focus on the basics.
- Can be done, but at a cost.



What Works

- Makes one focus on uniformity and consistency
- Makes contractors much more involved in all aspects of asphalt (from QC Tech to President).
- Big production, dedicated plant
- Average Pay Factor so far 1.0 (doesn't include cost of rework)



What it doesn't do

- Urban Plants, Multiple jobs same plant
- Small production
- Discontinuous Production
- Independent Testing - too much emphasis on single test.
- "People" think testing is much more precise than it actually is.



What it needs to make it work.

- Experienced people on both sides.
- A whole lot of common sense.
- Common Sense and Judgment.
- Did a mention Common Sense?
- Not for the faint of heart.
- Contractor must step up.
- DOT must step back and let the contractor control operations.



Perceptions from the Front Line

- Email poll of Quality Control Managers across Florida.



Contractor Perceptions on PWL

- "In practicality, the spec has required us to do many things differently. It has required a lot of consistency in a lot of realms. Consistent operators, consistent QC people - developing a consistent team of plant and QC that work together well and stay on a project consistently."



Contractor Perceptions (continued)

- "I think the PWL is something we need to continue with, for consistency of the mix... It seems to me if you keep everything at the plant in-line (calibrated), then the PWL works out great. Keeping everything up and your mix running good, the extra pay makes you feel good."



Contractor Perceptions (continued)

- "Dislike PWL, "Pain without limits" has caused me to consider alcoholism. It does penalize good mix unjustly."



Contractor Perceptions (continued)

- "The PWL is a good way to evaluate statistically. The system encourages us keep up with our current pay status and look into what ifs, in order to achieve the greatest amount of pay for a given situation occurring within a lot.
- The spec. limits are too narrow. It is very difficult to explain to management of why a penalty on material that does not fail, terminates lots, ceases production, etc."



Contractor Perceptions (continued)

- "PWL spec with realistic tolerances is a good thing. If the tolerances are too tight you are fighting to stay in tolerance (constant adjustments) and meanwhile the PWL is eating your lunch."



Contractor Perceptions (continued)

- "Do I like or hate the PWL? Given the two choices my answer would have to be hate it. We made an equal effort to maintain controllable parameters prior to the PWL Spec and met with success most of the time. Since the PWL Spec, we have tried to double what was already a maximum effort to try to maintain full payment which has resulted in an average of between 5-10% penalty on most jobs."



Contractor Perceptions (continued)

- "I don't like PWL that penalizes good mix. So many jobs require piecemeal construction, consistency is always going to be a challenge.
- This spec among others is only driving cost up, eventually to penalize the taxpayers."



Contractor Perceptions (continued)

- "I like the PWL specification. It has forced us to be on top of our game each day. We must plan ahead for a job; be proactive once the job begins; and monitor throughout. There is satisfaction in knowing that there is some bonus money for a job well done. The downside is the penalty which can far exceed the upside."



Summary

- PWL in use since 2002.
- Difficult learning curve
- Does improve consistency
- Makes it easy to promote quality
- Does increase cost
- Is it worth the cost?
 - Time will tell...

