ASPHALT PAVING WEATHER RESTRICTIONS - REQUESTS

November 19, 2015

PA Asphalt Pavement Association

- Charles Goodhart, Executive Director
- Gary Hoffman, Director of Technical Services
Agenda

1. Who we are!
2. PAPA Mission and Goals
3. History - Genesis of Specification
4. WMA Advantages
5. Recent Changes
6. Changes to Policy - SOL 495-15-08
7. What else needs to be changed?
8. Q & A
Who we are!

1. Charles Goodhart - Executive Director
   cgoodhart@pa-asphalt.org

2. Gary Hoffman - Director of Technical Services
   gary@pa-asphalt.org

3. Tina Holtzman - Office Administrator
   tina@pa-asphalt.org

   millie@pa-asphalt.org
PA Asphalt Pavement Association Mission

• “To promote and provide to our customers the best available asphalt pavement technology and to represent and serve the common interests of our members.”

• Goals:
  ▫ **Maintain Cooperative Relationships and Communications**
  ▫ **Ensure Best Quality Products and Pavements**
  ▫ **Support Government Affairs and Strategic Alliances**
  ▫ **Promote and Market Asphalt Pavements**
  ▫ **Promote Innovation and Environmental Awareness**
  ▫ **Ensure Association Viability**
Genesis of Late Season Paving Spec

- Low Density Pavement Failures
- Some Failures Cold Temperature Related
- NOAA Temperature Analysis
- Construction Season Start – Stop Dates
- DE’s Given Authority to Allow Work Outside of Dates
- District Inconsistencies in Applying Spec
Changes Since 1980’s

- **Equipment** — Compactors, Pavers, MTVs, Truck Bodies, Etc.
- **Materials** — WMA Technologies
- **Testing**
- **Weather Forecasting**
Changes Since 1980’s
Technology - Pave Cool Software

Mat Temperature

THMAO Project - N. Cameron Street, EB, Travel Lane
Mat Temperature (Spot Measurement) - 7/25/2012

- Pavecool Prediction (Wind Speed = 11 mph)
- Measured
Changes Since 1980’s
Technology - Pave Cool Software

Mat Temperature
Infrared Measurements
Changes Since 1980’s - Warm Mix Asphalt

**Workability vs. Temperature**

![Graph showing workability vs. temperature](image)

Torque (Lowest Working) vs. Temperature (F)

- HMA Control
- Advera WMA

Better performance at lower temperatures indicated.

Research by University of New Hampshire
Changes Since 1980’s - Warm Mix Asphalt

Extended Season Compaction Results

Spread of results of 233 cores

25mm Base 25% Rap

Spread of results of 65 cores

9.5mm Wearing 15% RAP
PAPA Survey of Other DOT Specs

- 17 RESPONSES TO SURVEY
- SOME DOTs (MD, KS, CA, NJ & OK) HAVE NO CUT-OFF DATES
- SOME HAVE CUT-OFF DATES AFTER OCT 31st (VA & MI)
- MOST HAVE RANGE OF AIR-PAVEMENT TEMPS FROM 350 F TO 500F WHICH VARIES BY PAVEMENT DEPTH & MIX TYPE
- A COUPLE DOTs ALLOW 350 F MINIMUM WITH WMA – OTHERS CONSIDERING
Late Season Paving

- **PAPA & APC worked with PennDOT for 3 Years to update policy**
- **Some significant items were changed**
  - Eliminate warranties (Pavement & Line Stripping)
  - Resource loaded plan
  - Lower temperature/WMA
- **PennDOT will monitor impact of changes**
SOL 495-15-08 Issued August 17, 2015

SUBJECT: Asphalt Weather Restrictions/Requests to Extend the Paving Season

- **Policy & Procedure to Revise Pub 408, Section 409.3(b) – Weather Limitations**
- **Issued as a Standard Special Provision (SSP)**
- **SSP Included in all Projects Let After 08-14-2015**
- **Projects under Construction & Projects Bid But Not Yet Advanced to Construction Phase – Should Be Amended to Include SSP But Contractor Does Not Have To Accept Amendment**
SOL 495-15-08 What changed?

SUBJECT: Asphalt Weather Restrictions/Requests to Extend the Paving Season

- **Extension Time Period** – March 15 to April 1 & October 31 to November 20
- Submit written request to DE
- **Change in wording from “DE may - to DE will” approve**
  ............... IF – the following conditions are met –
  - Provide justification with a work schedule - paving plan
  - Use Warm Mix Asphalt
  - Agree to supply WMA at or below HMA unit price
  - Agree to no additional costs for means, methods, or materials
  - Complete work by approved completion date
- A Final Acceptance Certificate will not be issued to May 1 of the following year for November work
What still needs to change?
Asphalt Weather Restrictions/Requests to Extend the Paving Season

- **Eliminate all date restrictions**
- **Retain wet surface restriction & air and pavement surface temperature of 40°F – 35°F if WMA used**
- A number of State DOT’s & PTC have moved to “No Date” specification
- **Simplify the Work Schedule - paving plan required**
## WORK SCHEDULE
FOR PAVING SEASON EXTENSION REQUEST
(PUB 4065, Section 402.3(b))

<table>
<thead>
<tr>
<th>DATE SUBMITTED: 09/10/2015</th>
<th>PERSON SUBMITTING:  Winston Smith, VP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECMS #: 879420</td>
<td>PROJECT LOCATION: SR 0081 Lebanon Co</td>
</tr>
<tr>
<td>CONTRACTOR NAME: Rodell Brothers Inc.</td>
<td>CONTACT PHONE #: 717-922-0001</td>
</tr>
</tbody>
</table>

REQUESTED PAVING SEASON EXTENSION DATES: 11/01/2015 TO 11/10/2015

<table>
<thead>
<tr>
<th>WORK ACTIVITY</th>
<th>START DATE</th>
<th>STOP DATE</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.5mm WMA Scratch</td>
<td>11/01/15</td>
<td>11/02/15</td>
<td>1750</td>
<td>Tons</td>
<td>Northbound</td>
</tr>
<tr>
<td>9.5mm WMA Scratch</td>
<td>11/03/15</td>
<td>11/04/15</td>
<td>1740</td>
<td>Tons</td>
<td>Southbound</td>
</tr>
<tr>
<td>9.5mm SMA WMA Wearing</td>
<td>11/05/15</td>
<td>11/06/15</td>
<td>3450</td>
<td>Tons</td>
<td>Northbound</td>
</tr>
<tr>
<td>9.5mm SMA WMA Wearing</td>
<td>11/07/15</td>
<td>11/08/15</td>
<td>3500</td>
<td>Tons</td>
<td>Southbound</td>
</tr>
<tr>
<td>Type 7 Shoulders WMA 9.5mm</td>
<td>11/09/15</td>
<td>11/09/15</td>
<td>1720</td>
<td>Tons</td>
<td>Northbound</td>
</tr>
<tr>
<td>Type 7 Shoulders WMA 9.5mm</td>
<td>11/10/15</td>
<td>11/10/15</td>
<td>1730</td>
<td>Tons</td>
<td>Southbound</td>
</tr>
<tr>
<td>Shoulder Backup</td>
<td>11/11/15</td>
<td>11/11/15</td>
<td>600</td>
<td>Tons</td>
<td>NB and SB</td>
</tr>
<tr>
<td>Seal WMA Overlays</td>
<td>11/12/15</td>
<td>11/13/15</td>
<td>24,000</td>
<td>LF</td>
<td>NB and SB</td>
</tr>
<tr>
<td>Mill Shoulder Rumble Strips</td>
<td>11/14/15</td>
<td>11/16/15</td>
<td>105,000</td>
<td>LF</td>
<td>NB and SB</td>
</tr>
<tr>
<td>Final Line Painting</td>
<td>11/17/15</td>
<td>11/17/15</td>
<td>1</td>
<td>LS</td>
<td>NB and SB plus Ramps</td>
</tr>
<tr>
<td>Cleanup and Punch List Items</td>
<td>11/18/15</td>
<td>11/20/15</td>
<td>1</td>
<td>LS</td>
<td>NB and SB plus Ramps</td>
</tr>
</tbody>
</table>
What still needs to change?
Asphalt Weather Restrictions/Requests to Extend the Paving Season

- PLEASE GIVE US YOUR OPINION!!!

- QUESTIONS?
Happenings - www.pa-ashalt.org

- **2016 PAPA Annual Conference – Hotel Hershey**
  - January 25, 26 and 27, 2016

- **2016 PENNDOT PAPA Regional Meetings**
  - March 14, 15 & 16, 2016 (Tentative)

- **2016 Bus Tour & T² Session**
  - July or August 2016 in District 1-0

Please Contact Tina Holtzman @ 717-657-1881 or tina@pa-ashalt.org for more Information!
Thank you!!

To contact Pennsylvania Asphalt Pavement Association
3540 North Progress Avenue, Suite 206, Harrisburg, PA 17110-9647
www.pa-asphalt.org
717-657-1881

Committed To:
Safe, Smooth, Sustainable, Long Lasting Pavements!