EME demonstration project Q – March 2014

Delivering the job - Production

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Boral Asphalt

Supported by

Overview

- Plant
- Materials management
- Process control
- Mixing
- QA

Overview

Plant

Schematic of Plant

Materials Management

Aggregate
- Careful attention to aggregate quality
  - meetings with Quarries
  - stock pile gradings checked
- High percentage crusher dust (90% higher than DG20HM)
- No natural sand
- High percentage passing the 75 micron

Materials Management

Bitumen – EME Binder
- Ensure tank able to heat and maintain temperature of 185°C
- Electrically heated (thyristor control to ensure slow rise)
- Tank flushed prior to taking load of EME binder

EME Binder Temp: 185°C
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**Process Control**

**Aggregate**
- Calibration of cold feed bins
- High % crusher dust – rare two feeders to ensure accuracy
- Baghouse fines quantities required - checked
- Blend sheets reviewed and checked
- Plant trials to check gradings / binder contents
- Plant scales calibrated

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**Process Control**

- Bitumen
  - Tank selection
  - Circulation
  - Temperature during mixing
  - Inline samples taken during production
  - Samples taken at supplier depot and on delivery from tanker

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**Mixing and Batching**

- Operators briefed on ITP
- Mixing temperature monitored closely:
  - target 185°C and then 180°C
- 75 micron target 8.4%
- Batching cycle times 50sec
- Bitumen temperature maintained at 185°C

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**Grading Achieved**

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**Compliance testing**

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<th>Sieve size</th>
<th>Max tolerance spec</th>
<th>Actual</th>
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<td>13.2mm</td>
<td>+/- 6 %</td>
<td>4</td>
</tr>
<tr>
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<tr>
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<tr>
<td>Binder content</td>
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<td>-0.1</td>
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