Guidelines for Safe Deliveries of Surface Dressing Bitumen Emulsion from Road Tanker to Sprayer

If it is safe and environmentally viable to fill the sprayer, the Contractor should take note of the following points:

1. **Risk Assessment**

   At any geographical location, the Contractor has the responsibility of assessing the environmental and safety risks to ensure safe delivery of filling the sprayer directly from the road tanker.

   All potential sources of pollution/spillage must be identified.

   All personnel must wear appropriate Personal Protection Equipment. (e.g. PPE hard hat, goggles, overalls, safety boots, high visibility garment).

   The public **MUST** be excluded from the unloading area to a minimum distance of 10m.

   No filling is to take place in environmentally unsafe locations (e.g. Main roads in town centres, villages, market areas and at least 50 metres from nearby rivers, canals, lakes or storm drains).

   Consideration should be given to Sites of Special Scientific Interest etc. in the locality.

2. **Good Access and Egress of the Unloading Area**

   A large articulated road tanker will almost certainly have a larger turning circle than that of a six or eight-wheel sprayer tanker. It might also be more difficult to reverse out of the unloading area onto the road successfully and safely. Always use a banksman for this operation. The area for unloading must also be able to take the weight of the road tanker together with the weight of the binder.

3. **Sprayer vehicle**

   All contents gauges and dipsticks on the sprayer must be working correctly.

   Contents gauges can be unreliable and if possible and safe to do so the sprayer should be dipped to ascertain that the delivery can be made safely.

   All ladders together with walkways and safety rails must be working correctly. The operative must be instructed on the use of three points of contact with the walkway and safety rail.

   **THINK** – about the collection of any spilt product whilst connecting, disconnecting or transferring from tanker to sprayer. The area for unloading must avoid all manhole lids, drain covers and water courses so if necessary cover all lids.

   Emergency spill kits **MUST** be carried on each sprayer.
4. **Unloading / Transfer of Product**

A trained/fully briefed representative (Sprayer Driver/ Operator or Supervisor etc) of the Contractor must be on site.

All operatives and vehicles **MUST** be protected from surrounding vehicle movements.

The sprayer tanker **MUST** pump the binder from the road tanker using the sprayer vehicle pump system.

The road tanker driver **MUST NOT** pressure discharge to the sprayer.

The on/off switch for the sprayer bitumen pump must be clearly marked at ground level to enable an urgent stop for the pump should an emergency occur.

The road tanker driver **MUST** open the breather, to allow air into the road tanker to enable the sprayer tanker to pump binder from the road tanker, preventing any damage to the road tanker caused by the sucking (vacuum) effect of the pumping to spray tanker from road tanker.

A drip receptacle **MUST** be used to collect any spillages that occur during connection, delivery and disconnection.

If a spill should occur, bunds/covers **MUST** protect manholes, gullies, surface water drains, streams etc.

All operatives **MUST** be instructed on the use of the emergency spill response.

The sprayer driver/operator **MUST** have a suitable arrangement to ensure that their vehicle does not overfill.

**NEVER** leave the tanker during the filling procedure. Use all round safety awareness (Check for any leakage at all connections during transfer).

5. **Safety Awareness**

Once the decision has been made to fill sprayers directly the sprayer driver/operator will:

Discuss discharge operation with road tanker driver. Make note of any of the above, and make the road tanker driver aware of them.

Ensure the Client is notified of the intention and request any relevant information relating to the geographical area.

Report any spillages to the Contractors Office immediately.

Further information on Bitumen Emulsions:

**Road Emulsion Association - Technical Data Sheets**

http://www.rea.org.uk/technical.htm
APPENDIX A

FEEDBACK ON THIS DOCUMENT

Any observations, feedback or complaints relating to the content of this document or the process described herein should be addressed (using the form below) to:

Chief Executive
The Road Surface Treatments Association Ltd
PA158, Technology Centre, Science Park
Glaisher Drive, Wolverhampton WV10 9RU
Email: enquiries@rsta-uk.org
Tel: 01902 824325

Issue Identified:

Suggested Action:

Name:

Organization:

Address:

Contact details:

Date:
APPENDIX B

DOCUMENT CONTROL

Issue Statement

Issue 5 2008
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REVISION LIST – AMENDMENTS MADE IN THIS ISSUE

<table>
<thead>
<tr>
<th>Revision</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 5 amended to cross reference information from the Road Emulsion Association.</td>
<td>2</td>
</tr>
<tr>
<td>Overall document reorganised with new section headings.</td>
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</tbody>
</table>