



SPECIFICATION

For

TENDER NUMBER: T741920HUN

SUPPLY AND DELIVERY

OF

BULK CATIONIC RAPID SETTING (CRS)®

GRADE BITUMEN EMULSION

(Single Source per Council)



ISO 9001:2008
Lic: QEC27783

SPECIFICATION
TENDER NUMBER: T741920HUN
SINGLE SOURCE SUPPLY AND DELIVERY
OF
BULK CATIONIC RAPID SETTING (CRS) GRADE BITUMEN EMULSION

“The statement of purposes set out in this SPECIFICATION is not intended to be an exhaustive list of the purposes required by this agreement”.

1. SCOPE

This specification is for the supply, delivery and unloading of the following Cationic Emulsion - CRS (rapid set) Bitumen Emulsion;

- CRS170/ 60
- CRS170/62
- Multibond SS or equivalent

Ordered on an as required basis by participating Councils during the contract period in accordance with the Deed of Agreement.

Approximate litres purchased per annum by the participating councils is 700,000 P/A*

The participating Councils are:

Hunter Region

- Cessnock City Council
- Singleton Council
- Dungog Shire Council
- Upper Hunter Shire Council

***The amount indicated is approximate only and no guarantees are given by Regional Procurement® that this amount will be achieved during this tender.**

2. UNIT PRICES

- 2.1** The Contract Unit Prices are inclusive of all the Service Providers' costs and expenses of supplying the Goods and the Service Provider shall not be entitled to levy any additional fees or charges for supplying Goods to the participating Councils.
- 2.2** All prices are to be shown as GST exclusive in the column provided.
- 2.3** The Tendered Unit Prices shall apply equally to each purchase order issued by a participating Council.
- 2.4** The Tendered Unit Price applicable at the time a purchase order is raised shall be the price paid by the participating Council irrespective of when the product is delivered.

3. PRODUCT SPECIFICATION

The Bitumen Emulsion shall conform to AS1160– 1996 Bitumen Emulsions for the Construction and Maintenance of Pavements.

4. QUALITY ASSURANCE

The Service provider shall supply Bitumen Emulsion under a quality system that complies with RMS QA Specification 3254.

The Service Provider shall supply a certificate of compliance with each delivery verifying that the production batch complies with the properties for its type and grade as detailed in AS 2008-2013. The certificate of compliance shall also include binder content, consistency and sieve residue. Testing for compliance up to delivery shall be at the Service Provider's expense.

5. SAFETY MANAGEMENT

The Service Provider shall comply with the Work Health & Safety Act 2011 and Work Health & Safety Regulation 2011 ("WH&S Acts"). The Service Provider shall be responsible for the Unloading of Bitumen Emulsion on each Council site and must have a Standard Operating Procedure for the delivery / unloading process.

6. SITE SPECIFIC SAFETY MANAGEMENT

Each Council may impose site specific WH&S Safety Management requirements for the delivery and unloading of Bitumen Emulsion. These requirements may be notified at the time of ordering or at the time of delivery.

The Service Provider shall ensure that all deliveries and unloading comply with their Standard Operating Procedures and the Site-specific safety management requirements.

7. DELIVERY

The Service Provider shall warrant that the vehicles used to transport and deliver the product are exclusively used for that purpose and fit for delivery free of contaminants.

Delivery dockets

Submit: Each delivery docket must be submitted with in 24 hours of delivery. Docket details to include:

- Manufacturer's name, product name and class.
- Refinery batch number.
- Date of loading at refinery.
- Any intermediate delivery sites.
- Loading temperature.
- Delivery temperature for bitumen delivered by road tanker.
- Weighbridge tickets showing gross mass of the delivery, the mass of the empty vehicle or container

Delivery times

Arrivals: Unless otherwise specially requested, deliveries are to reach the site of storage between the hours of 7.30 am and 2.30 pm Mondays to Fridays inclusive.

8. UNIFORM PRICING

All prices submitted for the specified delivery quantities in the Tender Price Schedule shall apply uniformly to each council.

9. REPORTING

Management reporting shall be provided as required under Clause 6.10 of the Deed of Agreement.

10. CLEANING OF THE VESSEL

Cleaning shall be defined as 'an internal and external inspection of the vessel. The cleaning process will physically remove any debris or sludge from the vessel, as well as the placement of same into suitable containers for disposal. (This will include the supply of containers by the service provider for this process). Council's representative will confirm that the cleaning process has been satisfactory and that decanting operations can resume effectively.

11. RINSING OF THE VESSEL

Rinsing of the vessel shall be defined as 'flushing of the vessel with an appropriate medium e.g.: kerosene and pumping out of the contents into suitable containers to facilitate disposal'. Kerosene or other cleaning agents are to be supplied by the service provider.

12. DISPOSAL OF DEBRIS AND SLUDGE

Disposal of debris and sludge shall be defined as the 'removal of the containers holding debris and sludge to an appropriate licensed disposal facility where it can be treated in a manner that can render the contents of the containers inert'. The Service Provider shall upon request of a Council provide proof of such disposal.

13. TESTING OF BITUMEN EMULSIONS

Laboratory testing via a NATA accredited laboratory of bitumen emulsions may be required this test will be paid for by the supplier if requested by the relevant council. These test are carried out as below;

- To measure properties related to handling, storage and use.
- To control the quality and uniformity of the product during manufacture and use.
- To determine full compliance to specifications.
- To predict or control field performance.

The standard tests used for determining the properties of bitumen emulsions are as follows:

13.1 Particle Charge test:

Identifies the charge on the bitumen particles in an emulsion. A positive and a negative electrode are left in a sample of emulsion for half an hour. If there is bitumen deposited on the negative electrode at the end of the test the emulsion is cationic; if bitumen is deposited on the positive electrode, the emulsion is anionic.

13.2 Setting Time test:

Indicates the time taken for a sample of emulsion to break under controlled conditions when mixed with a standard aggregate.

13.3 Residue from Evaporation test:

Indicates the percentage mass of binder present in an emulsion. An emulsion sample is heated so that water and other volatile components are evaporated. Residue from evaporation is calculated from the mass of the sample and residue after evaporation.

13.4 Water Content test:

Determines the percentage mass of water in an emulsion. This can be performed by Dean and Stark distillation. In the Dean and Stark distillation, a sample is heated with a solvent that is immiscible with water. During the distillation process, the solvent and the water are separated in a trap so that the amount of water can be measured.

13.5 Consistency:

Also known as the Engler Viscosity test, this measures the rate of flow of the bitumen emulsion at 25°C. The emulsion is heated to 25°C and poured into a standard container. The time taken by 200mL of emulsion to pass through a standard orifice at the bottom of the container is measured

Reference specifications;

AS 2008-2013	Bitumen for pavements
AGPT04B – 2014	Guide to Pavement Technology Part 4B: Asphalt
AGPT04F – 2008	Guide to Pavement Technology Part 4F: Bituminous Binders
AS 2891	Methods of sampling and testing asphalt