#### March 1, 2016

### Polymer Modified Emulsified Asphalt Fog Seal for OGFC

## **Description**

Apply a polymer modified asphalt emulsion product that is <u>ready to use</u> as a fog seal on aged OGFC pavements.

#### **Materials**

Ensure the product has been submitted and accepted onto the SCDOT Qualified Products List No. 38 prior to use. Provide a ready to use, diluted polymer modified fog seal product when it leaves the emulsion terminal. No additional dilution will be permitted once the material is shipped. Provide a fog seal material that meets the requirements of the emulsified asphalt (see table below).

Polymer Modified Emulsified Asphalt Fog Seal for OGFC	Test Method	Specification (ready to use)
Saybolt Furol Viscosity @ 77°F	AASHTO T72	10-100 SFS
Residue by Evaporation	AASHTO T59	35.0% minimum
Penetration of Asphalt Residue: @ 77°F, 100g, 5 sec.	AASHTO T49	50 dmm maximum
Solubility of Asphalt Residue	AASHTO T44	97.0 % minimum

### **Application**

Place the fog seal material on OGFC pavement within 48 hours of shipping from the emulsion terminal to prevent separation. Uniformly apply no less than 0.200 gallons per square yard of Polymer Modified Emulsified Asphalt Fog Seal with a distributor to the OGFC. Place a 500 foot test section on the shoulder or other non-mainline area to test application rate and to determine necessary time for the fog seal to cure in order for the traffic to return on the treated OGFC. If directed by the RCE, reduce the application rate of the fog seal based on the condition of the OGFC. All equipment distributor calibrations must be done prior to placing test section off the jobsite. Ensure all distributor nozzles are working properly and the application is uniform across the OGFC. Do not allow the fog seal to extend off the pavement surface more than 2 inches or onto preexisting pavement markings. Supply a pilot vehicle to accompany the fog seal distributor to create a temporary buffer zone that extends approximately 3-4 car lengths from the spray bars during the application to prevent any misting of the fog seal material on to adjacent traffic. Attend to any area where excess emulsions remains wet after the emulsion breaks. These wet areas may be blotted with sand if the RCE deems necessary in order to open to traffic. Do not apply the asphalt emulsion when the ambient air temperature is below 60° F without prior written approval from the RCE.

#### Measurement

Measure the road in length and width to compute the number of square yards for the application. Compute the number of gallons placed by checking the distributor levels before and after application.

#### **Payment**

Payment will be for furnishing and applying asphalt emulsion fog seal and any sand used for blotting will also be included. Payment will be reduced for every 0.001 gallon per square yard below the recommended rate of 0.200 as a percentage of the overall required rate. No additional payment will be made for rates exceeding 0.200 gallons per square yard. Do not adjust the specified target rate in the formula below if the RCE lowers the field target application rate.

S.C. File No. Page 1

## SUPPLEMENTAL SPECIFICATION

# Example:

21,120 feet of OGFC are covered at an average width of 12 feet in a day's production (21,120 ft. X 12 ft.) / (9 ft.²/SY) = 28,160 SY 5450 gallons of emulsified fog seal were applied

5450 gallons / 28,160 SY = 0.194 gal/SY was the average application rate for the day Reduce unit price per SY for the total number of SY placed for each day.

0.194 (actual gal/SY placed) / 0.200 (specified target rate gal/SY\*) = 0.970 Adjust unit price per SY by a factor of 0.970 for the day's production.

Item No.	Item	Pay Unit
XXXXXXX	Polymer Modified Emulsified Asphalt Fog Seal for OGFC	SY

S.C. File No. Page 2