Method of Test for Determining Compatibility of Cover Aggregates

1. Scope:

This test covers the procedure for determining the compatibility of emulsified asphalt with aggregate to be used for asphalt surface treatments.

2. Apparatus:

- 2.1 Drying oven capable of maintaining a temperature of $230^{\circ} \pm 9^{\circ}$ F.
- 2.2 Scale or balance having the capacity to weigh any sample which may be tested utilizing this procedure and readable to the nearest 0.1 gram.
- 2.3 Pans, scoops, brushes, etc., for handling materials.
- 2.4 Spatula with a blade 4 in. long.
- 2.5 Beaker, paper cup or plastic container suitable for hot liquid, 8-oz. capacity.

3. Procedure:

- 3.1 Obtain a sample of cover aggregate to test from contractor or storage.
- 3.2 Determine the type of emulsified asphalt to be used and identify the supplier.
- 3.3 Weigh approximately 2000 grams of aggregate into a pan.
- 3.4 Dry the sample to a constant weight in an oven and cool to room temperature.
- 3.5 Add water to the aggregate to reach the required 2.0 percent moisture level.
- 3.6 Weigh 50 grams of the wetted aggregate into the 8-oz. container.
- 3.7 Add, immediately, 5.0 grams of the test emulsion to the aggregate. Stir sample with the spatula to achieve maximum coating. Continue stirring for approximately 10 seconds.

NOTE: Take care so that stirring is not continued after the emulsion breaks.

- 3.8 Spread sample onto absorbent paper towel to determine the degree of coating.
- 3.9 Photograph the sample on the paper towel with the project information.

4. Report:

4.1 Acceptance (complete coating) or incomplete coating shall be noted. Additional tests such as boiling water and/or sweep tests or a small test strip will be required if incomplete coating occurs. Changing the aggregate and/or emulsion and completing a new compatibility test may be required.

5. References:

None