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° ± 9°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