Recommend Approval: _S.W. Hall III_ 9/21/2011	Maryland Department of Transportation
Team Leader / Date	State Highway Administration
M. Spea 09/21/2011	Office of Materials Technology
Division Chief / Date	MARYLAND STANDARD METHOD OF TESTS

| Approved: _Jim Smith_ 10/31/11 | **DETERMINATION OF MOISTURE CONTENT OF AGGREGATES** | **MSMT 251** |
| Director / Date | | |

SCOPE:

This procedure is used to determine the moisture content of aggregates in the field.

REFERENCES:

T 255   Total Evaporable Moisture Content of Aggregate by Drying

MATERIALS AND EQUIPMENT:

1. An electric hot plate or a gas burner.

2. Scale or balance conforming to M 231, Class G2.

3. Metal container, such as a large pie pan or equivalent.

4. Pointed trowel or large spoon.

TEST PROCEDURE:

1. Select a representative quantity of material having a minimum weight conforming to the following:

MAXIMUM PARTICLE SIZE	MINIMUM SAMPLE MASS
2 in.	1000 g
¾ in.	500 g
No. 4	250 g

2. Weigh a clean, dry container to the nearest 0.1 g.

3. Place the sample in the container and weigh to the nearest 0.1 g.

4. Place the container on the burner or hot plate and mix the sample continuously to expedite drying and to prevent burning the material.

5. When the sample looks dry, remove it from the heat, cool, and weigh. Place the sample back on the heat, continue drying for another 2 to 3 minutes, cool, and reweigh. The sample is dry when there is less than 0.1 percent difference between the weights. Record the weight of the sample and container to the nearest 0.1 g.

CALCULATIONS:

1. Moisture content of aggregate:

$$P = \frac{W - D}{D - C} \times 100$$

where:

P = percent moisture,

W = weight of wet aggregate and container,

D = weight of dry aggregate and container, and

C = container weight.

REPORT:

Report the moisture content to the nearest 0.1 percent.