Density Determinations for Liquid Asphalt Treated Base and Subbase

1. **Scope:**
   This test is for determining the relationship between the density of laboratory and field compacted liquid bitumen treated aggregate.

2. **Apparatus:**
   2.1 Mold. A 6” diameter mold conforming to the requirements of AASHTO T 99, calibrated in accordance with SD 205.
   2.2 Rammer. A manually or mechanically operated rammer conforming to the requirements of AASHTO T 99.
   2.3 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.
   2.4 Drying oven capable of maintaining a temperature of 230° ± 9°F.
   2.5 Miscellaneous. 12” straightedge, spatula, pans, scoops, gloves and knife.
   2.6 Sample extruder (Optional). A device adapted for the purpose of extruding compacted specimens from the mold.

3. **Procedure:**
   3.1 Standard density determination.
      A. Obtain a sample from the windrow in accordance with SD 201 and test in accordance with SD 104 method 4.
   3.2 Density of material in place.
      A. The density of material in place shall be determined in accordance with SD 105.

4. **Report:**
   4.1 Calculate the dry density and moisture determinations as shown on form DOT-41.
   4.2 Report the percent of moisture to the nearest 0.1%.
   4.3 Report the percent of standard density obtained to the nearest whole percentage point.
5. References:

AASHTO T 99
SD 104
SD 105
SD 201
SD 205
DOT-41