Standard Method of Test for

Method of Quartering Asphalt Mixtures

SCDOT Designation: SC-T 72 (rev. 6/2021)

1. SCOPE

1.1. This method is for use in obtaining the required size asphalt mixture sample for split samples and QC/QA testing. In most instances, mixture samples obtained in buckets-pails, or in bags are too large in size and must be reduced to obtain the proper quantity for testing.

2. REFERENCED DOCUMENTS

2.1. SC-T 62, SC-T 101.

3. SIGNIFICANCE AND USE

3.1. The purpose of this procedure is to properly reduce asphalt mixture samples to an appropriate testing size to ensure consistency and repetition of test results.

4. APPARATUS

4.1. Clean, smooth metal table; trowel; 5-gallon bucket-pail, sample bag, or sample boxes (2 or 4)*.

5. TEST SPECIMEN

5.1. 5-gallon pail or sample bag or box of asphalt mixture.

6. PROCEDURE

- 6.1. Obtain a sample of the asphalt mixture for a random tonnage, as determined using SC-T-101, by following the sampling method in SC-T-62.
- 6.2. Invert the sample bucket-pail (or bag) containing the mixture on a clean, smooth metal table.
- 6.3. Using a trowel, gently slice into the mixture so the mixture spreads into a near circular layer with uniform thickness and with as little segregation as possible. Divide the mixture into quarters by two lines intersecting at right angles at the center.
- 6.4. Place the diagonally opposing quarters (i.e., 2 and 3 or 1 and 4) in a sample bag immediately, or discard as required. Clean and discard all fines from the trowel.

- 6.5. The remaining opposing quarters should be pulled together. DO NOT remix to avoid segregation. Quarter the mixture again until the required sample size is obtained.
- 6.6. Once the proper sample size is obtained, clean both sides of the trowel with the edge of the table or a straight edge, and place a quarter of the fines in the sample to be tested.
- 6.7. Place a large representative portion on the split sample testing for SCDOT in a sample bag according to SC-T-62. If sample boxes are used for SCDOT split sample testing, reduce samples to desired test size and place in sample boxes*. Use coated-wax paper or pre-coated boxes to prevent material loss, seal and secure boxes with tape or other means to prevent contents from being lost during transport.

*Tech Note: Four boxes are required for any asphalt mixture that Maximum Specific Gravity testing is required in the field, and two boxes for any other mixture.

7. CALCULATION

None

8. REPORT

None