

**Standard Method of Test for**

**Method of Sampling Portland Cement, Slag, and Fly Ash**

SCDOT Designation SC-T-47 (8/08)

**1. SCOPE**

- 1.1. These methods cover the procedures for sampling Portland Cement, Slag, and Fly Ash.

**2. SUMMARY OF SAMPLING METHOD**

- 2.1. A sample of Portland Cement may be sampled from a bulk shipment of car or truck, or from the batch plant silo.

**3. SIGNIFICANCE AND USE**

- 3.1. Sampling is equally as important as the testing, and the sampler must use every precaution to obtain samples that will show the true nature and condition of the materials that they represent.

**4. APPARATUS**

- 4.1. Plastic airtight gallon container and a suitable, clean, shoveling device

**5. TEST SPECIMENS**

- 5.1. *Sample size and sample protection* – The size of the sample of material shall be 4 quarts. As samples are taken, they shall be placed directly in moisture-proof, airtight, containers to avoid moisture absorption and aeration of the sample. Containers shall be completely filled and sealed immediately.

**6. PROCEDURE**

- 6.1. *Sampling* – The material may be sampled as circumstances and batch plant equipment permit. In all cases, care shall be taken to prevent contaminating the sample by foreign matter. In most cases, samples may be obtained as follows:

- 6.1.1. *From Bulk Shipment of Rail Car or Truck* – The sample may be obtained from the delivery vehicle or along the conveyer route of travel from the vehicle to the batch plant storage silo. When sampling from the delivery vehicle, the sample may be obtained from the top hatch openings of a full load. The sample shall be taken at different points and should not include the surface material. When sampling from the conveyor route, be it bucket, auger, or air flow, the sample shall be obtained by stopping the conveyor as many times as is necessary to obtain a complete sample.

- 6.1.2. *From Batch Plant Silo* – The sample may be obtained from the scale hopper or by discharge as equipment will permit. Sampling from batch plant silos should only be done as a last resort when the identity of the material sample by mill test report is questionable.