Kentucky Method 64-316-083
Revised 2/17/0303/25/08
Supersedes Km KM 64-316-031
Dated 2/16/0102/17/03

SAMPLING PORTLAND CEMENT

1. SCOPE: This method covers the procedure for sampling portland cement.

2. APPARATUS:

2.1. A plastic moisture-proof, air-tight containerjug with an air-tight, screw-top lid.

2.1.1. A plastic jug with screw top lid.

2.1.2. A metal can with friction lid.

2.2. When applicable a clean device for obtaining samples such as a bucket, shovel, scoops, etc.

3. SAMPLE SIZE: One gallon.

4. SAMPLING PROCEDURE:

4.1. Samples shall be taken by a concrete producer representative and witnessed by a KYTC employee. Samples shall to be representative of the cement actually being used in the project. Obtain approximately one-half of the total project samples from the concrete plant weigh hopper or storage bin and the other one-half from the cement transport trucks. The concrete producer is responsible for insuring that the samples are obtained without contamination.

4.2. Sampling from Transport Truck:

4.2.1. From Top of Truck: Take sample from top of the truck prior to unloading. Scrape back the cement in an area about two feet in diameter and to a depth of approximately 12 inches and then take the sample.

4.2.2. From Discharge Line of Truck: If the discharge line is equipped with a sampling valve, take the sample at the halfway point of unloading. If the sample is taken from the end of the discharge line, take the sample at the halfway point of unloading.

4.3. Sampling from Concrete Plant Storage:

4.3.1. Sampling from Cement Storage Bin: Take sample from storage bin by means of approved sampling device (draw off port).

4.3.2. Sampling from Weigh Hopper: Take sample from weigh hopper by means of approved sampling device (draw off port). Advise plant operator to make sure that weigh hopper is free of other material such as fly ash.

4.3.3. Sampling from Weigh Hopper Discharge: Take sample from material discharged from the weigh hopper. Plant representative must insure sample does not become contaminated with other material in the weigh hopper or by material in the sampling device.

4.4. Sampling Precautions:

4.4.1. Fill sampling container as full as possible to avoid aeration and moisture absorption of the sample.

4.4.2. Never take a cement sample from a belt used to convey aggregates.

4.4.3. Never take a cement sample from off the ground.

4.4.4. Use great care and caution to insure that cement samples do not become contaminated with sand, fly ash, dirt, air-entraining admixtures, etc.

4.4.5. Observe all necessary safety precautions.

~~5. COMPLETING CEMENT SUBMISSION FORM AND SUBMITTING SAMPLE:~~

~~5.1. Complete KMIMS Sample Identification form with special emphasis on the following:~~

~~5.1.1. Inspected Quantity: Indicate the actual number of tons when sampling from transport. Estimate the number of tons, in consultation with the concrete plant representative, when sampling from the plant silo or weigh hopper. Never use the sampling frequency as the inspected quantity.~~

~~5.1.2. Indicate exact location of sampling such as:~~

~~5.1.2.1. top of transport.~~

~~5.1.2.2. transport discharge line.~~

~~5.1.2.3. silo sampling device.~~

~~5.1.2.4. weigh hopper sampling device.~~

~~5.1.2.5. top of weigh hopper.~~

~~5.1.2.6. weigh hopper discharge.~~

~~5.1.2.7. other locations.~~

~~5.2. SUBMITTING SAMPLE: Submit sample to central lab along with a copy of bill of lading and certification from transport sampled. When sample is taken from plant storage, submit sample along with copy of one bill of lading and certification representing the cement sampled.~~

APPROVED _____
DIRECTOR
DIVISION OF MATERIALS

DATE 03/25/08

~~APPROVED _____
Director
Division of Materials~~

~~DATE 2/17/03~~

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