# **ASPHALTIC MIXTURES**

DOTD Designation: S 203-03

#### I. General

# A. Equipment

- 1. Sampling device
  - a. Cold mixtures scoop suitable for obtaining sample.
  - b. Hot mixtures, loose mix scoop or shovel for obtaining the required sample sizes.
  - c. Pavement cores approved core drill unit capable of cutting approximately 4 in. or 6 in. diameter cores for the full depth of the completed work without damage to the sample.
- 2. Sample containers
  - a. Cold mixtures 1 gal friction top can.
  - b. Hot mixtures 1 gal friction top can and several 5 gal metal sample containers with lids depending on required sample size.
- 3. Miscellaneous equipment goggles, apron, gloves, marking crayon, wrapping paper, tape, string.
- 4. Approved styrofoam transport containers and seals for pavement cores.
- 5. MATT forms and envelopes.

#### B. Safety Precautions

It is the responsibility of the user of this sampling method to establish appropriate safety practices including, but not limited to, handling hot materials, exposure to hazardous fumes and handling heavy loads.

### II. Cold Mixtures

#### A. Stockpile

- 1. Estimate the volume of the stockpile and divide it into vertical increments of such size as required by the sampling frequency.
- 2. Sample each increment from 3 different levels, near the top, near the middle and near the bottom of the pile.
- 3. Remove 3 to 6 in. of the surface material before taking the sample.
- 4. With a scoop, obtain the material and composite the material taken from the 3 levels to form each sample.
- 5. Place composited sample into a 1 gal friction top can.
- 6. Place one properly completed, unsoiled, original sample identification form into an envelope. Tape the envelope to the friction top can.

### B. Railroad cars and trucks

- Samples shall be taken from 3 different sections of the load, near both ends and the middle. Remove 3 to 6 in. of the surface material before sampling.
- 2. With a scoop, obtain the material and composite the material taken from the 3 locations to form the sample.
- 3. Place composited sample into a 1 gal friction top can.
- 4. Place one properly completed, unsoiled, original sample identification form into an envelope. Tape the envelope to the friction top can.

# III. Asphaltic Concrete Hot Mixtures

# A. Loose Mix

- 1. Samples shall be taken from the truck, with each sample consisting of material from at least 2 different locations. Remove 3 to 6 in. of the surface material before taking the sample.
- 2. Using a scoop or shovel obtain the material and then composite the material taken from the 2 locations to form the sample.
- 3. Place composited sample into a 1 gal friction top can.
- 4. Place one properly completed, unsoiled, original sample identification form into an envelope. Tape the envelope to the friction top can.

# B. Briquettes

- 1. Take material for use in making briquettes in the same manner as described in Steps III.A.1. and 2.
- 2. Make briquettes after sampling.
- 3. Identify each briquette with a marking crayon.
- 4. Wrap briquette in paper and place in a 1 gal friction top can.
- 5. Place one properly completed, unsoiled, original sample identification form into an envelope. Tape the envelope to the friction top can.

# C. Pavement Samples

- 1. Samples shall be approximately 4 in. or 6 in. in diameter and taken by the contractor in the presence of the engineer's representative from areas selected by the engineer's representative.
- 2. Reject cores that are damaged during the cutting process. The contractor shall take an additional pavement core next to the selected location.
- 3. Identify each pavement core. Wrap and place the cores in the approved transport container and seal. Containers are to be secured with rubber band, twine, cord or tape to ensure that the container will not open during transport.
- 4. The sticker shown in Figure 1 shall be completed and signed by the inspector and affixed to the wrapping of each core and container in such a manner that any attempt to open the container or unwrap a core will result in the destruction of the sticker. Any evidence of tampering with the core wrapping, sticker or of opening the container will result in the cores being rejected.

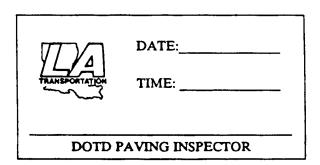


Figure 1: DOTD Pavement Core Tamper-proof Sticker

5. Place one properly completed, unsoiled, original sample identification form into an envelope. Securely fasten the envelope to the sealed container.