



# TEX-222-F

## Sampling Bituminous Mixtures



### Why

Proper procedures for sampling representative materials from what is being delivered and placed on the roadway for laboratory testing.

***Testing samples that are representative of what is being placed on the roadway is important to ensure quality material is delivered to the project.***



### When

Sampling of materials for specification compliance and acceptance is required during production. Samples may also be obtained during hauling, placement at the project site, or at the stockpile.



### How

#### Sampling Locations

1. Plant-Mixed Mixtures
  - Method A - Trucks or rail cars
  - Method B - Front-end loader
2. Stockpiles at the plant
3. Windrows
4. Slabs from the roadway
5. Behind the laydown machine (paver)

#### Sampling

- Obtain representative samples to avoid segregation and contamination of the mixture.

#### Sample Size

- The minimum sample size should be enough to fill a container appropriate for the specific test type.
- If extensive testing is desired, sample two or more containers of the material, as required. Blend all sampled materials to form a composite sample before quartering to size for laboratory tests.

#### Sample Splitting

- Combine all of the mixture sampled and thoroughly mix it all together.
- Split the material into individual samples in accordance with Tex-200-F.

#### Transporting Samples

- When mix is allowed to be cooled down and brought to another laboratory for testing, place the mixture in paper bags or cardboard boxes.
- Do not exceed a thickness of three inches in any of these containers.

## **QUICK FACTS: LEVEL 1A**

### **Plant-Mixed Mixtures**

- Method A - Sampling from Trucks or Rail Cars
  - *Use a proper sampling stand, following all safety precautions to prevent bodily injury.*
  - *Select a minimum of three sections.*
  - *Divide the sample size by three.*
  - *Dig a minimum of 12 inches below the surface and remove the amount of material needed from each section.*
- Method B - Sampling using a Front-End Loader
  - *Clean the bucket of material that may contaminate the sample.*
  - *Fill the front-end loader bucket with mix directly from the discharge chute.*
  - *Take mix from several locations in the bucket to make a composite sample of a minimum of 30 lbs.*

### **Stockpiles of Mix at the Plant**

- Sample equal quantities from holes dug into points near the top, middle, and bottom of the stockpile.

### **Mix from Windrows**

- Sample mixtures at intervals of no more than 500 feet.
- When possible, sample from a complete cross-section of the mixture approximately one foot wide.

### **Slabs from the Roadway**

- Use the sharp, narrow blade of a mattock to pry loose an 18-inch square pavement sample—handle carefully to avoid cracking.
- Place the sample between two clean ¾-inch thick plywood pieces, smooth side down, and tie securely with heavy cord for transport.
- Wrap the sample in aluminum foil to prevent moisture loss or evaporation of hydrocarbons.

### **Loose Material Behind the Laydown Machine (Paver)**

- Sample after approximately half of the truck load has passed through the paver.
- Sample from different areas in front of the screed on the paver or from different areas immediately behind the paver.