



BUREAU OF MATERIALS

MATERIALS

PROCEDURES

MP NUMBER: 11-08

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SAMPLING BULK LIQUID BITUMINOUS MATERIALS

PURPOSE:

The purpose is to establish a standard procedure for the sampling of bulk liquid materials at the point of manufacture or supply terminal.

SUPERSEDES:

Materials Procedure Number 11- Dated 10/01/2001

REFERENCES:

Special Provisions, Supplemental Specifications, Standard Specifications, Addenda and Attachments

AASHTO T40 Standard Method of Sampling Bituminous Materials

FORMS

LB-16	Analysis of Asphalt Cement
LB-17	Analysis of Asphaltic Oil
LB-18	Analysis of Emulsified Asphalt
LB-53	Inspection of Bituminous Material at Shipping Point
LB-88	Sample Envelope
LB-173	Laboratory Record of Lot Inspection
LB-296	Notice of Non-Complying Material

CAUTION: Bituminous products are stored at high temperatures. Therefore, it is extremely important that personal safety equipment be utilized. Safety equipment that must be worn includes safety helmets, eye/face protection, and heat resistant gloves and nomex coveralls.

INSTRUCTIONS:

I. Assignment Procedures:

The inspector shall receive from their supervisor the following:

- A. Location of assignment and starting time.
- B. Type of material, lot number, and tank number to be sampled.

II. Duties Prior to Sampling:

The inspector shall:

- A. Have an adequate supply of sample containers.
- B. Upon arrival, make their presence known to the coordinator for sampling.
- C. Obey all safety regulations posted in the refinery.
- D. Obtain sample information from coordinator (lot no., tank no. total volume). Enter information on LB-173 and keep at Bituminous Lab.
- E. Record all sample information on LB-53.
- F. Mark all containers with the following information:
 - 1. Name and location of manufacturer
 - 2. Product grade
 - 3. Lot number
 - 4. Tank number
 - 5. Date sampled

IMPORTANT: Mark containers on side - NEVER on the lid.

- G. Request plant representative to accompany them to storage area. If a representative is unavailable, and the inspector is familiar with the storage area, they may, with the permission of the coordinator, proceed to the storage area.

III. Duties - Sampling

The inspector shall:

- A. Wear heat resistant gloves while sampling and handling liquid bituminous materials. Sleeves should be rolled down and fastened over the gloves at the wrist. Personal safety equipment must also be worn.

- B. Stand above and away from the sampling valve as far as practical and on the windward side.
- C. Remove all material from the sampling valve. Drain at least one gallon (3.8L) of the product into a container through each sampling valve before the sample is taken. The drained material shall be discarded.

NOTE: Extreme caution is necessary whenever water is present. The combination of water and hot asphalt can cause foaming and/or splattering of hot material, this can cause burns.

- D. Hold the sample container with tongs or some other device while filling.
- E. Allow the material to flow slowly to prevent splashing of the hot material.
- F. Fill containers to no more than 1.5" below the top or about 85% of total volume.
- G. Take care to prevent samples from becoming contaminated. Any spilled material on the outside of the container shall be wiped with a clean, dry cloth immediately after the container is sealed. Solvents shall not be used for cleaning containers.
- H. Place the filled sample container on a firm, clean level surface and seal tightly. The sample shall not be transferred into another container.

IV. Additional Duties:

The inspector shall:

- A. Complete LB-53 and LB-88, also complete the pertinent form for the product sampled. (LB-16, LB-17, LB-18)
- B. Complete diary with notations and pertinent information from which can be recollected the events of any day.
- C. Submit all samples to the Bureau of Materials Laboratory by next work day.
- D. Record all samples in the log book which is maintained at the Bureau of Materials.

V. Authority and Responsibility

Bring to the attention of their supervisor and the coordinator any uncertainties regarding the quality of materials, equipment, methods of operation or sampling. Document the discussion and the corrective action taken on LB-53 and on his/her Daily Activities Report.

VI. Distribution of Forms:

<u>Form</u>	<u>Distribution</u>
LB-16, 17, 18	1. Original - Laboratory
LB-53	1. Original - Laboratory 2. Supervisor
LB-173	1. Original - Supplier
LB-296	1. Original - Bureau Headquarters 2. Regional Materials Office