

WSDOT FOP FOR WAQTC/ AASHTO T 40

Sampling Bituminous Materials

Significance

Sampling is as important as testing and precautions shall be taken to obtain samples to show the true nature and condition of the materials. Because of the numerous types and grades of bituminous materials that are alternately shipped and stored in the same or similar containers, the opportunity for contaminating these containers with residues, precipitates, or cleaning solvents is ever present. Numerous opportunities also exist for obtaining samples which are not strictly representative of the material or are contaminated after removal. Therefore it is incumbent upon the producer, transporter, user and sampler to exercise continuous precaution in the sampling and handling of these materials.

This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of the standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

Scope

This practice applies to the sampling of liquid bituminous materials in accordance with AASHTO T 40. Sampling of solid and semi-solid bituminous materials (included in AASHTO T 40) is not covered here.

Agencies may be more specific on exactly who obtains the samples, where to sample, and what type of sampling device to use.

WSDOT personnel will observe the contractor's personnel samples to assure that proper sampling procedures are followed. If proper sampling procedures are not followed the Contractor's personnel shall resample.

Procedure

1. Coordinate sampling with the contractor or supplier.
2. Use appropriate safety equipment and precautions.
3. A minimum of 1 gal (4 L) of the product shall be drawn and discarded or reintroduced to the tank before obtaining samples.
4. Sampling Asphalt Binder
Obtain samples at the asphalt mixing plant from the valve in either the storage tank or in the supply line to the mixer while the plant is in operation.
5. Sampling Emulsified Asphalt
Obtain samples from the distributor spray bar or application device just before or during application.

Containers

Sample containers must be new, and the inside may not be washed or rinsed. The outside may be wiped with a clean, dry cloth.

All samples shall be put in 1 qt (1 L) containers and properly identified on the outside of the container with contract number, date sampled, data sheet number, brand and grade of material and sample number. Include lot and subplot numbers when appropriate.

All samples shall be protected from freezing.

Note: The filled sample container shall not be submerged in solvent, nor shall it be wiped with a solvent saturated cloth. If cleaning is necessary, use a clean dry cloth.

- Asphalt binder: Use metal cans.
- Emulsified asphalt: Use wide-mouth plastic jars with screw caps. Place tape around the seam of the cap to keep the cap from loosening and spilling the contents.

Standard sample labels (WSDOT Form 350-016) shall be completely filled out and attached to each sample container.

Performance Exam Checklist

Sampling Bituminous Materials WAQTC FOP for AASHTO T 40

Participant Name _____ Exam Date _____

Procedure Element	Yes	No
1. The tester has a copy of the current procedure on hand?	<input type="checkbox"/>	<input type="checkbox"/>
2. Appropriate containers used?		
a. Metal cans (all other bituminous liquids).	<input type="checkbox"/>	<input type="checkbox"/>
b. Wide-mouth plastic containers (emulsified).	<input type="checkbox"/>	<input type="checkbox"/>
3. Containers not washed or rinsed on inside?	<input type="checkbox"/>	<input type="checkbox"/>
4. Minimum of 1 gallon allowed to flow before sample taken?	<input type="checkbox"/>	<input type="checkbox"/>
5. Material obtained at correct location?		
a. Line between storage tank and mixing plant or the storage tank (HMA plants).	<input type="checkbox"/>	<input type="checkbox"/>
b. Spray bar or application device, if not diluted (distributors).	<input type="checkbox"/>	<input type="checkbox"/>
c. From delivery vehicle or prior to dilution, if diluted (distributors).	<input type="checkbox"/>	<input type="checkbox"/>

Sample taken by: Contractor

First attempt: Pass Fail

Second attempt: Pass Fail

Signature of Examiner _____

Comments:

