

# WSDOT Errata to FOP for AASHTO R 66

## *Sampling Asphalt Materials*

WAQTC FOP for AASHTO R 66 has been adopted by WSDOT with the following changes:

### **Containers**

Include sentence below:

Emulsified asphalt: Use wide-mouth plastic jars with screw caps. Protect the samples from freezing since water is a part of the emulsion. The sample container should be completely filled to minimize a skin formation on the sample. Place tape around the seam of the cap to keep the cap from loosening and spilling the contents.



## SAMPLING ASPHALT MATERIALS FOP FOR AASHTO R 66

### Scope

This procedure covers obtaining samples of liquid asphalt materials in accordance with AASHTO R 66-16. Sampling of solid and semi-solid asphalt materials – included in AASHTO R 66 – is not covered here.

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

**Warning:** Always use appropriate safety equipment and precautions for hot liquids.

### Terminology

- Asphalt binder: Asphalt cement or modified asphalt cement that binds the aggregate particles into a dense mass.
- Asphalt emulsion: A mixture of asphalt binder and water.
- Cutback asphalt: Asphalt binder that has been modified by blending with a chemical solvent.

### 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 L (1 qt) 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.

- Emulsified asphalt: Use wide-mouth plastic jars with screw caps. Protect the samples from freezing since water is a part of the emulsion. The sample container should be completely filled to minimize a skin formation on the sample.
- Asphalt binder and cutbacks: Use metal cans

**Note:** The 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.

**Procedure**

1. Coordinate sampling with contractor or supplier.
2. Allow a minimum of 4 L (1 gal) to flow before obtaining samples.
3. Obtain samples of:
  - Asphalt binder from the line between the storage tank and the mixing plant while the plant is in operation, or from the delivery truck.
  - Cutback and emulsified asphalt from distributor spray bar or application device; or from the delivery truck before it is pumped into the distributor. Sample emulsified asphalt at delivery or before dilution.

**Report**

- On standard agency forms
- Sample ID
- Date
- Time
- Location
- Quantity represented

**PERFORMANCE EXAM CHECKLIST (ORAL)**

**SAMPLING ASPHALT MATERIALS  
FOP FOR AASHTO R 66**

Participant Name \_\_\_\_\_ Exam Date \_\_\_\_\_

Record the symbols "P" for passing or "F" for failing on each step of the checklist.

| <b>Procedure Element</b>  | <b>Trial 1</b> | <b>Trial 2</b> |
|---|----------------|----------------|
| <b>1. Describe the container that is used to sample Performance Graded Asphalt binder and Cutbacks.</b> |                |                |
| a. Metal can  | _____          | _____          |
| b. New  | _____          | _____          |
| c. 1 L (1 qt) in size   | _____          | _____          |
| <b>2. Describe the container that is used to sample Emulsified Asphalt.</b>                             |                |                |
| a. Screw capped wide mouth plastic jar.   | _____          | _____          |
| b. New.   | _____          | _____          |
| c. 1 L (1 qt).  | _____          | _____          |
| <b>3. How much material must be wasted before a sample can be obtained?</b>                             |                |                |
| a. A minimum of 4 L (1 gal).  | _____          | _____          |
| <b>4. Where is Performance Graded Asphalt binder sampled from?</b>                                      |                |                |
| a. At the Hot plant / Mixing plant.   | _____          | _____          |
| b. In the line between storage tank and mixing plant.   | _____          | _____          |
| c. Delivery truck.  | _____          | _____          |
| <b>5. Where is Cutback binder sampled from?</b>   |                |                |
| a. Spray bar or application device.   | _____          | _____          |
| b. Delivery truck.  | _____          | _____          |
| <b>6. Where is Emulsified Asphalt binder sampled from?</b>  |                |                |
| a. Prior to dilution Spray bar or application device.   | _____          | _____          |
| b. Prior to dilution the delivery truck.  | _____          | _____          |
| <b>7. How much Emulsified Asphalt needs to be in the container?</b>                                     |                |                |
| a. Filled completely.   | _____          | _____          |

**OVER**

**Procedure Element**

**Trial 1 Trial 2**

**8. Describe what needs to be done to the Emulsified Asphalt sample container before shipping.**

a. Place tape around the seam of the cap / lid.

\_\_\_\_\_

b. Mark / Label the container with the required identification.

\_\_\_\_\_

**9. During transport what must be done with the Emulsified Asphalt sample.**

a. Protected from freezing

\_\_\_\_\_

Comments: First attempt: Pass\_\_\_\_Fail\_\_\_\_ Second attempt: Pass\_\_\_\_Fail\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Examiner Signature \_\_\_\_\_ WAQTC #: \_\_\_\_\_