### **Standard Practice for**

## Certifying Suppliers of Performance-Graded Asphalt Binders

AASHTO Designation: R 26-01 (2018)

**Technical Subcommittee: 2b, Liquid Asphalt** 

Release: Group 3 (July)



American Association of State Highway and Transportation Officials 444 North Capitol Street N.W., Suite 249 Washington, D.C. 20001

#### Standard Practice for

# **Certifying Suppliers of Performance- Graded Asphalt Binders**

AASHTO Designation: R 26-01 (2018)

AASHO

Technical Subcommittee: 2b, Liquid Asphalt

Release: Group 3 (July)

#### 1. SCOPE

- 1.1. This standard specifies requirements and procedures for a certification system that shall be applicable to all suppliers of performance-graded asphalt binder (PGAB). The requirements and procedures shall apply to materials that meet the requirements of M 320, Section 5, Materials and Manufacture, and that are manufactured at refineries, mixed at terminals, in-line blended, or modified at the hot mix asphalt (HMA) plant.
- 1.2. This standard may involve hazardous materials, operations, and equipment. It does not purport to address all of the safety problems associated with this use. The user of this standard shall be responsible for appropriate safety and health practices.

#### 2. REFERENCED DOCUMENTS

- 2.1. *AASHTO Standards*:
  - M 320, Performance-Graded Asphalt Binder
  - R 28, Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)
  - R 29, Grading or Verifying the Performance Grade (PG) of an Asphalt Binder
  - R 66, Sampling Asphalt Materials
  - T 48, Flash and Fire Points by Cleveland Open Cup
  - T 313, Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)
  - T 315, Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)
  - T 316, Viscosity Determination of Asphalt Binder Using Rotational Viscometer
- 2.2. *ASTM Standards*:
  - D8, Standard Terminology Relating to Materials for Roads and Pavements
  - D3665, Standard Practice for Random Sampling of Construction Materials

#### 3. TERMINOLOGY

3.1. *AAP*—AASHTO accreditation program.

- 3.2. *agency*—shall be defined as a state highway agency or other agency responsible for the final acceptance of the PGAB.
- 3.3. *AS*—approved supplier.
- 3.4. *ASC*—approved supplier certification.
- 3.5. *asphalt binder*—an asphalt-based cement that is produced from petroleum residue either with or without the addition of nonparticulate organic modifiers.
- 3.6. *PGAB*—performance-graded asphalt binder.
- 3.7. *quality control testing*—the quality control testing shall be described in the supplier's quality control plan. The supplier's quality control plan shall be approved by the agency.
- 3.8. *specification compliance testing*—complete testing in accordance with the M 320 specification requirements. The procedure for verification of PGAB as described in R 29 shall be followed.
- 3.9. *supplier*—shall be defined as one who produces the final product or who makes the blend or modification that alters the properties of the PGAB specified in M 320. A supplier shall be a refinery, a terminal, or an HMA producer. If no modification is made to the PGAB after its initial production at the refinery, the refinery shall be the supplier and must provide the certification. If any modifications are made to the PGAB at the terminal, the terminal shall be the supplier and must provide certification. If any modification, blending, or blending of PGAB from different sources is made at the HMA plant, the HMA producer shall be the supplier and must provide the certification.
  - **Note 1**—Various refining techniques can produce equivalent PGAB; however, these asphalts may be incompatible with each other. Users shall consider compatibility before combining asphalts from different sources.
  - **Note 2**—Definitions for many terms common to asphalt binder are found in ASTM D8.

#### 4. SIGNIFICANCE AND USE

- 4.1. This standard specifies procedures for minimizing disruption of PGAB shipments. This is accomplished by a certification system that evaluates quality control and specification compliance tests performed by the supplier on samples obtained prior to shipment.
- 4.2. The number of PGAB available under M 320 may require construction of additional storage facilities if the procedure of "sample and hold while testing" is followed exclusively. The addition of new storage capacity at a facility may be infeasible at some locations. Standardization of procedures that allow shipment under an approved supplier certification provides the flexibility needed to use existing facilities and to limit the shipment disruptions.
- 4.3. *This standard provides information on the following activities:*
- 4.3.1. General requirements that the supplier shall satisfy to be given approved-supplier status;
- 4.3.2. Minimum requirements that shall be included in a supplier's quality control plan;
- 4.3.3. General requirements that the agency shall satisfy before certification;
- 4.3.4. Procedure for shipping PGAB under an ASC system;
- 4.3.5. Procedure for agency monitoring of an ASC system at the shipping facility; and