

2.48 Asphalt Processing and Asphalt Roofing Plants

2.48.1 Applicability and Designation of Affected Facilities

- (a) The affected facilities to which this source category applies are each saturator and each mineral handling and storage facility at asphalt roofing plants; and each storage tank and each blowing still at asphalt processing plants, petroleum refineries, and asphalt roofing plants.
- (b) [Reserved]

2.48.2 Test Methods and Procedures

- (a) For saturators, the owner or operator shall conduct performance tests required in Section 1.2 as follows:
 - (1) If the final product is shingle or mineral-surfaced roll roofing, the tests shall be conducted while 106.6-kg (235-lb) shingle is being produced.
 - (2) If the final product is saturated felt or smooth-surfaced roll roofing, the tests shall be conducted while 6.8-kg (15-lb) felt is being produced.
 - (3) If the final product is fiberglass shingle, the test shall be conducted while a nominal 100-kg (200-lb) shingle is being produced.
- (b) In conducting the performance tests required in Section 1.2, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in Section 1.2(b).
- (c) Unless otherwise specified by the Director, the owner or operator shall determine compliance with the particulate matter standards as follows:
 - (1) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (c_s Q_{sd}) / (PK)$$

Where:

- E = emission rate of particulate matter, kg/Mg.
- c_s = concentration of particulate matter, g/dscm (g/dscf).
- Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).
- P = asphalt roofing production rate or asphalt charging rate, Mg/hr (ton/hr).
- K = conversion factor, 1000 g/kg [907.2/(g-Mg)/(kg-ton)].

- (2) Method 5A shall be used to determine the particulate matter concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. For a saturator, the sampling time and sample volume for each run shall be at least 120 minutes and 3.00 dscm (106 dscf), and for the blowing still, at least 90 minutes or the duration of the coating blow or non-coating blow, whichever is greater, and 2.25 dscm (79.4 dscf).
- (3) For the saturator, the asphalt roofing production rate (P) for each run shall be determined as follows: The amount of asphalt roofing produced on the shingle or saturated felt process lines shall be obtained by direct measurement. The asphalt roofing production rate is the amount produced divided by the time taken for the run.
- (4) For the blowing still, the asphalt charging rate (P) shall be computed for each run using the following equation:

$$P = (Vd)/(K'q)$$

Where:

P = asphalt charging rate to blowing still, Mg/hr (ton/hr).

V = volume of asphalt charged, m³ (ft³).

d = density of asphalt, kg/m³ (lb/ft³).

K' = conversion factor, 1000 kg/Mg (200 lb/ton).

θ = duration of test run, hr.

(i) The volume (V) of asphalt charged shall be measured by any means accurate to within 10 percent.

(ii) The density (d) of the asphalt shall be computed using the following equation:

$$d = K''(1056.1 - 0.6176^{\circ}\text{C})$$

Where:

°C = temperature at the start of the blow, °C.

K'' = 1.0 [0.06243 (lb-m³) / (ft³-kg)].

(5) Method 9 and the procedures in Section 1.3 shall be used to determine opacity.

(d) The Director will determine compliance with the standards in §60.472(a)(3) by using Method 22, modified so that readings are recorded every 15 seconds for a period of consecutive observations during representative conditions [in accordance with Section 1.2(c)] totaling 60 minutes. A performance test shall consist of one run.

(e) The owner or operator shall use the monitoring device in Section 2.48.3(a) or (b) to monitor and record continuously the temperature during the particulate matter run and shall report the results to the Director with the performance test results.

(f) If at a later date the owner or operator believes the emission limits in §60.472(a) and (b) are being met even though the temperature measured in accordance with Section 2.48.3(a) and (b) is exceeding that measured during the performance test, he may submit a written request to the Director to repeat the performance test and procedure outlined in paragraph (c) of this section.

(g) If fuel oil is to be used to fire an afterburner used to control emissions from a blowing still, the owner or operator may petition the Director in accordance with Section 1.2(e) of the General Provisions to establish an opacity standard for the blowing still that will be the opacity standard when fuel oil is used to fire the afterburner. To obtain this opacity standard, the owner or operator must request the Director to determine opacity during an initial, or subsequent, performance test when fuel oil is used to fire the afterburner. Upon receipt of the results of the performance test, the Director will make a finding concerning compliance with the mass standard for the blowing still. If the Director finds that the facility was in compliance with the mass standard during the performance test but failed to meet the zero opacity standard, the Director will establish an opacity standard for the blowing still that will be the opacity standard when fuel oil is used to fire the afterburner.

2.48.3 Monitoring of Operations

(a) When required, the owner or operator subject to the provisions of this source category and using either an electrostatic precipitator or a high velocity air filter to meet the emission limit shall continuously monitor and record the temperature of the gas at the inlet of the control device. The temperature monitoring instrument shall have an accuracy of ±15°C over its range.

(b) The owner or operator subject to the provisions of this source category and using an afterburner to meet the emission limit shall continuously monitor and record the temperature in the combustion zone of the afterburner. The monitoring instrument shall have an accuracy of ±10°C over its range.

- (c) An owner or operator subject to the provisions of this source category and using a control device not mentioned in paragraphs (a) and (b) of this section shall provide to the Director information describing the operation of the control device and the process parameter(s) which would indicate proper operation and maintenance of the device. The Director may require continuous monitoring and will determine the process parameters to be monitored.
- (d) The industry is exempted from the quarterly reports required under §60.7(c). The owner/operator is required to record and report the operating temperature of the control device during the performance test and, as required by §60.7(d), maintain a file of the temperature monitoring results for at least two years.

¹Code of Federal Regulations, Title 40, Part 60.