2.69 Wool Fiberglass Insulation Manufacturing Plants

2.69.1 Applicability and Designation of Affected Facility

The affected facility to which the provisions of this source category apply is each wool fiberglass insulation production line.

2.69.2 Test Methods and Procedures

(a) 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).

(b) The owner or operator shall conduct performance tests while the product with the highest loss on ignition (LOI) expected to be produced by the affected facility is being manufactured.

(c) The owner or operator shall determine compliance with the particulate matter standard as follows:

(1) Where required (e.g., NSPS sources), the emission rate \(E\) of particulate matter shall be computed for each run using the following equation:

\[
E = \frac{C_t \cdot Q_{sd}}{P_{avg} \cdot K}
\]

Where:

- \(E\) = emission rate of particulate matter, kg/Mg (lb/ton).
- \(C_t\) = concentration of particulate matter, g/dscm (g/dscf).
- \(Q_{sd}\) = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).
- \(P_{avg}\) = average glass pull rate, Mg/hr (ton/hr).
- \(K\) = conversion factor, 1000 g/kg (453.6 g/lb).

(2) Method 5E shall be used to determine the particulate matter concentration \(C_t\) and the volumetric flow rate \(Q_{sd}\) of the effluent gas. The sampling time and sample volume shall be at least 120 minutes and 2.55 dscm (90 dscf). [Method 5T may be used in lieu of Method 5E for affected facilities not subject to Standards of Performance for New Stationary Sources (NSPS) as published in the Code of Federal Regulations, Title 40, Part 60. For these sources, the minimum sampling time and sample volume is 60 minutes and 0.85 dscm (30 dscf)].

(3) The average glass pull rate \(P_{avg}\) for the manufacturing line shall be the arithmetic average of three glass pull rate \(P_i\) determinations taken at intervals of at least 30 minutes during each run.

The individual glass pull rates \(P_i\) shall be computed using the following equation:

\[
P_i = K' L_i W_m M [1.0 - (LOI/100)]
\]
Where:

\[ P_i = \text{glass pull rate at interval } 'i', \text{ Mg/hr (ton/hr)}. \]
\[ L_s = \text{line speed, m/min (ft/min)}. \]
\[ W_m = \text{trimmed mat width, m (ft)}. \]
\[ M = \text{mat gram weight, g/m}^2 \text{ (lb/ft}^2). \]
\[ \text{LOI} = \text{loss on ignition, weight percent}. \]
\[ K' = \text{conversion factor, } 6 \times 10^{-5} \text{ (min-Mg)/(hr-g)} \left[ 3 \times 10^{-2} \text{ (min-ton)/(hr-lb)} \right]. \]

(i) ASTM Standard Test Method D2584-68 (Reapproved 1979) (incorporated by reference—see Section 1.6), shall be used to determine the LOI for each run.

(ii) Line speed \( L_s \), trimmed mat width \( W_m \), and mat gram weight \( M \) shall be determined for each run from the process information or from direct measurements.

(d) To comply with §60.684(d), the owner or operator shall record measurements as required in §60.684(a) and (b) using the monitoring devices in §60.683(a) and (b) during the particulate matter runs.

2.69.3 Monitoring of Operations

(a) An owner or operator subject to the provisions of 40 CFR 60, Subpart PPP who uses a wet scrubbing control device to comply with the mass emission standard shall install, calibrate, maintain, and operate monitoring devices that measure the gas pressure drop across each scrubber and the scrubbing liquid flow rate to each scrubber. The pressure drop monitor is to be certified by its manufacturer to be accurate within ±250 pascals (±1 inch water gauge) over its operating range, and the flow rate monitor is to be certified by its manufacturer to be accurate within ±5 percent over its operating range.

(b) An owner or operator subject to the provisions of 40 CFR 60, Subpart PPP who uses a wet electrostatic precipitator control device to comply with the mass emission standard shall install, calibrate, maintain, and operate monitoring devices that measure the primary and secondary current (amperes) and voltage in each electrical field and the inlet water flow rate. In addition, the owner or operator shall determine the total residue (total solids) content of the water entering the control device once per day using Method 209A, "Total Residue Dried at 103-105°C", in Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980 (incorporated by reference—see Section 1.6). Total residue shall be reported as percent by weight. All monitoring devices required under this paragraph are to be certified by their manufacturers to be accurate within ±5 percent over their operating range.

(c) All monitoring devices required under this section are to be recalibrated quarterly in accordance with procedures under Section 1.4(b).

2.69.4 Recordkeeping and Reporting Requirements (NSPS sources or as required otherwise)

(a) At 30-minute intervals during each 2-hour test run of each performance test of a wet scrubber
control device and at least once every 4 hours thereafter, the owner or operator shall record the measurements required by Section 2.69.3(a).

(b) At 30-minute intervals during each 2-hour test run of each performance test of a wet electrostatic precipitator control device and at least once every 4 hours thereafter, the owner or operator shall record the measurements required by Section 2.69.3(b), except that the concentration of total residue in the water shall be recorded once during each performance test and once per day thereafter.

(c) Records of the measurements required in paragraphs (a) and (b) of this section must be retained for at least 2 years.

(d) Each owner or operator shall submit written semiannual reports of exceedances of control device operating parameters required to be monitored by paragraphs (a) and (b) of this section and written documentation of, and a report of corrective maintenance required as a result of, quarterly calibrations of the monitoring devices required in Section 2.69.3(c). For the purpose of these reports, exceedances are defined as any monitoring data that are less than 70 percent of the lowest value or greater than 130 percent of the highest value of each operating parameter recorded during the most recent performance test.

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