(2) Method 5 shall be used to determine the particulate matter concentration \((c_s)\) and the volumetric flow rate \((Q_{sd})\) of the effluent gas. The sampling time and sample volume shall be at least 60 minutes and 0.90 dscm (31.8 dscf). Water shall be used instead of acetone in the sample recovery.

(3) Process data shall be used to determine the black liquor solids (BLS) feed rate on a dry weight basis.

(d) The owner or operator shall determine compliance with the TRS standards in §60.283, except §60.283(a)(1)(vi) and (4), as follows:

(1) Method 16 shall be used to determine the TRS concentration. The TRS concentration shall be corrected to the appropriate oxygen concentration using the procedure in §60.284(c)(3). The sampling time shall be at least 3 hours, but no longer than 6 hours.

(2) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the oxygen concentration. The sample shall be taken over the same time period as the TRS samples.

(3) When determining whether a furnace is a straight kraft recovery furnace or a cross recovery furnace, TAPPI Method T.624 (incorporated by reference—see §60.17) shall be used to determine sodium sulfide, sodium hydroxide, and sodium carbonate. These determinations shall be made 3 times daily from the green liquor, and the daily average values shall be converted to sodium oxide \((Na_2O)\) and substituted into the following equation to determine the green liquor sulfidity:

\[
GLS = 100 \frac{C_{Na_2S} (C_{Na_2S} + C_{NaOH} + C_{Na_2CO_3})}{C_{Na_2S}}
\]

Where:

- \(GLS\) = green liquor sulfidity, percent.
- \(C_{Na_2S}\) = concentration of \(Na_2S\) as \(Na_2O\), mg/liter (gr/gal).
- \(C_{NaOH}\) = concentration of \(NaOH\) as \(Na_2O\), mg/liter (gr/gal).
- \(C_{Na_2CO_3}\) = concentration of \(Na_2CO_3\) as \(Na_2O\), mg/liter (gr/gal).

(e) The owner or operator shall determine compliance with the TRS standards in §60.283(a)(1)(vi) and (4) as follows:

(1) The emission rate \((E)\) of TRS shall be computed for each run using the following equation:

\[
E = \frac{C_{TRS} F Q_{sd}}{P}
\]

where:

- \(E\) = emission rate of TRS, g/kg (lb/ton) of BLS or ADP.
- \(C_{TRS}\) = average combined concentration of TRS, ppm.
- \(F\) = conversion factor, 0.001417 g H\(_2\)S/m\(^3\)-ppm \((8.846 \times 10^{-8} \text{ lb H}_2\text{S/ft}^3\text{-ppm})\).
- \(Q_{sd}\) = volumetric flow rate of stack gas, dscm/hr (dscf/hr).
- \(P\) = black liquor solids feed or pulp production rate, kg/hr (ton/hr).

(2) Method 16 shall be used to determine the TRS concentration \((C_{TRS})\).

(3) Method 2 shall be used to determine the volumetric flow rate \((Q_{sd})\) of the effluent gas.

(4) Process data shall be used to determine the black liquor feed rate or the pulp production rate \((P)\).

(f) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For Method 5, Method 17 may be used if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17 and the stack temperature is no greater than 204 °C (400 °F).

(2) In place of Method 16, Method 16A or 16B may be used.


Subpart CC—Standards of Performance for Glass Manufacturing Plants

§ 60.290 Applicability and designation of affected facility.

(a) Each glass melting furnace is an affected facility to which the provisions of this subpart apply.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 15, 1979, is subject to the requirements of this subpart.

(c) This subpart does not apply to hand glass melting furnaces, glass melting furnaces designed to produce less than 4.55 Mg (5 tons) of glass per day and all-electric melters.