

**§ 98.282 GHGs to report.**

You must report:

(a) CO<sub>2</sub> process emissions from all silicon carbide process units or furnaces combined.

(b) CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions from each stationary combustion unit. You must report these emissions under subpart C of this part (General Stationary Fuel Combustion Sources) by following the requirements of subpart C.

[74 FR 56374, Oct. 30, 2009, as amended at 78 FR 71966, Nov. 29, 2013]

**§ 98.283 Calculating GHG emissions.**

You must calculate and report the combined annual process CO<sub>2</sub> emissions from all silicon carbide process units and production furnaces using the procedures in either paragraph (a) or (b) of this section.

(a) Calculate and report under this subpart the combined annual process CO<sub>2</sub> emissions by operating and maintaining CEMS according to the Tier 4 Calculation Methodology specified in § 98.33(a)(4) and all associated requirements for Tier 4 in subpart C of this part (General Stationary Fuel Combustion Sources).

(b) Calculate and report under this subpart the combined annual process CO<sub>2</sub> emissions using the procedures in paragraphs (b)(1) and (b)(2) of this section.

(1) Use Equation BB-1 of this section to calculate the facility-specific emissions factor for determining CO<sub>2</sub> emissions. The carbon content must be measured monthly and used to calculate a monthly CO<sub>2</sub> emissions factor:

$$EF_{CO_2,n} = 0.65 * CCF_n * \left( \frac{44}{12} \right) \quad (\text{Eq. BB-1})$$

Where:

EF<sub>CO<sub>2</sub>,n</sub> = CO<sub>2</sub> emissions factor in month n (metric tons CO<sub>2</sub>/metric ton of petroleum coke consumed).

0.65 = Adjustment factor for the amount of carbon in silicon carbide product (assuming 35 percent of carbon input is in the carbide product).

CCF<sub>n</sub> = Carbon content factor for petroleum coke consumed in month n from the sup-

plier or as measured by the applicable method incorporated by reference in § 98.7 according to § 98.284(c) (percent by weight expressed as a decimal fraction).

44/12 = Ratio of molecular weights, CO<sub>2</sub> to carbon.

(2) Calculate annual CO<sub>2</sub> process emissions from the silicon carbide production facility according to Equation BB-2 of this section:

$$CO_2 = \sum_{n=1}^{12} [T_n * EF_{CO_2,n}] * \frac{2000}{2205} \quad (\text{Eq. BB-2})$$

Where:

CO<sub>2</sub> = Annual CO<sub>2</sub> emissions from silicon carbide production facility (metric tons CO<sub>2</sub>).

T<sub>n</sub> = Petroleum coke consumption in calendar month n (tons).

EF<sub>CO<sub>2</sub>,n</sub> = CO<sub>2</sub> emissions factor from month n (calculated in Equation BB-1 of this section).

2000/2205 = Conversion factor to convert tons to metric tons.

n = Number of month.

(c) If GHG emissions from a silicon carbide production furnace or process unit are vented through the same stack as any combustion unit or process equipment that reports CO<sub>2</sub> emissions using a CEMS that complies with the Tier 4 Calculation Methodology in subpart C of this part (General Stationary Fuel Combustion Sources), then the calculation methodology in paragraph (b) of this section shall not be used to