$$CO_2 = \sum_{n=1}^{12} \left[T_n * EF_{CO2,n} \right] * \frac{2000}{2205}$$
 (Eq. BB-2)

Where:

 ${\rm CO_2}$ = Annual ${\rm CO_2}$ emissions from silicon carbide production facility (metric tons ${\rm CO_2}$). ${\rm T_n}$ = Petroleum coke consumption in month n (tons).

 ${\rm EF_{CO2,n}}={\rm CO_2}$ 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_2 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 calculate process emissions. The owner or operator shall report under this subpart the combined stack emissions according to the Tier 4 Calculation Methodology in §98.33(a)(4) and all associated requirements for Tier 4 in subpart C of this part.

(d) You must calculate annual process CH₄ emissions from all silicon carbide production combined using Equation BB-3 of this section:

$$CH_4 = \sum_{n=1}^{12} [T_n * 10.2] * \frac{2000}{2205} * 0.001$$
 (Eq. BB-3)

Where:

 $\begin{array}{l} CH_4 = Annual \ CH_4 \ emissions \ from \ silicon \ carbide \ production \ facility \ (metric \ tons \ CH_4). \\ T_n = \ Petroleum \ coke \ consumption \ in \ month \ n \ (tons). \end{array}$

10.2 = $C\dot{H}_4$ emissions factor (kg $CH_4/metric$ ton coke).

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

0.001 = Conversion factor from kilograms to metric tons.

n = Number of month.

§98.284 Monitoring and QA/QC requirements.

(a) You must measure your consumption of petroleum coke using plant instruments used for accounting purposes including direct measurement weighing the petroleum coke fed into your process (by belt scales or a similar device) or through the use of purchase records.

(b) You must document the procedures used to ensure the accuracy of monthly petroleum coke consumption measurements.

(c) For CO_2 process emissions, you must determine the monthly carbon

content of the petroleum coke using reports from the supplier. Alternatively, facilities can measure monthly carbon contents of the petroleum coke using ASTM D3176-89 (Reapproved 2002) Standard Practice for Ultimate Analysis of Coal and Coke (incorporated by reference, see §98.7) and ASTM D5373-08 Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Laboratory Samples of Coal (incorporated by reference, see §98.7).

(d) For quality assurance and quality control of the supplier data, you must conduct an annual measurement of the carbon content of the petroleum coke using ASTM D3176-89 and ASTM D5373-08 Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Laboratory Samples of Coal (incorporated by reference, see §98.7).

§98.285 Procedures for estimating missing data.

For the petroleum coke input procedure in §98.283(b), a complete record of