Environmental Protection Agency

§ 98.117

(1) Annual process CO₂ emissions (in metric tons) from each EAF used for the production of any ferroalloy listed in Table K–1 of this subpart (metric tons).

(2) Annual process CH₄ emissions (in metric tons) from each EAF used for the production of any ferroalloy listed in Table K–1 of this subpart (metric tons).

(3) Identification number of each EAF.

(e) If a CEMS is not used to measure CO₂ process emissions, and the carbon mass balance procedure is used to determine CO₂ emissions according to the requirements in §98.113(b), then you must report the following information specified in paragraphs (e)(1) through (e)(7) of this section.

(1) Annual process CO₂ emissions (in metric tons) from each EAF used for the production of any ferroalloy listed in Table K–1 of this subpart (metric tons).

(3) Identification number for each material.

(4) Annual material quantity for each material included for the calculation of annual process CO₂ emissions for each EAF.

(5) Annual average of the carbon content determinations for each material included for the calculation of annual process CO₂ emissions for each EAF (percent by weight, expressed as a decimal fraction).

(6) List the method used for the determination of carbon content for each material reported in paragraph (e)(5) of this section (e.g., supplier provided information, analyses of representative samples you collected).

(7) If you use the missing data procedures in §98.115(b), you must report how monthly mass of carbon-containing inputs and outputs with missing data was determined and the number of months the missing data procedures were used.

§98.117 Records that must be retained.

In addition to the records required by §98.3(g), you must retain the records specified in paragraphs (a) through (d) of this section for each EAF, as applicable.

(a) If a CEMS is used to measure CO₂ emissions according to the requirements in §98.113(a), then you must retain under this subpart the records required for the Tier 4 Calculation Methodology in §98.37 and the information specified in paragraphs (a)(1) through (a)(3) of this section.

(1) Monthly EAF production quantity for each ferroalloy product (tons).

(2) Number of EAF operating hours each month.

(3) Number of EAF operating hours in a calendar year.

(b) If the carbon mass balance procedure is used to determine CO₂ emissions according to the requirements in §98.113(b)(2), then you must retain records for the information specified in paragraphs (b)(1) through (b)(5) of this section.

(1) Monthly EAF production quantity for each ferroalloy product (tons).

(2) Number of EAF operating hours each month.

(3) Number of EAF operating hours in a calendar year.

(4) Monthly material quantity consumed, used, or produced for each material included for the calculations of annual process CO₂ emissions (tons).

(5) Average carbon content determined and records of the supplier provided information or analyses used for the determination for each material included for the calculations of annual process CO₂ emissions.

(c) You must keep records that include a detailed explanation of how company records of measurements are used to estimate the carbon input and output to each EAF, including documentation of specific input or output materials excluded from Equation K–1 of this subpart that contribute less than 1 percent of the total carbon into or out of the process. You also must document the procedures used to ensure the accuracy of the measurements of materials fed, charged, or placed in an EAF including, but not limited to, calibration of weighing equipment and other measurement devices. The estimated accuracy of measurements made with these devices must also be recorded, and the technical basis for these estimates must be provided.

(d) If you are required to calculate CH₄ emissions for the EAF as specified
in §98.113(d), you must maintain records of the total amount of each alloy product produced for the specified reporting period, and the appropriate alloy-product specific emission factor used to calculate the CH$_4$ emissions.

### TABLE K–1 TO SUBPART K OF PART 98—ELECTRIC ARC FURNACE (EAF) CH$_4$ EMISSION FACTORS

<table>
<thead>
<tr>
<th>Alloy product produced in EAF</th>
<th>CH$_4$ emission factor (kg CH$_4$ per metric ton product)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EAF Operation</td>
</tr>
<tr>
<td></td>
<td>Batch-charging</td>
</tr>
<tr>
<td>Silicon metal</td>
<td>1.5</td>
</tr>
<tr>
<td>Ferrosilicon 90%</td>
<td>1.4</td>
</tr>
<tr>
<td>Ferrosilicon 75%</td>
<td>1.3</td>
</tr>
<tr>
<td>Ferrosilicon 65%</td>
<td>1.3</td>
</tr>
</tbody>
</table>

*a Sprinkle-charging is charging intermittently every minute.

Subparts L–M [Reserved]

### Subpart N—Glass Production

#### §98.140 Definition of the source category.

(a) A glass manufacturing facility manufactures flat glass, container glass, pressed and blown glass, or wool fiberglass by melting a mixture of raw materials to produce molten glass and form the molten glass into sheets, containers, fibers, or other shapes. A glass manufacturing facility uses one or more continuous glass melting furnaces to produce glass.

(b) A glass melting furnace that is an experimental furnace or a research and development process unit is not subject to this subpart.

#### §98.141 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains a glass production process and the facility meets the requirements of either §98.2(a)(1) or (2).

#### §98.142 GHGs to report.

You must report:

(a) CO$_2$ process emissions from each continuous glass melting furnace.

(b) CO$_2$ combustion emissions from each continuous glass melting furnace.

(c) CH$_4$ and N$_2$O combustion emissions from each continuous glass melting furnace. You must calculate and report these emissions under subpart C of this part (General Stationary Fuel Combustion Sources) by following the requirements of subpart C.

#### §98.143 Calculating GHG emissions.

You must calculate and report the annual process CO$_2$ emissions from each continuous glass melting furnace using the procedure in paragraphs (a) and (b) of this section.

(a) For each continuous glass melting furnace that meets the conditions specified in §98.33(b)(4)(ii) or (iii), you must calculate and report under this subpart the combined process and combustion CO$_2$ emissions by operating and maintaining a CEMS to measure CO$_2$ emissions 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