(b) The emission units for which GHG emissions must be reported are listed in paragraphs (b)(1) through (b)(5) of this section:

(1) Chemical recovery furnaces at kraft and soda mills (including recovery furnaces that burn spent pulping liquor produced by both the kraft and semichemical process).

(2) Chemical recovery combustion units at sulfite facilities.

(3) Chemical recovery combustion units at stand-alone semichemical facilities.

(4) Pulp mill lime kilns at kraft and soda facilities.

(5) Systems for adding makeup chemicals (CaCO$_3$, Na$_2$CO$_3$) in the chemical recovery areas of chemical pulp mills.

§ 98.271 Reporting threshold.

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

§ 98.272 GHGs to report.

You must report the emissions listed in paragraphs (a) through (f) of this section:

(a) CO$_2$, biogenic CO$_2$, CH$_4$, and N$_2$O emissions from each kraft or soda chemical recovery furnace.

(b) CO$_2$, biogenic CO$_2$, CH$_4$, and N$_2$O emissions from each sulfite chemical recovery combustion unit.

(c) CO$_2$, biogenic CO$_2$, CH$_4$, and N$_2$O emissions from each stand-alone semichemical chemical recovery combustion unit.

(d) CO$_2$, biogenic CO$_2$, CH$_4$, and N$_2$O emissions from each kraft or soda pulp mill lime kiln.

(e) CO$_2$ emissions from addition of makeup chemicals (CaCO$_3$, Na$_2$CO$_3$) in the chemical recovery areas of chemical pulp mills.

(f) CO$_2$, CH$_4$, and N$_2$O combustion emissions from each stationary combustion unit. 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.

§ 98.273 Calculating GHG emissions.

(a) For each chemical recovery furnace located at a kraft or soda facility, you must determine CO$_2$, biogenic CO$_2$, CH$_4$, and N$_2$O emissions using the procedures in paragraphs (a)(1) through (a)(3) of this section. CH$_4$ and N$_2$O emissions must be calculated as the sum of emissions from combustion of fossil fuels and combustion of biomass in spent liquor solids.

(1) Calculate fossil fuel-based CO$_2$ emissions from direct measurement of fossil fuels consumed and default emissions factors according to the Tier 1 methodology for stationary combustion sources in § 98.33(a)(1). A higher tier from § 98.33(a) may be used to calculate fossil fuel-based CO$_2$ emissions if the respective monitoring and QA/QC requirements described in § 98.34 are met.

(2) Calculate fossil fuel-based CH$_4$ and N$_2$O emissions from direct measurement of fossil fuels consumed, default or site-specific HHV, and default emissions factors and convert to metric tons of CO$_2$ equivalent according to the methodology for stationary combustion sources in § 98.33(c).

(3) Calculate biogenic CO$_2$ emissions and emissions of CH$_4$ and N$_2$O from biomass using measured quantities of spent liquor solids fired, site-specific HHV, and default emissions factors, according to Equation AA-1 of this section:

$$CO_2, CH_4, \text{ or } N_2O \text{ from biomass} = (0.90718) \times \text{Solids} \times HHV \times EF \quad (\text{Eq. AA-1})$$

Where:

- CO$_2$, CH$_4$, or N$_2$O from Biomass = Biogenic CO$_2$ emissions or emissions of CH$_4$ or N$_2$O from spent liquor solids combustion (metric tons per year).

- Solids = Mass of spent liquor solids combusted (short tons per year) determined according to § 98.274(b).