

§ 98.291

(2) Calcining sodium sesquicarbonate.
 (3) Using a liquid alkaline feedstock process that directly produces CO₂.

(b) In the context of the soda ash manufacturing sector, “calcining” means the thermal/chemical conversion of the bicarbonate fraction of the feedstock to sodium carbonate.

§ 98.291 Reporting threshold.

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

§ 98.292 GHGs to report.

You must report:

(a) CO₂ process emissions from each soda ash manufacturing line combined.

(b) CO₂ combustion emissions from each soda ash manufacturing line.

(c) CH₄ and N₂O combustion emissions from each soda ash manufacturing line. 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.

(d) CO₂, CH₄, and N₂O emissions from each stationary combustion unit other than soda ash manufacturing lines. 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.

§ 98.293 Calculating GHG emissions.

You must calculate and report the annual process CO₂ emissions from

each soda ash manufacturing line using the procedures specified in paragraph (a) or (b) of this section.

(a) For each soda ash manufacturing line that meets the conditions specified in § 98.33(b)(4)(ii) or (b)(4)(iii), you must calculate and report under this subpart the combined process and combustion CO₂ emissions by operating and maintaining a CEMS to measure CO₂ 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 part (General Stationary Fuel Combustion Sources).

(b) For each soda ash manufacturing line that is not subject to the requirements in paragraph (a) of this section, calculate and report the process CO₂ emissions from the soda ash manufacturing line by using the procedure in either paragraphs (b)(1), (b)(2), or (b)(3) of this section; and the combustion CO₂ emissions using the procedure in paragraph (b)(4) of this section.

(1) Calculate and report under this subpart the combined process and combustion CO₂ emissions by operating and maintaining a CEMS to measure CO₂ 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 part (General Stationary Fuel Combustion Sources).

(2) Use either Equation CC–1 or Equation CC–2 of this section to calculate annual CO₂ process emissions from each manufacturing line that calcines trona to produce soda ash:

$$E_k = \sum_{n=1}^{12} \left[(IC_T)_n * (T_t)_n \right] * \frac{2000}{2205} * \frac{0.097}{1} \quad (\text{Eq. CC-1})$$

$$E_k = \sum_{n=1}^{12} \left[(IC_{sa})_n * (T_{sa})_n \right] * \frac{2000}{2205} * \frac{0.138}{1} \quad (\text{Eq. CC-2})$$

Where:

E_k = Annual CO₂ process emissions from each manufacturing line, k (metric tons).

(IC_T)_n = Inorganic carbon content (percent by weight, expressed as a decimal fraction)

in trona input, from the carbon analysis results for month n. This represents the ratio of trona to trona ore.

(IC_{sa})_n = Inorganic carbon content (percent by weight, expressed as a decimal fraction) in soda ash output, from the carbon