

same plant instruments used for accounting purposes, including but not limited to, calibrated weigh feeders, rail or truck scales, and barge measurements. The direct measurements of each lime product shall be reconciled annually with the difference in the beginning of and end of year inventories for these products, when measurements represent lime sold.

(b) You must determine the annual quantity of each calcined byproduct/waste generated that is not sold by either direct measurement using the same instruments identified in paragraph (a) of this section or by using a calcined byproduct/waste generation rate.

(c) You must determine the chemical composition (percent total CaO and percent total MgO) of each type of lime and each type of calcined byproduct/waste sold according to paragraph (c)(1) or (c)(2) of this section. You must determine the chemical composition of each type of lime on a monthly basis. You must determine the chemical composition for each type of calcined byproduct/waste that is not sold on an annual basis.

(1) ASTM C25-06 Standard Test Methods for Chemical Analysis of Limestone, Quicklime, and Hydrated Lime (incorporated by reference—see § 98.7).

(2) The National Lime Association's CO₂ Emissions Calculation Protocol for the Lime Industry English Units Version, February 5, 2008 Revision—National Lime Association (incorporated by reference—see § 98.7).

(d) You must use the analysis of calcium oxide and magnesium oxide content of each lime product collected during the same month as the production data in monthly calculations.

(e) You must follow the quality assurance/quality control procedures (including documentation) in National Lime Association's CO₂ Emissions Calculation Protocol for the Lime Industry English Units Version, February 5, 2008 Revision—National Lime Association (incorporated by reference—see § 98.7).

§ 98.195 Procedures for estimating missing data.

For the procedure in § 98.193(b)(2), a complete record of all measured pa-

rameters used in the GHG emissions calculations is required (e.g., oxide content, quantity of lime products, etc.). Therefore, whenever a quality-assured value of a required parameter is unavailable, a substitute data value for the missing parameter shall be used in the calculations as specified in paragraphs (a) or (b) of this section. You must document and keep records of the procedures used for all such estimates.

(a) For each missing value of the quantity of lime produced (by lime type), and quantity of byproduct/waste produced and sold, the substitute data value shall be the best available estimate based on all available process data or data used for accounting purposes.

(b) For missing values related to the CaO and MgO content, you must conduct a new composition test according to the standard methods in § 98.194 (c)(1) or (c)(2).

§ 98.196 Data reporting requirements.

In addition to the information required by § 98.3(c), each annual report must contain the information specified in paragraphs (a) or (b) of this section, as applicable.

(a) If a CEMS is used to measure CO₂ emissions, then you must report under this subpart the relevant information required by § 98.36 and the information listed in paragraphs (a)(1) through (a)(8) of this section.

(1) Method used to determine the quantity of lime sold.

(2) Method used to determine the quantity of lime byproduct/waste sold.

(3) Beginning and end of year inventories for each lime product.

(4) Beginning and end of year inventories for lime byproducts/wastes.

(5) Annual amount of lime byproduct/waste sold, by type (tons).

(6) Annual amount of lime product sold, by type (tons).

(7) Annual amount of lime byproduct/waste not sold, by type (tons).

(8) Annual amount of lime product not sold, by type (tons).

(b) If a CEMS is not used to measure CO₂ emissions, then you must report the information listed in paragraphs (b)(1) through (b)(17) of this section.

(1) Annual CO₂ process emissions from all kilns combined (metric tons).

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- (2) Monthly emission factors for each lime type.
- (3) Monthly emission factors for each sold byproduct/waste by lime type.
- (4) Standard method used (ASTM or NLA testing method) to determine chemical compositions of each lime type and lime byproduct/waste type.
- (5) Monthly results of chemical composition analysis of each lime product and byproduct/waste sold.
- (6) Annual results of chemical composition analysis of each type of lime byproduct/waste not sold.
- (7) Method used to determine the quantity of lime sold.
- (8) Monthly amount of lime product sold, by type (tons).
- (9) Method used to determine the quantity of lime byproduct/waste sold.
- (10) Monthly amount of lime byproduct/waste sold, by type (tons).
- (11) Annual amount of lime byproduct/waste not sold (tons).
- (12) Monthly mass of each lime type produced (tons).
- (13) Beginning and end of year inventories for each lime product.
- (14) Beginning and end of year inventories for lime byproducts/wastes.
- (15) Annual lime production capacity (tons) per facility.

- (16) Number of times in the reporting year that missing data procedures were followed to measure lime production (months) or the chemical composition of lime products sold (months).
- (17) Indicate whether CO₂ was used on-site (i.e. for use in a purification process). If CO₂ was used on-site, provide the information in paragraphs (b)(17)(i) and (b)(17)(ii) of this section.
 - (i) The annual amount of CO₂ captured for use in the on-site process.
 - (ii) The method used to determine the amount of CO₂ captured.

§ 98.197 Records that must be retained.

In addition to the records required by § 98.3(g), you must retain the records specified in paragraphs (a) and (b) of this section.

- (a) Annual operating hours in calendar year.
- (b) Records of all analyses (e.g. chemical composition of lime products, by type) and calculations conducted.

§ 98.198 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

TABLE S-1 TO SUBPART S OF PART 98—BASIC PARAMETERS FOR THE CALCULATION OF EMISSION FACTORS FOR LIME PRODUCTION

Variable	Stoichiometric ratio
SR _{CaO}	0.7848
SR _{MgO}	1.0918

Subpart T [Reserved]

Subpart U—Miscellaneous Uses of Carbonate

§ 98.210 Definition of the source category.

(a) This source category includes any equipment that uses carbonates listed in Table U-1 in manufacturing processes that emit carbon dioxide. Table U-1 includes the following carbonates: limestone, dolomite, ankerite, magnesite, siderite, rhodochrosite, or sodium carbonate. Facilities are considered to emit CO₂ if they consume at

least 2,000 tons per year of carbonates heated to a temperature sufficient to allow the calcination reaction to occur.

(b) This source category does not include equipment that uses carbonates or carbonate containing minerals that are consumed in the production of cement, glass, ferroalloys, iron and steel, lead, lime, phosphoric acid, pulp and paper, soda ash, sodium bicarbonate, sodium hydroxide, or zinc.

(c) This source category does not include carbonates used in sorbent technology used to control emissions from stationary fuel combustion equipment. Emissions from carbonates used in sorbent technology are reported under 40 CFR 98, subpart C (Stationary Fuel Combustion Sources).

§ 98.211 Reporting threshold.

You must report GHG emissions from miscellaneous uses of carbonate if your facility uses carbonates as defined in § 98.210 of this subpart and the facility