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monthly with the 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 or 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 or waste generation rate.
- (c) You must determine the chemical composition (percent total CaO and percent total MgO) of each type of lime product that is produced and each type of calcined byproduct or waste sold according to paragraph (c)(1) or (2) of this section. You must determine the chemical composition of each type of lime product that is produced and each type of calcined byproduct or waste sold on a monthly basis. You must determine the chemical composition for each type of calcined byproduct or 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 that is produced and that is 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 Associa-

tion (incorporated by reference—see §98.7).

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 66465, Oct. 28, 2010; 78 FR 71958, Nov. 29, 2013]

§ 98.195 Procedures for estimating missing data.

For the procedure in §98.193(b)(1), a complete record of all measured parameters 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 calcined byproduct or 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).

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 66465, Oct. 28, 2010; 78 FR 71959, Nov. 29, 2013]

§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 CO_2 emissions, then you must report under this subpart the relevant information required by §98.36 and the information listed in paragraphs (a)(1) through (8) of this section.
- (1) Method used to determine the quantity of lime that is produced and quantity of lime that is sold.
- (2) Method used to determine the quantity of calcined lime byproduct or waste sold.
- (3) Beginning and end of year inventories for each lime product that is produced, by type.

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- (4) Beginning and end of year inventories for calcined lime byproducts or wastes sold, by type.
- (5) Annual amount of calcined lime byproduct or waste sold, by type (tons).
- (6) Annual amount of lime product sold, by type (tons).
- (7) Annual amount of calcined lime byproduct or waste that is 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 CO_2 emissions, then you must report the information listed in paragraphs (b)(1) through (17) of this section.
- (1) Annual CO_2 process emissions from all lime kilns combined (metric tons).
- (2) Monthly emission factors (metric ton CO₂/ton lime product) for each lime product type produced.
- (3) Monthly emission factors for each calcined byproduct or waste by lime type that is sold.
- (4) Standard method used (ASTM or NLA testing method) to determine chemical compositions of each lime type produced and each calcined lime byproduct or waste type.
- (5) Monthly results of chemical composition analysis of each type of lime product produced and calcined byproduct or waste sold.
- (6) Annual results of chemical composition analysis of each type of lime byproduct or waste that is not sold.
- (7) Method used to determine the quantity of lime produced and/or lime sold.
- (8) Monthly amount of lime product sold, by type (tons).
- (9) Method used to determine the quantity of calcined lime byproduct or waste sold.
- (10) Monthly amount of calcined lime byproduct or waste sold, by type (tons).
- (11) Annual amount of calcined lime byproduct or waste that is not sold, by type (tons).
- (12) Monthly weight or mass of each lime type produced (tons).
- (13) Beginning and end of year inventories for each lime product that is produced.
- (14) Beginning and end of year inventories for calcined lime byproducts or wastes sold.

- (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 CO_2 was used on-site (i.e. for use in a purification process). If CO_2 was used on-site, provide the information in paragraphs (b)(17)(i) and (ii) of this section.
- (i) The annual amount of CO_2 captured for use in the on-site process.
- (ii) The method used to determine the amount of CO₂ captured.

[75 FR 66465, Oct. 28, 2010, as amended at 78 FR 71959, Nov. 29, 2013]

§ 98.197 Records that must be re-

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 CAL-CULATION OF EMISSION FACTORS FOR LIME PRODUCTION

Variable	Stoichio- metric ratio
SR _{CaO}	0.7848 1.0918

Subpart T—Magnesium Production

SOURCE: 75 FR 39761, July 12, 2010, unless otherwise noted.

§ 98.200 Definition of source category.

The magnesium production and processing source category consists of the following processes:

(a) Any process in which magnesium metal is produced through smelting (including electrolytic smelting), refining, or remelting operations.