## § 98.205

- (c) When estimating emissions by monitoring the mass flow of the pure cover gas or carrier gas into the gas distribution system, you must use gas flow meters, or mass flow controllers, with an accuracy of 1 percent of full scale or better.
- (d) When estimating emissions using Equation T-1 of this subpart, you must ensure that all the quantities required by Equation T-1 of this subpart have been measured using scales or load cells with an accuracy of 1 percent of full scale or better, accounting for the tare weights of the containers. You may accept gas masses or weights provided by the gas supplier e.g., for the contents of containers containing new gas or for the heels remaining in containers returned to the gas supplier) if the supplier provides documentation verifying that accuracy standards are met; however you remain responsible for the accuracy of these masses or weights under this subpart.
- (e) When estimating emissions using Equations T-2 and T-3 of this subpart, you must monitor and record container identities and masses as follows:
- (1) Track the identities and masses of containers leaving and entering storage with check-out and check-in sheets and procedures. The masses of cylinders returning to storage shall be measured immediately before the cylinders are put back into storage.
- (2) Ensure that all the quantities required by Equations T-2 and T-3 of this subpart have been measured using scales or load cells with an accuracy of 1 percent of full scale or better, accounting for the tare weights of the containers. You may accept gas masses or weights provided by the gas supplier e.g., for the contents of cylinders containing new gas or for the heels remaining in cylinders returned to the gas supplier) if the supplier provides documentation verifying that accuracy standards are met; however, you remain responsible for the accuracy of these masses or weights under this sub-
- (f) All flowmeters, scales, and load cells used to measure quantities that are to be reported under this subpart shall be calibrated using calibration procedures specified by the flowmeter, scale, or load cell manufacturer. Cali-

bration shall be performed prior to the first reporting year. After the initial calibration, recalibration shall be performed at the minimum frequency specified by the manufacturer.

# § 98.205 Procedures for estimating missing data.

- (a) A complete record of all measured parameters used in the GHG emission calculations is required. Therefore, whenever a quality-assured value of a required parameter is unavailable, a substitute data value for the missing parameter will be used in the calculations as specified in paragraph (b) of this section.
- (b) Replace missing data on the emissions of cover or carrier gases by multiplying magnesium production during the missing data period by the average cover or carrier gas usage rate from the most recent period when operating conditions were similar to those for the period for which the data are missing. Calculate the usage rate for each cover or carrier gas using Equation T-4 of this section:

$$R_{GHG} = C_{GHG} / Mg * 0.001$$
 (Eq. T-4)

R<sub>GHG</sub> = The usage rate for a particular cover or carrier gas over the period of comparable operation (metric tons gas/metric ton Mg)

 $C_{GHG}$  = The consumption of that cover or carrier gas over the period of comparable operation (kg).

Mg = The magnesium produced or fed into the process over the period of comparable operation (metric tons).

0.001 = Conversion factor from kg to metric tons.

(c) If the precise before and after weights are not available, it should be assumed that the container was emptied in the process (*i.e.*, quantity purchased should be used, less heel).

#### § 98.206 Data reporting requirements.

In addition to the information required by §98.3(c), each annual report must include the following information at the facility level:

- (a) Emissions of each cover or carrier gas in metric tons.
- (b) Types of production processes at the facility (e.g., primary, secondary, die casting).

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- (c) Amount of magnesium produced or processed in metric tons for each process type. This includes the output of primary and secondary magnesium production processes and the input to magnesium casting processes.
- (d) Cover and carrier gas flow rate (e.g., standard cubic feet per minute) for each production unit and composition in percent by volume.
- (e) For any missing data, you must report the length of time the data were missing for each cover gas or carrier gas, the method used to estimate emissions in their absence, and the quantity of emissions thereby estimated.
- (f) The annual cover gas usage rate for the facility for each cover gas, excluding the carrier gas (kg gas/metric ton Mg).
- (g) If applicable, an explanation of any change greater than 30 percent in the facility's cover gas usage rate (e.g., installation of new melt protection technology or leak discovered in the cover gas delivery system that resulted in increased emissions).
- (h) A description of any new melt protection technologies adopted to account for reduced or increased GHG emissions in any given year.

## § 98.207 Records that must be retained.

In addition to the records specified in §98.3(g), you must retain the following information at the facility level:

- (a) Check-out and weigh-in sheets and procedures for gas cylinders.
- (b) Accuracy certifications and calibration records for scales including the method or manufacturer's specification used for calibration.
- (c) Residual gas amounts (heel) in cylinders sent back to suppliers.
- (d) Records, including invoices, for gas purchases, sales, and disbursements for all GHGs.

#### § 98.208 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part. Additionally, some sector-specific definitions are provided below:

Carrier gas means the gas with which cover gas is mixed to transport and dilute the cover gas thus maximizing its

efficient use. Carrier gases typically include  $CO_2$ ,  $N_2$ , and/or dry air.

Cover gas means SF<sub>6</sub>, HFC-134a, fluorinated ketone (FK 5-1-12) or other gas used to protect the surface of molten magnesium from rapid oxidation and burning in the presence of air. The molten magnesium may be the surface of a casting or ingot production operation or the surface of a crucible of molten magnesium that feeds a casting operation.

## 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  $CO_2$  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).

## $\S$ 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 meets the requirements of either §98.2(a)(1) or (a)(2).

## § 98.212 GHGs to report.

You must report  $CO_2$  process emissions from all miscellaneous carbonate