

Environmental Protection Agency

§ 98.203

(b) Any process in which molten magnesium is used in alloying, casting, drawing, extruding, forming, or rolling operations.

§ 98.201 Reporting threshold.

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

§ 98.202 GHGs to report.

(a) You must report emissions of the following gases in metric tons per year resulting from their use as cover gases or carrier gases in magnesium production or processing:

- (1) Sulfur hexafluoride (SF₆).
- (2) HFC-134a.
- (3) The fluorinated ketone, FK 5-1-12.
- (4) Carbon dioxide (CO₂).
- (5) Any other GHGs (as defined in § 98.6).

(b) You must report under subpart C of this part (General Stationary Fuel Combustion Sources) the CO₂, N₂O, and CH₄ emissions from each combustion unit by following the requirements of subpart C.

§ 98.203 Calculating GHG emissions.

(a) Calculate the mass of each GHG emitted from magnesium production or processing over the calendar year using either Equation T-1 or Equation T-2 of this section, as appropriate. Both of these equations equate emissions of cover gases or carrier gases to consumption of cover gases or carrier gases.

(1) To estimate emissions of cover gases or carrier gases by monitoring changes in container masses and inventories, emissions of each cover gas or carrier gas shall be estimated using Equation T-1 of this section:

$$E_x = (I_{B,x} - I_{E,x} + A_x - D_x) * 0.001 \quad (\text{Eq. T-1})$$

Where:

E_x = Emissions of each cover gas or carrier gas, X, in metric tons over the reporting year.

I_{B,x} = Inventory of each cover gas or carrier gas stored in cylinders or other containers at the beginning of the year, including heels, in kg.

I_{E,x} = Inventory of each cover gas or carrier gas stored in cylinders or other containers at the end of the year, including heels, in kg.

A_x = Acquisitions of each cover gas or carrier gas during the year through purchases or other transactions, including heels in cylinders or other containers returned to the magnesium production or processing facility, in kg.

D_x = Disbursements of each cover gas or carrier gas to sources and locations outside the facility through sales or other transactions during the year, including heels in cylinders or other containers returned by the magnesium production or processing facility to the gas supplier, in kg.

0.001 = Conversion factor from kg to metric tons

X = Each cover gas or carrier gas that is a GHG.

(2) To estimate emissions of cover gases or carrier gases by monitoring

changes in the masses of individual containers as their contents are used, emissions of each cover gas or carrier gas shall be estimated using Equation T-2 of this section:

$$E_{GHG} = \sum_{p=1}^n Q_p * 0.001 \quad (\text{Eq. T-2})$$

Where:

E_{GHG} = Emissions of each cover gas or carrier gas, X, over the reporting year (metric tons).

Q_p = The mass of the cover or carrier gas consumed (kg) over the container-use period p, from Equation T-3 of this section.

n = The number of container-use periods in the year.

0.001 = Conversion factor from kg to metric tons.

X = Each cover gas or carrier gas that is a GHG.

(b) For purposes of Equation T-2 of this section, the mass of the cover gas used over the period p for an individual container shall be estimated by using Equation T-3 of this section: