

Magnesium Production Facilities

Monitoring Checklist



Greenhouse Gas Reporting Program

What Must Be Monitored by Each Magnesium Production Facility that Meets the Requirements of §98.200 and §98.201?

Each magnesium production facility must monitor the following information:

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| <input type="checkbox"/> Type of magnesium production process (e.g., primary, secondary, die casting). | <input type="checkbox"/> Amount of magnesium produced or processed over the reporting period for each process type (metric tons). |
| <input type="checkbox"/> Average cover gas flow rate (standard cubic feet per minute). | <input type="checkbox"/> Composition of the cover/carrier gas during the reporting period (percent by volume). |
| <input type="checkbox"/> Overall cover gas usage rate for the facility (kg of GHG/metric ton of magnesium). | <input type="checkbox"/> For missing data, the length of time data are missing, the method used to estimate cover and carrier gas usage, and the quantity of emissions estimated for the missing data period. |
| <input type="checkbox"/> New melt protection technologies adopted during the reporting year that account for changes in emissions from the previous year. | <input type="checkbox"/> Changes in facility cover gas usage rate greater than 30 percent compared to the prior year. If applicable, facilities must provide an explanation. |

Each magnesium production facility must monitor the following parameters based on the gas consumption tracking method used:

Inventory Method (Eqn. T-1)

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|--|--|
| <input type="checkbox"/> Inventory of each cover gas or carrier gas stored in cylinders or other containers at the beginning of the year, including residual gas amounts (heels), in kg. | <input type="checkbox"/> Inventory of each cover gas or carrier gas stored in cylinders or other containers at the end of the year, including heels, in kg. |
| <input type="checkbox"/> Acquisitions of each cover gas or carrier gas during the year through purchases or other transactions, in kg. | <input type="checkbox"/> 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, including heels, in kg. |

Cylinder Tracking Method (Eqn. T-2, T-3)

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|---|---|
| <input type="checkbox"/> Mass of each container's contents (kg) at the beginning of the container-use period. | <input type="checkbox"/> Mass of each container's contents (kg) at the end of the container-use period. |
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Mass Flow Controller Method

- Mass of each cover gas or carrier gas measured using a mass flow controller during the period of use.

See also the information sheet for Magnesium Production at <https://www.epa.gov/ghgreporting/subpart-t-information-sheet>

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