

Lead Production



Final Rule: Mandatory Reporting of Greenhouse Gases

Under the Mandatory Reporting of Greenhouse Gases (GHGs) rule, owners or operators of facilities that contain lead production processes (as defined below) and that emit 25,000 metric tons or more of GHGs per year (expressed as carbon dioxide equivalents) from lead production processes, stationary fuel combustion, miscellaneous use of carbonates, and other source categories (see information sheet on General Provisions) must report emissions from all source categories located at the facility for which emission calculation methods are defined in the rule. Owners or operators are required to collect emission data; calculate GHG emissions; and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting.

How Is This Source Category Defined?

The lead production source category consists of primary and secondary lead smelters. A primary lead smelter is a facility engaged in the production of lead metal from lead sulfide ore concentrates through the use of pyrometallurgical techniques (smelting). A secondary lead smelter is a facility at which lead-bearing scrap materials (including but not limited to lead-acid batteries) are recycled by smelting into elemental lead or lead alloys.

What GHGs Must Be Reported?

Lead production facilities must report the following emissions:

- Carbon dioxide (CO₂) process emissions from each smelting furnace used for lead production.
- CO₂ combustion emissions from each smelting furnace used for lead production.
- Methane (CH₄) and nitrous oxide (N₂O) emissions from fuel combustion at each smelting furnace. Report these emissions under 40 CFR part 98, subpart C (General Stationary Fuel Combustion Sources). The information sheet on general stationary fuel combustion sources summarizes the rule requirements for calculating and reporting emissions from these units.
- CO₂, CH₄, and N₂O emissions from each onsite stationary fuel combustion unit other than smelting furnaces under 40 CFR part 98, subpart C (General Stationary Combustion Sources).

In addition, each facility must report GHG emissions for any other source categories for which calculation methods are provided in other subparts of the rule.

How Must GHG Emissions Be Calculated?

For CO₂ emissions from each smelting furnace, facilities must use one of two methods, as appropriate:

- Lead smelting furnaces with certain types of continuous emission monitoring systems (CEMS) in place must report using the CEMS and following the Tier 4 methodology of 40 CFR part 98, subpart C to report combined CO₂ emissions from the smelting process and fuel combustion.
- For other affected smelting furnaces, the reporter can elect to use one of two methods, as follows:
 - **CEMS.** Operate a CEMS to measure combined process and combustion CO₂ emissions according to requirements specified in 40 CFR part 98, subpart C.
 - **Carbon mass balance procedure.** Conduct a once-per-year calculation using recorded monthly production data and the average carbon content for each smelting furnace input

material, including carbonaceous reducing agents. Determine carbon content either using material supplier information or by annual analysis of three representative samples of each material. Materials that can be documented to contribute less than 1 percent of the total carbon into the process can be excluded.

A checklist for data that must be monitored is available at:

www.epa.gov/ghgreporting/documents/pdf/checklists/leadproduction.pdf.

When Must Reports be Submitted?

The submission date for the annual GHG report can vary in the first 3 years of the program.

- Reporting Year 2010. The report was required to be submitted by September 30, 2011.
- Reporting Year 2011. The due date depends on which source categories are included in the report. If the report includes one or more of the source categories listed below, then the report must be submitted by September 28, 2012. This reporting deadline applies to all subparts being reported by the facility. In addition, if the facility contains one or more of these source categories and the facility submitted a GHG annual report for reporting year 2010 under another subpart (e.g., subpart C for general stationary fuel combustion), then by April 2, 2012 you must notify EPA through e-GGRT that you are not required to submit the second annual report until September 28, 2012 (the notification deadline according to 4 CFR 98.3(b) is March 31, 2012, however, because this date falls on a Saturday in 2012, the notification is due on the next business day).
 - Electronics Manufacturing (subpart I)
 - Fluorinated Gas Production (subpart L)
 - Magnesium Production (subpart T)
 - Petroleum and Natural Gas Systems (subpart W)
 - Use of Electric Transmission and Distribution Equipment (subpart DD)
 - Underground Coal Mines (subpart FF)
 - Industrial Wastewater Treatment (subpart II)
 - Geologic Sequestration of Carbon Dioxide (subpart RR)
 - Manufacture of Electric Transmission and Distribution (subpart SS)
 - Industrial Waste Landfills (subpart TT)
 - Injection of Carbon Dioxide (subpart UU)
 - Imports and Exports of Equipment Pre-charged with Fluorinated GHGs or Containing Fluorinated GHGs in Closed-cell Foams (subpart QQ)

If the report contains none of the source categories listed above, then the report must be submitted by April 2, 2012 (the deadline is March 31, 2012, however, because this date falls on a Saturday, the annual report is due on the next business day).

- Reporting Year 2012. Starting in 2013 and each year thereafter, the report must be submitted by March 31 of each year, unless the 31st is a Saturday, Sunday, or federal holiday, in which case the reports are due on the next business day.

What Information Must Be Reported?

In addition to the information required by the General Provisions at 40 CFR 98.3(c), the following information must be reported for smelting furnaces:

If a CEMS is used to measure CO₂ emissions, then under this subpart the relevant information required for the CEMS by subpart C (General Stationary Fuel Combustion Sources) and the information listed below must be reported:

- Identification number of each smelting furnace.
- Annual lead product production capacity (tons).
- Annual production for each lead product (tons).
- Total number of smelting furnaces at the facility used for lead production.

If a CEMS is not used to measure emissions, then the following information must be reported:

- Identification number of each smelting furnace.
- Annual process CO₂ emissions from each smelting furnace (metric tons).
- Annual lead product production capacity for the facility and each smelting furnace (tons).
- Annual production for each lead product (tons).
- Total number of smelting furnaces at the facility used for lead production.
- Annual material quantity for each material used for the calculation of annual process CO₂ emissions for each smelting furnace (tons).
- Annual average of the carbon content determinations for each material used for the calculation of annual process CO₂ emissions.
- The method used for the determination of carbon content for each material reported.
- If the missing data procedures are used, then report how the monthly mass of carbon-containing materials with missing data was determined and the number of months in which the missing data procedures were used.

EPA has temporarily deferred the requirement to report data elements in the above list that are used as inputs to emission equations (76 FR 53057, August 25, 2011). For the current status of reporting requirements, including the list of data elements that are considered to be inputs to emissions equations, consult the following link: <http://www.epa.gov/ghgreporting/reporters/cbi/index.html>

For More Information

This document is provided solely for informational purposes. It does not provide legal advice, have legally binding effect, or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits in regard to any person. The series of information sheets is intended to assist reporting facilities/owners in understanding key provisions of the final rule.

Visit EPA's Web site (www.epa.gov/ghgreporting/reporters/index.html) for more information, including the final preamble and rule, additional information sheets on specific industries, the schedule for training sessions, and other documents and tools. For questions that cannot be answered through the Web site, please contact us at: GHGReporting@epa.gov.