

Glass Production



Proposed Rule: Mandatory Reporting of Greenhouse Gases

Under the proposed Mandatory Reporting of Greenhouse Gases (GHGs) rule, owners or operators of facilities that contain glass production processes (as defined below) and that emit 25,000 metric tons of GHGs per year or more (expressed as carbon dioxide equivalents) from stationary combustion, miscellaneous use of carbonates, and other source categories (see information sheet on General Provisions) would report emissions from all source categories located at the facility for which emission calculation methods are defined in the rule. Owners or operators would 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?

Under the proposal, the glass production source category consists of facilities that manufacture glass (including flat, container, pressed, or blown glass) or wool fiberglass using one or more continuous glass melting furnaces. Experimental furnaces and research and development process units would be excluded.

What GHGs Would Be Reported?

The proposal calls for glass production facilities to report the following:

- Carbon dioxide (CO₂) process emissions from each continuous glass melting furnace.
- CO₂, methane (CH₄), and nitrous oxide (N₂O) emissions from each fuel combustion unit at each continuous glass melting furnace and each onsite stationary fuel combustion unit by following the requirement of 40 CFR part 98, subpart C (General Stationary Combustion Sources). The information sheet on general stationary fuel combustion sources summarizes the proposal for calculating and reporting emissions from these units.

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

How Would GHG Emissions Be Calculated?

For CO₂ process emissions from glass melting furnaces, the proposal calls for facilities to use one of two methods, as appropriate:

- For glass melting furnaces with certain types of continuous emission monitoring systems (CEMS) in place, facilities would report using the CEMS and following the methodology of 40 CFR part 98, subpart C. For other glass furnaces, the use of CEMS would be optional.
- Facilities without CEMS would calculate CO₂ emissions for each furnace using a default emission factor appropriate for the carbonate raw material that is multiplied by:
 - The annual mass of carbonate-based raw material charged to the furnace (required to be measured); and
 - The mass-fraction of carbonate in the raw material (based on data supplied by the raw material supplier and verified by an annual measurement).

For CH₄ and N₂O emissions from glass melting furnaces, owners or operators would follow the requirements of 40 CFR part 98, subpart C.

What Information Would Be Reported?

In addition to the information required by the General Provisions at 40 CFR 98.3(c), the proposal calls for each glass manufacturing facility to report the following information for each continuous glass melting furnace:

- Annual process emissions of CO₂.
- Annual quantity of each carbonate-based raw material charged.
- Annual glass production.
- Mass fraction for each carbonate-based raw material charged to a continuous glass melting furnace, in percent.

Facilities that use CEMS would also report the data specified in 40 CFR 98.34(d) of subpart C (General Stationary Fuel Combustion Sources).

For More Information

This series of information sheets is intended to assist reporting facilities/owners in understanding key provisions of the proposed rule. However, these information sheets are not intended to be a substitution for the rule. Visit EPA's Web site (www.epa.gov/climatechange/emissions/ghgrulemaking.html) for more information, including the proposed preamble and rule and additional information sheets on specific industries, or go to www.regulations.gov to access the rulemaking docket (EPA-HQ OAR-2008-0508). For questions that cannot be answered through the Web site or docket, call 1-877-GHG-1188.