

Suppliers of Carbon Dioxide



Proposed Rule: Mandatory Reporting of Greenhouse Gases

Under the proposed Mandatory Reporting of Greenhouse Gases (GHGs) rule, suppliers of carbon dioxide (CO₂) that meet the applicability requirements of the rule (see information sheet on General Provisions) would report CO₂ emissions associated with the complete release of the gases that they place into commerce.

How Is This Source Category Defined?

Under the proposed rule, suppliers of CO₂ consist of the following:

- Facilities with production process units that capture and supply CO₂ for commercial applications.
- Facilities with CO₂ production wells.
- Importers of bulk CO₂, if total combined imports of CO₂ and other GHGs exceed 25,000 tons of CO₂ equivalent (CO₂e) per year.
- Exporters of bulk CO₂, if total combined exports of CO₂ and other GHGs exceed 25,000 tons CO₂e per year

This source category does not include entities that store CO₂ through geologic sequestration or above ground storage; use CO₂ in enhanced oil and gas recovery; transport or distribute CO₂; purify, compress, or process CO₂; or import or export CO₂ in equipment.

What GHGs Would Be Reported?

The proposal calls for suppliers of CO₂ to report the mass of CO₂ captured from production process units and extracted from production wells, and the mass of CO₂ that is imported and exported.

How Would GHG Emissions Be Calculated?

Under the proposal, all suppliers would calculate emissions quarterly by measuring the mass flow of gas and multiplying by the CO₂ composition of the gas, as specified below:

- For facilities with production process units or CO₂ production wells that have mass flow meters installed to measure the volume of the CO₂ captured or extracted, mass flow would be measured prior to any subsequent purification, processing, or compressing of the gas.
- Facilities with production process units or CO₂ production wells that do not have mass flow meters installed to measure the volume of the CO₂ captured or extracted would measure the mass flow of the CO₂ transferred off site.
- Importers or exporters of bulk CO₂ would be required to use a mass flow meter to measure the volume of imported/exported CO₂. If the CO₂ importer does not have a mass flow meter installed to measure the volume imported, the measurements would be based on the volume of imported CO₂ transferred off site or used in onsite processes. If a CO₂ exporter does not have mass flow meters installed to measure the volume exported, the measurements would be based on the volume of CO₂ received for export.
- CO₂ composition would be measured quarterly.

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 facilities with production process units or CO₂ production wells to report the following information at the facility level; importers and exporters would report the information at the corporate level:

- Total annual mass of CO₂ in metric tons.
- The weighted average composition of the CO₂ stream captured, extracted, or transferred in either gas, liquid, or solid forms.
- Annual amounts of CO₂ transferred to the following end-use applications (if known):
 - Food and beverage
 - Industrial and municipal water/wastewater treatment
 - Metal fabrication, including welding and cutting
 - Greenhouse uses for plant growth
 - Fumigants (e.g., grain storage) and herbicides
 - Pulp and paper
 - Cleaning and solvent use
 - Fire fighting
 - Transportation and storage of explosives
 - Enhanced oil and natural gas recovery
 - Long-term storage (sequestration)
 - Research and development

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.