

# Suppliers of Carbon Dioxide



## Final Rule: Mandatory Reporting of Greenhouse Gases

*Under the Mandatory Reporting of Greenhouse Gases (GHGs) rule, suppliers of carbon dioxide (CO<sub>2</sub>) that meet the applicability requirements of the rule (see information sheet on General Provisions) must report CO<sub>2</sub> emissions that would result from the complete release of the product that they place into commerce.*

### How Is This Source Category Defined?

Suppliers of CO<sub>2</sub> consist of the following:

- Facilities with production process units that capture and supply CO<sub>2</sub> for commercial applications that capture and maintain custody of a CO<sub>2</sub> stream in order to sequester or otherwise inject it underground.
- Facilities with CO<sub>2</sub> production wells.
- Importers of bulk CO<sub>2</sub>, if total combined imports of CO<sub>2</sub> and other GHGs exceed 25,000 tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) per year.
- Exporters of bulk CO<sub>2</sub>, if total combined exports of CO<sub>2</sub> and other GHGs exceed 25,000 tons CO<sub>2</sub>e per year.

This source category does not include entities that store CO<sub>2</sub> through geologic sequestration or above ground storage; use CO<sub>2</sub> in enhanced oil and gas recovery; transport or distribute CO<sub>2</sub>; purify, compress, or process CO<sub>2</sub>; or import or export CO<sub>2</sub> in equipment.

### What GHGs Must Be Reported?

Suppliers of CO<sub>2</sub> must report the mass of CO<sub>2</sub> captured from production process units and extracted from production wells, and the mass of CO<sub>2</sub> that is imported and exported.

### How Should GHG Emissions Be Calculated?

All suppliers must calculate emissions that would result from the complete release of the product placed into commerce quarterly by measuring the mass flow of gas and multiplying by the CO<sub>2</sub> composition of the gas, as specified below:

- Reporters with mass flow meters installed to measure the volume of the CO<sub>2</sub> captured or extracted must measure the total mass of CO<sub>2</sub> in a CO<sub>2</sub> stream in metric tons quarterly, prior to any subsequent purification, processing, or compressing of the gas.
- Reporters with volumetric flow meters installed to measure the volume of the CO<sub>2</sub> captured or extracted must measure the total mass of CO<sub>2</sub> in a CO<sub>2</sub> stream in metric tons quarterly, prior to any subsequent purification, processing, or compressing.
- Importers or exporters that import or export CO<sub>2</sub> in containers must calculate the total mass of CO<sub>2</sub> imported or exported in metric tons, prior to any subsequent purification, processing, or compressing, based on summing the mass in each CO<sub>2</sub> container using weigh bills, scales, or load cells.
- CO<sub>2</sub> composition must be measured quarterly for reporting of CO<sub>2</sub> supply using flow meters.
- CO<sub>2</sub> stream density must be measured quarterly for reporting of CO<sub>2</sub> supply using volumetric flow meters.

A checklist for data that must be monitored is available at:  
[www.epa.gov/climatechange/emissions/downloads/checklists/supplierscarbondioxide.pdf](http://www.epa.gov/climatechange/emissions/downloads/checklists/supplierscarbondioxide.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), facilities with production process units or CO<sub>2</sub> production wells must report the following information at the facility level; importers and exporters must report the information at the corporate level:

- Total annual mass of CO<sub>2</sub> in metric tons.
- The percentage of the total annual mass, if any, that is biomass-based.
- If a flow meter is used to report CO<sub>2</sub> supply:
  - Quarterly concentration of the CO<sub>2</sub> stream, and the method used to measure it.
  - Quarterly mass of CO<sub>2</sub> in metric tons
- If a volumetric flow meter is used to report CO<sub>2</sub> supply, report the quarterly density of the CO<sub>2</sub> stream and the method used to measure it.
- If reporters import or export CO<sub>2</sub> in containers, report the type of equipment used to measure CO<sub>2</sub> mass and the standard used to operate and calibrate the equipment.
- The number of days in the reporting year for which substitute data procedures were used.
- Annual amounts of CO<sub>2</sub> 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 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/climatechange/emissions/ghgrulemaking.html](http://www.epa.gov/climatechange/emissions/ghgrulemaking.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](mailto:GHGreporting@epa.gov).