

Final Rule: Mandatory Reporting of Greenhouse Gases

Under the Mandatory Reporting of Greenhouse Gases (GHGs) rule, suppliers of natural gas and natural gas liquids (NGLs) must report the emissions that would result from the complete combustion or oxidation of the products that they place in commerce. Suppliers of natural gas and NGLs are required to collect data on their products; calculate the GHG emissions associated with these products; and follow the specified procedures for ensuring data quality, amending missing data, and meeting recordkeeping and reporting requirements.

Natural gas fractionators should also note other potential source categories that are required to report emissions under the proposed rule.

How Is This Source Category Defined?

Suppliers of natural gas and NGLs are defined as natural gas liquids fractionators and local natural gas distribution companies (LDCs), as follows:

- Natural gas liquids fractionators are installations that fractionate NGLs into their constituent liquid products (ethane, propane, normal butane, isobutane, or pentanes plus) for supply to downstream facilities.
- **Local distribution companies** are companies that own or operate distribution pipelines that physically deliver natural gas to end users and that are regulated as separate operating companies by state public utility commissions, or that operate as independent municipally owned distribution systems. *Companies that operate interstate or intrastate pipelines are not part of this source category.*

This supply category does not include the following facilities:

- Field gathering and boosting stations.
- Natural gas processing plants that separate NGLs from natural gas and produce bulk or y-grade NGLs but do not fractionate these NGLs into their constituent products.
- Facilities that meet the definition of refineries and report under subpart MM (Suppliers of Petroleum Products).
- Facilities that meet the definition of petrochemical plants and report under subpart X (Petrochemical Production).

What GHGs Must Be Reported?

Natural gas fractionators must report carbon dioxide (CO₂) emissions that would result from the complete combustion or oxidation of the annual quantity of ethane, propane, normal butane, isobutane, and pentanes plus that is sold or delivered to others.

Local distribution companies must report CO₂ emissions that would result from the complete combustion or oxidation of the annual volumes of natural gas provided to end users on their distribution systems.

How Should GHG Emissions Be Calculated?

Two different methods can be used to calculate CO₂ emissions that would result from the complete oxidation or combustion of the product supplied:

- **Calculation Methodology 1:** Calculate CO₂ mass emissions from a natural gas or NGL product by multiplying the volume of product by its higher heating value (HHV) and its CO₂ emission factor (EF). Use either measured or default fuel HHVs and CO₂ EFs.
- **Calculation Methodology 2:** Calculate CO₂ mass emissions from a natural gas or NGL product by multiplying the volume of product by its CO₂ EF. Use either measured or default CO₂ EFs.

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

www.epa.gov/climatechange/emissions/downloads/checklists/suppliersnaturalgas.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), each NGL fractionator must report the following information:

- Annual CO₂ emissions in metric tons associated with all NGLs supplied, excluding emissions from quantities of NGL received from other fractionators.
- Annual CO₂ emissions in metric tons associated the total quantities of NGL that are supplied to facilities, reported in the following product categories:
 - Ethane
 - Propane
 - Normal butane
 - Isobutane
 - Pentanes plus
- Annual quantities in barrels (bbl) of ethane, propane, normal butane, isobutane, and pentanes plus and the specific industry standard used to measure these quantities.
- Annual quantities in bbl received from other NGL fractionators of ethane, propane, normal butane, isobutane, and pentanes plus.
- Annual volume in thousand standard cubic feet of natural gas received for processing.
- Annual quantity in bbl of y-grade, bulk NGLs received from others for fractionation.
- Annual quantity in bbl of propane that the NGL fractionator odorizes at the facility and delivers to others.
- Developed EFs and HHVs and the industry standard(s) used to develop them, if the NGL fractionator developed site-specific EFs or HHVs.
- Number of days in the reporting year for which substitute data procedures were used to measure quantity, develop HHVs, and develop EFs.

In addition to the information required by the General Provisions at 40 CFR 98.3(c), each LDC must report the following information at the corporate level:

- Annual CO₂ mass emissions in metric tons associated with gas delivered to each meter that receives 460,000 thousand standard cubic feet or more per year.
- Annual CO₂ mass emissions in metric tons associated with gas delivered to all meters that receive less than 460,000 thousand standard cubic feet per year (excluding emissions from gas delivered to other pipelines or LDCs and gas stored for future deliveries.)
- Annual CO₂ mass emissions in metric tons that would result from the complete combustion or oxidation of the seven reported volumes that follow.
- Annual volume in thousand standard cubic feet of natural gas received at its city gate stations for redelivery on its distribution system, including for use by the LDC, and the specific industry standard used to measure this volume.
- Annual volume in thousand standard cubic feet of natural gas that is used for deliveries in the reporting year that was not otherwise accounted for in the above reported volume. This primarily includes natural gas previously stored on-system or liquefied and stored, which is removed from

storage and used for deliveries to customers or other LDCs by the LDC within the reporting year. This also includes natural gas that bypassed the city gate and was delivered directly to LDC systems from producers or natural gas processing plants from local production.

- Annual volume in thousand standard cubic feet of natural gas withdrawn from on-system storage for delivery on the distribution system.
- Annual volume in thousand standard cubic feet of natural gas placed into storage, including gas liquefied and placed into storage.
- Annual volume in thousand standard cubic feet of natural gas delivered directly to LDC systems from producers or natural gas processing plants from local production.
- Annual volume in thousand standard cubic feet of natural gas delivered to downstream gas transmission pipelines and other LDCs.
- Annual volume in thousand standard cubic feet of natural gas delivered to each meter registering supply equal to or greater than 460,000 thousand standard cubic feet during the calendar year and the customer name, address, meter number, and EIA identification number (if known) of each meter reading used.
- Developed EFs and HHVs and the industry standard(s) used to develop them, if the LDC developed site-specific EFs or HHVs.
- Annual volume in thousand standard cubic feet of natural gas delivered to each of the following end-user categories:
 - Residential consumers.
 - Commercial consumers.
 - Industrial consumers.
 - Electricity-generating facilities.
- Number of days in the reporting year for which substitute data procedures were used to measure quantity, develop HHVs, and develop EFs.

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) 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.