

Suppliers of Natural Gas and Natural Gas Liquids

Subpart NN, Greenhouse Gas Reporting Program

OVERVIEW

Subpart NN of the Greenhouse Gas Reporting Program (GHGRP) (40 CFR 98.400 – 98.408) applies to suppliers of natural gas and natural gas liquids (NGLs) that meet the Subpart NN source category definition. Some subparts have thresholds that determine applicability for reporting, and some do not. To decide whether your facility must report under this subpart, please refer to 40 CFR 98.401 and the GHGRP [Applicability Tool](#).

This Information Sheet is intended to help facilities reporting under Subpart NN understand how the source category is defined, what greenhouse gases (GHGs) must be reported, how GHG emissions must be calculated and shared with EPA, and where to find more information.



How is This Source Category Defined?

Subpart NN applies to natural gas and natural gas liquids (NGLs) suppliers, which are local natural gas distribution companies (LDCs) and NGLs fractionators.

- **LDCs:** Companies that own or operate distribution pipelines that physically deliver natural gas to end users within a single state and are regulated as separate operating companies by State public utility commissions or are operated as independent municipally-owned distribution systems. LDCs do not include pipelines (both interstate and intrastate) delivering natural gas directly to major industrial users and farm taps upstream of the LDC inlet. All LDCs that supply 460,000 thousand standard cubic feet (mscf) of natural gas during a calendar year are subject to Subpart NN.
- **NGLs fractionators:** Installations that fractionate NGLs into their constituent liquid products (ethane (C₂H₆), propane (C₃H₈), normal butane (C₄H₁₀), isobutane (HC(CH₃)₃), or pentanes plus (C₅H₁₂ plus)) for supply to downstream facilities. All NGL fractionators are subject to Subpart NN regardless of the quantity of NGL products supplied.

Subpart NN does not apply to 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, found at 40 CFR 98.390 – 98.398).
- Facilities that meet the definition of petrochemical plants and report under Subpart X (Petrochemical Production, found at 40 CFR 98.240 – 98.248).



What GHGs Must Be Reported?

NGL fractionators must report carbon dioxide (CO₂) emissions that would result from the complete combustion or oxidation of the annual quantity of C₂H₆, C₃H₈, C₄H₁₀, HC(CH₃)₃, or C₅H₁₂ plus that is sold or delivered to others.

LDCs 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.

If multiple Greenhouse Gas Reporting Program (GHGRP) source categories are co-located at a facility, the facility may need to report greenhouse gas (GHG) emissions under a different subpart. For example, for more information on Petroleum and Natural Gas Systems, see the [Subpart W Information Sheet](#). Please refer to the relevant Information Sheet for a summary of the rule requirements for any other source categories located at the facility.



How Must 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.

To avoid double counting of CO₂ emissions associated with the supply of natural gas and NGLs, NGL fractionators and LDCs should use the following practices:

- NGL fractionators account for any NGL products received from other fractionators by subtracting the quantity of CO₂ associated with any NGL they receive from the CO₂ associated with quantity of NGL supplied.
- LDCs account for CO₂ emissions from natural gas consumption reported by other GHGRP reporters by subtracting the quantity of CO₂ associated with natural gas supplied to customers receiving equal to or greater than 460,000 mscf/year from the total quantity of CO₂ associated with the quantity of natural gas supplied.

A checklist for data that must be monitored is available here: [Subpart NN Monitoring Checklist](#).



What Information Must Be Reported?

In addition to the information required by the General Provisions in Subpart A, found at 40 CFR 98.3(c), each NGL fractionator must report the following:

- Annual CO₂ emissions associated with all NGLs supplied, excluding emissions from quantities of NGL received from other fractionators (metric tons).
- Annual CO₂ emissions associated with the total quantities of NGL that are supplied to facilities, reported in the following product categories (metric tons):
 - Ethane (C₂H₆)
 - Propane (C₃H₈)
 - Normal butane (C₄H₁₀)

- Isobutane (HC(CH₃)₃)
- Pentanes plus (C₅H₁₂ plus)
- Annual quantities of C₂H₆, C₃H₈, C₄H₁₀, HC(CH₃)₃, or C₅H₁₂ plus supplied and the specific industry standard used to measure these quantities (barrels (bbls)).
- Annual quantities of C₂H₆, C₃H₈, C₄H₁₀, HC(CH₃)₃, or C₅H₁₂ plus received from other NGL fractionators (bbls).
- Annual volume of natural gas received for processing (mscf).
- Annual quantity of y-grade, o-grade and other bulk NGLs received (bbls).
- Annual quantity of y-grade, o-grade and other bulk NGL supplied to downstream users that are not fractionated by the reporter (bbls).
- Annual quantity of C₃H₈ that the NGL fractionator odorizes at the facility and delivers to others (bbls).
- Developed EFs and HHVs and the industry standard(s) used to develop them, if developed site-specific EFs or HHVs are used to calculate CO₂.
- Number of days in the reporting year for which substitute data procedures were used to measure quantity, develop HHVs, and develop EFs.

Each LDC must report the following information:

- Annual CO₂ mass emissions associated with gas delivered to each large end-user or meter that receives 460,000 mscf/year or more (metric tons).
- Annual CO₂ mass emissions associated with gas delivered to all customers that receive less than 460,000 mscf/year (metric tons).
- Annual volume of natural gas (mscf) and the annual CO₂ mass emissions (metric tons) that would result from the complete combustion or oxidation of the following:
 - Annual volume of natural gas received at the LDC's city gate stations for redelivery on its distribution system, including natural gas used by the LDC.
 - Annual volume of natural gas that bypassed the city gate(s) and was supplied through the LDC distribution system. This includes natural gas from producers and natural gas processing plants from local production, or natural gas that was vaporized upon receipt and delivered, and any other source that bypassed the city gate.
 - Annual volume of natural gas withdrawn from on-system storage and annual volume of vaporized liquefied natural gas (LNG) withdrawn from storage for delivery on the distribution system.
 - Annual volume of natural gas placed into storage, including gas liquefied and placed into storage.
 - Annual volume of natural gas delivered to downstream gas transmission pipelines and other LDCs.
 - Annual volume of natural gas delivered to each large end-user's facility or large-end user's meter registering supply equal to or greater than 460,000 mscf during the calendar year and the large end-user's customer name, address, meter number, and EIA identification number (if known).
- Specific industry standard used to measure the volumes of natural gas reported.
- Developed EFs and HHVs and the industry standard(s) used to develop them, if developed site-specific EFs or HHVs are used to calculate CO₂.
- Annual volume of natural gas delivered to each of the following end-user categories (mscf):

- 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.
- Name of the state or U.S. territory in which the LDC operates.



What Records Must Be Maintained?

Reporters are required to retain records that pertain to their annual GHGRP report for at least three years after the date the report is submitted. Please see the [Subpart A Information Sheet](#) and 40 CFR 98.3(g) for general recordkeeping requirements. Specific recordkeeping requirements for Subpart NN are listed at 40 CFR 98.407.



When and How Must Reports Be Submitted?

Reporters must submit their annual GHGRP reports for the previous calendar year to the EPA by March 31st, unless the 31st falls on a Saturday, Sunday, or federal holiday, in which case reports are due on the next business day. Annual reports must be submitted electronically using the [electronic Greenhouse Gas Reporting Tool \(e-GGRT\)](#), the GHGRP's online reporting system.

Additional information on setting up user accounts, registering a facility, and submitting annual reports is available on the [GHGRP Help webpage](#).



When Can a Facility Stop Reporting?

A facility may discontinue reporting under several scenarios, which are summarized in Subpart A (found at 40 CFR 98.2(i)) and the [Subpart A Information Sheet](#).



For More Information

For additional information on Subpart NN, please visit the [Subpart NN webpage](#). For additional information on the GHGRP, please visit the [GHGRP website](#), which includes additional information sheets, [data](#) previously reported to the GHGRP, [training materials](#), and links to Frequently Asked Questions ([FAQs](#)). For questions that cannot be answered through the GHGRP website, please contact us at: GHGreporting@epa.gov.

This Information Sheet is provided solely for informational purposes. It does not replace the need to read and comply with the regulatory text contained in the rule. Rather, it is intended to help reporting facilities and suppliers understand key provisions of the GHGRP. It does not provide legal advice; have a legally binding effect; or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits with regard to any person or entity.