

# Suppliers of Petroleum Products



## Final Rule: Mandatory Reporting of Greenhouse Gases

*Under the Mandatory Reporting of Greenhouse Gases (GHGs) rule, all owners or operators of petroleum refineries and importers and exporters of petroleum products that meet the applicability requirements of the rule (see information sheet on General Provisions) must report the GHG emissions that would result from the complete combustion or oxidation of the products they supply. Refinery owners or operators and importers and exporters of petroleum products 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.*

*Owners or operators of refineries should also review the Petroleum Refineries information sheet to identify other potential direct emissions that they must report under the rule.*

## How Is This Source Category Defined?

Suppliers of petroleum products consist of:

- **Petroleum refineries** that produce petroleum products through the distillation of crude oil.
- **Importers** who bring petroleum products or natural gas liquids (NGLs) into the United States from a foreign country, including any blender or refiner of refined or semi-refined petroleum products. Importers include those who are primarily liable for the payment of any duties on the merchandise or an authorized agent acting on the importer's behalf. Importers also include, as appropriate, the consignee, the importer of record, the actual owner, or the transferee.
- **Exporters** who transfer petroleum products or NGLs from the United States to another country or to an affiliate in another country, including any blender or refiner of refined or semi-refined petroleum products, but excluding those who transfer products to U.S. military bases and to ships for onboard use.

## What GHGs Must Be Reported?

Suppliers of petroleum products must report annually:

- Carbon dioxide (CO<sub>2</sub>) emissions that would result from the complete combustion or oxidation of each petroleum product and NGL produced, used as feedstock, imported, or exported during the calendar year.
- CO<sub>2</sub> emissions that would result from the complete combustion or oxidation of any biomass co-processed with petroleum feedstock (required only for refiners).

Suppliers of petroleum products are not required to report data on emissions of GHGs other than CO<sub>2</sub>.

## How Must GHG Emissions Be Calculated?

Suppliers must calculate the annual CO<sub>2</sub> emissions (metric tons) that would result from the complete combustion or oxidation of all petroleum products and NGLs that leave the facility, minus emissions that would result from the complete combustion or oxidation of: 1) petroleum products and NGLs that enter the refinery to be further refined or otherwise used on site and 2) any biomass co-processed with petroleum feedstock. To calculate these emissions, multiply the measured annual quantity of each product (metric tons or barrels) by a product-specific CO<sub>2</sub> emission factor (metric tons CO<sub>2</sub> emitted per barrel or

per metric ton of product). Use one of two alternative methods to determine the emission factor for each petroleum product and NGL:

- Method 1: Use a CO<sub>2</sub> emission factor (metric tons CO<sub>2</sub> emitted per barrel) that is provided in the rule for each petroleum product or NGL.
- Method 2: Develop an emission factor using direct measurement of density and carbon share (i.e., percent carbon by mass).

For calculating biomass feedstock, use the biomass default factors provided per Method 1. For petroleum products that are produced by blending a petroleum-based product with a biomass-based fuel, the rule provides procedures for calculating emissions to account for the volume percentage of petroleum-based product.

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

[www.epa.gov/climatechange/emissions/downloads/checklists/supplierspetroleumproducts.pdf](http://www.epa.gov/climatechange/emissions/downloads/checklists/supplierspetroleumproducts.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), petroleum refiners must report the following information for each of their refineries:

- Annual CO<sub>2</sub> emissions (metric tons) that would result from the complete combustion or oxidation of all petroleum products and NGLs that leave the facility, minus emissions that would result from the complete combustion or oxidation of: 1) petroleum products and NGLs that enter the refinery to be further refined or otherwise used on site and 2) any biomass co-processed with petroleum feedstock.
- Annual CO<sub>2</sub> emissions (metric tons) that would result from complete combustion or oxidation of:
  - Each petroleum product and each NGL leaving the facility.
  - Each petroleum product and each NGL entering the refinery to be further refined or otherwise used on site.
  - Each type of biomass entering the refinery to be co-processed with petroleum feedstock to produce a petroleum product.
- Annual quantities (metric tons or barrels) of:
  - Each petroleum product and each NGL leaving the facility.
  - Each petroleum product and each NGL entering the refinery to be further refined or otherwise used on site.
  - Each type of biomass entering the refinery to be co-processed with petroleum feedstock to produce a petroleum product.
- Percent of the volume reported that is petroleum-based, for each product and feedstock produced by blending a petroleum-based product with a biomass-based product.
- Annual quantities (metric tons or barrels), segregated by each measurement method used to determine quantity, of:
  - Each petroleum product and each NGL leaving the facility.
  - Each petroleum product and each NGL entering the refinery to be further refined or otherwise used on site.
  - Each type of biomass entering the refinery to be co-processed with petroleum feedstock to produce a petroleum product.
- Each measurement method used to determine the segregated annual quantities.
- The following for all crude oil feedstock used at the refinery:
  - Batch volume in barrels.
  - API gravity of the batch at the point of entry at the refinery.
  - Sulfur content of the batch at the point of entry at the refinery.
  - Country of origin of the batch, if known.
- The total quantity of bulk NGLs in metric tons or barrels received for processing during the reporting year.
- Report the following for each product and feedstock for which an emission factor was developed (i.e., Method 2):
  - Number of samples collected.

- Sampling standard method used.
- Carbon share test results in percent mass.
- Standard method used to test carbon share.
- Calculated CO<sub>2</sub> emission factor in metric tons CO<sub>2</sub> per barrel or per metric ton of product.
- Density test results in metric tons per barrel (only for non-solid products and feedstock).
- Standard method used to test density (only for non-solid products and feedstock).

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

- Annual CO<sub>2</sub> emissions (metric tons) that would result from the complete combustion or oxidation of all petroleum products and NGLs.
- Annual CO<sub>2</sub> emissions (metric tons) that would result from the complete combustion or oxidation of each petroleum product and each NGL.
- Total annual quantities (metric tons or barrels) of each petroleum product and each NGL.
- Annual quantities (metric tons or barrels) of each petroleum product and each NGL, segregated by each measurement method used to determine quantity.
- Each measurement method used to determine segregated annual quantities.
- Percent of the volume reported that is petroleum-based, for each product produced by blending a petroleum-based product with a biomass-based product.
- Report the following for each product for which an emission factor was developed:
  - Number of samples collected.
  - Sampling standard method used.
  - Carbon share test results in percent mass.
  - Standard method used to test carbon share.
  - Calculated CO<sub>2</sub> emission factor in metric tons CO<sub>2</sub> per barrel or per metric ton of product.
  - Density test results in metric tons per barrel (only for non-solid products).
  - Standard method used to test density (only for non-solid products).

## 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).