

# Suppliers of Petroleum Products

## Subpart MM, Greenhouse Gas Reporting Program

### OVERVIEW

Subpart MM of the Greenhouse Gas Reporting Program (GHGRP) (40 CFR 98.390 – 98.398) applies to suppliers of petroleum products that meet the Subpart MM 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 98.391 and the GHGRP [Applicability Tool](#).

This Information Sheet is intended to help facilities reporting under Subpart MM 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?

Suppliers of petroleum products who must report under Subpart MM include:

- **Refiners:** Owners and operators of petroleum refineries (i.e., facilities engaged in producing petroleum products listed in Table MM-1, Subpart MM is found at 40 CFR 98.390 – 98.398, through the distillation of crude oil).
- **Importers:** Those who bring petroleum products or natural gas liquids (NGLs)—listed in Table MM-1 and including any blender or refiner of refined or semi-refined petroleum products—in quantities equivalent to 25,000 metric tons of carbon dioxide equivalent (CO<sub>2e</sub>) or more per year into the U.S. from a foreign country.
- **Exporters:** Those who transfer petroleum products or NGLs—listed in Table MM-1 and including any blender or refiner of refined or semi-refined petroleum products—in quantities equivalent to 25,000 metric tons CO<sub>2e</sub> or more per year from the U.S. to another country or to an affiliate in another country.



## What GHGs Must Be Reported?

Suppliers of petroleum products must report the following 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 greenhouse gases (GHGs) and other than CO<sub>2</sub>.

If multiple Greenhouse Gas Reporting Program (GHGRP) source categories are co-located at a facility, the facility may need to report GHG emissions under a different subpart. 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?

Suppliers of petroleum products 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 listed in Table MM-1 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 (bbls)) by a product-specific CO<sub>2</sub> emission factor (EF) (metric tons CO<sub>2</sub> emitted per bbl (metric tons CO<sub>2</sub>/bbl) or per metric tons of product (metric tons CO<sub>2</sub>/ metric tons product)). The EF for each petroleum product and NGL must follow either:

- **Method 1:** A CO<sub>2</sub> EF (metric tons CO<sub>2</sub>/bbl) that is provided in the rule for each petroleum product or NGL.
- **Method 2:** A CO<sub>2</sub> EF (metric tons CO<sub>2</sub> per bbl or per metric tons product) developed by the reporter using direct measurement of density and carbon (C) share (i.e., % C 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 here: [Subpart MM 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), the following must be reported:

- 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 bbls) 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.
- The total annual quantity of crude that enters the refinery (bbl) and the quantity of crude oil that a refiner injected into a crude oil supply or reservoir (bbl).

- The total quantity of bulk NGLs in metric tons or bbls received for processing during the reporting year.
- Report the following for each product and feedstock for which an EF was developed (i.e., Method 2):
  - Number of samples collected.
  - Sampling standard method used.
  - C share test results in % mass.
  - Standard method used to test C share.
  - Calculated CO<sub>2</sub> EF in metric tons CO<sub>2</sub>/bbl or metric tons CO<sub>2</sub>/metric tons product.
  - Density test results in metric tons/bbl (only for non-solid products and feedstock).
  - Standard method used to test density (only for non-solid products and feedstock).

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 bbls) of each petroleum product and each NGL.
- Annual quantities (metric tons or bbls) of each petroleum product and each NGL.
- 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 EF was developed:
  - Number of samples collected.
  - Sampling standard method used.
  - C share test results in % mass.
  - Standard method used to test C share.
  - Calculated CO<sub>2</sub> EF in metric tons CO<sub>2</sub>/bbl or metric tons CO<sub>2</sub>/metric tons product.
  - Density test results in metric tons/bbl (only for non-solid products).
  - Standard method used to test density (only for non-solid products).



## What Records Must Be Maintained?

Reporters are required to retain records that pertain to their annual GHGRP as described at 40 CFR 98.3(g). Please see the [Subpart A Information Sheet](#) and 40 CFR 98.3(g) for general recordkeeping requirements. Specific recordkeeping requirements for Subpart MM are listed at 40 CFR 98.397.



## When and How Must Reports Be Submitted?

Reporters must submit their annual GHGRP reports for the previous calendar year to the EPA by March 31<sup>st</sup>, unless the 31<sup>st</sup> 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 MM, please visit the [Subpart MM 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 [FAQs](#). For questions that cannot be answered through the GHGRP website, please contact us at: [GHGreporting@epa.gov](mailto: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.*