

# General Provisions



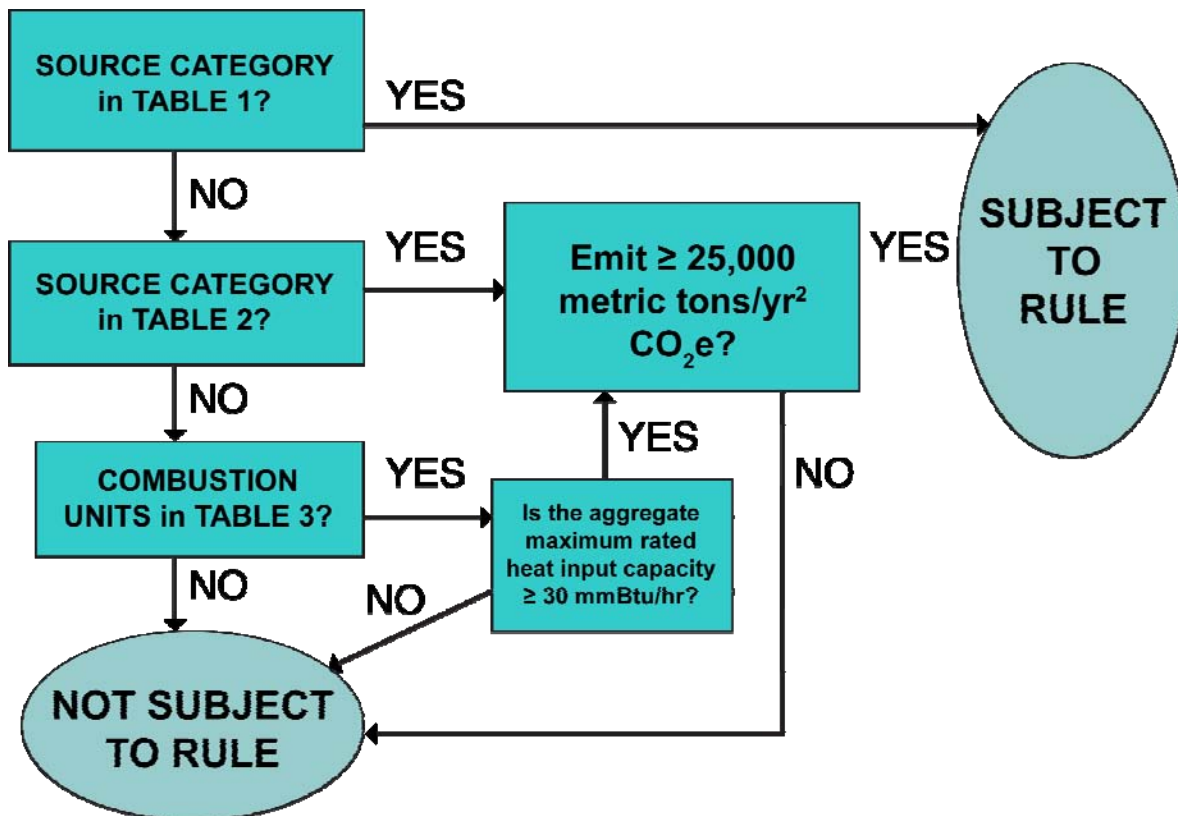
## Final Rule: Mandatory Reporting of Greenhouse Gases

The Mandatory Reporting of Greenhouse Gases (GHGs) rule requires reporting of annual emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFCs), perfluorochemicals (PFCs), and other fluorinated gases (e.g., nitrogen trifluoride, hydrofluorinated ethers [HFEs]). The rule (40 CFR 98) applies to certain facilities that emit GHGs and to suppliers of fossil fuels and industrial GHGs. Manufacturers of vehicles and engines must report GHG emissions under other rules<sup>1</sup> and are not addressed further here. Reporting is at the facility level, except for certain suppliers that must report at the corporate level.

Facilities and suppliers that are subject to the rule must comply with the General Provisions (40 CFR part 98, subpart A) and the provisions of all other applicable subparts of 40 CFR 98.

### What Facilities Must Report?

Applicability depends on the source categories located at the facility and, for some source categories, the emission level or production capacity. An overview of the applicability provisions for facilities is outlined in the figure below and explained in Tables 1 through 3. Table 6 (see page 5) provides examples of how these applicability requirements apply to different types of facilities.



<sup>1</sup> See 40 CFR parts 86, 87, 89, 90, 94, 1033, 1039, 1042, 1045, 1048, 1051, 1054, and 1065. Also see the information sheet on Mobile Sources.

<sup>2</sup> Considering emissions from all source categories, stationary combustion units, and use of carbonates at the facility.

**Table 1.** If the facility contains any of the source categories listed in this table in any calendar year starting in 2010, the rule requires the facility to report emissions from all source categories for which calculation methodologies are provided in any subpart of the rule.

<p><b>Adipic Acid Production</b></p> <p><b>Aluminum Production</b></p> <p><b>Ammonia Manufacturing</b></p> <p><b>Cement Production</b></p> <p><b>Electricity Generation</b> facilities that report CO<sub>2</sub> emissions year round through 40 CFR part 75</p> <p><b>HCFC-22 Production</b></p> <p><b>HFC-23 Destruction Processes</b> that are not collocated with a HCFC-22 production facility and that destroy more than 2.14 metric tons of HFC-23 per year.</p> <p><b>Lime Manufacturing</b></p> <p><b>Manure Management Systems</b> with combined CH<sub>4</sub> and N<sub>2</sub>O emissions in amounts equivalent to 25,000 metric tons CO<sub>2</sub>e per year or more. [EPA will not be implementing subpart JJ of the Mandatory GHG Reporting Rule due to a Congressional restriction prohibiting the expenditure of funds for this purpose.]</p>	<p><b>Municipal Solid Waste Landfills</b> that <i>generate</i> CH<sub>4</sub> in amounts equivalent to 25,000 metric tons CO<sub>2</sub>e per year or more.</p> <p><b>Nitric Acid Production</b></p> <p><b>Petrochemical Production</b></p> <p><b>Petroleum Refineries</b></p> <p><b>Phosphoric Acid Production</b></p> <p><b>Silicon Carbide Production</b></p> <p><b>Soda Ash Production</b></p> <p><b>Titanium Dioxide Production</b></p>
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**Additional Source Categories Applicable in 2011 and Future Years**

**Underground Coal Mines** subject to quarterly or more frequent sampling of ventilation systems by the Mine Safety & Health Administration (MSHA).

**Table 2.** If the facility does not contain any of the source categories listed in Table 1, then the rule requires the facility to determine whether it emits 25,000 metric tons or more of CO<sub>2</sub>e in combined emissions from stationary fuel combustion, miscellaneous carbonate use, and the source categories listed in this table in any calendar year starting in 2010. If so, the rule requires the facility to report emissions from all source categories for which calculation methodologies are provided in any subpart of the rule.

<p><b>Ferroalloy Production</b></p> <p><b>Glass Production</b></p> <p><b>Hydrogen Production</b></p> <p><b>Iron and Steel Production</b></p>	<p><b>Lead Production</b></p> <p><b>Pulp and Paper Manufacturing</b></p> <p><b>Zinc Production</b></p>
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**Additional Source Categories Applicable in 2011 and Future Years**

<p><b>Industrial Waste Landfills</b></p> <p><b>Industrial Wastewater Treatment</b> collocated with one or more of the following processes: pulp and paper manufacturing, food processing, ethanol production, petroleum refining</p>	<p><b>Magnesium Production</b></p>
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**Table 3.** If the facility does not contain any of the source categories in Tables 1 or 2, then the rule requires the facility to determine if the facility emits 25,000 metric tons<sup>1</sup> or more of CO<sub>2</sub>e from stationary combustion in any calendar year starting in 2010. If so, the facility must report emissions from stationary fuel combustion devices only.

**Boilers**  
**Stationary Internal Combustion Engines**  
**Process Heaters**  
**Combustion Turbines**  
**Other Stationary Fuel Combustion Equipment<sup>2</sup>**

<sup>1</sup> If the maximum-rated heat-input capacity for all stationary fuel combustion equipment combined is less than 30 million British thermal units (Btu) per hour, then the facility is presumed to emit less than 25,000 metric tons CO<sub>2</sub>e, and the facility does not have to calculate or report emissions.

<sup>2</sup> Excludes portable equipment, emergency generators, emergency equipment, agricultural irrigation pumps, hazardous waste combustors (except for co-fired fossil fuels), and flares.

## What Suppliers Must Report?

Tables 4 and 5 describe the suppliers of fossil fuels and industrial GHGs that must report.

**Table 4.** A supplier of fossil fuels listed in this table in any calendar year starting in 2010 must report the annual quantities of fuels supplied into the economy each year and the emissions associated with the complete oxidation of the fuels.

**Coal-based Liquid Fuels:** All producers. Importers and exporters above a threshold.  
**Natural Gas and Natural Gas Liquids:** All natural gas fractionators and all local distribution companies.  
**Petroleum Products:** All producers. Importers and exporters above a threshold.

**Table 5.** A supplier of industrial GHGs listed in this table in any calendar year starting in 2010 must report the annual quantities of each gas supplied into the economy and the emissions associated with their complete release. Suppliers include all producers and those importers or exporters above a threshold.

**Fluorinated Gases**  
**Nitrous Oxide**  
**Carbon Dioxide**

## What Information Must Be Reported?

The annual GHG report must include the following information:

- Facility or supplier name and address,
- Year and months covered by the report
- For facilities that directly emit GHGs:
  - Annual facility emissions in metric tons CO<sub>2</sub>e aggregated for all source categories (CO<sub>2</sub> from combustion of biomass is reported separately).
  - Annual emissions for each source category located at the facility, in metric tons of each GHG.
  - Additional information, such as unit- or process-level emissions, activity data (e.g., fuel use, feedstock inputs), or quality assurance/quality control data specified in an applicable subpart.

- For suppliers:
  - Annual quantity of GHG supplied, aggregated for all GHGs from all applicable supplier categories and expressed in metric tons CO<sub>2</sub>e.
  - Annual quantity of each GHG supplied from each supplier category, expressed in metric tons of each GHG.
  - Additional information specified in each applicable subpart, such as data used to calculate GHG quantities or support QA/QC.
- A description of any “best available monitoring method” used for calendar year 2010 (see below).
- If missing data procedures were used to fill gaps in monitoring data, identify the data elements and total hours in the year during which missing data procedures were used.
- A signed and dated certification statement

There are special provisions to simplify reporting during calendar year 2010:

- For the first quarter of 2010, reporters can use best available monitoring methods if it is not feasible to obtain, install and operate a required piece of monitoring equipment by January 1, 2010. Reporters can also request extensions for use of best available monitoring methods. The extension request must have been submitted by January 28, 2010 and approved by EPA. Extensions will not be granted beyond December 31, 2010.
- Facilities containing only general stationary fuel combustion sources can submit an abbreviated emission report (using simplified calculation methods) for calendar year 2010.

## How Must Reports Be Submitted?

The emission reports must be submitted electronically, in a format to be specified by the EPA Administrator after publication of the final rule. Each report must be signed by a designated representative of the owner or operator, certifying under penalty of law that the report has been prepared in accordance with the requirements of the rule.

## Can Reports Be Revised?

Reporters can submit revised annual GHG reports. They must be submitted within 45 days of discovering or being notified by EPA of errors in the annual GHG report.

## What Records Must Be Retained?

Each facility and supplier must retain the following records for three years in electronic or hardcopy format:

- A list of all units, operations, processes, and activities for which the reporter calculates GHG emissions.
- Data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. These data vary by source category and include, but are not limited to:
  - The GHG emission calculations and methods used.
  - Analytical results for the development of site-specific emission factors.
  - Results of all required analyses of high heat value, carbon content, or other required fuel or feedstock parameters.
  - Any facility operating data or process information used for the GHG emissions calculation.
- Annual GHG reports.
- Missing data computations. For each missing data event, also record the duration of the event, actions taken to restore malfunctioning equipment, the cause of the event, and actions taken to prevent or minimize occurrence in the future.
- A written GHG monitoring plan. The plan can rely on references to existing operating documents (e.g., standard operating procedures, other documents), providing the following elements are included and easily recognizable:

- Identification of positions of responsibility (i.e., job titles) for collecting GHG data.
- Explanation of processes and methods used to collect the data needed to calculate GHG emissions.
- Description of procedures and methods used for quality assurance, maintenance, and repair of monitoring systems used to provide data for the GHG reports.
- The results of all required certification and quality assurance tests of monitoring systems used to provide data for the annual GHG report.
- Maintenance records for monitoring instrumentation.
- Any other data specified in any applicable subpart of this rule.

## **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: [ghgmrr@epa.gov](mailto:ghgmrr@epa.gov).

Table 6. Examples of how the applicability criteria apply at different types of facilities.		
Facility Description	Required to Submit a GHG Report?	Explanation
A <b>lime manufacturing plant</b> emits 22,000 metric tons per year (tpy) from lime kilns.	Yes	Because lime manufacturing is a source category that is listed in Table 1, the facility must submit a report regardless of the amount of GHGs emitted.
A <b>pulp mill</b> emits 22,000 metric tpy CO <sub>2</sub> e in combined emissions from the pulping process, stationary fuel combustion and carbonates.	No	Because pulp and paper manufacturing is a source category listed in Table 2, the facility must report only if emissions are 25,000 metric tpy CO <sub>2</sub> e or more.
A <b>cheese manufacturing plant</b> contains: <ul style="list-style-type: none"> <li>• A gas-fired boiler that emits 15,000 metric tpy CO<sub>2</sub>e;</li> <li>• A biomass-fired boiler that emits 10,000 metric tpy CO<sub>2</sub>e; and</li> <li>• A wastewater treatment operation that emits 9,000 metric tpy CO<sub>2</sub>e.</li> </ul>	No	Because wastewater treatment at food processing plants is a source category listed in Table 2, the facility must report only if emissions from wastewater treatment and stationary fuel combustion are 25,000 metric tpy CO <sub>2</sub> e or more. Because combustion of biogenic fuels is excluded from the applicability computation, nonbiogenic GHG emissions for the facility are 24,000 metric tpy CO <sub>2</sub> e, and the facility is not required to report.
An <b>automobile assembly plant</b> emits 30,000 metric tpy CO <sub>2</sub> e from a coal-fired boiler.	Yes	Automobile assembly plants are not a listed source category in Tables 1 or 2, but the facility nevertheless must submit a report because emissions from stationary fuel combustion are 25,000 metric tpy CO <sub>2</sub> e or more.
A <b>university</b> emits 24,000 metric tpy CO <sub>2</sub> e from a cogeneration unit and 2,000 metric tpy CO <sub>2</sub> e from coal storage.	No	Because the rule does not prescribe a method for calculating GHG emissions from coal storage, coal storage emissions are not counted in determining applicability.
An <b>industrial gas facility</b> emits 100,000 metric tpy CO <sub>2</sub> e from the production of SF <sub>6</sub> .	Yes (as a supplier)  No (as a facility)	The facility is subject to reporting as a supplier of industrial GHG because all industrial GHG producers must report emissions from product sales. The facility is not required to report direct emissions from the SF <sub>6</sub> production processes because fluorinated GHG production is not a listed source category in Tables 1 or 2.
A <b>municipal solid waste landfill</b> generates an amount of CH <sub>4</sub> equivalent to 40,000 metric tpy CO <sub>2</sub> e, but collects and combusts 75 percent of the CH <sub>4</sub> , emitting only 10,000 metric tpy CO <sub>2</sub> e.	Yes	For a municipal landfill, the 25,000 metric tpy CO <sub>2</sub> e reporting threshold is based on gas generation, not on actual emissions.
A <b>petrochemical plant</b> has stationary fuel combustion units that emit 24,000 metric tpy CO <sub>2</sub> e from the combustion of fossil fuels.	Yes	Because petrochemical production is a source category listed in Table 1, the facility must report emissions from the petrochemical operations and all stationary fuel combustion units, even though the emissions from the stationary combustion sources are less than 25,000 metric tpy CO <sub>2</sub> e.
An <b>electric utility plant</b> that is subject to the acid rain program recovers CO <sub>2</sub> from flue gas and sells CO <sub>2</sub> to an oil field operation. The plant also operates small boilers and internal combustion engines that collectively emit 24,000 metric tpy CO <sub>2</sub> e.	Yes (as a facility)  Yes (as a supplier of CO <sub>2</sub> )	The facility would report emissions from units subject to Acid Rain Program under the subpart D (Electricity Generation) and emissions from the engines and other boilers under subpart C (General Stationary Fuel Combustion Sources). The facility would report as a supplier, because a CO <sub>2</sub> supplier includes any facility with a process that captures CO <sub>2</sub> for purposes of supplying CO <sub>2</sub> for commercial applications.