

U.S. EPA Requires Mandatory Reporting Beginning with Next Year's Greenhouse Gas Emissions

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On September 22, 2009, U.S. EPA issued a final rule imposing mandatory reporting of greenhouse gas (GHG) emissions. This rule is the Obama administration's first major regulatory action on GHGs. The GHG reporting rule, which was Congressionally-mandated in an appropriations bill signed by President Bush in late 2007, requires most sources to submit their first annual GHG emission report on March 31, 2011, covering emissions for the calendar year beginning January 1, 2010. EPA estimates that the rule will cover 85% of total U.S. GHG emissions from approximately 10,000 facilities, and is expected to cost, in total, for all covered private sector facilities, approximately \$115 million the first reporting year and \$72 million each subsequent year.

Covered Sources and GHGs

The final rule includes many significant changes from the proposed rule, released in March of this year. Although the threshold emissions level for covered facilities remains the same as in the proposed rule – 25,000 metric tons of carbon dioxide equivalent (“CO₂e”) per year – the number of covered source categories has decreased from 42 in the proposed rule to 31 in the final rule. In general, fossil fuel suppliers, industrial gas suppliers, manufacturers of engines and vehicles (except those from the light duty sector), and other downstream facilities that emit at least 25,000 metric tons of CO₂e annually are covered under the final rule. The following source categories, which were included under the proposed rule, are not

required to report emissions under the final rule:

- Oil and natural gas systems
- Electronics manufacturers
- Ethanol producers
- Coal suppliers and underground coal mines
- Wastewater treatment facilities
- Industrial landfills
- Food processors
- Fluorinated GHG producers and magnesium producers
- Sulfur hexafluoride emissions from electrical equipment
- Research and development (“R&D”) activities

Another key provision in the final rule, not included in the proposed rule, allows facilities to cease reporting if their emissions fall below the threshold for a specified period of time.

Specifically, covered facilities and suppliers may:

- cease reporting after emissions have fallen below 25,000 metric tons CO₂e per year for five consecutive years;
- cease reporting after emissions have fallen below 15,000 metric tons CO₂e per year for three consecutive years; or
- cease reporting if GHG-emitting processes or operations are shut down.

As in the proposed rule, the GHGs covered by the proposed rule are: carbon dioxide (CO₂); methane (CH₄); sulfur hexafluoride (SF₆); nitrous oxide (N₂O); perfluorocarbons (PFC); hydrofluorocarbons (HFC); and other fluorinated gases, including nitrogen trifluoride (NF₃) and hydrofluorinated ethers (HFE). All GHGs will be measured and reported in CO₂e, based on a conversion table supplied in Table A-1 of the final rule.

Reporting Methodology for Stationary Sources

The reporting methodology for stationary sources varies depending upon the industry sector, but generally, reporting

will be from the facility, rather than the corporate, level. Certain suppliers of industrial GHGs and fossil fuels, as well as vehicle and engine manufacturers, will report at the corporate level. Facilities already required to report and collect data regarding one or more GHG, such as those facilities regulated under the Clean Air Act Acid Rain Program, will report GHG emissions based on direct measurements of emissions from each facility. Facility-specific calculation methods will be used for other sources. The proposed rule provides those calculation methods by industry sector, with sectors defined by their NAICS code, starting at Subpart C § 98.30.

In response to objections from industry representatives, who had argued that regulated sources would not have sufficient time to install all the required data-collection devices and properly train personnel, the final rule now allows emission estimation for a limited time period. Specifically, during the first quarter (January through March) of 2010, covered entities can collect emissions data based on best available monitoring methods, rather than by using the otherwise-required data collection techniques.

Reporting Threshold Calculation for Stationary Sources

Unless otherwise addressed, any stationary facility that meets the annual emissions threshold of 25,000 tons of CO₂e, in total, must report all GHGs for which there are methods to measure data. A facility may develop capacity-based thresholds, if feasible. Those facilities in the Acid Rain Program, typically electricity generators and oil refineries, are expected to use capacity-based thresholds. Some facilities will have no threshold or thresholds different from 25,000 tons of CO₂e. The threshold applicable to each source category is provided in the section of the proposed rule entitled “§ 98.2 Who must report?”. EPA also provides tables summarizing the threshold triggers in its Fact Sheet for the proposed rule’s General Provisions, available at: <http://www.epa.gov/climatechange/emissions/downloads09/generalprovisions.pdf>

All suppliers of fossil fuels, i.e., producers, importers, and exporters, are required to report the CO₂ emissions that would “result from the complete combustion or oxidation of each petroleum product and natural

gas liquid produced, used as feedstock, imported or exported during the calendar year,” as well as the emissions resulting from any biomass processed together with petroleum feedstocks. EPA recognizes that counting emissions from both suppliers and combustion sources will lead to double-reporting of GHG emissions. However, EPA seeks to obtain this information from both “downstream” and “upstream” sources in order to better formulate and assess policy decisions concerning GHG emissions. (See September 22, 2009, pre-Federal Register publication of final rule, p. 57-58.)

Suppliers of industrial GHGs, i.e., fluorinated gases and N₂O, must report the GHG emissions that result from the release of each of the GHGs they produce, transform, destroy, import or export each year. Suppliers are subject to a reporting threshold of a volume of gases potentially releasing 25,000 tons of CO₂e, annually.

Reporting by Mobile Sources (Vehicle and Engine Manufacturers)

Most mobile source manufacturers already are required to measure and report CO₂ under U.S. EPA and California regulations. Under

the final rule, these requirements are expanded to require annual reporting of CO₂ emissions for engines and vehicles beginning with model year 2011, CH₄ emissions beginning in model year 2012, and N₂O emissions beginning in model year 2013. Emissions will be reported in the form of gram/kW-hr.

Only those manufacturers of engine models that use NO_x after-treatment technology are required to measure and report N₂O emissions. Small manufacturers, as already defined for each mobile source category in 40 CFR Parts 1033 through 1065, are generally exempt from reporting requirements, and federal, state and local governments are not required to report emissions data from any vehicle fleets. In addition, manufacturers of light-duty vehicles, light-duty trucks and medium-duty passenger vehicles are not covered by the final rule, but EPA notes in the preamble that it expects to propose a rule imposing GHG emission limits and requiring GHG emissions monitoring beginning with model year 2012. (See September 22, 2009, pre-Federal Register publication of preamble to the final rule, p. 496.)

Reporting Procedures and Liability

Reporting will be once a year, except that facilities already required to report GHG emissions more often, such as those reporting GHGs pursuant to the Acid Rain Program, will continue reporting under those other programs, as well as submit annual GHG emission reports under the new rule. All reporting will be to a central EPA registry, with electronic forms to be provided by EPA. No third-party verification of data is required, but the facility's or supplier's designated representative must certify the data's accuracy. Under a provision that was not included in the proposed rule, EPA may require a covered entity to submit a revised report to correct errors. EPA may bring an enforcement action for non-compliance, including but not limited to inaccurate reporting, failure to collect or calculate emissions data according to the rule, or failure to report.

Record Retention

Whereas the proposed rule would have required covered entities to retain records for five years, the final rule requires covered entities to maintain the following information for only three years:

- The annual GHG emission reports;
- A list of all units, operations, processes, and activities for which GHG emissions are calculated;
- The data used to calculate GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type, including the GHG emission calculations and methods used, analytical results for the development of site-specific emission factors, facility operating data or process information used for GHG emission calculations, and the results of required analyses for carbon content, high heat value, and other required feedstock or fuel parameters;
- A GHG Monitoring Plan, including a list of personnel responsible for collecting emissions data, an explanation of the methods and processes used in collecting GHG emissions data required for the emissions calculations, and a description of methods and procedures used for maintenance, repair, and quality assurance of all instruments used to provide data used in calculating GHG emissions under the final rule;
- The results of required quality assurance and certification tests for continuous emission monitoring systems (“CEMS”) and other instruments used to collect data reported under the final rule;
- Maintenance records for CEMS and other instruments used to collect data reported under the final rule;
- Missing data computations; and
- All other data specified in any applicable subpart of the rule.

Availability of the Final Rule

The final rule will be codified at 40 CFR Part 98. The rule will go into effect 60 days after it is published in the Federal Register. EPA has made available a pre-publication copy of the final rule, as well as numerous information sheets concerning the final rule, at: <http://www.epa.gov/climatechange/emissions/ghgrulemaking.html>

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