

FINAL RULE ON MANDATORY REPORTING OF GREENHOUSE GASES

U.S. Environmental Protection Agency (EPA) issued the proposed rule for mandatory reporting requirements (MRR) of greenhouse gases (GHGs) in March 10, 2009 and received comments from the environmental communities. EPA subsequently issued the final MRR for GHGs on September 22, 2009, which requires at least 30 emission source categories to report GHG emissions on an annual basis. These emission sources are to begin collecting GHGs data on January 1, 2010 with the first annual GHG report due to EPA on March 31, 2011.

The first step towards compliance with the new MRR is to determine the applicability of the rule for each site. The second step is to determine what information needs to be collected for the report. This PROVIsion provides a brief summary of these issues and discusses the general aspects of the GHG MRR.

Major changes from the proposed rule

Some major changes from the proposed rule, are listed below:

- Allow facilities and suppliers that report less than 25,000 metric tons (MT) of CO₂e for 5 consecutive years, or less than 15,000 MT of CO₂e for 3 consecutive years, to cease submitting annual reporting to EPA [§98.2(i)(1)], except listed source categories [§98.2(a)].
- Manufacturers of light-duty vehicles and passenger trucks are not subject to this rule.
- Excluded Research and Development activities from reporting [§98.2(a)(5)].
- Allow revisions to annual GHG reports, if needed, to correct errors.
- Changed the general records retention period from 5 years to 3 years.
- Added a population threshold to reduce the burden of determining applicability for manure management systems.
- Added a provision to allow use of best available data in lieu of the required monitoring methods for January - March 2010. Facilities can request a date extension beyond March 2010, but EPA will not approve any requests for an extension beyond 2010.
- In several subparts, added monitoring options, changed monitoring locations, or allowed engineering calculations to reduce the need for installing new monitors.
- For fuel combustion and some other source categories, reduced the required frequency for sampling and analysis.
- Quality Assurance. Added calibration requirements for flow meters and other monitoring devices including a five percent accuracy specification.
- Verification. In several subparts, required more data to be reported rather than kept as records to allow EPA to verify reported emissions.
- Combustion Sources. Added exemptions for unconventional fuels, flares, hazardous wastes, and emergency equipment. Reduced the need for mass flow monitors for some units or fuels. Allowed more facilities to aggregate reporting of emissions from smaller units rather than report emissions for each individual unit.

- Manure Management Systems. Added an animal population threshold to reduce the burden of determining applicability. Reduced the monitoring requirements.

Who must report GHGs?

Generally, the rule affects everyone from upstream production (i.e. suppliers of coal-base liquid fuels, petroleum products, natural gas and natural gas liquids, industrial GHGs, CO₂, etc.) to downstream sources (i.e. general stationary fuel, combustion sources, electricity generation, etc.). Table 1 in the Preamble of the rule provides a comprehensive list of affected facilities by North American Industry Classification System (NAICS) codes. Each facility should examine the criteria in 40 CFR Part 98, Subpart A to verify applicability of the MRR rule.

Most sites emitting 25,000 MT CO₂e or more per year are required to report GHG emissions under this rule. This reporting threshold is applicable to the majority of the downstream sources. Other listed source categories, who **must** report their GHG emissions to EPA under §98.2(a), are as follows:

(1) Listed source categories without minimum reporting threshold [§98.2(a)(1)]: a facility that contains any source category, defined in Subparts C through JJ of the rule, which include: (i) Electricity generation; (ii) Adipic acid production; (iii) Aluminum production; (iv) Ammonia manufacturing; (v) Cement production; (vi) HCFC-22 production; (vii) HFC-23 destruction processes; (viii) Lime manufacturing; (ix) Nitric acid production; (x) Petrochemical production; (xi) Petroleum refineries; (xii) Phosphoric acid production; (xiii) Silicon carbide production; (xiv) Soda ash production; (xv) Titanium dioxide production; (xvi) Municipal solid waste landfills; and (xvii) Manure management systems.

(2) Listed source categories with 25,000 MT CO₂e or more per year [§98.2(a)(2)]: a facility

that contains any source category, defined in Subparts C through JJ of the rule, which include: (i) Ferroalloy Production; (ii) Glass Production; (iii) Hydrogen Production; (iv) Iron and Steel Production; (v) Lead Production; (vi) Pulp and Paper Manufacturing; and (vii) Zinc Production.

(3) Facilities that are not included in either (1) or (2) above and emit 25,000 MT CO₂e or more per year in combined emissions, that have an aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility of 30 MMBTU/h or greater.

(4) All suppliers of coal-to-liquid products, petroleum refineries, natural gas and natural gas liquids, industrial GHGs, CO₂; importers and exporters of these products with 25,000 MT CO₂e or more,

How Does the 25,000 MT CO₂e translate into fuel consumption?

25,000 MT CO₂e is generally represents 456 MMSCF/yr of natural gas or 10,512 short ton/yr of bituminous or to 2.63 million gallons per year of diesel either imported, exported or combusted using the CO₂e calculation formula (Equation A-1 of the rule), and Tier 1 Calculation Methodology of General Stationary Fuel Combustion Sources (Equation C-1 in Subpart C of the rule).

What are the general monitoring, reporting, recordkeeping and verification requirements? [§98.3]

The GHG report due March 31 each year shall contain: (1) for facilities, aggregated emissions in MT of CO₂e for all GHGs, and each CO₂, CH₄, N₂O, fluorinated GHGs in MT; (2) for suppliers, annual quantities of GHGs that would be emitted from combustion or use of the products supplied, imported, and exported including aggregated GHGs in MT of CO₂e, each GHG and combined fluorinated GHGs in MT.

The report must be submitted electronically, and must be signed, dated, and certified by the

designated representative of the owner or operator.

Special provisions for reporting year 2010 are the best available monitoring methods (BAMM). The owners or operators must decide by January 30, 2010 if it is not reasonably feasible to acquire, install, and operate a required piece of monitoring equipment by April 1, 2010. EPA will not approve BAMM beyond December 31, 2010. Therefore, the owners or operators must identify current used monitoring methods, supplier data, engineering calculations, or other company records as BAMM to request for extension of the use of BAMM by *January 30, 2010*.

EPA indicates that data verification will be reviewed by the agency. The record must be retained by the facility for at least 3 years, including a list of all units, operations, process, and activities, the data used to calculate the GHG emissions, the annual GHG reports, missing data computations, and a written GHG Monitoring Plan [§98.3(g)(5)]. The owners or operators have 45 days to revise the GHG report if discovering or being notified by EPA of errors in the report.

Conclusion

The owners or operators should review their current facilities, their practices, and compare them against the current mandatory reporting rule requirements to determine necessary actions while preparing for the first BAMM deadline (January 30, 2010) if any, GHG Monitoring Plan, Quality Assurance Performance Plan and the first annual GHG report on March 31, 2011. For additional information, please contact Providence at the contact information listed below.

The highlights discussed above are the summary to the Final Mandatory Reporting of Greenhouse Gases Rule signed by the EPA Administrator on September 22, 2009. For details of the rule, refer to 40 CFR Part 98 and related subparts.

<http://www.epa.gov/climatechange/emissions/ghgrulemaking.html>

EPA will host a number of in-person and Web-based training sessions for people involved with reporting under the Mandatory Reporting of Greenhouse Gases Rule. More information on this training can be found at.

<http://www.epa.gov/climatechange/emissions/training.html>

For further questions concerning this rule and other air quality management issues, please contact:

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