

Articles

EPA Greenhouse Gas Reporting Starts January 2010

November 16, 2009

On September 22, 2009, the U.S. Environmental Protection Agency (EPA) issued its final Mandatory Greenhouse Gas Reporting Rule that will impact most large industrial and manufacturing facilities as well as suppliers of fuels and industrial gases.¹ Reporting requirements will take effect for the calendar year starting January 1, 2010, only three months from now. Legal challenges to the final rule must be filed by December 29, 2009.

EPA's Mandatory Greenhouse Gas Reporting Rule is a critical component of a multi-tiered EPA strategy to regulate emissions of greenhouse gases under existing federal Clean Air Act authority.² See Andrews Kurth Client Alert.

Why Does This Rule Matter?

EPA's mandatory reporting rule will be the foundation for future climate change legislation and/or regulation. Emissions data reported will: (a) allow EPA and Congress to identify sectors and individual facilities that can be subjected to mandatory emissions reductions or control technology under existing Clean Air Act authority or new legislation; (b) allow EPA to track emissions baselines and the trend of industry and facility emissions over time; and (c) provide public access to emissions data (as well as production data) through EPA's website, emissions reports and other formats.

Background. EPA proposed its mandatory reporting rule on April 10, 2009,³ in response to a Congressional mandate to gather data on economy-wide greenhouse gas emissions under EPA's existing authority under the federal Clean Air Act.⁴

Significant changes from the April 2009 proposed rule include:

- The number of source and supply categories that facilities and suppliers must report from has been reduced from 42 to 31.
- A mechanism for facilities and suppliers to cease annual reporting by reducing their GHG emissions has been added.
- Exemptions for combustion of unconventional fuels, flares, hazardous waste and emergency equipment have been added.

Sectors Affected. The following industrial sources of greenhouse gases will be affected by the rule. Note that many facilities will be subject not only to requirements for their particular source category, but also must include emissions from ancillary emissions sources such as fuel combustion units (Subpart C), on-site landfilling (Subpart HH) and wastewater treatment (Subpart II). Reporting is on the facility level for process emissions and energy use (using a geographic definition and EPA's traditional "common control" test) and on a facility basis for fuel and industrial gas suppliers but a corporate basis for fuel and gas imports and exports.

- Adipic Acid Production
- Aluminum Production
- Ammonia Manufacturing
- Cement Production
- Electricity Generation
- Electronics Manufacturing⁵
- Ethanol Production⁶
- Ferroalloy Production
- Fluorinated Gas Production⁷
- Food Processing⁸
- Glass Production
- HCFC-22 Production and HFC-23 Destruction

Articles

- Hydrogen Production
- Iron and Steel Production
- Landfills (MSW)⁹
- Lead Production
- Lime Manufacturing
- Magnesium Production¹⁰
- Manure Management¹¹
- Miscellaneous Uses of Carbonate
- Mobile Sources (Vehicles and Engines)
- Nitric Acid Production
- Oil and Natural Gas Systems
- Petrochemical Production
- Petroleum Refineries
- Phosphoric Acid Production
- Pulp and Paper Manufacturing
- Silicon Carbide Production
- Soda Ash Manufacturing
- Sulfur Hexafluoride (SF6) (Electrical Equipment)
- Suppliers of Coal,¹² Coal-based Liquid Fuels, Natural Gas and Natural Gas Liquids, Petroleum Products, Industrial GHG or Carbon Dioxide
- Titanium Dioxide Production
- Underground Coal Mines¹³
- Wastewater Treatment¹⁴
- Zinc Production

Gases Covered. The rule requires reporting for carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) from combustion units, CH₄ from any on-site landfills and CH₄ from any on-site wastewater treatment, as well as HFCs, PFCs and other fluorinated gases.¹⁵ Reporting is generally in metric tons of carbon dioxide or its equivalent in global warming potential¹⁶ (CO₂e).

Emissions Threshold. In general, facilities must report their greenhouse gas emissions if annual (calendar year) aggregate emissions (including process emissions, combustion, landfilling and wastewater treatment) at the facility exceed 25,000 metric tons of CO₂e. Although certain heavy industry sectors must report all greenhouse gas emissions (regardless of size), these facilities almost certainly will emit greater than 25,000 tons CO₂e per year. Suppliers of fuels and industrial gases must calculate the emissions that would be created through combustion or use of their products downstream (including exports). This threshold is relatively low, roughly equal to the annual emissions from a large industrial boiler, approximately 450 million cubic feet of natural gas, 2.4 million gallons (58,000 barrels) of fuel oil, 131 railcars of coal, or a 17,000-sq.-ft. commercial building.

Facilities can escape reporting if annual emissions are less than 25,000 tons CO₂e for 5 consecutive years or less than 15,000 tons CO₂e for 3 consecutive years. This provides some relief from EPA's usual "once in-always in" approach.

Exemption for Smaller Facilities. Certain facilities with aggregate maximum rated heat input capacity less than 30 million British thermal units per hour (30 mmBtu/hr) will be presumed to be under the 25,000 ton/year threshold.

Start Date. The rule effectively starts January 1, 2010 – i.e., at the end of this year. The first annual report must be submitted to EPA by March 31, 2011, for emissions during calendar year 2010. All reports must be submitted electronically.

Articles

Reporting/Recordkeeping. Reporting will be at the facility level, and may require sub-reporting of specific sources and process units within the facility. The rule contains detailed formulas and reporting protocols for emissions calculations, as well as provisions covering monitoring plans, maintenance logs, quality assurance procedures, and reporting of production levels and process or operational changes. Missing data provisions require use of conservative estimates to fill in data gaps. Records must be retained for 3 years and may be audited by EPA. EPA will recognize CBI procedures pursuant to 40 C.F.R. Part 2, but these protections are somewhat limited in the context of reporting emissions under Clean Air Act § 114. Process and production information may be difficult to protect.

Certification. The reported data must be accompanied by a management-level certification, similar to Clean Air Act Title V procedures, stating that the data is true and accurate based on reasonable inquiry by management, and subject to civil and criminal penalties for false statements.

Enforcement. Failure to fully report, monitor emissions, or keep records will be subject to administrative, civil or criminal penalties pursuant to Clean Air Act Section 113 and other law, including penalties of up to \$37,500 per day. Certification of reports submitted to EPA are potentially subject to civil and criminal penalties if EPA determines a facility's report or certification constitutes a false statement.

For more information please contact:

Paul M. Bohannon

Waterway Plaza Two, 10001 Woodloch Forest Dr., Suite 200
The Woodlands, TX 77380
713.220.4193 or
pbohannon@andrewskurth.com

Lisa M. Shelton

111 Congress Avenue, Suite 1700
Austin, TX 78701
512.320.9222 or
lisashelton@andrewskurth.com

Roger D. Feldman

1350 I Street, NW, Suite 1100
Washington, DC 20005
202.662.3048 or
rogerfeldman@andrewskurth.com

Shemin V. Proctor

1350 I Street, NW, Suite 1100
Washington, DC 20005
202.662.3052 or
sproctor@andrewskurth.com

-
1. 74 Fed. Reg. 56260 (Oct. 30, 2009), to be codified at 40 C.F.R. Part 98.
 2. CAA §§ 114 and 208.
 3. Mandatory Reporting of Greenhouse Gases: Proposed Rule, 74 Fed. Reg. 16,448 (Apr.10, 2009) (proposed rule). The public comment period ended June 9, 2009.
 4. Fiscal Year 2008 Consolidated Appropriations Act (H.R. 2764), Pub. L. 110-161, 121 Stat. 1844, 2128 (Dec. 26, 2007).
-

Articles

5. Reporting for electronics manufacturing has been deferred pending further analysis and data collection.
6. Reporting for ethanol production has been deferred pending further evaluation of proposed Subpart HH (Landfill emissions) and Subpart II (Wastewater Treatment emissions). Stationary fuel combustion sources at ethanol plants are subject to Subpart C.
7. Reporting for fluorinated gas production has been deferred pending further analysis and data collection in light of technical challenges in measuring emissions.
8. Emissions reporting for the food processing industry has been deferred until EPA finalizes reporting rules for on-site landfills and wastewater treatment plants and considers comments submitted by industry stakeholders. However, fuel combustion sources at food processing plants will be subject to reporting if emissions exceed the 25,000 ton per year threshold.
9. Industrial landfills are not covered by the rule pending further evaluation.
10. Emissions from magnesium production are covered under Subpart OO (Industrial Gas Supply) but may be regulated separately in the future.
11. Covers GHG emissions from manure management systems (stabilization and/or storage) only, not including daily spread or pasture/range/paddock systems or land application activities or off-site activities such as land application or composting operations. For those manure management systems that include digesters, CH₄ generated and destroyed, as well as any CH₄ leakage, at the digester must be reported.
12. Reporting for coal suppliers has been deferred pending assessment of legal authorities.
13. Reporting for underground coal mines has been deferred pending further evaluation.
14. Reporting for industrial on-site wastewater treatment has been deferred pending further evaluation of data collection options and recent technical studies. Centralized domestic wastewater treatment plants remain exempted as proposed in the draft rule.
15. The rule also covers hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF₆) and other fluorinated gases including nitrogen trifluoride (NF₃) and hydrofluorinated ethers (HFE) from various sources.
16. For example, methane has a global warming potential 21 times and nitrous oxide a GWP of 310 times that of carbon dioxide, respectively.