

Client Alert

Latham & Watkins Environment, Land &
Resources Department

EPA Announces Proposed Mandatory Greenhouse Gas Reporting Program to Apply to Nearly All Sectors of the US Economy

In what is being hailed as a first step toward the development of mandatory emissions reduction programs, this week the US Environmental Protection Agency (EPA) announced a proposed rule to require reporting of greenhouse gas (GHG) emissions from nearly all sectors of the US economy.¹ The rule would apply to upstream producers of sources of GHGs as well as downstream emitters. In total, EPA estimates that the proposed rule will apply to approximately 13,000 facilities, accounting for 85 to 90 percent of the GHGs emitted in the US.

EPA developed the proposed rule in response to language in the FY2008 Consolidated Appropriations Act directing the agency to develop a program "to require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy ..."² An accompanying explanatory statement directs EPA to include in the rule both upstream and downstream sources, to the extent the agency deems it appropriate; determine thresholds of emissions above which reporting will be required; and determine how frequently reports should be submitted.³ Based on this direction and using the agency's existing authority under the Clean Air Act, EPA is proposing an annual reporting program that will begin in 2010 and will apply to:

- upstream suppliers of fossil fuels or industrial GHGs;
- manufacturers of vehicles and engines; and
- downstream facilities primarily emitting 25,000 metric tons or more per year of GHG emissions.

The rule proposes that covered entities report emissions of the most commonly known GHGs, namely carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), chlorofluorocarbons (CFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆), in addition to other fluorinated gases such as nitrogen trifluoride (NF₃) and hydrofluorinated ethers (HFEs).⁴ According to EPA, the substances chosen are the most abundantly emitted GHGs that result from human activity, they are not controlled by other mandatory federal programs, and, with the exception of CO₂ emissions data reported by electric generating units subject to the Acid Rain Program, data on the emissions of these GHGs are not reported under any other mandatory federal program.

Comments to the proposed rule must be received on or before 60 days after the date the proposed rule is published in the Federal Register.⁵ EPA has so far scheduled two public hearings regarding the rule, one to take place on April 6 and 7, 2009 in Arlington,

"Covered entities under the proposed rule will need to begin collecting data on January 1, 2010."

Virginia, and one on April 16, 2009 in Sacramento, California.

EPA indicated in its preamble to the proposed rule that the agency is particularly interested in receiving comments regarding: (1) the reporting thresholds and whether they result in an appropriate number of entities being subject to the reporting program; (2) the methodologies for data collection and reporting of GHG emissions, including information regarding the technical feasibility, costs and relative improvement in accuracy of direct measuring of GHG emissions at facilities; (3) whether the frequency and year of reporting chosen by the proposed rule will allow for timely collection of data to help shape future policy decisions; and (4) whether the proposed verification approach is appropriate and whether there are alternative approaches that could ensure complete, accurate and timely data delivered with minimum costs and burdens imposed on covered entities. Each of these subjects is discussed in turn in this *Alert*.

Covered Entities and Reporting Thresholds

Under the proposed rule, EPA has identified five categories of entities that are subject to reporting requirements:

(1) Owners and operators of downstream facilities⁶ that include any of the following source categories in any calendar year starting in 2010:

- Electricity-generating facilities that are subject to the Acid Rain Program, or that contain electric generating units that collectively emit 25,000 metric tons of CO₂e or more per year
- Adipic acid production
- Aluminum production
- Ammonia manufacturing
- Cement production
- Electronics–Semiconductor, microelectricmechanical systems (MEMS) and LCD manufacturing

facilities with an annual production capacity that exceeds the following thresholds–Semiconductors: 1,080 m² silicon, MEMS: 1,202 m² silicon, LCD: 235,700 m² LCD

- Electric power systems that include electrical equipment with a total nameplate capacity that exceeds 17,820 lbs (7,838 kg) of SF₆ or PFCs
- HCFC-22 production
- HFC-23 destruction processes that are not co-located with a HCFC-22 production facility and that destroy more than 2.14 metric tons of HFC-23 per year
- Lime manufacturing
- Nitric acid production
- Petrochemical production
- Petroleum refineries
- Phosphoric acid production
- Silicon carbide production
- Soda ash production
- Titanium dioxide production
- Underground coal mines that are subject to quarterly or more frequent sampling by the Mine Safety and Health Administration of ventilation systems
- Municipal landfills that generate CH₄ in amounts equivalent to 25,000 metric tons CO₂e or more per year
- Manure management systems that emit CH₄ and N₂O in amounts equivalent to 25,000 metric tons CO₂e or more per year

(2) Owners and operators of downstream facilities that emit 25,000 metric tons CO₂e or more per year in combined emissions from (i) stationary fuel combustion units, (ii) miscellaneous use of carbonates, and (iii) any of the following identified source categories, in any calendar year starting in 2010:

- Electricity Generation
- Electronics–Photovoltaic Manufacturing
- Ethanol Production
- Ferroalloy Production
- Fluorinated Greenhouse Gas Production
- Food Processing
- Glass Production

- Hydrogen Production
- Iron and Steel Production
- Lead Production
- Magnesium Production
- Oil and Natural Gas Systems
- Pulp and Paper Manufacturing
- Zinc Production
- Industrial Landfills
- Wastewater

(3) Owners and operators of facilities with stationary fuel combustion sources with an *aggregate* maximum rated heat input capacity of 30 mmBtu/hr or greater *and* emissions of 25,000 metric tons CO₂e or more per year, in any calendar year starting in 2010;

(4) Suppliers of coal, coal-based liquid fuels, petroleum products, natural gas and natural gas liquids, industrial GHGs, and CO₂ in any calendar year starting in 2010; and

(5) Manufacturers of mobile sources and engines, which includes, among other things, manufacturers of passenger cars, light trucks, medium-duty passenger vehicles, heavy-duty engines, personal watercraft, highway motorcycles, and jet and turboprop aircraft engines.⁷

EPA estimates that most small businesses would fall below the 25,000 metric ton threshold and would be exempt from the reporting program. Additionally, EPA is proposing to exempt most emission sources from the agriculture sector and other land uses, stating that reporting methods to estimate facility-level emissions for these sources can be difficult to implement and likely to yield unreliable data. The proposed rule does not exempt livestock operations with GHG emissions from manure management systems that meet or exceed the threshold of 25,000 metric tons. The agency estimates that fewer than 50 very large livestock operations would meet this threshold.

EPA's asserted goals are: (1) to ensure that the source categories emitting the most significant amounts of GHGs in the US today are included in the rule, while

still minimizing the number of entities required to report; and (2) to ensure that data collection methods exist for each source category to ensure an appropriate level of accuracy in the data.

The agency selected 25,000 metric tons per year of CO₂e as the threshold for most covered entities after considering two lower thresholds (1,000 and 10,000 metric tons per year) and one higher threshold (100,000 metric tons per year). The 25,000 threshold was viewed by many as sufficiently capturing the majority of GHG emissions in the US without ensnaring thousands of small businesses within the rule's requirements. The agency "concluded that a 25,000 metric ton threshold suited the needs of the reporting program by providing comprehensive coverage of emissions with a reasonable number of reporters and that having a uniform threshold was an equitable approach."⁸

EPA estimates that the majority of downstream sources covered by the proposed rule are large facilities in the electricity generation or industrial sectors that are already collecting much of the required data and performing the emissions measurements and quantifications that would be required under the new reporting scheme. For the upstream suppliers, EPA reasons that including them in the reporting program avoids having to include far more smaller sources of downstream facilities and emitters. The agency acknowledges that the result will be double-reporting, given that the downstream facilities that are covered by the proposed rule will in many cases have obtained fossil fuels and industrial GHGs from upstream producers also covered by the rule. According to EPA, "[t]his double-reporting is nevertheless consistent with the appropriations language, and provides valuable information to EPA and stakeholders in the development of climate change policy and programs. Policies such as low-carbon fuel standards can only be applied upstream, whereas end-use emission standards

can only be applied downstream. Data from upstream and downstream sources would be necessary to formulate and assess the impacts of such potential policies."⁹

Reporting Requirements and Methodologies

The required reports would include total annual GHG emissions in metric tons of CO₂e aggregated for all listed source categories and for all upstream supply categories to allow EPA to compare total GHG emissions across facilities in varying categories that emit different types of GHGs. Additionally, reports would present annual mass GHG emissions for each source category and supply category, by gas, which would allow the agency to quantify the relative contribution of each individual gas to a source category's emissions.

The specific reporting requirements will depend on the source category. For example, reporting could be required for each individual emitting unit for some source categories, but for each process line for other source categories. In addition to GHG emissions, the rule requires reporting certain activity data used to generate the emissions data, such as fuel use and feedstock inputs.

Generally, any downstream facilities covered by the proposed rule will be required to report both total facility-level data and emissions for each of the source categories identified in the rule. For example, a petroleum refinery covered by the rule would have to report emissions resulting from stationary combustion, refinery production processes, wastewater, onsite landfills and any other source categories listed in the rule as well as total emissions for the refinery. In such instances—where one facility is likely to have multiple source categories—the covered entity will need to identify and follow the monitoring and reporting methods provided in multiple sections of the proposed rule. In the petroleum refinery example,

for instance, that entity would need to review, among other sections: (1) Subpart C of the proposed rule covering general stationary fuel combustion sources; (2) Subpart Y covering petroleum refineries; (3) Subpart HH covering landfills; and (4) Subpart II covering wastewater treatment.

For upstream fossil fuel or industrial GHG suppliers, the proposed rule identifies the specific reporting requirements for each type of supplier. For instance, coal suppliers must report the CO₂ emissions that would result from the complete combustion or oxidation of coal supplied during the calendar year.¹⁰

Rather than requiring all covered facilities to implement direct emissions measuring wherever possible, the rule proposes using a combination of direct emission measurements and facility-specific calculations. Specifically, those facilities that already use direct measurement, for instance through the use of continuous emissions monitoring systems (CEMS), to collect and report data under other federal programs will be required to use those systems to collect and report data under the proposed rule. Those facilities that do not currently have such systems installed would have the choice to either directly measure emissions or use facility-specific GHG calculation methods outlined in the proposed rule. These methods vary depending on the source category and could include mass balance; measuring a facility's use of fuels, raw materials, or additives combined with site-specific measured carbon content of these materials; or other procedures that rely on facility-specific data. For supplier source categories, the proposed rule requires reporting production, import and export data. According to EPA, using this approach will still result in high quality data to develop future climate change policies while striving to minimize the imposed costs on regulated entities.

The proposed rule does not require the use of a third party to verify data. Instead, the rule would require that covered entities self-certify that the information submitted to the EPA is truthful, accurate and complete. EPA will then review the emissions and supporting data to verify completeness.

Reports would be submitted electronically to EPA, and they would be made available to the public. The proposed rule would also impose record-retention requirements, requiring covered entities to retain and make available for EPA certain records used to create the GHG emissions data for five years, including lists of all covered units; the operations, processes and activities for which GHG emissions are calculated; the data used to calculate the GHG emissions; and the process used to collect the necessary data.

Data Collection and Reporting Schedule

Covered entities under the proposed rule will need to begin collecting data on January 1, 2010. The first annual report would be submitted to EPA in 2011 for the data collected during 2010, except for vehicle and engine manufacturers, which would begin reporting for model year 2011. Covered entities must submit reports annually. Electric generating units that are subject to the Acid Rain Program would be required to continue to report CO₂ mass emissions quarterly, as required by that program, and would also provide annual GHG emissions reports.

Once subject to the proposed rule, covered facilities must continue to submit annual reports even if they fall below reporting thresholds—with the exception of coal mines, which EPA acknowledges should not be subject to continued reporting requirements once all of the coal has been extracted. Recognizing that the continued

reporting requirements might create a disincentive for facilities to reduce their emissions, EPA is specifically requesting comment on whether, alternatively, the proposed rule should create an exemption for facilities that fall below applicable thresholds for three consecutive years.

Conclusions and Recommendations

The scope of EPA's proposed GHG reporting program is ambitious and will potentially impose significant new regulatory burdens on thousands of facilities across the country. Those who could be affected by this new program should review the provisions of the proposed rule carefully and get involved in the comment process as soon as possible to ensure that EPA understands the impact the program could have on the US economy and has accurate data to help build a program that minimizes the regulatory burdens placed on covered entities.

Endnotes

- ¹ A copy of the proposed rule, the rule's preamble, and additional supporting documents and information about the reporting program is available on EPA's Web site at <http://epa.gov/climatechange/emissions/ghgrulemaking.html>.
- ² See Consolidated Appropriations Act 2008, Pub. L. No. 110-161, 121 Stat. 1844 (2007) ("...not less than \$3,500,000 shall be provided for activities to develop and publish a draft rule not later than 9 months after the date of enactment of this Act, and a final rule not later than 18 months after the date of enactment of this Act, to require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy ...").
- ³ See Consolidated Appropriations Act, 2008, Committee Print of the House Committee on Appropriations on H.R. 2764/Public Law 110-161 at 1254-1255.
- ⁴ See proposed 40 C.F.R. § 98.6 for definitions.
- ⁵ At the time of this writing, EPA had not yet published the proposed rule in the Federal Register.

⁶ According to the rule preamble, facility means “any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse gas. Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties.” EPA, Mandatory Reporting of Greenhouse Gases Preamble at 69, n.30.

⁷ See proposed 40 C.F.R. § 98.2.

⁸ EPA, Mandatory Reporting of Greenhouse Gases Preamble at 102.

⁹ EPA, Mandatory Reporting of Greenhouse Gases Preamble at 93.

¹⁰ See proposed 40 C.F.R. § 98.372.

If you have any questions about this *Client Alert*, please contact one of the authors listed below or the Latham attorney with whom you normally consult:

Janice M. Schneider
+1.202.637.2261
janice.schneider@lw.com
Washington, D.C.

Claudia M. O'Brien
+1.202.637.2181
claudia.o'brien@lw.com
Washington, D.C.

Elizabeth Johnson Klein
+1.202.637.2369
elizabeth.klein@lw.com
Washington, D.C.

Client Alert is published by Latham & Watkins as a news reporting service to clients and other friends. The information contained in this publication should not be construed as legal advice. Should further analysis or explanation of the subject matter be required, please contact the attorney whom you normally consult. A complete list of our *Client Alerts* can be found on our Web site at www.lw.com.

If you wish to update your contact details or customize the information you receive from Latham & Watkins, please visit www.lw.com/LathamMail.aspx to subscribe to our global client mailings program.

Abu Dhabi	London	Paris
Barcelona	Los Angeles	Rome
Brussels	Madrid	San Diego
Chicago	Milan	San Francisco
Doha	Moscow	Shanghai
Dubai	Munich	Silicon Valley
Frankfurt	New Jersey	Singapore
Hamburg	New York	Tokyo
Hong Kong	Northern Virginia	Washington, D.C.
	Orange County	