

## **Proposed EPA Rule Mandatory Reporting of Greenhouse Gases**

On March 10, 2009, the Environmental Protection Agency (EPA) released a pre-publication draft of a proposed rule to require the reporting of the emissions of manmade greenhouse gases (GHGs) in the United States. The rule is required by the FY2008 Consolidated Appropriations Act signed by President Bush to collect economy-wide data on facility-level GHG emissions that will be essential for determining future climate change policy decisions. No reductions of GHG emissions are required by this rule, and it does not suggest any decision by EPA regarding the regulation of GHG under the Federal Clean Air Act.

Reportable GHG emissions include carbon dioxide (CO<sup>2</sup>), methane, nitrous oxide, and fluorinated gases\* from three types of major sources:

- Power and industrial facilities that emit 25,000 metric tons of CO<sup>2</sup>equivalent (mt CO<sup>2</sup>e) or more per year
- Suppliers of fossil fuels or industrial GHGs
- Manufacturers of motor vehicles and engines

These annual facility-wide threshold limits were chosen to cover from 85-90 percent of total national GHG emissions while minimizing the impacts on small businesses. It is estimated that although up to 30,000 facilities may need to determine if they are affected by the rule, approximately 17,000 facilities will likely be required to report their emissions.

The rule proposes specific requirements for approximately 35 different categories of “downstream” sources with direct emissions of GHGs into the atmosphere. Examples include:

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| • Stationary Fuel Combustion Sources<br>(boilers, turbines, engines, incinerators,<br>process heaters) | • Lime Manufacturing           |
| • Electrical Generation  | • Oil and Natural Gas Systems  |
| • Cement Production  | • Petrochemical Production     |
| • Electronics Manufacturing  | • Petroleum Refineries         |
| • Ethanol Production   | • Pulp and Paper Manufacturing |
| • Food Processing  | • Landfills                    |
|  | • Wastewater Treatment         |
|  | • Manure Management            |

Emissions from most downstream sources will be reported at the facility level and may be broken down into data from several of the source categories (i.e. fuel combustion, wastewater, process units).

The rule assumes that fuel combustion equipment with a maximum rated heat input capacity of less than 30 million Btu per hour (30 mmBtu/hr) emits less than the 25,000 mt CO<sup>2</sup>e threshold that would trigger the reporting requirement. For comparison, EPA estimated that over 80 percent of commercial buildings with boilers generate less than 10 mmBtu/hr. The 25,000 mt CO<sup>2</sup>e threshold is also equal to the annual use or consumption of 58,000 barrels of oil, 131 railcars of coal, or 2,200 households.

\* GHGs covered by the United Nations Framework Convention on Climate Change (UNFCCC)

The rule excludes all agricultural operations except for the largest 40-50 livestock operations with manure management systems. Although some agricultural activities exceed the 25,000 mt CO<sup>2</sup>e threshold, the calculation methodologies contain too much uncertainty to achieve program goals.

The rule also requires the reporting of GHGs from several types of “upstream” sources that supply fuels or chemicals that contribute to GHG emissions from the large numbers of smaller, distributed sources or activities that use these products. Source categories include Petroleum Products, Natural Gas and Natural Gas Liquids, Coal and Coal-based Products, and CO<sup>2</sup> and Industrial GHG Suppliers. Most of these upstream supplier sources will be required to report production, import, and export data at the corporate level as necessary to allow for the calculation of emissions levels. Some “double counting” of emissions will occur from facilities that are both upstream and downstream sources; however, EPA has indicated that this is necessary to obtain the level of information required to support future climate change planning processes.

Motor vehicle and engine manufacturers will incorporate GHG emissions into the current standard pollutant and fuel economy testing and reporting procedures.

Facilities will be allowed to self-certify the completeness and quality of the information provided, and EPA will review the data to verify that it meets the reporting requirements. Large sources which already collect and report data for other pollutants using continuous emissions monitors (CEMS) may be required to upgrade those monitors to also record CO<sup>2</sup> or other GHGs emissions. Other facilities would have the option of installing CEMS or using facility-specific GHG calculation methods developed for each category of sources identified in the rule. Additional information on certain process operating data necessary to calculate, quality control, and verify GHG emissions will also be reported.

In developing the proposed rule, EPA conducted a comprehensive review of existing voluntary and mandatory GHG reporting programs and guidance documents, as well as other national pollutant reporting requirements. It attempted to craft the rule to utilize the lessons learned and to avoid duplications of effort and other inconsistencies that would interfere with the continued implementation of those programs or place unnecessary burdens on sources affected by this new rule.

Facilities will be required to begin monitoring and collecting GHG emissions data beginning in 2010 with the first report due to EPA by March 31, 2011. Vehicle and engine manufacturers will begin reporting with the 2011 model year. Reports will be required annually.

The proposed rule will be open for public comment for 60 days from the date it is published in the *Federal Register*. EPA has schedule two public hearings on April 6 and 7, 2009 (Arlington, VA; Sacramento, CA). It is specifically soliciting comments on a number of critical components of the rule, such as the appropriateness of threshold limits, calculation methodologies, frequency of reporting, verification approach, and the potential role of state and local governments in administering the rule.

Carl R. Griffith & Associates can provide information and analyses on the impact of the proposed rule on specific operations or sources and can assist in the preparation of comments to EPA to address concerns or recommendations. We can also conduct a comprehensive assessment of facility operations and assist clients in formulating and implementing a plan to begin collecting appropriate data in accordance with the rule and to prepare required reports for submission to EPA.