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### EPA Greenhouse Gas Reporting Rules Expanded to Oil and Gas, Enhanced Oil Recovery

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On March 22, 2010, the U.S. EPA issued three proposed rules expanding EPA's Mandatory Greenhouse Gas Reporting Rule to three new industrial sectors: (1) Carbon Capture and Storage (CCS); (2) Oil and Gas; and (3) Fluorinated Gases.<sup>1</sup> The greenhouse gas reporting rule, which was originally promulgated on October 30, 2009 (effective January 1, 2010), was applicable to approximately 10,000 facilities in 31 source categories (such as iron and steel, glass, cement, engines, and pulp and paper), but coverage of certain sectors was deferred for further study. See Andrews Kurth Client Alert, November 16, 2009.

The proposed rules would require reporting of global warming emissions from the three new sectors starting in calendar year 2011. EPA will accept public comment on the proposed rules for 60 days following their publication in the Federal Register, or until approximately the end of May 2010. The reporting rules lay the groundwork for forthcoming emissions control regulations of greenhouse gases, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. See Andrews Kurth Client Alert, September 25, 2009. Affected companies should study the rules and consider submitting comments. A public hearing will be held on the CCS and Oil and Gas rules in Arlington, VA on April 19, 2010.

#### **Carbon Capture and Sequestration**

The new reporting rule imposes monitoring and reporting requirements on downstream users of CO<sub>2</sub> in enhanced oil recovery (EOR) operations or geological sequestration (GS) facilities such as saline aquifers or gas storage formations. Both EOR and CS are critical components of CCS, which is considered one of the leading potential solutions to climate change. EPA has stated that the new monitoring rule will also be implemented in conjunction with new proposed rules for injection of CO<sub>2</sub> in Class VI wells under the Safe Drinking Water Act's Underground Injection Control (UIC) Program.

The CCS rule proposes to impose annual reporting of CO<sub>2</sub> injection amounts for the calendar year 2011, with the first report due to EPA by March 31, 2012. The rule also allows EPA to collect data on the efficacy of geological sequestration sites for long-term storage of CO<sub>2</sub>. Storage facilities would be required to develop and implement site specific monitoring, reporting, and verification (MRV) plans, approved by EPA (the rule makes this provision voluntary for facilities that inject CO<sub>2</sub> for enhanced oil and gas recovery and are not involved in storage). The cost of reporting at each permanent storage well is estimated to be \$300,000 per year.

#### **Petroleum and Natural Gas**

The new rule expands the types of businesses in the oil and gas sector subject to reporting beyond those subject to EPA's original proposed rule.

The rule will apply to approximately 3,000 facilities in the following categories:

- onshore petroleum and natural gas production
- offshore petroleum and natural gas production
- onshore natural gas processing
- natural gas transmission and natural gas distribution facilities (i.e., pipelines and distribution)
- underground natural gas storage
- LNG storage and LNG import and export facilities.

Petroleum and natural gas industry participants with significant vented and fugitive emissions of CO<sub>2</sub> and methane would be required to report emissions beginning January 1, 2011, with facility-level reports submitted annually using a special definition of "facility." Combustion emissions of carbon dioxide, methane and nitrous oxide from flaring is also covered. The

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rule requires reporting for facilities emitting 25,000 metric tons of CO<sub>2</sub> equivalent per year (approximately 1,000 tons of methane). Notably, the focus of the proposed rule has shifted from direct measurement of emissions to modeled and/or estimated reporting.

At the same time as EPA is requiring greenhouse gas reporting, the American Carbon Registry announced on March 29 that it approved the first U.S. carbon offset methodology for a fugitive methane emission reduction project in the oil & gas sector, which will enable oil & gas companies to generate carbon offset credits by retrofitting pneumatic controllers to reduce fugitive emissions of methane.

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### Fluorinated Greenhouse Gases

EPA is imposing reporting for five source categories of fluorinated greenhouse gases:

- electronics manufacturing
- fluorinated gas production
- sulfur hexafluoride in electric power systems
- manufacturers of electrical equipment
- importers of pre-charged equipment and closed-cell foams.

Fluorinated gases include hydrofluorocarbons (HFCs), nitrogen trifluoride (NF<sub>3</sub>), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). The rule would apply to facilities that emit 25,000 metric tons of CO<sub>2</sub> per year or more, based on global warming potential, which in the case of fluorinated gases can be on the order of 10,000:1 or more, so the amounts are quite small in terms of mass. As with the other proposed rules, data collection would begin on January 1, 2011, and the first facility-level reports would be due to EPA on March 31, 2012 (for emissions during 2011). A public hearing will be held in Washington, D.C. on April 20.

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These rules are part of an overall trend at EPA to use the authority provided in the Clean Air Act to regulate Greenhouse Gases. Although the rules have not yet been published in the Federal Register, a pre-publication version and additional information are available on EPA's website.

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1. Mandatory Reporting of Greenhouse Gases: Petroleum and Natural Gas Systems; Proposed Rule (Mar. 22, 2010) (40 C.F.R. Part 98, Subpart W); Mandatory Reporting of Greenhouse Gases: Injection and Geologic Sequestration of Carbon Dioxide; Proposed Rule (Mar. 22, 2010) (40 C.F.R. Part 98, Subpart RR); Mandatory Reporting of Greenhouse Gases: Additional Sources of Fluorinated GHGs; Proposed Rule (Mar. 22, 2010) (40 C.F.R. Part 98, Subpart I, L, DD, OOa and SS).