



EPA Expands the Greenhouse Gas Mandatory Reporting Rules

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Recently, the U. S. Environmental Protection Agency (EPA) published for public review and comment proposed rules titled *Mandatory Reporting of Greenhouse Gases (GHG) for Petroleum and Natural Gas Systems, and Injection and Geological Sequestration of Carbon Dioxide (CO2)* 75 Fed. Reg. 18,576, 18,608 (April 12, 2010) (40 C.F.R. Part 98, Subpart W). EPA is also proposing new reporting requirements that include additional parent company and corporate structure information not previously required. 75 Fed. Reg. 18,455.

The proposed oil and gas rules supplement EPA's GHG monitoring and reporting rules published in October 2009 for other industries, and now include offshore and onshore oil and gas activities. These proposed rules, as currently drafted, are significant to energy companies operating in the Rocky Mountain region. The proposed rules for upstream onshore oil and gas production seek to have companies aggregate their GHG emissions on a basin-wide basis for purposes of reporting, or in the alternative, aggregate at the field level.

The proposed rules also contemplate the possibility of lowering the trigger for mandatory emission reporting from the currently proposed 25,000 metric tons of CO2 equivalent threshold down to 10,000 metric tons. Because these emission reports will likely serve as an eventual baseline for determining carbon tax levels, or other form of cap-and-trade scheme or regulation, it will be important for industry to engage on this issue.

The EPA is not going to consider comments previously submitted in 2009. Comments on these proposed rules must be filed no later than June 11, 2010.

Petroleum and Natural Gas Systems (40 C.F.R. Part 98, Subpart W)

The revised proposed rules now incorporate all segments of the petroleum and natural gas industry, expanding regulatory coverage to upstream onshore activities. The proposed rules seek to require reporting on vented, fugitive,

and flare combustion emissions for facilities that emit equal to or greater than 25,000 metric tons of CO₂ equivalent per year that fall within the following source categories:

- Onshore and offshore petroleum and natural gas production
- Onshore natural gas processing plants
- Onshore natural gas transmission compression
- Underground natural gas storage
- Liquefied natural gas storage and import and export equipment
- Natural gas distribution

The 2009 rules did not include onshore petroleum and natural gas production. EPA elected to include onshore petroleum and natural gas activities based on the belief that production operations represent approximately 66 percent of fugitive, vented and incremental combustion emissions of this source category. 75 Fed. Reg. 18,614. The proposed rules define onshore petroleum and natural gas production as “all structures associated with wells (including but not limited to compressors, generators, or storage facilities), piping (including but not limited to flowlines or intra-facility gathering lines), and portable non-self-propelled equipment (including but not limited to well drilling and completion equipment, workover equipment, gravity separation equipment, auxiliary non-transportation related equipment, and leased, rented or contracted equipment) used in production, extraction, recovery lifting, stabilization, separation or treating of petroleum and/or natural gas (including condensate).” Proposed 40 C.F.R. § 98.230(a)(2). This definition includes all associated storage, all systems engaged in gathering production gas from multiple wells, and all enhanced oil recovery using CO₂. *Id.* The required reporting entity would be the operating entity listed on the state well drilling permit or operating permit and/or the owner.

The proposed rule aggregates production facilities for monitoring and reporting. Emission reporting is proposed to occur on a “basin-level,” although EPA also seeks comments on reporting instead on a “field-level.” 75 Fed. Reg. 18,614-15. EPA states “[w]here an operating entity holds more than one permit to operate wells in a basin, then all onshore petroleum and natural gas production well permits in their name in the basin, including all equipment on the well pads, would be considered one onshore petroleum and natural gas production facility for purposes of reporting.” 75 Fed. Reg. 18,614-15.

EPA also proposes to expand the GHG reporting rule to cover distribution activities. Under the proposed rules, local natural gas distribution companies are required to report emissions for all the distribution facilities they own or operate. Natural gas distribution includes all distribution pipelines (but not interstate pipeline or intrastate pipelines) and metering stations that physically deliver natural gas to end users. *See* proposed 40 C.F.R. § 98.230(a)(8). EPA

also seeks to capture information regarding the fugitive and vented emissions from valves, open-ended lines, connectors, pressure safety valves, and natural gas driven pneumatic devices.

Another significant proposed change to the Subpart W regulations is to define "vented emissions" separately from "fugitive emissions." The term "vented emissions" includes intentional or designed releases of CH₄ and/or CO₂ containing natural gas or hydrocarbons gas (not including stationary combustion flue gas) from emissions sources including, but not limited to, process designed flow to the atmosphere through seals or vented pipes, equipment blowdown for maintenance, and direct venting of gas used to power equipment (such as pneumatic devices). The term "fugitive emissions" includes those emissions which could not reasonably pass through a stack, vent or other functionally-equivalent opening. Flare combustion emissions are also included in this supplemental rule.

Companies will be required to start reporting their GHG emissions in 2011. The first annual report will be due March 31, 2010.

Geological Sequestration of CO₂ (40 C.F.R. Part 98, Subpart RR)

EPA is also proposing to add reporting requirements to cover facilities that inject CO₂ for purposes of either long-term geological sequestration or for enhanced oil and gas recovery. This is a new broadly defined source category subject to GHG monitoring and reporting. This source category includes any well or group of wells that inject CO₂ including wells for geological sequestration or for any other purposes. Proposed 40 C.F.R. § 98.440(a).

The proposed rules do not require threshold emission level to trigger reporting; rather, all CO₂ injection facilities would be required to report the quantity of CO₂ injected, the quantity of CO₂ transferred offsite, and source of the CO₂, if known. 75 Fed. Reg. 18,584. Quantity is to be determined using mass flow or volumetric flow, and measured quarterly. 75 Fed. Reg. 18,585.

In addition to the above requirements, for long-term geological sequestration operations EPA proposed reporting of: (a) the amount of leakage of CO₂ to the surface; (b) the amount of CO₂ in produced oil or gas (for long-term geological sequestration with enhanced recovery operations); (c) the amount of fugitive and vented CO₂ emissions from surface equipment; and (d) the total annual amount of CO₂ sequestered using a mass balance equation. 75 Fed. Reg. 18,586. In addition to the reporting requirements, facilities that inject CO₂ for long-term sequestration must develop and implement a site-specific monitoring, reporting, and verification (MRV) plan, where as facilities injecting CO₂ for purposes of enhanced oil and gas recovery would not be required to develop MRV plans.

According to EPA, Subpart RR would complement and build upon EPA's proposed Underground Injection control (UIC) Class VI requirements for long-term geological sequestration by imposing a monitoring strategy for detecting potential emissions and reporting data to verify the amount of CO₂ sequestered. 75 Fed. Reg. 18,580. Annualized compliance costs under this Subpart RR are estimated by EPA's to be \$300,000 for long-term sequestration facilities and \$4,000 for enhanced oil and gas recovery operations.

The first annual reports of CO₂ injection would be due to EPA by March 31, 2012 covering injection that occurred in 2011. Comments on this Subpart RR are important and should focus on the scope of the reporting requirements, the burden to industry, and the sufficiency of the reporting methodology, among other aspects of this proposed rule.

Reporting Parent Company Information (40 C.F.R. Part 98.3)

In proposed amendments, EPA seeks to modify its annual GHG emissions reporting requirements to gather more data regarding the corporate ownership structure and an operator's parent companies. 75 Fed. Reg. 18,455. Under this proposal, EPA would require entities that report GHG emissions to provide: (a) the name, physical address, and ownership status of their highest-level U.S. parent company or companies and its percentage of ownership of the reporting entity; (b) the primary and all other applicable North American Industry Classification System code(s); and (c) an indication of whether any of their reported emissions are from a cogeneration unit.

Please contact [Julia Jones](#) or [Bret Sumner](#) for additional information on the GHG Monitoring and Reporting proposed rules and the public comment process.