

Major Provisions of Mandatory Greenhouse Gas Reporting Rule

Brief Summary

On September 22, 2009, the US EPA released the final rule requiring facilities that emit 25,000 metric tons of CO₂ equivalent (CO₂e) or more per year of greenhouse gases (GHG) to report GHG emission levels annually to the EPA. This rule is intended to be economy-wide and includes reporting requirements for some beef cattle operations. Specifically for the cattle industry, the rule requires reports from facilities with “manure management systems” that have annual combined methane and nitrous oxide emissions equal to the 25,000 ton threshold level or higher. The rule states that cattle operations with fewer than 29,300 head are NOT required to report. Any cattle operation that is 29,300 head or larger that is unsure about whether its manure management system emits 25,000 tons of CO₂e should conduct a more thorough analysis to determine whether a report is required. Current cattle numbers indicate the rule is likely to require reporting from 150-180 beef cattle operations throughout the U.S. The rule was promulgated under the Clean Air Act; the current penalty for Clean Air Act violations is \$37,500 per day.

Major Provisions

- **Which Beef Cattle Operations Must Report?** - Any beef cattle operation that emits 25,000 metric tons of CO₂e or more of aggregate methane and nitrous oxide annually from its Manure Management System (MMS) must file an annual report of those emissions with the Administrator of the EPA. Cattle operations with fewer than 29,300 head are not required to report. Any cattle operation that is 29,300 head or larger that is unsure about whether its MMS emits 25,000 tons of CO₂e should conduct a more thorough analysis to determine whether a report is required.
- **What is a Manure Management System?** A “Manure Management System” is defined in the rule as “a system that stabilizes and/or stores livestock manure, litter, or manure wastewater in one or more of the following system components: . . . solid manure storage, dry lots (including feedlots) . . . deep bedding systems for cattle and swine, manure composting, and aerobic treatment.” A MMS does not include system components that are unrelated to the stabilization and/or storage of manure such as daily spread or pasture/range/paddock systems or land application activities, or any method of manure use that is not included in the definition above. In addition, the rule does not cover manure management activities located off-site from a livestock operation or off-site manure composting operations.
- **Which Emissions are NOT Required to be Reported?** - The rule only requires reporting of GHG emissions from the MMS, as defined above, of a cattle operation. Greenhouse gas emissions from other components of the operation are NOT required to be reported, including methane emissions from enteric fermentation.

- **How are Emissions Calculated?** - Emission levels must be calculated using complicated equations that EPA provides in the rule. All data except that designated as confidential business information (CBI) will be made publicly available. Regarding claims of CBI, while the EPA usually makes decisions on a case-by-case basis, in this instance the EPA will conduct a notice and comment process later this year to establish those data elements that are “emissions data” and therefore will NOT be afforded protections of CBI, and may identify classes of information that are CBI.

- **What Must be Included the Annual Report?** – Each annual report must contain the following information:
 - Facility name and address
 - Year and months covered by the report
 - Date of submittal
 - List of manure management system components at the facility
 - Fraction of manure from each animal type that is handled in each manure management system component
 - Average annual animal population for each animal type, calculated using an equation included in the rule
 - Average number of days that animals are kept at the facility for each animal type
 - The number of animals produced annually for each animal type
 - Typical animal mass for each animal type - provided in a look-up table in the rule
 - Total facility emissions
 - Annual methane emissions from the MMS
 - Volatile solids value used in equations for each animal type - provided in a look-up table in the rule
 - Maximum methane producing capacity for each animal type – provided in a look-up table in the rule
 - Methane conversion factor used for each MMS component – provided in a look-up table in the rule
 - Average ambient temperature used to select each conversion factor
 - Annual nitrous oxide emissions, calculated using an equation included in the rule
 - Nitrogen excretion rate value used for each animal type – provided in a look-up table in the rule
 - Nitrous oxide emission factor selected for each MMS component – provided in a look-up table in the rule
 - A signed and dated certification statement provided by the designated representative of the owner or operator of the cattle operation

- **How Will Reports be Certified?** – Cattle operations will be required to self-certify their emissions reports, and EPA will be responsible for verification. The certification must be done by a formally designated representative who is

responsible for certifying, signing, and submitting reports and any other submissions to the EPA. The EPA will not accept a report unless the Administrator has received a complete certificate of representation for the designated representative at least 60 days before the submission of an emission report certified by the individual. Any action taken by the designated representative under this rule will legally bind all owners and operators of the reporting facility. A certificate of representation may name one alternate designated representative who may act on behalf of the designated representative for the facility. Such representatives can be changed by submitting a new certificate of representation to the EPA.

- **How Will Reports be Revised to Correct Errors?** - Owners and operators are allowed to revise a submitted report within 45 days of discovering or being notified by EPA of errors. Documentation of the reasons for revisions must be retained for three years.
- **How Must Reports be Submitted?** – Each GHG report and certificate of representation for a facility must be submitted electronically in a format specified by the Administrator after publication of the rule. Once subject to the rule, facilities must continue to submit GHG reports annually. A facility may cease reporting only if the reports can demonstrate that reported emissions are either (1) less than 25,000 metric tons of CO₂e per year for five consecutive years, or (2) less than 15,000 metric tons of CO₂e per year for three consecutive years. If GHG emissions at the facility subsequently increase to 25,000 tons of CO₂e annually then reports must resume. If a facility goes out of business, the facility must notify the EPA that reports will cease.
- **When Must Reports be Submitted?** - The report must be submitted no later than March 31 of each calendar year for GHG emissions in the previous calendar year. For an existing cattle operation that began operations prior to January 1, 2010, the first report must be filed by March 31, 2011.
- **Who Will Verify the Reports?** – The Administrator of the EPA may review certification statements and any other credible evidence, in conjunction with a comprehensive review of the GHG reports and periodic on-site audits of selected reporting facilities to verify the completeness and accuracy of the reports.
- **What Records Must be Kept and for How Long?** – An owner or operator of a cattle operation that must report under the rule must retain all required records for at least three years. The records must be kept in an electronic or hard-copy format, and must be made available to the EPA for inspection and review by the Administrator upon request. Records may be retained offsite if readily available. Cattle operations must retain the following records:
 - A list of all units, operations, processes, and activities for which GHG emissions were calculated

- The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by type
 - The annual GHG reports
- **What is the Penalty for Noncompliance?** – Any violation of the rule is a violation of the Clean Air Act. The current penalty for such violation is \$37,500 per day, adjusted annually for inflation. Violations include failure to report GHG emissions, failure to retain records needed to verify the amount of GHG emissions, and failure to calculate emissions following the methodologies specified in the rule, among others.