Mandatory Greenhouse Gas Reporting Rule

By
Tamara McCann Thies, NCBA
Ben Weinheimer, TCFA
The FY 2008 Consolidated Appropriations Act, signed into law December 26, 2007 authorized funding for EPA to develop a regulation to require the “mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the United States.”

On April 10, 2009, EPA proposed the GHG reporting rule

- Captures 85% of US GHG emissions from direct emitters, suppliers of fossil fuels and industrial gases, manufacturers of heavy duty and off-road vehicles and engines
- Requires reporting from “manure management systems” (MMS)
- Reporting is at the “facility” level – “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.”

Congress worked on FY 2010 appropriations bills
Background

- NCBA and other organizations worked to convince Congress to delete EPA funding in the FY 2010 Interior/EPA Appropriations bill for implementation of the rule for MMS.
- Congress agreed to delete the funding:
  - “Notwithstanding any other provision of law, none of the funds made available in this or any other Act may be used to implement any provision in a rule, if that provision requires mandatory reporting of greenhouse gas emissions from manure management systems.”
- September 22, 2009, EPA Administrator Jackson signed the final GHG Reporting rule
  - Published in Federal Register October 30, 2009
  - FY 2010 Interior/EPA Appropriations bill became law October 30, 2009
- Unfortunately, the timing of these two events did not work to our advantage.
  - Outcome: certain facilities with MMS must report GHG emissions to EPA
Background

• Why am I telling you all this?
• Difficult situation: Facilities with MMS are required by law to report GHG emissions to EPA, but EPA does not have funding to implement the MMS program
• Meantime, EPA has implemented the program for other sectors of the economy required to report
  – Reports are required to be submitted electronically through a new system called e-GGRT (electronic Greenhouse Gas Reporting Tool)
  – E-GGRT accepts data inputs on step-by-step forms for each sector required to report
  – E-GGRT has not been built out with such forms for facilities with MMS
Background

- NCBA was hopeful that when FY2010 ended on September 30, 2010 the EPA would be able to use FY2011 funds to implement the program for MMS in time for our members to submit reports through the e-GGRT system by the due date, September 30, 2011.
- Unfortunately, Congress did not pass FY2011 appropriations bills and instead funded the government through “Continuing Resolution” that carried forward FY2010 funding levels and requirements.
- Consequently, no system has been put in place to date to accept reporting from MMS.
- It now appears Congress may continue to fund government using CRs thru 2012.
Background

- Question is what to do about it?
- Congress is working to prevent EPA from implementing all GHG rules under CAA, including the GHG reporting rule
- Meantime, NCBA’s Environmental Working Group and H&H attorney Denise Kennedy agree that the safest course of action for our producers is to develop our own GHG reporting form and submit it to the EPA.
- Technically, this form will not enable our producer members to comply completely with the rule (since compliance requires reporting through the e-GGRT system), but we are hopeful that submitting our own reports will help to shield our members from EPA enforcement efforts.
- If Congress fails to stop EPA, NCBA anticipates that once Congress passes a new Interior/EPA appropriations bill (for FY2012? 2013?) EPA will work to implement the rule for MMS.
Greenhouse Gas Reporting Rule and MMS

- October 30, 2009, final GHG reporting rule published in Federal Register
- Requires facilities throughout the economy that emit 25,000 metric tons of CO2 equivalent (CO2e) or more per year of GHGs to report GHG emission levels to EPA
- Rule includes reporting requirements for some beef cattle operations’ Manure Management Systems (MMS)
- Data collection began 1/1/10 (NCBA form)
  - No monitoring required for MMS
- First annual reports must be submitted to EPA by 9/30/11, for GHG emissions during 2010
Which beef cattle operations are required to report?

- Facilities with MMS that have combined methane and nitrous oxide emissions equal to the 25,000 ton threshold level or higher per year are required to report
  - 150-180 cattle operations throughout US
- Cattle operations with average annual cattle population of fewer than 29,300 head are NOT required to report
- Any cattle operation with an average annual cattle population of 29,300 head or larger that is unsure about whether its MMS emits 25,000 tpy of CO2e should conduct a more thorough analysis to determine whether a report is required
  - Average annual population is estimated by using the average number of days each animal is kept at the facility and the number of animals produced annually.
  - EPA will develop applicability tools
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) . . . 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, land application activities, or off-site manure composting operations, or any method of manure use that is not included in the definition above.
• Which emissions are NOT required to be reported?
  – Rule only requires reporting of methane and nitrous oxide emissions from the MMS of a cattle operation.
  – GHG emissions from other components of the operation are NOT required to be reported, including methane emissions from enteric fermentation
• How are Emissions Calculated?

– Emissions levels must be calculated using complicated equations that EPA provides in the rule
  • Equations taken from Intl Panel on Climate Change (IPCC)

– All data except confidential business information (CBI) will be made available to the public

– Regarding CBI, in July 2010, EPA proposed regulations to address CBI concerns for data submitted to EPA under the GHG rule.
  • Data submitted by facilities with MMS were NOT within the scope of the rulemaking due to lack of EPA funding
• CBI cont.
  – CBI rule has not been finalized

• On August 25, 2011, EPA deferred reporting of certain inputs to equations until 3/31/13 and 3/31/15, depending on difficulty in assessing legitimacy of CBI claims
  – No data elements from MMS were included within scope of rule due to lack of funding
  – Anticipate EPA will propose and finalize CBI rules for MMS when funding is restored
  – For these reasons, NCBA (and Denise Kennedy of Holland & Hart law firm) believes it makes sense for our member feedyards to withhold data, for CBI reasons, that will be used in emission equations for MMS.
  – Consequently, we anticipate our feedyard members would submit reports to EPA containing only GHG emission totals by 9/30/11
• What must be included in Annual Report?
  – Unless CBI, information below is required to be reported annually for MMS:
    • Facility name and address
    • Name, address, and % ownership of US parent company
      – Legal name and physical address of highest level US parent company(s) of reporting entity and % of ownership interest for each listed parent company as of 12/31 of year for which data are being reported according to these instructions:
        » If reporting entity is entirely owned by single US Co. that is not owned by another Co., provide that Co’s legal name/physical address as the US parent Co. and report 100% ownership
        » If reporting entity is entirely owned by single US parent Co. that is itself owned by another Co. (e.g. it is a division or subsidiary of a higher level Co.), provide legal name/physical address of the highest level Co. in the ownership hierarchy as the US parent Co. and report 100% ownership
        » If reporting entity is owned by more than one US parent Co., provide legal names/addresses of all highest level (e.g. 40%, 35%, 25%) Cos. with US ownership interest as US parent Cos, and report % ownership of each Co.
        » If reporting entity is owned by joint venture or co-op, the jt venture or co-op is its own US parent Co. Provide name/physical address of jt venture or coop as US parent co., and report 100% ownership by joint venture or coop.
        » If reporting entity is entirely owned by foreign company, provide legal name and physical address of foreign Co’s. highest level Co. based in US as US parent Co., and report 100% ownership
        » If reporting entity partially owned by foreign Co. and partially owned by 1 or more US Cos., provide legal name/physical address of foreign Co’s highest level Co. based in US, + name/physical address of US Cos., and report % ownership of each
Annual Report Requirements cont.

- Primary North American Industry Classification System (NAICS) code(s) and additional applicable NAICS codes
  - “Primary” product/activity/service is the principle source of revenue for entity
  - “Additional” NAISC codes describe all products/activities/services at reporting entity that are not related to the principle source of revenue

- Indicate whether or not (yes or no) any of reported emissions are from a cogeneration unit
  - “Cogeneration unit means a unit that produces electrical energy and useful thermal energy for industrial, commercial, or heating or cooling purposes, through the sequential or simultaneous use of the original fuel energy.”

- Year and months covered by report
- Date of submittal
- List of MMS components at facility
- Fraction of manure from each animal type that is handled in each MMS component
- Average annual animal population for each animal type (calculated using equation in rule)
- Average number of days animals are kept at facility for each animal type
- Number of animals produced annually for each animal type
– Annual Report Requirements cont.

• Typical animal mass for each animal type (default value provided in look-up table in rule, or actual average weights can be collected and reported by individual producers
• Total facility emissions
• Total annual methane emissions from MMS
• Volatile solids value used in equations for each animal type (provided in look-up table in rule)
• Maximum methane producing capacity for each animal type (provided in look-up table in rule)
• Methane conversion factor used for each MMS component (provided in look-up table in rule)
• Average ambient temperature used to select each conversion factor
• Annual nitrous oxide emissions (calculated using equation in rule)
• Nitrogen excretion rate value used for each animal type (provided in look-up table in rule)
• Nitrous oxide emission factor selected for each MMS component (provided in look-up table in rule)
• Signed and dated certification statement provided by a designated representative of owner/operator of cattle operation
  – Owner/operator representative is designated through formal process
• **Data Collection and Submission**
  – All entities must report in electronic format thru EPA’s new e-GGRT electronic reporting system
  – A Designated Representative (see below) must use an electronic signature device to submit a report
  – All emissions must be reported as metric units, i.e. kg or metric tons per unit of time
  – Quantity of each GHG emitted must be reported in two forms
    • 1. quantity of gas emitted (e.g. metric tons of N2O) per unit of time, and
    • 2. CO2e emissions per unit of time
  – EPA plans to publish on its website all data submitted that isn’t CBI
- **How Will Reports be Certified?**
  - Facilities are required to self-certify their emissions reports. EPA is responsible for verification
    - Certification must be done by formally Designated Representative (DR) who is responsible for certifying, signing, and submitting reports and any other submissions under this rule to EPA
    - EPA will not accept a report unless Administrator has received a complete Certificate of Representation for the DR at least 60 days before the submission of emission report certified by the individual
    - Any action taken by DR under this rule will legally bind all owners/operators of reporting facility
    - Certificate of Representation may name one alternate DR who may act on behalf of DR. Agents may also be named.
      - DR, Alternate DR, Agents are NOT required to be employees of reporting entity
    - DRs may be changed by submitting new Certificate of Representation to EPA
How Will Reports be Revised to Correct Errors?

- Owners/operators allowed to revise submitted report within 45 days of discovering or being notified by EPA of “substantive” errors
  - “Substantive error” is one that “impacts the quantity of GHG emissions reported or otherwise prevents the reported data from being validated or verified.”
  - Report is NOT required to be resubmitted if owner/operator provides info demonstrating that previously submitted report does not contain the identified substantive error or that the identified error is not a substantive error
  - Owners/operators may request extension of 45-day resubmission deadline to address facility-specific circumstances that arise in either correcting error or in determining whether error is in fact a substantive error
    - Owner/operator required to notify EPA by email at least 2 days prior to end of 45-day period if seek extension
    - Automatic 30 day extension if EPA does not respond to extension request by end of 45-day period – during 30 days, EPA will determine whether more days approp
  - Documentation of reasons for revisions must be kept for 3 years
• How Must Reports be Submitted?
  – Each GHG report and Certificate of Representation must be submitted through e-GGRT system
  – Once subject to the rule, always subject to the rule, unless:
    • Facility may cease reporting only if reports can demonstrate that reported emissions are either:
      1. Less than 25,000 metric tons of CO2e per year for 5 consecutive years (records for these 5 years must be kept); or
      2. Less than 15,000 metric tons of CO2e per year for 3 consecutive years (records for these 3 years must be kept)
    • If intend to cease reporting, EPA must be notified by 3/31 of year immediately following 5 or 3 years of low emissions
    • All records must be kept for 3 years following notification
    • If GHG emissions at facility later increase to 25,000 tpy of CO2e then reports must resume
  – If go out of business, EPA must be notified that reports will cease
• When Must Reports be Submitted?
  – Report must be submitted no later than March 31 of each calendar year for GHG emissions in the previous calendar year
    • First report originally supposed to be submitted by March 31, 2011, but extension to September 30, 2011

• Who Will Verify Reports?
  – EPA Administrator may review certification statements and any other credible evidence, in conjunction with comprehensive review of GHG reports and periodic on-site audits of selected reporting facilities to verify completeness and accuracy of reports
• What Records Must be Kept and For How Long?
  – All required records must be retained for at least three years
    • Must be kept in electronic or hard-copy format, and must be available to EPA for inspection and review
    • 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
      – Data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by type
      – Annual GHG reports
• What is the Penalty for Noncompliance?
  – Any violation of the rule is a violation of the Clean Air Act
  – Current penalty: $37,500 per day, inflation adjusted
  – Violations: fail to collect data, fail to report, fail to retain records, fail to calculate emissions using methodologies in rule, file false report
• Data collection for 2011 should be ongoing
In honor of Earth Day, she vowed to release no methane for 24 hours.