

(Revised January 2010 by CO SWANA)

# **UPDATE ON EPA'S FINAL MANDATORY REPORTING RULE**

**SHANNON CRAWFORD**

**MANAGER OF LEGISLATIVE AND REGULATORY  
PROGRAMS**

**Tuesday, November 3, 2009**



# WHY THE Mandatory Reporting Rule (MRR)?

- In the 2008 Appropriations Bill, EPA was directed to develop a mandatory greenhouse gas emissions reporting rule.
- Requires reporting of greenhouse gas (GHG) emissions from all sectors of the economy in the United States
- Provides accurate and timely data to draft future climate change policies and programs
- Does not require control of GHG
- The goal of the ruling is to provide EPA with a better understanding of where GHG emissions are coming from and will provide guidance on how to implement policies to reduce future GHG emissions



# BACKGROUND ON EPA'S Mandatory Reporting Rule (MRR)

- On September 22, 2009, Administrator Jackson signed the final rule for mandatory reporting of Greenhouse Gases (GHG) from large emission sources.
- This rule requires GHG reporting from sources that emit more than 25,000 metric tons of CO<sub>2</sub>e (carbon dioxide equivalent) on an annual basis.
- See EPA website:  
<http://www.epa.gov/climatechange/emissions/ghgrulemaking.html>



## How much is 25,000 MTCO<sub>2</sub> e?

Equivalent to:

- Annual greenhouse gas emissions from the energy use of approximately 2,300 homes
- Annual greenhouse gas emissions from approximately 4,600 passenger vehicles
- Majority of commercial building owners not likely to meet reporting threshold
- Applicability Tool available online to help facilities assess whether they are required to report



## Relationship to State and Regional Programs

- Rule does not preempt states (CO) from regulating or requiring reporting of GHGs. EPA rule is a limited action developed in response to a specific request from Congress and is narrower in focus than many existing State programs that are coupled with reduction programs
- No state delegation
- Reporting entities will report directly to EPA:
  - To reduce reporting burden, EPA staff is working with the Climate Registry and the Exchange Network on a data exchange standard
  - EPA is committed to working with state and regional programs to provide timely access to verified emissions data, establish mechanisms to share data efficiently, and harmonize data systems to the extent possible



## TIMELINE

- September 22, 2009 – final rule signed by EPA Administrator
- October 30, 2009 – final rule published
- December 29, 2009 – final day to petition for judicial review
- January 1, 2010 - All covered facilities must begin monitoring their applicable GHG emissions
- **January 31, 2010 – extension requests are due**
- January 1 – March 31, 2010 – facilities may use “best available monitoring methods”
- March 31, 2011 – first emissions report due



## WHO IS EFFECTED?

- **EPA has finalized requirements for 31 different sources (approx. 10,000 sites), including landfills and waste-to-energy operations. And according to EPA would cover 85% of all emissions in the US.**
- **All Waste To Energy (WTE) operations in the US would be reporting**
- **According to EPA estimates, over 2,500 landfills would be reporting under Subpart HH**

## WHAT ISN'T REPORTED

- Indirect emissions (electricity use)
- Fleet emissions
- Emissions offsets
- Carbon sequestration



# LANDFILLS IMPACTED

- MSW landfills that generate CH<sub>4</sub> in amounts equivalent to 25,000 metric tons CO<sub>2</sub>e or more per year, and;
- MSW landfills that accepted waste on or after January 1, 1980
- Excluded are:
  - Hazardous waste landfills
  - C&D landfills
  - Industrial landfills



## WHAT SIZE LANDFILL? \*\*

- 25,000 Mtons CO<sub>2</sub>e per year is a very low threshold.
- Could be as low as 282,000 tons in place (case-by-case and rule not based on size, but emissions).
- Could be as low as 185 standard cubic feet per minute (scfm) LFG at 50% CH<sub>4</sub>.

\*\* - Estimates from SWANA presentation Nov. '09.  
- Low estimates variable



## MSW LANDFILL SOURCES INCLUDE

- The landfill itself
- Landfill gas collection systems
- Landfill gas destruction devices (including the flare)
- Possibly stationary engines



# GHGs TO REPORT

- CH<sub>4</sub> generation (annual) and total CH<sub>4</sub> emissions from landfill
- CH<sub>4</sub> destruction resulting from LFG collection and combustion systems
- CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions from each stationary combustion unit
  - Would include a non-LFG fired stationary engine for instance
  - Excludes portable engines and dedicated emergency generators
- CH<sub>4</sub> and N<sub>2</sub>O are reported as CO<sub>2</sub>e, which is calculated based on Global Warming Potential (GWP)(see EPA <http://www.epa.gov/OMS/climate/420f05002.htm>).



# BEST AVAILABLE MONITORING METHODS

- Facilities are allowed to use “best available monitoring methods” (BAMM) from January 1 through March 31 of 2010. Facilities would:
  - Use emissions estimates provided in the rule
  - Obtain equation inputs using best available information, specifically current monitoring methods, engineering calculations and company data

If facilities would like to use BAMM longer than the three month grace period, they must request an extension by January 31 directly to EPA.

No extensions will be granted for BAMM beyond December 31, 2010.



# MONITORING REQUIREMENTS

- Mass of incoming waste
- Concentration of CH<sub>4</sub> with a gas composition\* monitor
  - If existing system has a continuous CH<sub>4</sub> monitor, must keep and use.
- LFG flow rate with gas flow meter\*
  - Calibration required
  - Correction for temp., pressure, and moisture (if reading dry)
  - Eight potential methods

\* For landfills with collection systems



## HOW TO SUBMIT REPORT

- EPA is currently developing an electronic reporting system to ease the logistical burden on reporters
- It will be web-based and is designed to “guide reporters through data entry and submission”
- Electronic reporting systems allows for built-in calculation and completeness checks for reporters
- Allows self-certification with EPA verification of reporting data.



# How Will Emissions Be Verified?

## ○ Self certification

- Designated representative certifies and submits report
- Rule allows one designated representative for each facility and supplier

## ○ EPA verification

- Reports submitted through an electronic system
- Built-in calculation and completeness checks for reporters
- Additional EPA electronic QA and consistency checks
- Site-specific and on-site audits



## ENFORCEMENT – FINAL RULE

- Failure to accurately monitor and report GHG emissions could result in enforcement action by the EPA under Clean Air Act (CAA) sections 113 and 203-205.
- Civil and administrative penalties of up to \$37,500 a day per violation.
- Potential Offenses
  - Failure to report GHGs
  - Failure to collect data needed to calculate GHGs
  - Failure to monitor continuously and test as required
  - Failure to calculate GHG emissions as specified
  - Failure to keep required reports needed for verification
  - Falsification of reports



## ENFORCEMENT (CON'T)

- Although the wording in the ruling is very severe, EPA clarifies in the preamble they intend to be flexible on a case-by-case basis.
- CAA allows EPA discretion to pursue a variety of informal and formal actions in order to achieve compliance.
- EPA stresses that based on past enforcement experience, less punitive actions are exhausted before fine and more punitive penalties are imposed on a non-complying source.
- EPA is not laying out a specific policy in order to maintain flexibility



## EXITING THE PROGRAM

- In the proposed rule, there was no provision for exiting the program, essentially once-in, always-in
- To address this, EPA has added a mechanism in which facilities may cease reporting of emissions
  - After five consecutive years below 25,000 tons CO<sub>2</sub>e
  - After three consecutive years below 15,000 tons CO<sub>2</sub>e
  - If GHG-emitting processes or operations shut down.



## Final Rule – Special Provisions for 2010

- In January 2010, due to numerous questions and comments from owners, operators and other interested parties (i.e. SWANA), the EPA has allowed for some flexibility for the year 2010 reporting year.
- Special provisions include:
  - Abbreviated reporting (limited to stationary fuel combustion sources only).
  - Use of Best Available Monitoring Methods (BAMM) through March 31, 2010 (extension to Dec. 31, 2010 only in limited cases and must be requested by Jan. 31, 2010.)
  - Postponement of equipment calibration beyond April 1, 2010.
  - Monitoring Plans developed and on site by April 1, 2010.



# EPA Website and Additional Resources

## ○ USEPA Website for GHG:

<http://www.epa.gov/climatechange/emissions/ghgrulemaking.html>

## **National SWANA Contact:**

Shannon Crawford

Manager of Legislative and Regulatory Programs

240-494-2241 – direct

Check into various webinars offered by EPA and SWANA.

**➔ Next EPA webinar is Wed., January 20, 2009.**

## **Colorado Rocky Mountain SWANA Contacts:**

Neil Nowak, Weaver Boos Consultants #720.529.0132

Cathryn Stewart, AquAeTer #303.771.9150

Cameron Beul, Golder Assoc. #303.980.0540



# QUESTIONS? COMMENTS?

Neil C. Nowak, PE  
Director - Colorado Rocky Mountain  
SWANA

Legislative Programs  
ph. 720-529-0132

[nnowak@weaverboos.com](mailto:nnowak@weaverboos.com)