Developments in U.S. National Climate Change Policy

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Overview

- Current EPA Policy Developments Impacting the Future
  - GHG Reporting Rule
  - GHG Endangerment Findings
  - Other EPA Actions/CAA Issues
- Congressional Developments
- International Developments
- Conclusions

Strong Engagement in EPA

"These long-overdue findings cement 2009's place in history as the year when the United States Government began addressing the challenge of greenhouse-gas pollution and seizing the opportunity of clean-energy reform.

Business leaders, security experts, government officials, concerned citizens and the United States Supreme Court have called for enduring, pragmatic solutions to reduce the greenhouse gas pollution that is causing climate change.

This continues our work towards clean energy reform that will cut GHGs and reduce the dependence on foreign oil that threatens our national security and our economy."

EPA Administrator Lisa P. Jackson – Remarks on Endangerment Finding 12/7/2009

Mandatory Reporting Rule: Overview

- Prepared in response to the FY2008 Consolidated Appropriations Act – Dec. 26, 2007
- First Federal rule requiring mandatory reporting of GHG emissions from large sources
- Intended to collect accurate and timely emissions data to inform future policy decisions
- April 10, 2009: Proposed rule published in the Federal Register
- Sept. 22, 2009: Final rule signed by EPA Administrator Jackson
- Collecting this information under the CAA:
  - Does not require an endangerment finding
  - Does not make GHGs a regulated pollutant under the Prevention of Significant Deterioration (PSD) program

Source Categories in the Final Rule*

Upstream Sources	• Suppliers of Coal-based Liquid Fuels • Suppliers of Petroleum Products • Suppliers of Natural Gas and Natural Gas Liquids • Suppliers of Industrial GHGs • Suppliers of Carbon Dioxide (CO2)
Downstream Sources	• General Stationary Fuel Combustion Sources • Electricity Generation • Adipic Acid Production • Aluminum Production • Ammonia Manufacturing • Cement Production • Ferroalloy Production • Glass Production • HCFC-22 Production and HFC-23 Destruction • Hydrogen Production • Iron and Steel Production • Lead Production • Lime Manufacturing • Miscellaneous Uses of Carbonates • Nitric Acid Production • Petrochemical Production • Petroleum Refineries • Phosphoric Acid Production • Pulp and Paper Manufacturing • Silicon Carbide Production • Soda Ash Manufacturing • Titanium Dioxide Production • Zinc Production • **Municipal Solid Waste Landfills** • Manure Management
Mobile Sources	•Vehicles and engines outside of the light-duty sector (light-duty in NPRM to *Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Fuel Economy Standards)*

* We delayed inclusion of the following source categories as we consider the comments and options: Electronics Manufacturing, Ethanol Production, Fluorinated GHG Production, Food Processing, Magnesium Production, Oil and Natural Gas Systems, Sulfur Hexafluoride (SF_6) from Electrical Equipment, Underground Coal Mines, **Industrial Landfills**, Wastewater Treatment, Suppliers of Coal

Rule Summary

Reporter:

- Facility based reporting for all source categories for which there are methods (limited exceptions)
- *No major changes from proposed rule*

Threshold:

- A facility that meets the general emissions threshold of 25,000 metric tons or more of CO_2e/year reports all source categories for which there are methods in the rule
- Capacity thresholds where feasible
- *No major changes from proposed rule*

Methodology:

- Direct measurement of stationary combustion source categories where data currently collected (e.g., CO_2 emissions from EGUs in Acid Rain Program)
- Facility-specific calculation methods for other source categories at the facility
- *Major changes from proposed rule:*
  - *Best available monitoring methods may be used from 1/1/2010-3/31/2010*
  - *Streamlined and reduced reporting burden regarding required methodologies*

Rule Summary (cont.)

Frequency: Annual

- Data collection will begin January 1, 2010, with first reports submitted to EPA March 31, 2011
- Exception: Facilities already reporting quarterly for existing mandatory programs (e.g., Acid Rain Program) will continue to report quarterly
- *Major changes from proposed rule: Added mechanisms to allow facilities and suppliers to cease submitting annual reporting in special cases*
  - *1) Facilities or suppliers report less than 25,000 metric tons of CO_2e for 5 consecutive years, or less than 15,000 metric tons CO_2e for 3 consecutive years*
  - *2)Facilities or suppliers shut down GHG-emitting processes or operations covered by the rule.*

Verification: EPA verifies reports

- Reporter self-certifies emissions data and other specified activity data and submits to EPA who performs verification of reports
- *No major changes from proposed rule*

Mandatory Reporting Rule: MSW Landfills

- Municipal Solid Waste Landfills (Subpart HH) are included as a source category in the final rule
- How is this category defined?
  - Applies to owners/operators of MSW landfills
  - Does not include industrial, hazardous waste, or construction and demolition landfills
  - Landfills that accepted waste on or after January 1, 1980 and *generate* methane in amounts equal to or more than 25,000 metric tons of CO_2e per year
- What must be reported annually?
  - Modeled CH4 generation and emissions
  - CH4 destruction
  - CO2, CH4, and N2O emissions from stationary fuel combustion

Additional Information about the Mandatory GHG Reporting Rule

- Preamble and final regulatory text available at our website:
  - After publication in the Federal Register , it will also be available at www.regulations.gov
- Additional information including a training schedule: www.epa.gov/climatechange/emissions/ghgrulemaking.html
- Hotline:
  - Telephone: 1-877-GHG-1188
  - Email: GHGMRR@epa.gov

Endangerment: Background

- April 2, 2007– In *Massachusetts v. EPA*, the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act
- EPA was required to determine whether:
  - GHG emissions from new motor vehicles cause or contribute to air pollution;
  - This air pollution may reasonably be anticipated to endanger public health or welfare; or
  - The science is too uncertain to make a reasoned decision
- Endangerment finding is a prerequisite for using section 202 of the Clean Air Act to regulate GHGs

Endangerment Findings

- EPA Administrator signed endangerment & cause or contribute findings for GHGs under Clean Air Act:
  - **Endangerment Finding:** The Administrator finds that elevated atmospheric concentrations of six greenhouse gases taken in combination endanger both the public health and public welfare of current and future generations.
  - **Cause or Contribute Finding:** The Administrator also finds that the combined emissions of these greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas air pollution that endangers public health and welfare under section 202(a) of the Clean Air Act.

Endangerment: Next Steps

- Findings themselves to not impose requirements on industry or other entities
- Findings a prerequisite for regulation of GHGs under Clean Air Act
- Timeline:
  - December 7, 2009 – Findings signed by Administrator
  - December 15, 2009 – Final findings published in *Federal Register*
  - January 15, 2010 – Final rule will be effective
- More information available at: http://www.epa.gov/climatechange/endangerment.html

Other Key EPA Actions

- Granted California's request for a waiver for its GHG vehicle standard (74 FR 32744, July 8, 2009)
- NPRM to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Fuel Economy Standards (signed September 15, 2009)
- NPRM: "Prevention of Significant Deterioration and Title V GHG Tailoring Rule" (Signed September 30, 2009)
- EPA must respond to a number of pending CAA issues
  - Multiple petitions to set standards for mobile sources related to aircraft, ships, other non-road engines (e.g. construction)
  - Multiple legal actions related to setting new Source Performance Standards for GHGs (e.g., EGUs and industrial boilers, cement, refineries, landfills)

Proposed Rule: PSD and Title V Tailoring Rule

- Focused on large facilities emitting over 25,000 $MTCO_2e$ per year – would require permits that demonstrate best available control technology
- Proposes *new major source thresholds for GHGs* that define when permits under NSR and Title V would be required
  - Title V – from 100 tons/yr to 25,000 tpy CO2e
  - NSR-PSD – from 250 tons/yr to 25,000 tpy CO2e and a significance level between 10,000 and 25,000 tpy CO2e
- Proposed thresholds would "tailor" the permit programs to limit which facilities would be required to obtain NSR and Title V Permits
  - Covers nearly 70 percent of national GHG emissions from
  - Excludes small farms, restaurants, and many other small facilities
- Absent the proposed tailoring rule, the existing thresholds would automatically take effect for GHGs with the adoption of any EPA rule that controls or limits GHG emissions

Ongoing Congressional Activity

- House passed American Clean Energy and Security Act of 2009
  - Clean Energy Title – Federal RES – incentives for LFGE
  - Section 811 – NSPS for sources greater than 10,000 $MTCO_2e$
- Draft Senate climate bill—Kerry-Boxer Clean Energy Jobs & American Power Act—released September 30, 2009
  - Differences from House bill: slightly more ambitious targets; price collar on carbon permits; fewer international offsets allowed; EPA retains authority to regulate GHGs under CAA
  - Allocations not specified
  - NSPS delayed until 2020 – opportunity for offsets
- Current legislative framework focuses on cap and trade, but also other policy tools, like:
  - Energy efficiency
  - Renewable Energy

International – Copenhagen Accord

- At the 15th meeting of Conference of the Parties (COP) to the UNFCCC countries agreed to "taking note of" the Accord
  - Not legally binding, but marks a significant step forward for international action
  - Supported by well over 100 countries
- Four key elements to the Accord
  - Frames a long-term goal – keep global temperature increase below 2 degrees C
  - Commitments by developed and developing countries to undertake mitigation actions
  - Provides for transparency and verification measures
  - Commitment to financing - $30 billion over the next 3 years and a goal of mobilizing $100 billion a year by 2020 (range of public and private)
- Next steps – operationalize the Copenhagen Accord and achieve a legally binding agreement that reflects balanced commitments by all major economies.

Things to Watch

- Progress in the Senate
  - Climate Bill – multiple committees involved
  - Energy Provisions
- International negotiations
- Ongoing Actions under Clean Air Act

Conclusions – Moving Forward

- Change is underway
  - A lot of policy uncertainty, but strong focus on tackling climate change
- Methane reductions are an important part of climate protection and offer significant co-benefits
  - Potent greenhouse gas, clean energy source
  - Address near-term warming
- Opportunity to act now
  - Technically feasible, cost-effective reductions available
  - Minimize impact of any future regulatory regime
- Full spectrum of policies and measures being considered
  - Use Partnership to prepare for the future

Contacts and Resources

Thank you!

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