

# **Developments in Climate Change Policy**

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# Overview



- **GHG Reporting Program**
- **Endangerment Finding**
- **Other EPA Climate Actions**
- **International Engagement**
- **Final Thoughts**

# **GHG Reporting Program (GHGRP)**



- **Required by FY08 Appropriations Act – Dec. 26, 2007**
- **Final rule published in Federal Register in October 2009**
  - ~10,000 facilities monitored emissions starting on Jan 1, 2010
  - First reports are due March 31, 2011
- **GHGRP will provide accurate and timely emissions data to inform future climate policy decisions**
  - Does not require control of GHG

# Source Categories Reporting



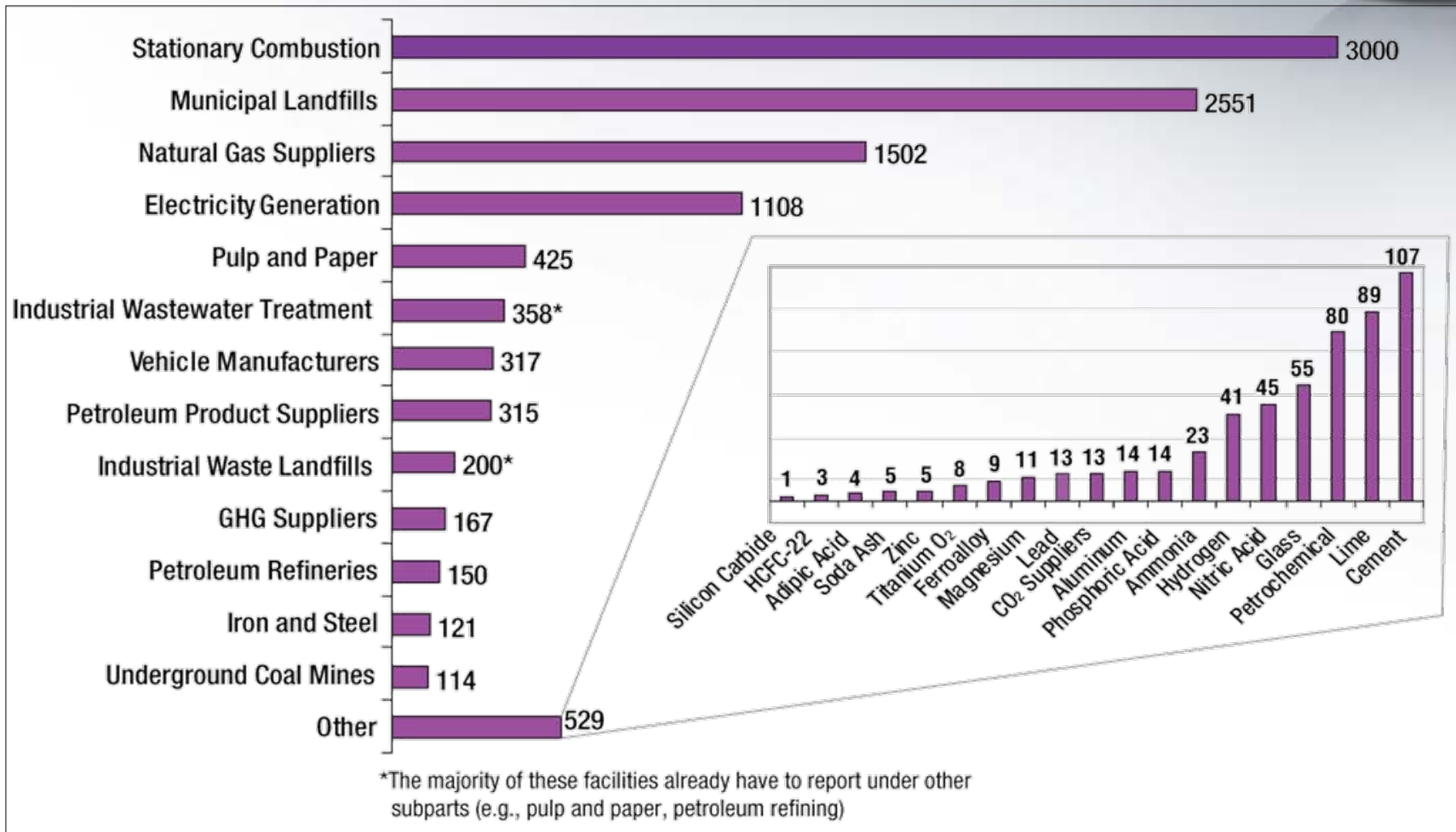
Stationary Combustion  
Electricity Generation (Part 75)  
Adipic Acid Production  
Aluminum Production  
Ammonia Manufacturing  
Cement Production  
HCFC-22 Production/  
HFC-23 Destruction Processes  
Lime Manufacturing  
Misc. sources of Carbonate  
Nitric Acid Production  
Petrochemical Production  
Petroleum Refineries  
Phosphoric Acid Production  
Silicon Carbide Production  
Soda Ash Production  
Titanium Dioxide Production  
Municipal Solid Waste Landfills  
Manure Management<sup>1</sup>  
Underground Coal Mines<sup>2</sup>

Ferroalloy Production  
Glass Production  
Hydrogen Production  
Industrial Wastewater Treatment<sup>2</sup>  
Industrial Waste Landfills<sup>2</sup>  
Iron and Steel Production  
Lead Production  
Magnesium Production<sup>2</sup>  
Pulp and Paper Manufacturing  
Zinc Production  
CO<sub>2</sub> injection<sup>2</sup>  
Geologic sequestration<sup>2</sup>  
Petroleum and natural gas systems<sup>2</sup>  
Electrical equipment manufacture and  
refurbishment<sup>2</sup>  
Electronics manufacturing<sup>2</sup>  
Fluorinated GHG production<sup>2</sup>  
Import/export of pre-changed equipment and  
closed cell foams<sup>2</sup>  
Use of electric transmission and distribution  
equipment<sup>2</sup>

<sup>1</sup>not implemented in 2010 due to Congressional restriction

<sup>2</sup> first report due in 2012

# About 10,000 U.S. Facilities Covered



# MSW Landfills in GHGRP



- 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<sub>2</sub>e per year
- What must be reported Annually?
  - Modeled CH<sub>4</sub> generation and emissions
  - CH<sub>4</sub> destruction
  - CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions from stationary fuel combustion

# For More Information about the GHG Reporting Rule



- There will be a more detailed presentation on the GHGRP during this conference
- Check the website:
  - Subpart HH information sheet and a monitoring checklist: <http://epa.gov/climatechange/emissions/subpart/hh.html>
  - Preamble and final regulatory text: [www.epa.gov/climatechange](http://www.epa.gov/climatechange)
    - Also available at: [www.regulations.gov](http://www.regulations.gov)

# If You Still Have Questions...



- Check the searchable Frequently Asked Questions (“FAQ”) database
- Submit your question using the Hotline Email:  
[GHGMRR@epa.gov](mailto:GHGMRR@epa.gov)
  - EPA will respond in writing
  - Answers are posted to the FAQ database
- If you are required to report this year, training for e-GGRT (electronic GHG reporting tool) is underway
  - User registration module training is available online
  - The reporting module is now available at:  
<https://ghgreporting.epa.gov>
  - <http://www.epa.gov/climatechange/emissions/data-reporting-system.html>



# 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 Findings



- December 7, 2009 – Administrator issued two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act
  - **Endangerment Finding:** Current and projected concentrations of the mix of six key greenhouse in the atmosphere threaten the public health and welfare
  - **Cause or Contribute Finding:** Combined emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key greenhouse gases, and hence to the threat of climate change
- As part of development of final finding, EPA did a comprehensive review of the science
  - 380,000 public comments; 11,000 significant
  - Many raised issues with the science and provided literature
  - Response to Comments document thoroughly addresses all comments

# The Public Health and Public Welfare Elements of the Endangerment Findings



- **Public Health**

“The Administrator has considered how elevated concentrations of the well-mixed greenhouse gases and associated climate change affect public health by evaluating the risks associated with changes in air quality, increases in temperatures, changes in extreme weather events, increases in food- and water-borne pathogens, and changes in aeroallergens.”

“Finally, the Administrator places weight on the fact that certain groups, including children, the elderly, and the poor, are most vulnerable to these climate-related health effects.”

- **Public Welfare**

“The Administrator has considered how elevated concentrations of the well-mixed greenhouse gases and associated climate change affect public welfare by evaluating numerous and far-ranging risks to food production and agriculture, forestry, water resources, sea level rise and coastal areas, energy, infrastructure, and settlements, and ecosystems and wildlife.”

# Endangerment Petitions



- EPA received 10 administrative petitions for reconsideration for the Endangerment Findings.
- Petitions were denied July 29, 2010.
- With this decision, EPA decided there was no scientific or other basis to change its 2009 finding that climate change caused by emissions of greenhouse gases threatens public health and the environment.

“The endangerment finding is based on years of science from the U.S. and around the world. These petitions -- based as they are on selectively edited, out-of-context data and a manufactured controversy -- provide no evidence to undermine our determination. Excess greenhouse gases are a threat to our health and welfare.”

-- EPA Administrator Lisa P. Jackson

- General information and FAQs available online:  
<http://epa.gov/climatechange/endangerment/petitions.html>

# Transportation and Climate



- In transportation sector, EPA has issued rules regulating GHG emissions from motor vehicles (April 1, 2010):
  - [www.epa.gov/otaq/climate/regulations.htm](http://www.epa.gov/otaq/climate/regulations.htm)
  - Joint final rule issued April 1, 2010 with Department of Transportation's National Highway Traffic Safety Administration (NHTSA)
  - Establishes national standards for MY 2012-2016 cars, SUVs, minivans, pickups, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements
  - Reduces greenhouse gas emissions by nearly 950 million metric tons
- In September 2010, EPA and NHTSA issued a Notice of Intent (NOI) to begin developing new standards for GHGs and fuel economy for light-duty vehicles in model years 2017-2025.
  - President Obama requested this in his May 21, 2010 Presidential Memorandum
- In October 2010, EPA and NHTSA announced a first-ever program to reduce GHG emissions and improve fuel efficiency of medium- and heavy-duty vehicles.
  - It is estimated that the combined proposed standards have the potential to reduce GHG emissions by nearly 250 million metric tons and save approximately 500 million barrels of oil over the life of vehicles sold during 2014 to 2018.

# Stationary Sources



- EPA finalized the “Tailoring rule” (May 13, 2010):  
[www.epa.gov/NSR/documents/20100413fs.pdf](http://www.epa.gov/NSR/documents/20100413fs.pdf)
  - Raises the emissions thresholds for GHGs, or “tailors” the CAA requirements to focus air pollution permit requirements on the largest emitting facilities
  - Beginning Jan 2, 2011, large stationary sources already subject to the PSD program will be subject to “Best Available Control Technology” requirements if their GHG permits increase by 75,000 tons CO<sub>2</sub>e
  - Beginning July 1, 2011, PSD permitting requirements will cover all new construction projects that emit GHGs of at least 100,000 tons CO<sub>2</sub>e, even if they do not exceed permitting thresholds on other pollutants
  - Ensures that small farms, restaurants, and commercial facilities will not be subject to PSD/BACT requirements
- Announcement on CO<sub>2</sub> emissions from biomass and other biogenic sources in PSD applicability and Title V (Jan 13, 2011)
  - Initiate rulemaking to defer for 3 yrs CO<sub>2</sub> emissions from biomass and other biogenic sources in applicability
    - Concurrently issue guidance to build on Nov 10 guidance related to assessing these CO<sub>2</sub> emissions in BACT
  - During that period EPA will work with independent body to assess science and technical issues related to these CO<sub>2</sub> emissions

# **New Source Performance Standards (NSPS)**



- Numerous petitions and notices before EPA on a wide variety of source categories
  - Environmental Defense Fund (EDF) filed a notice of intent to sue regarding statutory obligation to review and revise the landfill NSPS and emission guidelines
- Announcement on utility and refinery NSPS for GHGs (Dec 23, 2010)
  - Settlement agreement to issue proposed standards for utilities by July 2011 and refineries by Dec 2011
  - Represents almost 40% of US GHG emissions

# Growing International Focus on Methane



- Increased attention on methane reductions due to:
  - Rapid pace of Arctic warming
  - Growing recognition of co-benefits, especially linkage between methane emissions and background concentrations of ground-level ozone
- In October 2010, the Global Methane Initiative (GMI) was launched at a meeting in Mexico City
  - Builds on the existing structure and success of the international Methane to Markets Partnership (M2M)
  - Includes 38 country partners (up from 14 that initially joined M2M)
  - More than 1,000 public and private sector member organizations, including large multilateral development banks, technology vendors, project developers
  - The United States is pledging \$50 million over 5 years, and other developed countries are considering pledges to support implementing methane emissions reduction projects and technologies
  - For more information: <http://www.methanetomarkets.org/gmi>
- EPA continues to lead US efforts in this area, with support of our private sectors partners



# Final Thoughts



- Best prospects for Congressional action on clean energy
- EPA is moving with careful consideration within the Clean Air Act
- Actions to reduce GHGs remain important
  - Science is strong
  - Rate of change in key indicators is cause for concern
- 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
- Your continued domestic and international efforts to recover and use methane are essential

# Contacts and Resources



*Thank you!*

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