



The Impact of Federal Climate Change Legislation and Regulation on the Solid Waste Industry

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Presentation Outline

- Supreme Court Case
- EPA Endangerment Findings
- Tailoring Rule
- Federal Legislation
- Federal Mandatory Reporting
- California AB32

Supreme Court Case

- *Massachusetts v. EPA*, 549 U.S. 497 (2007)
 - Landmark decision regarding climate change and GHG
 - Supreme Court found that GHGs, including carbon dioxide, are air pollutants covered by the CAA
 - EPA tasked with determining “endangerment” of public health and welfare

EPA Endangerment Findings

- EPA made finding on December 15, 2009
 - Includes stationary and mobile sources
 - Necessary for regulation of any pollutant under the federal CAA
 - Allows them to pursue regulation under NSR, PSD, Title V, etc.
- Landfills: NSPS does not cover public health/welfare, thus landfills are subject
- EPA Policy: Any GHG standard under CAA triggers regulation under existing standards

Endangerment Findings (cont.)

- EPA/DOT proposing new GHG standard for light duty vehicles
- Once promulgated, this rule would become the triggering event for GHG regulation
- Primary impacts:
 - Title V permits: 100 tons per year (tpy); 6 million Title V permits
 - PSD permits: 250 tpy; 41,000 PSD projects
- Essentially a game of chicken with Congress, trying to force their hand to legislation

Tailoring Rule

- September 30, 2009, EPA issued a proposed “Prevention of Significant Deterioration and Title V GHG Tailoring Rule (74 FR 55292)”
 - Establishes a transition period for the implementation of PSD/Title V permitting for major sources of GHGs.
 - GHG not historically regulated and current threshold would produce “absurd” results
 - EPA claims they are trying to help us, which should frighten us all

Tailoring Rule (cont.)

- Proposed emission thresholds:
 - Title V: 25,000 ton CO₂e/year
 - PSD: 25,000 tpy; 10,000-25,000 tpy (significance levels)
- EPA estimates that “1,700 landfills may be added to the Title V program”
- Any landfill expansion would likely trigger PSD pre-construction permitting (landfill BACT)
- Reference: EPA GHG reporting rule for methods
- Industry comments through SWANA/NSWMA

Letter to EPA

- February 19, 2010 letter sent to EPA on the behalf of eight Democratic Senators
 - Plan to proceed with regulations
 - When will the U.S. Congress be able to review/address these regulations
 - Senate Joint Resolution 26 effects
 - “Tailoring rule’s” goals
 - Potential legislation effect on regulated entities

Letter to EPA (cont.)

- February 19, 2010 letter to EPA (cont.)
 - How can BACT be adhered to if there is no industry standard
 - Regulations translate into cost for industries
 - Direct and indirect cost implications for industrial sources of CAA PSD
 - If the endangerment finding was repealed, what would be the EPA's ability to address/adapt climate change effects

EPA Response

- On February 22, 2010, Lisa Jackson of EPA replied to the Senators
 - No regulation in 2010
 - Phase-in with higher threshold from 2011-2013
 - Start with existing Title V sources in 2011
- Subsequent press release:
 - 75,000 tpy for 2 years (~800 landfills)
 - Then, 50,000 (~1200 landfills)

Sen. Rockefeller: EPA Suspension

- Stationary Source Regulations Delay Act
 - Suspend for 2 years any EPA action under the CAA with respect to CO₂ or CH₄ for any stationary source permitting or any requirement under section 111 of CAA (42 U.S.C. 7411)
 - For any source other than a new motor vehicle or new motor vehicle engine, as described in section 202(a) of that Act (42 U.S.C. 7521(a))

Sen. Murkowski on the Endangerment Findings

- Senate Joint Resolution 26 introduced on January 21, 2010
- Proposed bill to vacate the endangerment findings
- Would clearly take the wheels off for EPA, but would Obama sign ?
- There are legitimate legal issues with endangerment findings
- Many lawsuits will come if EPA moves forward

Remaining Issues

- Alternative thresholds proposed by EPA are still too low and do not represent “major sources”
 - Industry Comment: 100,000 to 700,000 tpy as equivalent threshold
- EPA does not appear to be excluding fugitive emissions from landfills (reference to 40 CFR 98)
- EPA has not recognized the difference between biogenic and anthropogenic CO₂ emissions
- A lot of legal, political, and regulatory jockeying yet to come

American Clean Energy and Security Act of 2009

- House: Waxman Markey (passed the House)
 - Landfills not under cap
 - No regulation of GHG under CAA
 - But opens door for a new NSPS for uncapped methane sources (landfills)
 - RPS: LFGTE renewable
 - Landfill methane reduction viable credits for cap and trade

Clean Energy Jobs and American Power Act

- Senate: Kerry Boxer (not passed)
 - Landfills not under cap
 - GHG reductions with market incentives
 - Grants to states for RPS profiles
 - LFGTE and LFG are qualified renewable sources under this provision
 - Targets to reduce GHG emissions to 20% below 2005 targets by 2020, and 83% below 2005 targets by 2050

Climate Action and Energy Independence

- Senate: Kerry Graham Lieberman (proposed framework)
 - Landfills not mentioned in framework
 - Expanding/increased funding for:
 - Offshore drilling for oil and natural gas
 - Increase in nuclear-power plants
 - Research to reduce coal plant emissions
 - Early deployment of carbon capture and sequestration

Climate Action and Energy Independence (cont.)

- “Preserve our refining capacity without sacrificing our environmental goals.”
- “Cap-and-trade” for utility sector:
 - Program for power plants and a carbon tax or fee on motor fuels.
- Proposed cutting U.S. GHG emissions “in the range of” 17%, as measured against 2005 levels, by 2020.

EPA Mandatory Reporting Rule (MRR)

- Passed September 22, 2009 (40 CFR 98)
- Landfills directly regulated (Subpart HH)
- 25,000 MTCO₂e methane generation
- Reporting for 2010 due March 31, 2011
- No third-party verification
- Reporting of methane emissions from LFG based on gas model/actual recovery data
- Possible reporting of stationary combustion
- Additional monitoring and testing requirements
 - Deadline: April 1, 2010 (best available methods)

Impacts – EPA MRR

- Monitoring
 - Waste disposal amounts (scale house)
 - Continuous gas flow monitoring
 - Correction for temperature, pressure, and moisture if needed
 - Methane monitoring: Continuous, or at least weekly
 - Monitoring Plan

Impacts – EPA MRR(cont.)

- Reporting
 - Methane generation via model
 - Methane generation via SWICS method (actual recovery and collection efficiency)
 - Report under Subpart C (General Stationary Combustion Sources) the emissions of CO₂, CH₄, and N₂O as required
 - Methane destruction resulting from GCCSs
 - 10% methane oxidation
 - Various other landfill information

California AB 32

- Mandatory reporting (25,000 MTCO_{2e})
 - Landfills under stationary combustion (1700 scfm at 50%) or LFGTE (1 MW)
 - Third-party verification for 2009
- Landfill methane rule (coming April 2010)
 - 450,000 tons in place
 - Early install of controls
 - Enhanced SEM
 - Preview of future NSPS ???
- Cap and trade program (still to come)