The Shape of NSR with GHGs Added

or

A Simple Rule with a Not-So-Simple Implementation

Rick Sprott
Principal
Bear Claw Environmental
Climate Change in Angel Fire

Sunday Morning

CEO Site Visit, Oct 18
Presentation Overview

- Proposed PSD and Title V “Tailoring” Rule
  - The statutory threshold dilemma
  - Applicability

- Potential Impacts
  - Regulatory agency challenges
  - Regulated community Challenges

- Will present specifics proposed and rather than all the alternatives for comment
Proposal

- Proposal released Sept 30, 2009
- Published in FR on October ??, 2009
- Comments due December ??, 2009
- EPA expects to finalize in April 2010
Because four GHGs become a “regulated pollutant” in March 2010 with light-duty vehicle standard

The “regulated pollutant” is actually a group of six GHGs

- \( \text{CO}_2, \text{CH}_4, \text{N}_2\text{O}, \text{HFCs}, \text{PFCs}, \text{and SF}_6 \)
- Measure is \( \text{CO}_2\text{e} \), not mass of emissions in short tons
Statutory Dilemma

- PSD 250/100 tpy and Title V 100 tpy applicability statutory, not regulatory
- Unworkable for GHGs
- EPA uses legal doctrines of “absurd results” and “administrative necessity” to justify proposed departures from CAA
- Litigation assured, but will the rule be stayed?
Implementation - Regulatory Overload without Rule (EPA Estimates)

- **PSD**
  - 41,000 new PSD actions
  - 140 fold increase
  - 3.3 million hours for permitting/enforcement

- **Title V**
  - 6.1 million Title V sources
  - 400 fold increase
  - 340 million hours for permitting/enforcement
  - $15 billion

- **3-4 years for permitting authorities to gear up**
  - Add and train staff
  - Many states have hiring freeze in place
The “Entire” Rule – 40 CFR 51 and 70/71

- **Regulated Pollutant Definition**
  - CO$_2$, CH$_4$, N$_2$O, HFCs, PFCs, and SF$_6$
  - Metric is global warming potential (GWP) compared to metric tonnes of CO$_2$
    - e.g. CH$_4$ = 21 CO$_2$e and SF$_6$ = 23,900 CO$_2$e

- **PSD**
  - New Major Source: 25,000 CO2e/year
  - Major Modification Significance Level: 10,000 – 25,000 CO2e/year

- **Title V**
  - Major source: 25,000 CO2e/year
Proposal Effectiveness

- Captures 68% of national stationary source GHG emissions
- 87% of CO₂
- 13,661 facilities
Phased Approach

- **Means to deal with statutory conflict of proposal based on incremental implementation of statute**
  - Five years to:
    - Build capacity
    - Implement streamlining
    - Implement non-PSD measures like EE to reduce GHGs
  - Assess and propose needed changes during sixth year
Implementation – What Does it Cost?

- “Novel” RIA in Rulemaking
- Actually regulatory “relief” compared to literal application of CAA PSD and Title V
  - No discussion of cost to regulated sources
  - Analysis is limited to savings compared to using the CAA 250/100 tpy applicability levels
- Savings compared to no “tailoring” rule
  - PSD: Sources – $907 M; Gov’t - $249 M
  - Title V: Sources - $39 B; Gov’t – $15.6 B

Grand Total = $55.5 Billion
Implementation - Regulatory Relief (PSD)

- **No SIP action required for PSD change**
  - New federal rule implements for non-SIP programs
  - Proposed rule amends PSD SIP approvals
  - Rationale is either “limited approval” or “error correction” of previously approved SIPs
Implementation - Regulatory Relief (Title V)

- **Rulemaking**
  - No action required to comply with federal rule
  - Similar rationale as for PSD using “limited” Title V program approval
  - Permitting authorities need to change Title V rules to avoid different state and federal applicability

- **Fees**
  - No federal rule action
  - States must ensure adequate resources and have authority
  - EPA will be monitoring
Implementation - Regulatory “Relief”

- **EPA Streamlining Ideas**
  - Redefine PTE (e.g. thermostats vs. hours)
  - Prohibitive rules
  - Presumptive BACT
  - General Permits (but case-by-case BACT could be issue)
  - Permit by Rule (ditto)
  - e Permits
  - “Lean” permitting

- **Will also take 3-4 years**

- **What do we do until then?**
Implementation - Regulatory “Relief”

- EPA to provide more information to assist sources and permitting authorities
  - Emission factors and methods
  - GHG control technologies
  - Measurement and monitoring methodologies for key source categories

- Similar challenges as with GHG Reporting Rule methods
Implementation Forecast

Cloudy with a LOT of Hail

- PSD Applicability
  - “Aged” Puzzle Book
  - New sources with little experience with PSD
  - Determining contemporaneous emission increases
    - Difficult even with well characterized pollutants and sources
    - Lack of historical GHG emission data
    - Poor quality emission calculation methods

- PSD application requirements
  - Proposal suggests NAAQS, air quality, additional impacts, and Class I AQRV impacts not required
Implementation Forecast

*Cloudy with a LOT of Hail*

- **PSD BACT**
  - “BACT is a process; not a number”
  - *Learning curve for regulators*
  - *Huge uncertainties and legal risk*
  - *Utility example:*
    - What is BACT for coal-fired power plant?
      - CCS?
      - Fluidized bed?
      - Some % biomass?
      - NG turbine?
  - *Fertile grounds for litigation*
Implementation Forecast

Cloudy with a LOT of Hail

- Title V
  - Secondary wave following PSD actions
  - Similar learning curve
  - Fee changes
  - GHG CAM?
  - Certification risk?
Implementation Forecast

Cloudy with a LOT of Hail

- What happens in near term?
  - Critical non-GHG PSD actions during economic recovery?
  - Need flexibility to prioritize actions without sources being subject to federal enforcement or litigation
  - Scramble to “staff up” and train staff in business and government

- But wait! There’s more!

- Use of NSPS for GHG?
The “Tailoring” Rule

Questions?