

# **GHG Permitting Guidance and Related Rulemakings**

Anna Marie Wood  
Acting Director, Air Quality Policy Division, OAQPS

NACAA Fall Meeting  
Washington, D.C.  
October 20, 2010

# Overview of Presentation

- Brief refresher on the GHG Tailoring Rule
- GHG SIP Related Rulemakings
  - To include authority to regulate GHG in PSD (GHG SIP Call/FIP Rules)
  - To adopt GHG PSD thresholds in the Tailoring Rule
  - Title V counterpart rulemakings in progress
- GHG BACT Work Group Phase I and II Reports
- Tools to Facilitate GHG PSD Permitting

# The Final Tailoring Rule

- Issued on May 13, 2010
- “Tailors” the requirements to focus PSD and title V permit requirements on the largest emitting facilities
- Subjects facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources to CAA permitting requirements
  - This includes the nation’s largest GHG emitters—power plants, refineries, and cement production facilities
  - Small farms, restaurants, and commercial facilities are shielded by this rule
- “The right sources, at the right time, in a manageable way”

## Phase In Steps: Step 1

- January 2, 2011 to June 30, 2011
- No new permitting actions due solely to GHG emissions during this time period; only sources undertaking permitting actions “anyway” for other regulated pollutants will need to address GHG emissions
- Covers sources responsible for 65% of total national stationary source GHG emissions

## Phase In Steps: Step 1

- PSD Permitting Applicability:
  - “Anyway” sources will be subject to the PSD requirements only if they increase GHG emissions by 75,000 tpy CO<sub>2</sub>e or more
- Title V Permitting Applicability:
  - Only those sources currently with title V permits will address GHGs, and only when applying for, renewing or revising their permits

## Phase In Steps: Step 2

- July 1, 2011 to June 30, 2013
- Sources subject to GHG permitting requirements under step 1 will continue to be subject to GHG permitting requirements
- In addition, sources that emit or have the potential to emit GHGs at or above 100,000 tpy CO<sub>2</sub>e will also be subject to GHG permitting requirements in title V and possibly in PSD programs

## Phase In Steps: Step 2

- PSD Permitting Applicability:
  - Triggered with construction that increases emissions above certain thresholds
  - A newly constructed source (which is not major for another pollutant) will not be subject to PSD unless it emits 100,000 tpy or more on a CO<sub>2</sub>e basis
  - A modification project at a major stationary source will not be subject to PSD unless it results in a net GHG emissions increase of 75,000 tpy or more on a CO<sub>2</sub>e basis

## Phase In Steps: Step 2

- Title V Permitting Applicability:
  - A GHG emission source (which is not already subject to title V) will not be subject to title V unless it emits 100,000 tpy or more on a CO<sub>2</sub>e basis.
  - Newly subject sources must apply for a title V permit on or before July 1, 2012 (which is one year from July 1, 2011), unless the permitting authority sets an earlier deadline.
- Covers sources responsible for nearly 70% of total national stationary source GHG emissions



## Phase In Steps: Step 3

- The rule establishes an enforceable commitment to complete another rulemaking no later than July 1, 2012.
- We will propose or solicit comment on a possible step 3 of the phase-in plan
  - EPA will consider, during the implementation of step 2, whether it will be possible to administer GHG permitting programs for additional sources.
  - EPA will establish that step 3 would take effect on July 1, 2013, so that permitting authorities and sources can prepare for any additional GHG permitting actions.

## Phase In Steps: Step 3

- Step 3, if different from step 2, will not require permitting of sources with GHG emissions below 50,000 tpy CO<sub>2</sub>e
- We also commit to explore a wide range of streamlining options on which we plan to take comment in the step 3 proposal
- In addition, we plan to solicit comment on a permanent exclusion of certain sources from PSD, title V or both

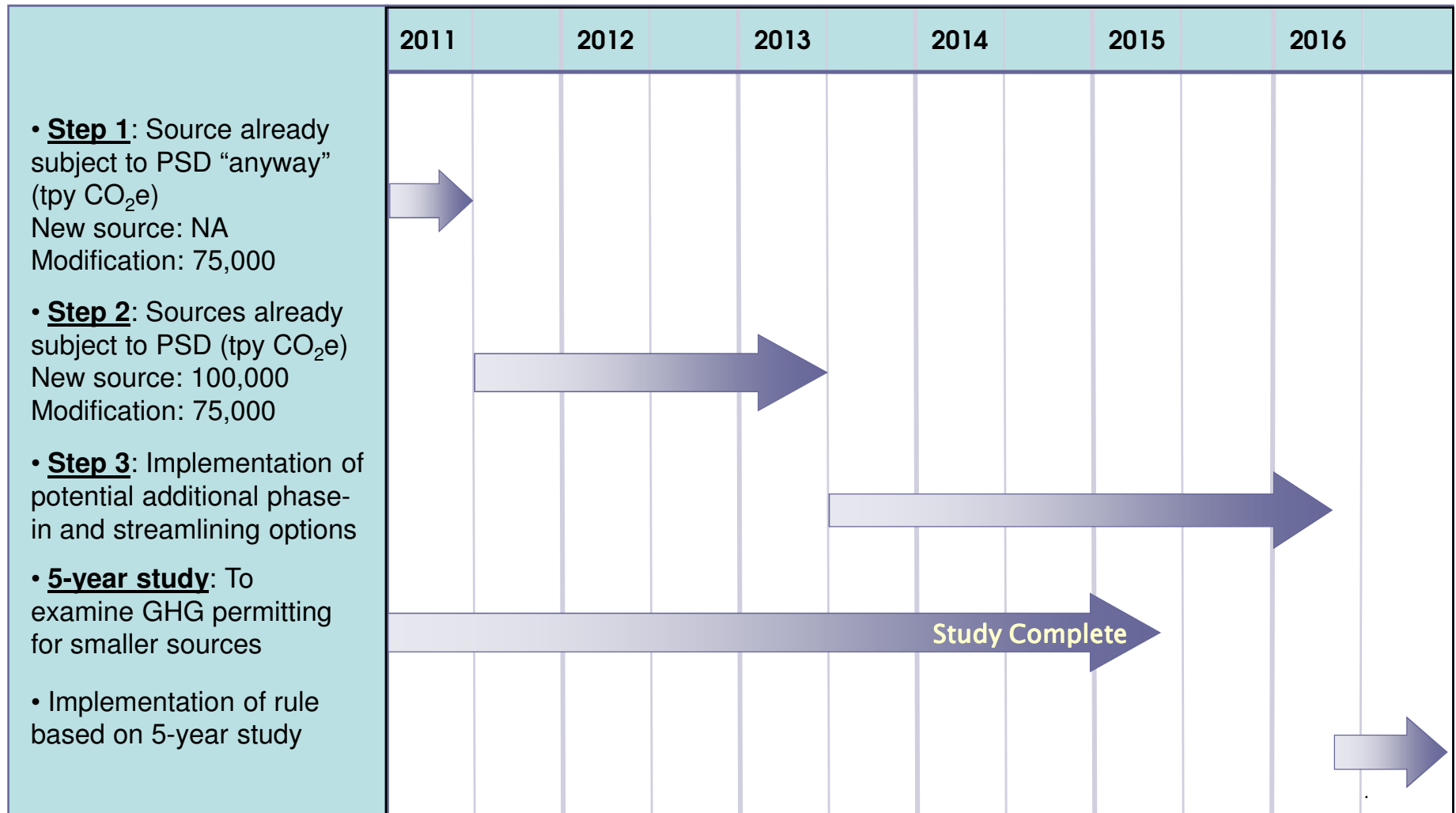
## Phase-in Steps: Further Action

- EPA will not require permits for smaller sources until April 30, 2016 or later
- The rule establishes an enforceable commitment for EPA to complete a study within 5 years projecting the administrative burdens that remain for small sources after EPA has had time to develop (and states have had time to adopt) streamlining measures to reduce the permitting burden for such sources

## Phase-in Steps: Further Action

- We will use this study to serve as the basis for an additional rulemaking that would take further action to address small sources, as appropriate.
- We are making an enforceable commitment to complete this rulemaking by April 30, 2016
- We plan to solicit comment on a permanent exclusion of certain sources from PSD, title V or both.

# Permitting Steps Under the Tailoring Rule



# GHG SIP Call/FIP Rulemaking Path

1. **SIP Call** – Proposal and final
  - Focuses on approx. 13 states that currently lack authority to regulate GHG
  - Proposed in August 2010 (published in FR 9/2/10)
  - Final to be signed and announced in early December 2010
  
2. **Finding of failure to submit** – Done by letter to the State, then announced in a FR notice
  - For States that ask for earliest SIP submittal deadline of December 1, 2010, the final finding of failure to submit will be made in late December
  
3. **FIP** – Proposal and final
  - Proposed in August 2010 (published in FR 9/2/10)
  - Final signed and announced in late December 2010
  - Comment period ended October 14, 2010 (which is 30 days after the public hearing held on September 14, 2010)

## States that need to adopt Tailoring Rule thresholds

- The purpose of the rulemaking is to serve as a back stop to ensure that all states are able to take advantage of the GHG PSD thresholds established in the Tailoring Rule, regardless of whether SIP revision to adopt Tailoring Rule thresholds is approved as of January 2, 2011
- Proposed in the Tailoring Rule
- EPA to issue a final rule to "narrow" the prior SIP approval to exclude smaller sources to implement the Tailoring Rule
  - Timing for final rule – in place before January 2, 2011
- As long as a State has changed its state laws and EPA has "narrowed" the SIP approval by January 2, 2011 the state's SIP revision to adopt TR thresholds could be approved later.

# GHG Title V Rulemakings

- **GHG Title V Narrowing Rulemaking**
  - Title V counterpart rulemaking to serve as backstop to ensure all states can take advantage of higher GHG thresholds in Tailoring Rule for GHG
  - Proposed in Tailoring Rule
  - Final promulgation end of 2010
- **GHG Title V NOD Rulemaking**
  - Title V counterpart to ensure that states currently without authority to regulate GHG under Title V have the authority to do so
  - Proposed end of 2010



# GHG BACT Workgroup – Phase I

- Phase I Report submitted to the Clean Air Act Advisory Committee on February 3, 2010
  - <http://www.epa.gov/air/caaac/climatechangewg.html>
- Phase I efforts focused on Best Available Control Technology for GHGs
- General consensus that existing Top-Down BACT Process should be used for GHGs
- Technical Recommendations: EPA should provide information about GHG control measures, including technical, economic and environmental performance data for these available and emerging measures
  - Communication of this information should be timely and widespread
  - EPA should proactively seek and provide permitting decisions related to GHGs to stakeholders
  - Adequate funding for establishment and maintenance of technical resources

# GHG BACT Workgroup – Phase I

- Guidance Recommendations:
  - Pollution prevention measures
  - Efficiency improving technologies
  - Emissions factors and calculations for GHGs
  - Monitoring requirements, averaging times and compliance test methods
  - Control techniques for GHGs, other than CO<sub>2</sub>
  - Ranking of GHGs with regard to climate change impact
- EPA should address following policy issues:
  - What does it mean for a control option to “redefine the source”
  - How to evaluate energy efficiency in a BACT analysis? Can efficiency gains elsewhere at the source and/or offsite be considered
  - How to promote new and innovative control technologies
  - How to consider CCS within a BACT process
  - How should Clean Fuels be considered in BACT
  - Carbon neutrality of biomass

## GHG BACT Workgroup – Phase II

- Phase II Report submitted to the Clean Air Act Advisory Committee: October 6, 2010
  - <http://www.epa.gov/air/caaac/climatechangewg.html>
- Work Group focused attention on how Energy Efficient Processes and Technologies (EEPT) may be incorporated into the BACT process and on changes that can be made to existing policies to better promote promising new technologies offering reductions in GHGs.
  - Focused on each step in the top-down BACT process and identified considerations a permit applicant and writer would likely need to address regarding the application of EEPTs to arrive at what constitutes BACT.
  - Investigated and provided guidance for incorporating EEPTs into top-down BACT
  - Assessed policy implications of performing top-down energy efficiency analysis at varying levels: Equipment; Production; Facility

# GHG BACT Workgroup – Phase II

## Encouraging Inherently Efficient and Lower Emitting Processes and Practices for GHGs

- Recommendations:
  - EPA should encourage use of innovative control technologies for GHGs authorizing waivers for innovative technological systems of continuous emission reduction.
  - EPA should disavow its policy set out in the Kamine Memorandum
  - EPA should formally and publicly state its views about the availability of the waiver
  - EPA should reevaluate the appropriate maximum waiver length
  - EPA should support States in their efforts to promote new and innovative technologies or techniques for GHG reductions by expressly allowing permits to specify a range of emissions limits that constitute BACT for that particular application of the new or innovative technology
- EPA should commit to:
  - Work expeditiously with permitting authorities that wish to issue permits including BACT limits based on new or innovative technologies (using the waiver provisions as needed)
  - Take steps to foster information sharing about cases in which permitting authorities use the flexibility under existing law to encourage new and innovative technologies

# Tools to facilitate GHG PSD permitting

- Tools
  - GHG PSD/Title V Guidance
  - GHG control technology white papers for 7 sectors
  - GHG enhancements to the RACT/BACT/LAER Clearing House
  - GHG Mitigation Strategies Database
  - EPA GHG Permitting Action Team
  - Training and outreach under development
- Timing
  - Fall 2010

# Status of GHG PSD Permitting Guidance

- Currently at OMB undergoing interagency review, timing for completion of review hopefully in near future; however specific timing uncertain.
- EPA will provide public comment opportunity on guidance, once issued. Will focus review on comments on the guidance pertaining to calculation and/or other technical errors that are submitted.
- Will consider other comments as we move forward, do not intend to respond to comments, not a formal rulemaking action.
- EPA will continue to closely monitor guidance implementation post Jan 2011 and provide clarifications and supplement as needed.
- EPA will assess whether additional guidance is needed, depending on implementation experience

# GHG Permitting Resources

## One Stop Shopping GHG PSD Permitting Website:

- GHG PSD Permitting Guidance
- ORD GHG Mitigation Strategies Database
  - Including performance and cost data on current/developing GHG control measures
  - Current focus on EGUs and cement plants
- RACT/BACT/LAER Clearinghouse Enhancements
  - Formatting improvements to include GHG control and test data, links to State permits, GHG message board, etc.
- GHG Control Measures White Papers
  - Summarizes technical information on sector-specific control options
  - EGU, Cement, Refineries, Iron and Steel, Pulp and Paper, Industrial Boilers, Nitric Acid Plants
- Information about the EPA GHG Permitting Action Team
  - Name, email and phone number for points of contacts for each Region on GHG PSD permitting questions

**Training and outreach materials under development**

# Questions, Comments, or Feedback?

