

Update on GHG Permitting

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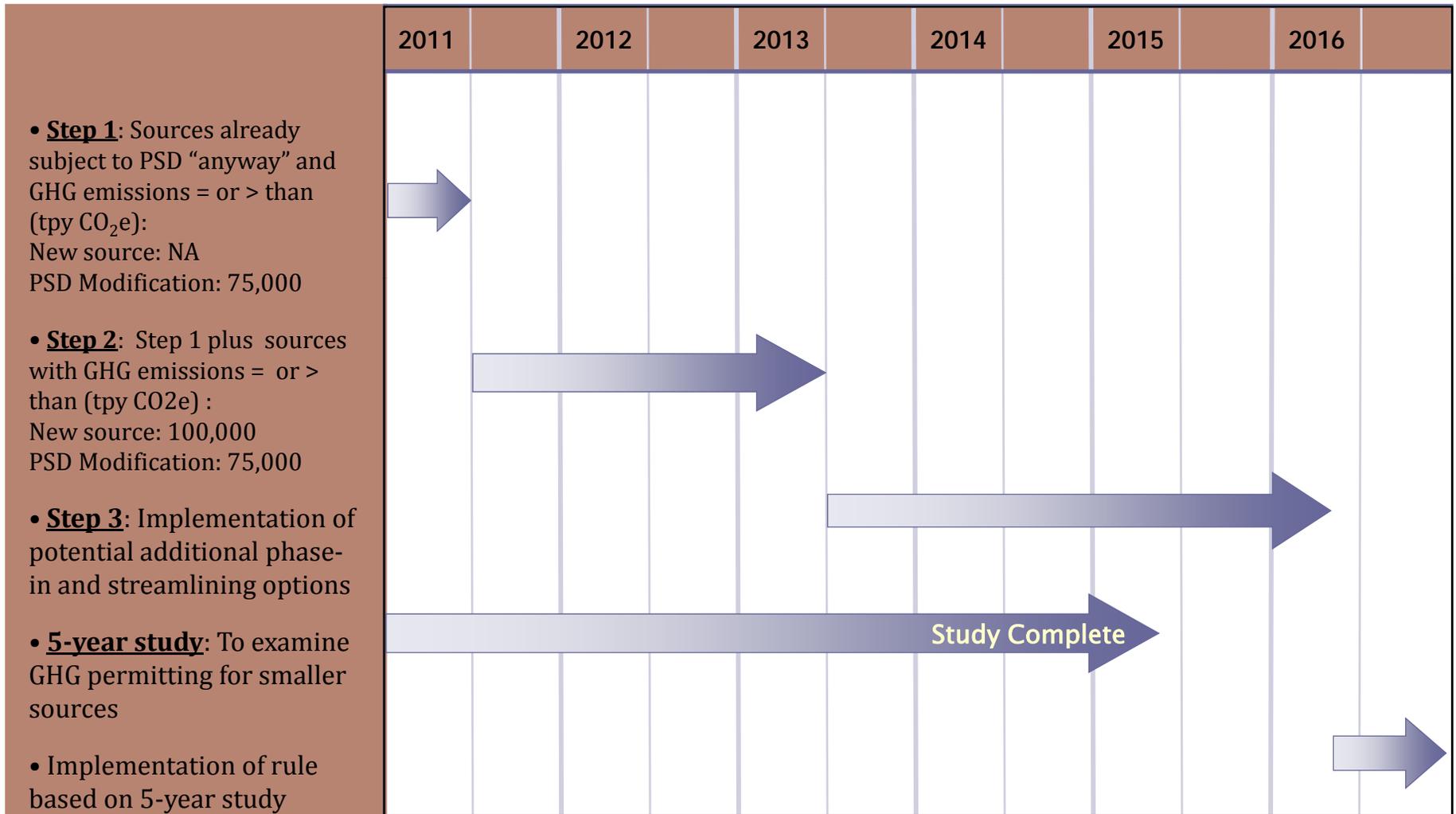
CAAAC Meeting
April 24-25, 2012



Outline

- ▶ Phase-in approach to GHG Permitting
 - ▶ Steps Under the Tailoring Rule
- ▶ GHG Permitting Activity Update
- ▶ EPA Comments on GHG Permits
- ▶ Biomass and GHG Permitting
- ▶ Other GHG Permitting Actions
 - ▶ Tailoring Rule Step 3
 - ▶ GHG Permit Streamlining Work Group

GHG Permitting: Steps under the Tailoring Rule





GHG Permit Status

- ▶ As of April 13, 2012, we are aware of 31 companies/plants that have been issued GHG permits (since January 2, 2011)
 - ▶ EPA has issued 5 of these permits (Palmdale Hybrid Energy Center, CA; Eni Holy Cross Drilling Project, OCS Eastern GOM; Lower Colorado River Authority, TX; and Port Dolphin Energy LNG Port, OCS Eastern GOM ; Pioneer Valley Energy Center, MA)
 - ▶ SIP-approved state/local permitting authorities issued the other 26
- ▶ EPA has provided comments on 13 draft GHG permits to be issued by state agencies
- ▶ EPA is currently reviewing approximately 27 GHG permit applications for which EPA will issue the permits
- ▶ In addition to these issued and pending permits, EPA is tracking roughly 70 additional PSD permit applications that likely include a GHG component have been submitted and include source categories such as:
 - ▶ Biofuel Production
 - ▶ Cement Plants
 - ▶ Electric Generating Units
 - ▶ Lime Production Facilities
 - ▶ Outer Continental Shelf Exploration
 - ▶ Pulp and Paper Mills
 - ▶ Refineries



EPA Comments on GHG Permits

- ▶ Include adequate support and explanation for form of GHG BACT emissions limit
 - ▶ Numerical emissions limit, or design standard or some other requirement if numerical limit deemed infeasible.
 - ▶ Must specify averaging time for limits.
 - ▶ Consider setting output based limits for GHG (lb/MWh).
 - ▶ Limits can be on CO₂e basis or individual gas basis.

- ▶ Ensure practical enforceability, adequate compliance monitoring to measure emissions or efficiency over time.
 - ▶ Consideration of a source's non-CO₂ constituents— e.g., CH₄ and N₂O at combustion sources.
 - ▶ CEMS or other CO₂ measurement- preferably direct measurement for EGUs and other large sources.



EPA Comments on GHG Permits (Cont.)

- ▶ Provide adequate explanation for rejecting control options (e.g., CCS) based on feasibility or cost.
 - ▶ BACT analysis should explain if most efficient turbine or boiler was not selected.
 - ▶ Permit record should clearly show where CCS was eliminated as a potential BACT control technology.
- ▶ Affirm that the CO₂e emissions during start-up and shut-down are included in the compliance calculation for the CO₂e BACT limits.
- ▶ **Bottom line: documentation of GHG control considerations and BACT limits is important for a robust permit record**



Biomass and GHG Permitting

▶ Biomass Deferral

- ▶ In Jan 2011, EPA announced an expedited rulemaking to defer completely the application of pre-construction permitting requirements to biomass-fired CO₂ and other biogenic CO₂ emissions for a **period of three years**.
 - ▶ Final Rule, Fact Sheet, and Response to Comments at: <http://www.epa.gov/nsr/actions.html>;
 - ▶ Deferral applies to CO₂ emissions only.

▶ EPA sent a biomass study to SAB for review in September 2011

▶ Next steps:

- ▶ SAB to issue letter on biomass study (anticipated Spring 2012)
- ▶ EPA to address SAB comments as appropriate
- ▶ If necessary, EPA would propose rule on how to treat biomass in permitting



Other GHG Permitting Activities

- ▶ Ongoing GHG permitting implementation
 - ▶ Tailoring Rule Steps 1 & 2
 - ▶ Q&A website
- ▶ Tailoring Rule Step 3 rulemaking underway
 - ▶ Proposal comment period ended on April 20, 2012
 - ▶ Final rule to be completed this summer
- ▶ 2016 - 5-year GHG NSR study and Step 4 final rule
- ▶ GHG Permit Streamlining Work Group



Tailoring Rule Step 3 Proposal

- ▶ Proposed on February 20, 2012.
- ▶ Proposes to maintain GHG thresholds at current levels.
- ▶ Also proposes two approaches to streamline GHG permitting process.
 - ▶ GHG PALs
 - ▶ Synthetic Minor Authority for EPA where EPA is the PSD permitting authority
- ▶ Seeks information and comment on a variety of aspects associated with GHG permitting
 - ▶ Permitting activity, burden, PA resources, impact of lowering the thresholds, and permit streamlining techniques.



Tailoring Rule Step 3 Proposal

- ▶ Comment period ended on April 20, 2012.
- ▶ Final rule scheduled for completion this summer.



GHG Permit Streamlining Work Group

- ▶ Established under the CAAAC.
- ▶ Charged with:
 - ▶ Review the EPA identified streamlining methods and source categories. Confirm, expand or narrow both the scope of streamlining methods EPA should explore further, and the source categories that may be well-suited either individually, or collectively for each streamlining approach.
 - ▶ Identify the regulatory and policy barriers associated with further development of permit streamlining methods for each of the source categories, and recommend approaches to address those barriers.
 - ▶ Prioritize the source categories and streamlining methods for further development by EPA and recommend and implementation approach for each method.
- ▶ The Work Group began in April 2012 and will complete its work by October 2012.



GHG Permit Streamlining Work Group

- ▶ **Deliverables and Deadlines**
 - ▶ Draft interim written report (August 2012); and
 - ▶ Draft final written report (September 2012) are to be delivered and deliberated upon by the CAAAC for submission to EPA.
 - ▶ The final report may also address the issues and potential barriers associated with further development of permit streamlining methods and recommend implementation strategies.



Questions or comments?