

GHG Permitting and Title V Updates

Juan Santiago Associate Director, Air Quality Policy Division CAAAC Subcommittee Meeting October 28, 2014





Overview of Presentation

- Update on GHG permitting (McCabe/Giles Memo and other recent happenings)
- GHG Permitting and Biomass
- Title V Task Force Recommendations Update



GHG Permitting



GHG Supreme Court Decision

The Supreme Court (SCOTUS) issued its decision on June 23, 2014 in Utility Air Regulatory Group (UARG) v EPA

- At issue was whether EPA permissibly determined that its regulation of GHGs from new motor vehicles triggered permitting requirements under the CAA for stationary sources that emit GHGs
- Key outcomes of SCOTUS decision:
 - EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit
 - EPA could continue to require that PSD permits otherwise required based on emissions of non-GHG pollutants, contain limitations on GHG emissions based on the application of BACT

On August 25, 2014, the D.C. Circuit Court of Appeals issued an order that parties file motions to govern future proceedings in light of the Supreme Court's decision on or before October 21, 2014



Preliminary Views of SCOTUS Decision

- EPA memorandum dated July 25, 2014 to Regional Administrators provided preliminary information on how to proceed:
 - EPA will continue to require carbon pollution limits in permits for the largest sources
 - EPA will no longer require permits for "step 2" sources (sources that triggered permitting requirements based solely on their GHG emissions)
- The memo provided EPA's preliminary views in response to questions regarding ongoing permitting requirements for "anyway sources" and some additional issues regarding permitting requirements for "step 2" sources
- EPA does anticipate that many SIPs and approved Title V programs will need to be revised in light of the SCOTUS decision



Preliminary Views of SCOTUS Decision (cont.)

- 5-Year Study and Step 4 Tailoring Rule
 - SCOTUS eliminated need for the 5-year study
 - EPA does not intend to take further action on Step 4 Rule
 - EPA recommends that Regional Offices confer with state, local and tribal permitting authorities and permit applicants to discuss how to handle permit applications pending with those agencies
- Treatment of Biogenic CO₂ Emissions
 - SCOTUS decision did not directly address application of PSD and Title V permitting requirements to biogenic CO₂ emissions
 - EPA's work regarding biogenic CO₂ assessment framework remains ongoing
 - The Deferral Rule expired on its own terms July 21, 2014



Permitting of Anyway Sources

For "anyway sources" continue applying existing regulations:

- <u>Existing</u> sources remain subject to the PSD BACT requirement for GHG if they emit non-GHG pollutants at or above certain thresholds
- For <u>new</u> "anyway" sources EPA intends to continue applying the PSD BACT requirement to GHG emissions if the source emits or has the PTE 75,000 tpy or more of GHG on a CO₂e basis
- For <u>modified</u> "anyway" sources EPA intends to continue applying the PSD BACT requirements to GHG if both of the following circumstances are present:
 - 1) the mod is otherwise subject to PSD for a pollutant other than GHG
 - 2) the mod results in a GHG emissions increase and a net GHG emissions increase equal to or greater than 75,000 tpy CO₂e and greater than zero on a mass basis



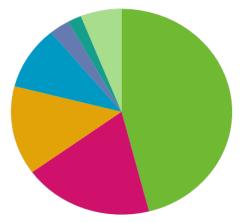
Tally of GHG PSD Permits (as of 10/15/14)

Permits by Industry

- 200 PSD permits with GHG limits have been issued
 - 129 issued by states
 - 71 issued by EPA
- Approximately 50 GHG-related PSD permit applications are currently being processed by EPA Regions
- EPA Comment Letters on GHG Permitting Actions

http://www.epa.gov/nsr/ghgcomment.html

EPA-issued permits available on Region websites



- EGU
- Oil & Gas
- Chemicals & Fertilizer
- Minerals/Metals
- Cement
- Wood Products
- Other



GHG BACT Determinations

GHG BACT is resulting in:

- Energy efficiency being considered early in the design of projects
 - Pushing existing technology to become more effective in reducing GHGs; and
 - Greater consideration of plant-wide efficiency measures (e.g., use of waste heat within the process)
- Add-on GHG controls being considered as BACT, resulting in continued development of these technologies
 - CCS for CO₂ control at a variety of industries
 - Power generation (IC engines) from methane capture at landfills
 - Non-Selective Catalytic Reduction for N₂O control from nitric acid plants
- Compliance with BACT typically shown through mass balance using fuel factors/equations from 40 CFR 98



GHG BACT Determinations (cont.)

Carbon Capture and Storage (CCS)

- BACT Step 1 EPA views CCS as an available technology for most facilities emitting CO2 in large amounts and with high purity CO2 streams
- BACT Step 2 If any of the 3 components (capture, transport or storage) is technically infeasible, then CCS is technically infeasible for the source in question
- CCS is often evaluated in BACT Step 4, which considers costs and other impacts
- At least 3 PSD permits issued since 2011 with CCS

A BACT evaluation is a case-specific analysis, and BACT decisions should be supported by the record and well documented



Global Warming Potentials (GWP)

- Revision to GWP values (Part 98, Table A-1)
 - Final rule published November 29, 2013
 - Aligns Reporting Rule GWPs with IPCC's 2007 Report
 - Some values increased and some decreased from 2009 Part 98 rule (e.g., CH₄'s GWP increased from 21 to 25; N₂O and SF₆ decreased)
 - New GWPs were effective on 1/1/14 for EPA permits and in states if their rules automatically update when Table A-1 is revised
 - No Retroactivity PSD permits issued prior to the rule's effective date will continue to use the GWPs that were in effect at issuance
- Addition of chemical-specific and default GWPs to Table A-1
 - Proposed rule published July 31, 2014; finalize by early 2015
 - Adding these values for the remaining fluorinated GHG compounds will mean that all possible GHG compounds will have a GWP value
 - Negligible increase in permit activity expected



Title V Guidance Updates

- On April 30, 2014, EPA issued a Memorandum titled "Implementation Guidance on Annual Compliance Certification and Statement of Basis Requirements for Title V Operating Permits"
 - The guidance is responsive to the 2005 Title V Office of Inspector General Report, the Title V Task Force Report, as well as stakeholder interest in this type of guidance
 - The guidance describes the CAA and regulatory elements surrounding annual compliance certification and statement of basis and also provides key guidance on those programmatic elements
 - <u>http://www.epa.gov/Region7/air/title5/t5memos/20140430.pdf</u>



Title V Rulemaking Updates

 On July 28, 2014, EPA published a final rulemaking titled, "Amendments to Compliance Certification Content Requirements for State and Federal Operating Permits Programs" (79 FR 43661)

- This action restored a sentence that was inadvertently removed from the operating permits program rules (found in 40 CFR parts 70 and 71) due to an editing error
- This rule amended the compliance certification requirements in <u>40 CFR</u> <u>70.6(c)(5)(iii)(B)</u> and <u>71.6(c)(5)(iii)(B)</u>

The restored sentence is: "If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information."



Title V Permit Order Updates

- EPA continues to receive Title V petition orders from various types of parties including environmental groups and regulated entities
- Since January 2014, EPA has issued 6 Title V petition orders
- All orders can be viewed online at:
- http://www.epa.gov/region7/air/title5/petitiondb/petitiondb.htm
- In addition, notice of issuance of final orders is published in the Federal Register



Commonly Raised Issues in Title V Petitions

The issues raised in petitions can be loosely categorized into two groups: 1) those relating to ensuring the proper applicable requirements are addressed in Title V permits; and 2) those relating to ensuring that conditions and procedures necessary to assure compliance with such requirements are addressed in Title V permits

More specifically, common issues include:

- Pollutant-specific claims surrounding monitoring adequate to assure compliance with applicable requirements;
- Adequacy of terms and conditions in Title V to incorporate state implementation plan approved rules; and
- New source review related issues, among others.



Title V Task Force Recommendations Update



Brief History/Overview

- Final Report to the Clean Air Act Advisory Committee, Title V Implementation Experience, April 2006.
- Sept. 2006, initial EPA response identifies ways in which EPA is considering the different recommendations and issues raised in the report.
- Since 2006, many issues have been addressed by:
 - states thru their implementation practice
 - EPA in rulemakings, guidance, and/or through general title V permit implementation and oversight (e.g., petition orders, program approvals, NODs, objection letters, information communications with state and local permitting authorities)



Initial Priority Recommendations

- In July 2011, NACAA provided EPA with a list of issues from the Task Force that were "priority" items for NACAA.
- These were developed in part due to priority issues previously identified by EPA.
- Meanwhile, EPA also received feedback on title V oversight and implementation from the Office of Inspector General with some overlapping recommendations (e.g., compliance certification and statement of basis related recommendations).



Initial Priority Items

Those issues included (among others):

- Treatment of insignificant emission units in title V permits
- Clarifying the expected content of statements of basis
- Addressing the specificity of citations in title V permits to NSPS or NESHAPs
- Provide for the use of "short form" for compliance certification
- Encourage public notices to include minimum amount of information on the title V facility
- Clarifications and streamlining of common control determination
- Provisions for alternative forms of public notice to reflect new means of communication (e.g., e-public notice options)
- Expanding the list of modifications allowed under administrative and minor permit revisions



Moving Forward

- •Many issues have in fact been addressed either directly or at least to an extent that the issue as described in the Task Force Report is no longer the salient issue in that area at this time.
 - E.g., EPA issuance of guidance on compliance certification and statement of basis; EPA rulemaking on compliance certification; numerous title V petition orders that touch on key issues in both the Task Force Report as well as the in
- Some issues have been addressed through state implementation of their programs and permits.
- The Task Force Report remains a valuable and important tool in considering and evaluating title V related issues described in the Report.



QUESTIONS OR COMMENTS