



AAPCA Annual Meeting – GHG Permitting

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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 September 30, 2014

Preliminary Views of SCOTUS Decision

- ▶ EPA memorandum dated July 24, 2014 to Regional Administrators provided preliminary information on how to proceed:
 - ▶ EPA will continue to require carbon pollution limits in permits for “anyway” sources
 - ▶ EPA will no longer require permits for “step 2” or “nonanyway” sources (sources that triggered permitting requirements based solely on their GHG emissions)
 - ▶ EPA will no longer require Title V permits for sources who solely emit or have the potential emit above GHG major source threshold
- ▶ 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

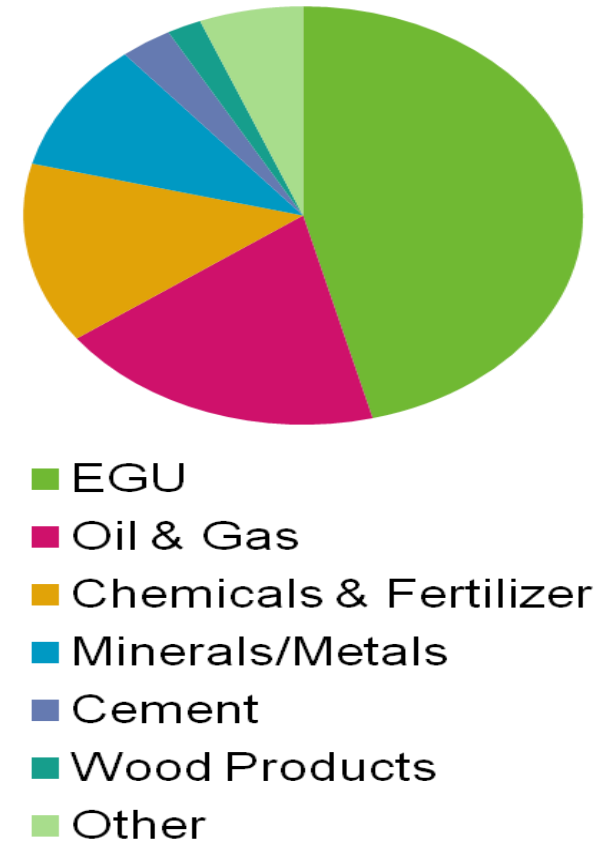
Permitting of Anyway Sources

- ▶ For “anyway sources” continue applying existing regulations:
 - ▶ Existing sources remain subject to the PSD BACT requirement for GHG if they emit non-GHG pollutants at or above certain thresholds
 - ▶ For new “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 modified “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 8/31/14)

- ▶ 196 PSD permits with GHG limits have been issued
 - ▶ 128 issued by states
 - ▶ 68 issued by EPA (51 by EPA Region 6)
- ▶ Approximately 50 GHG-related PSD permit applications are currently being processed by EPA Regions
- ▶ EPA Region 6 Permit Applications in Texas:
 - ▶ 88 permit applications (estimated capital costs ≈ \$38B)
 - ▶ 51 final permits issued (estimated capital costs ≈ \$25B)
 - ▶ 15 initial workshare permits with TCEQ with many permits finalized by EPA (estimated capital costs ≈ \$7.6B)
 - ▶ 12 permit applications to potentially transition to TCEQ upon SIP approval (estimated capital costs ≈ \$10B)
- ▶ EPA Comment Letters on GHG Permitting Actions
<http://www.epa.gov/nsr/ghgcomment.html>
- ▶ EPA-issued permits available on Region websites

Permits by Industry Nationally



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)
 - ▶ EPA may ask why a more efficient design/technology that does not disrupt the applicant's basic business purpose was not considered before we move forward with proposing a draft GHG PSD permit. Any decision to exclude an option on "redefining the source" grounds should be explained and documented in the permitting record.....(pages 24-28 of EPA's PSD and Title V Permitting Guidance for Greenhouse Gases, March 2011).
- ▶ 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
- ▶ Compliance with BACT typically shown through mass balance using fuel factors/equations from 40 CFR 98. We allow CEMS monitoring option in nearly all permits should applicant decide to install CEMs.

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
- ▶ In conclusion, BACT evaluation should be case-specific analysis, and BACT decisions should be supported by the record and well documented

QUESTIONS OR COMMENTS