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Clean Air Act Permitting for Greenhouse Gases

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Greenhouse gas (GHG) emissions from the largest stationary sources were, for the first time, covered by the Prevention of Significant Deterioration (PSD) and title V Operating Permit Programs beginning on January 2, 2011. These permitting programs, required under the Clean Air Act, are proven tools for protecting air quality and the same tools will be used to reduce GHG emissions.

EPA's GHG Tailoring Rule, issued in May 2010, established a common sense approach to permitting GHG emissions under PSD and Title V. The rule set initial emission thresholds - known as Steps 1 and 2 of the Tailoring Rule - for PSD and Title V permitting based on carbon dioxide equivalent (CO₂e) emissions.

Step 3 of the GHG Tailoring Rule, issued on June 29, 2012, continued to focus GHG permitting on the largest emitters by retaining the permitting thresholds that were established in Steps 1 and 2. In addition, the Step 3 rule improved the usefulness of plantwide applicability limitations (PALs) by allowing GHG PALs to be established on CO₂e emissions, in addition to the already available mass emissions PALs, and to use the CO₂e-based applicability thresholds for GHGs provided in the "subject to regulation" definition in setting the PAL on a CO₂e basis. The rule also revised the PAL regulations to allow a source that emits or has the potential to emit at least 100,000 tons per year of CO₂e, but that has minor source emissions of all other regulated NSR pollutants, to apply for a GHG PAL while still maintaining its minor source status.

U.S. Supreme Court Decision in *Utility Air Regulatory Group v. EPA*

On June 23, 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014) ("UARG"). The Court held that 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. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT). In accordance with the Supreme

Court decision, on April 10, 2015, the D.C. Circuit issued an amended judgment in *Coalition for Responsible Regulation, Inc. v. EPA*, Nos. 09-1322, 10-073, 10-1092 and 10-1167 (D.C. Cir. April 10, 2015), which, among other things, vacated the PSD and title V regulations under review in that case to the extent that they require a stationary source to obtain a PSD or title V permit solely because the source emits or has the potential to emit GHGs above the applicable major source thresholds. The D.C. Circuit also directed EPA to consider whether any further revisions to its regulations are appropriate in light of UARG, and if so, to undertake to make such revisions. In response to the Supreme Court decision and the D.C. Circuit's amended judgment, the EPA has undertaken various actions to explain the next steps in GHG permitting and also conduct rulemaking action to make the appropriate revisions to the PSD and operating permit rules. These actions include:

- [U.S. Supreme Court Decision \(PDF\)](#) (52 pp, 260 K, [About PDF](#))
- [EPA Memo: Next Steps and Preliminary Views on the Application of Clean Air Act Permitting Programs to Greenhouse Gases Following the Supreme Court's Decision \(PDF\)](#) (6 pp, 1.5 MB, [About PDF](#))
- [EPA Memo: Next Steps for Addressing EPA-Issued Step 2 Prevention of Significant Deterioration \(PSD\) Greenhouse Gas \(GHG\) Permits and Associated Requirements \(PDF\)](#) (4 pp, 1.6 MB, [About PDF](#))
- [EPA Memo: No Action Assurance Regarding EPA-Issued Step 2 Prevention of Significant Deterioration Permits and Related Title V Requirements Following *Utility Air Regulatory Group v. Environmental Protection Agency* \(PDF\)](#) (5 pp, 1.1 MB, [About PDF](#))
- [D.C. Circuit Court Amended Judgment \(PDF\)](#) (3 pp, 78 K, [About PDF](#))
- [Proposed Revisions to the PSD and Title V Permitting Regulations for GHGs and Establishment of a GHG Significant Emission Rate \(SER\) Following Supreme Court Decision and the D.C. Circuit's Amended Judgment](#)
- [Webinar slides on Proposed Revisions to the PSD and title V Permitting Regulations for GHGs and Establishment of a GHG SER Following Supreme Court Decision and the D.C. Circuit's Amended Judgment](#) - These slides summarize this proposed rule and are for informational purposes only. The EPA presented these slides during a stakeholder webinar on September 20, 2016. For more specifics on this proposed rule, please consult the actual proposed rule at the link above or at www.regulations.gov, Docket Number EPA-HQ-OAR-2015-0355.
- [Extension of the Comment Period for the proposed rule titled: "Revisions to the PSD and title V GHG Permitting Regulations and Establishment of a SER for GHG Emissions Under the PSD Program" Following Supreme Court Decision and the D.C. Circuit's Amended Judgment](#)

Implementation Guidance and Tools

Please note that most of these implementation guidance and tools were developed and issued before the U.S. Supreme Court decision in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014) ("UARG") and the D.C. Circuit amended judgment in *Coalition for Responsible Regulation, Inc. v. EPA*, Nos. 09-1322, 10-073, 10-1092 and 10-1167 (D.C. Cir. April 10, 2015) mentioned above. Therefore, they might be outdated. Please refer to the applicable PSD and title V permitting rules and regulations for the latest requirements on GHG permitting for both of these permitting programs.

- [PSD and Title V Permitting Guidance for Greenhouse Gases \(PDF\)](#) (96 pp, 11.2 MB, [About PDF](#)) - This document provides the basic information that permit writers and applicants need to address GHG emissions in permits. This document does not reflect the U.S.

Supreme Court decision in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014) ("UARG") and the D.C. Circuit amended judgment in *Coalition for Responsible Regulation, Inc. v. EPA*, Nos. 09-1322, 10-073, 10-1092 and 10-1167 (D.C. Cir. 2015).

- [Summary slides on PSD and Title V Permitting Guidance for GHGs \(PDF\)](#) (33 pp, 163 K, [About PDF](#)) - These slides summarize the "PSD and Title V Permitting Guidance for Greenhouse Gases" and are for informational purposes only. EPA presented these slides during the stakeholder webinars on November 18 and 19, 2010. For more specifics on EPA's guidance on the permitting of GHGs, please consult the actual guidance document.
- [Interim Permitting Guidance for GHG Emissions from Bioenergy Production \(PDF\)](#) (35 pp, 622 K, [About PDF](#)) - This document provides guidance that permitting authorities may use when determining Best Available Control Technology (BACT) for GHG emissions at Bioenergy facilities. This guidance can be used on an interim basis as EPA completes its detailed examination of the science and technical issues associated with the accounting for biogenic CO₂ emissions from stationary sources.
- [Next Steps for Addressing Biogenic Carbon Dioxide Emissions from Stationary Sources \(PDF\)](#) (3 pp, 692 K, [About PDF](#)) and [EPA's Treatment of Biogenic Carbon Dioxide Emissions from Stationary Sources that Use Forest Biomass for Energy Production \(04/23/2018\) \(PDF\)](#) (6 pp, 168 K, [About PDF](#)) - These documents announced EPA's plans regarding the treatment of biogenic CO₂ emissions in the context of EPA's air regulatory programs, including the permitting of biogenic CO₂ emissions.
- [Resources for Estimating GHG Emissions](#) - This page includes references that may prove useful to sources and permitting authorities in identifying, characterizing and estimating GHG emissions.
- [RACT/BACT/LAER Clearinghouse \(RBLC\)](#) - This website provides access to information and decisions about GHG pollution control measures in permits issued by air agencies.
- [Implementing GHG Permitting - Questions and Answers](#) - This page lists responses to implementation questions EPA received on GHG permitting before the U.S. Supreme Court decision in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014) ("UARG") and the D.C. Circuit amended judgment in *Coalition for Responsible Regulation, Inc. v. EPA*, Nos. 09-1322, 10-073, 10-1092 and 10-1167 (D.C. Cir. April 10, 2015).

GHG Control Measures White Papers

This series of technical "white papers" summarize readily available information on control techniques and measures to reduce GHG emissions from specific industrial sectors. These papers provide basic technical information which may be useful in a BACT analysis, but they do not define BACT for each sector. The industrial sectors covered include:

White Papers	EPA Contact	Phone	Email

White Papers	EPA Contact	Phone	Email
Electric Generating Units (PDF) (48 pp, 805 K, About PDF)	Christian Fellner	(919) 541-4003	fellner.christian@epa.gov
Large Industrial/Commercial/Institutional Boilers (PDF) (39 pp, 337 K, About PDF)	Jim Eddinger	(919) 541-5426	eddinge.jim@epa.gov
Pulp and Paper (PDF) (62 pp, 421 K, About PDF)	Kelley Spence	(919) 541-0516	spence.kelley@epa.gov
Cement (PDF) (48 pp, 220 K, About PDF)	Brian Storey	(919) 541-1103	storey.brian@epa.gov
Iron and Steel Industry (PDF) (78 pp, 620 K, About PDF)	Donna Lee Jones	(919) 541-5251	jones.donnalee@epa.gov
Refineries (PDF) (42 pp, 707 K, About PDF)	Brenda Shine	(919) 541-3608	shine.brenda@epa.gov

White Papers	EPA Contact	Phone	Email
Nitric Acid Plants (PDF) (31 pp, 544 K, About PDF)	Nathan Topham	(919) 541-0483	topham.nathan@epa.gov
Landfills (PDF) (28 pp, 250 K, About PDF)	Andy Sheppard	(919) 541-4161	sheppard.andrew@epa.gov

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