

Office of Air Quality Planning and Standards

NAAQS and Other CAA Implementation Updates

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Overview of Presentation

- NAAQS Schedules and Implementation Updates
 - Ozone
 - PM_{2.5}
 - \circ SO₂
 - Other NAAQS
- Exceptional Events
- Interstate Pollution Transport
- Regional Haze
- GHG Permitting
- Title V Permitting
- New Source Review
- SIP Reform
- Appendix



NAAQS: ANTICIPATED SCHEDULES & IMPLEMENTATION UPDATE



NAAQS Reviews: Status Update

(as of May 2014)

	Ozone	Lead	Primary NO ₂	Primary SO ₂	Secondary NO ₂ and SO ₂	РМ	СО
Last Review Completed (final rule signed)	Mar 2008	Oct 2008	Jan 2010	Jun 2010	Mar 2012	Dec 2012	Aug 2011
Recent or Upcoming Major Milestone(s) ¹	Feb 2014 2nd Draft REAs 2nd Draft PA Mar 25-27, 2014 CASAC review meeting Dec 1, 2014* Proposed rule Oct 1, 2015* Final rule	Spring 2014 Final PA 2014 Proposed rule	Nov 2013 1st Draft ISA Feb 2014 Draft IRP Mar 12-13, 2014 CASAC review meeting	Mar 2014 Draft IRP Apr 22, 2014 CASAC review meeting	Mar 4-6, 2014 Kickoff workshop for next review Summer 2014 Draft IRP	Kickoff workshop for next review targeted for early 2015	Kickoff workshop for next review targeted for 2015

Additional information regarding current and previous NAAQS reviews is available at: http://www.epa.gov/ttn/naaqs/

¹ IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment

^{*} Court ordered dates per April 29, 2014 ruling



Anticipated NAAQS Implementation Milestones

(updated May 2014)

Pollutant	Final NAAQS Date	Infrastructure SIP Due	Designations Effective	Attainment Plans Due	Attainment Date
PM _{2.5} (2006)	Oct 2006	Oct 2009	Dec 2009	Dec 2014	Dec 2015 (Mod) Dec 2019 (Ser)
Pb (2008)	Oct 2008	Oct 2011	Dec 2010/2011	June 2012/2013	Dec 2015/2016
NO ₂ (2010) (primary)	Jan 2010	Jan 2013	Feb 2012	N/A	N/A
SO ₂ (2010) (primary)	June 2010	June 2013	Oct 2013* (+2 rounds)	April 2015	Oct 2018
Ozone (2008)	Mar 2008	Mar 2011	July 2012	Mid 2015/2016	2015/2032
PM _{2.5} (2012)	Dec 2012	Dec 2015	Early 2015	Mid 2016	Dec 2021 (Mod) Dec 2025 (Ser)
Ozone 2015	Oct 2015	Oct 2018	Dec 2017	Dec 2020/21	2020-2037



2008 Ozone NAAQS Implementation

- Revised primary 8-hr Ozone standard in 2008 (75 ppb)
- EPA designations for the 2008 Ozone NAAQS effective on July 20, 2012
 - Litigation on certain final area designations
 - Petition seeking redesignation to nonattainment of areas initially designated as attainment
- 2008 Ozone NAAQS SIP Requirements Rule
 - Proposed May 29, 2013 (78 FR 34178)
 - Anticipate final rule in Fall 2014
 - Attainment plans and demonstrations due July 2015 (Moderate) or July 2016 (Serious and above)



Overview of Preliminary Staff Conclusions on Ozone

Primary Standard

- Current evidence and exposure/risk information call into question the adequacy of public health protection at by current standard (75 ppb)
- lt is appropriate to consider revising the standard to provide greater public health protection, with range of levels from 70 ppb to 60 ppb, in conjunction with the current indicator (O₃), averaging time (8-hour), and form (3 year average of 4th highest daily maximum)

Secondary Standard

- Current evidence and exposure/risk information call into question the adequacy of public welfare protection provided by current standard (75 ppb)
- It is appropriate to consider revising the standard to provide greater public welfare protection, focusing on a W126-based cumulative seasonal metric and a range of levels from somewhat above 15 ppm-hrs down to 7 ppm-hrs (3 year average)



Current Ozone NAAQS Review

- Received court ruling on April 29, 2014
 - Propose December 1, 2014
 - Final October 1, 2015
- Planning is underway to coordinate the implementation activities and to ensure early involvement similar to previous implementation rules:
 - FACA formed in 1995 to address Ozone, PM and RH implementation for the 1997 standard/rules
 - Listening sessions held with NACAA-selected state group reps and others in 2010 and 2010 reconsideration and again in 2011-2012 for 2008 Ozone Implementation Rule
 - Listening sessions held with NACAA-selected group reps in 2011-12 and the 2012 PM Implementation Rule



PM_{2.5} NAAQS Review

- EPA revised the annual primary PM_{2.5} NAAQS to 12 μg/m³ from the previous level of 15 μg/m³ on December 14, 2012
 - NAAQS effective date: March 18, 2013
 - Legal challenge filed by industry related to the annual primary PM_{2.5} standard, near-road monitoring, and implementationrelated issues
- NRDC v EPA (D.C. Cir, Jan. 4, 2013)
 - Court held EPA improperly proceeded under Subpart 1, and that provisions of Subpart 4 applied to rulemakings
 - Decision impacted 2007 $PM_{2.5}$ NA Rule and 2008 $PM_{2.5}$ NSR Implementation Rule (related to 1997 $PM_{2.5}$ NAAQS) and implementation of the 2006 $PM_{2.5}$ NAAQS



- On April 25, 2014, the EPA issued a rule to:
 - Classify areas designated nonattainment for the 1997 and/or 2006 PM_{2.5} standards as "Moderate"
 - Set a new deadline of December 31, 2014, for states to submit attainment—related and nonattainment NSR SIP submissions required under subpart 4 as needed
- The rule provides clarity to states following January 2013
 D.C. Circuit decision holding that the EPA should implement PM_{2.5} NAAQS according to subpart 4 of part D of Title I of the Clean Air Act
 - Subpart 4 deadlines had already passed when the decision was issued, so we proposed expeditious future date of December 31, 2014
 - This rule will aid EPA and states in processing redesignations and defending against deadline suits



Designations Guidance

 April 2013 guidance on Initial Area Designations for the 2012 Revised Primary Annual Fine Particle National Ambient Air Quality Standard http://www.epa.gov/pmdesignations/2012standards/docs/april-2013guidance.pdf

 Available data sets to facilitate area analyses, and interactive designations tools are available on the PM_{2.5} designations website at

http://www.epa.gov/pmdesignations/2012standards/techinfo.h tm and http://geoplatform2.epa.gov/PM_MAP/index.html (PM Designations Mapping Tool)



Status of Designations

- State (and Tribal) recommendations were due to EPA by December 13, 2013
- EPA received recommendations from 50 states, 2 territories,
 D.C. and 6 tribes
 - 5 states (PA, OH, IL, IA and CA) recommended a total of 15 nonattainment areas (including 39 whole or partial counties)
 - Most states based their recommendations on 2010-2012 data;
 some used preliminary 2013 data (final 2013 data available after the May 1, 2014, data certification date)

Next Steps

- EPA intends to notify states/tribes of intended modifications to recommendations in "120-day" letters by August 2014
- Final designations expected in December 2014



- PM_{2.5} NAAQS SIP Requirements NPRM
 - Propose rule early fall 2014
 - Finalize as close as possible to effective date of designations for the 2012 PM_{2.5} NAAQS (in 2015)
- Proposal will clarify nonattainment implementation requirements according to subpart 4 of part D of Title I of the CAA, consistent with D.C. Circuit Court decision
- Proposal will address how subpart 4 court decision affects nonattainment NSR permitting requirements (e.g., with respect to major source threshold, precursors, etc.)



- PM_{2.5} Emissions Inventory Guidance
 - EPA is updating the 2005 Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter NAAQS and Regional Haze Regulations
 - Draft guidance will be released with the proposed PM_{2.5}
 Implementation Rule in fall 2014
 - Final guidance will be released with the final PM_{2.5} Implementation Rule
- PM_{2.5} Attainment Demonstration Modeling Guidance for SIPs
 - Updates to draft guidance Late 2014 around timing for designations
 - Final version will be released when PM_{2.5} Implementation Rule if finalized



- Revised primary SO₂ standard: June 2010 (75 ppb/1-hr)
- SO₂ Area Designations and Implementation Strategy released February 2013
- Designations and Implementation Guidance and Assistance
 - Issued PSD permit modeling guidance documents applicable to the 1-hr SO₂ NAAQS on August 23, 2010 and March 1, 2011
 - Technical Assistance Documents for modeling and monitoring issued December 2013

For more information including strategy and guidances visit http://www.epa.gov/airquality/sulfurdioxide/implement.html



- SO₂ Data Requirements Rule
 - Objective is to provide information to EPA in an orderly fashion to inform initial area designations for areas not designated in 2013
 - Proposed on April 17, 2014
 - Final scheduled for late 2014
- 1-hr SO₂ NAAQS Nonattainment SIP Elements Guidance
 - Objective is to provide assistance to areas developing their nonattainment area plans
 - Issued guidance on April 24, 2014
- More detailed discussion at the 1:30 SO₂ session



Lead NAAQS

- Revised NAAQS in 2008, primary and secondary standard is 0.15 micrograms per cubic meter (µg/m³) as a 3-month average concentration of lead in total suspended particles (Pb-TSP)
- 21 nonattainment areas designated in 2010-2011
 - 2 of the 21 states now have clean data determinations
 - Issued findings of failure to submit attainment SIPs in February 2014 for 3 nonattainment areas
- Current Lead NAAQS Review
 - CASAC's June 4, 2013 letter on our draft Policy Assessment concurs with staff conclusion that it is appropriate to consider retaining current NAAQS, without revision
 - Propose Rulemaking 2014
 - Final Rulemaking TBD



Progress on Ozone Attainment

(as of April 2014)

	1997 8-hr Ozone 2004 Designations	2008 Ozone 2012 Designations
Initial Nonattainment Areas	113	46
Redesignation Approved Areas	76	0
Current Nonattainment Areas	37	0
Clean Data Determinations	21	0
Pending Proposed Redesignation Requests	0	0



Progress on PM_{2.5} Attainment

(as of April 2014)

	1997 PM _{2.5} 2005 Designations	2006 PM _{2.5} 2009 Designations
Initial Nonattainment Areas	39	32
Redesignation Approved Areas	17	6
Current Nonattainment Areas	22	26
Clean Data Determinations	19	15
Pending Proposed Redesignation Requests	3	1



Progress on Revised NAAQS

(as of April 23, 2014)

	2010 SO2 2013 Designations	2008 Lead 2010-2011 Designations
Initial Nonattainment Areas	29	21
Redesignation Approved Areas	0	0
Current Nonattainment Areas	0	0
Clean Data Determinations	0	2
Pending Proposed Redesignation Requests	0	0



EXCEPTIONAL EVENTS UPDATE



Exceptional Events Next Steps

- 2007 Exceptional Events Rule (EER) Revisions
 - To be proposed in advance of finalizing any new or revised national ambient air quality standards for ozone
- Guidance to Support Data Exclusion Requests for Wildfire-Related Events that May Affect Ozone Concentrations
 - Address how air agencies can incorporate the EER revisions into ozone/wildfire event demonstrations
 - Discuss the technical tools available to support EER criteria
 - Guidance to support data exclusion requests for wildfire-related events that may affect ozone concentrations
 - Schedule anticipated to parallel EER revision effort
- Anticipate additional stakeholder outreach



Exceptional Events Pilot Projects

- Initiated two collaborative pilot efforts to produce more focused, streamlined demonstrations
 - Region 6/Rudy Husar of WA State EE Decision Support System focusing on PM and winds
 - Target is to complete in mid-2014
 - Region 8/WESTAR DEASCO tool focusing on ozone and wildfires
 - Target is to complete in fall 2015
- EPA plans to incorporate the results of these pilot efforts into both the rule revisions and the wildfire/ozone guidance



INFRASTRUCTURE SIPS, TRANSPORT AND SSM UPDATES



Infrastructure SIPs (iSIP)

- September 2013: EPA finalized the iSIP guidance that covers the 2008 Ozone, 2010 NO₂, 2010 SO₂, 2012 PM_{2.5} and all future new or revised NAAQS
- Guidance is more detailed than previous iSIP guidance
 - Focus is to provide early, useful, clear guidance consistent with recent court cases and actions EPA has taken in light of court cases
 - Avoid any surprises as EPA reviews iSIPs
 - Document does not address CAA 110(a)(2)(D)(i) "Element D" transport issues for the NAAQS



iSIPs for NAAQS Implementation

2006 PM_{2.5} NAAQS

- NOI for finding of failure to submit (FFS) 2006 PM_{2.5} NAAQS iSIPs (9/2013)
 - 13 states out of 19 and the D.C. area have submitted iSIP
- NOI for FFS to issue FIP for several states for which EPA previously issued FFS PM_{2.5} iSIPs

2010 SO₂ NAAQS

- NOI for failure to submit SO₂ iSIPs (2/2014)
 - 8 states out of 39 that have submitted and Regional offices are taking quick action to review

2010 NO₂ NAAQS

- NOI for FFS iSIPs for 2010 NO₂ NAAQS
 - Litigants accepted 7/15/15 deadline; the EPA will issue FFS notice

2008 Ozone NAAQS

- 1/15/2013, EPA published FFS iSIPs for 2008 Ozone
 - 28 states, D.C. and Puerto Rico



Interstate Transport Portion of iSIPs

- For the interstate transport portion of iSIPs (addressing contribution to downwind nonattainment and interference with maintenance), the Supreme Court opinion reversing the D.C. Circuit's decision in *EME Homer City* impacts these actions
 - There are deadline suits that relate to this portion of the infrastructure SIPs
 - We are reviewing the opinion and will determine next steps when our review is complete



Interstate Pollution Transport Update

- On April 29, 2014, the U.S. Supreme Court issued its opinion reversing the D.C. Circuit's decision in *EME Homer City* which vacated the Cross State Air Pollution Rule (CSAPR)
 - Decision impacts CSAPR and other actions
 - We are reviewing the decision and will determine next steps when our review is complete
- CSAPR focused on attainment and maintenance of the 1997
 Ozone NAAQS, 1997 PM_{2.5} NAAQS and 2006 PM_{2.5} NAAQS
- EPA is moving forward to address transport through rulemaking
 - From an air quality and health perspective, the most pressing transport challenge appears to be ozone in the eastern half of the U.S. Specifically, transported emissions may pose challenges for areas with respect to the 2008 ozone standard.
 - Proposed rule targeted for late summer 2014



Interstate Pollution Transport Update

cont.

- Assessing need for further action in western states
 - EPA will continue to work with western states through our Region 8, 9, and 10 offices to address particulate matter (PM) and ozone attainment challenges in the west and assess the need for a future transport rule addressing these issues
- We have and will continue to conduct outreach to states
 - Examples of this include the workshop in April 2013, early release of emissions inventories, updates to state organizations, and conference calls on technical issues



Section 176A

- Petition filed December 2013 from 9 states: CT, DE, MD, MA, NH, NY, RI, VT and PA
- Petition requests that EPA add 8 states (IL, IN, KY, MI, NC, OH, TN, WV) and the remainder of VA to the current Ozone Transport Region (OTR) that was established under section 184 of the CAA
- Petitioners believe that expanding OTR would help states work together to address ozone transport for the 2008 ozone NAAQS



SSM SIP Call

- In 2011 EPA entered into a settlement agreement with Sierra Club and Wild Earth Guardians to take final action to grant or deny an administrative petition for rulemaking specific to SSM provisions in SIPs.
- EPA proposed a SIP Call to 36 states in February 2013 concerning identified SIP provisions for treatment of excess emissions occurring during startup, shutdown and malfunctions (SSM)
 - The proposal restated and invited public comment on EPA's SSM Policy
 - EPA proposed to allow the affected states 18 months after any SIP calls are final (the max allowed under the CAA) to correct and submit SIPs revisions
 - Link to EPA's webpage specific to this rule is at <u>www.epa.gov/airquality/urbanair/sipstatus</u>
- Per settlement agreement, final action date is June 12, 2014



Recent Cement MACT Court Decision

- On April 18, in NRDC's challenge to EPA's 2013 emission standards for portland cement plants, the D.C. Circuit court ruled that EPA does not have statutory authority to provide "affirmative defense provisions," even in the case of malfunctions
- These affirmative defense (AD) provisions were created for use only under certain circumstances; ADs can shield sources from monetary penalties in enforcement proceedings.
 - Aside from monetary penalties, a court may order <u>injunctive relief</u> (corrective actions such as installing a control device). ADs do not extend to injunctive relief.
- EPA is assessing the impact of the decision on the proposed SSM SIP Call and the potential need for any extension of time to allow for any supplemental proposal addressing the impacts of the decision
- EPA's preliminary view is that a supplemental proposal will be necessary



REGIONAL HAZE UPDATE

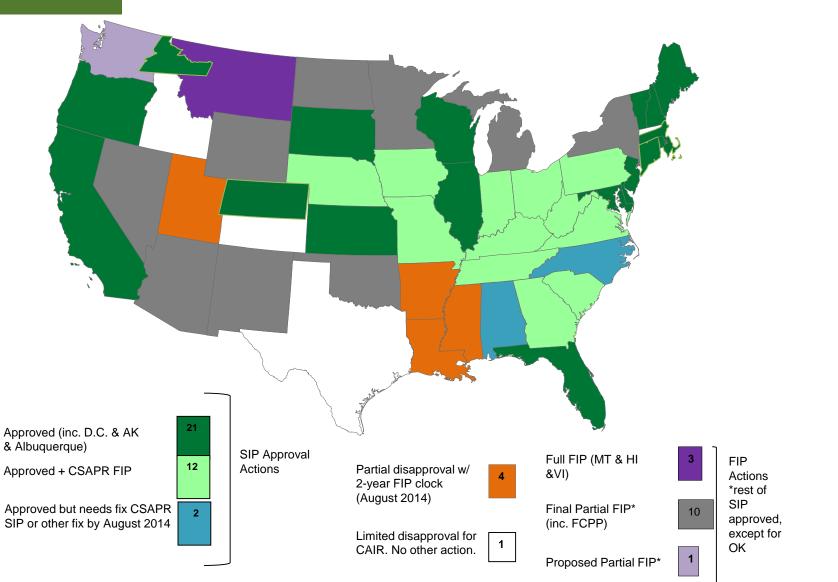


Status of RH Actions Under Consent Decree

- Only six actions remain to satisfy the consent decree:
 - Washington FIP (non-EGU BART and remaining SIP elements)
 - Final rule May 30, 2014
 - Arizona FIP (remaining non-EGU BART and reasonable progress)
 - Final rule June 27, 2014
 - Texas (CAIR disapproval and RP)
 - Proposed rule November 26, 2014; Final September 4, 2015
 - Oklahoma (all remaining non-BART elements)
 - Proposed rule November 26, 2014; Final September 4, 2015
- To date, 130 proposed and final actions



Current Status of Regional Haze SIP and FIP Actions (April 2014)





Regional Haze BART Determinations

- We have taken 1,425 BART actions for PM, SO₂ and NO_x at 484 coal-fired EGUs (excluding Tribal EGUs)
- Of the 1,425 actions:
 - 38 FIPs (about 2%)
 - 765 source-specific BART determinations made by the states (i.e., excluding any CAIR/CSAPR actions), of which we approved 721 and disapproved 44 (~ 94% approval)



Related EPA Actions

- CSAPR Better-than-BART Rule (effective August 7, 2012)
 - Allows CSAPR states to meet the BART requirements for EGUs with CSAPR programs
 - Eleven states have partial "friendly" FIPs that substitute CSAPR trading programs for source-specific BART for EGUs, as applicable
 - Two states have FIP clocks running that are dependent on CSAPR
- Implications of the U.S. Supreme Court opinion reversing the D.C.
 Circuit's decision in EME Homer City
 - EPA is reviewing the opinion and will determine next steps for CSAPR Better-than-Bart Rule upon review



Regional Haze

Overview of petitions for judicial review and administrative petitions for reconsideration

CAIR-CSAPR

- Petitions for review and reconsideration filed by both industry and enviros for all states with a CAIR/CSAPR FIP. There were also "after arising" petitions filed related to EME Homer City.
- Petitions for review have been consolidated in the DC Circuit and all are being held in abeyance.

FIPs

- · Federalism claims by OK and ND.
- All FIPs except Hawaii and Virgin Islands have been challenged (states, industry, enviros).
- Arizona, Montana, New York, San Juan New Mexico, Wyoming

Approvals/Disapprovals

- Enviro and Tribal challenge to Nevada SIP approval (Reid Gardner) and enviro challenges to North Dakota, Colorado, Pennsylvania, and Florida SIP approvals.
- State and industry challenge to Utah SIP partial disapproval.

SO₂ Backstop Trading

 Enviro challenge to approval of SO₂ trading program for "309 states" – Utah, Wyoming, New Mexico, and Albuquerque.

Non-EGU and Other Issues

Arizona – cement plant RP; Michigan and Minnesota – taconite plants; Minnesota – EGU RAVI;
 Pennsylvania – comment/response issues; Michigan – cement plant BART eligibility.



Periodic Progress Report

- Due 5 years from submittal of the initial SIP under 308 and in 2013 under 309, and must be in the form of a SIP revision
- EPA proposed approval of South Carolina's progress report/addressing public comments
- 2013 for Utah, New Mexico and Wyoming (under §309)
- Between 2013 and 2017 for the rest of the states depending on the SIP submittal date



Looking Forward: 2018 RH SIP Revisions

- A comprehensive SIP revision is due July 31, 2018, and must fully satisfy the Regional Haze Rule requirements
- EPA assessing lessons learned to improve the Regional Haze Program for the next round of SIPs
 - Topics for discussion include national consistency issues, possible additional guidance, technical support needed and potential rule revisions
- We have met with WESTAR, the FLMs, and several environmental groups and are considering their recommendations
 - Common themes among the recommendations:
 - Clear guidance and expectations needed for Reasonable Progress, including technical requirements for modeling visibility impacts and conducting cost effectiveness assessments
 - Focus on controllable emissions with reduced emphasis on the goal of natural conditions
- Briefing ADDs and Senior OAR management in spring 2014
- Any changes will require timely action on our part so that states have time to develop their SIPs



GHG PERMITTING UPDATE



GHG Permitting Tailoring Rule Implementation Schedule

Step 1: Sources already subject to PSD "anyway" and GHG emissions = or > than (tpy CO₂e):

New source: NA

PSD Modification: 75,000

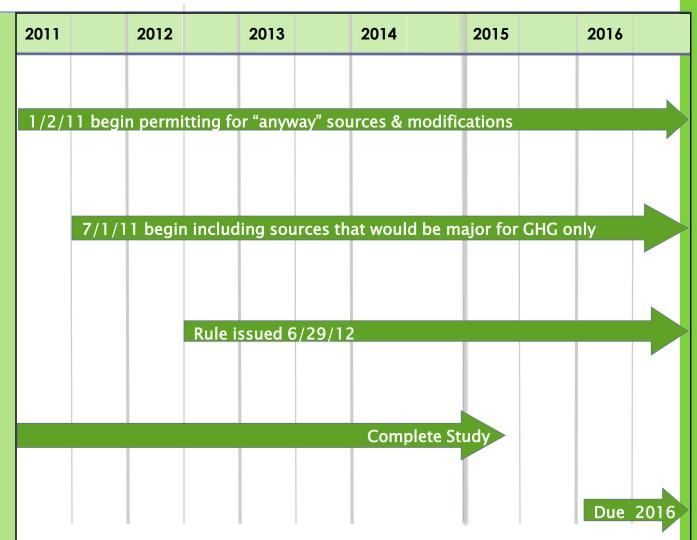
• Step 2: Step 1 plus sources with GHG emissions = or > than

(tpy CO2e):

New source: 100,000 PSD Modification: 75,000

• <u>Step 3</u>: Maintains the thresholds from Step 1 and Step 2. Establishes additional PAL provisions to streamline the permitting process

- <u>5-year study</u>: To examine GHG permitting for smaller sources
- <u>Step 4</u>: Additional rulemaking based on 5-year study





GHG Tailoring Rule Implementation

- Additional work/commitments include:
 - 5-year study due for completion in April 2015
 - Step 4 Rule due in April 2016
 - Actions we are considering to assist in the implementation of the Tailoring Rule
 - Streamlining Techniques Development
 - Title V Fees for GHGs
 - Approaches for treatment of Biogenic CO₂ emissions for permitting purposes
- Consider and develop (as appropriate) GHG PSD permit streamlining approaches



GHG Permitting Five-Year Study: Data Collection

- Data on GHG permitting activity is needed for both PSD and title V programs as part of the study
- EPA is conducting a voluntary survey of 9 state/local permitting authorities to obtain additional permitting data
- Data elements identified for the study include:
 - Total number of permits being issued with/without GHG permit requirements
 - Source categories for which permits are being issued
 - Information to estimate the number of currently minor GHG sources that would be added to the program if the thresholds were changed/lowered
 - Development and use of streamlining techniques
 - Permitting authority burden
- EPA is also assessing information from publicly available online permitting databases such as the RACT/BACT/LAER Clearinghouse
- We are also considering our own data for areas where we issue GHG permits



Status of GHG PSD and Title V Permitting Programs

PSD Programs

- 12 permitting authorities initially received FIPs
- 10 states, 2 programs in Arizona
- Only 1 state (TX) currently remains with GHG FIP
- EPA continues to work with permitting authorities to ensure
 PSD permitting program changes are processed in an efficient manner

Title V Programs

 EPA is working with Regional Offices, as necessary, to ensure states have adequate authority to implement title V GHG programs



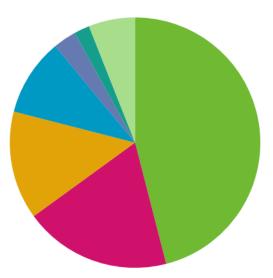
Tally of GHG PSD Permits (as of 4/21/14)

- 172 PSD permits with GHG limits have been issued
 - 122 issued by states
 - 50 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 Regions' websites

Permits by Industry



- **■**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
 - Add-on GHG controls being considered, forcing continued development of these technologies
- EPA views Carbon Capture and Storage (CCS) as an available technology for most facilities emitting CO₂ in large amounts
 - CCS often rejected in BACT Step 4, which considers costs and other impacts.
 - In some cases, CCS has been rejected in Step 2, which considers the technical feasibility of CCS at the source in question
 - EPA continues to stress that the BACT evaluation of CCS is a very case-specific analysis, and BACT decisions should be supported by the record and well documented



Supreme Court GHG Litigation

- On February 24, 2014, the Court heard oral argument in the matter of *UARG v. EPA* where the Court had granted certiorari on the following question:
 - Whether EPA permissibly determined that its regulation of greenhouse gas emissions from new motor vehicles triggered permitting requirements under the Clean Air Act for stationary sources that emit greenhouse gases.
 - Decision is expected in summer 2014
- The Court's decision, whether in favor of EPA or not, is likely to result in EPA assessing the implications of the decision on EPA's permitting related GHG activities



Treatment of Biogenic CO₂ Emissions for PSD and Title V Permitting Purposes

- In July 2011, EPA deferred application of Clean Air Act permitting requirements to CO₂ emissions from bio-energy and other biogenic sources until July 2014 to learn more about the scientific and technical issues related to accounting for biogenic CO₂
- In September 2011, EPA issued a draft accounting framework for biogenic CO₂ emissions from stationary sources and in September 2012 the Science Advisory Board (SAB) completed its scientific analysis of this framework
- In July 2013, the D.C. Circuit Court of Appeals vacated EPA's deferral of the treatment of biogenic CO₂ emissions in Clean Air Act permitting
- D.C. Circuit extended time for submitting petitions for rehearing to 30 days after Supreme Court decision in *UARG v. EPA* (expected in early Summer 2014)
- The Court's mandate making the vacatur effective will not issue until after the Supreme Court decision
- Deferral will expire per its own terms in July 2014
- EPA is considering recommendations made by SAB in order to determine next steps



GWP Revisions

- Revision to Global Warming Potential (GWP) values (Part 98, Table A-1)
 - Final rule published November 29, 2013
 - Aligns Reporting Rule GWPs with IPCC's 2007 Report
 - Most GWP values increase
 - Methane increased from 21 to 25
 - Nitrous Oxide and SF₆ decreased
 - New GWPs are effective on 1/1/14 for EPA permits and in states if their rules automatically update when Table A-1 is revised
 - State rules that do not automatically update will need to amend their SIPs at some point (no timetable)
 - No Retroactivity Final PSD permits will continue to use GWPs that were in effect at issuance
 - PSD permits not yet issued should use new values if issued on/after 1/1/14, assuming the new values are effective in their state



NSR AND TITLE V UPDATES



NSR: PM_{2.5} NAAQS Implementation Rule

- Upcoming PM_{2.5} Implementation Rule will clarify application of CAA Subpart 4 requirements to nonattainment NSR
- Proposed requirements will address:
 - Lower major source thresholds for PM_{2.5} and precursors in PM_{2.5}
 Serious Nonattainment Areas;
 - Potential under section 189(e) for control of <u>all PM_{2.5} precursors (SO₂, NOx, VOC & ammonia), with opportunity for state to exempt any precursor will not contribute significantly to ambient PM_{2.5} in the nonattainment area.
 </u>
- EPA has indicated that the January 4, 2013, Court decision does not affect the PSD requirements for PM_{2.5}
- Proposal anticipated for publication early fall 2014



NSR: PM_{2.5} Significant Monitoring Concentration (SMC) and Significant Impact Levels (SILs)

- The January 22, 2013 DC Circuit Court decision in Sierra Club v. EPA vacated the PM_{2.5} SMC and vacated and remanded to EPA paragraph (k)(2) of two PSD rules (i.e., 40 CFR 51.166 and 52.21) containing the PM_{2.5} SILs
- The two rulemakings below address this Court decision:
- 1. PM_{2.5} Vacatur Rule
 - Rule removed the PM_{2.5} SMC and (k)(2) from 40 CFR 51.166 and 52.21
 - Direct final rule published at 78 FR 73698, December 9, 2013



NSR: PM_{2.5} SMC and SILs (cont.)

- 2. PM_{2.5} SILs Reconsideration Rule
 - Rule will focus on legal and technical basis for the PM_{2.5} SILs and their use in the PSD air quality analysis
 - Rule will address significant emissions rates (SER) for SO₂, NO_x and VOC as PM_{2.5} precursors and a new SER for ammonia
 - Rule will also remove mandatory newspaper notice requirement and allow additional methods (media neutral) for public notice of draft permits for major NSR and title V
 - Proposal anticipated in early 2015



NSR: Interim Guidance for Using Condensable PM Test Results for NSR

- Developing interim guidance for using Method 202 for measuring CPM for both PSD and nonattainment NSR
- Guidance responds to potential positive bias concerns from contamination of test apparatus and solvents
- CPM over-estimation can affect source applicability determinations, air quality analyses, emissions offset calculation and source compliance activities
- Guidance will provide alternative "blank correction" procedures until EPA issues a best practices document for Method 202 and revises Method 202 as necessary
- Guidance was issued on April 8, 2014



PM_{2.5} NAAQS Implementation

- Draft Guidance on PM_{2.5} PSD Modeling
 - Addressed approaches to assessment of source impacts on ambient PM_{2.5}, particularly for secondary PM_{2.5}
 - Addressed recent court decision affecting the PM_{2.5} Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC) and contained interim guidance on using the SILs as part of the air quality impact analysis
 - Finalizing revisions to guidance document based on comments received and experience gained through more recent PM_{2.5} permit modeling assessments submitted for review to EPA
 - Draft guidance can be found at <u>http://www.epa.gov/ttn/scram/guidance/guide/Draft_Guidance_fo</u> <u>r_PM25_Permit_Modeling.pdf</u>
- Final guidance document anticipated in mid-May



NSR: Other Rulemakings

- 1. Revisions to EPA's Guideline on Air Quality Models, published as Appendix W to 40 CFR Part 51
 - In response to Sierra Club petition grant for ozone & PM_{2.5}, and technical updates to address 1-hour NAAQS
 - Rulemaking to:
 - Incorporate new analytical techniques to address ozone and secondary PM_{2.5}
 - Updates for conducting individual source and cumulative impact analysis for new 1-hour NAAQS
 - Update, as appropriate, current EPA-preferred models to address input and science issues



NSR: Other Rulemakings (cont.)

2. Ozone PSD and NNSR Requirements Rule

- To address screening criteria associated with planned Appendix
 W revisions regarding quantification of ozone impacts
- Rulemaking to:
 - Establish SILs for ozone
 - Address revised SERs for VOC and NO_x as ozone precursors, for triggering PSD and NNSR applicability and the requirement for air quality analysis, logically linked to the SILs
- Leverage concepts from PM_{2.5} SIL rulemaking to inform approach and reduce time and resources needed for rule development
- Timing considerations Will likely coordinate this rulemaking with the Appendix W revisions



NSR: PSD Permit Extension Guidance

- To clarify what constitutes adequate justification for PSD permit extension, the Agency issued national guidance, applicable to EPA and delegated permitting authorities, on January 31, 2014
 - http://www.epa.gov/region7/air/nsr/nsrmemos/extend14.pdf
- PSD permit extensions generally should be available for an additional 18-month period following the initial 18-month timeframe (shorter or longer time periods may be granted depending on the justification provided)
- Public notice and comment is not necessary for permit extension actions that would simply extend the deadline for commencing construction without reconsideration or amendment of the substantive conditions of the permit



Title V Program: 2005 Inspector General Report

- EPA proposed changes to federal rules to amend the annual compliance certification requirements for state and federal operating permit programs to address IG recommendation
 - The rule amending the compliance certification requirements is a correction rule to restore a sentence that was removed from the rules in error back in 2003
 - The proposal was published on March 29, 2013
 - We received 7 comment letters and are working on the final package
- EPA committed to develop a guidance document that addresses the recommendations on the contents of statement of basis and compliance certifications
 - Guidance signed April 30, 2014
- EPA reviewing other priority actions recommended by Task Force and NACAA



SIP REFORM UPDATE



Efforts to Address SIP Backlog and Improve SIP Processing

- NACAA/ECOS/EPA SIP Reform Work Group formed in 2010 and met for past several years to discuss how to improve SIP processing
- Work Group identified a list of 13 priority objectives from the Work Group, referred to as the "List of 13"
- Main themes of these discussions included:
 - Developing and implementing best practices and tools through PM_{2.5}
 Full Cycle Analysis Project (FCAP) for PM_{2.5} to facilitate SIP processing
 - Timely issuance of technical tools, guidance and rulemakings needed by states to implement NAAQS
 - Increasing transparency of SIP data and evaluating additional improvements to AirTrax that could be of assistance to states
 - Developing joint state-region plans to reduce the number of SIPs pending before an EPA Region within a certain time frame



Focus of EPA's SIP Reform Efforts

- SIP Backlog Reduction and Improved SIP Processing
 - SIP approval decisions are consistent between EPA Regions and made within Clean Air Act timeframes
 - SIP backlog is reduced and future SIPs are processed in timely manner
- Rule and Guidance Management EPA issues timely and effective NAAQS-related rules, guidance, and other tools needed for air agencies to meet their Clean Air Act responsibilities
- Continue to make progress on list of 13 SIP Reform requests from ECOS/NACAA



SIP Backlog Commitment

- ECOS/NACAA SIP Reform Work Group discussed need to clear the SIP backlog and improve SIP processing
- Resulted in a joint commitment to:
 - Set a goal of clearing the current backlog (as of October 1, 2013) by the end of 2017;
 - Develop 4-year management plans agreed upon by EPA Regions and states that identify the highest priority SIPs process to meet the backlog goal;
 - Use best practices and tools developed through FCAP to facilitate SIP processing; and
 - Increases transparency of SIP review status and improve EPA's SIP tracking system with fields that could be of assistance to states.



4-Year SIP Management Plans

- Regions working to complete plans with states by April 2014
- Plans are flexible and based on agreement between a region and a state
- Plans identify the SIPs to be processed each year between 2014 and 2017 to eliminate current backlog
- Plans will be revisited each year and altered to meet current priorities
- Recognition that clearing the backlog by end of 2017 may be impossible due to litigation, state priorities and other considerations, this will be addressed between each EPA Region and their states



Tracking Additional Data

- Changes will be made to the EPA SIP tracking system to include additional data requested by states
- Additional data includes:
 - High, Medium, Low priority SIP categories
 - Target dates for proposed and final action on SIPs
 - Revised category list
- Information will be reported to states each month



Timely Issuance of Technical Tools, Guidance and Rules

- FCAP for PM_{2,5} resulted in development of timeline for optimal dates for technical tools, guidance and rules ("guidance")
- States need guidance earlier than it has been provided to meet their CAA SIP submittal dates
- Although the timeline was developed after EPA began implementing the PM_{2.5} NAAQS, we are adhering to timeline to extent possible
- EPA using optimal timeline to plan outreach for current Ozone NAAQS review and develop necessary technical tools, guidance and rulemakings

Timeline for 2012 PM_{2.5} NAAQS Implementation Rules/Guidance/Tools

Action	After NAAQS Promulgation	Optimal Dates	Actual and (Planned) Dates
EPA promulgates 2012 PM2.5 NAAQS rule	N/A	Dec-12	Dec-12
Share draft Designations Guidance memo with key co-regulators	2 months	Feb-13	Feb-13
Listening session for key co-regulators.	3 months	Mar-13	Mar-13
Draft permit modeling guidance	12 months	Dec-13	Dec-13
EPA issues Designations guidance	4 months	Apr-13	Apr-13
States submit Designation recommendations	12 months	Dec-13	Oct-13 - Mar-14
EPA issues proposed NAA SIP rules or guidance	12 months	Dec-13	(Sep-14)
Updated modeling guidance to address PM issues	12 months	Dec-13	(Dec-14)
Updated emission inventory guidance to address PM issues	12 months	Dec-13	(Sept-14)
"Final" permit modeling guidance	17 months	May-14	(May-14)
EPA promulgates final PM2.5 area designations	24 months	Dec-14	(Dec-14)
Effective date of EPA designations	27 months*	Mar-15	(Apr-15)
EPA issues final nonattainment area SIP rules or guidance	27 months*	Mar-15	(Sep-15)
"Final" modeling guidance	27 months*	Mar-15	(Sep-15)
"Final" emission inventory guidance	27 months*	Mar-15	(Sep-15)
EPA and/or air agencies issue final SIP templates, toolkits, etc. to assist states with development of nonattainment area plans	27 months*	Mar-15	(Sep-15)
States submit Attainment plans	45 months	Sep-16	(Sep-16)

^{*} Designations can be finalized in 3 years under certain circumstances. If an additional year is used for designations, then an additional year could be used to develop implementation guidance.



Other Lessons Learned Going Forward

FCAP PM_{2.5} state/EPA workgroups developed several best practices and tools for SIP development and processing

- PM_{2.5} SIP Best Practice Roadmap
 - Provides recommendations for identifying key tasks, due dates and assigned responsibilities specific to 2012 PM_{2.5} NAAQS SIP development and processing
 - Provides recommendations for "ideal" timeframes if used for other pollutants
- Best Practice Recommendations for Communicating National Issues:
 - Create a forum for sharing issues of national relevance through a routine call with all air agencies
 - Ensure opportunity and mechanism for additional questions and feedback on specific issues
- Best Practice Recommendations for Consistent State/Regional Dialog on Issues:
 - Routine communication with targeted discussions
 - Engage in approvability discussions early in the SIP process (sharing/reviewing early drafts)
- To be developed: Attainment demonstration outline/template for states



e-SIP Pilot

- Pilot system which allows Regions to collect and track electronically potential SIPs
 - Pilot was initiated on February 18, 2014, and will last approximately 6 months to 1 year
 - 14 states and 5 Regions are participating
 - Application supported by the Central Data Exchange (CDX) for user registration and maintenance; identity proofing; electronic signature; and data access

Next Steps

- States are providing feedback and participating in bimonthly calls
- After the pilot, EPA will revise system as needed
- EPA will also explore expanding the types of SIPs that are collected electronically



QUESTIONS OR COMMENTS

