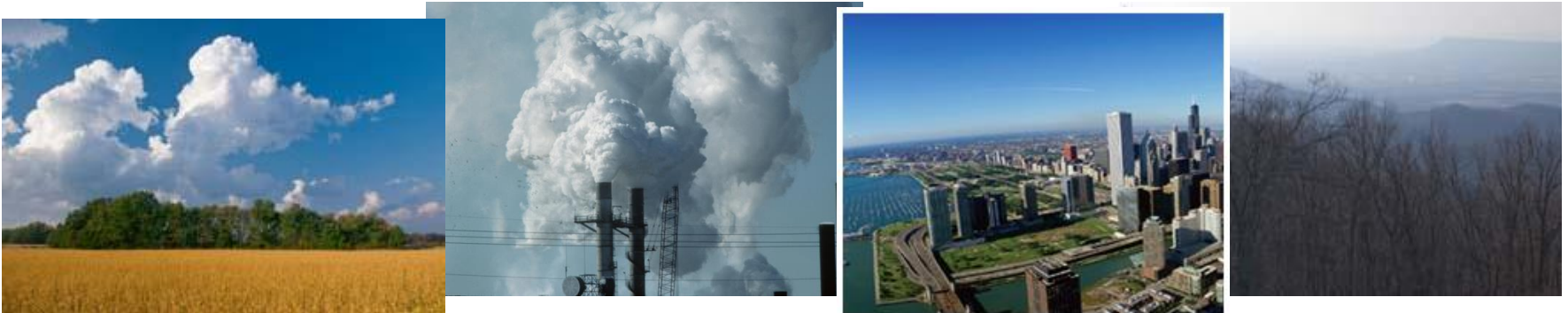


# NAAQS and Other CAA Implementation Updates

**Anna Marie Wood**  
**Director, Air Quality Policy Division**  
**AAPCA Annual Meeting**  
**September 11, 2014**

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# Overview of Presentation

- NAAQS Schedules and Implementation
  - Ozone
  - PM<sub>2.5</sub>
  - SO<sub>2</sub>
  - Other NAAQS
- Exceptional Events
- Infrastructure SIPs, Interstate Transport and SSM
- Regional Haze
- GHG Permitting
- New Source Review and Title V Permitting
- SIP Reform

# NAAQS Implementation

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# NAAQS Reviews: Status Update

(as of September 10, 2014)

	Ozone	Lead	Primary NO <sub>2</sub>	Primary SO <sub>2</sub>	Secondary NO <sub>2</sub> and SO <sub>2</sub>	PM	CO
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) <sup>1</sup>	<u>August 2014</u> Final REAs Final PA  <u>Dec 1, 2014</u> <sup>2</sup> Proposed rule  <u>Oct 1, 2015</u> <sup>2</sup> Final rule	<u>May 2014</u> Final PA  <u>2014</u> Proposed rule	<u>June 2014</u> Final IRP  <u>Fall 2014</u> 2 <sup>nd</sup> Draft ISA REA Planning Document	<u>Summer 2014</u> Final IRP	<u>Fall 2014</u> Draft IRP	Kickoff workshop for next review targeted for early 2015	<u>TBD</u> <sup>3</sup>

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

<sup>2</sup> **Bold and underlined** dates indicate court-ordered or settlement agreement deadlines

<sup>3</sup> TBD = to be determined

# Anticipated NAAQS Implementation Milestones

(updated September 10, 2014)

Pollutant	Final NAAQS Date	Infrastructure SIP Due	Designations Effective	Attainment Plans Due	Attainment Date
PM <sub>2.5</sub> (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 <sub>2</sub> (2010) (primary)	Jan 2010	Jan 2013	Feb 2012	N/A	N/A
SO <sub>2</sub> (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 <sub>2.5</sub> (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-hour Ozone NAAQS in 2008 (75 ppb)
- Area designations for the 2008 Ozone NAAQS effective on July 20, 2012
  - 46 nonattainment areas, 1 unclassifiable area
  - Ongoing litigation concerning designations for several areas
    - Oral argument set for October 21, 2014
- EPA received two petitions seeking redesignation to nonattainment of newly violating areas initially designated as attainment or unclassifiable
  - On August 14, 2014, EPA denied the petition submitted by Sierra Club regarding the redesignation of 57 areas
- 2008 Ozone NAAQS SIP Requirements Rule and Revocation of 1997 NAAQS
  - Proposed May 29, 2013 (78 FR 34178), anticipate final rule in early 2015
  - Emission inventory and RACT SIPs due July 2014
  - Attainment plans and demonstrations due July 2015 (Moderate) or July 2016 (Serious and above)

# 2015 Ozone NAAQS Review

- April 29, 2014 court issued ruling on schedule
  - Propose December 1, 2014
  - Final October 1, 2015
  
- The EPA staff conclusions for the primary and secondary standards are based on consideration of:
  - The scientific evidence discussed in the Integrated Science Assessment
  - Estimates of Ozone exposures and risks estimated in the Health Risk and Exposure Assessment
  - Advice received from CASAC
  - Consideration of public comments received as CASAC meetings

# 2015 Ozone NAAQS Review (cont.)

- EPA staff conclude available health evidence and exposure/risk information call into question the adequacy of the public health protection provided by the current primary standard
  - EPA staff concluded it is appropriate to consider revising the level within the range of 70 ppb to 60 ppb
  
- EPA staff conclude available vegetation and ecosystem effects evidence and exposure/risk calls into question the adequacy of the public welfare protection provided by the current secondary standard
  - EPA staff concluded it is appropriate to consider a range of levels from 17 to 7 ppm-hrs, expressed in terms of the W126 index



# 2015 Ozone NAAQS Review: Implementation

- Key implementation milestones for NAAQS (if revised)
  - I-SIPs due Oct 2018
  - Designations promulgated by October 2017
  - Attainment plans due 2020/21
  - Attainment dates 2020-2037 (primary standard only)
  
- Implementation rules and guidance for 2015 Ozone NAAQS
  - Proposals on limited grandfathering of PSD permit applications, and process deadlines for ozone-related exceptional events demonstrations to be included with NAAQS review proposal
  - Also seeking early input on certain implementation issues

# Potential Schedule for 2015 Ozone NAAQS Implementation Rules/Guidance/Tools

Action	After NAAQS Promulgation	Actual and (Planned) Dates
EPA <b>proposes</b> 2015 Ozone NAAQS and Monitoring, Exceptional Event Demonstration Schedule, and PSD guidance or rule as part of 2015 NAAQS proposal.		December 2014
EPA <b>finalizes</b> 2015 Ozone NAAQS and Monitoring, Exceptional Event Demonstration Schedule, and PSD guidance or rule as part of 2015 NAAQS final.	Upon promulgation	October 2015
EPA issues Designations guidance	4 months	January 2016
<i>States submit Designation recommendations</i>	<i>12 months</i>	<i>October 2016</i>
As needed, EPA issues Transport Rule and/or revised i-SIP guidance	Up to 12 months	Up to October 2016
EPA <b>proposes</b> Nonattainment Area SIP rules/guidance (including classification, conformity, emission inventory, modeling [e.g., Appendix W], and nonattainment NSR provisions)	12 months	October 2016
EPA <b>finalizes</b> Designations, Classifications, and Attainment Dates	24 months	October 2017
EPA <b>finalizes</b> Nonattainment Area SIP rules/guidance	24 months	October 2017
EPA issues final SIP templates, toolkits, etc. to assist states with development of nonattainment area plans	24 months	October 2017
<i>States submit Infrastructure and Transport SIPs</i>	<i>36 months</i>	<i>October 2018</i>
<i>States submit Attainment plans</i>	<i>5-6 years</i>	<i>December 2020-2021</i>
<i>Nonattainment Area Attainment Dates (Marginal – Extreme)</i>	<i>5-22 years</i>	<i>December 2020-2037</i>

\* 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.

# Progress on Ozone Attainment

(as of September 10, 2014)

	1997 8-hr Ozone 2004 Designations	2008 Ozone 2012 Designations
Initial Nonattainment Areas	114	46
Redesignation Approved Areas	77	0
Current Nonattainment Areas	37	46
Clean Data Determinations	21	0
Proposed Redesignations	1	0

# Particulate Matter<sub>2.5</sub> (PM<sub>2.5</sub>) NAAQS

- On December 14, 2012, EPA revised the primary (health-based) annual PM<sub>2.5</sub> standard by lowering the level from 15.0 to 12.0 µg/m<sup>3</sup>
- EPA also made updates and improvements to the PM<sub>2.5</sub> monitoring network that include relocating a small number of monitors to measure PM<sub>2.5</sub> near heavily traveled roads in areas with populations ≥1 million
  - These relocations will be phased in over two years (2015-2017) and will not require additional monitors
- U.S. Court of Appeals, D.C. Circuit issued its decision on May 9, 2014 regarding a lawsuit challenging the final PM NAAQS
  - Court denied petitions for review on all accounts

# PM<sub>2.5</sub> NAAQS Implementation: 2014 Deadline and Classification Rule

- On June 2, 2014, EPA issued the final rule on “Identification of Nonattainment Classification and Deadlines for Submission of SIP Provisions for 1997 PM<sub>2.5</sub> NAAQS and 2006 PM<sub>2.5</sub> NAAQS” (79 FR 31566)
  - Classifies areas designated nonattainment for the 1997 and/or 2006 PM<sub>2.5</sub> standards as “Moderate”
  - Sets new deadline of December 31, 2014, for states to submit attainment–related and nonattainment NSR SIP submissions required under subpart 4 as needed
  - Provides clarity to states following January 2013 D.C. Circuit decision holding that the EPA should implement PM<sub>2.5</sub> NAAQS according to subpart 4 of part D of Title I of the Clean Air Act
  
- Litigation pending

# PM<sub>2.5</sub> NAAQS Implementation: Status of Designations

- EPA received recommendations from 50 states, 2 territories, D.C. and 6 tribes
  
- On August 19, 2014, 120-day letters were signed and released indicating EPA's intent to designate:
  - Nonattainment - 14 areas in 6 states
  - Unclassifiable – 2 territory, 1 area in Indian country, 3 areas in Georgia, the entire state of Tennessee (except for 3 counties in the Chattanooga area), the entire state of Illinois, 2 counties in Indiana and 4 counties and 1 city in Missouri
  - Deferring designations for 1 year for five areas – primarily in Georgia but also affecting single counties in South Carolina and Alabama

## PM<sub>2.5</sub> NAAQS Implementation: Status of Designations (cont.)

- The Notice of Availability for the 120-day letters was published in the Federal Register on August 29, 2014 (78 FR 51517)
- The comment period on the 120-day letters closes:
  - September 29, 2014 for the public
  - October 29, 2014 for states and tribes
- Final designations expected in December 2014

# PM<sub>2.5</sub> NAAQS Implementation: SIP Requirements NPRM

- PM<sub>2.5</sub> NAAQS SIP Requirements NPRM
  - Propose rule late 2014
  - Finalize as close as possible to effective date of designations for the 2012 PM<sub>2.5</sub> NAAQS (in late 2015)
- The proposal will:
  - Take comment on approaches to clarify nonattainment implementation requirements according to subpart 4 of part D of Title I of the CAA, consistent with January 2013 D.C. Circuit Court decision
  - Apply to all PM<sub>2.5</sub> NAAQS nonattainment areas, including areas designated for the 1997 and 2006 PM<sub>2.5</sub> NAAQS and areas designated later this year for the 2012 PM<sub>2.5</sub> NAAQS
  - Address how subpart 4 court decision affects nonattainment NSR permitting requirements (e.g., with respect to major source threshold, precursors, etc.)



# PM<sub>2.5</sub> NAAQS Implementation: Inventory and Modeling Guidance

## ■ PM<sub>2.5</sub> 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<sub>2.5</sub> Implementation Rule in late 2014
  - Final guidance will be released with the final PM<sub>2.5</sub> Implementation Rule

## ■ PM<sub>2.5</sub> Attainment Demonstration Modeling Guidance for SIPs

- Updates to draft guidance – Late 2014 around timing for designations
- Final version will be released when PM<sub>2.5</sub> Implementation Rule is finalized

## Schedule for 2012 PM2.5 NAAQS Implementation Rules/Guidance/Tools

Action	After NAAQS Promulgation	Actual and (Planned) Dates
EPA promulgates 2012 PM <sub>2.5</sub> NAAQS rule and Monitoring, Exceptional Event Demonstration Schedule, and PSD guidance or rule as part of NAAQS rule.	N/A	Dec-12
EPA issues Designations guidance	4 months	Apr-13
<i>States submit Designation recommendations as needed</i>	12 months	Oct-13 - Mar-14
EPA proposed nonattainment area SIP rules or guidance (e.g., modeling, emission inventory and permit modeling guidances)	12 months	(Dec-14)
EPA finalizes PM <sub>2.5</sub> area designations	24 months	(Dec-14)
Effective date of EPA designations	27 months*	(Apr-15)
EPA issues final nonattainment area SIP rules or guidance (e.g., modeling, emission inventory and permit modeling guidances)	27 months*	(Sep-15)
EPA and/or air agencies issue final SIP templates, toolkits, etc. to assist states with development of nonattainment area plans	27 months*	(Sep-15)
<i>States submit Attainment plans</i>	45 months	(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.

# Progress on PM<sub>2.5</sub> Attainment

(as of September 10, 2014)

	1997 PM <sub>2.5</sub> 2005 Designations	2006 PM <sub>2.5</sub> 2009 Designations
Initial Nonattainment Areas	39	32
Redesignation Approved Areas	20	8
Current Nonattainment Areas	19	24
Clean Data Determinations	16	13
Proposed Redesignations	5	0

# 2010 SO<sub>2</sub> NAAQS Implementation

- Revised primary SO<sub>2</sub> standard: June 2010 (75 ppb/1-hour)
  
- SO<sub>2</sub> Area Designations and Implementation Strategy released February 2013
  
- Designations and Implementation Guidance and Assistance
  - Issued PSD permit modeling guidance documents applicable to the 1-hour SO<sub>2</sub> 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>

# 2010 SO<sub>2</sub> NAAQS Implementation

## ■ SO<sub>2</sub> 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
  - <https://www.federalregister.gov/articles/2014/05/13/2014-09458/data-requirements-rule-for-the-1-hour-sulfur-dioxide-so2>
- Final scheduled for summer 2015

## ■ 1-hr SO<sub>2</sub> NAAQS Nonattainment SIP Elements Guidance

- Objective is to provide assistance to areas developing their nonattainment area plans
- Issued guidance on April 24, 2014
  - <http://www.epa.gov/airquality/sulfurdioxide/pdfs/20140423guidance.pdf>
- EPA Regional Offices are working to assist states with SO<sub>2</sub> nonattainment areas in applying this guidance to develop SIPs, redesignation areas, etc.

# 2010 SO<sub>2</sub> NAAQS Implementation: Designations

- SO<sub>2</sub> Designations and Implementation Strategy provides for three rounds of designations:
  - First round of designations
    - Promulgated on August 5, 2013 (effective October 2013)
    - Attainment SIPs due April 2015
    - Attainment date October 2018
  - Second round BASED ON MODELING by December 2017 (effective by February 2018)
    - Attainment SIPs due August 2019
    - Attainment date February 2023
  - Third round BASED ON MONITORING by December 2020 (effective by February 2021)
    - Attainment SIPs due August 2022
    - Attainment date February 2026
- Proposed consent decree between U.S. and SC/NRDC could result in additional round of designations for source areas

# Progress on Revised NAAQS

(as of September 10, 2014)

	2010 SO <sub>2</sub> 2013 Designations
Initial Nonattainment Areas	29
Redesignation Approved Areas	0
Current Nonattainment Areas	29
Clean Data Determinations	0
Proposed Redesignations	0

- Revised NAAQS in 2008, primary and secondary standard is 0.15 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) 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 areas 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
- NOI received in June 2014 from Center for Biological Diversity, Center for Environmental Health and Clean Air Council to require EPA to issue findings of failure to submit attainment plans (for 4 more areas) and failure to act on attainment plan submissions (for 6 areas)



# Progress on Revised NAAQS

(as of September 10, 2014)

	2008 Lead 2010-2011 Designations
Initial Nonattainment Areas	21
Redesignation Approved Areas	0
Current Nonattainment Areas	21
Clean Data Determinations	2
Proposed Redesignations	1

# Exceptional Events

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# Exceptional Events Next Steps

- Revisions to the 2007 Exceptional Events Rule (EER)
  - We anticipate proposing the EER revisions in mid-2015 and promulgating EER revisions in mid-2016
  - Schedule provides EER changes in advance of implementation activities for any potential new or revised ozone NAAQS
  
- Guidance to Support Data Exclusion Requests for Wildfire-Related Events that May Affect Ozone Concentrations
  - Schedule anticipated to parallel EER revision effort
  - Focus on demonstration components and the technical tools available to support EER criteria

# Exceptional Events Rule Revisions

- Rule revisions will focus on statutory language to clarify level of supporting documentation to satisfy approved EE demonstrations with the focus on improved national consistency
- EPA recognizes that there are few readily-available, cost-effective tools that air agencies can use to support ozone-related exceptional event demonstrations under the existing EER
  - We are addressing this gap

# Exceptional Events in Designations Efforts

- Example Dates for a Potential 2015 Ozone NAAQS (under a 2-year designations schedule)
  - By December 1, 2014 – EPA proposes 2015 Ozone NAAQS
  - ***Mid-2015 - EPA proposes Exceptional Event Rule revisions/guidance***
  - By October 1, 2015 – EPA promulgates 2015 Ozone NAAQS
  - ***Mid-2016 - EPA promulgates Exceptional Event Rule revisions/guidance***
  - October 2016 - States/tribes submit area and boundary recommendations based on 2013-2015 data
  - June 2017 - EPA notifies states/tribes re: any intended modifications to their recommendations (120-day letters) based on 2014-2016 data
  - October 2017 - EPA promulgates final ozone area designations
  - Potential exceptional event schedule

Air Quality Data Collected for Calendar Year	Event Flagging & Initial Description Deadline	Detailed Documentation Submission Deadline
2013 and 2014	July 2016	October 2016
2015	July 2016	October 2016
2016	May 2017	May 2017

# Exceptional Events (cont.)

- States continue to express concerns about EE demonstrations
- Ongoing discussion with EPA Regions and states to determine lessons learned thus far and best practices – what worked well and what could work better to address concerns for EE demonstrations
  - Are there opportunities to further standardize certain aspects of EE demonstrations?
  - How can early and frequent coordination and communication, templates, and other process aids be used to improve process efficiency?
  - Are there other process improvements or technical tools EPA and states should consider?
- Technical tools and process aids identified as best practices and lessons learned will be used to complement the EE Rule revisions

# Infrastructure SIPs, Transport and SSM

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# Litigation Related to Infrastructure SIPs for Implementing NAAQS

## ■ 2006 PM<sub>2.5</sub> NAAQS

- January 2014: NOI for FFS to issue FIP for several states for which EPA previously issued findings of failure to submit (FFS) PM<sub>2.5</sub> infrastructure state implementation plans (iSIPs)

## ■ 2008 Ozone NAAQS

- January 2013: EPA published FFS iSIPs for 2008 Ozone NAAQS for 28 states, D.C. and Puerto Rico
- July 2014: Complaint filed against the EPA for failure to act to either approve or disapprove iSIPs submitted by 22 states
- August 2014: NOI for failure to act on iSIPs submitted by 4 additional states – IA, MT, NE and UT

## ■ 2008 Lead NAAQS

- July 2014: NOI for failure to act on 2008 Lead NAAQS iSIP for NC

## ■ 2010 NO<sub>2</sub> NAAQS

- August 2013: NOI for FFS iSIPs for 2010 NO<sub>2</sub> NAAQS
  - EPA is undertaking public notice and comment process for proposed consent decree (under CAA section 113(g)) and anticipates issuing FFS once process is complete

## ■ 2010 SO<sub>2</sub> NAAQS

- February 2014: NOI for FFS SO<sub>2</sub> iSIPs for 38 states and D.C. that satisfy all required iSIP elements



# Interstate Pollution Transport Update

- On April 29, 2014, 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 (e.g., transport SIPs, redesignations, Regional Haze CSAPR, Better than BART Rule)
  - CSAPR focused on attainment and maintenance of the 1997 Ozone NAAQS, 1997 PM<sub>2.5</sub> NAAQS and 2006 PM<sub>2.5</sub> NAAQS; CSAPR stayed since December 2011
- On June 26, 2014, EPA filed a motion with the U.S. Court of Appeals to lift the stay of CSAPR and to begin implementing it on January 1, 2015
  - Court decision on request to lift stay anticipated in next few months
- CAIR, which remains in place, addresses the 1997 Ozone and 1997 PM<sub>2.5</sub> standards
- EPA is continuing to evaluate implications of the Supreme Court decision and remaining CSAPR litigation as we develop a path forward for addressing transport
- 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
- EPA is reviewing this petition as part of its consideration of the overall transport strategy for the 2008 Ozone NAAQS

# SSM SIP Call: Recap of EPA's February 2013 Proposal

- In February 2013, EPA proposed SIP calls to 36 states concerning identified SIP provisions for treatment of excess emissions occurring during periods of startup, shutdown and malfunction (SSM)
  - The proposal restated and invited public comment on EPA's SSM Policy as it applies to State Implementation Plans, with one change regulating affirmative defense (AD) provisions
  
- On September 5, EPA issued a supplemental proposal, to address “affirmative defense” provisions in SIPs, before finalizing the SSM SIP rulemaking already under way due to recent federal court ruling in Cement NESHAP case

# SSM SIP Call: September 5, 2014 Supplemental Proposal

- *NRDC v. EPA* (D.C. Circuit 2014): NRDC challenged EPA’s Cement NESHAP regulations; the D.C. Circuit ruled EPA does not have statutory authority to provide “affirmative defense provisions,” even in the case of malfunctions
- It is EPA’s view that D.C. Circuit’s decision extends to AD provisions for malfunctions in SIPs
- The September 5 supplemental notice of proposed rulemaking (SNPR) revises February 2013 proposal for AD provisions for malfunctions
- This SNPR addressed the court’s decision in NESHAP context and its implications for SIPs and how specific SIPs may be affected
  - The SNPR is limited to issues related to AD provisions and would not change what EPA proposed in February 2013 for any other issues
- SNPR affects 17 states with AD provisions

# SSM SIP Call: Toward Final Rulemaking

- EPA's rulemaking deadlines, pursuant to the settlement agreement:
  - SNPR signed September 5, 2014
  - Final rule to be signed May 22, 2015
  
- As earlier proposed, the deadline for state action to remove provisions from their rules and make corrective SIP submissions will be 18 months after the final action
  
- Link to EPA's webpage specific to this rule is at [www.epa.gov/airquality/urbanair/sipstatus](http://www.epa.gov/airquality/urbanair/sipstatus)

# Regional Haze

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# Status of RH Actions

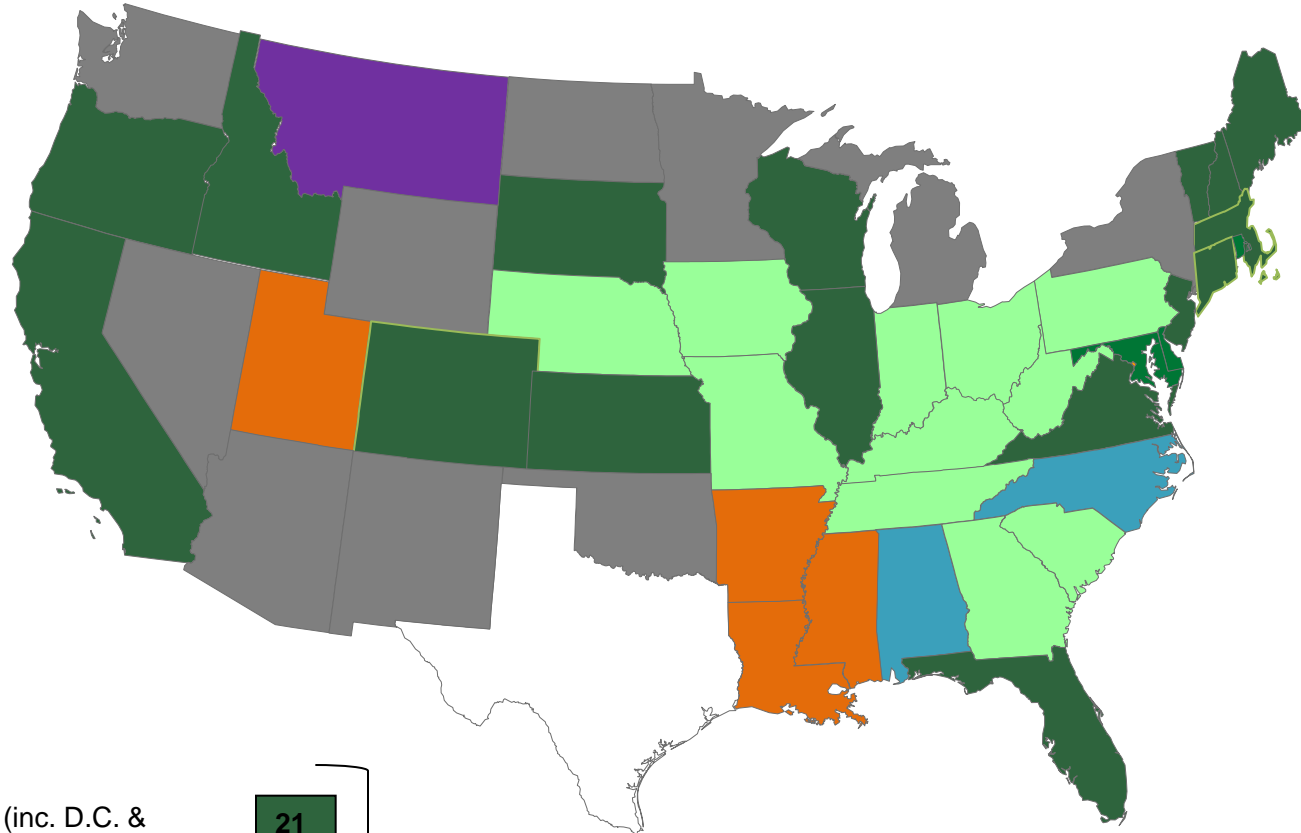
- The initial round of RH SIPs is nearly complete
- Only two actions remain to satisfy the consent decree:
  - Texas (CAIR disapproval and RP)
    - Proposed rule November 26, 2014; Final September 4, 2015
  - Oklahoma (all remaining non-BART elements)
    - Proposed rule November 26, 2014; Final September 4, 2015
- Litigation lingers in several states – with challenges for:
  - CAIR/CSAPR reliance for EGU BART
  - All EPA FIPs (from states, affected sources, and environmental groups)
  - Disapproved SIPs (by states and affected sources) and approved SIPs (by environmental groups)
  - The SO<sub>2</sub> backstop program for Albuquerque, WY, UT, and NM
  - Actions on non-EGUs – taconite plants in MN and MI and cement plants in several states
- Key observations from first planning period for the RH program
  - When controls are fully implemented, the visibility benefits will be significant due to reduction of SO<sub>2</sub>, NO<sub>x</sub> and PM
  - Visibility improvement at some Class I areas is slower than expected

# Regional Haze BART Determinations

- We have taken 1,426 BART actions for PM, SO<sub>2</sub> and NO<sub>x</sub> at 485 coal-fired EGUs (excluding Tribal EGUs)
- Of the 1,426 actions:
  - 39 FIPs (about 2%)
  - 766 source-specific BART determinations made by the states (i.e., excluding any CAIR/CSAPR actions), of which we approved 721 and disapproved 45 (~ 94% approval)



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



Approved (inc. D.C. & AK & Albuquerque)

21

Approved + CSAPR FIP

12

Approved but needs fix CSAPR SIP or other fix by August 2014

2

SIP  
Approval  
Actions

Partial disapproval  
w/ 2-year FIP clock

4

Limited disapproval  
for CAIR. No other  
action.

1

Full FIP (MT & HI & VI)

3

Final Partial FIP\*  
(inc. FCPP and Navajo)

12

FIP  
Actions  
\*rest of  
SIP  
approved,  
except for  
OK

# 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 depended on CSAPR but did not have the “friendly” FIP
- We have requested that the court lift the CSAPR stay
  - If the stay is not lifted or our reliance on CSAPR>BART changes for some unforeseen reason, we will consult with the states on a case-by-case basis on appropriate pathways forward

# 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
- VA and DE approved; proposed approvals for SC, IA, WV
- Due dates from now through 2017 for the rest of the states depending on the SIP submittal date
- EPA is reviewing the 5-year regional haze reports in accordance with the guidance issued in April 2013

# Looking Forward: Planning for the Next Cycle of RH SIP Revisions

- Next round of comprehensive SIPs are due July 31, 2018
- EPA plans to develop guidelines for two key aspects of the program:
  - RP Guidelines – Guidance for evaluating the statutory factors and making decisions on RP controls
  - RP Goals - Setting the reasonable progress goals based on controllable, anthropogenic emissions instead of natural background conditions
  - We are still discussing the form of the guidelines – whether that entails guidance or rulemaking
    - Timing – draft guidance or rulemaking in Fall 2015
- Other aspects under consideration for RH Program
- Outreach to states as we get further along in the process

# 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 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 CO<sub>2</sub> Emissions
  - SCOTUS decision did not directly address application of PSD and title V permitting requirements to biogenic CO<sub>2</sub> emissions
  - EPA's work regarding biogenic CO<sub>2</sub> assessment framework remains ongoing
  - The Deferral Rule expired on its own terms July 21, 2014



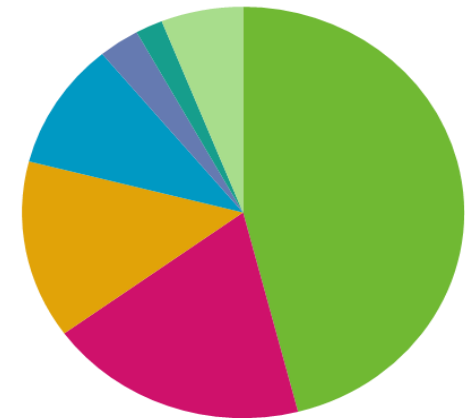
# Permitting of Anyway Sources

- For “anyway sources” continue applying existing regulations:
  - 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 CO<sub>2</sub>e 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 CO<sub>2</sub>e 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
- 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

## 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; 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 CO<sub>2</sub> control at a variety of industries
  - Power generation (IC engines) from methane capture at landfills
  - Non-Selective Catalytic Reduction for N<sub>2</sub>O 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 CO<sub>2</sub> in large amounts and with high purity CO<sub>2</sub> 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., CH<sub>4</sub>'s GWP increased from 21 to 25; N<sub>2</sub>O and SF<sub>6</sub> 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

# NSR AND TITLE V

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# NSR: PM<sub>2.5</sub> NAAQS Implementation Rule

- Upcoming PM<sub>2.5</sub> Implementation Rule, noted earlier, will clarify application of CAA Subpart 4 requirements to nonattainment NSR
  
- Proposed requirements will address:
  - Lower major source thresholds for PM<sub>2.5</sub> and precursors in PM<sub>2.5</sub> Serious Nonattainment Areas;
  - Potential under section 189(e) for control of all PM<sub>2.5</sub> precursors (SO<sub>2</sub>, NO<sub>x</sub>, VOC & ammonia), with opportunity for state to exempt any precursor that does not contribute significantly to ambient PM<sub>2.5</sub> in the nonattainment area.
  
- EPA has indicated that the January 4, 2013 Court decision does not affect the PSD requirements for PM<sub>2.5</sub>
  
- Proposal anticipated late 2014

## NSR: PM<sub>2.5</sub> Significant Monitoring Concentration (SMC) and Significant Impact Levels (SILs)

- January 22, 2013 D.C. Circuit Court decision in *Sierra Club v. EPA* vacated the PM<sub>2.5</sub> 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<sub>2.5</sub> SILs
  
- The following two rulemakings address this Court decision:
  1. PM<sub>2.5</sub> SMC Vacatur Rule was published on December 9, 2013 (78 FR 73698)
    - This “Good Cause” rule removed the PM<sub>2.5</sub> SMC and (k)(2) from 40 CFR 51.166 and 52.21



# NSR: PM<sub>2.5</sub> Significant Monitoring Concentration (SMC) and Significant Impact Levels (SILs) (cont.)

## 2. PM<sub>2.5</sub> SILs Reconsideration Rule

- The proposed rule is anticipated in early 2015 and will:
  - Establish legal and technical basis for PM<sub>2.5</sub> SILs and their use in the PSD air quality analysis
  - Address significant emissions rates (SER) for SO<sub>2</sub> and NO<sub>x</sub> as PM<sub>2.5</sub> precursors and a new SER for ammonia

# 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<sub>2.5</sub>, and technical updates to address 1-hour NAAQS
  - Rulemaking to:
    - Incorporate new analytical techniques to address ozone and secondary PM<sub>2.5</sub>
    - 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

## 2. Ozone PSD and NNSR Requirements Rule

- Rulemaking to:
  - Address the possibility of revising the SERs for VOC and NO<sub>x</sub> as ozone precursors.
  - Address the possibility of having VOC and NO<sub>x</sub> triggers for requiring an ozone air quality analysis in PSD areas, set higher than the SERs.
  - Establish SILs for ozone, so the PSD rule's default SIL of zero does not apply to ozone.
- New ozone SILs would be used once the planned Appendix W revisions provide approaches for quantification of ozone impacts.
- Timing considerations – This rulemaking will somewhat lag the rulemaking for the Appendix W revisions

# Tribal NSR Rule

## ■ Overview

- Published in the *Federal Register* on July 1, 2011; took effect on August 30, 2011
- Established preconstruction permitting requirements for synthetic minor sources, true minor sources and minor modifications in Indian Country
- Established preconstruction permitting requirements for major sources in non-attainment areas of Indian Country as well

## ■ Important Dates

- August 31, 2011 – Deadline for major sources in nonattainment areas and synthetic minor sources to obtain NSR permits before beginning construction
- September 2, 2014 – Deadline for true minor sources to obtain NSR permits before beginning construction
- March 2, 2016 – Deadline for oil and natural gas true minor sources to obtain NSR permits

# Amendments to Tribal Minor NSR Rule

- Finalized on May 30, 2014; Effective June 29, 2014
- Added exemptions for the following emission units/activities :
  - Cooking of food, except wholesale businesses that both cook and sell cooked food
  - Single family residences and other residences with four or fewer dwelling units
  - Certain Emergency generators based on size and attainment/non-attainment status
  - Stationary internal combustion engines below 50 horsepower
  - Furnaces or boilers used for space heating
  - Air conditioning units used for human comfort
- Construction Related Terms - Defined *Begin Construction* and clarified when it applies

# Upcoming/Ongoing Actions

- **General Permits/Permits by Rule (PBR):**
  - **Bundle #1** – Proposed January 14, 2014; Final permits planned for late Fall 2014
    - Hot mix asphalt plants
    - Stone quarrying, crushing, and screening facilities
    - Gasoline dispensing facilities\*
    - Petroleum dry cleaners\*
    - Auto body repair and miscellaneous surface coating operations\*
  - **Bundle #2** - Proposed July 17, 2014 (Comment period closes September 17, 2014); Finalize December 2014
    - Boilers
    - Engines
    - Printing operations
    - Concrete batch plants
    - Saw mills
- **Advanced Notice of proposed Rulemaking (ANPR)**
  - **Bundle #3** – Published June 5, 2014. Comment period closed August 20, 2014; Finalize March 2016
    - For oil and natural gas production sector
    - Taking comment on three options– general permits, permits by rule, Federal Implementation Plan

\*Proposed general permit or PBR alternative for these categories

# 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
  - <http://www.epa.gov/Region7/air/title5/t5memos/20140430.pdf>

# 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 Fed. Reg. 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 40 CFR 70.6(c)(5)(iii)(B) and 71.6(c)(5)(iii)(B)
- 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 4 title V petition orders
- Anticipate at least two more before the end of 2014
- 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.

# SIP Reform

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# 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 the Clean Air Act (CAA) timeframes
  - SIP backlog is reduced and future SIPs are processed in a timely manner
  
- Rule and Guidance Management – EPA issues timely and effective NAAQS-related rules, guidance, and other tools to help air agencies meet their CAA responsibilities
  
- Continue to make progress on priorities agreed upon with ECOS and 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 to meet the backlog goal;
  - Improve EPA's SIP tracking system with fields that could be of assistance to states; and
  - Use best practices and tools developed through PM<sub>2.5</sub> Full Cycle Analysis Project (FCAP) to facilitate SIP development and processing for implementing the 2012 PM<sub>2.5</sub> NAAQS.

# e-SIP Pilot

- Pilot system which allows Regions to collect and track SIP submittals electronically
  - Pilot initiated on February 18, 2014
  - 14 states and 5 Regions are participating
- Next Steps
  - States are providing feedback and participating in bi-monthly calls
  - After the pilot, EPA will revise system as needed and scale it up (target date is January 2015)
  - EPA will also explore expanding the types of state submissions that can be submitted electronically

# QUESTIONS OR COMMENTS

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