

# NAAQS and Other CAA Implementation Updates

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NACAA Spring Meeting  
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# Overview

- Schedules for NAAQS Reviews and Implementation
  - Ozone
  - Sulfur Dioxide (SO<sub>2</sub>)
  - Particulate Matter (PM)
  - Lead
- Exceptional Events
- Infrastructure SIPs, Interstate Transport and Startup, Shutdown, and Malfunction (SSM)
- Regional Haze
- Greenhouse Gas (GHG) Permitting
- New Source Review (NSR) and Title V Permitting
- NAAQS Implementation Plans in Non-Reservation Areas of Indian Country

# **NAAQS SCHEDULES AND IMPLEMENTATION**

# NAAQS Reviews: Status Update

(as of March 31, 2015)

	Ozone	Lead	Primary NO <sub>2</sub>	Primary SO <sub>2</sub>	Secondary NO <sub>2</sub> and SO <sub>2</sub>	PM	CO
<b>Last Review Completed</b> (final rule signed)	Mar 2008	Oct 2008	Jan 2010	Jun 2010	Mar 2012	Dec 2012	Aug 2011
<b>Recent or Upcoming Major Milestone(s)<sup>1</sup></b>	<u>August 2014</u> Final REAs Final PA  <u>Nov 25, 2014</u> Proposed rule  <u>Oct 1, 2015<sup>2</sup></u> Final rule	<u>May 2014</u> Final PA  <u>Dec 2014</u> Proposed decision	<u>June 2014</u> Final IRP  <u>January 2015</u> 2 <sup>nd</sup> Draft ISA  <u>Spring 2015</u> REA Planning Document	<u>October 2014</u> Final IRP  <u>Summer 2015</u> 1 <sup>st</sup> Draft ISA  <u>Fall 2015</u> REA Planning Document	<u>Summer 2015</u> Draft IRP	<u>Winter 2015/2016</u> Draft IRP	TBD <sup>3</sup>

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

<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 March 31, 2015)

Pollutant	Final NAAQS Date	Designations Effective	Infrastructure SIP Due	Attainment Plans Due	Attainment Date
PM <sub>2.5</sub> (2006)	Oct 2006	Dec 2009	Oct 2009	Dec 2014	Dec 2015 (Mod) Dec 2019 (Ser)
Pb (2008)	Oct 2008	Dec 2010-2011	Oct 2011	June 2012-2013	Dec 2015-2016
NO <sub>2</sub> (2010) (primary)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A
SO <sub>2</sub> (2010) (primary)	June 2010	Oct 2013 (+3 rounds)	June 2013	April 2015 (2018, 2019, 2022)	Oct 2018 (2023, 2024, 2027)
Ozone (2008)	Mar 2008	July 2012	Mar 2011	Mid 2015-2016	Mid 2015-2032
PM <sub>2.5</sub> (2012)	Dec 2012	Early 2015	Dec 2015	Mid 2016	Dec 2021 (Mod) Dec 2025 (Ser)
Ozone (2015)	Oct 2015	Dec 2017*	Oct 2018*	Dec 2020-21*	2020-2037*

\*if revised

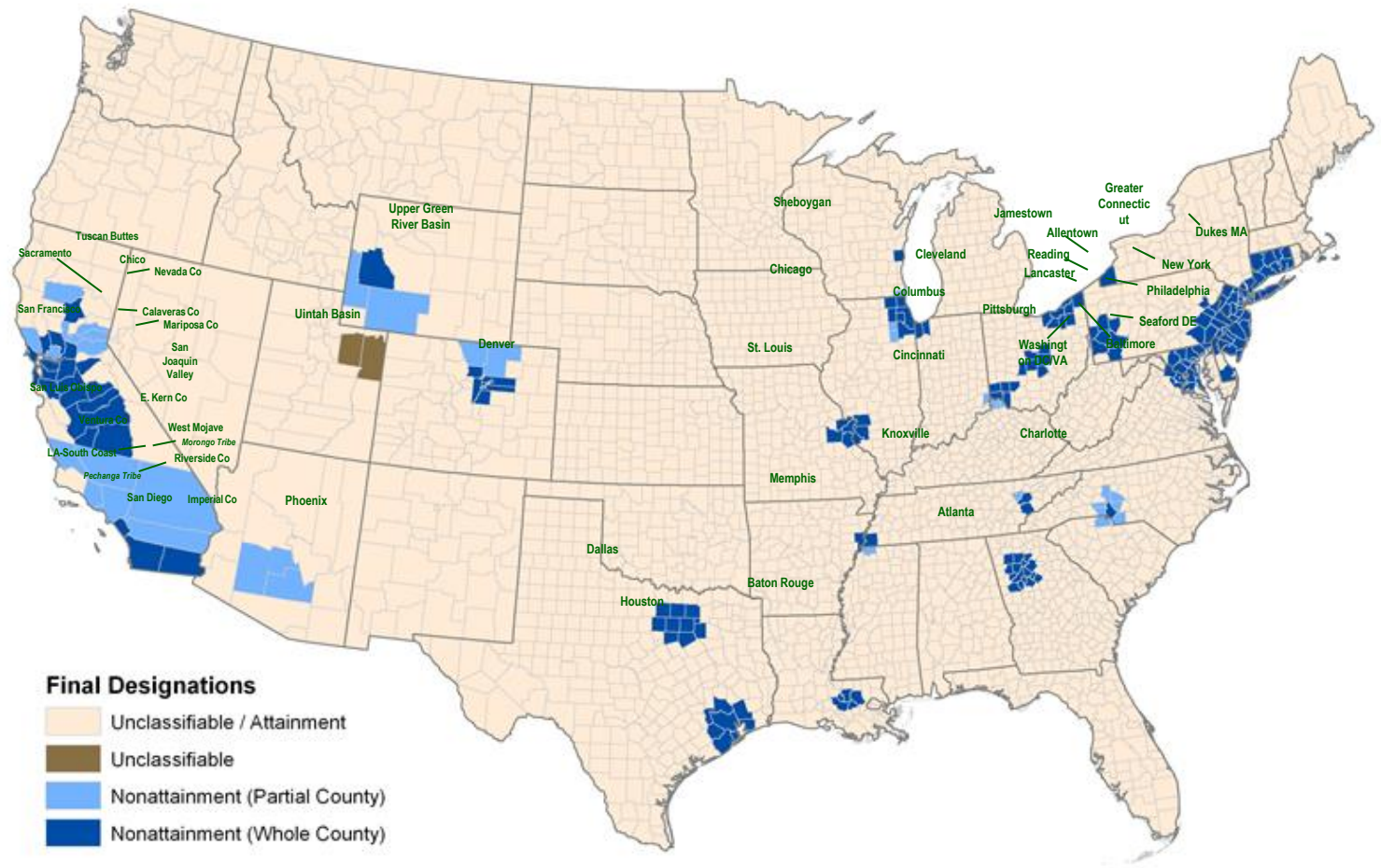
# 2008 Ozone NAAQS

- Revised primary 8-hour Ozone NAAQS in 2008 (75 ppb)
- Final 2008 Ozone NAAQS Classifications Rule
  - Published May 21, 2012 (77 FR 30160)
  - Established air quality thresholds for each ozone nonattainment area classification, attainment deadlines and revocation of the 1997 Ozone standards for transportation conformity
- Lawsuit filed by NRDC, challenging end of year attainment date EPA sought to establish in Classifications Rule
  - DC Circuit issued opinion on December 23, 2014 vacated portion of the Classification Rule that sought to establish attainment date periods from the end of year; held that deadlines calculated as annual periods running from date of designations required by CAA
  - EPA addressed lawsuit in final 2008 Ozone SIP requirements Rule (*covered in upcoming slides*); established the maximum attainment date as a specific number of years from effective date of designations

# 2008 Ozone NAAQS: Area Designations

- Area designations for 2008 Ozone NAAQS effective July 20, 2012
  - 46 nonattainment areas, 1 unclassifiable area
    - 36 Marginal; 3 Moderate; 2 Serious; 3 Severe; 2 Extreme
- Attainment Dates for 2008 Ozone NAAQS (attainment date runs from effective date of designations)
  - Marginal – 3 years
  - Moderate – 6 years
  - Serious – 9 years
  - Severe – 15 years
  - Extreme – 20 years

# 2008 Ozone NAAQS: Area Designations (Effective July 20, 2012)



**Notes:**  
EPA has not designated as nonattainment any areas outside the Continental US.



# Implementation of the 2008 NAAQS for Ozone: State Implementation Requirements Rule

- Official title: “Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements” (*hereafter referred to as Ozone SRR*)
  - Final Ozone SRR signed on Feb. 13, 2015; published March 6, 2015 80 FR 12264
    - effective date is April 6, 2015
  - Webinar for state, local and tribal air agencies held on Feb. 26, 2015
    - webinar slides and recording available online at [www.epa.gov/groundlevelozone/actions.html](http://www.epa.gov/groundlevelozone/actions.html)
  - Significant amount of implementation detail from the Ozone SRR addressed in webinar

# Implementation of the 2008 NAAQS for Ozone: State Implementation Requirements Rule

- In general, the Ozone SSR interprets applicable statutory requirements and provides flexibility (to extent possible) to states to minimize administrative burdens while developing and implementing plans to meet and maintain the NAAQS
  - Provides guidance on nearly all aspects of the attainment planning requirements for designated nonattainment areas
  - Establishes due dates for attainment plans and clarifies attainment dates for each nonattainment area according to its classification (established based on air quality thresholds)
  - Revokes the 1997 ozone NAAQS as of April 6 and establishes anti-backsliding requirements for areas remaining nonattainment for the 1997 ozone NAAQS

# Implementation of the 2008 NAAQS for Ozone: State Implementation Requirements Rule (SRR)

- Basic SIP components for nonattainment areas addressed in the Ozone SRR
  - Emissions Inventory and use of Air Emissions Reporting Rule
  - Reasonable further progress (RFP) plan
  - Reasonably available control technology (RACT)
  - Reasonably available control measures (RACM)
  - Attainment demonstrations
  - Contingency measures
  - NA NSR program
  - Motor vehicle emissions budget (MVEB) (CAA 176(c))
  - As applicable, a variety of area-wide mobile source and stationary control programs

# Implementation of the 2008 NAAQS for Ozone: State Implementation Requirements Rule

- Key implementation dates:
  - Emission inventory and RACT SIPs due July 2014
  - Attainment plans and demonstrations due July 2015 (Moderate) or July 2016 (Serious and above)
  - Marginal area attainment date: July 20, 2015 (attainment to be determined by 2012-2014 air quality data)
  - Moderate area attainment date: July 20, 2018 (2015-2017 air quality data)

## Implementation of the 2008 NAAQS for Ozone: State Implementation Requirements Rule

- EPA's preliminary thinking is that the implementation provisions in 40 CFR 51.1100 (subpart AA), finalized for the 2008 ozone NAAQS and associated revocation of the 1997 NAAQS, are a template for essentially identical provisions that would be adopted to apply to the 2015 NAAQS and associated revocation of the 2008 NAAQS
- *NOTE - Assuming the event current ozone NAAQS is revised*

# Anti-backsliding Provisions for Revoked 1997 Ozone NAAQS

(Effective April 6, 2015)

- For areas that are nonattainment for both the 2008 and 1997 NAAQS, the anti-backsliding rules preserve most of the ongoing attainment planning and control obligations for the revoked 1997 NAAQS, but...
  - ...grant relief from reclassification if area fails to attain
  - ...remove all 1997 classification-based restrictions on NSR offset transactions between nonattainment areas
  - ...allow the Administrator in certain cases to approve alternative controls that are ‘not less stringent’ (e.g., section 185 fee programs)
  - ...provide a mechanism to close-out all 1997-based requirements through ‘redesignation substitute’

# Anti-Backsliding Provisions for Revoked 1997 Ozone NAAQS (con't)

- For 1997 nonattainment areas that were designated attainment for 2008 NAAQS, the anti-backsliding rules grant relief from developing maintenance plans and implementing nonattainment NSR (except in the OTR)
- For areas implementing maintenance plans for the 1997 NAAQS, the anti-backsliding rules grant relief from developing and submitting 2<sup>nd</sup> 10-year maintenance plans

# 2015 Ozone NAAQS: Proposal Overview

- Proposed November 25, 2014; primary ozone ( $O_3$ ) NAAQS: **65 to 70 ppb** (current level is 75 ppb), taking comment on lower levels including 60 ppb and on retaining the current standard.
  - Proposed to retain the current indicator, averaging time, and form
- Proposed secondary  $O_3$  NAAQS – 65-70 ppb, which we propose would provide the requisite protection equivalent to a seasonal W126 index of 13 to 17 ppm-hours.
  - Proposed to define the target level of protection for public welfare as W126 values within the range of 13 to 17 ppm-hrs (3-year average).
  - W126 is a seasonal index that is often used to assess the impacts of  $O_3$  exposures on trees, plants and ecosystems
  - Analyses show that an  $O_3$  standard with a level from 65 to 70 ppb, combined with the current averaging time and form, would provide protection equivalent to a W126 index value of 13 to 17 ppm-hrs
- Proposed updates to AQI breakpoints, based on the level of a revised primary standard



# 2015 Ozone NAAQS Proposal: Implementation Aspects

- Extending the monitoring season in 33 states (*Section VI.B*)
- New Federal Reference Method (FRM) for measuring ambient ozone to stay current with latest technology (*Section VI.D*)
- Revising minimum Photochemical Assessment Monitoring Stations (PAMS) network requirements to promote flexibility (*Section VI.C*)
  - Required at existing NCore sites in ozone nonattainment areas
- Instructions for data handling specific to new standard(s) (*Section V.C*)
- Grandfathering of in-the-pipeline PSD permit applications (*Section VII.D*)
- Addresses the “exceptional event” demonstration deadline to ensure air agency claims for 2013-2016 are adequately considered in area designations decisions (*Section V.E*)

# 2015 Ozone NAAQS: Remaining Schedule

- Proposal signed on November 25, 2014
  - *Federal Register* Notice published December 17, 2014 (79 FR 75234)
  - 90-day public comment period ended March 17, 2015
  - Held 3 public hearings
- Final rule to be signed by October 1, 2015
- Additional information and comment submission instructions at <http://www.epa.gov/air/ozonepollution/>

# 2015 Ozone NAAQS: Implementation

- Key implementation milestones for NAAQS (if revised)
  - Area designations promulgated by October 2017
  - Infrastructure SIPs due Oct 2018
  - Attainment plans due 2020-21
  - Attainment dates 2020-2037 (primary standard only)
- Implementation rules and guidance for 2015 Ozone NAAQS
  - 2015 ozone NAAQS proposal includes limited grandfathering of PSD permit applications, and process deadlines for ozone-related exceptional events demonstrations
  - Also seeking early input on other implementation issues that would be addressed in separate implementation requirement rulemaking
  - EPA to propose separate implementation rulemaking (as necessary)

# Background Ozone

- Proposal acknowledges that background ozone contributes significantly to ozone levels on some days, especially in some areas in the western U.S. (e.g., Denver)
  - Acknowledges that prescribed fire may be used to mitigate the effects of catastrophic wildfire
- Majority of current 8-hour exceedances attributable to (local and regional) manmade emissions
  - On high ozone days, about 1/3 – 1/2 of total ozone (on average) is due to background
- Background influences include stratospheric ozone intrusion, wildfires and sources outside of the U.S.
  - Where this is an issue, existing CAA mechanisms help ensure fair and reasonable control requirements (Exceptional Events and 179B)
- EPA working to ensure these mechanisms are as workable as possible for states and EPA to administer

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

Action	After NAAQS Promulgation	(Actual) and Planned Dates
EPA <u>proposes</u> 2015 Ozone NAAQS and Monitoring, Exceptional Event Demonstration Schedule, and PSD grandfathering as part of 2015 NAAQS proposal.		(November 25, 2014)
EPA <u>finalizes</u> 2015 Ozone NAAQS and Monitoring, Exceptional Event Demonstration Schedule, and PSD grandfathering as part of 2015 NAAQS final.	Upon promulgation	October 2015
EPA <u>proposes</u> Exceptional Events Rule revisions and issues draft Wildfire/Ozone Guidance		Fall 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 revised i-SIP guidance	Up to 12 months	Up to October 2016
EPA <u>finalizes</u> Exceptional Events Rule revisions and issues Wildfire/Ozone Guidance		Summer 2016

# Intended Schedule for 2015 Ozone NAAQS Implementation Rules/Guidance/Tools (table continued)

Action	After NAAQS Promulgation	(Actual) and Planned Dates
EPA <u>proposes</u> Nonattainment Area SIP rules/guidance (including classification, conformity, emission inventory, modeling [e.g., Appendix W], and nonattainment NSR provisions)	12 months	October 2016
EPA <u>finalizes</u> Designations, Classifications, and Attainment Dates*	24 months	October 2017
EPA <u>finalizes</u> Nonattainment Area SIP rules/guidance	24 months	October 2017
EPA issues <u>final</u> 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>3-4 years</i>	<i>December 2020-2021</i>
<i>Nonattainment Area Attainment Dates (Marginal – Extreme)</i>	<i>3-20 years</i>	<i>December 2020-2037</i>

\* Designations can be finalized in 3 years under certain circumstances.

# Progress on Ozone NAAQS Attainment

(as of March 31, 2015)

	1997 8-hr Ozone (2004 Designations)	2008 Ozone (2012 Designations)
Initial Nonattainment Areas	115	46
Areas Redesignated to Attainment	80 (prior to revocation)	0
Current Nonattainment Areas	35	46
Clean Data Determinations	24	1
Proposed Redesignations/ Redesignation Substitutes	0	0

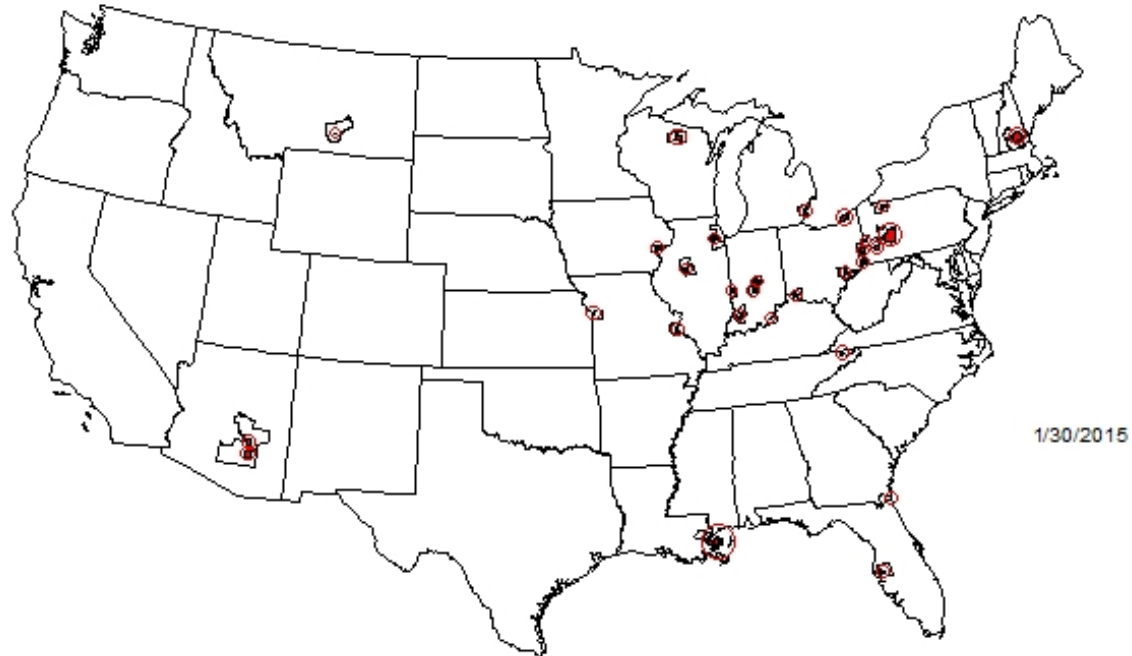
# 2010 SO<sub>2</sub> NAAQS Implementation

- EPA revised primary SO<sub>2</sub> standard on June 2010 (75 ppb/1-hour)
- 1-hr SO<sub>2</sub> NAAQS NA SIP elements guidance issued on April 24, 2014
  - [www.epa.gov/airquality/sulfurdioxide/pdfs/20140423guidance.pdf](http://www.epa.gov/airquality/sulfurdioxide/pdfs/20140423guidance.pdf)
  - EPA regional offices are working to assist states with SO<sub>2</sub> NA areas in applying this guidance to develop SIPs, redesignation areas, etc.
- Attainment plans for 29 areas currently designated nonattainment due April 4, 2015




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

## SO<sub>2</sub> Nonattainment Areas (2010 Standard)



Nonattainment areas are indicated by color.  
When only a portion of a county is shown in color,  
it indicates that only that part of the county is within  
a nonattainment area boundary.

 SO<sub>2</sub> Nonattainment Areas

# SO<sub>2</sub> Data Requirements Rulemaking

- In April 2014, EPA proposed requirements for air agencies to characterize SO<sub>2</sub> levels near sources across the country for purposes of implementing the 1-hour SO<sub>2</sub> NAAQS
- Proposed requirements would focus on characterizing air quality in areas with larger sources of SO<sub>2</sub> emissions, and include smaller sources in areas with higher population
  - Proposal included a schedule for state and tribal air agencies to characterize air quality using modeling or monitoring, and provide that air quality data to the EPA
- Final rule anticipated summer 2015
- In the meantime, EPA recommends that states consider practical issues associated with implementing the requirements as proposed

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

- Consent decree entered on March 2, 2015 by U.S. District Court for Northern California “triggered” the following:
  - July 2, 2016 (The EPA must complete initial round of designations)
  - December 31, 2017 (The EPA must complete an additional round of designations)
  - December 31, 2020 (The EPA must complete all remaining designations)
  - 2017 and 2020 rounds would occur consistent with EPA’s anticipated final SO<sub>2</sub> DRR
- Two other designations lawsuits (from two state groups were stayed pending potential settlement in Sierra Club/NRDC case) may be reactivated

# 2010 SO<sub>2</sub> NAAQS Implementation: July 2, 2016 Designations

- Initial group of designations include:
  - Areas with violation of the 2010 SO<sub>2</sub> NAAQS (based on 2013-2015 data)
  - *Preliminarily (based on 2012 – currently available 2014 data):*
    - Chatham County, Georgia
    - Hawaii County, Hawaii
    - Iron County, Missouri
    - Williams County, North Dakota
    - Brown County, Wisconsin
    - Carbon County, Wyoming

# 2010 SO<sub>2</sub> NAAQS Implementation: July 2, 2016 Designations

- Initial round of designations also includes:
  - Areas where there are sources (electric power plants) that as of March 2, 2015, have not been “announced for retirement,” and meet one of the following emissions thresholds:
    - 16,000 tons of emitted in 2012 *or*
    - 2,600 tons of SO<sub>2</sub> emitted in 2012 with an average emission rate of at least 0.45 pounds of SO<sub>2</sub> per mmBtu
- “Announced for Retirement”
  - Any stationary source in the United States with a coal-fired unit that as of January 1, 2010, had a capacity of over five (5) megawatts (MW); and
  - That has announced as of March 2, 2015, that it will cease burning coal at that unit through a company public announcement, public utilities commission filing, consent decree, public legal settlement, final state or federal permit filing, or other similar means of communication.
- Yields 68 sources in 24 states

# July 2, 2016 SO<sub>2</sub> Designations: Schedule

<b>Milestones and Schedule for Completing the July 2, 2016, Round of SO<sub>2</sub> Designations</b>	
<b>Milestone</b>	<b>Date</b>
<b>Court Order</b>	<b>March 2, 2015</b>
<b>Impacted states may submit updated recommendations and supporting information for area designations to the EPA</b>	<b>No later than September 18, 2015</b>
<b>The EPA notifies impacted states concerning any intended modifications to their recommendations (120-day letters)</b>	<b>On or about January 22, 2016, but absolutely no later than 120 days prior to final designations (March 2, 2016)</b>
<b>The EPA publishes public notice of state recommendations and the EPA's intended modifications and initiates 30-day public comment period</b>	<b>On or about February 3, 2016</b>
<b>End of 30-day public comment period</b>	<b>On or about March 4, 2016</b>
<b>Impacted states provide additional information to demonstrate why an EPA modification is inappropriate</b>	<b>On or about April 8, 2016</b>
<b>The EPA promulgates final SO<sub>2</sub> area designations (no later than 16 months from Court Order)</b>	<b>No later than July 2, 2016</b>

# December 31, 2017 SO<sub>2</sub> Designations: Impacted Stakeholders and Schedule

- By December 31, 2017, EPA must complete an additional round of area designations addressing areas where air agencies have not installed and begun operating a new SO<sub>2</sub> monitoring network meeting the EPA's specifications referenced in the Agency's anticipated final SO<sub>2</sub> DRR

Milestone	Date
States submit air quality modeling results for selected areas (per the Data Requirements Rule)	01/13/2017
The EPA notifies states concerning any intended modifications (120-day letters)	No later than 09/01/2017
The EPA signs a notice promulgating final SO <sub>2</sub> area designations per the court's order.	No later than 12/31/2017

# December 31, 2020 SO<sub>2</sub> Designations: Impacted Stakeholders and Schedule

- The EPA must promulgate designations for any remaining undesignated areas for the 2010 SO<sub>2</sub> NAAQS by December 31, 2020

Milestone	Date
States begin operating new monitoring network (per proposed Data Requirements Rule)	01/01/2017
States certify 2019 monitoring data to calculate the 2017 – 2019 design value	05/01/2020
The EPA notifies states concerning any intended modifications to their recommendations (120-day letters)	No later than 09/02/2020
The EPA signs a notice promulgating final SO <sub>2</sub> area designations, per the court's order	No later than 12/31/2020



# SO<sub>2</sub> Designations: Additional Information

- Information at [www.epa.gov/so2designations/](http://www.epa.gov/so2designations/) includes:
  - Fact Sheet
  - Schedule for completing designations
  - Final court order
  - Sources exceeding the criteria established in the court's order
  - Locations of ambient air quality monitors with a preliminary violation of the 2010 SO<sub>2</sub> NAAQS
  - Updated guidance for designations issued on March 20, 2015
  - Technical support and assistance documents

# Progress on 2010 SO<sub>2</sub> NAAQS Attainment

(as of March 31, 2015)

	2010 SO <sub>2</sub> (2013 Designations)
Initial Nonattainment Areas	29
Areas Redesignated to Attainment	0
Current Nonattainment Areas	29
Clean Data Determinations	0
Proposed Redesignations	0

# 2012 PM<sub>2.5</sub> NAAQS

- Final PM<sub>2.5</sub> NAAQS rule signed December 14, 2012
  - Revised the primary annual PM<sub>2.5</sub> standard to 12 µg/m<sup>3</sup>
  - Retained secondary annual PM<sub>2.5</sub> standard of 15 µg/m<sup>3</sup> and 24-hr PM<sub>2.5</sub> standards of 35 µg/m<sup>3</sup> (and 24-hr PM<sub>10</sub> standard of 150 µg/m<sup>3</sup>)
  - EPA also made updates and improvements to 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 lawsuit challenging the final PM<sub>2.5</sub> NAAQS
  - Court denied petitions for review on all accounts

# 2012 PM<sub>2.5</sub> NAAQS Implementation

- January 2013 DC Circuit decision regarding litigation on 2007 PM<sub>2.5</sub> implementation rule and 2008 NSR rule for PM<sub>2.5</sub>
  - Court held that EPA must implement PM<sub>2.5</sub> NAAQS under subpart 4
- EPA issued final deadline and classifications rule issued on June 2, 2014 (79 FR 31566). The rule:
  - Classified areas designated nonattainment for the 1997 and/or 2006 PM<sub>2.5</sub> standards as “Moderate”
  - Set new deadline of December 31, 2014, for states to submit attainment–related and nonattainment NSR SIP submissions required under subpart 4 as needed
  - Directed states to existing EPA guidance (1992 General Preamble and 1994 Addendum) to better understand subpart 4 requirements
- Petition for review filed July 31, 2014, by WildEarth Guardians in D.C. Circuit Court of Appeals on deadline/classifications rule
  - Petitioners filed opening brief on January 16, 2015
  - EPA’s response is due in early April 2015

# 2012 Annual PM<sub>2.5</sub> NAAQS: Designations

- December 18, 2014 – Administrator signed final area designations for most areas of the country (based on 2011-2013 data)
  - Final designations published in Federal Register on January 15, 2015
  - Effective date for designations is April 15, 2015 (90 days)
  - Supplemental final signed March 31, 2015 changed designation of several areas to attainment based on early-certified 2014 data showing attainment
- Final designation decisions include 9 nonattainment areas involving 4 states, plus several unclassifiable areas
  - 1 tribal area designated separate unclassifiable/attainment
  - 3 Unclassifiable areas: IL (+2 IN + 4 MO counties/1 city in MO), PR, USVI

## 2012 Annual PM<sub>2.5</sub> NAAQS: Designations (con't)

- States with nonattainment areas must submit attainment plan within 18 months of the effective date of designation (by October 15, 2016)
  - Attainment deadline is no later than the end of the 6<sup>th</sup> calendar year after designations (by December 31, 2021, using 2019-2021 data)
- EPA deferred final decisions for up to 1 year for several areas
  - 5 Deferred areas: FL, TN (-3 counties), 3 GA areas
- Remainder of 2015 – review certified 2014 data and preliminary 2015 data in deferred areas and take action as appropriate

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

- March 10, 2015: EPA proposed rule for SIP requirements that would apply to current and future PM<sub>2.5</sub> nonattainment areas.
  - Official title is “Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements; Proposed Rule
  - Published on March 23, 2015 (80 FR 15340)
    - Public hearing scheduled for April 29, 2015 in Washington, DC
    - Public comment period closes on May 29, 2015
- Webinar for state, local and tribal air agencies held on March 18, 2015
  - Webinar slides and recording available online at [www.epa.gov/pm/actions.html](http://www.epa.gov/pm/actions.html)
  - Significant amount of implementation detail from the proposal addressed in webinar
- Finalize in late 2015/early 2016

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

- The proposal:
  - Takes 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
  - Would apply to all 2012 PM<sub>2.5</sub> NAAQS nonattainment areas, areas designated nonattainment for the 1997 and 2006 PM<sub>2.5</sub> NAAQS, and any additional areas designated nonattainment for these or future revised PM<sub>2.5</sub> NAAQS
  - Addresses 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: SIP Requirements NPRM

- Proposal addresses a number of requirements including:
  - Attainment plan due dates, attainment dates and attainment date extension criteria for Moderate and Serious nonattainment areas
  - Determination criteria for Reasonably Available Control Measures (RACM) for Moderate areas and Best Available Control Measures (BACM) for Serious areas
  - Plans for demonstrating reasonable further progress and for meeting periodic quantitative milestones
  - Criteria for reclassifying a Moderate nonattainment area to Serious
- EPA is also proposing:
  - Options for air agencies to demonstrate that one or more PM<sub>2.5</sub> precursors do not contribute significantly to PM<sub>2.5</sub> levels in a particular nonattainment area
  - Options for revoking the 1997 primary annual PM<sub>2.5</sub> standard of 15 micrograms per cubic meter (µg/m<sup>3</sup>)

## Schedule for 2012 PM<sub>2.5</sub> 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 2012)
EPA issues Designations guidance	4 months	(April 13)
<i>States submit Designation recommendations as needed</i>	12 months	(Oct 2013 – March 2014)
EPA finalizes PM <sub>2.5</sub> area designations	24 months	(Dec 2014)
EPA proposed nonattainment area SIP rules or guidance (e.g., modeling, emission inventory and permit modeling guidances)	12 months	(March 2015)
Effective date of EPA designations	27 months*	April 2015
EPA issues final nonattainment area SIP rules or guidance (e.g., modeling, emission inventory and permit modeling guidances)	27 months*	Early 2016
EPA and/or air agencies issue final SIP templates, toolkits, etc. to assist states with development of nonattainment area plans	27 months*	Sept 2016
<i>States submit Attainment plans</i>	45 months	Sept 2016

\* Designations can be finalized in 3 years under certain circumstances.

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

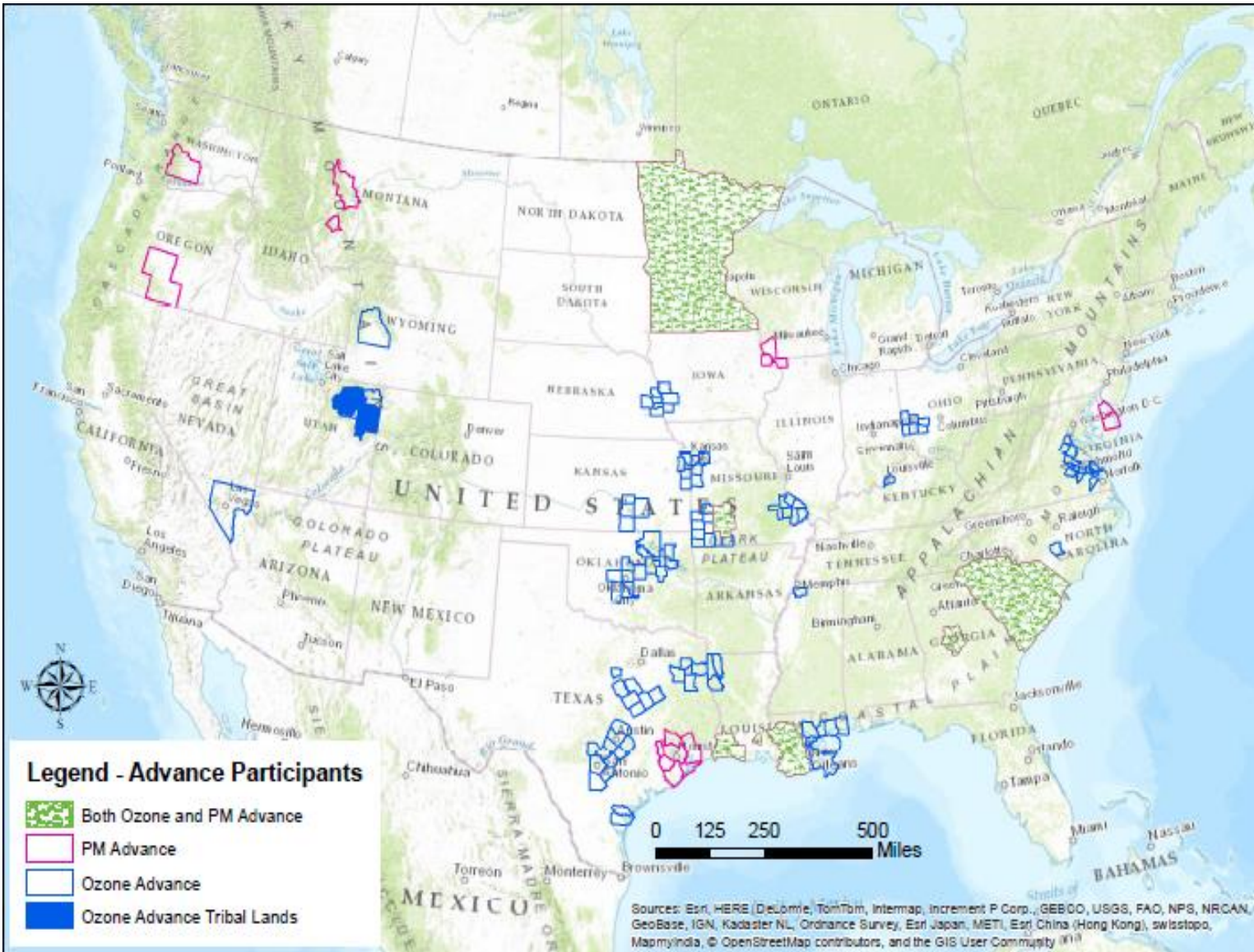
(as of March 31, 2015)

	1997 PM <sub>2.5</sub> (2005 Designations)	2006 PM <sub>2.5</sub> (2009 Designations)
Initial Nonattainment Areas	39	32
Areas Redesignated to Attainment	26	8
Current Nonattainment Areas	13	24
Clean Data Determinations	11	13
Proposed Redesignations	2	6

# Advance Program

- The Advance Program is a collaborative effort by EPA, states, tribes, and local governments to encourage emission reductions in **attainment** areas, to help them continue to meet the National Ambient Air Quality Standards (NAAQS) for ozone and/or fine particulate matter (PM<sub>2.5</sub>)
- Program Goals:
  - Help attainment areas to ensure continued health protection
  - Better position areas to remain in attainment/avoid air quality violations that could lead to future nonattainment
  - Efficiently direct available resources toward actions to address ozone and PM<sub>2.5</sub> problems quickly
- EPA assists participating areas as they chart out and implement a local plan for improving air quality
- To learn more, see [www.epa.gov/ozonepmadvance](http://www.epa.gov/ozonepmadvance) and contact us at [advance@epa.gov](mailto:advance@epa.gov)

# Advance Program – Participating Areas (as of Oct. 2014)



# Lead NAAQS

- 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
  - 1 of the 21 areas now has a clean data determination; 1 area has been redesignated
  - 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
  - On January 5, 2015, EPA published proposal not to revise the existing NAAQS
  - Final Rulemaking – TBD
- Complaint received in November 2014 from Center for Biological Diversity, Center for Environmental Health and Clean Air Council to require EPA to issue findings of failure to submit (FFS) attainment plans (for 4 areas) and failure to act on attainment plan submissions (for 6 areas)
  - All states have now submitted attainment plans, so FFS portion of complaint is now moot
  - EPA determining schedule for acting on submitted plans, including 1 additional area added to the recently complaint

# Progress on 2008 Lead NAAQS

(as of March 31, 2015)

	2008 Lead 2010-2011 Designations
Initial Nonattainment Areas	22
Areas Redesignated to Attainment	1
Current Nonattainment Areas	21
Clean Data Determinations	2
Proposed Redesignations	0



# EXCEPTIONAL EVENTS



# Exceptional Events: Outreach to Assess Lessons Learned and Best Practices

- Outreach Goals and Methodology:
  - Goal: To better understand EE related concerns and best practices from air agencies, for EPA to learn and provide standardized and more efficient ways for states to address EE demonstrations
  - Qualitative review based on standard set of questions
  - Talked with several states and regional offices
- Results of outreach revealed best practices already being used, areas for improvement and requests to further clarify policy and improve tools

# Exceptional Events: Opportunities in Three Key Areas

- Best practices for communication/collaboration between EPA and air agencies
  - Systematic communications process between air agencies and the reviewing EPA Regional office for EE events before, during and after exceptional events package development, submittal and review
- Recommendations to clarify and simplify demonstrations
- Recommendations for tools and consistency checks
  - Tools and resources that enhanced collaboration among regions and states and resulted in consistency in interpretation of EER policy and level of effort

# Exceptional Events: Schedule and Next Steps

- Schedule for EER revisions and guidance development
  - Anticipate proposing EER revisions fall 2015 and promulgating in summer 2016
    - Schedule provides EER changes in advance of implementation activities for any potential new or revised ozone NAAQS
  - Schedule for ozone wildfire EE guidance anticipated to parallel EER revision effort so guidance can reflect concepts in proposed rule and statutory elements
  - Provide additional guidance as needed to support EER revisions
  - Continued development of Exceptional Events tools (e.g., website, templates, delegations)
- Exceptional Events best practices
  - Get input from EPA regions and states
  - Include best practices as recommendations in guidance and/or rule
  - Tools on an EPA website
  - Continuous improvement, dissemination, outreach, education

# Exceptional Events: Communication Plan

- Continue internal EPA coordination, including consistency checks using internal EPA EE Work Group
- Continued discussions with state/local/tribal air agencies and other interested stakeholders
- Additional outreach for the new ozone wildfire guidance, before EPA drafts full documents for wider review
- Webinars on content of the NPRM and draft guidance following NPRM and release of draft guidance
- Following final rule and release of new guidance:
  - Internal EPA national consistency workshop
  - Implementation workshop(s) for states, tribes, and other affected stakeholders

# **INFRASTRUCTURE SIPS, TRANSPORT AND SSM**

# Litigation Related to Infrastructure SIPs for Implementing NAAQS

## • 2006 PM<sub>2.5</sub> NAAQS

- December 2012: Complaint filed claiming that EPA failed to (1) take action on PM<sub>2.5</sub> infrastructure state implementation plans (iSIPs), including interstate transport SIPs and (2) promulgate interstate transport FIPs for 21 states.
  - The section 113(g) notice requesting comment on the proposed CD was published on February 11, 2015
- February 2015: Complaint received for failure 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

- July 2014: Complaint filed claiming that EPA failed to (1) take action on a number of iSIPs), including interstate transport SIPs and (2) issue a FFS for CAA 110(a)(2)(D)(i)(I) for TN.
  - The section 113(g) notice requesting comment on the proposed CD to establish deadlines to act on iSIPs was published on February 5, 2015
  - The final CD is expected to be filed soon
  - The EPA expects a court order establishing the deadline for issuing a FFS for TN to be issued at any time
- November 2014: Complaint filed against the EPA for failure to issue a FFS for CAA 110(a)(2)(D)(i)(I) for 25 states

## • 2010 NO<sub>2</sub> NAAQS

- EPA issued findings of failure to submit iSIPs on November 14, 2014
- The notice listed 7 states and the District of Columbia

## • 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

# SSM SIP Call: Recap of Proposals

- In 2011, EPA entered into a settlement agreement to take final action on a Sierra Club petition for rulemaking concerning SIP provisions for treatment of excess emissions occurring during periods of startup, shutdown and malfunction (SSM)
- In February 2013, EPA proposed SIP calls to 36 states with certain SSM-related SIP provisions
  - 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
- In September 2014, EPA issued a supplemental proposal to address “affirmative defense” provisions for malfunctions
  - SNPR addressed a 2014 DC Circuit decision on EPA’s cement NESHAP and its implications for SIPs and how specific SIPs may be affected
  - SNPR affected provisions in SIPs for 17 states

# SSM SIP Call: Toward Final Rulemaking

- Pursuant to the settlement agreement, final rule to be signed May 22, 2015
- As 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

# Regional Haze: Status of 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 24, 2014; Final September 4, 2015
  - Oklahoma (action on RPGs and RP was deferred)
    - Proposed rule November 24, 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
  - Projected visibility improvement at some Class I areas is slower than needed to reach natural conditions in 2064

# Regional Haze: Visibility Protection iSIPs

- CSAPR took effect January 1, 2015
- EPA issued Regional Haze FIPs to replace reliance on CAIR with obligations to rely on CSAPR
- Because of these CSAPR Better Than BART FIPs, EPA cannot approve “Prong 4 – Visibility Protection” because SIPs themselves should provide this information
- To address this Prong 4 issue, a state can prepare and submit a SIP revision to replace reliance on CAIR with CSAPR in its RH SIP
  - OAQPS and OGC are working with regions on the review of such SIP revisions
- Another path is for EPA to disapprove Prong 4 and explain that a sufficient FIP is already in place

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

- Next round of comprehensive planning SIPs are due July 31, 2018; EPA considering shifting due date to July 2021
- EPA plans to propose rule amendments to change the schedule and process for submitting 5-year Progress Reports
- EPA plans to develop guidance for two key aspects of the program:
  - Reasonable Progress (RP) Guidelines – Guidance for evaluating the statutory factors and making decisions on RP controls
  - RP Goals - Setting the reasonable progress goals based on visibility impacts from controllable, anthropogenic emissions instead of all sources
    - Timing – draft guidance and/or rulemaking in early 2016
- Outreach included a March 2015 listening session in RTP with RPOs, states, and tribes

# GHG PERMITTING

# Post Supreme Court Decision Status Update

- June 23, 2014 Supreme Court Decision in *Utility Air Regulatory Group (UARG) v EPA*
  - Key outcomes:
    - 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
- 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 subject to permitting anyway
  - EPA will no longer require permits for “step 2” sources (sources that triggered permitting requirements based solely on their GHG emissions)

# Post Supreme Court Decision Status Update (cont'd)

- The Supreme Court decision was subsequently sent back to the US Court of Appeals for the District of Columbia Circuit before which parties submitted “motions to govern” regarding next steps for implementing the Supreme Court decision
- The EPA’s “motion to govern” and response
  - Requested vacatur of those parts of the GHG Tailoring rule that:
    - Require stationary sources to obtain a PSD permits if GHGs are the only pollutant that triggers the PSD permitting action (i.e., “Step 2” of the Tailoring Rule)
    - Require stationary sources to obtain title V permits solely because the sources emit or have the potential to emit GHGs above the applicable major source thresholds
    - Phase-in additional steps for permitting GHG-only sources at lower thresholds
- The EPA also requested remand without vacatur of those parts of the Tailoring Rule related to the GHG BACT requirements for anyway sources (e.g., interim GHG emissions threshold) to allow further evaluation of the matter on remand

# D.C. Circuit Decision Motions to Govern

- On April 10, 2015, the D.C. Circuit Court of Appeals issued an ‘amended judgment’ in response to parties’ motions to govern which was consistent with the relief requested by the EPA.
- The D.C. Circuit’s Amended Judgment confirmed EPA’s understanding of the United States Supreme Court decision.
- As EPA requested, the court vacated only those regulations that implement Step 2 of the PSD and Title V Greenhouse Gas Tailoring Rule and required EPA to study whether it was feasible to take additional steps to phase-in permitting requirements for smaller sources.
- The judgment did not vacate the EPA regulations that implement Step 1 of the Tailoring Rule and preserves the ongoing application of the Best Available Control Technology (BACT) requirement to greenhouse gas emission from sources that are required to obtain a PSD permit based on emissions of pollutants other than greenhouse gases (“anyway sources”).



# Post Supreme Court Decision Status Update (cont'd)

- On December 19, 2014, the EPA issued a pair of memoranda providing further information on how the EPA intends to proceed regarding **EPA-issued** Step 2 GHG PSD permits
- In a memorandum from the EPA's Office of Enforcement and Compliance Assurance, the EPA describes the process by which sources may seek to obtain a "no-action assurance" for EPA-issued Step 2 GHG PSD permit terms in both PSD and title V permits
- In a memorandum from the EPA's Office of Air and Radiation, the EPA describes its intentions to complete a rulemaking authorizing the rescission of Step 2 PSD GHG permits. This rulemaking is close to completion – it will be a direct final action.

# Biogenic CO<sub>2</sub> Emissions in Permitting Update

- June 23, 2014 UARG v EPA Supreme Court Decision
  - Decision did not directly address application of PSD and Title V permitting requirements to biogenic CO<sub>2</sub> emissions
- Next Steps announced in Nov. 19, 2014 EPA Memorandum include:
  - Proposing revisions to the PSD rules to exempt waste-derived and sustainable non-waste feedstocks from the GHG BACT analysis
  - Issuing guidance on how to conduct GHG BACT analyses for non-exempt biogenic feedstocks
- Clean Power Plan
  - The EPA anticipates that some states will wish to include the use of biogenic feedstocks in their compliance plans
  - This issue is discussed further in the Nov. 19, 2014 memorandum
- Next Steps regarding framework:
  - The EPA has released a second draft of the *Framework for Assessing Biogenic CO<sub>2</sub> Emissions for Stationary Sources* for a second round of targeted Science Advisory Board (SAB) review, which will occur in late March 2015

# NSR AND TITLE V

# Title V: Guidance Updates

- The EPA continues to work in response to the 2014 Office of Inspector General (OIG) Report regarding EPA oversight of title V fee programs. The OIG fee report is available online at: <http://www.epa.gov/oig/reports/2014/20141020-15-P-0006.pdf>
- The EPA also continues to work on the title V permitting template/guidance for the Cross State Air Pollution Rule (CSAPR)
  - We heard from state/local permitting authorities that there was a significant interest in EPA providing template language for inclusion of CSAPR obligations into title V permits

# Title V: Updates

- Title V Petitions Transparency Rulemaking
  - Seeks to increase transparency and efficiency of the petition submittal and review process by establishing guidelines for the form, content, and method of submittal of title V petitions
    - This action was developed in part based on feedback from various stakeholders over the years, such as through the title V Task Force report, and other venues
  - This action would be a rulemaking and thus will include opportunities for public comment
- Title V Website Update
  - Updating website to provide easier access to useful information
  - Developing improvements to our title V fees page and specific pages to address title V petitions

# Title V: Petition Order Updates

- EPA continues to receive Title V petition orders from various types of parties including environmental groups and regulated entities
- Since September 2014, EPA has issued 2 Title V petition orders
- All orders can be viewed online at:  
<http://www.epa.gov/region7/air/title5/petitiondb/petitiondb.htm>
- In addition, notice of issuance of final orders is published in the Federal Register

# 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 signed March 10, 2015

# NSR: Appendix W Revisions

## 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
- Proposed Signature date – late May 2015



## NSR: PM<sub>2.5</sub> Significant Impact Levels (SILs) Rule

- The proposed rule is anticipated in Fall 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

# E-Public Notice Rule for Air Permitting

- Removes mandatory newspaper notice from air permitting rules; allows alternative mechanisms for public notice
  - Applies to noticing procedures for Title V, NSR and OCS permit programs
  - At their discretion, permit agencies can still use newspaper notice when warranted
- Considerations:
  - Reflects that most of the public has moved away from newspaper for accessing permit documents
  - Provides more flexibility and cost savings to permitting agencies
  - Discussed in 2006 title V Task Force Report and on NACAA's 'priority' actions list stemming from the Task Force Report
- Propose in summer 2015

# Part 56 Regional Consistency Rule

- The Regional Consistency Regulations, 40 CFR Part 56, were promulgated in 1980
- Their purpose is to assure consistent application of rules, regulations and policy among EPA Regional offices and with national policy
- We are proposing to revise these rules to allow regions, where appropriate, to exercise where appropriate, “jurisdictional non acquiescence” where Federal Circuit courts issue opinions on local issues that confound consistent application of CAA programs, policy and guidance
- A proposal is planned for late Spring 2015

# Source Determination for Oil and Gas Extraction

- Notice and comment rulemaking to clarify the definition used to determine the source to be permitted in oil and gas extraction
- Clarity needed as a result of recent court decisions (Summit)
- Rulemaking timing in conjunction with other oil and gas regulatory actions:
  - Proposed NSPS revisions to Subpart 0000
  - Proposed CTG for existing sources in nonattainment areas
  - Proposed rule for streamlined permitting of oil and gas operations in Indian Country
- Expect proposed rule to be signed summer 2015

# **NAAQS IMPLEMENTATION PLANS IN NON-RESERVATION AREAS OF INDIAN COUNTRY**

# NAAQS Implementation Plans in Non-Reservation Areas of Indian Country

- *Oklahoma Dept. of Environmental Quality v EPA*, 740 F.3d 185 (D.C. Cir. 2014)
- “Indian country” under the Clean Air Act consists of:
  - Reservations: both formal and informal reservations/tribal Trust lands (lands held in trust by the U.S. government on behalf of a tribe)
  - Allotments
  - Dependent Indian Communities
  - The court’s decision impacts non-reservation Indian country (i.e., allotments and dependent Indian Communities)
- The decision vacated EPA’s Indian country NSR rule for non-reservation areas of Indian country.
  - Under CAA sec. 107(a), states, not EPA or tribes, have initial primary responsibility for, and jurisdiction over, non-reservation Indian country for purposes of NAAQS implementation plans
  - The D.C. Circuit noted that state jurisdiction can be displaced by a demonstration by EPA or a tribe that a tribe has jurisdiction over a non-reservation area

# Key Points Regarding the Court's Decision

- Does not apply to reservations
- Does apply to non-reservation Indian country throughout the U.S., not just lands in Oklahoma
- In EPA's view, applies to state implementation plans (SIPs) under CAA sec. 110; does not apply to other statutes or other parts of CAA such as Title V and 111(d)
- States cannot waive responsibility for CAA implementation plan coverage of non-reservation areas within their borders

# Aligning Our Programs With the Decision

## Issues We Particularly Need States' Thoughts On:

- Information gathering/scoping: Where is non-reservation Indian country and what sources exist or would like to locate there? What have states said about Indian country in prior SIPs?
- How/whether to address prior SIPs to ensure they appropriately cover non-reservation Indian country.

## EPA's Next Steps:

- Continue to gather information from states and tribes
- Coordinate with those who think there may not be any non-reservation areas of Indian country within their state
- Awaiting direction from OAR management

## For questions or more information:

- Laura Bunte, EPA OAQPS, [bunte.laura@epa.gov](mailto:bunte.laura@epa.gov), (919) 541-0889



# APPENDIX

# Overview of CAA Ozone Nonattainment Area Planning & Control Requirements by Classification

		NSR offset ratio	Major source threshold	
<b>EXTREME</b> (20 years to attain)	TRAFFIC CONGESTION CONTROLS (if appropriate)	<b>1.5 : 1 Extreme</b>	10	
	CLEAN FUELS REQUIREMENT FOR BOILERS			
	PENALTY FEE PROGRAM FOR MAJOR SOURCES			
<b>SEVERE</b> (15/17 years to attain)	LOW VOC REFORMULATED GAS (as appropriate)	<b>1.3 : 1 Severe</b>	25	
	VMT GROWTH DEMONSTRATION (& TCMs if needed)			
	VMT DEMONSTRATION (& TCMs if needed)			
<b>SERIOUS</b> (9 years to attain)	NSR REQUIREMENTS FOR EXISTING SOURCE MODS	<b>1.2 : 1 Serious</b>	50	
	ENHANCED MONITORING PLAN			CLEAN FUELS PROGRAM (if applicable)
	MODELED DEMO OF ATTAINMENT			MILESTONE DEMONSTRATIONS and CONTINGENCY MEASURES FOR RFP
	3% ANNUAL RFP UNTIL ATTAINMENT			ENHANCED I/M for larger population areas
	CONTINGENCY MEASURES FOR FAILURE TO ATTAIN			
<b>MODERATE</b> (6 years to attain)	Stage II Gasoline Vapor Recovery	<b>1.15 : 1 Moderate</b>	100	
	BASIC VEHICLE I/M for larger population areas			
	15% VOC ROP or 15% VOC/NO <sub>x</sub> RFP (OVER 6 YEARS)			
	VOC/NO <sub>x</sub> RACT for MAJOR/CTG SOURCES			ATTAINMENT DEMONSTRATION
<b>MARGINAL</b> (3 years to attain)	TRANSPORTATION CONFORMITY DEMONSTRATION (MVEBs)	<b>1.1 : 1 Marginal</b>	100	
	NONATTAINMENT NEW SOURCE REVIEW PROGRAM			MAJOR SOURCE EMISSION STATEMENTS
	BASILINE EMISSION INVENTORY (EI)			PERIODIC EMISSION INVENTORY UPDATES