

NAAQS and Other Implementation Updates

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AAPCA FALL MEETING

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Overview

- NAAQS Implementation Updates
 - Ozone
 - Fine Particulate Matter (PM_{2.5})
- Final Action on Startup, Shutdown, and Malfunction (SSM) Policy for SIPs and SIP Call
- 2010 SO₂ NAAQS Implementation and Designations
- Regional Haze
- Interstate Transport
- GHG Permitting

2008 Ozone NAAQS Implementation

- Final 2008 Ozone NAAQS SIP Requirements Rule: “Implementation of the 2008 NAAQS for Ozone: State Implementation Plan Requirements Rule” published March 6, 2015 (80 FR 12264)
 - Provided guidance on nearly all aspects of the attainment planning requirements for designated nonattainment areas
 - Revoked 1997 NAAQS effective April 6, 2015 and established anti-backsliding requirements
- Basic SIP components for nonattainment areas addressed
 - Emissions Inventory and use of Air Emissions Reporting Rule
 - Reasonable further progress (RFP) plan
 - Reasonably available control technology (RACT) and Reasonably available control measures (RACM)
 - Attainment demonstrations
 - Contingency measures
 - Nonattainment NSR program
 - Motor vehicle emissions budget (MVEB) (CAA 176(c))
 - As applicable, a variety of area-wide mobile source and stationary control programs

2008 Ozone NAAQS Implementation (continued)

- 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 was July 20, 2015 (attainment determined by 2012-2014 air quality data)
 - Moderate area attainment date is July 20, 2018 (2015-2017 air quality data)

2008 Ozone NAAQS Implementation: Proposed Actions for Marginal Nonattainment Areas

- Marginal area attainment date was July 20, 2015
- On August 27, 2015, EPA proposed several actions for 36 Marginal areas:
 - Determinations of attainment by the attainment date proposed for 17 areas
 - One-year extensions of the attainment date proposed for 8 areas
 - Reclassification to Moderate due to failure to attain by the attainment date proposed for 11 areas
 - Proposal also includes 2 options for Moderate area attainment plan due date
 1. Beginning of each area's 2017 ozone season, or
 2. January 1, 2017 (for all seasons)
- Comment period closes September 28, 2015

2015 Ozone NAAQS: Proposal Overview

- Proposal issued November 25, 2014
 - Primary ozone (O₃) NAAQS: **65-70 ppb** (current level is 75 ppb), took comment on lower levels including 60 ppb and on retaining the current standard
 - Proposed to retain the current indicator, averaging time, and form
 - Secondary O₃ NAAQS: 65-70 ppb, which we proposed would provide the requisite protection equivalent to a seasonal W126 index of 13 to 17 ppm-hours
 - Proposed updates to AQI breakpoints, based on the level of a revised primary standard
 - Addressed a number of implementation-related issues, for example:
 - Extending the monitoring season in 32 states and D.C. starting in 2017
 - Grandfathering for in-the-pipeline PSD permit applications
 - Process deadlines for ozone-related exceptional events demonstrations
- Final rule to be signed by October 1, 2015 (court order)
- Additional information at <http://www.epa.gov/air/ozonepollution/>

2015 Ozone NAAQS (if revised)

- Key implementation milestones for NAAQS
 - Area designations promulgated by October 2017 (more on designations later)
 - Infrastructure SIPs due October 2018
 - Attainment plans due 2020-21
 - Attainment dates 2020-2037 (primary standard only)
- 2008 Ozone NAAQS SIP Requirements Rule expected to serve as blueprint for 2015 Ozone NAAQS implementation rule
- See Appendix for anticipated schedule for 2015 Ozone NAAQS implementation rules/guidance/tools

Area Designations Schedule if Ozone NAAQS Is Revised

NAAQS Revision Promulgated	October 2015
EPA Issues Area Designations Guidance	By February 2016
State Recommendations Due	October 2016
EPA Issues “120-Day Letters”	No later than June 2017
Initial Designations Promulgated	October 2017



Progress on Ozone NAAQS Attainment

(as of September 10, 2015)

	1997 8-hr Ozone (2004 Designations)	2008 Ozone (2012 Designations)
Initial Nonattainment Areas	115	46
Areas Redesignated to Attainment	80 (prior to revocation)	2
Current Nonattainment Areas	35	45
Clean Data Determinations	25	1*
Proposed Redesignations/ Redesignation Substitutes	0	1

* Determinations of attainment by the attainment date proposed for 17 areas on August 27, 2015.

PM_{2.5} NAAQS Implementation: SIP Requirements NPRM

- March 10, 2015: EPA proposed rule for SIP requirements that would apply to current and future PM_{2.5} nonattainment areas
 - “Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements; Proposed Rule” was published on March 23, 2015 (80 FR 15340)
- Proposal sought comment on approaches to clarify nonattainment implementation requirements including for nonattainment NSR according to subpart 4 of part D of Title I of the CAA, consistent with January 2013 D.C. Circuit Court decision
 - Final rule would apply to all 2012 PM_{2.5} NAAQS nonattainment areas, areas designated nonattainment for the 1997 and 2006 PM_{2.5} NAAQS, and any additional areas designated nonattainment for these or future revised PM_{2.5} NAAQS
- Final rule anticipated in early 2016

PM_{2.5} 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 and procedures for reclassifying a Moderate nonattainment area to Serious
- EPA also proposed options to address a number of key issues:
 - Options for air agencies to demonstrate that one or more PM_{2.5} precursors do not contribute significantly to PM_{2.5} levels in a particular nonattainment area
 - Attainment demonstrations and unmonitored areas
 - Nonattainment NSR major source thresholds
 - Options for revoking the 1997 primary annual PM_{2.5} standard of 15 µg/m³

PM_{2.5} NAAQS Implementation

- EPA issued final deadline and classifications rule on June 2, 2014 (79 FR 31566). The rule:
 - Classified areas designated nonattainment for the 1997 and/or 2006 PM_{2.5} 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) for interpretation of subpart 4 requirements
- Petition for review filed July 31, 2014, by WildEarth Guardians in D.C. Circuit Court of Appeals on deadline and classifications rule
 - Oral arguments scheduled for November 6, 2015
- NOI filed July 27, 2015, by Center for Biological Diversity and others for failure to issue findings of failure to submit attainment plans for 2006 PM_{2.5} NAAQS and to act on submitted plan elements

Progress on PM_{2.5} NAAQS Attainment

(as of September 10, 2015)

	1997 PM_{2.5} (2005 Designations)	2006 PM_{2.5} (2009 Designations)	2012 PM_{2.5} (2015 Designations)
Initial Nonattainment Areas	39	32	9
Areas Redesignated to Attainment	28	15	0
Current Nonattainment Areas	11	17	9
Clean Data Determinations	9	8	0
Proposed Redesignations	3	1	0

Response to SSM Petition, Final Policy and SIP Call

- Final action was signed May 22, 2015, in response to a Sierra Club petition for rulemaking concerning SIP provisions for treatment of excess emissions occurring during periods of startup, shutdown and malfunction (SSM)
- Final notice restates EPA's SSM Policy as it applies to SIPs with one change regulating affirmative defense (AD) provisions
- SIP Call applies to 36 states (45 jurisdictions), the majority of which were named in the original petition
- Deadline for state action to remove provisions from their rules and make corrective SIP submissions is November 22, 2016
- Litigation from multiple parties filed with DC Circuit

2010 SO₂ NAAQS Implementation

- EPA revised primary SO₂ standard on June 3, 2010 (75 ppb/1-hour)
- 1-hr SO₂ NAAQS NA SIP elements guidance issued on April 24, 2014
 - www.epa.gov/airquality/sulfurdioxide/pdfs/20140423guidance.pdf
 - EPA regional offices are working to assist states with SO₂ NA areas in applying this guidance to develop SIPs, redesignation areas, etc.
- Attainment plans for 29 areas currently designated nonattainment were due April 4, 2015

SO₂ NAAQS Data Requirements Rule

- Final Data Requirements Rule, issued on August 10, 2015, establishes requirements for air agencies to monitor or model ambient SO₂ levels in areas with largest sources of SO₂ emissions to help implement the 1-hour SO₂ NAAQS.
- At a minimum, air agencies must characterize air quality around sources that emit 2,000 tons per year (tpy) or more of SO₂ or adopt enforceable emission limits that ensure that the source will not emit more than 2,000 tpy of SO₂.
 - Based on 2011 emissions data, a threshold of 2,000 tpy accounts for approximately 412 sources and covers 89% of U.S. SO₂ emissions.
 - Based on more recent data, it is estimated that about 10% fewer sources now exceed this threshold.
- Final rule establishes a schedule for air agencies to characterize air quality and to provide that air quality data to the EPA (does NOT establish designations schedule - more on that later).

SO₂ NAAQS Data Requirements Rule: Implementation Timeline

- **January 15, 2016:** Air agency identifies sources exceeding threshold and other sources for which air quality will be characterized.
- **July 1, 2016:** Air agency specifies (for each identified source) whether it will monitor air quality, model air quality, or establish an enforceable limit.
 - Air agency also accordingly submits a revised monitoring plan, modeling protocols, or descriptions of planned limits on emissions to less than 2,000 tpy.
- **January 2017**
 - New monitoring sites must be operational by Jan. 1, 2017.
 - Modeling analyses must be submitted to EPA by Jan. 13, 2017.
 - Documentation of federally enforceable emission limits and compliance must be submitted to EPA by Jan. 13, 2017.
- **Early 2020:** Monitoring sites will have 3 years of quality-assured data which must be submitted to EPA.

2010 SO₂ NAAQS Designations

- Consent decree entered on March 2, 2015 by U.S. District Court for Northern California “triggered” the following deadlines consistent with a settlement with original plaintiffs:
 - July 2, 2016 - The EPA must complete a round of designations for areas associated with 68 EGUs in 24 states and any undesignated areas with violating monitors.
 - December 31, 2017 - The EPA must complete an additional round of designations for any area a state has not elected to monitor per the provisions of the DRR starting January 1, 2017.
 - December 31, 2020 - The EPA must complete all remaining designations (primarily expected to be areas where states have elected to monitor per the provisions of the DRR).
- Plaintiff states have appealed the March 2, 2015 court order, and in a separate action, North Carolina has filed its own designations deadline suit.
- See Appendix for additional information

Schedule for Completing 2010 SO₂ NAAQS Designations Due on July 2, 2016

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

Regional Haze: Status of Actions

- The initial round of RH SIPs is nearly complete
- Only two actions remain to satisfy the consent decree:
 - Texas (disapproved RP and reliance on CAIR for BART)
 - Proposed rule November 24, 2014; Final required by December 9, 2015)
 - Oklahoma (action on RPGs and RP was deferred)
 - Proposed rule November 24, 2014; Final required by December 9, 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 SO₂ backstop program for Albuquerque, WY, UT, and NM
 - Actions on non-EGUs – taconite plants in MN and MI and cement plants in several states
- Other RH related program issues are being considered and addressed:
 - Options for visibility protection iSIPs
 - July 28, 2015 CSAPR D.C. Circuit court opinion and implications on RH SIPs/FIPs
 - Coordination with CPP

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

- Next round of comprehensive planning SIPs are due July 31, 2018
- EPA plans to propose rule amendments to:
 - Shift the due date for these next SIPs to July 2021; will not prevent states from submitting SIPs earlier
 - Change the schedule and process for submitting 5-year Progress Reports
 - Revise aspects of RAVI provisions
- 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 (Glidepath Metrics)- 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:
 - Listening session in RTP with RPOs, states, and tribes in March 2015
 - Conference calls with RPOs, states and Tribes in July and August 2015 on options for rule amendments and glidepath metrics guidance
 - Conference calls on guidance for Reasonable Progress planned for October, 2015

Scope of Exceptional Events Efforts

- Exceptional Events Implementation Best Practices
- Exceptional Events Rule Revisions
- Wildfire/Ozone Exceptional Events Implementation Guidance
- Alternate Paths for Data Exclusion Guidance
- Communication and Outreach

Anticipated Schedule

- Exceptional Events Rule revisions and guidance development
 - Fall 2015 – sign Notice of Proposed Rulemaking for rule revisions and Notice of Availability for draft guidances
 - Late Fall / Early Winter 2015 – public hearing in Arizona
 - August 2016 – sign final rule and issue final guidance documents

Current Thinking



Status of Transport Rule Efforts

- Status of the Cross-State Air Pollution Rule
 - EPA began implementation of this rule on January 1, 2015. It addresses interstate transport obligations for the 1997 ozone, 1997 PM_{2.5} and 2006 PM_{2.5} NAAQS
 - On July 28, the D.C. Circuit issued its opinion on the remaining issues raised with respect to CSAPR
- Transport Rule to address the 2008 ozone NAAQS
 - EPA issued preliminary interstate transport modeling on January 22, 2015
 - EPA issued updated modeling for public notice and comment on July 23. The comment period closes on September 23.
 - Where upwind states contribute to downwind attainment and maintenance problems, the rule will propose to focus on near-term EGU NO_x reductions achievable by 2017 in those states
 - We intend to propose this rule by the end of this year
 - Additional information at <http://www.epa.gov/airtransport/>

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)
- 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.

D.C. Circuit Amended Judgment on 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”).

GHG Regulatory Updates Post Supreme Court

- In April 2015, EPA issued a final rulemaking action revising EPA's PSD regulations to enable the EPA to rescind EPA-issued PSD permits. Direct Final – 80 FR 26183; Parallel Proposal – 80 FR 26210.
- In Aug. 2015, EPA issued a final rulemaking to remove certain provisions from PSD and title V that were vacated as part of the D.C. Circuit's April 2015 Amended Judgment. 80 FR 50199.
- The EPA is working on a proposed rule to establish a significant emissions rate for GHGs under the PSD program. This proposed rulemaking will also propose the remaining changes to PSD and title V that are necessary to fully implement the D.C. Circuit's April 2015 Amended Judgment.
 - This will be a proposed rulemaking and available for public comment.

APPENDIX

NAAQS Reviews: Status Update (as of September 2015)

	Ozone	Lead	Primary NO ₂	Primary SO ₂	Secondary NO ₂ and SO ₂	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) ¹	<u>Oct 1, 2015</u> ² Final rule to be signed	<u>January 5, 2015</u> Proposed rule published in FR <u>April 6, 2015</u> Comment period closed	<u>June 2-3, 2015</u> CASAC meeting to discuss 2 nd draft ISA and REA Planning document <u>August 13, 2015</u> CASAC teleconference to discuss letters on 2 nd draft ISA and REA Planning Document	<u>Fall 2015</u> 1 st draft ISA	<u>Fall 2015</u> Draft IRP	<u>Dec 2015</u> Draft IRP	<u>TBD</u> ³

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

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

² Indicates court-ordered deadline

³ TBD = to be determined

Anticipated NAAQS Implementation Milestones

(updated September 10, 2015)

Pollutant	Final NAAQS Date	Designations Effective	Infrastructure SIP Due	Attainment Plans Due	Attainment Date
PM _{2.5} (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 ₂ (2010) (primary)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A
SO ₂ (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 _{2.5} (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016	Dec 2021 (Mod) Dec 2025 (Ser)
Ozone (2015)	Oct 2015	Dec 2017*	Oct 2018*	Dec 2020-21*	2020-2037*

*if revised



Anticipated Schedule for 2015 Ozone NAAQS Implementation Rules/Guidance/Tools

Action	After NAAQS Promulgation	(Actual) and Planned Dates
EPA <u>proposes</u> 2015 Ozone NAAQS, Monitoring rules, Exceptional Event Demonstration Schedule, and PSD grandfathering.		(November 25, 2014)
EPA <u>finalizes</u> 2015 Ozone NAAQS, Monitoring rules, Exceptional Event Demonstration Schedule, and PSD grandfathering.	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	February 2016
<i>States submit Designation recommendations</i>	<i>12 months</i>	<i>October 2016</i>
EPA publishes interstate ozone transport contribution assessment NODA	12 months	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 area classifications, SIP due dates, and nonattainment NSR provisions)	12 months	October 2016
EPA <u>finalizes</u> Designations, Classifications, and nonattainment area SIP rules/guidance	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>2020-2021</i>
<i>Nonattainment Area Attainment Dates (Marginal – Extreme)</i>	<i>5-22 years</i>	<i>2020-2037</i>

2010 SO₂ Designations Due in July 2, 2016 Under Consent Decree

- Initial group of designations include:
 - Areas with violation of the 2010 SO₂ NAAQS (based on 2013-2015 data)
 - *Preliminarily (based on final 2012 – 2014 data):*
 - Chatham County, Georgia
 - Hawaii County, Hawaii
 - Iron County, Missouri
 - Williams County, North Dakota
 - Brown County, Wisconsin
 - Carbon County, Wyoming

2010 SO₂ Designations Due in July 2, 2016 Under Consent Decree

- 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 SO₂ emitted in 2012 with an average emission rate of at least 0.45 pounds of SO₂ 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