

NAAQS and Other CAA Implementation Updates

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Clean Air Act Advisory Committee Meeting
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Overview

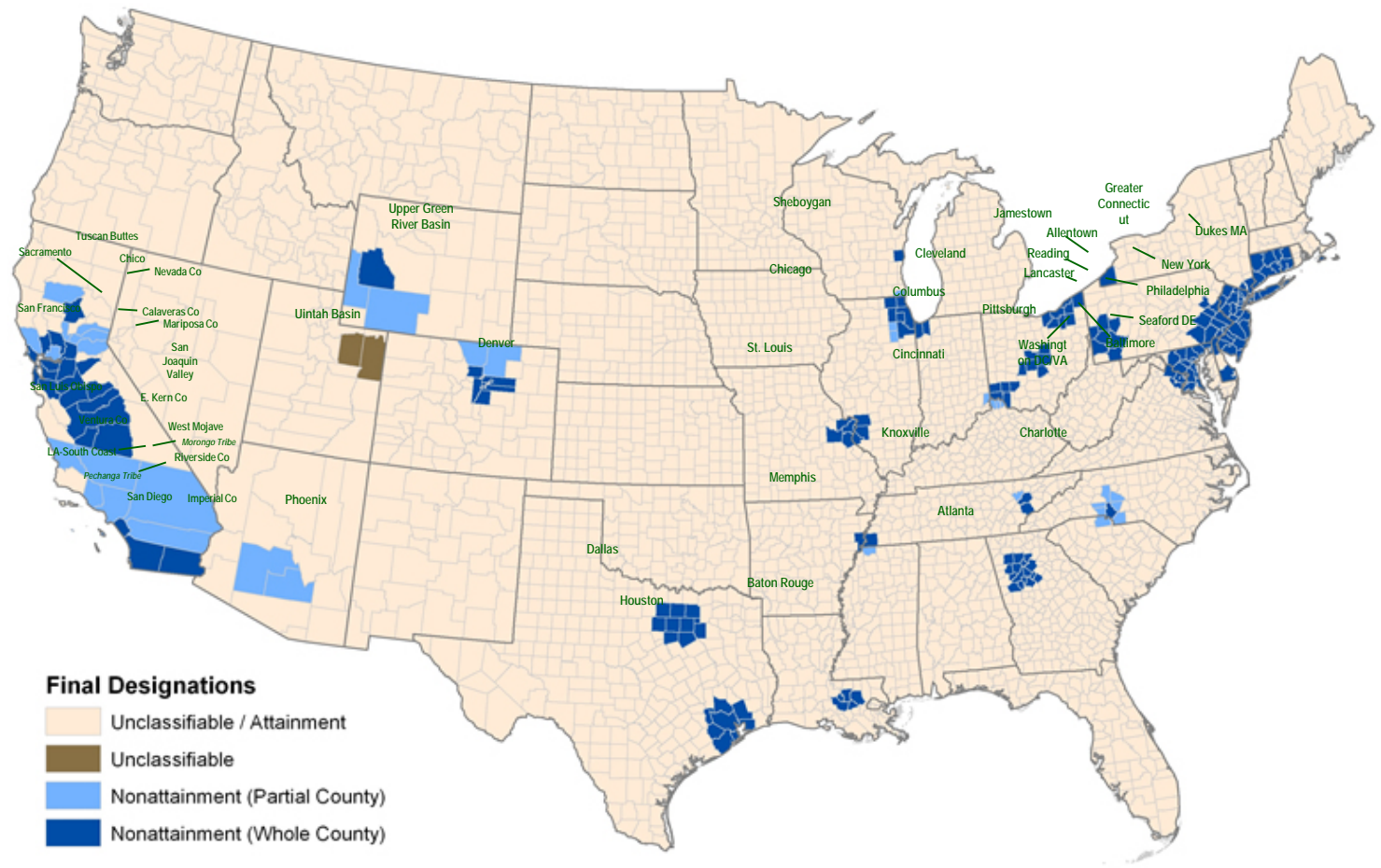
- NAAQS Updates
 - Ozone
 - Particulate Matter (PM_{2.5})
 - Sulfur Dioxide (SO₂)
 - Startup, Shutdown and Malfunction SIP Call
- Greenhouse Gas (GHG) Permitting
- Title V and New Source Review (NSR) Permitting Updates

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
- 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

2008 Ozone NAAQS: Area Designations

(Effective July 20, 2012)



- Final Designations**
- Unclassifiable / Attainment
 - Unclassifiable
 - Nonattainment (Partial County)
 - Nonattainment (Whole County)

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
 - 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
 - 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
 - Provides guidance on nearly all aspects of the attainment planning requirements for designated nonattainment areas

2015 Ozone NAAQS: Proposal Overview

- Proposed November 25, 2014; primary ozone (O₃)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 O₃ 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 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 monitoring data 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/>



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

2012 PM_{2.5} NAAQS

- Final PM_{2.5} NAAQS rule signed December 14, 2012
 - Revised the primary annual PM_{2.5} standard to 12 µg/m³
 - Retained secondary annual PM_{2.5} standard of 15 µg/m³ and 24-hr PM_{2.5} standards of 35 µg/m³ (and 24-hr PM₁₀ standard of 150 µg/m³)
- January 2013 DC Circuit decision regarding litigation on 2007 PM_{2.5} implementation rule and 2008 NSR rule for PM_{2.5}
 - Court held that EPA must implement PM_{2.5} NAAQS under subpart 4
- December 18, 2014 – Administrator signed final area designations for most areas of the country (based on 2011-2013 data)
 - Final designations include 9 nonattainment, plus several unclassifiable areas
 - 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

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.
 - 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
 - Significant amount of implementation detail from the proposal addressed in webinar
- Finalize in late 2015/early 2016

PM_{2.5} 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_{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
 - Addresses how subpart 4 court decision affects nonattainment NSR permitting requirements (e.g., with respect to major source threshold, precursors, etc.)



Progress on PM_{2.5} NAAQS Attainment

(as of March 31, 2015)

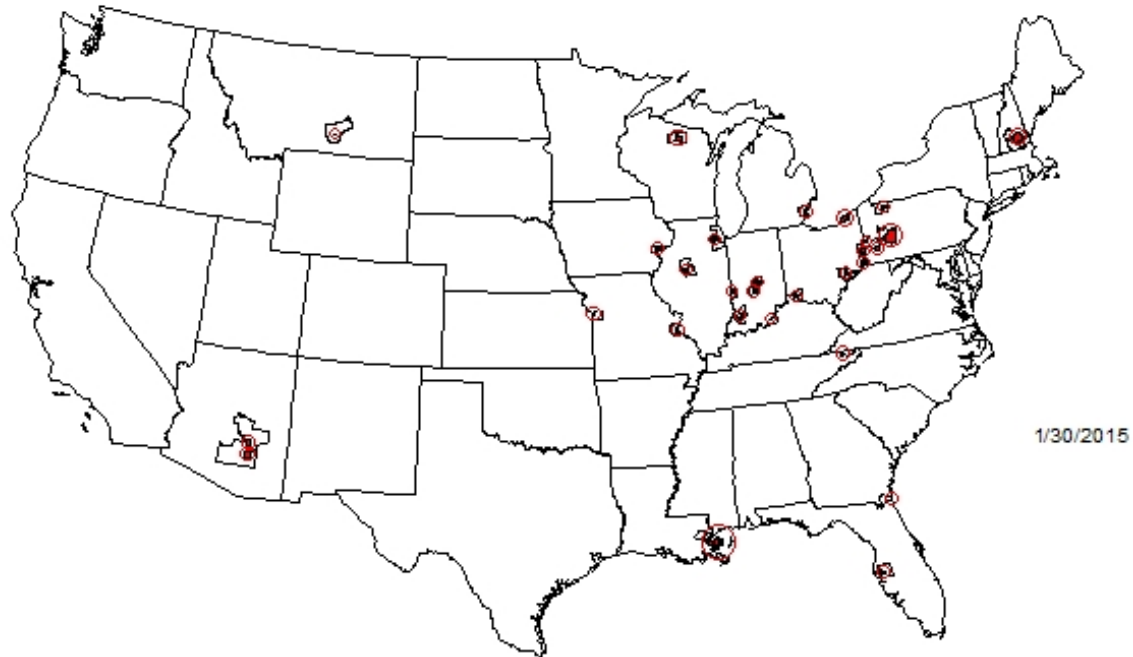
	1997 PM _{2.5} (2005 Designations)	2006 PM _{2.5} (2009 Designations)
Initial Nonattainment Areas	39	32
Areas Redesignated to Attainment	26	8
Current Nonattainment Areas	13	24
Clean Data Determinations	11	13
Proposed Redesignations	2	6

2010 SO₂ NAAQS Implementation


- EPA revised primary SO₂ standard on June 2010 (75 ppb/1-hour)
- EPA designated 29 NA areas on 8/5/13 (effective Oct. 2013)
- Technical Assistance Documents for modeling and monitoring issued December 2013
- 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.

2010 SO₂ NAAQS

SO₂ 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.

 SO₂ Nonattainment Areas

SO₂ Data Requirements Rulemaking

- In April 2014, EPA proposed requirements for air agencies to characterize SO₂ levels near sources across the country for purposes of implementing the 1-hour SO₂ NAAQS
- Proposed requirements would focus on characterizing air quality in areas with larger sources of SO₂ 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

2010 SO₂ 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 SO₂ DRR
- Two other designations lawsuits (from two state groups were stayed pending potential settlement in Sierra Club/NRDC case) may be reactivated

SO₂ Designations: Additional Information

- Information at 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 SO₂ NAAQS
 - Updated guidance for designations issued on March 20, 2015
 - Technical support and assistance documents

Progress on 2010 SO₂ NAAQS Attainment

(as of March 31, 2015)

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

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

Supreme Court Decision - Greenhouse Gas Permitting: 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)

- 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

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
 - preserves the ongoing application of the Best Available Control Technology (BACT) requirement to GHG emission from sources that are required to obtain a PSD permit based on emissions of pollutants other than greenhouse gases (“anyway sources”)

Biogenic CO₂ 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 CO₂ 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 CO₂ Emissions for Stationary Sources* for a second round of targeted Science Advisory Board (SAB) review, which will occur in late March 2015

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

NSR: PM_{2.5} Significant Impact Levels (SILs) Rule and Appendix W Rule Revisions

- PM_{2.5} SILs proposed rule anticipated in Fall 2015
 - Establish legal and technical basis for PM_{2.5} SILs and their use in the PSD air quality analysis
 - Address significant emissions rates (SER) for SO₂ and NO_x as PM_{2.5} precursors and a new SER for ammonia

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

E-Public Notice Rule for Title V and NSR

- 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

QUESTIONS OR COMMENTS

