



# NAAQS and Other Implementation Updates

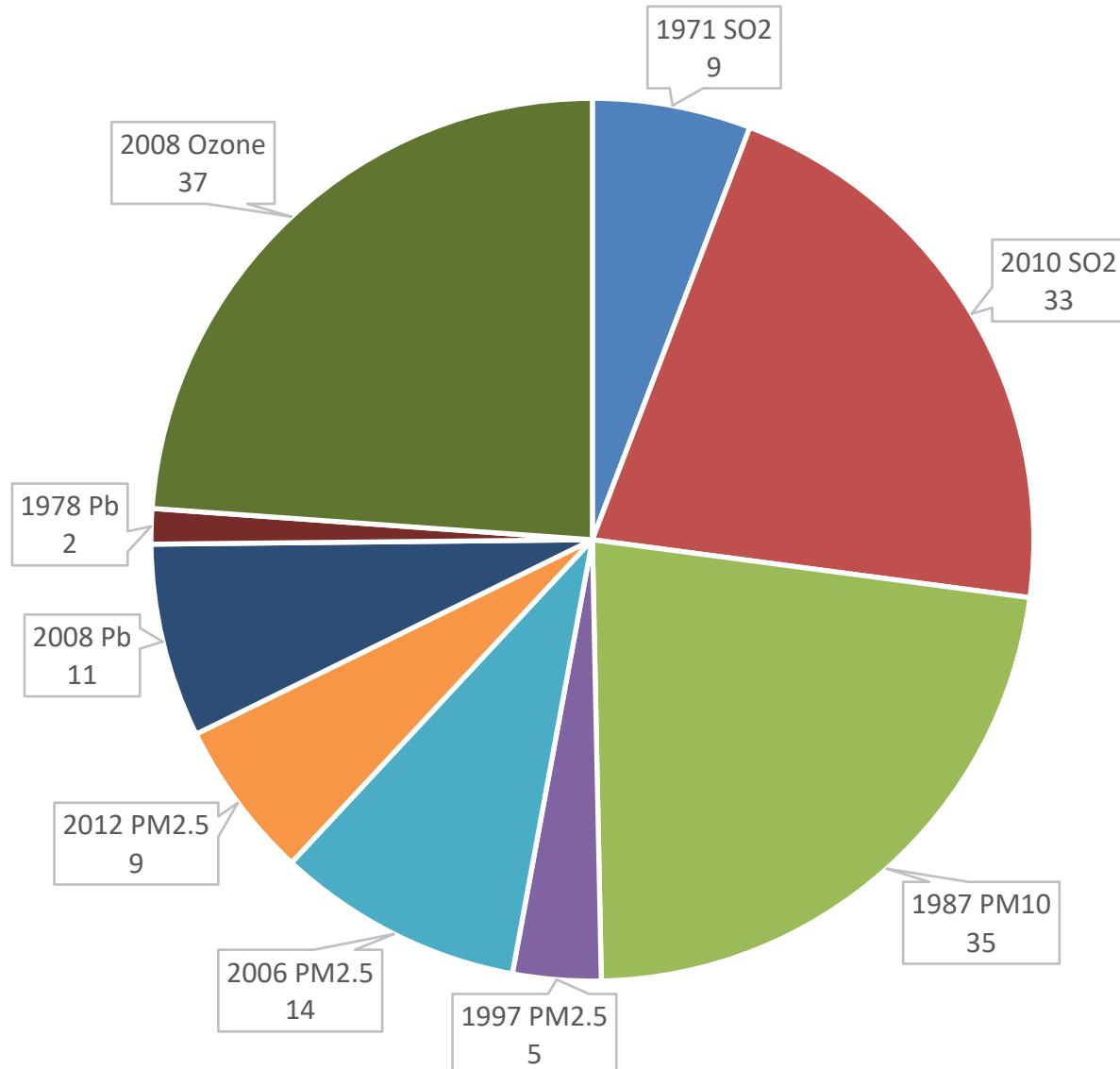
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# OVERVIEW

- EPA's Clean Air Priority Goal: Reduce Number of Nonattainment Areas
- NAAQS Implementation Updates
  - Ozone
  - Sulfur Dioxide (SO<sub>2</sub>)
  - Fine Particulate Matter (PM<sub>2.5</sub>)
- Transport
- Regional Haze



## Nonattainment Areas for Non-revoked NAAQS as of October 1, 2017 (status as of March 2019)



## EPA Priority Goal: Reduce Number of Nonattainment Areas

- Work with states to prioritize redesignation submissions.
- Ensure states have necessary rules, guidance, and tools.
- Improve the efficiency and effectiveness of the SIP/TIP process, including EPA's review process, to maximize timely processing of requested SIP/TIP actions.
- Take federal oversight actions, where necessary.

To approve state's requests to redesignate nonattainment areas depends on states meeting the minimum Clean Air Act requirements, which include:

- A demonstration that the area has air quality that is attaining the NAAQS;
- Establishing that pollution reductions are due to implementing permanent and enforceable measures;
- A 10-year maintenance plan that includes contingency measures to be triggered in the event of a re-violation of the NAAQS; and,
- Satisfying any other applicable and outstanding attainment planning and emissions control requirements.

# NAAQS Reviews: Status Update

(March 2019)

	Ozone	Lead	Primary NO <sub>2</sub>	Primary SO <sub>2</sub>	Secondary (Ecological) NO <sub>2</sub> , SO <sub>2</sub> , PM <sup>1</sup>	PM <sup>2</sup>	CO
<b>Last Review Completed</b> (final rule signed)	Oct. 2015	Sept 2016	April 2018	Feb 2019	Mar 2012	Dec 2012	Aug 2011
<b>Recent or Upcoming Major Milestone(s)</b>	<u>Summer 2019</u> Draft ISA <sup>3</sup>  <u>Early 2020</u> Proposal  <u>Late 2020</u> Final	TBD <sup>4</sup>	TBD <sup>4</sup>	TBD <sup>4</sup>	<u>Timing depends on PM/O3 schedules</u> Final ISA; draft REA/PA <sup>3</sup>	<u>March 28, 2019</u> CASAC teleconference on draft ISA <sup>3</sup>  <u>Early 2020</u> Proposal  <u>Late 2020</u> Final	TBD <sup>4</sup>

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

<sup>1</sup> Combined secondary (ecological effects only) review of NO<sub>2</sub>, SO<sub>2</sub>, and PM

<sup>2</sup> Combined primary and secondary (non-ecological effects) review of PM

<sup>3</sup> IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment

<sup>4</sup> TBD = To be determined



## 2008 Ozone NAAQS Implementation: Determinations of Attainment/Attainment Date Extensions/Reclassifications for Moderate Areas

- Attainment date for Moderate areas: July 20, 2018
- Statutory deadline for issuing final determinations: January 20, 2019
- NPRM published November 14, 2018
  - EPA proposed determinations of attainment/failure to attain (and reclassification to Serious), and 1-year attainment date extensions based on 2015-17 DV for 11 areas
  - Proposal also included due dates for attainment plans and RACT implementation
- Final notice anticipated in late spring 2019





# 2008 Ozone NAAQS Implementation: Post-South Coast II Decision

## ***South Coast Air Quality Management District v. EPA (2018)***

- South Coast AQMD and env. petitioners (Sierra Club *et al.*) challenged various elements of the 2008 Ozone NAAQS SIP Requirements Rule (SRR), including elements related to revoking the 1997 NAAQS (effective April 6, 2015), and the associated anti-backsliding requirements
  - The D.C Circuit decision (February 16, 2018) upheld about half of the challenged elements and vacated several flexibilities in the SRR
  - As a result of decision- 1997 ozone NAAQS nonattainment and maintenance areas that are attainment for the 2008 NAAQS are again subject to non-transportation conformity control measures as anti-backsliding requirements



## 2008 Ozone NAAQS Implementation: Post-South Coast II Decision

- On November 21, 2018, EPA posted a **Resource Document for 1997 Ozone NAAQS Areas: Supporting Information for States Developing Maintenance Plans**
- This resource document and technical information may assist states in developing initial or second maintenance plans for certain 1997 ozone NAAQS areas.
- For more info, please contact Regional Office staff or visit
  - <https://www.epa.gov/ground-level-ozone-pollution/1997-ozone-national-ambient-air-quality-standards-naaqs-nonattainment>



## 2015 Ozone NAAQS Update

- 2015 Ozone NAAQS signed 10/1/15 (80 FR 65292; 10/26/15)
  - Several environmental and health organizations, industry groups, and some states filed petitions for judicial review (Murray Energy v. EPA, No. 15-1385, and consolidated cases)
  - The D.C. Circuit heard oral argument in those challenges on December 18, 2018
  - No opinion issued yet
- 2015 Ozone NAAQS SIP Requirements Rule (83 FR 62998; 12/6/18)
  - On February 4, 2019, Downwinders at Risk, Sierra Club, and National Parks Conservation Association filed a petition for review of the final 2015 ozone NAAQS SIP Requirements Rule in the D.C. Circuit
  - On March 11, 2019, the petitioners' filed their statement of issues related to:
    - NNSR interprecursor trading
    - RFP requirements
      - Milestone compliance demonstrations
      - Alternative baseline year
    - Early implemented contingency measures





## 2015 Ozone NAAQS: Infrastructure SIPs

- Infrastructure SIPs due October 1, 2018 for the 2015 ozone NAAQS
  - Submittals received
  - EPA may become subject to a mandatory duty suit to issue findings of failure to submit overdue infrastructure SIPs
- **Guidance on Infrastructure State Implementation Plans (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)** issued September 13, 2013
  - [https://www3.epa.gov/airquality/urbanair/sipstatus/docs/Guidance\\_on\\_Infrastructure\\_SIP\\_Elements\\_Multipollutant\\_FINAL\\_Sept\\_2013.pdf](https://www3.epa.gov/airquality/urbanair/sipstatus/docs/Guidance_on_Infrastructure_SIP_Elements_Multipollutant_FINAL_Sept_2013.pdf)



## 2015 Ozone NAAQS: Quick Start Guide

- On February 26, 2019, EPA posted the **Quick Start Guide** at: <https://www.epa.gov/air-quality-implementation-plans/guidance-streamlining-sip-process>
- Document brings together EPA and state air agency work to “lean” SIP development and processing with requirements associated with attainment planning for 2015 ozone NAAQS nonattainment areas and OTR states
- Checklists lay out a sample timeline of key milestones intended to help EPA, state and local air agencies collaborate early and throughout the SIP development process for the 2015 8-hour ozone standard
- “Early engagement” is a critical component to supporting air agencies in the development of approvable SIPs and EPA in taking timely action on SIPs



# Progress on Ozone NAAQS Attainment

(as of March 2019)

	1997 NAAQS (2004 Designations)	2008 NAAQS (2012 Designations)	2015 NAAQS (2018 Designations)
Initial Nonattainment Areas	115	46	<b>52</b>
Areas Redesignated to Attainment	80 (prior to revocation)	9	0
Current Nonattainment Areas	35**	37	52
Clean Data Determinations	26	17*	0

\*Includes 15 Marginal area determinations of attainment by the attainment date and 2 Moderate area clean data determinations.

\*\*Obligation to reclassify may be affected by South Coast II decision.



## 2010 SO<sub>2</sub> NAAQS Implementation: Nonattainment Area Overview

Designation Round	Number of Original Nonattainment Areas	Designations Effective Date	Attainment Plan Due Date	Attainment Date
1	29	October 4, 2013	April 4, 2015	October 4, 2018
2	4	September 12, 2016	March 12, 2018	September 12, 2021
2	3	December 13, 2016	July 12, 2018	January 12, 2022
3	6	April 9, 2018	October 9, 2019	April 9, 2023
4*	TBD	TBD	TBD	TBD

\*Designations must be completed by December 30, 2020



## 2010 SO<sub>2</sub> NAAQS: Implementation and Litigation

- On June 14, 2018, the Center for Biological Diversity (CBD), the Center for Environmental Health, and the Sierra Club, filed a lawsuit in the US District Court (Northern District of California) citing:
  - EPA's alleged failure to take action (FFA) on several pending 2010 SO<sub>2</sub> attainment plans for "Round 1" nonattainment areas; and
  - EPA's alleged failure to issue findings of failure to submit (FFS) for overdue plans for nonattainment areas for the 1971 SO<sub>2</sub> NAAQS.
- On December 17, 2018, the petitioners amended the June complaint, which now cites:
  - EPA's alleged failure to act on 18 pending attainment plans for "Round 1" areas in 11 states;
  - EPA's alleged failure to issue FFS for four "Round 2" areas in 3 states; and,
  - EPA's alleged failure to issue an FFS for one nonattainment area for the 1971 SO<sub>2</sub> NAAQS.



## Progress on 2010 SO<sub>2</sub> NAAQS Attainment (as of March 2019)

	Round 1	Round 2	Round 3
Initial Nonattainment Areas	29	7	6
Areas Redesignated to Attainment	2	0	0
Current Nonattainment Areas	27	7	6
Clean Data Determinations	1	0	0





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

- EPA focusing efforts on supporting states with 2006 PM<sub>2.5</sub> NAAQS Serious areas and 2012 PM<sub>2.5</sub> NAAQS Moderate areas
  - 2006 NAAQS Serious area attainment date: December 31, 2019
  - 2012 NAAQS Moderate area attainment date: December 31, 2021
- EPA is targeting spring 2019 for releasing the **revised Draft PM<sub>2.5</sub> Precursor Demonstration Guidance**
  - EPA is considering comments on November 2016 version of draft guidance that recommended technical approaches for precursor demonstrations to assess whether a particular precursor contributes significantly to exceedances of the NAAQS in a given area
  - States have been submitting and EPA has taken or is considering action on precursor demonstrations that states have developed using the draft guidance



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

(as of March 2019)

	1997 PM <sub>2.5</sub> (2005 Designations)	2006 PM <sub>2.5</sub> (2009 Designations)	2012 PM <sub>2.5</sub> (2015 Designations)
Initial Nonattainment Areas	39	32	9
Areas Redesignated to Attainment	34	18	0
Current Nonattainment Areas	5 *	14	9
Clean Data Determinations	4	9	3

\*Includes St. Louis, MO-IL area. Missouri portion of area redesignated on 10/2/2018. Waiting for 3 years of monitoring data from Illinois side of nonattainment area.



# Interstate Transport: 2008 Ozone NAAQS

- On December 6, 2018, EPA finalized a determination that the 2016 Cross State Air Pollution Rule Update (CSAPR Update) fully addresses interstate ozone transport obligations for 20 states in the eastern US with respect to the 2008 ozone NAAQS (83 FR 65878, 12/21/18)
  - The final rule determines that 2023 is an appropriate future analytic year to evaluate further good neighbor requirements
  - The rule uses the latest data and modeling to assess air quality for 2023 and finds that there will be no remaining nonattainment or maintenance areas for the 2008 ozone NAAQS in the eastern US
  - With this determination, EPA has no obligation to establish additional requirements for sources in the 20 covered states to further reduce transported ozone pollution under the 2008 ozone NAAQS
  - The covered states do not need to submit state implementation plans (SIPs) that would establish additional requirements beyond the existing CSAPR Update with regard to the 2008 ozone NAAQS



# Interstate Transport: 2015 Ozone NAAQS

- Good Neighbor SIPs for the 2015 ozone NAAQS were due October 1, 2018
- To date, EPA has released three memoranda intended to assist states in developing and submitting, and to assist EPA in its review of, interstate transport SIPs that address the good neighbor requirements with respect to the 2015 ozone NAAQS.
  - **March 2018 Memo: Information on the Interstate Transport SIP Submissions**
  - **August 2018 Memo: Analysis of Contribution Thresholds (Step 2)**
  - **October 2018 Memo: Considerations for Identifying Maintenance Receptors (Step 1)**
- These memoranda are available on EPA's website at <https://www.epa.gov/airmarkets/memo-and-supplemental-information-regarding-interstate-transport-sips-2015-ozone-naaqs>
- EPA encourages consistency and collaboration among states linked to a common receptor and among upwind and downwind states in developing and applying a regionally consistent analytic approach



# Interstate Transport: 2015 Ozone NAAQS

- EPA is committed to a “**SIP First**” Approach for 2015 Ozone NAAQS
  - States are developing and submitting good neighbor SIPs ahead of pace for previous NAAQS.
    - EPA has engaged on more than two dozen SIPs (or Draft SIPs)
  - Many SIPs are employing concepts discussed in EPA’s transport memoranda
  - Example concepts: use of 1 ppb vs 1% threshold, use of non-EPA modeling, reliance on different base year (with consideration of meteorological conduciveness), conclusions that emissions trends will continue to decrease, consideration of potential/expected additional cost-effective NO<sub>x</sub> emissions reductions, consideration of international emissions
- EPA intends to further engage with states regarding the submission of approvable SIPs



# NOx SIP Call Update

- On February 26, 2019, EPA finalized the regulatory action, **Emissions Monitoring Provisions in State Implementation Plans Required Under the NOx SIP Call** (84 FR 8422, 3/8/19)
  - The final rule amends the NOx SIP Call regulations to allow states to establish alternative, potentially lower-cost monitoring and reporting requirements for certain sources
  - The amendments also remove obsolete regulatory provisions and clarify the remaining regulations





## NO<sub>x</sub> SIP Call Update

- All changes to source requirements will come through state rule amendments and SIP revisions and are optional for states
  - Transition from Part 75 monitoring to alternative monitoring will need to be addressed (potential for partial years of data from some sources, need to track who is using alternatives and who remains under Part 75, etc.)
  - State reporting under 40 CFR 51.122 could change. (Requirements would not change, but state actions could.) States do not have to report emissions from sources that use Part 75
- Mostly non-EGUs, but some non-Acid Rain Program EGUs in non-CSAPR states
- We expect some states to act quickly to provide alternative monitoring
- We encourage states to work with Regions and Headquarters on drafts to ensure a smooth, approvable transition



## Regional Haze: On-going Work

- Resolve remaining first implementation period actions, following a SIP path where possible.
- Support states for the second and future implementation periods
- Moving forward as described in the September 11, 2018, Regional Haze Reform Roadmap



## Regional Haze: What's on the Horizon for the Second Planning Period

- SIPs due by July 2021
- EPA will complete Roadmap products in Spring/Summer 2019
- Some states plan to submit in 2019
- Regional Offices are available for questions or preliminary feedback
- We encourage early engagement on these SIPs



# Regional Haze: Key Principles for the Second Implementation Period

- EPA is committed to working to support states for the second planning period.
- Key principles for implementation of the second planning period include:
  - Ensuring that states have the information they need to develop approvable regional haze plans
  - Ensuring that states have discretion and flexibility to select sources for reasonable progress analysis and whether and how to control sources of visibility-impairing pollutants
  - Ensuring that we are on a path that enables compliance with the Clean Air Act and improved visibility in Class I areas



# EPA's Regional Haze Roadmap for the Second Planning Period

- On September 11, 2018, Acting Administrator Wheeler signed the **Regional Haze Reform Roadmap**
  - Outlines the implementation tools and guidance products that EPA will release over the next year to help states during their 2021 SIP development



## Information Outlined in EPA's Regional Haze Roadmap for the Second Planning Period

- **Fall 2018** – Final recommendations on selecting the 20% most impaired days, including methods for adjusting the glidepath (Section 5 of 2016 Draft Guidance)
  - ✓ **Finalized December 20, 2018**
- **Spring 2019** – Update, as necessary, natural visibility conditions estimates
- **Spring/Summer 2019** – Update 2028 visibility modeling platform (incl. estimates of US and international source contributions for Class I Areas)
- **Spring 2019** – Final guidance on regional haze SIP development will focus on topics such as:
  - Additional information and context regarding screening sources before in-depth analysis, including relevance of previous decisions to adopt emission controls to meet other CAA requirements
  - Consideration of visibility benefits along with the four statutory factors





# Questions and Comments



# APPENDIX

# NAAQS Implementation Milestones

(March 2019)

Pollutant	Final NAAQS Date	Nonattainment 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 2015-2019
PM <sub>2.5</sub> (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016 (Mod)	Dec 2021 (Mod) Dec 2025 (Ser)
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, Sept 2016, Dec 2017 (+1 round)	June 2013	Apr 2015, Mar 2018, Oct 2019 (+2022)	Oct 2018, Sept 2021, Apr 2023 (+2026)
Ozone (2008)	Mar 2008	July 2012	Mar 2011	Mid 2015-2016	Mid 2015-2032
Ozone (2015)	Oct 2015	Aug 3, 2018 (all but San Antonio, TX) Sep 24, 2018 (San Antonio, TX)	Oct 2018	Aug 2021-2022	Aug 2021-2038

