

AAPCA Fall Meeting
September 27, 2023

NAAQS, Regional Haze and Permit Program Updates



Scott Mathias, Director
Air Quality Policy Division
Office of Air Quality Planning
& Standards



NAAQS Reviews Status (September 2023)

	Lead	Ozone	PM ¹	Secondary (Ecological) NO ₂ , SO ₂ , PM ²	Primary NO ₂	Primary SO ₂	CO
Last Review Completed (final rule signed)	Sept 2016	Dec 2020	Dec 2020	Mar 2012	April 2018	Feb 2019	Aug 2011
Recent or Upcoming Major Milestone(s)	<u>March 2023</u> Draft ISA released <u>Summer 2024</u> Draft PA/REA ³	<u>Spring 2024</u> Science Policy Workshop <u>Fall 2024</u> Draft IRP Volume 1 and 2	<u>January 2023</u> Proposed Rulemaking <u>Fall 2023</u> Final Rulemaking (anticipated)	<u>May 2023</u> Draft PA/REA ³ released <u>Feb. 9, 2024</u> Proposed Rulemaking (consent decree) <u>Dec. 10, 2024</u> Final Rulemaking (consent decree)	<u>Dec 9, 2022</u> Call for Information on the Integrated Science Assessment <u>Spring 2024</u> Draft IRP Volume 1 and 2	TBD ⁴	TBD ⁴
Additional information regarding current and previous NAAQS reviews is available at: http://www.epa.gov/ttn/naaqs/							

¹ Combined primary and secondary (non-ecological effects) review of PM
² Combined secondary (ecological effects only) review of NO₂, SO₂, and PM
³ PA – Policy Assessment; REA – Risk and Exposure Assessment
⁴ TBD = To be determined



Reconsideration of Ozone NAAQS

- In October 2021, the EPA announced it would reconsider a December 2020 decision to retain the primary (health-based) and secondary (welfare-based) ozone standards at 70 ppb.
- In June 2023, the Clean Air Act Science Advisory Committee (CASAC) sent their final letter on the draft Policy Assessment (PA) for the reconsideration.
 - The CASAC advised that there were important analyses and information missing from the draft PA in the evaluation of the evidence.
- EPA recognizes the need to address the CASAC advice and remains committed to following a sound process and preserving scientific integrity in the NAAQS review process.
- On August 21, 2023, EPA announced a new review of air quality standards for ground-level ozone.
 - A new review of the ozone NAAQS will facilitate additional consideration of newer studies and updated analyses in the context of a full and systematic review with the opportunities for CASAC advice and public engagement that such a process involves.
- EPA published a call for information in the Federal Register on August 25, 2023 (88 FR 58264; submission deadline October 24, 2023) and expects to hold a science-policy workshop in Spring 2024.



Reconsideration of PM NAAQS

- EPA is reconsidering the 2020 final decision to retain the PM NAAQS.
- EPA proposed revisions to the PM NAAQS in January 2023 (78 FR 3086), including:
 - Revising the primary (health-based) annual $PM_{2.5}$ standard from its current level of $12.0 \mu\text{g}/\text{m}^3$ to within the range of 9.0 to $10.0 \mu\text{g}/\text{m}^3$.
 - Retaining all other PM NAAQS
 - Revising other provisions related to the PM NAAQS, including the Air Quality Index (AQI) and $PM_{2.5}$ monitoring network requirements.
 - The public comment period for this proposal closed on March 28, 2023.
- EPA anticipates issuing the final rule later this year.



Overall Implementation Timeline PM_{2.5} NAAQS

- **Effective date** of final revised NAAQS rule - stationary source permitting
 - Revised standard applies with respect to pre-construction Prevention of Significant Deterioration permitting upon the effective date of a revised standard.
- **Within 2 years** after a revised NAAQS: Based on available information, including most recent monitoring data, EPA must "designate" areas as meeting (attainment areas) or not meeting (nonattainment areas) the revised NAAQS considering input from states and tribes.
 - All PM_{2.5} nonattainment areas are initially classified as "Moderate." (CAA §188)
- **Within 3 years** after a final revised NAAQS: Clean Air Act §110 requires all states to submit state implementation plan revisions to show they have the basic air quality management program components in place to implement the final NAAQS.
 - See EPA's 2013 [Guidance on Infrastructure State Implementation Plan \(SIP\) Elements under Clean Air Act Sections 110\(a\)\(1\) and 110\(a\)\(2\)](#).
- **Within 18 months after the effective date of nonattainment designation:** State Implementation Plans for attaining the PM_{2.5} NAAQS are due. (CAA §189)
- **End of the 6th calendar year after the effective date of designations:** "Moderate" area attainment date. (CAA §188)



Air Quality Designations for a Revised NAAQS

- **No later than 1 year after final NAAQS** - Governors (and participating Tribal Leaders) submit recommendations to EPA on area designations and boundaries.
- **No later than 2 years after final NAAQS** - EPA must finalize area designations.
- **Designations Memorandum** - EPA intends to issue a designations memorandum in parallel with any revised NAAQS that would include the expected schedule and help states and Tribes prepare their recommendations.
- **Nonattainment Area** - both the location where a monitor indicates there is a violation and all nearby areas that contribute to the monitored violation

See CAA section 107(d)(1) & (2)



Fire-related Exceptional Events

- EPA's [Exceptional Events Rule](#) provides a pathway to exclude air quality monitoring data influenced by prescribed and wildfires, among other events, from certain regulatory decisions, such as initial area designations. (81 FR 68216, 10/3/16)
- The Rule:
 - Explains how prescribed fires can meet Rule criteria, such as the clear causal relationship, being considered human activity unlikely to recur, and being not reasonably controllable or preventable.
 - Provides recommendations on smoke management program elements and basic smoke management practices.
 - Allows air agencies to authorize federal land managers to submit demonstrations or help with the preparation of demonstrations.
 - Encourages Federal Land Managers to collaborate with air agencies on prescribed fire impacts.



Fire-related Resources

- EPA's [Exceptional Events Guidance: Prescribed Fire on Wildland that May Influence Ozone and Particulate Matter Concentrations](#) addresses preparation of demonstrations and key issues regarding prescribed fires (issued August 2019).
- EPA's [Guidance on the Preparation of Exceptional Events Demonstrations for Wildfire Events that May Influence Ozone Concentrations](#) (issued September 2016).
- EPA's [Wildfire Resource Document](#) "Analytical Tools for Preparing Exceptional Events Demonstrations for Wildfire Events that May Influence Ozone and Particulate Matter Concentrations" (issued August 2023).
- Other Resources:
 - PM NAAQS proposal fact sheet: [Wildland Fire, Air Quality and Public Health Considerations](#)
 - National Wildfire Coordinating Group [Smoke Management Guide for Prescribed Fire](#) (Nov 2020)
 - WESTAR/SCAQMD online Exceptional Event Demonstration Development Tool ([online demo video 7-11-23](#))
 - [EPA Fire and Smoke Map](#), version 4 expected in Fall 2023



NAAQS Implementation Plans and Title VI of the Civil Rights Act

- Clean Air Act section 110(a)(2)(E)(i) requires that each State Implementation Plan (SIP) provide “**necessary assurances**” that the state is **not prohibited by any provisions of federal law** from carrying out such implementation plan.
- This provision can be interpreted as applying to every SIP revision submitted to EPA.
- Title VI of the Civil Rights Act of 1964 (Title VI) prohibits recipients of federal financial assistance from discriminating on the basis of race, color, or national origin.
- In Oct. 2022, EPA stated that national guidance concerning implementation of section 110(a)(2)(E)(i) as it pertains to Title VI would be “forthcoming.” (87 FR 60494 Oct. 5, 2022.)



Start-Up, Shutdown and Malfunction (SSM) Provisions in SIPs

- EPA is continuing to implement the SSM Policy outlined in the 2015 SSM SIP Call action (80 FR 33840, June 12, 2015) since renewed by 9/30/21 McCabe memo.
 - Automatic and discretionary exemptions from SIP emissions limits and affirmative defense provisions are inconsistent with the CAA.
- EPA proposed to reinstate findings of substantial inadequacy of SSM provisions (SIP calls) that were withdrawn in 2020 for the states of Texas, North Carolina and Iowa (88 FR 11842, February 24, 2023).
 - In addition, EPA proposed to issue new findings of substantial inadequacy and SIP calls to: Connecticut; Maine; North Carolina; Wisconsin, Louisiana; Shelby County, TN; Buncombe County, NC; and Mecklenburg County, NC.
 - EPA is proposing that affected air agencies submit revised SIPs within 18 months after the final findings are published.
 - Public comment closed April 25, 2023.
- Findings of Failure to Submit for 12 overdue SIP Call responses, effective February 11, 2022 (87 FR 1680, January 12, 2022).
 - In August 2023, sanctions were imposed in 3 states that have not submitted complete SIP Call responses.



Contingency Measures Policy

- EPA released a new draft Contingency Measure guidance for comment.
 - The guidance addresses both ozone and PM plans.
 - The comment period closed on April 24, 2023.
 - Available at: <https://www.epa.gov/air-quality-implementation-plans/draft-contingency-measures-guidance>
- The draft guidance reviews current policy and also asks for comment on three new policy clarifications intended to address air agency challenges in identifying sufficient contingency measures in certain areas following court decisions that invalidated key aspects of the previous policy.



Ozone NAAQS Implementation Updates

2023 ozone air quality (preliminary thru 9/5/23)

- 20 of 34 nonattainment areas are meeting the 2008 ozone NAAQS.
- 10 of 47 nonattainment areas are meeting the 2015 ozone NAAQS.
- Monitors located in 30 areas currently designated attainment in 15 states are violating the 2015 ozone NAAQS.
 - Mostly midwestern and western US states.
 - Some monitors have a longer-term violation trend but many are new.

Redesignations to attainment

- 2008 NAAQS: Chicago (IL, IN and WI portions)
- 2015 NAAQS: Atlanta, GA; Cincinnati (OH portion); Detroit, MI; Door County-Revised, WI; Louisville (IN portion); Manitowoc County, WI
- 2015 NAAQS: reversal of El Paso County, TX nonattainment designation



Ozone NAAQS Implementation Updates (cont.)

Recent and upcoming determinations of attainment and reclassifications

2021 attainment dates

- 2008 Serious: 5 areas reclassified as Severe
 - Severe area SIP revisions due May 7, 2024.
 - Severe area attainment date is July 20, 2027.
- 2015 Marginal: 24 areas reclassified as Moderate
 - Moderate area SIP revisions due January 1, 2023.
 - Moderate area attainment date is August 3, 2024.

2024 attainment dates

- 2015 Moderate: final 2021-2023 design value available May 2024

Voluntary reclassifications

- 3 for 2008 ozone, 4 for 2015 ozone, all in California



Ozone NAAQS Implementation Updates (cont.)

2008 NAAQS SIP Status Update

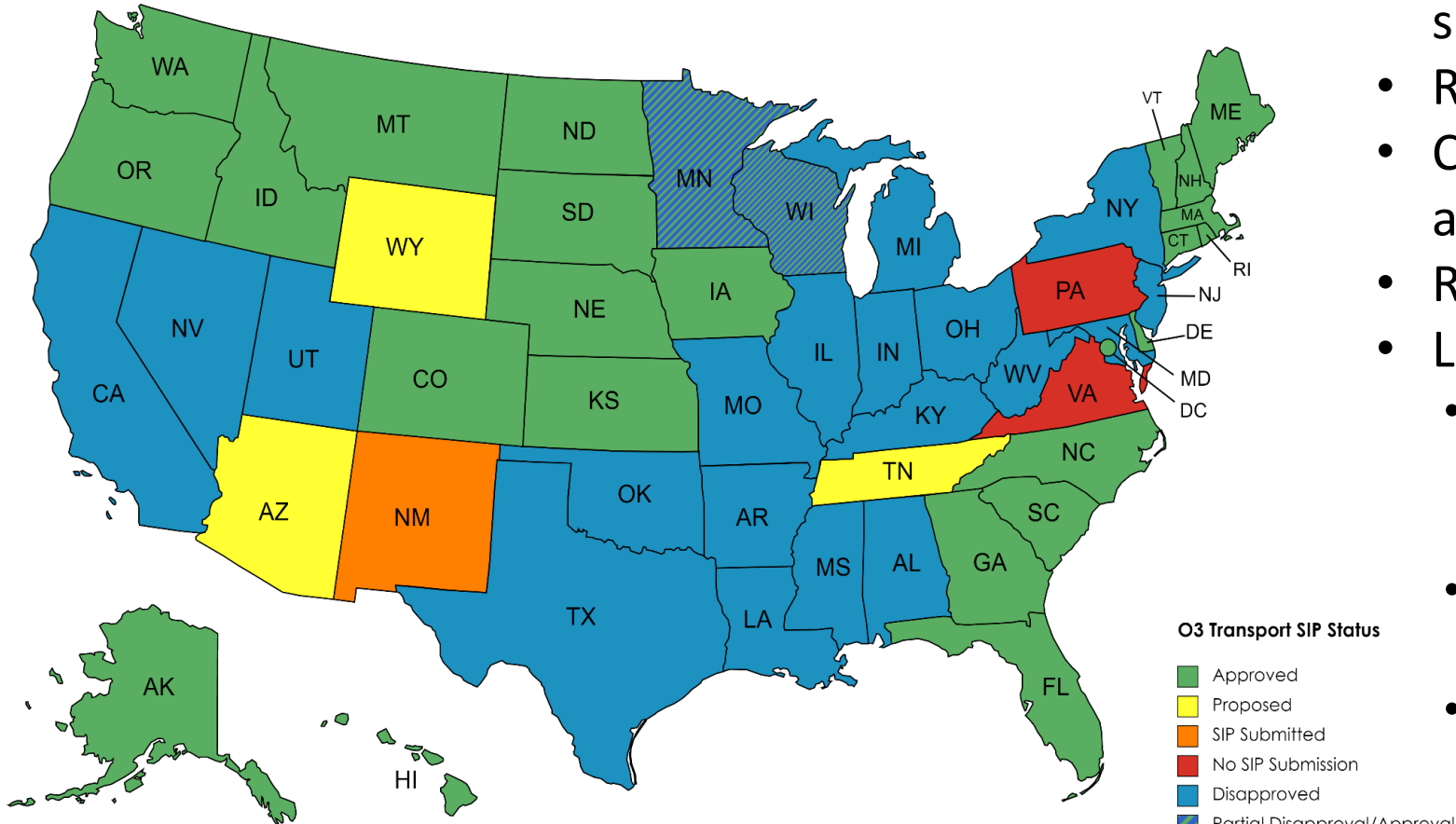
- No overdue SIP submittals for previously reclassified Serious areas.
- SIP revisions for reclassified Severe areas in progress (due May 7, 2024).

2015 NAAQS SIP Status Update

- For all initial SIP revisions due through August 3, 2022:
 - 23 areas with approx. 100 SIP elements in total overdue (as of September 13, 2023).
 - Includes nonattainment NSR SIPs/certifications for 20 areas covering 25 NNSR elements.
- SIP revisions for reclassified Moderate areas were due January 1, 2023.
 - EPA intends to issue findings of failure to submit in Fall 2023.



2015 Ozone Transport SIP Status (as of 9/11/23)



- Final action taken on 45 of 49 submitted ozone transport SIPs.
- Reproposed approval action on WY.
- Currently reviewing actions on AZ and TN submissions.
- Reassessing KS and IA approvals.
- Litigation:
 - Settlement deadline to take final action on AZ, TN and WY by December 15, 2023.
 - Settlement deadline to take final action on NM by June 1, 2024.
 - Disapprovals stayed for Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Missouri, Nevada, Oklahoma, Texas, Utah, and West Virginia.

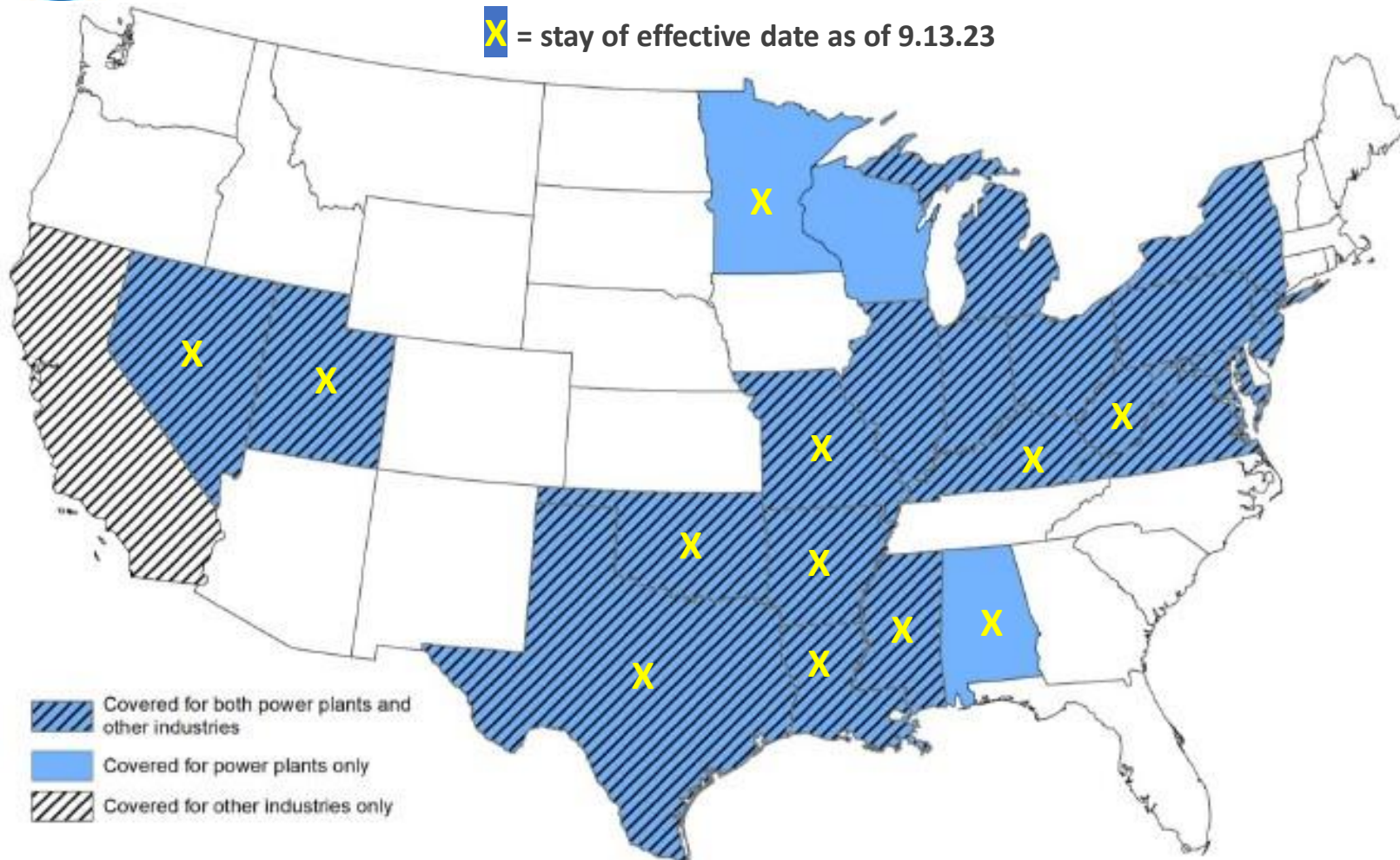


Good Neighbor Plan FIP

- Final federal plan ensures states meet obligations under the Clean Air Act's "Good Neighbor" provisions for the 2015 ozone NAAQS (88 FR 36654, 6/5/23). Effective date 8/4/2023.
 - Establishes Federal Implementation Plan (FIP) requirements for 23 states to eliminate their significant contribution to nonattainment, or interference with maintenance, of the NAAQS in downwind states.
 - Applies to states where EPA made a Finding of Failure to Submit or disapproved a Good Neighbor SIP.
- Determines emission limitations for ozone precursor NO_x.
 - Electric Generating Unit (EGU) requirements in 22 states starting in 2023 ozone season.
 - Industrial source (non-EGU) requirements in 20 states by 2026 ozone season.
 - Stay orders on SIP disapproval actions has resulted in EPA issuing stay of the effective date of GNP FIP for 12 states (interim final rules: 88 FR 49295 7/31/23; second rule signed 9/21/23).
- **NEW** Non-EGU GNP Implementation webpage is under development.
 - Highlight requirements of the GNP for industrial sources.
 - Implementation tools to aid in the development of notifications, workplans, reports and requests.
 - Instructions for uploading reports to CEDRI.
 - List of FAQs.



States/Sources Covered by GNP FIP



Power Plants + Other Industries:

- Reciprocating internal combustion engines in *Pipeline Transportation of Natural Gas*
- Kilns in *Cement and Concrete Product Manufacturing*
- Boilers and reheat furnaces in *Iron and Steel Mills and Ferroalloy Manufacturing*
- Furnaces in *Glass and Glass Products Manufacturing*
- Boilers in *Metal Ore Mining; Basic Chemical Manufacturing; Petroleum and Coal Products Manufacturing; and Pulp, Paper, and Paperboard Mills*
- Combustors and incinerators in *Solid Waste Combustors or Incinerators*

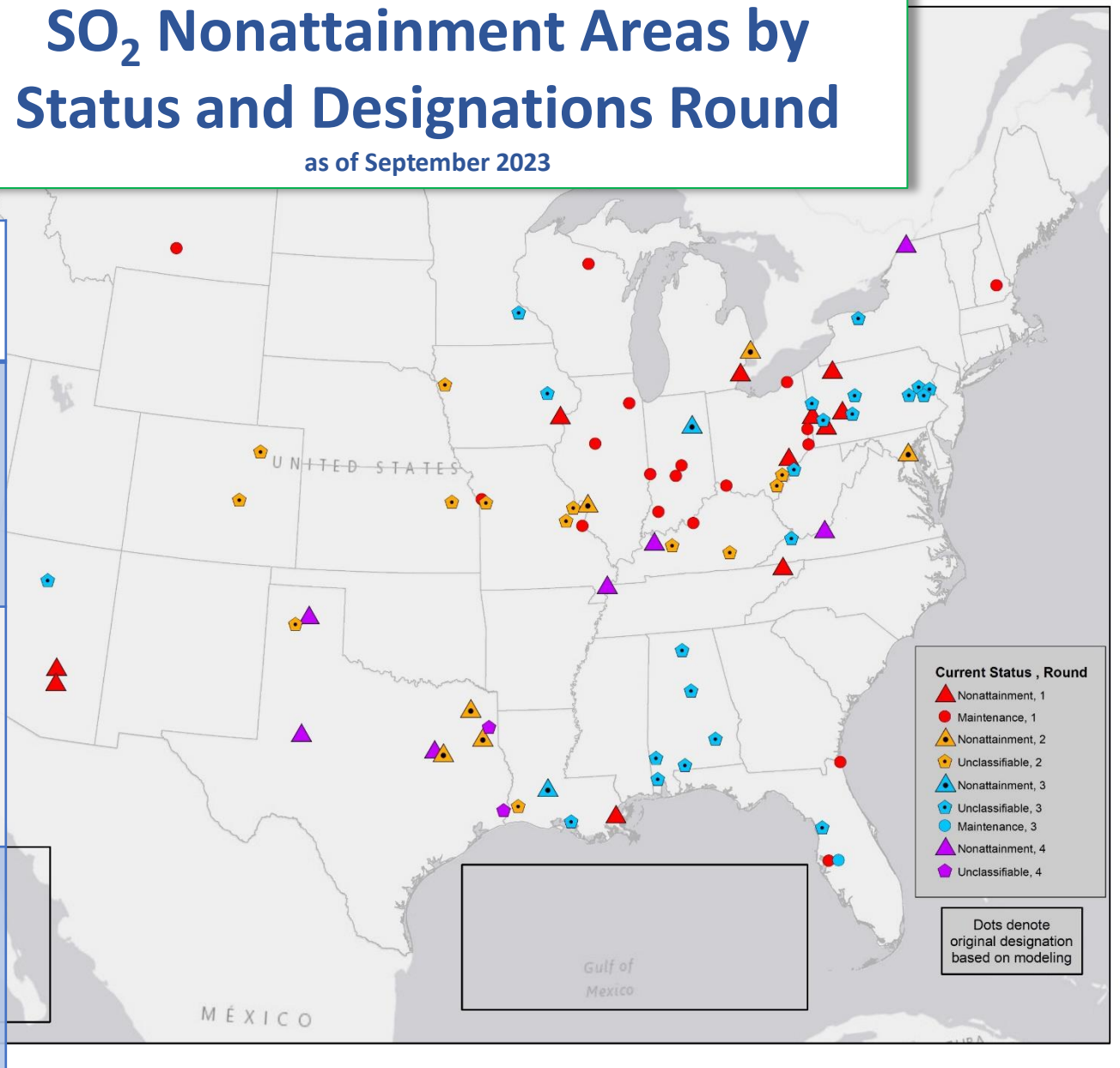
Phase I of NO_x reductions for power plants took effect August 4, 2023.
Phase 2 for power plants and covered industrial sources takes effect in 2026.



SO₂ Nonattainment Areas by Status and Designations Round

as of September 2023

	Rnd 1	Rnd 2	Rnd 3	Rnd 4	Total
Nonattainment	11	6	5	8	30
Unclassifiable	-	13	24	2	39
Maintenance	18	-	1	-	19



Current Status , Round

- ▲ Nonattainment, 1
- Maintenance, 1
- ▲ Nonattainment, 2
- ⬠ Unclassifiable, 2
- ▲ Nonattainment, 3
- ⬠ Unclassifiable, 3
- Maintenance, 3
- ▲ Nonattainment, 4
- ⬠ Unclassifiable, 4

Dots denote original designation based on modeling



SO₂ NAAQS Implementation Update

- Round 1 Nonattainment Areas
 - Revised attainment plans due in 2023 for Hayden & Miami, AZ; St. Bernard Parish, LA. Revised attainment plan due in 2024 for Indiana, PA.
 - EPA pursuing redesignation to nonattainment for an area of Westmoreland & Cambria counties, PA adjacent to the existing Indiana, PA area.
- Round 2 Nonattainment Areas
 - All areas have either Clean Data Determination and/or approved attainment plan except Rusk/Panola Cos., TX. EPA subject to December 13, 2023 CD deadline for FIP/approved SIP for Rusk/Panola Cos., TX.
- Round 3 Nonattainment Areas
 - Sanctions and FIP deadline December 2, 2022 for Evangeline Parish, LA; Piti-Cabras, GU; and Huntington Co. IN.
- Round 4 Nonattainment Areas
 - Attainment plan submittals due October 30, 2022 for St. Lawrence Co., NY; Giles Co., VA; Henderson & Webster Counties, KY.
- SO₂ Interstate Transport SIPs – 14 SIP submissions under review



Regional Haze Program Update

- EPA is reviewing and taking action on submitted SIPs.
- Latest SIP action was a proposed approval for Maryland (88 FR 58178, 8/25/23).
- EPA issued Findings of Failure to Submit effective September 29, 2022, for 15 states (87 FR 52856).
- EPA previously committed to reconsidering certain aspects of the 2017 Regional Haze Rule revisions, including FLM consultation and RAVI provisions.
 - Other rule changes for the 3rd planning period are being considered.

Regional Haze SIP Status as of September 2023	
EPA Final Actions Published	1
Submitted SIPs Awaiting Final EPA Action	38
SIPs Outstanding	13

Air Permit Program Updates





PSD Program Updates

- Reviewing aspects of Project Emissions Accounting Rule for determining major modification applicability
 - Discretionary rulemaking to consider issues raised in a January 2021 petition.
 - Project Emissions Accounting Final Rule: 85 FR 74890 (11/24/20); Denial of Petition for Reconsideration: 86 FR 57585 (10/18/21).
- Reconsidering the 2008 Fugitive Emissions Rule
 - The proposed rule would require fugitives to be counted for all existing major sources undergoing a major modification (87 FR 62322, 10/14/22).
 - This rule does not impact the determination of a new major source, only non-listed source(s) that are existing major source(s) undergoing major modification(s).
 - Comment period extended to 120 days, closed February 14, 2023.



PSD Program Updates (cont.)

- Evaluating sufficiency of minor NSR program provisions
 - Public notice/participation requirements.
 - Guidance/oversight related to synthetic minor permitting.
- Addressing “potential to emit” concerns from July 2021 OIG report:
 - Update EPA’s 1989 *Guidance on Limiting Potential to Emission in New Source Permitting* on practical enforceability to more clearly describe how the technical accuracy of a permit limit should be supported and documented.
 - Revise EPA guidance to communicate key expectations for synthetic minor permit terms and conditions to ensure PTE remains below applicable major source thresholds, including meeting criteria for what it means for the PTE limits to be legally and practicably enforceable.



Title V Program Update

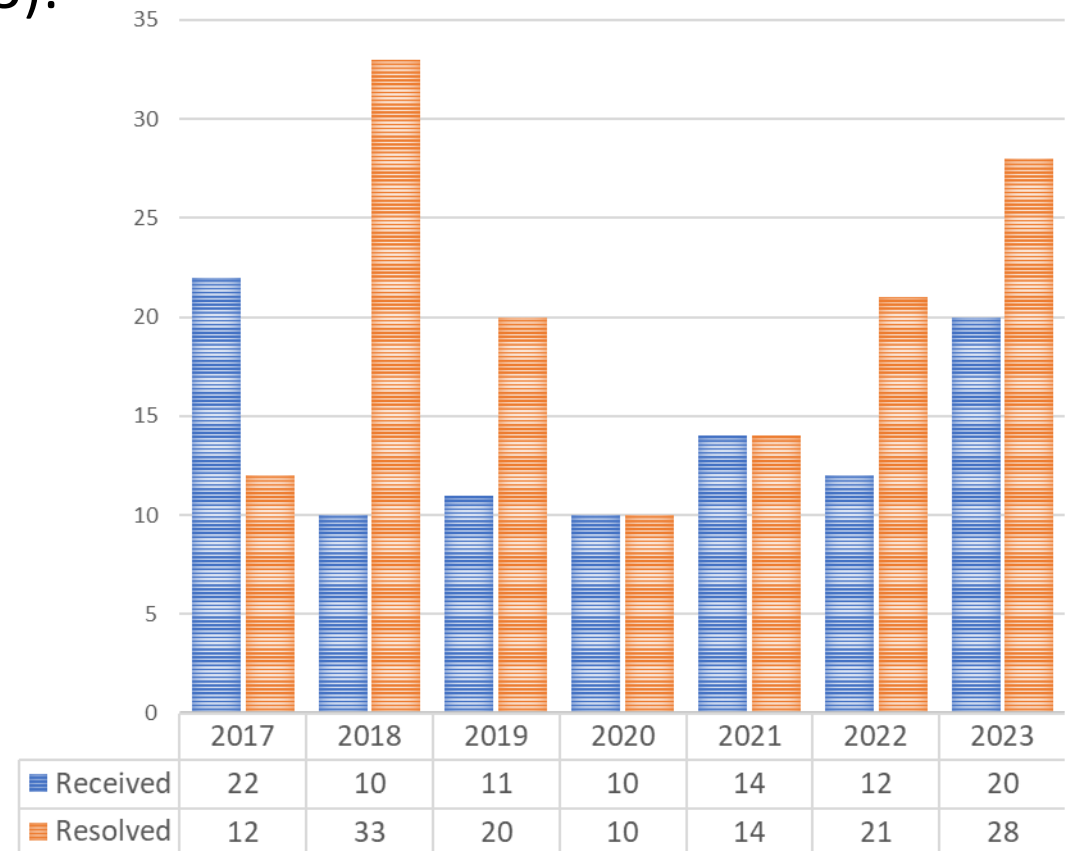
- Removal of Title V Emergency Affirmative Defense Provisions From State Operating Permit Programs and Federal Operating Permit Program (88 FR 47029, July 21, 2023 – Final Rule)
 - Where necessary, States must revise part 70 programs by August 21, 2024, following procedures in 40 CFR 70.4(a) and (i).
 - States may submit a request to the appropriate EPA Regional office requesting an extension to this 12-month deadline, demonstrating why such an extension is necessary.
 - Where necessary, States must remove affirmative defense provisions from individual permits during the next permit revision or periodic permit renewal for the source that occurs following the EPA’s approval of State program revisions.
- Title V Applicable Requirements Rule
 - Would clarify the definition of “applicable requirement” within title V program as it relates to NSR permit requirements.



Title V Program Update (cont.)

- Citizen petitions on title V permits:
 - Over 7 years (FY17-FY23 thru 9/25/23): 99 received; 138 resolved
 - FY23 (thru 9/25/23): 20 received, 28 resolved
- Notable topics:
 - Use of title V to address NSR permitting issues
 - Use of title V to add operational requirements necessary to assure compliance with existing limits
 - Monitoring

TITLE V PETITIONS RECEIVED & RESOLVED BY FY (THRU 9/12/23)





Title V Program Update (cont.)

EPA Office of Inspector General January 2022 report “EPA’s Title V Program Needs to Address Ongoing Fee Issues and Improve Oversight.”

- OIG concluded that declining Title V fee revenues and the misuse of Title V funds pose a “significant challenge” to EPA and state and local permitting authorities.
- EPA has completed several corrective actions, including conducting a [webinar with permitting authorities on title V fee laws and regulations](#) and issuing [updated guidance](#) to EPA Regions.
- EPA is continuing to implement corrective actions that include:
 - 1) Identifying and sharing current best practices;
 - 2) Developing a strategic plan to address declining Title V fee revenues.

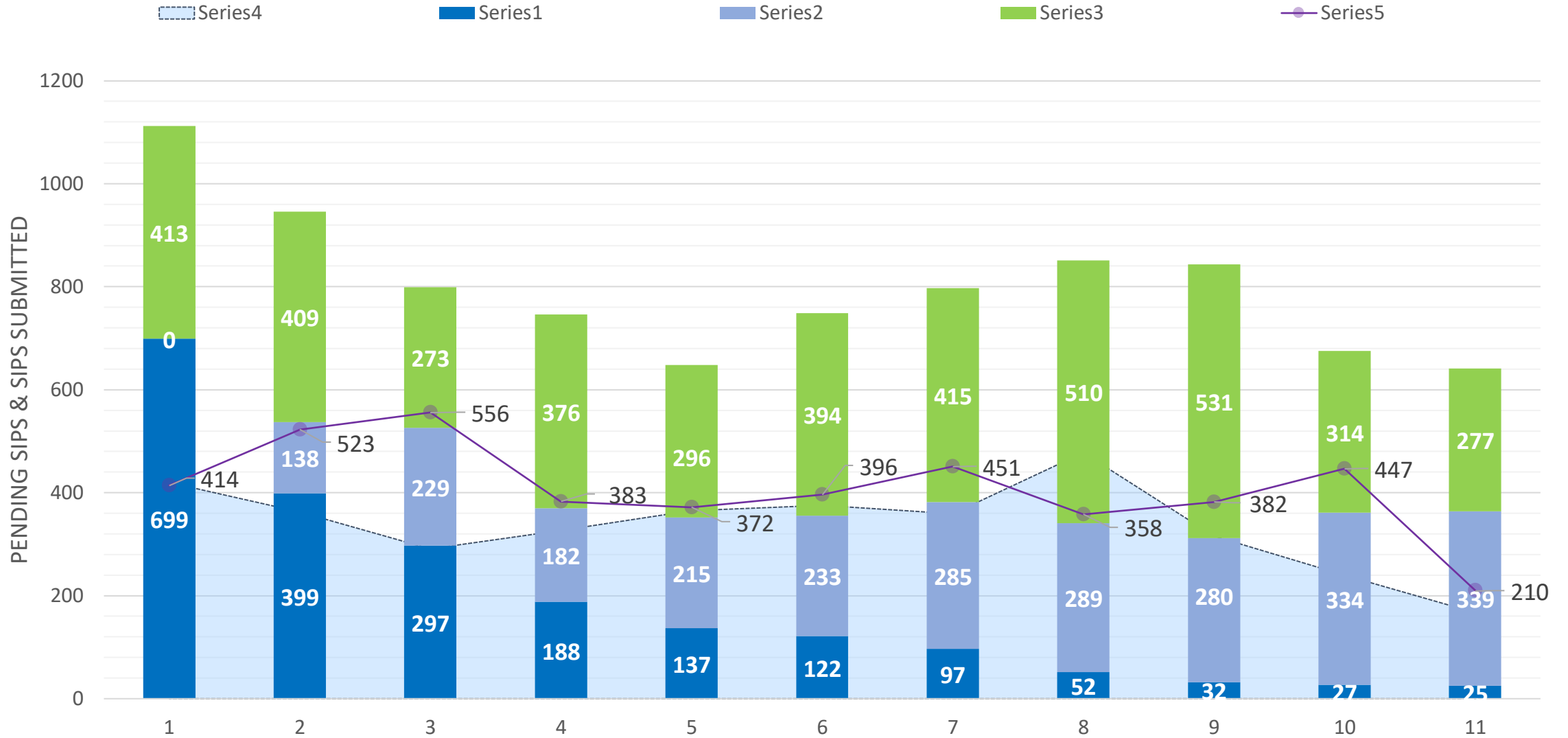


Questions and Comments





Improving State Implementation Plan Reviews: SIPs Pending EPA Review Oct. 1, 2013 to Sept. 1, 2023





Exceptional Event Demonstration Examples

[Link to Example Demonstrations and EPA Responses](#)

Event	Agency / Location	Available Documentation
PM2.5: August 2020 California Wildfires	California Air Resources Board / San Joaquin Valley	San Joaquin Valley, CA Documents
PM2.5: August 2015 Oregon Wildfires	Oregon Dept of Environmental Quality / Klamath Falls	Klamath Falls Documents
Ozone: September 2017 Northwest Wildfires	Colorado Dept of Public Health and Environment / Denver	Colorado Documents
Ozone: May 2016 Canadian Wildfires	Connecticut Dept of Energy and Environmental Protection / Connecticut	Connecticut Documents
Ozone: May & July 2016 Canadian Wildfires	Maryland Dept of Environment / Maryland	Maryland Documents
Ozone: September 2017 Northwest Wildfires	Louisiana Dept of Environmental Quality / Baton Rouge	Louisiana Documents



EPA eLearning Modules on Area Designations

- Air Quality Planning curriculum intended for learners who implement the National Ambient Air Quality Standards via State / Tribal Implementation Plans
- AirKnowledge eLearning Modules at <https://airknowledge.gov>
 - [What are Area Designations?](#)
- PLAN201-SI: [Applying Technical Factors for Area Designations](#)
 - Area Designations Process and Timeline
 - Area Designations Factor Analysis



ADVANCE

A collaborative program for states, tribes, cities, regional planning commissions, and councils of government to achieve ongoing emission reductions in attainment or maintenance areas for ozone and/or PM_{2.5} NAAQS.

53 partner areas covering more than 54 million population.

Platform to support air quality and climate goals and address concerns of EJ communities.

For more information contact Mia South (south.mia@epa.gov)

