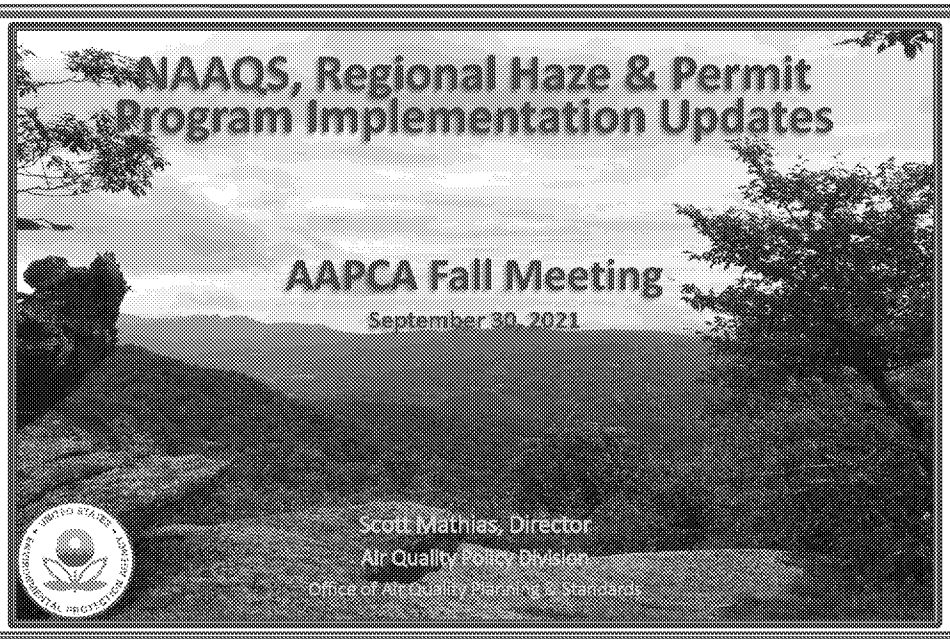
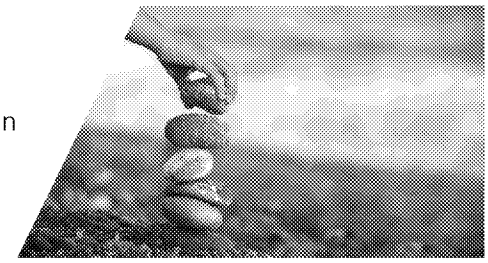

NAAQS, Regional Haze & Permit Program Implementation Updates
AAPCA Fall Meeting
September 30, 2021
Scott Mathias, Director
Air Quality Policy Division
Office of Air Quality Planning & Standards

Overview

- Regional Haze Implementation
- NAAQS Implementation
  - Sulfur Dioxide (SO_2)
  - Ozone (O_3)
  - Particulate Matter ($PM_{2.5}$)
  - Lead (Pb)
  - Exceptional Events
  - Startup, Shutdown & Malfunction Policy (SSM)
- Permit Program Updates
- Data Systems Support

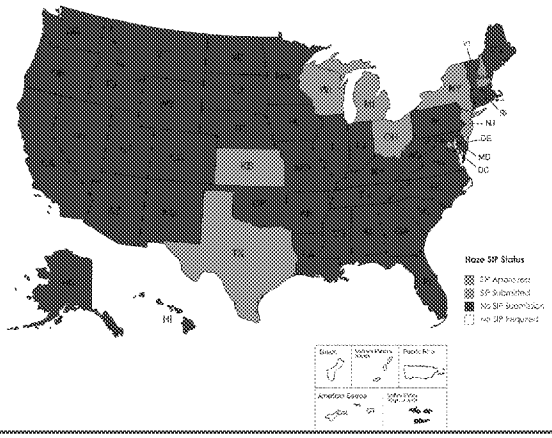


Regional Haze Program Update

- Recent 2nd planning period regional haze information from EPA can be found here: https://www.epa.gov/visibility/visibility-guidance-documents
- July 2021 Regional Haze "Clarifications Memo"
  - Provides additional information on 2nd planning period issues and questions received from stakeholders during recent early engagement interactions.
  - EPA Regions and HQ staff are available to support SIP development efforts.
- Technical Memos
  - Recommendations for site combinations and volcano adjustments for Hawaii.
  - Technical Support Document for EPA's modeling for AK, HI, and USVI.

Regional Haze Program Update con't

- Second planning period regional haze SIP deadline was July 31, 2021.
- EPA has received 9 final SIPs.
- EPA and FLMs have also reviewed numerous other draft SIPs as part of the early engagement and consultation process.

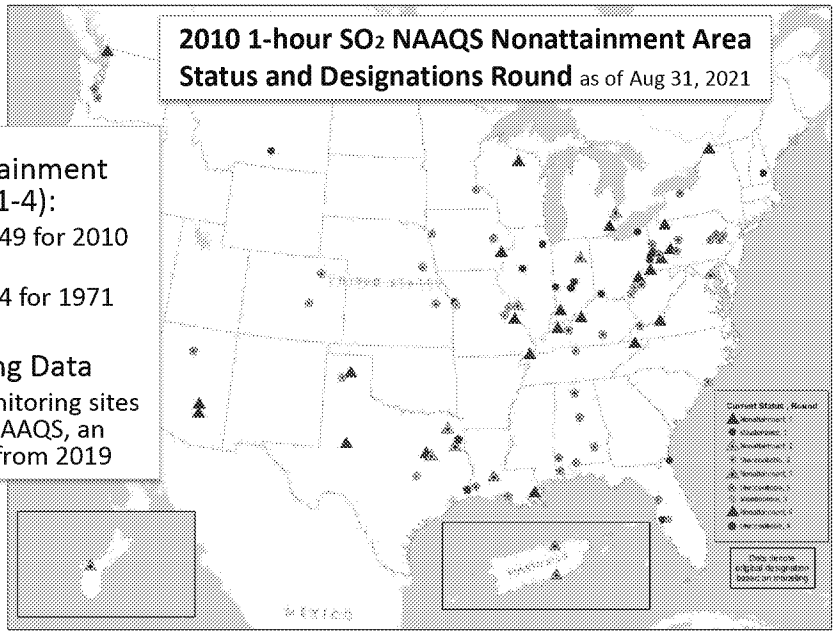


Regional Haze Program Update (cont.)

- 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 and beyond may also be considered.
- We look forward to communicating with states and other stakeholders on this topic in the coming year.

2010 1-hour SO_2 NAAQS Nonattainment Area Status and Designations Round as of Aug 31, 2021

- Current nonattainment areas (Rounds 1-4):
  - 33 of original 49 for 2010 SO_2 NAAQS
  - 8 of original 54 for 1971 SO_2 NAAQS
- 2020 Monitoring Data
  - 19 of 463 monitoring sites exceed 1-hr NAAQS, an increase of 5 from 2019



SO_2 NAAQS Implementation Update

- Round 4 nonattainment areas
  - EPA staff are available to assist with strategy and technical issues for developing attainment plans for the eight new nonattainment areas.
  - Attainment SIP submission deadline is October 30, 2022.
- Round 3 nonattainment areas
  - EPA issued findings of failure to submit (FFS) timely attainment plans on November 3, 2020, for five areas: Huntington IN; Evangeline Parish LA; Guayama-Salinas PR; San Juan PR; Piti-Cabras GU.
  - Attainment deadline is April 9, 2023, for these areas (2020-2022 AQ data).
- Round 2 nonattainment areas
  - Attainment deadline is September 16, 2021, for Alton Township IL, Anne Arundel County and Baltimore County MD, and St. Clair MI (2018-2020 AQ data). Attainment deadline is January 17, 2022, for Freestone and Anderson Counties TX, Rusk and Panola Counties TX, and Titus County TX (2019-2021 AQ data).
  - Litigation: EPA entered a Consent Decree with a deadline of March 1, 2022, for final action on the attainment plan for the Alton Township, IL area.

SO_2 NAAQS Implementation Update (cont.)

Round 1 nonattainment areas

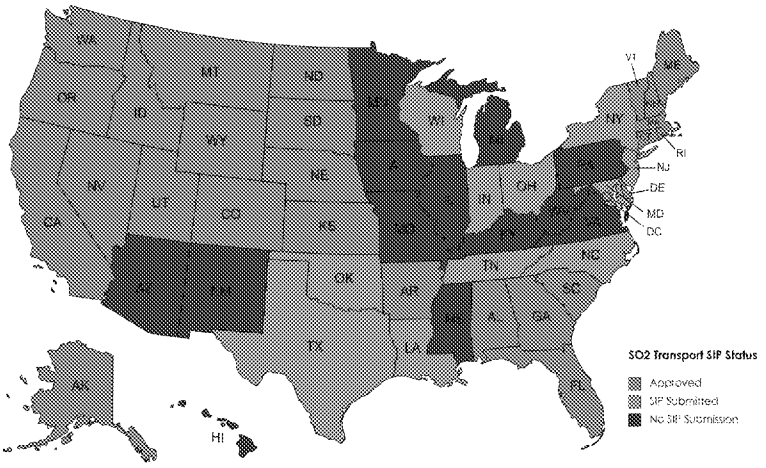
- Court granted EPA's request for remand of its approval of the Indiana, PA attainment plan on August 17, 2021.
- Consent decree deadlines for EPA final action to determine attainment by the October 4, 2018, attainment date for several areas:
  - Detroit, MI; Rhinelander, WI; SW Indiana, IN: January 31, 2022.
  - Hayden, AZ and Miami, AZ: January 31,2022.
  - Sullivan County, TN; Jackson County, MO; St Bernard Parish, LA and Muscatine, IA: March 31, 2022.
- On August 11, 2021, the Sierra club and CBD filed suit against EPA for failing to take timely action to promulgate a FIP for Detroit, MI, and to take final action on a SIP for Anne Arundel County, MD.
  - EPA and the plaintiffs are discussing whether the litigation can be resolved through settlement.

SO_2 Transport SIP Status

27 Approved (green)

11 Submitted, Under Review (orange)

13 States + 5 territories Outstanding (red)



2015 Ozone NAAQS (70 ppb) Nonattainment Area Status

State infrastructure SIPs due October 1, 2018. Received 46 full, 5 partial submissions.

Initial SIP submittals (emiss. inv./statements/RACT/CTGs) due August 3, 2020. Received SIP revisions from 23 States for 38 areas and 6 states for OTR.

Moderate area attainment plans/ demonstrations due August 3, 2021.

Marginal area attainment date for 40 areas is Aug/Sept 2021 (2018-20 DV).

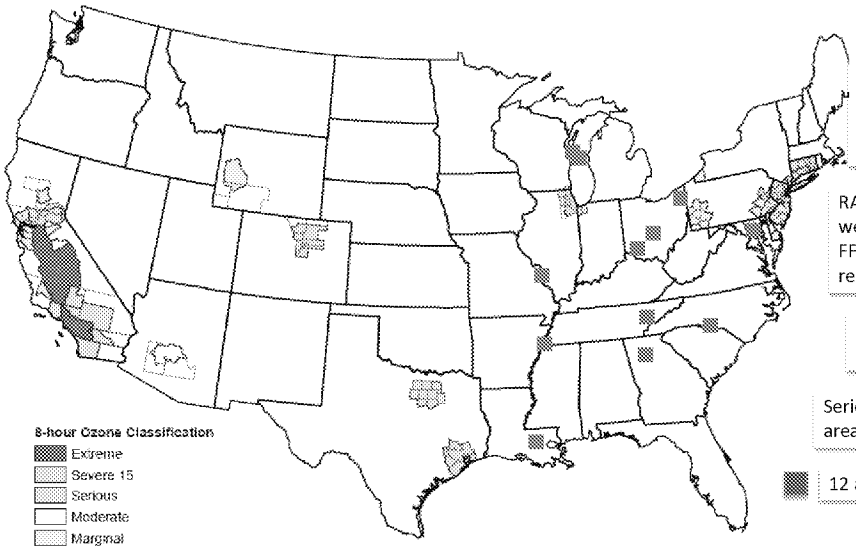
2 areas redesignated (Maintenance).

Area designations remanded for 16 counties in 9 areas on 7/10/2020.

2015 Ozone NAAQS Designations Remand

- In its July 2020 decision, the DC Circuit Court in the *Clean Wisconsin v. EPA* case remanded the original EPA final designations for 16 counties or parts of counties associated with 9 general areas back to EPA.
- On May 24, 2021, EPA responded to the D.C. Circuit Court's remand for 14 of the 16 counties taking final action to revise the boundaries for six nonattainment areas in four states (Illinois, Indiana, Missouri, and Wisconsin) and reaffirming the April 30, 2018, designation for Ottawa County, Michigan.
  - Revisions were effective July 14, 2021.
  - Marginal area SIP revision requirements associated with this final action to be submitted as expeditiously as practicable.
- On May 25, 2021, EPA notified Texas and Colorado of EPA's intention to designate as nonattainment:
  - El Paso County, TX to be part of El Paso-Las Crucas TX-NM nonattainment area, and
  - Weld County, CO to be part of Denver Metro/N. Front Range CO nonattainment area.
  - 30-day public comment period closed on July 14, 2021.
  - EPA is considering public and state feedback as we work toward final designation decisions.

2008 Ozone NAAQS (75 ppb) Nonattainment Area Status



Attainment plans/demonstrations for reclassified Serious areas were due August 3, 2020. Received 4 of 12 SIP revisions due.

RACT SIPs for Oil & Gas Industry CTG were due October 27, 2018. After FFS action, outstanding submissions remain for PA OTR & NY OTR.

35 of 47 areas remain designated nonattainment (8/31/21).

Serious area attainment date for 11 areas was July 20, 2021 (2018-20 DV).

12 areas redesignated (Maintenance).

2008 and 2015 Ozone NAAQS Determinations of Attainment

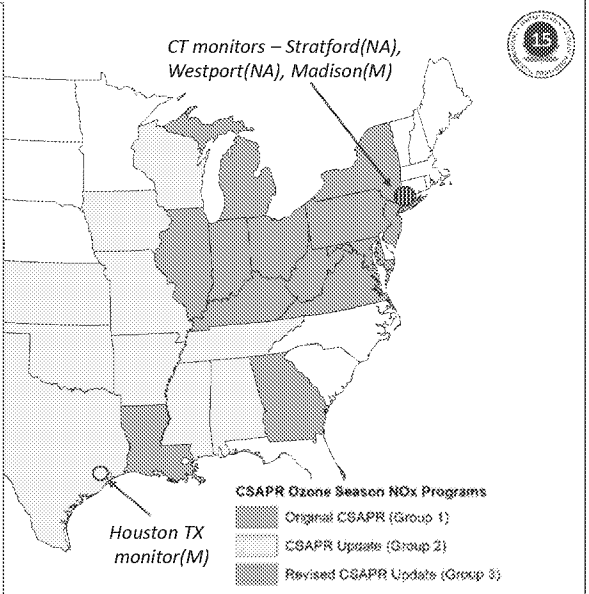
- Under CAA section 181(b)(2)(A), EPA must determine whether an area attained the ozone NAAQS by the applicable attainment date.
  - 2008 ozone NAAQS Serious areas have an attainment date of July 20, 2021.
  - 2015 ozone NAAQS Marginal areas have an attainment date of August 3, 2021 (September 24, 2021, for San Antonio).
- These actions will identify areas that (1) attained, (2) received a 1-yr attainment date extension, and (3) failed to attain based on 2018-2020 AQ data.
  - It will also reclassify areas that failed to attain and establish new planning deadlines for those areas.
  - States are expected to implement any new requirements consistent with regulations and guidance adopted in EPA's implementation rules for the 2008 and 2015 ozone NAAQS.
  - EPA has received attainment date extension requests for Houston TX and Uintah Basin UT.
- Determinations for some areas may also be informed by exceptional event (EE) or international transport (CAA section 179B) demonstrations.
  - For 2008 Serious areas, California has notified EPA of their intent to submit EE demonstrations for multiple events that affected two areas.
  - For 2015 Marginal areas, California and Nevada have submitted EE demonstrations, and notified EPA of their intent to submit additional demonstrations, for multiple events that affected seven areas; EPA is also considering CAA section 179B demonstrations for several areas.
- Proposed determinations, including action on EE and 179B demonstrations, are being processed in several rulemakings handled by EPA Regions and headquarters.

Additional Ozone NAAQS Implementation Updates

- EPA is evaluating the scope of a rulemaking to update the implementing regulations affected by the 2018 *South Coast* decision and 2021 *Sierra Club* decision.
- In accordance with Presidential Executive Orders and the EPA Administrator's direction, EPA is assessing how to address potential environmental justice concerns in its rulemakings and SIP reviews.
  - See for example Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements (81 FR 58010, August 24, 2016).
  - The EPA included specific discussion in this preamble about actions that could be considered for the protection of minority, low-income or indigenous populations. See preamble:
    - Section IV.D.6 on Moderate area attainment plan control strategies (page 58033);
    - Section VI.D.7 on Serious area attainment plan control strategies (page 58080); and
    - Section IX.G on measures to ensure appropriate protections for overburdened populations (page 58136).

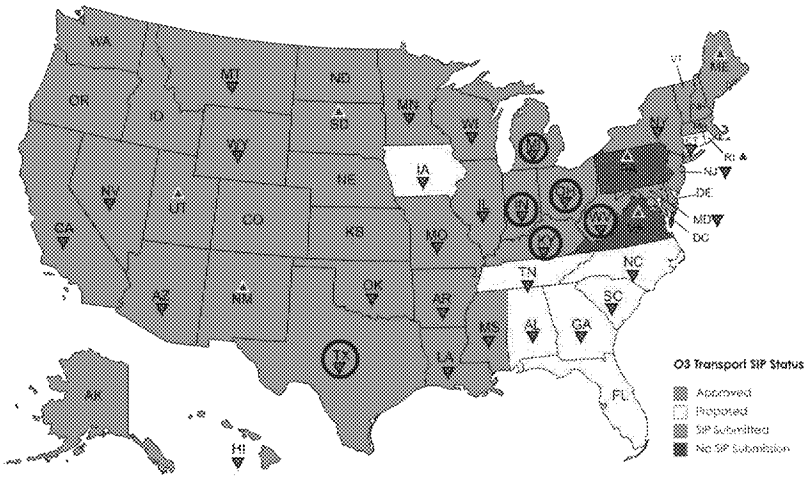
Revised CSAPR Update Rule (effective 6/29/21)

- EPA adjusted the NOx ozone season emissions budgets for the 12 upwind states projected to be linked to downwind nonattainment (NA) or maintenance (M) receptors.**
- The adjusted NOx budgets reflect electric generating unit (EGU) emissions reductions associated with optimization of existing selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) pollution controls beginning in the 2021 ozone season, and combustion control upgrades beginning in the 2022 ozone season.
- A new "Group 3" NOx allowance trading program for EGUs.
- EPA estimates 17,000 tons of NOx emissions reductions from power plants in 12 states; public health and climate benefits valued, on average, at up to $2.8 billion each year from 2021 to 2040.
- For more information: www.epa.gov/csapr/revised-cross-state-air-pollution-rule-update



*** NOx budgets for TN and GA to address their 2008 ozone transport obligations were established by the 2016 CSAPR Update rule and do not change under the Revised CSAPR Update. TN remains in Group 2 and GA remains in Group 1.*

2015 Ozone Transport SIP Status *(as of 9/21/21)*



- Received SIPs for 48 of 56 states/ jurisdictions.
- Final approval action taken on 14 SIPs and proposed approval on 9 others.
- Findings of failure to submit ▲ interstate transport SIPs effective Jan 22, 2020, for 7 states for SIPs due October 1, 2018.
- Complaints ▼ for EPA's failure to timely act on state transport SIPs.
- Proposed settlement O of SIP action deadlines.

2015 Ozone Transport SIP Review/FIP Status

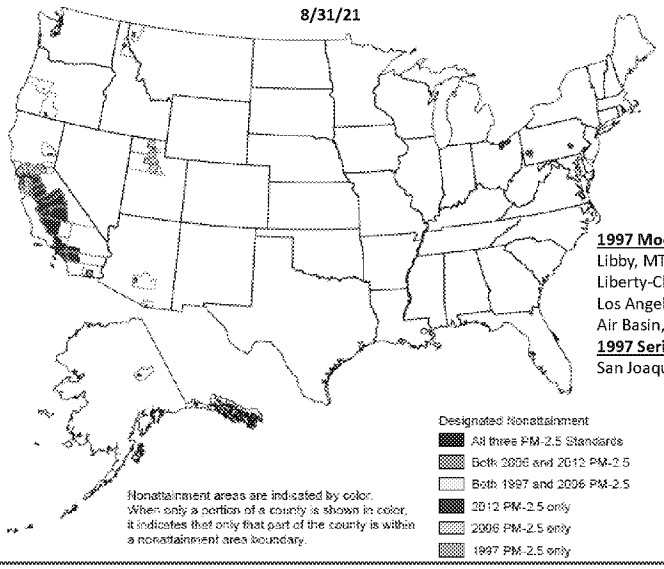
- Proposed settlement deadlines for action on certain SIPs (IN, KY, MI, OH, TX, WV).
  - Two final SIP action deadlines: April 30, 2022, and December 15, 2022.
  - The later deadline applies only for states where EPA has proposed a FIP by February 28, 2022.
  - The earlier deadline applies for states where EPA has not proposed a FIP.
- FIP deadline of January 22, 2022, for RI, VA, PA, NM, and UT.
- Reviewing familiar 4-step framework for evaluating significant contribution.
- Updating air quality modeling
  - Considering emissions-related adjustments resulting from RCU, the latest MOBILE model, and others that we have become aware of since the RCU modeling was completed last summer.
  - Future attainment years 2023 (Moderate), 2026 (Serious), 2032 (Severe).
- Evaluating EGU and non-EGU emissions sources and source categories.

Reconsideration of PM NAAQS

- On June 10, 2021, EPA announced that it will reconsider the 2020 decision to retain the existing PM NAAQS.
  - On June 17, 2021, the Agency announced the membership of the seven-member chartered CASAC panel.
  - On June 25, 2021, a call for nominations for the PM CASAC Panel was published in the Federal Register. The nomination period closed on July 16, 2021.
- Anticipating proposal in Summer 2022 and a final in Spring 2023.
  - If revised, the CAA deadline for nonattainment designations would be no later than Spring 2025 based on 2021-2023 or 2022-2024 monitoring data.

Counties Designated Nonattainment for PM-2.5 (1997, 2006, and/or 2012 Standards)

8/31/21



1997 Moderate Areas
Libby, MT
Liberty-Clairton, PA
Los Angeles-South Coast Air Basin, CA

1997 Serious Areas
San Joaquin Valley, CA

2006 Moderate Areas
Imperial, Co, CA
Klamath Falls, OR
Liberty-Clairton, PA
Nogales, AZ
Oakridge, OR
Sacramento, CA
San Francisco Bay Area, CA
West Central Pinal, AZ

2006 Serious Areas
Fairbanks, AK
Los Angeles-South Coast Air Basin, CA
Provo, UT
Salt Lake City, UT
San Joaquin Valley, CA

2012 Moderate Areas
Allegheny County, PA
Imperial County, CA
Plumas County, CA
San Joaquin Valley, CA
West Silver Valley, ID

2012 Serious Areas
Los Angeles-South Coast Air Basin, CA

Progress on PM NAAQS Attainment

As of 8/31/21

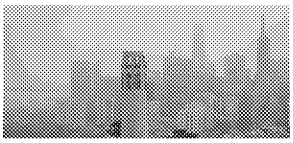
	1997 $PM_{2.5}$ (2005 Designations)	2006 $PM_{2.5}$ (2009 Designations)	2012 $PM_{2.5}$ (2015 Designations)	1987 PM_{10} (1990, 1991, 2010, 2012 Designations)
Initial Nonattainment Areas	39	32	9	89
Areas Redesignated to Attainment	35	19	3	65
Current Nonattainment Areas	3 CDDs 1 Serious	8 Mod./CDDs 5 Serious (incl 2 CDDs)	5 Moderate (incl 1 CDD) 1 Serious	24
Attainment Deadlines	Serious: 2021	Various	Moderate: 2021 Serious: 2025	Various

PM NAAQS Implementation: On-going Actions

- 2006 $PM_{2.5}$: Finalized redesignation for multi-state Logan, UT-ID area.
- 2006 $PM_{2.5}$: Proposed redesignations for Provo, UT and Salt Lake City, UT. Comments are under review.
- 2006 $PM_{2.5}$: "5% plan" revisions for Fairbanks, AK and Los Angeles-South Coast are under review.
  - These plans are required under CAA section 189(d) for Serious areas that fail to attain within 10 years.
- 2006 $PM_{2.5}$: In 2020, EPA granted a five-year attainment date extension for the San Joaquin Valley, CA, Serious area, to 2024.
  - This action has been challenged; legal briefs were due starting in April 2021.
- 1987 PM_{10}: Published a finding of failure to submit a required SIP/PM_{10} Moderate area plan for West Pinal County, AZ. The finding was effective August 23, 2021. Serious area SIP due January 2022.
- 2012 $PM_{2.5}$: Interstate Transport SIPs for 47 states have been approved. SIPs for 3 states are under active review (RI, NV, AZ). HI plus several territories have not submitted SIPs.

Lead (Pb) NAAQS Implementation Update

- Of the 22 areas designated nonattainment for the 2008 Pb NAAQS, 12 have been redesignated to attainment.
- Eight areas violated the 2008 Pb NAAQS based on 2020 design values
  - Troy, AL; Hayden, AZ; Lake Co, IN; Arecibo, PR; Jefferson, MO; Stark, OH; Kaufman, TX; Madison, KY.
  - EPA regional offices and HQ are communicating about the status and next steps for each of these areas.
- EPA's focus:
  - Assessing opportunities for reducing Pb impacts as a criteria pollutant and HAP, especially on vulnerable populations. This includes working with our monitoring, permitting and sectors groups to locate areas or facilities that may have on-going or emerging Pb-related issues.
  - Engaging with Agency-wide Pb Strategy effort to address Pb-related multi-media issues more holistically with all partners.
  - Pb NAAQS review is under way.
  - Remaining redesignations.



Exceptional Events Update

- EPA has concurred on 110 state demonstrations that were submitted since EPA revised the Exceptional Events Rule in September 2016.
- States have submitted 20 final demonstrations through the Exceptional Events Submission and Tracking System that was deployed in August 2020.
- An increasing number of demonstrations are for wildfire events. Received a record number of wildfire event initial notifications since Jan 1, 2021.
- EPA's exceptional events webpage provides additional resources, including example demonstrations for Ozone and PM and will continue to be updated as new materials become available.
  - https://www.epa.gov/air-quality-analysis/treatment-air-quality-data-influenced-exceptional-events

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

- On September 30, 2021, EPA withdrew its 2020 SSM Policy and reinstated the 2015 Policy originally articulated in the June 12, 2015, SSM SIP Action.
  - It affirmed the 2015 Policy statements that:
    - Automatic and discretionary exemptions from SIP emissions limits are inconsistent with the CAA
    - Affirmative defense provisions in SIPs are also inconsistent with the CAA
  - The memo also stated that EPA plans to revisit the individual SIP actions in 2020 for TX, NC, and IA that withdrew SSM SIP Calls using rationale that is inconsistent with the 2015 Policy.
- The withdrawal was based on a conclusion that the 2015 policy better protects public health and is more consistent with the CAA and relevant case law.
- The 2015 SSM SIP Calls (other than TX, NC, and IA) remain in effect.

Provisions Concerning Start-Up, Shutdown and Malfunction (SSM) Events in SIPs (cont.)

- The 2021 withdrawal memo also renewed EPA's commitment to implement the 2015 SIP SSM Action, including:
  - Reviewing and acting on the 32 pending SIP Call response submittals.
  - Issuing overdue FFS for the 12 SIP Calls for which EPA has not received a response.
    - SIPs Call responses were due in November 2016; on Sept 8, 2021, we received a deadline suit addressing these FFS.
  - Acting on the additional (non-SIP Call) SIP submittals that have been backlogged due to uncertainty about SSM Policy.
- All of these actions were completed through a notice-and-comment process.
  - EPA Offices are currently discussing plans and schedule for completing this work.
- The 2015 Policy will be used to guide EPA review of these actions. It can be found at: https://www.govinfo.gov/content/pkg/FR-2015-06-12/pdf/2015-12905.pdf#page=137

Permitting Program Updates

Emerging issues

- Outer Continental Shelf (OCS) permitting issues .
- Sufficiency of minor NSR program provisions, especially public participation requirements.
- Environmental justice considerations in permitting context.

Close out of long-standing petitions for reconsideration and litigation

- 2008 Fugitive Emissions Rule reconsideration.
- API Petition for Review of 2011 Tribal NSR Regulations.

Permitting Program Updates (cont.)

Previous Actions Under E.O. 13990 Review

- Project Emissions Accounting
  - Guidance: 83 FR 13745; 3/13/18); Final Rule: 85 FR 74890; 11/24/20.
- Enforceability and Use of Actual-to-Projected-Actual Applicability Test
  - 12/7/17 Pruitt Memo.
- NSR Source Reactivation Policy
  - Articulated in Dec 2020 Limetree Bay PAL permit.
- Revised Draft "Ozone and PM2.5 Permit Modeling Guidance"
  - New draft posted 9/20/21; comment deadline 11/19/21.
- Removal of Title V Affirmative Defense Provisions
  - 2016 proposal withdrawn via Regulatory Agenda.

Outer Continental Shelf Permitting

- OCS air permits are "umbrella permits" for the control of air pollution from sources located in the OCS. The OCS permitting requirements:
  - For sources locating in the inner OCS include: NSPS, NESHAPs, NSR/PSD, nonattainment NSR, Title V and any other state/local requirements applicable in the Corresponding Onshore Area (COA) that could apply to the offshore source.
  - For sources locating in the outer OCS include: NSPS, NESHAPs, PSD and title V. No state, local, or nonattainment NSR requirements apply.
- There are currently 17 wind farms and 1 oil and gas project expected to be developed on the OCS between 2021 and 2030 where EPA will be the primary permitting authority. EPA has delegated the OCS permitting program to Virginia, Maryland and Delaware.
- Emerging OCS permitting issues currently being evaluated include:
  - Which equipment, activities or facilities constitute an OCS source (e.g., cable-laying vessels)?
  - How do the emissions offset requirements apply to OCS source construction emissions?
  - How to perform air quality modeling analyses for temporary air emissions from OCS sources?

Environmental Justice and Permitting

- April 7th message from Administrator Regan acts on Executive Orders by directing EPA offices to infuse equity and environmental justice principles and priorities into all EPA practices, policies, and programs.
  - EPA has defined environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies."
- Efforts ongoing at all levels at EPA to refine objectives and strategies for incorporating EJ into our work.
  - In the permitting context, focus is currently on best practices for promoting meaningful engagement with communities.
  - Also looking at how to identify communities of concern, develop appropriate analytical tools and safeguards.

Title V Petitions

- Typically, EPA receives and responds to 10-20 Title V petitions per year.
- From Oct 2016 – Sept 2021, EPA received 70 petitions, resolved 93 petitions.
- Issue trends
  - Monitoring generally a primary issue; especially for synthetic minor permits. Most common type of claim we grant.
  - Starting to see more claims connecting monitoring to environmental justice concerns.
- Requirements in 2020 Petitions Rule (85 FR 6431) are helping EPA more quickly evaluate issues and set priorities. Includes:
  - requirements for permitting authorities (response to comments).
  - requirements for petitioners (petition content).

Electronic Data Systems Support

State Planning Electronic Collaboration System (SPeCS)

- In 2016, through a partnership with E-Enterprise and ECOS an EPA and State project team began developing SPeCS for electronically submitting, reviewing, tracking and publicly reporting on state implementation plans (SIPs) and related demonstrations.
- Currently, all 50 states and 8 local air agencies voluntarily use SPeCS to submit SIPs to EPA.
- Since 2018, over 3,200 draft and final state plans have been submitted through SPeCS.

Exceptional Events Submission and Tracking System (EETS)

- The EETS is a web-based system that enables air agencies to submit exceptional events demonstrations and mitigation plans for EPA review and approval. This system is EPA's preferred method for receiving such submissions.
- EPA worked extensively with air agency representatives and partnered with E-Enterprise for the Environment and ECOS to develop EETS.
- Half of all states and several local air agencies are registered to use the system. Since launching the system in August 2020, we have received more than 56 submissions, 20 of these are final demonstrations.

Green Book

- The EPA Green Book provides up-to-date detailed information about area NAAQS designations, classifications and nonattainment status.
- Information is available in reports, maps and data downloads.

Electronic Data Systems Support

Electronic Permitting System (EPS)

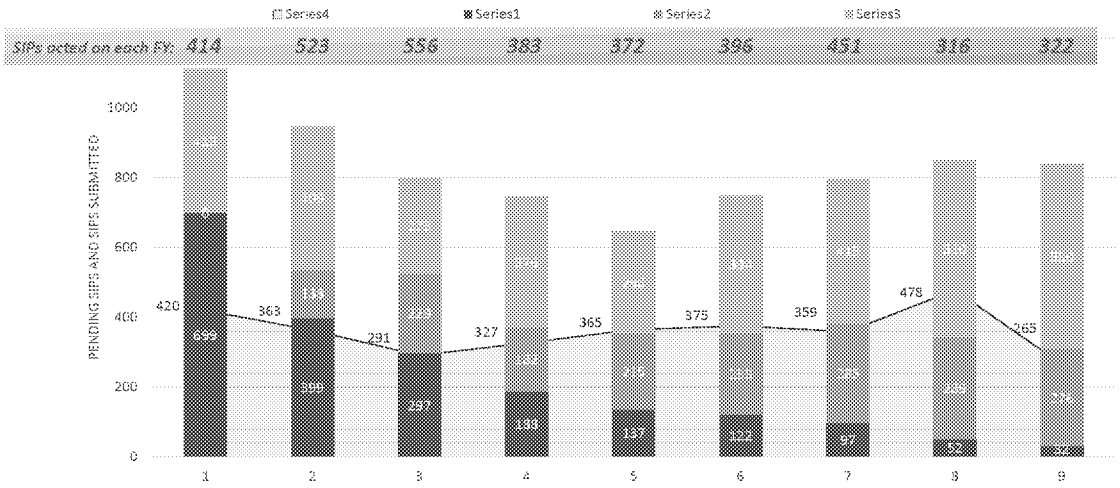
- EPS was developed in close coordination with state partners and ECOS to provide a central system for states to transmit Clean Air Act permits for EPA review, and then facilitate communication between EPA and the state regarding EPA review of those permits.
- Completed March 2020, 18 states and 58 local permitting authorities are participating from Regions 1, 4, 9, and 10.
- As of September 2021, EPS has received about 4,500 permit actions from 18 states spread over 4 EPA Regions.

Compliance and Emissions Data Reporting Interface (CEDRI)

- Allows affected sources to electronically submit performance test reports, notification reports, and periodic reports to EPA.
- Facilitates compliance under parts 49, 70, 71 (federal tribal minor NSR under Part 49; state, local or tribal title V program approved under Part 70; federal title V program under Part 71)
- 367 reports have been submitted under Part 49, Part 70, and Part 71.

Questions and
Comments

Improving State Implementation Plan Reviews:
SIPs Pending EPA Review FY 2014 – Sept. 1, 2021



ADVANCE

www.epa.gov/advance

A collaborative program for states, tribes and local governments to avoid nonattainment and achieve ongoing emission reductions in areas designated as attainment or maintenance for ozone and/or $PM_{2.5}$ NAAQS.

Goals 1) Leverage programs and planning to address air quality, climate, and environmental justice objectives;
2) Help meet the environmental, health, economic development, and quality of life goals in the participating area.

Background 45 current partners covering areas with more than 50 million population. Partners include states, tribal nations, cities, counties, councils of government, regional planning commissions.

Requirements Advance Partners provide EPA with annual plan updates describing progress in implementing relevant programs in their communities (e.g., mobile sources, transportation, energy efficiency, renewable energy, stationary sources, woodsmoke, community monitoring, education and outreach), and outlining plans for the next year.

Benefits
- Avoid many of the costs of nonattainment while collaborating with stakeholders in your community
- Implement ozone and $PM_{2.5}$ programs that support climate goals and address needs of EJ communities
- Obtain technical assistance from multiple EPA offices and other agencies like DOE and DOT
- Attend monthly meetings with partners sharing best practices and EPA training on programs and tools
- Receive monthly newsletter on grants and training opportunities

For more info, contact Rich Damberg (damberg.rich@epa.gov) and Mia South (south.mia@epa.gov)

NAAQS Implementation Milestones (Sept 2021)

Pollutant (Standard)	Final NAAQS Signature	Nonattainment Designations Effective	Infrastructure SIP Due	Attainment Plans Due	Attainment Date
Ozone (2015)	Oct 2015	Aug 3, 2018 (Sep 24, 2018 for San Antonio, TX)	Oct 2018	**Aug 2021-2022**	**Aug 2021**-2038
Ozone (2008)	Mar 2008	July 2012	Mar 2011	July 2015-2016 Jan 2017*, Aug 2020*	**July** 2015, 2018, **2021**, 2027, 2032
SO_2 (2010) (primary)	June 2010	[1]Oct 2013, [2]Sept 2016, [3]Apr 2018, **[4]Apr 2021**	June 2013	[1]Apr 2015, [2]Mar 2018, [3]Oct 2019, [4]Oct 2022	[1]Oct 2018, **[2]Sept 2021**, **[3]Apr 2023**, [4]Apr 2026
$PM_{2.5}$ (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016 (Moderate)	**Dec 2021 (Moderate)** Dec 2025 (Serious)
$PM_{2.5}$ (2006)	Oct 2006	Dec 2009	Oct 2009	Dec 2014	Dec 2015 (Moderate) Dec 2019 (Serious) Dec 2024**
Pb (2008)	Oct 2008	Dec 2010-2011	Oct 2011	June 2012-2013	Dec 2015-2016, Oct 2019
NO_2 (2010) (primary)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A

*January 2017 for areas reclassified from Marginal to Moderate. August 2020 for areas reclassified from Moderate to Serious.
**EPA granted San Joaquin Valley an extension to the Serious area attainment date under CAA 188(e).

NAAQS Review Status

(September 2021)

	Ozone	Lead	Primary NO_2	Primary SO_2	Secondary (Ecological) NO_2, SO_2, PM[1]	PM[2]	CO
Last Review Completed (final rule signed)	Dec 2020	Sept 2016	April 2018	Feb 2019	Mar 2012	Dec 2020	Aug 2011
Recent or Upcoming Major Milestone(s)	TBD	Fall 2022 Integrated Review Plan Documents for CASAC review	TBD	TBD	Early 2022 Draft PA with REA Appendices[3]	Fall 2021 Draft ISA Supplement and Draft PA for Reconsideration available for CASAC review	TBD

[1] Combined secondary (ecological effects only) review of NO_2, SO_2, and PM
[2] Combined primary and secondary (non-ecological effects) review of PM
[3] REA – Risk and Exposure Assessment; PA – Policy Assessment
[4] TBD – To be determined