

NAAQS, Regional Haze & Permit Program Implementation Updates

NACAA Spring Meeting
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& Standards

Overview

- Regional Haze Update
- NAAQS Implementation
 - Sulfur Dioxide (SO₂)
 - Ozone (O₃)
 - Particulate Matter (PM_{2.5})
 - Lead (Pb)
 - Exceptional Events
 - Startup, Shutdown & Malfunction Policy (SSM)
- Environmental Justice
- Permit Program Updates





Regional Haze Program Update

- Second planning period regional haze information from EPA: <https://www.epa.gov/visibility/visibility-guidance-documents>
- SIP deadline was July 31, 2021.
- As of April 30, 2022 EPA has received 18 final SIPs: DC, NY, NJ, TX, WI, OH, MA, KS, MI, FL, IN, CT, WA, MD, TN, NC, SC and OR.
- EPA intends to make Findings of Failure to Submit by August 31, 2022; cutoff for SIP submissions is August 15, 2022.

Regional Haze SIP Status as of April 30, 2022	
EPA Final Actions Published	1
Submitted SIPs Awaiting EPA Action	17
SIPs Outstanding	34



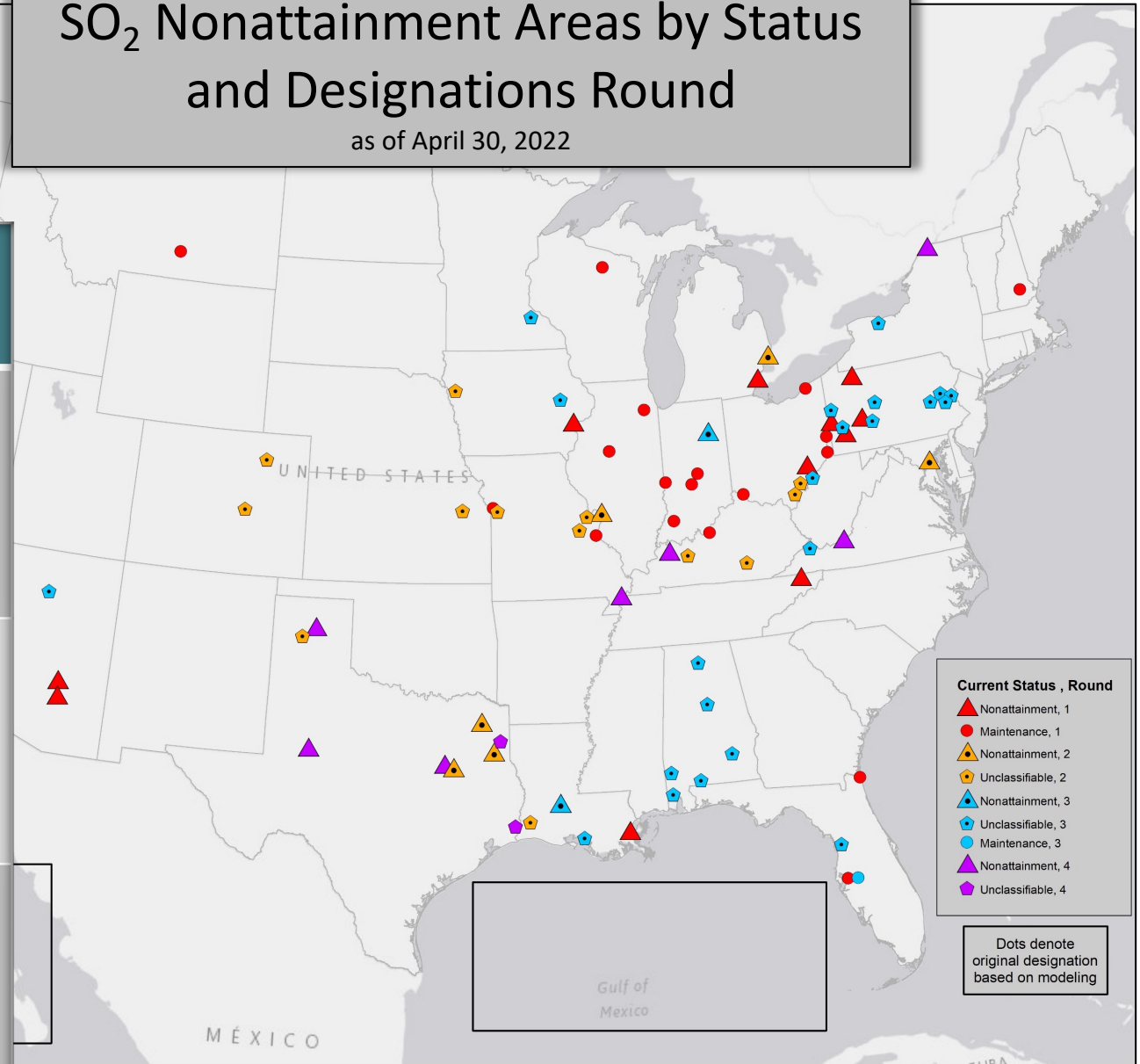
Regional Haze Program Update (cont.)

- 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 this year.

SO₂ Nonattainment Areas by Status and Designations Round

as of April 30, 2022

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



SO₂ NAAQS Implementation Update



- Round 1 Nonattainment Areas
 - Indiana, PA: EPA proposed partial disapproval of remanded attainment plan on March 17, 2022.
 - Detroit, MI: Forthcoming proposed FIP. Final FIP settlement deadline of Sept. 30, 2022.
 - Hayden & Miami, AZ: Revised attainment plans due January 31, 2023.
 - Sullivan Co, TN: Finding of Failure to Attain effective May 5, 2022; revised attainment plan due April 3, 2023.
- Round 2 Nonattainment Areas
 - EPA has deadlines for final action on attainment plans for 3 of the 6 remaining areas.
- Round 3 Nonattainment Areas
 - Finding of Failure to Submit attainment plans issued for Round 3 areas on Nov. 3, 2020.
 - SIP action/FIP deadline is December 3, 2022.
- Round 4 Nonattainment Areas
 - Deadline for attainment plan submittal is October 30, 2022.
 - Regions are collaborating on issues common to aluminum smelters located in several of these areas.



SO₂ Transport SIP Update

- EPA has 13 complete SIP submittals that are under review: IA, IN, LA, MD, MS, NC, NJ, NY, OH, OK, TN, TX, WI.
- EPA is reviewing large sources of SO₂ near state borders that may have interstate transport implications.
- SIP deadline was 6/2/2013.

1-hour SO ₂ Transport SIP Status as of April 30, 2022	
EPA Final SIP Approvals	27
SIPs Awaiting EPA Action	13
State SIPs Outstanding	11

Reconsideration of Ozone NAAQS

- On October 28, 2021, EPA announced that it will reconsider the 2020 decision to retain the existing ozone NAAQS.
- EPA intends to complete the reconsideration by the end of 2023.
 - On December 21, 2021, the Court ordered that consolidated litigation cases be held in abeyance until December 15, 2023.
- The CAA deadline for nonattainment designations would be no later than 2 years after promulgation of a revised NAAQS, potentially in 2025, and could involve ozone monitoring data from 2022-2024 or 2023-2025.



Ozone NAAQS Implementation Update

- Determinations of attainment by the 2021 attainment dates proposed April 13, 2022. Comment period through June 13, 2022. Proposed to find that:
 - 6 Serious nonattainment areas for 2008 NAAQS did not attain; 1 area attained
 - Proposed to deny attainment date extension request for Houston.
 - Proposed not to concur with exceptional events demonstrations for Dallas and Chicago.
 - Determinations for 2 of 9 total Serious areas will be handled separately by Region 9.
 - 24 Marginal nonattainment areas for 2015 NAAQS did not attain; 6 areas attained
 - Proposed to grant 1-year attainment date extension for Uinta Basin. Proposed to concur with many exceptional events demonstrations. Proposed to disapprove section 179B demonstrations for San Antonio and N. Wasatch Front UT.
 - Determinations for 9 of 40 total Marginal areas handled in separate actions by Regions 6 and 9.
- SIP Status Updates
 - 2008: bump-up SIPs for Serious areas were due August 3, 2020; 3 areas have overdue submittals covering approx. 10 elements total (3/21/22).
 - 2015: initial nonattainment NSR SIPs/certifications due August 3, 2021; 23 areas have outstanding NNSR SIP submissions covering 31 NNSR elements (3/21/22).
 - 2015: for all obligations 25 areas with 56 SIP elements in total overdue (3/21/22).

Additional Ozone NAAQS Implementation Updates

- Contingency Measures (CMs)
 - Recent court decisions have invalidated the past practice of relying on surplus mobile reductions from fleet turnover to satisfy the CM requirement for nonattainment plans.
 - CMs must be prospective and conditional, *i.e.*, CM cannot be “already implemented”.
 - In recognition of the resulting challenges that some areas face in developing valid CMs, EPA has convened an internal task force to evaluate whether changes to CM policy/guidance are warranted.
- Ozone Implementation Rule Revisions
 - EPA is contemplating the scope and timing for potential revisions to ozone implementation rules to address 2018 *South Coast* decision, 2021 *Sierra Club* decision, and other emerging issues.

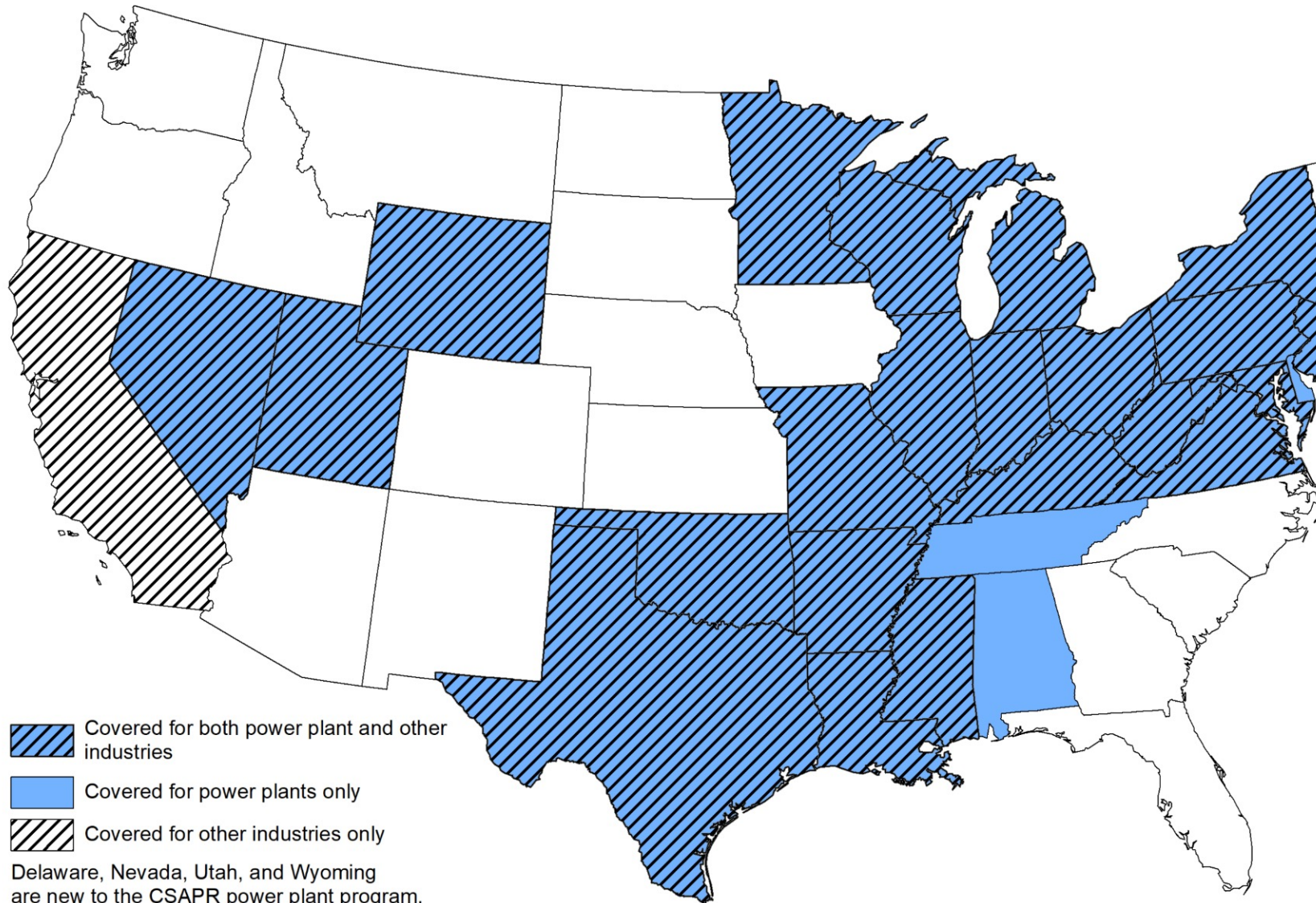
2015 Ozone Transport SIP Status (as of 4/30/22)

- EPA has received SIPs for 49 of 56 states/jurisdictions.
 - Final approval action taken on 21 SIPs.
 - Proposed approval on 3 SIPs.
 - Proposed disapproval on 19 SIPs.
- EPA will continue to act on SIPs, consistent with deadlines established by consent decrees:
 - December 15, 2022, final action deadline applies for 1) eastern US states where EPA proposed a FIP by February 28, 2022, and 2) several western US states.
 - April 30, 2022, final action deadline applied to eastern states where EPA had not proposed a FIP.
- Action on SIPs is consistent with analytical framework used in the proposed ozone transport federal plan for 2015 ozone NAAQS.

Good Neighbor FIP Proposal Overview

- Intended to ensure states meet their obligations under the Clean Air Act’s “Good Neighbor” provision for 2015 ozone National Ambient Air Quality Standards (NAAQS).
 - Sets forth Federal Implementation Plan (FIP) requirements for states to eliminate their significant contribution to nonattainment, or interference with maintenance, of the NAAQS in downwind states where EPA has made a Finding of Failure to Submit or disapproves a Good Neighbor SIP,
- Proposal applies a time-tested, judicially-reviewed framework for establishing Good Neighbor requirements.
 - Updates to keep pace with more protective 2015 NAAQS, updated evaluation of ozone transport, and latest technical analysis
 - Identifies 27 states that are linked to downwind air quality problems for purposes of the Good Neighbor provision
 - Determines required reductions in ozone precursor emissions (NO_x)
 - 25 states with requirements for Electric Generating Units (EGUs) starting 2023 ozone season
 - 23 states with requirements for certain industrial source categories (non-EGUs) no later than 2026 ozone season
- EPA estimates that this proposal would reduce ozone forming NO_x emissions from the 26 upwind states by approximately 94,000 tons in the 2026 Ozone season (May 1 – September 30).

States/Sources Covered by Proposed FIP Obligations



Other Industries

- Reciprocating internal combustion engines in *Pipeline Transportation of Natural Gas*
- Kilns in *Cement and Concrete Product Manufacturing*
- Boilers and furnaces in *Iron and Steel Mills and Ferroalloy Manufacturing*
- Furnaces in *Glass Products Manufacturing*
- Boilers in *Basic Chemical Manufacturing*
- Boilers in *Petroleum and Coal Products Manufacturing*
- Boilers in *Pulp, Paper, and Paperboard Mills*

Reconsideration of PM NAAQS

Schedule

- 22-member CASAC PM Panel established in August 2021
- Target schedule: proposal in Summer 2022; final in Spring 2023.

March 18, 2022 CASAC Review of the EPA's Policy Assessment

- Annual PM_{2.5} standard: The CASAC reached consensus that the current level of 12 $\mu\text{g}/\text{m}^3$ is not adequate for the primary annual PM_{2.5} standard, but did not reach consensus on an alternate level
 - Majority of members recommend revision to a level between 8-10 $\mu\text{g}/\text{m}^3$
 - Minority of members recommend revision to a level between 10-11 $\mu\text{g}/\text{m}^3$
- 24-hour PM_{2.5} standard: The CASAC did not reach consensus on whether the primary 24-hour PM_{2.5} standard should be revised or retained.
 - Majority of members conclude that the current standard is not adequately protective, in conjunction with the annual standard, and recommend revision to a level of 25-30 $\mu\text{g}/\text{m}^3$
 - Minority of members recommend retaining current standard of 35 $\mu\text{g}/\text{m}^3$

Progress on PM NAAQS Attainment

through April 30, 2022

	1997 PM _{2.5} (2005 Designations)	2006 PM _{2.5} (2009 Designations)	2012 PM _{2.5} (2015 Designations)	1987 PM ₁₀ (1990-1998, 2010, 2012 Designations)
Initial Nonattainment Areas	39	32	9	89
Areas Redesignated to Attainment	35	19	4	65
Current Nonattainment Areas	3 CDDs 1 Serious	8 Mod./CDDs 5 Serious (incl 2 CDDs)	3 Moderate (incl 1 CDD) 2 Serious	19 Moderate (incl 5 CDDs) 5 Serious
Attainment Deadlines	Serious: 2021	Various	Moderate: 2021 Serious: 2025	Various

PM_{2.5} NAAQS Implementation Updates

- 2006 PM_{2.5}: Comments received on proposed redesignations for Provo, UT and Salt Lake City, UT are under review.
- 2006 PM_{2.5}: “5% plan” revisions for Fairbanks, AK and Los Angeles-South Coast are under review.
- 1997, 2006, and 2012 PM_{2.5} San Joaquin Valley: EPA has taken action on various SIP elements in 2021 and will continue monitor litigation and work with CARB and SJV on developing approvable plans.
- 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
 - Five are nonattainment areas: Troy, AL; Hayden, AZ; Lake Co, IN; Arecibo, PR; Jefferson, MO
 - Three are attainment areas: Stark, OH; Kaufman, TX; Madison, KY
- EPA's focus:
 - Assessing opportunities for reducing impacts from Pb as a criteria pollutant and HAP, especially on vulnerable populations. This includes working with our monitoring, permitting and sectors groups to locate and address 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.



Exceptional Events Update

- EPA has concurred on 110 state demonstrations that were submitted since EPA revised the Exceptional Events Rule in September 2016.
- An increasing number of demonstrations are for wildfire events. EPA received a record number of wildfire event initial notifications since Jan 1, 2021.
- States have submitted 39 final demonstrations through the Exceptional Events Submission and Tracking System that was deployed in August 2020.
- 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

- EPA continues to implement the 2015 SSM Policy following the September 2021 McCabe memo reinstating it. That memo affirmed 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 2015 SSM SIP Calls (other than TX, NC, and IA) remain in effect.
- Recent implementation steps include:
 - Several proposed or final actions on SIPs submitted in response to the 2015 SIP Call.
 - January 4, 2022 Findings of Failure to Submit (FFS) for 12 overdue SIP Call responses.
- Future implementation steps include
 - Continuing to review and act on the ~30 pending SIP Call response submittals and other SSM-related submittals.
 - Revisiting (through notice-and-comment) actions from 2020 for TX, NC, and IA that withdrew SSM SIP Calls using rationale that is inconsistent with the 2015 Policy.

Environmental Justice

- EPA has made it a priority 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.
- EPA is assessing how to address potential environmental justice concerns in rulemakings, SIP reviews, and permitting.

Environmental Justice (cont.)

- State Implementation Plans:
 - See *Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements* (81 FR 58010, August 24, 2016).
 - Includes discussion on actions that could be considered for overburdened populations.
 - Attainment plan control strategies (section IV.D.6 page 58033 and section VI.D.7 page 58080).
 - Measures to ensure appropriate protections for overburdened populations (section IX.G page 58136).
- Permitting:
 - Identifying best practices for promoting meaningful engagement with communities.
 - Identifying communities of concern, developing appropriate analytical tools and safeguards.

Permitting Program Updates

- Evaluating sufficiency of **minor NSR program provisions**
 - Public notice/participation requirements.
 - Guidance/oversight related to synthetic minor permitting.
- Addressing the parallel “**potential to emit**” definitions in permitting & air toxics program regulations.
 - Part of the reconsideration of *Reclassification of Major Sources as Area Sources under Section 112 Rule* (MM2A or Once In/Always In) promulgated November 19, 2020 (see 85 FR 73854); effective January 19, 2021.
 - That final rule changed “*federally enforceable*” to “enforceable” but did not finalize proposed amendment to PTE definition in 40 CFR Part 63.

Permitting Program Updates (cont.)

- Reconsidering the 2008 **Fugitive Emissions Rule** to address which sources are required to count fugitive emissions towards NSR major modification thresholds.
- 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).
- Reviewing EPA's December 7, **2017 enforcement discretion memo** titled "New Source Review Preconstruction Permitting Requirements: Enforceability and Use of the Actual-to-Projected-Actual Applicability Test in Determining Major Modification Applicability".

Title V Program Update

- Citizen Petitions
 - EPA typically receives and responds to 10-20 petitions per year.
 - From Oct 1, 2016 – Apr 30, 2022, EPA received 75 petitions, resolved 104 petitions.
 - Monitoring a primary issue; especially for synthetic minor permits. Most common type of claim EPA grants.
- Removal of Title V Affirmative Defense Provisions
 - Renewal of 2016 proposal (proposed April 1, 2022, 87 FR 19042).
- Title V Applicable Requirements Rule
 - Clarify the definition of “applicable requirement” within title V program.
- EPA Office of Inspector General January 2022 report “EPA’s Title V Program Needs to Address Ongoing Fee Issues and Improve Oversight.”
 - OIG conducted 31 Title V program evaluations from 2018 through 2020.
 - Indicated more than half (52 percent) did not undergo a Title V fee evaluation despite having indicators that should have triggered such a fee evaluation.
 - Concluded that declining Title V fee revenues and the misuse of Title V funds pose a “significant challenge” to EPA and state and local Title V permitting authorities.

OIG Title V Program Evaluation

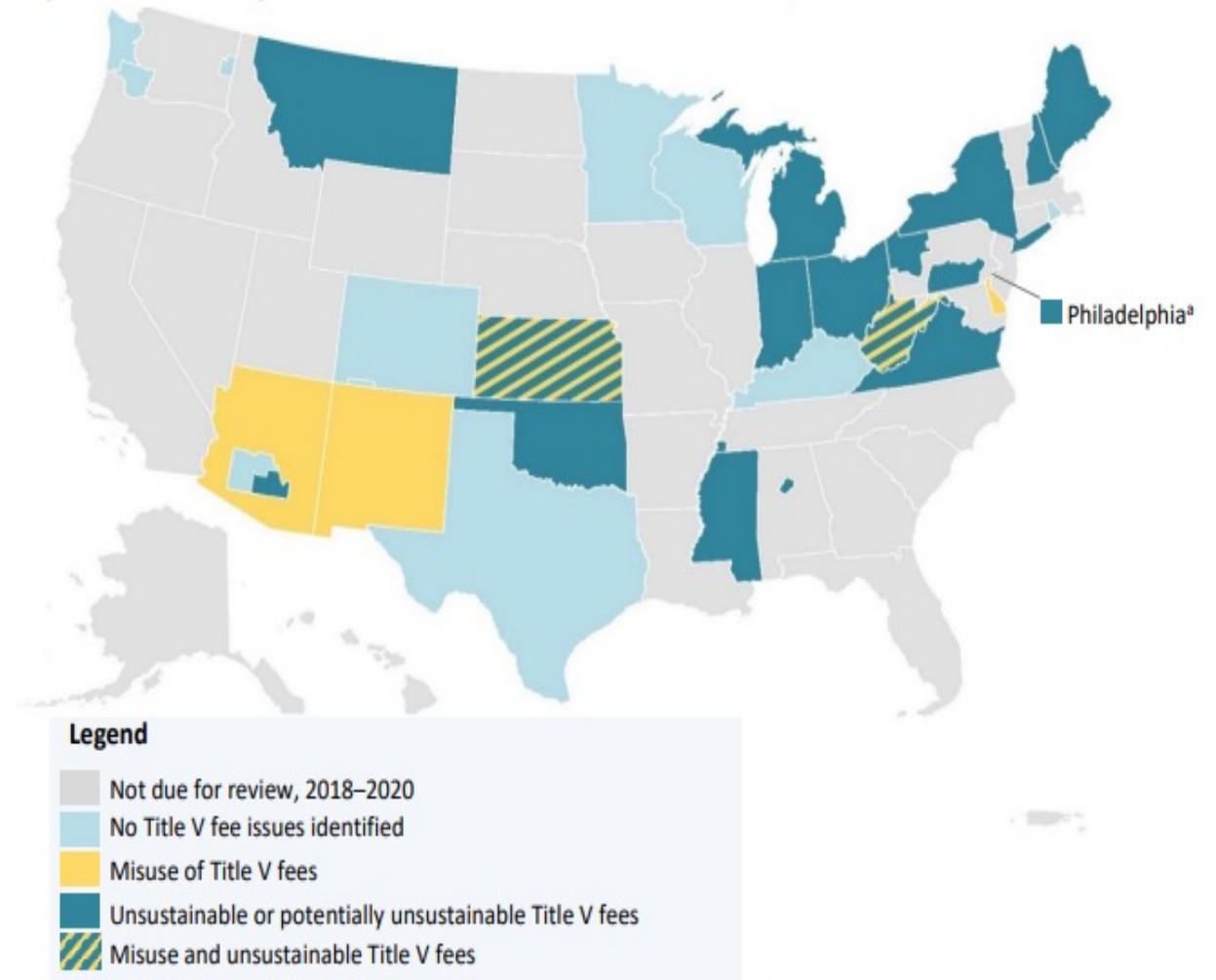
Pursuant to OIG recommendations, EPA will:

Develop/implement a plan to address declining Title V revenues – (1) convene a workgroup, identify key stakeholders and plan for consultations; (2) conduct consultations with permitting authorities to scope of fee deficiencies and fee structures and identify current best practices; and (3) implement the strategies identified.

Update EPA's 2018 Title V fee guidance to (1) set expectations on time frames for permitting authorities to complete corrective actions in program and fee evaluations and clear, escalating consequences if timely corrective actions are not completed; and (2) establish criteria for how and when EPA must conduct Title V fee evaluations.

Provide recurring training on Clean Air Act Title V fee laws, regulations and guidance to EPA staff and permitting agencies.

Figure 4: Permitting authorities with known Title V fee issues, 2018–2020



Source: OIG analysis of EPA Title V program and fee evaluation reports and EPA correspondence. (EPA OIG image)

Outer Continental Shelf Permitting

- OCS air permits are “umbrella permits” for air pollution control from sources located in the OCS. OCS permitting requirements include:
 - NSPS, NESHAPs, NSR/PSD, nonattainment NSR, title V and any other state/local requirements applicable in the Corresponding Onshore Area (except for outer OCS projects).
- EPA has delegated the OCS permitting program for inner OCS projects to Virginia, Maryland and Delaware and 4 permitting authorities in CA (Santa Barbara, San Luis Obispo, South Coast and Ventura County).
- Two OCS wind energy permits have been issued recently by EPA:
 - Vineyard Wind 1 (May 2021). Facility began construction in Nov. 2021.
 - South Fork Wind (Jan. 2022). Facility began construction in Feb. 2022.
- Recent policy interpretations:
 - Pull-ahead anchor Cable Laying Vessels are not OCS sources.
 - Permitting-related emissions offsets are not required for OCS construction emissions.
- Emerging OCS permitting issues currently being evaluated include:
 - Which equipment, activities or facilities constitute an OCS source and at what point in time does the OCS source exist?
 - Air quality modeling analysis requirements for OCS sources’ construction emissions during extended construction periods (e.g., > 2 years)

Questions and Comments



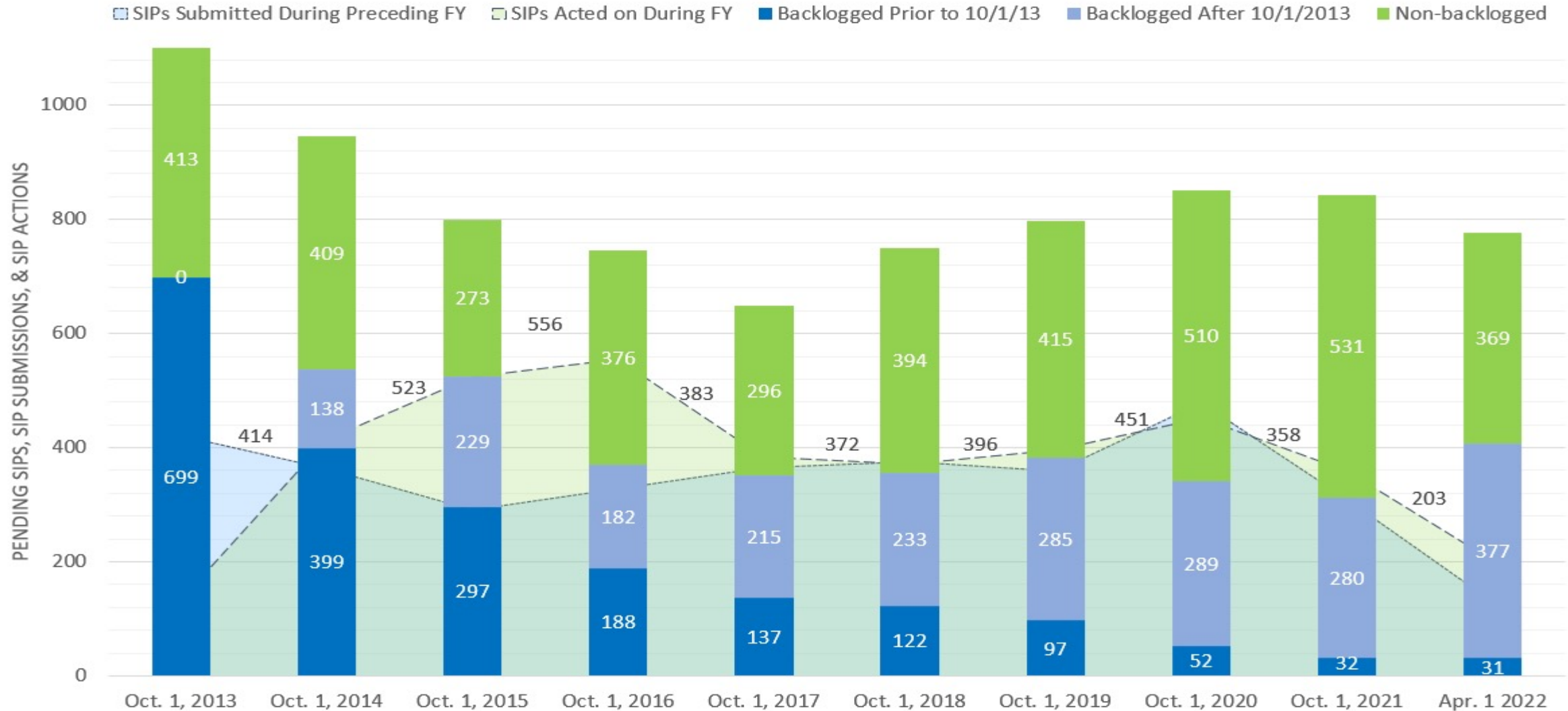
FY 2022-2026 EPA STRATEGIC PLAN

Long-Term Performance Goals



- **Goal 4: Air**, includes Obj 4.1:
 - Reduce ozone season emissions of nitrogen oxides from electric power generation sources by 21% from the 2019 baseline of 390,354 tons.
 - Improve measured air quality in counties not meeting the current National Ambient Air Quality Standards from the 2016 baseline by 10%.
 - Strive to ensure all people with low socio-economic status live in areas where the air quality meets the current fine particle pollution National Ambient Air Quality Standards.
- **Goal 2: Environmental Justice**, includes:
 - Obj 2.1 EPA programs with direct implementation authority will take at least 100 significant actions that will result in measurable improvements in Indian country.
 - Obj 2.2 All EPA programs and regions will identify and implement areas and opportunities to integrate environmental justice considerations and achieve civil rights compliance in their planning, guidance, policy directives, monitoring, and review activities
- **FY 2022-2023 Agency Priority Goals**, includes:
 - **Deliver tools and metrics for EPA and its Tribal, state, local, and community partners to advance environmental justice and external civil rights compliance.** By September 30, 2023, EPA will develop and implement a cumulative impacts framework, issue guidance on external civil rights compliance, establish a set of at least 10 indicators to assess EPA's performance in reducing disparities in environmental and public health conditions, and train staff and partners on how to use these resources

Improving State Implementation Plan Reviews: SIPs Pending EPA Review FY 2014 – April 1, 2022



Electronic Data Systems Support



State Planning electronic Collaboration System (SPeCS)

- In 2016, through a partnership with E-Enterprise and ECOS, an EPA-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 1,300 draft and final state plans have been submitted through SPeCS.

Exceptional Events Submission and Tracking System (EETS)

- The EETS is a web-based system enabling air agencies to submit exceptional events demonstrations and mitigation plans for EPA review and approval. It is EPA's preferred method for receiving such submissions.
- EPA worked with air agency representatives and partnered with E-Enterprise and ECOS to develop EETS.
- More than 30 states and several local air agencies are registered to use the system. Since launching the system in August 2020, we have received more than 60 submissions, 39 of these are final demonstrations.

Green Book www.epa.gov/green-book

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

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.
- As of March 2022, EPS has received about 4,500 permit actions from 22 states and 63 local permitting authorities spread over Regions 1, 4, 9, and 10.

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)
- About 400 reports from 10 different states have been submitted under Part 49, Part 70, and Part 71.

- 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.
- Currently 46 partner areas covering more than 50 million population. Partners include states, tribal nations, cities, counties, councils of government, regional planning commissions.

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.

Benefits of partnership

- Avoid the costs of nonattainment designation for ozone or PM_{2.5} while collaborating with local stakeholders
- Implement ozone and PM_{2.5} programs that also support climate goals and address concerns 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

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