



NAAQS and Other Implementation Updates

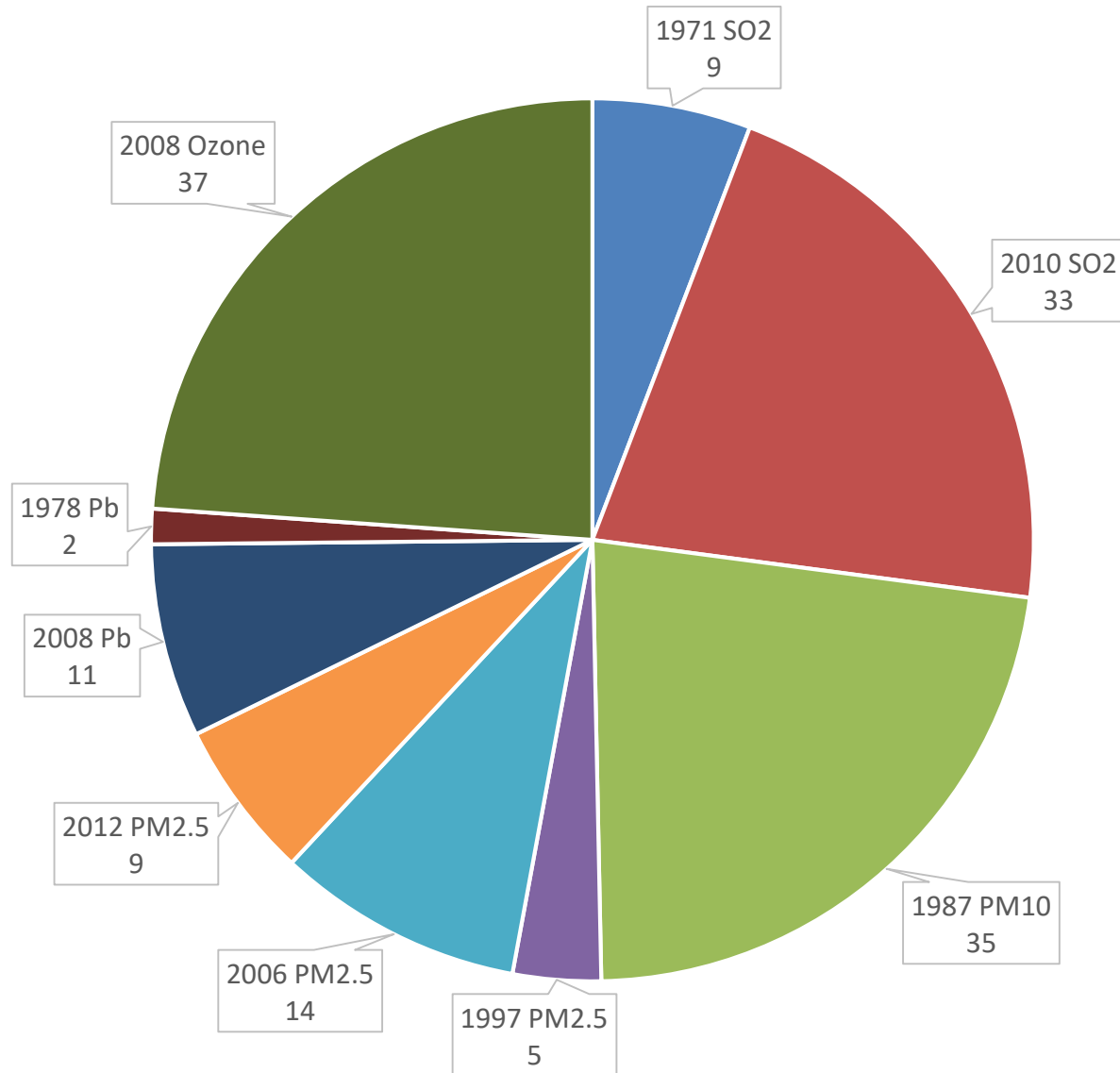
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OVERVIEW

- EPA's Clean Air Priority Goal: Reduce Number of Nonattainment Areas
- NAAQS Implementation Updates
 - Ozone
 - Sulfur Dioxide (SO₂)
 - Fine Particulate Matter (PM_{2.5})
- Transport
- Exceptional Events
- Regional Haze
- Startup, Shutdown, and Malfunction (SSM) Policy
- NSR and Title V Permitting Updates
- SIP Processing Improvements and SPeCS



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

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

¹ Combined secondary (ecological effects only) review of NO₂, SO₂, and PM

² Combined primary and secondary (non-ecological effects) review of PM

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

⁴ 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



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	52
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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ NAAQS.



Progress on 2010 SO₂ 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_{2.5} NAAQS Implementation

- EPA focusing efforts on supporting states with 2006 PM_{2.5} NAAQS Serious areas and 2012 PM_{2.5} 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_{2.5} 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_{2.5} NAAQS Attainment

(as of March 2019)

	1997 PM _{2.5} (2005 Designations)	2006 PM _{2.5} (2009 Designations)	2012 PM _{2.5} (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 NOx 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



NOx 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



Exceptional Events Update

- We have concurred on 25 demonstrations that were submitted after revising the Exceptional Events Rule in September 2016
- We continue developing new guidance documents to help right-size demonstrations and facilitate the exceptional events process – Thank you for feedback on drafts!
 - **Stratospheric Ozone Intrusion Guidance – Released November 2018**
 - **Updated High Wind Dust Event Guidance – Released April 4, 2019**
 - **Clarification Memo on Data Modification – Released April 4, 2019**
 - **Prescribed Fire Guidance – Ready to begin OMB interagency review process**
- EPA’s exceptional events webpage provides key resources, including example demonstrations, 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>



Regional Haze: Ongoing 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



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 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 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



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



SSM SIP Call Under Policy Review

- Final SSM SIP Action of 2015 concerned SIP provisions for treatment of excess emissions occurring during periods of startup, shutdown and malfunction (SSM)
 - Included SSM SIP Call that applied to 36 states (45 jurisdictions)
- Judicial review of the SSM Action is pending before the D.C. Circuit, but case is currently being held in abeyance to allow for review within EPA
- On October 16, 2018, EPA granted TCEQ's petition for reconsideration with respect to the Texas SIP call for certain affirmative defense provisions in Texas' SIP



NSR Improvement Phase 1 Actions

Phase 1

Phase 2

- Actual-to-Projected-Actual Applicability Test Guidance Memorandum
- Project Emissions Accounting Memo
- Once-In-Always-In Policy Change
- Source Aggregation
 - Common Control Guidance, Meadowbrook Letter
 - Draft Guidance on Interpreting Adjacency
- PM_{2.5} and Ozone SILs Guidance
- Project Aggregation Reconsideration Final Action
- Draft Ambient Air Policy



Ongoing Phase 1 Actions

Phase 1

Phase 2

Action	Status	Target Date
Final Adjacency Guidance	Reviewing Comments	Late Spring 2019
Final Ambient Air Guidance	Reviewing Comments	Late Spring 2019
NPRM Project Emissions Accounting		Summer 2019
NPRM Treatment of Biomass for Permitting		TBD

Upcoming Phase 2 Improvement Actions

Phase 1

Phase 2

Action	Target Date
NPRM NSR Error Corrections Rule	Late Spring 2019
NPRM Oil and Gas FIP Part I Registration Form Amendment	Late Spring 2019
Begin Actual Construction Guidance (Draft)	Fall 2019
Routine Maintenance Repair and Replacement (RMRR) Guidance (Draft)	Fall 2019



Upcoming Phase 2 Improvement Actions (con't)

Phase 1

Phase 2

Action	Target Date
Plantwide Applicability Limit (PAL) Guidance (Draft)	Fall 2019
NSR Actual to Projected Actual Applicability Test (ATPA) Guidance (Draft)	Fall 2019
2010 NSR Reconsiderations (Reasonable Possibility, Fugitive Emissions and Ethanol)	TBD
NSR E-Guidance Compendium and Training	December 2019



Title V Permitting

- Rulemakings in Progress
 - Finalize Title V Petitions Process Rulemaking – Summer 2019
- Process Improvements
 - Increased use of electronic systems
 - Testing electronic permit submission system with permitting authorities in several regions
 - Hoping to expand testing to more permitting authorities through ECOS
 - Petition Resolution
 - Resolving more petitions (see Appendix)
 - Addressing petitions more quickly
- Lean Kaizen Event held last year
 - Goal for Agency-issued permits is 6 months from receipt



Title V Petitions

- Title V Petitions continue to be a substantial work load
- Petitions Received FY2018 – 9
- Petitions Resolved FY2018 – 36
 - 20 Orders
 - 16 Resolved by other means (petitioners agreed to withdraw, previous responses identified)
- Petitions Received so far in FY2019 – 5
- Petitions Resolved so far in FY2019 – 6



EPA's Electronic Permitting System (EPS) for State-Issued Permits

- The EPS is based in the EPA's Central Data Exchange (CDX) and utilizes the same platform as State Planning Electronic Collaboration System (SPECs) for SIPs
- Our goal is to provide a consistent means for transmitting permits to the EPA for review and to provide information on the status and official communications back to the permitting authority
- We are looking for states that want to volunteer to begin using the system in order to provide feedback and suggestions for enhancements



EPA's Electronic Permitting System (EPS) for State-Issued Permits

- Features of EPS:
 - Receive draft, proposed, and final title V permits and draft and final NSR permits
 - Includes a form where states can provide general information on the facility (which is pulled using the EPA's Facility Registry Service), the type of permit, whether there were public comments, an attachment field for the permit record, etc.
 - Includes a permit collection interface page for each permitting authorities that provides states the ability to submit new permits, update previously submitted permits, and view all pending and final submissions to the EPA



SIP Process Improvements

- Focus on reducing the SIP backlog and improving SIP processing times
- Trends in SIP processing
- SIP Process Improvement Activities
 - Promoting early engagement between EPA and air agencies during SIP development
 - Ongoing communication to ensure EPA takes action on the SIP submittals that matter most for air quality – using management plans and SIP planning conversations
 - Continued investment in the State Plan Electronic Collaboration System (SPeCS) for use of draft and final submittals
 - Continued commitment to providing timely guidance on SIP development issues



SIP Process Improvements – Early Engagement

- Ozone Quick Start Guide
- Early engagement during SIP development
- Upcoming activities:
 - Review and updating of SIP Toolkit SharePoint site
 - Review and updating of external-facing “SIP streamlining” website
 - Development of New Process Standard Operating Procedure
 - Consideration of key backlog reduction techniques for the most difficult SIPs including withdrawal and disapproval



SIP Processing Improvements: State Plan Electronic Collaboration System (SPeCS) for SIPs

- EPA has worked extensively with state air agency representatives, and partnered with E-Enterprise for the Environment and ECOS on this project over the past 2 years
 - The E-Enterprise SPeCS Integrated Project Team (IPT), with 12-15 air agency representatives, provided input and feedback on the Plan Collection Interface (PCI) module before it was launched in January 2018
 - IPT is now focusing on Public Dashboard and soon after the Exceptional Events modules
- Since January 2018, EPA have been focusing efforts on developing the internal Clearinghouse
 - The Clearinghouse is the EPA-facing portion of the system that manages and tracks submissions
 - The Clearinghouse will replace existing EPA IT systems and databases, which contain decades' worth of SIP information
- To date, states have submitted a total of **374 submissions** (319 official submissions and 55 draft submissions) SIP revisions via SPeCS since January of 2018



SIP Processing Improvements: State Plan Electronic Collaboration System (SPeCS) for SIPs

- Plans for 2019 and beyond include:
 - Complete Public Dashboard
 - Develop an Exceptional Events Demonstration Module
 - Develop the Regional Haze Module
 - Coordinate SPeCS with SIP Lean Efforts
 - Continuously improve the State Plan Collection Interface and EPA Clearinghouse based on on-going user feedback



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 _{2.5} (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 _{2.5} (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016 (Mod)	Dec 2021 (Mod) Dec 2025 (Ser)
NO ₂ (2010) (primary)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A
SO ₂ (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



State Plan Electronic Collaboration System (SPeCS) for SIPs

