

NAAQS AND OTHER IMPLEMENTATION UPDATES

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OVERVIEW

- NAAQS Implementation Updates
 - Ozone
 - Sulfur Dioxide (SO₂)
 - Fine Particulate Matter (PM_{2.5})
- Startup, Shutdown, and Malfunction (SSM) Policy for SIPs and SIP Call
- NSR and Title V Permitting Updates
- Reducing the SIP Backlog
- State Plan Electronic Collections System for SIPs



NAAQS Reviews: Status Update

(March 2017)

	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	Jan 2010	Jun 2010	Mar 2012	Dec 2012	Aug 2011
Recent or Upcoming Major Milestone(s)³	TBD ⁴	TBD ⁴	<u>Jan 2016</u> Final ISA <u>Sep 2016</u> 1 st Draft PA <u>Spring 2017</u> Final PA	<u>Dec 2016</u> 2 nd Draft ISA <u>Feb 2017</u> REA Planning Document <u>March 2017</u> CASAC review of Draft ISA and REA Planning Document	<u>Jan 2017</u> Final IRP <u>Spring 2017</u> CASAC review of 1 st Draft ISA	<u>Dec 2016</u> Final IRP <u>Winter 2017/2018</u> 1 st draft ISA REA Planning Document	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



Anticipated NAAQS Implementation Milestones

(March 2017)

Pollutant	Final NAAQS Date	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 (+2 rounds)	June 2013	April 2015, March 2018 (2019, 2022)	Oct 2018, Sept 2021 (2023, 2026)
Ozone (2008)	Mar 2008	July 2012	Mar 2011	Mid 2015-2016	Mid 2015-2032
Ozone (2015)	Oct 2015	Dec 2017	Oct 2018	Dec 2020-2021	2020-2037



2008 Ozone NAAQS Implementation

- **Final Implementation of the 2008 NAAQS for Ozone: State Implementation Plan Requirements Rule** published March 6, 2015 (80 FR 12264)
 - Provides interpretive rules and guidance on nearly all aspects of the attainment planning requirements for designated nonattainment areas
 - Revoked the 1997 NAAQS (effective April 6, 2015) and established anti-backsliding requirements
- Key implementation dates for nonattainment areas:
 - Emissions inventories, emissions statement rules and RACT SIPs due July 2014
 - Attainment plans and demonstrations due July 2015 (Moderate) or July 2016 (Serious and above)
 - Marginal area attainment date July 20, 2015 (attainment determined by 2012-2014 air quality data)
 - Moderate area attainment date July 20, 2018 (2015-2017 air quality data)



2008 Ozone NAAQS Implementation: Litigation

- South Coast Air Quality Management District and environmental petitioners (Sierra Club *et al.*) challenged various aspects of the 2008 Ozone NAAQS SIP Requirements Rule, including creditability of reasonable further progress (RFP) control measures, revocation of 1997 NAAQS and application of regulatory anti-backsliding requirements (final briefs submitted; oral arguments schedule TBD)
- In response to a complaint filed by environmental petitioners, the EPA found that 15 states and the District of Columbia failed to submit certain SIP revisions required under the 2008 ozone NAAQS (82 FR 9158; February 3, 2017).
 - The finding of failure to submit action gives formal notice to affected parties, and establishes deadlines by which they either must submit complete SIP revisions or become subject to mandatory sanctions.
 - Petitioners further alleged that EPA failed to take final action on SIP submittals by various states under the 1997 and 2008 ozone NAAQS.
 - EPA entered into a Consent Decree with the petitioners on January 19, 2017, which sets deadlines for EPA to complete final actions on SIP submittals by various dates ranging from June 2017 to July 2018.



Progress on Ozone NAAQS Attainment

(as of March 2017)

	1997 NAAQS (2004 Designations)	2008 NAAQS (2012 Designations)
Initial Nonattainment Areas	115	46
Areas Redesignated to Attainment	80 (prior to revocation)	6
Current Nonattainment Areas	35	40
Clean Data Determinations	26	18*
Redesignation Substitutes	2	0
Reclassifications to Higher Classification	N/A after revocation	13

*Includes 15 Marginal area determinations of attainment by the attainment date and 3 Moderate area clean data determinations.



2015 Ozone NAAQS: Implementation-Related Rules/Guidance/Activities

- **Final National Ambient Air Quality Standards for Ozone Rule** signed October 1, 2015 (40 FR 65292), revising the primary and secondary 8-hour ozone standards to 0.070 ppm
 - Litigation pending on the level of the standard (oral arguments scheduled for April 19, 2017)
- **Proposed Rule: Implementation of the 2015 NAAQS for Ozone: Nonattainment Area Classifications and State Implementation Plan Requirements** published November 17, 2016 (81 FR 81276)
 - Can be found at <https://www.epa.gov/ozone-pollution/implementation-2015-national-ambient-air-quality-standards-naaqs-ozone-state>
 - Proposed rule comment period closed February 13, 2017; timing of final rule TBD
- PSD permitting tools/guidance:
 - Final update to Guideline on Air Quality Models (Appendix W to 40 CFR Part 51)
 - Guidance on compliance demonstration tools:
 - Ozone and PM_{2.5} significant impact levels (SILs) (posted for comment in August 2016)
 - Model emissions rates for precursors (MERPs)
- Update to transportation conformity guidance specific to nonattainment areas for 2015 NAAQS (Fall 2017)



2015 Ozone NAAQS Implementation Rule Proposal: Key Topics

- Nonattainment area classification thresholds
 - Proposed the current “percent-above-the-standard” classification thresholds method.
Moderate=81ppb
- Revocation of the 2008 Ozone NAAQS - 2 options
 - Opt 1: revoke the 2008 NAAQS for all areas and purposes 1 year after designations are effective (historical ozone approach)
 - Opt 2: revoke the 2008 NAAQS only in areas attaining the 2008 NAAQS at time of its revocation, and later for areas upon redesignation to attainment for the 2008 or 2015 NAAQS (similar to PM_{2.5} approach)
- Submitting nonattainment area and OTR SIP elements
 - Clear listing of required SIP elements
 - How to submit “certification” SIPs



2015 Ozone NAAQS: Anticipated Timeline for Designations Process

Milestone	Date
The EPA promulgates 2015 Ozone NAAQS rule	October 1, 2015
The EPA issues designations guidance	February 25, 2016
Air agencies submit exceptional events demonstrations for data years 2014-2015	No later than the date recommendations are due to EPA (October 1, 2016)
States and tribes submit recommendations for ozone designations (and exceptional events demonstrations for data years 2014-2015) to EPA	No later than October 1, 2016
The EPA notifies states and tribes concerning any intended modifications to their recommendations (120-day letters)	No later than June 2, 2017 (120 days prior to final ozone area designations)
The EPA publishes public notice of state and tribal recommendations and the EPA's intended modifications, if any, and initiates 30-day public comment period	On or about June 9, 2017
End of 30-day public comment period	On or about July 10, 2017
States and tribes submit additional information, if any, to respond to the EPA's modification of a recommended designation	No later than August 7, 2017
The EPA promulgates final ozone area designations	No later than October 1, 2017



2010 SO₂ NAAQS Implementation

- EPA revised **Primary NAAQS for Sulfur Dioxide (SO₂) standard** on June 3, 2010 to 75 ppb/1-hour (75 FR 35520)
- EPA designated 29 areas as nonattainment on July 25, 2013 (Round 1)
 - **Guidance for 1-hr SO₂ NAAQS NAA SIP Submissions** was issued on April 23, 2014
 - Attainment plans for the 29 areas were due April 4, 2015
 - EPA issued findings of failure (FFS) to submit attainment plans for 16 areas in 11 states, effective April 18, 2016 (81 FR 14736; published March 18, 2016)
- EPA is required to promulgate a Federal Implementation Plan (FIP) if a state does not submit, and EPA does not approve the required SIPs within 24 months of the effective date of the FFS (i.e., April 18, 2018)
- EPA is working with affected states to develop SIPs

2010 SO₂ NAAQS Designations

- Consent decree entered on March 2, 2015, by U.S. District Court for Northern California in *SIERRA CLUB and NATURAL RESOURCES DEFENSE COUNCIL v. EPA* “triggered” the following deadlines:
 - July 2, 2016 - The EPA must complete a round of designations for 61 areas associated with approximately 64 EGUs in 24 states and any undesignated areas with violating monitors (“Round 2” designations)
 - December 31, 2017 - The EPA must complete an additional round of designations for any area a state has not established a new monitoring network by January 1, 2017 per the provisions of the SO₂ Data Requirements Rule
 - December 31, 2020 - The EPA must complete designations of all remaining, undesignated areas (expected to be areas where states elected to monitor per the provisions of the DRR)

2010 SO₂ Designations Due on July 2, 2016 Under Consent Decree

- On June 30, 2016, EPA finalized designations for 61 areas for “Round 2”:
 - Areas where there are sources (electric power plants) that as of March 2, 2015, have not been “announced for retirement,” and
 - Areas that meet one of the following emissions thresholds:
 - 16,000 tons of emitted in 2012 or
 - 2,600 tons of SO₂ emitted in 2012 with an average emission rate of at least 0.45 pounds of SO₂ per mmBtu
 - Areas where 2013-15 data indicate monitored violations – only Hawaii County, HI – which was determined to be an Exceptional Event
- These designations included 4 nonattainment areas, 41 unclassifiable/attainment areas, and 16 unclassifiable areas

SO₂ NAAQS Data Requirements Rule: Milestones

- **January 15, 2016:** Deadline for air agency to identify applicable sources (i.e., those exceeding threshold and other sources for which air quality will be characterized)
 - EPA notified states in March 2016 that review of source lists was complete. In a few cases, EPA added sources to characterization list
- **July 1, 2016:** Deadline for air agency to specify (for each applicable source) whether it will monitor air quality, model air quality, or establish an enforceable limit
 - Air agency also accordingly submits a revised monitoring plan, modeling protocols, or descriptions of planned limits on source emissions to less than 2,000 tpy, or documentation that a source has shut down
- **January 2017**
 - January 1: Deadline for new monitoring sites to be operational
 - January 13: Deadline for air agency to submit modeling analyses or documentation of emission limits/shut down
- **Early 2020:** Monitoring sites will have 3 years of quality-assured data which must be submitted to EPA
- EPA's website has recently been updated with state submittals associated with these milestones and related correspondence with EPA
 - <https://www.epa.gov/so2-pollution/final-data-requirements-rule-2010-1-hour-sulfur-dioxide-so2-primary-national-ambient>

Intended Schedule for Area Designations for 2010 SO₂ NAAQS Due on December 31, 2017 (Round 3)

Milestone	Date
States and tribes may submit updated recommendations and supporting information for area designations to the EPA	No later than January 13, 2017
States and tribes submit modeling analyses pursuant to SO ₂ Data Requirements Rule	No later than January 13, 2017
States submit exceptional events demonstrations for event-influenced SO ₂ monitoring data from 2015-2016	No later than July 14 , 2017
The EPA notifies states and tribes concerning any intended modifications to their recommendations (120-day letters)	on/about August 14, 2017 (no later than 120 days prior to final designations)
The EPA publishes public notice of state and tribal recommendations and the EPA's intended modifications and initiates 30-day public comment period	on/about August 24, 2017
End of 30-day public comment period	on/about September 24, 2017
States and tribes submit additional information, if desired, to demonstrate why an EPA modification is inappropriate	No later than October 13, 2017
The EPA signs notice promulgating final SO ₂ area designations for Round 3	on/about December 14, 2017 (can be no later than December 31, 2017)

PM_{2.5} NAAQS Implementation: SIP Requirements Rule

- **PM_{2.5} NAAQS SIP Requirements Rule** finalized on August 24, 2016 (81 FR 58010) provided framework for planning requirements for 2012 and future PM_{2.5} NAAQS and informs implementation for areas still violating 1997 and/or 2006 PM_{2.5} NAAQS
- November 2016 EPA issued draft **PM_{2.5} Precursor Demonstration Guidance**
 - Recommends technical approaches for precursor demonstrations to assess whether air quality impact from a particular precursor can be considered to be insignificant in a given area
 - Comment period extended to March 31, 2017
- South Coast Air Quality Management District filed suit challenging two aspects of the rule:
 1. Requirement that emissions reductions for RFP come from sources within the nonattainment area (consistent with past court decision)
 2. Lack of explicit “de minimis” source category exclusion for Reasonably Available Control Measures (RACM) and Best Available Control Measures (BACM)
 - Petitioner’s brief due on April 4, 2017; EPA response brief due June 6, 2017



2006 PM_{2.5} NAAQS Implementation

- In December 2016, EPA proposed:
 - Determinations of attainment for 7 areas
 - Findings of failure to attain by the December 31, 2015 attainment date, and reclassification to Serious for 4 areas
 - The action is a mandatory requirement under the CAA and will fulfill obligations included in consent decrees resulting from two lawsuits.
- Serious area attainment date is December 31, 2019
 - Extension up to December 31, 2024 is possible if cannot demonstrate attainment by 2019. Requires Most Stringent Measures in any state.
- EPA plans to take final action this year on a number of submitted Moderate area plans and will continue to work with states developing Serious area plans to address air quality challenges.



2012 PM_{2.5} NAAQS Implementation

- December 14, 2012 revised the PM_{2.5} NAAQS primary annual PM_{2.5} standard to 12µg/m³ (78 FR 3086)
 - Nine Moderate nonattainment areas were designated in 2015
 - Moderate area attainment plan due date - October 2016
 - Moderate area attainment date - December 31, 2021
 - Serious area attainment date - December 31, 2025



Progress on PM_{2.5} NAAQS Attainment

(as of March 2017)

	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	31	16	0
Current Nonattainment Areas	8	16	9
Clean Data Determinations	5	8	1
Proposed Redesignations	0	0	0



Response to SSM Petition, Final Policy and SIP Call

- Final action was signed May 22, 2015, in response to a Sierra Club petition for rulemaking concerning SIP provisions for treatment of excess emissions occurring during periods of startup, shutdown and malfunction (SSM)
 - Final notice restates EPA's SSM Policy as it applies to SIPs with one change regarding affirmative defense (AD) provisions
- SIP Call applies to 36 states (45 jurisdictions), the majority of which were named in the original petition
- Challenge from multiple parties pending in D.C. Circuit Court



Draft Guidance on Significant Impact Levels (SILs) for Ozone and PM_{2.5} in the Prevention of Significant Deterioration Permitting Program

- Draft guidance was posted August 18, 2016 and had a 60 day comment period through September 30, 2016
 - Draft guidance includes a memorandum that identifies recommended SIL values for ozone and PM_{2.5} and describes how these values may be used in a PSD compliance demonstration;
 - A technical basis document (with supporting appendices) describing how EPA developed the SIL values for PM_{2.5} and ozone; and
 - A legal support document that discusses a legal basis that permitting authorities may choose to apply if allowing sources to use SILs as part of their compliance demonstrations.
 - <https://www.epa.gov/nsr/draft-guidance-comment-significant-impact-levels-ozone-and-fine-particle-prevention-significant>
- Timing: TBD



Title V Permitting

- Title V Program and Fee Evaluation Guidance
 - Satisfies EPA commitments in response to a 2014 Office of Inspector General (OIG) report recommending enhanced oversight of state and local title V program fee revenue practices
 - Committed to completing the revised guidance by Fall 2017
 - Provides guidance for EPA regions on conducting state and local title V program and fee evaluations
 - Discretionary for EPA regions and no specific requirements for state programs
 - Consistent with the principles and best practices for oversight of state permitting programs contained in the August 30, 2016 document “*Principles and Best Practices for Oversight of State Permitting Programs*”, developed by EPA’s Cross-Media State Programs Health and Integrity Workgroup
- Timing: TBD



Principles and Best Practices for Oversight of State Permitting Program

- The EPA's Cross-Media State Programs Health and Integrity Workgroup was created in response to an OIG Report from 2011
- The workgroup developed the principles intended to be used to guide future oversight activities in three major permitting programs: the Clean Water Act National Pollutant Discharge Elimination System Program, the Clean Air Act Title V program, and the Resource Conservation and Recovery Act subtitle C program.
- The principles and best practices were developed by EPA in consultation with ECOS, the Association of Clean Water Administrators, NACAA, AAPCA, and the Association of State and Territorial Solid Waste Management Officials.
- Established common principles and best practices to promote efficient and effective oversight of state, local, and tribal permitting programs for air, water, and solid waste.



Revisions to the Petition Provisions of the Title V Permitting Program

- Proposed rulemaking to increase transparency and stakeholder understanding of the petition process, as well as ensure that the Agency is able to efficiently address related programmatic and air quality issues was published on August 24, 2016 (81 FR 57822)
- The proposed revisions:
 - provide direction for submitting title V petitions, including encouraging the use of an electronic submittal system;
 - require mandatory content and format for title V petitions; and
 - require permitting authorities to respond in writing to significant comments received during the public comment period on draft title V permits.
- The preamble also provides guidance on “recommended practices” for permitting authorities and sources to help ensure title V permits have complete administrative records and are consistent with the CAA
 - If followed, these practices may reduce the likelihood that a petition will be submitted on a title V permit
- The comment period closed on October 24, 2016 and EPA is in the process of reviewing the comments received. Timing: TBD



Regulatory Updates for GHG Permitting

- EPA has taken a series of steps to respond to the June 23, 2014, Supreme Court decision in *Utility Air Regulatory Group (UARG) v. EPA* and the April 10, 2015, Court of Appeals for the District of Columbia (D.C. Circuit) *Coalition for Responsible Regulation v. EPA Amended Judgment*
 - In April 2015, EPA issued a final rulemaking revising EPA's PSD regulations to enable the EPA to rescind EPA-issued PSD permits for GHG
 - Direct Final (80 FR 26183); Parallel Proposal (80 FR 26210)
 - In August 2015, EPA issued a final **Prevention of Significant Deterioration and Title V Permitting for Greenhouse Gases: Removal of Certain Vacated Elements Rulemaking** (80 FR 50199)
 - Rule removed certain provisions from PSD and title V that were vacated as part of the D.C. Circuit Court's April 2015 Amended Judgment
 - On August 26, 2016, EPA proposed the **Revisions to the Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas (GHG) Permitting Regulations and Establishment of a Significant Emissions Rate (SER) for GHG Emissions Under the PSD Program** (81 FR 68110)
 - Rule also proposed the remaining changes to PSD and title V that are necessary to fully implement the D.C. Circuit Court's April 2015 amended judgment
 - The public comment period closed on December 16, 2016 and EPA is currently reviewing comments. Timing: TBD



Removal of Emergency Provisions from Part 70 and 71

- Proposed **Removal of Title V Emergency Affirmative Defense Provisions From State Operating Permit Programs and Federal Operating Permit Program Rule** to remove the “emergency” affirmative defense (AD) provisions from title V regulations 40 CFR 70.6(g) and 71.6(g) published on June 14m 2016 (81 FR 38645)
- The public comment period closed on August 15, 2016, and the EPA is currently evaluating all comments received
- This is a follow-up action to similar rulemakings, including the 2015 SSM SIP Call, intended to ensure that the EPA’s policy on AD is consistent across all CAA program areas, following the D.C. Circuit’s *2014 NRDC v. EPA* decision
- Timing: TBD



SIP Processing Improvements

- NACAA-ECOS-EPA SIP Reform Workgroup discussed need to reduce the SIP backlog and improve SIP processing
- Successful Implementation of Key Principles:
 - Set a goal of clearing the current backlog (as of October 1, 2013) by the end of 2017
 - Manage the review of all other SIPs consistent with Clean Air Act deadlines
 - Develop 4-year management plans agreed upon by EPA Regions and states that identify the highest priority SIPs to process and meet the backlog reduction goal
 - Use best practices and tools developed through the PM_{2.5} Full Cycle Analysis Project (FCAP) to facilitate SIP processing
 - Increase transparency of SIP review status and improve EPA's SIP tracking system with fields that could be of assistance to states



SIP Processing Improvements (Con't)

- Trends in SIP Processing
 - EPA and air agencies are implementing the best practices from the PM_{2.5} Full Cycle Analysis to improve SIP processing and assessing effectiveness to ensure continued improvement
 - 4-year management plans in place for each state
 - Will continue to coordinate with states on multi-year SIP management plans as a standard practice
 - EPA and states making good progress on eliminating the SIPs backlogged as of October 1, 2013
 - Backlogged SIPs reduced by 70%
 - EPA and states working together to prioritize SIPs and manage the review of all other SIPs consistent with Clean Air Act deadlines
 - Active SIPs reduced by 32%



SIP Processing Improvements: Integrated Electronic System for SIP Submissions

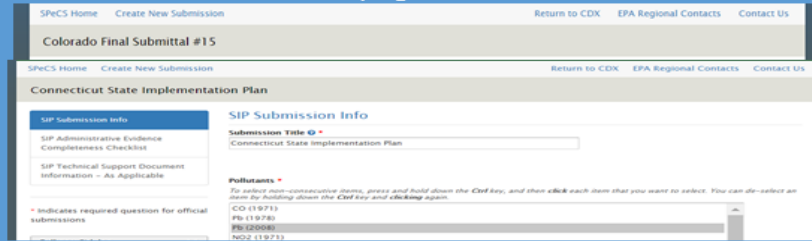
- Our vision is to create an integrated electronic submission system for SIPs and other state plans that enables us to:
 - Manage state submissions more efficiently and effectively
 - Increase transparency through data availability
- EPA embarking on project to leverage new Agency IT systems to improve and modernize the SIP submission process by allowing for:
 - 1) Developing and transmitting SIP submissions;
 - 2) Internal EPA review, collaboration, tracking and storage of plans;
 - 3) External public interface that provides status information on EPA action on SIPs, links to submittals, and links to FR notices; and
 - 4) Additional functionality, such as maintaining SIP compilations and accommodating other types



Vision: SPeCS for SIPs: Major Components

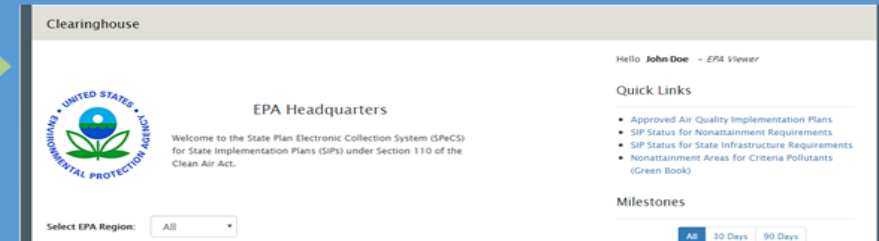
State Plan Collection Interface

Compilation and submission of plans using checklists, file upload capability, completeness checks and a state landing page



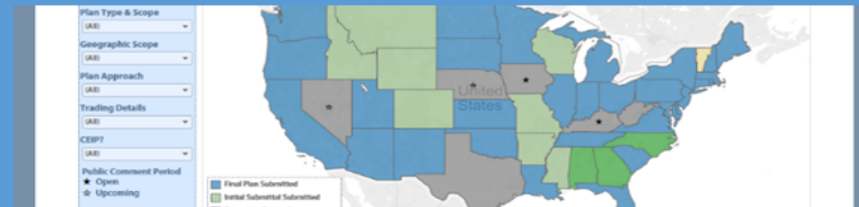
EPA Plan Review Clearinghouse

SIP requirement tracking, Issue tracking, storage of submittals and compliance with SIP requirements



Public Dashboard

Plan status updates, links to final approved plans, national and individual state SIP information



Questions and Comments



APPENDIX

Intended Schedule for 2015 Ozone NAAQS Implementation Rules/Guidance/Tools

Action	After NAAQS Promulgation	(Actual) and Planned Dates
EPA proposes nonattainment area SIP rules/guidance (including area classifications thresholds, SIP due dates, and nonattainment NSR provisions)	12 months	(November 2016)
EPA finalizes designations, classifications, and nonattainment area SIP rules/guidance	24 months	October 2017
States submit infrastructure and transport SIPs	36 months	October 2018
States submit attainment plans	5-6 years	2020-2021
Nonattainment area attainment dates (Marginal – Extreme)	5-22 years	2020-2037