

NAAQS and Regional Haze Implementation Updates

NACAA Virtual Fall Meeting

October 21, 2020

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Overview

- Review EPA Strategic Plan Objections
- Implementation Program Updates
 - Regional Haze
 - Sulfur Dioxide (SO₂)
 - Ozone (O₃) & Ozone Transport
 - Particulate Matter (PM)
 - Lead (Pb)
 - Exceptional Events
 - International Emissions Transport
- Advance Program

FY 2018 – 2022 U.S. EPA Strategic Plan

Objective 1.1 Improve Air Quality

Work with states and tribes to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards.



- By September 30, 2022, **reduce the number of areas** to 101. LTPG-1.1.1.

Objective 3.2 Create Consistency and Certainty

Outline exactly what is expected of the regulated community to ensure good stewardship and positive environmental outcomes.



- By September 30, 2022, meet 100% of legal deadlines imposed on EPA. LTPG-3.2.1.
- Prioritize meeting statutory deadlines to ensure that expectations for the regulated community and the public are clear and comprehensive and that Agency actions are defensible and consistent with its authorities.
- Ensure consistent implementation of policies across all regions, and work towards more cooperative decision making between EPA's regions and headquarters.
- Review regulatory guidance documents to identify opportunities to clarify and align EPA approaches to improve consistency and clarity.

Objective 3.4 Streamline and Modernize

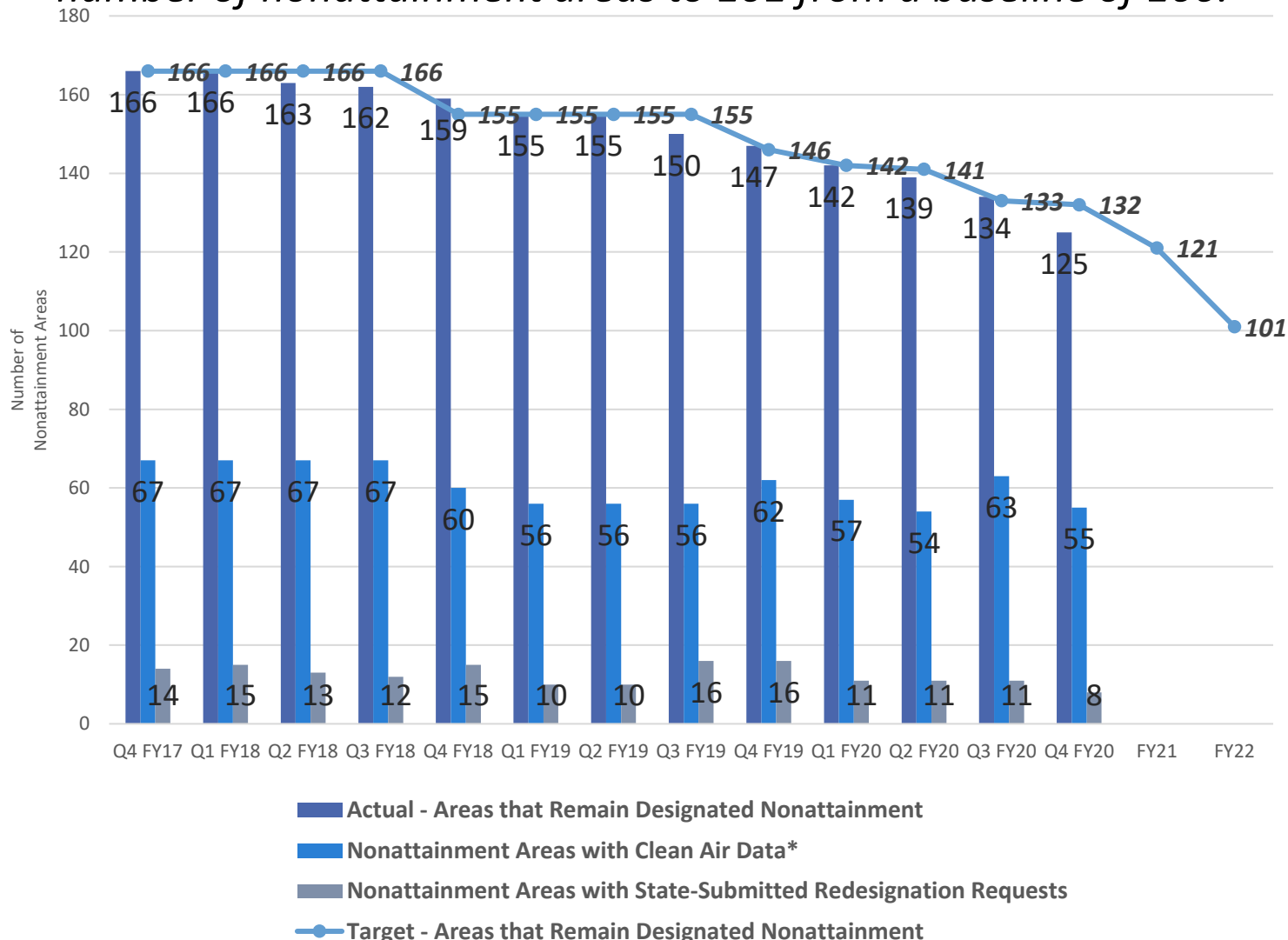
Issue permits more quickly and modernize our permitting and reporting systems.



- Systematically collect and report permitting data.
- Modernize permitting and reporting processes through E-Enterprise for the Environment, a shared governance model with EPA, states, and tribes.
- Consider where policy changes can improve permitting efficiency without sacrificing environmental results.

Reducing Number of Nonattainment Areas

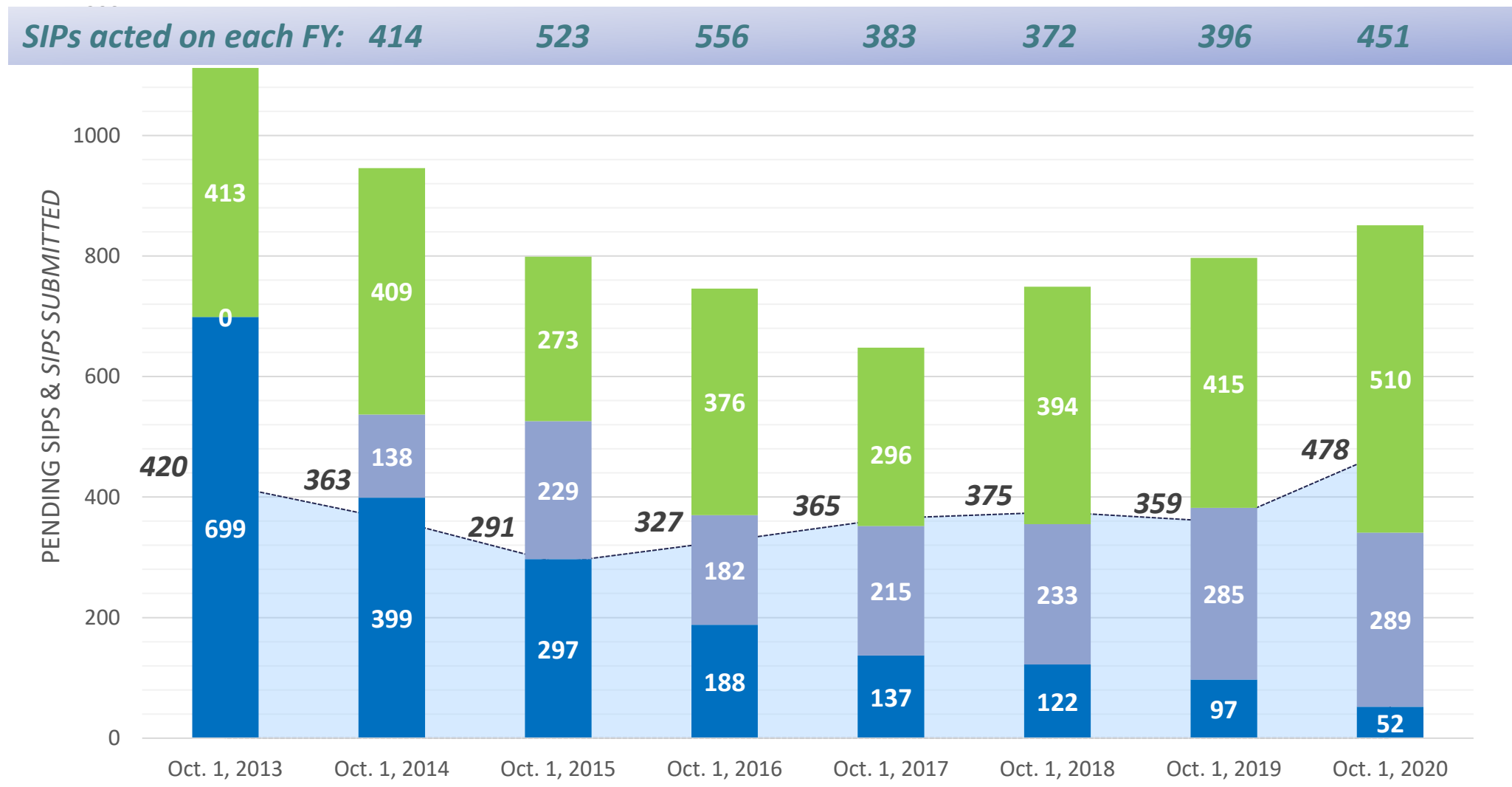
Agency Priority Goal: By September 30, 2022, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 101 from a baseline of 166.



*Clean air data is a key step to redesignation to attainment, which can occur once an area's air quality attains the federal standard.

Improving State Implementation Plan Reviews: SIPs Pending EPA Review FY 2014 – FY 2020

■ SIPs Submitted During Preceding FY
 ■ Backlogged Prior to 10/1/13
 ■ Backlogged After 10/1/2013
 ■ Non-backlogged



Benefits of SPeCS for SIPs

-  Saves money and staff resources
-  Saves time
-  Enhances reporting capabilities
-  Increases consistency
-  Increases transparency
-  Increases efficiency
-  Combines 4 legacy systems into one

Project Results

50 States use SPeCS

8 Local agencies use SPeCS

850+ SIP submittals

398 Active users

\$200k Estimated savings/year

Regional Haze Program: Ongoing Work

- Regional Haze Program focus is on planning associated with the second planning period SIPs due by July 31, 2021.
 - Continue to engage with Regional Offices to talk through issues associated with your Regional Haze analyses and plan development.
 - Continue to engage with Federal Land Managers.
- EPA has already received final SIPs from three states.
- Working to resolve remaining first planning period actions.

SO₂ NAAQS Implementation Updates

- Remaining nonattainment areas:
 - 29 of 41 for 2010 SO₂ NAAQS
 - 8 of 54 for 1971 SO₂ NAAQS
- 2010 NAAQS – Round 1 nonattainment areas:
 - EPA has a deadline of October 30, 2020 to take final action on 12 submitted attainment plans identified in a consent decree. Final action has been completed on plans addressing 5 of the 12 areas.
 - The Regional Offices are working with HQ and states on addressing approvability issues for all remaining attainment plans and acting on redesignation requests.
- 2010 NAAQS – Round 2 areas:
 - EPA issued Findings of Failure to Submit (FFS) attainment plans for five nonattainment areas:
 - 3 areas in TX effective September 9, 2020 (plans due July 13, 2018).
 - 2 areas in MD and MI effective October 21, 2019 (plans due March 12, 2018); MD now submitted and EPA proposed CDD for MI.
 - Proposal to redesignate unclassifiable areas to attainment in Missouri, Ohio, Nebraska, and Texas was signed September 2, 2020.

SO₂ NAAQS Implementation: Recent Litigation

- On August 6, 2020, the Center for Biological Diversity (CBD), the Sierra Club and Center for Environmental Health filed a mandatory duty complaint in the U.S. District Court for the Northern District of California, alleging that EPA failed to issue an FFS for the following areas:
 - 1) Huntington IN, 2) Evangeline Parish LA, 3) Guayama-Salinas PR, 4) San Juan PR, and 5) Piti-Cabras GU.
- In addition, on August 11, 2020, the same groups filed a Notice of Intent to Sue (NOI) for EPA's alleged...
 - ...failure to take timely action on an attainment plan for one Round 2 SO₂ nonattainment area (Alton Township, IL).
 - ...failure to make timely determinations of attainment by the attainment date for nine Round 1 areas by their statutory attainment date of October 4, 2018.
 - The nine areas are: 1) Hayden AZ, 2) Miami AZ, 3) Southwest Indiana IN, 4) Muscatine IA, 5) St. Bernard Parish LA, 6) Detroit MI, 7) Jackson County MO, 8) Sullivan County TN, and 9) Rhinelander WI.

Round 4 SO₂ NAAQS Area Designations

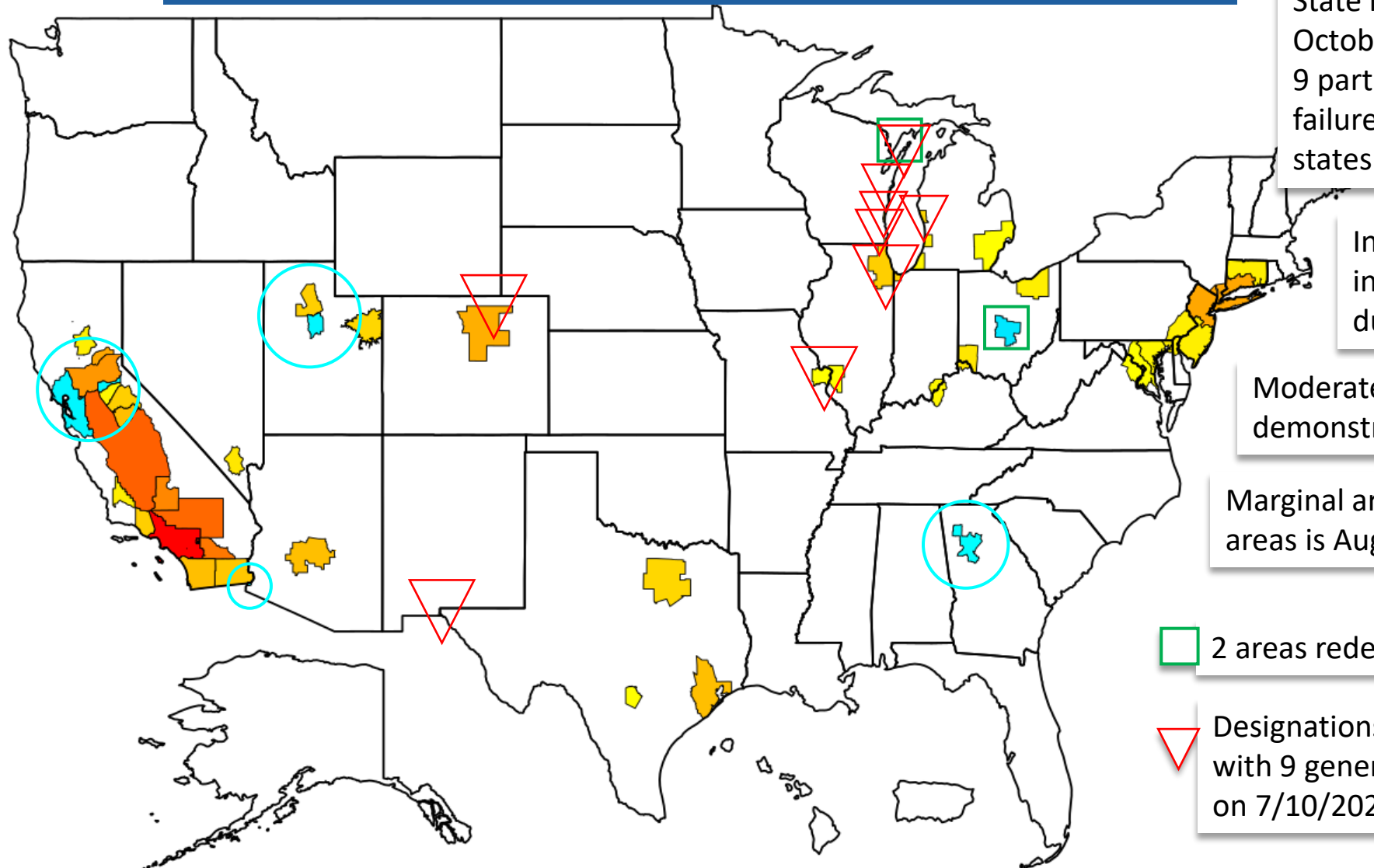
- EPA must designate all remaining portions of the U.S. by December 31, 2020.
- Round 4 Process Guidance Memo issued September 5, 2019.
- EPA notified states of its intended Round 4 designations on August 13, 2020.

- **Final milestone** 

Milestone	Date
States and tribes certify 2019 SO ₂ monitoring data	✔ No later than May 1, 2020
States and tribes may submit updated recommendations and supporting information for area designations to EPA*	✔ No later than May 1, 2020
States submit exceptional events demonstrations for event-influenced SO ₂ monitoring data from 2017-2019	✔ No later than May 1, 2020
EPA notifies states and tribes concerning any intended modifications to their recommendations (120-day letters)	✔ On or about August 13, 2020
EPA publishes public notice of state and tribal recommendations and EPA's intended modifications, initiating a 30-day public comment period	✔ August 21, 2020 (85 FR 51694)
End of 30-day public comment period	✔ September 21, 2020
In response to EPA's intended designations, states and tribes submit additional information, if desired, to demonstrate why EPA's proposed modification in the 120-day letter to the state's recommended designation or boundary is inappropriate	✔ No later than October 16, 2020
EPA signs notice promulgating final SO ₂ area designations for Round 4	On or about December 17, 2020 (No later than December 31, 2020)

* For any remaining undesignated area (i.e., those areas that installed and began operating EPA-approved SO₂ monitoring networks pursuant to the DRR and that have not been previously designated).

2015 Ozone NAAQS (70 ppb) Nonattainment Area Status



State infrastructure SIPs due October 1, 2018. Received 39 full, 9 partial submissions. Finding of failure to submit issued to 7 states on January 6, 2020.

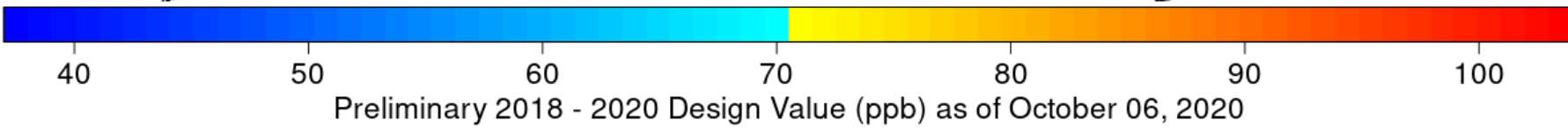
Initial SIP submittals (emiss. inv./statements/ RACT/CTGs) due August 3, 2020

Moderate area attainment plans/ demonstrations due August 3, 2021

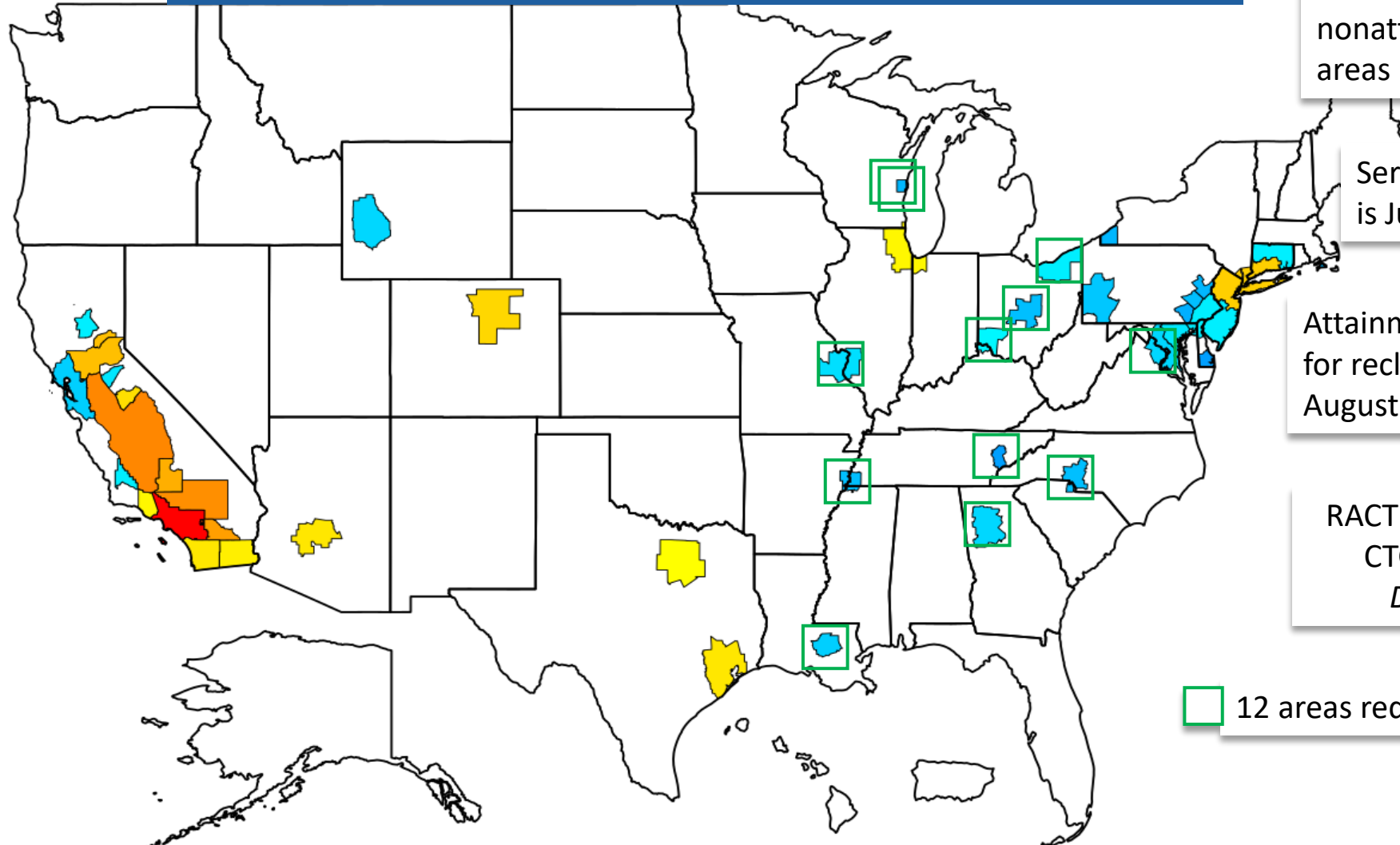
Marginal area attainment date for 39 areas is Aug/Sept 2021 (2018-20 DV)

□ 2 areas redesignated (Maintenance)

▽ Designations for 16 counties associated with 9 general areas remanded to EPA on 7/10/2020



2008 Ozone NAAQS (75 ppb) Nonattainment Area Status



35 of 47 areas remain designated nonattainment, though many areas have attaining air quality

Serious area attainment date is July 20, 2021 (2018-20 DV)

Attainment plans/demonstrations for reclassified Serious areas due August 3, 2020

RACT SIPs for Oil & Gas Industry CTG due October 27, 2018
Deadline litigation/FFS

12 areas redesignated (Maintenance)



1997 Ozone NAAQS Implementation Update

- The 2018 *South Coast II* ruling reversed several antibacksliding approaches for the revoked 1997 ozone NAAQS, most significantly affecting procedures for determinations of attainment by the attainment date and redesignation requirements.
- Region 6 finalized replacements for previous Texas area “redesignation substitutes”; both actions have been challenged.
 - Houston-Galveston-Brazoria, TX area (85 FR 8411; 2/14/20)
 - Dallas-Fort Worth, TX area (85 FR 19096; 4/06/20)
- Updated 40 CFR part 52 to clarify that nine 1997 ozone nonattainment areas attained by their respective attainment dates.
 - Direct final rule 85 FR 64046 (October 9, 2020); effective 1/07/2021
- Began work on a proposed “Cleanup” rule for addressing 40 CFR part 50 anti-backsliding provisions impacted by *South Coast II* ruling.

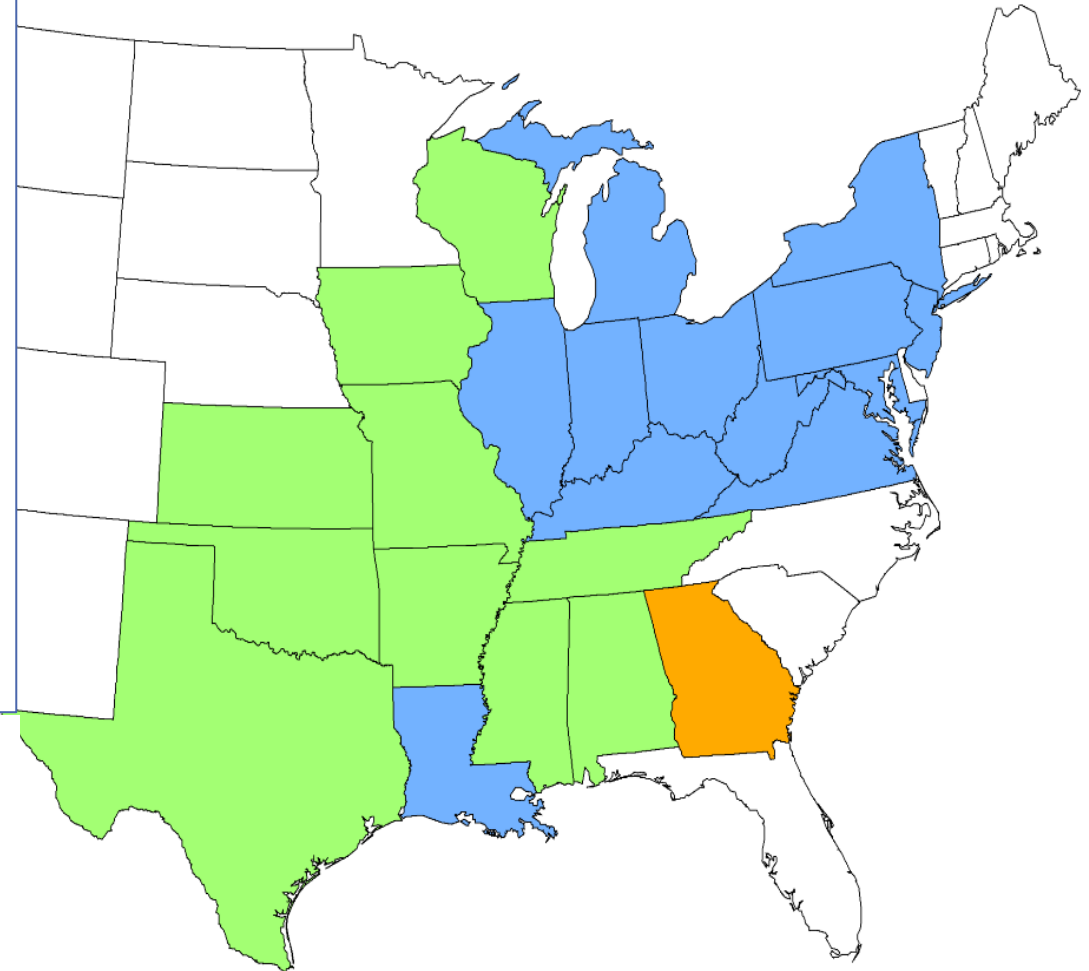
2008 Ozone NAAQS Interstate Transport Update

- September 13, 2019, *Wisconsin v. EPA*, the D.C. Circuit remanded the CSAPR Update to EPA for allowing significant contribution to continue beyond downwind area attainment dates determined under CAA section 181.
- October 1, 2019, *New York v. EPA*, the D.C. Circuit vacated and remanded the CSAPR Closeout because it did not address states Good Neighbor obligations with respect to the next applicable attainment date in 2021.
- July 28, 2020, *New Jersey v. Wheeler*, South District of NY placed EPA on a court-ordered deadline to sign a final rule by March 15, 2021.
- October 15, 2020, Administrator Wheeler signed the proposed rule (Revised CSAPR Update) that is fully responsive to the court's remands.
- EPA will accept comments for 45 days after publication of the proposed rule in the Federal Register and will hold a virtual public hearing two weeks after publication.

Revised CSAPR Update Proposal

- Addresses 21 eastern states' remaining good neighbor obligations under the 2008 ozone NAAQS.**
- Per the court's remand, EPA aligned its analysis and the implementation of emission reductions required to address significant contribution beginning with the 2021 ozone season, which corresponds to the July 20, 2021, Serious area attainment date for the 2008 ozone NAAQS.
- For more information www.epa.gov/csapr/updated-cross-state-air-pollution-rule-update

CSAPR Ozone Season NO_x Programs



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

2015 Ozone NAAQS Interstate Transport SIPs

- EPA is actively reviewing submitted 2015 ozone NAAQS transport SIPs
 - Received 47 of 56 states/jurisdictions.
 - Finalized approval action on 11 SIP submissions.
 - Proposed approval on an additional 8 submissions.
- Findings of Failure to Submit (FFS) outstanding interstate transport SIPs that were due October 1, 2018.
 - On November 22, 2019, EPA issued an FFS that 7 states failed to submit interstate transport SIPs for the 2015 ozone NAAQS.
 - 3 states have since submitted.
- Western State Transport Considerations
 - EPA is considering the unique features of transport in the west.
 - For example, the collective contribution of anthropogenic emissions from upwind states to air quality problems is generally smaller in the west than in other regions of the country as a result of western geography.

Transport-related Petitions and Litigation

- Maryland & Delaware section 126(b) petitions. On May 19, 2020, the D.C. Circuit Court of Appeals remanded EPA's denial of petitions submitted by Maryland and Delaware in 2016 for four EGUs with SNCR. The ruling also held that the relevant analytic year is the next future attainment date, which impacts 2008 and 2015 ozone transport SIPs.
- New York section 126(b) petition. On July 14, 2020, the D.C. Circuit vacated EPA's 2019 denial of New York's petition regarding approximately 350 sources for the 2008 and 2015 ozone standards.
- Maine section 176A petition. EPA is reviewing petition from Maine requesting a partial withdrawal from the Northeast Ozone Transport Region submitted on February 24, 2020.
- OTC section 184(c) petition. EPA is reviewing petition from the Ozone Transport Commission submitted on June 8, 2020, recommending additional NOx control on Pennsylvania coal-fired EGUs.

Progress on PM NAAQS Attainment

As of 9/30/2020

	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	18	3	63
Current Nonattainment Areas	4	14	6	26
Attainment Deadlines	Serious 11/2021	Serious 12/2019	Moderate 12/2021	Various

PM_{2.5} NAAQS Implementation: 2020 Actions

As of 9/30/2020

NAAQS	DATE	STATE	AREA	ACTION
2006 PM _{2.5}	6/8/2020 (Corr:7/7/2020)	UT	Provo	Proposal- Attained by the Attainment Date
2006 PM _{2.5}	6/8/2020 (Corr:7/7/2020)	UT	Salt Lake City	Proposal- Attained by the Attainment Date
2006 PM _{2.5}	7/22/2020	CA	San Joaquin	Final- Approved Extension Request and Requirements
2006 PM _{2.5}	9/2/2020	AK	Fairbanks	Final- Failure to Attain
2006 PM _{2.5}	9/16/2020	CA	LA-South Coast	Final- Failure to Attain
2012 PM _{2.5}	7/2/2020	CA	LA-South Coast	Proposal- Plan approval and reclassification to Serious Final – signed; publication pending

PM₁₀ NAAQS Implementation: 2020 Actions

As of 9/30/2020

NAAQS	DATE	STATE	AREA	ACTION
PM ₁₀	2/25/2020	UT	Ogden	Final- Redesignation
PM ₁₀	2/25/2020	UT	Salt Lake	Final- Redesignation
PM ₁₀	2/25/2020	UT	Utah County	Final- Redesignation
PM ₁₀	6/24/2020	AZ	West Central Pinal	Final- Failure to attain and reclassification to Serious
PM ₁₀	6/26/2020	MT	Columbia Falls	Final- Redesignation
PM ₁₀	6/26/2020	MT	Kalispell	Final- Redesignation
PM ₁₀	6/26/2020	MT	Libby	Final- Redesignation
PM ₁₀	8/4/2020	AZ	Ajo	Final- Redesignation
PM ₁₀	9/18/2020	CA	Imperial	Final- Redesignation

EPA Targeted Airshed Grant Program

- Competitive grant program since 2015 to reduce emissions in the ozone and PM_{2.5} nonattainment areas with greatest air quality improvement challenges.
- \$205 million awarded to date, including:
 - \$74 million for projects involving on-road mobile light and medium duty trucks and buses.
 - \$65 million for woodstove replacements and changeouts.
 - \$61 million for projects involving nonroad mobile.

Innovative Replacement and Demonstration Projects	
Fuel cell and battery-electric buses	Medium- and heavy-duty battery-electric trucks
Nonroad agricultural equipment, locomotives, stationary engines	Tier II ocean-going vessel engine upgrade
Woodstove changeouts	Low-dust agricultural nut harvesters
Light-duty vehicle replacements and repairs	Battery-electric nonroad wheel loader and excavator
Battery-electric lawn and garden equipment rebates	Dry wood bank, woodshed storage, education via low-cost sensors

Burn Wise Program Resources

Burn the right wood, the right way, in the right appliance

- Voluntary control measure program
 - Promotes upgrades to cleaner burning technologies.
 - Educates users on how to properly use their wood burning appliances.
 - Targeted Airshed Grants: \$65 million for woodstove changeouts and related projects since 2015.
- Education and Training through Partnerships
- Free Educational Materials Available
 - www.epa.gov/burnwise/orderform



Burn Wise
Program of the U.S. EPA

WOOD SMOKE AND YOUR HEALTH

Wood smoke may smell good but it's not good for you. With a few simple steps you can help reduce wood smoke to protect your health and the air we breathe.

DID YOU KNOW?
One old, inefficient wood stove can emit as much air pollution as 5 dirty old diesel trucks.

Tiny particles in wood smoke can affect your health

HEART IMPACTS Increases the risk of heart attack, irregular heartbeat, heart failure, stroke and early death.	WHO IS AT GREATER RISK? Older adults Children and teens People with heart or lung disease
LUNG IMPACTS Triggers asthma attacks and aggravates other lung diseases and damages children's lungs.	

Four easy steps to reduce wood smoke

- 1 Burn dry, seasoned wood that has been split, stacked, covered and stored.
- 2 Test wood with a moisture meter (20% moisture or less is best).
- 3 Use a cleaner-burning gas or wood stove.
- 4 Provide sufficient air to the fire; never let it smolder.

Learn more at www.epa.gov/burnwise

EPA

WET WOOD IS A WASTE
BURN DRY FIREWOOD TO SAVE MONEY AND HEALTH

Four Easy Steps to Dry Firewood

- STEP 1 SPLIT
- STEP 2 STACK
- STEP 3 COVER
- STEP 4 STORE

Burn Wise EPA

DOES YOUR WOOD STOVE HAVE A DIRTY LITTLE SECRET?

Burn Wise EPA

Residential Wood Heaters

- New Source Performance Standards
 - On March 11, 2020, EPA finalized rule amendments to the 2015 NSPS, which did not provide a sell-through period beyond May 15, 2020 for any of the Step 1 wood heating devices.
 - On May 22, 2020, we proposed amendments to allow for an amended sales period for all Step 1 wood heating devices until November 30, 2020.
 - Intended to provide retailers with additional time to sell Step 1 units to replace the 60 days (mid-March - May 15) of normal business operations lost due to the COVID-19 pandemic.
 - EPA is evaluating comments:
 - The amended sales period was opposed by State, local and tribal agencies, private citizens, and environmental/health organizations, and supported by manufacturers, retailers, and the industry trade group.
- Wood and Hydronic Heater Test Method Work

Lead (Pb) NAAQS Implementation Update

- Of the 22 areas designated nonattainment for the 2008 Pb NAAQS, 12 have been redesignated to attainment.
- Six nonattainment areas have 2017-2019 design values out of compliance with the 2008 Pb NAAQS.
 - Troy, AL; Hayden, AZ; Lake Co, IN; Stark, OH; Arecibo, PR; and Kaufman, TX
 - All have developed attainment plans.
- EPA's focus:
 - Remaining redesignations.
 - Early detection of emerging compliance issues in attainment/maintenance areas.

Exceptional Events Update

- EPA has concurred on 109 state demonstrations that were submitted since EPA revised the Exceptional Events Rule in September 2016.
- Exceptional Events Submission and Tracking System 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>

International Emissions Transport

- “Guidance on the Preparation of Clean Air Act Section 179B Demonstrations for Nonattainment Areas Affected by International Transport of Emissions” is at OMB for up to 90-day interagency review period.
- EPA approved the “Imperial County Clean Air Act Section 179B(b) Retrospective Analysis for the 75 ppb 8-hour Ozone Standard” demonstrating that the nonattainment area would have attained the 2008 ozone NAAQS by the Moderate attainment date of July 20, 2018, but for emissions emanating from Mexico, and therefore is not subject to reclassification to Serious upon failure to attain. 84 FR 11817 (Feb. 27, 2020).
 - Challenge filed by the Center for Biological Diversity and the Center for Environmental Health with 9th Circuit Court of Appeals on April 27, 2020.

ADVANCE

www.epa.gov/advance

- A collaborative program for states, tribes and local governments to achieve ongoing emission reductions in areas designated as attainment/maintenance for ozone or PM_{2.5}.
 - 40 current partners with 360+ counties and 45 million population.
 - Forum for stakeholder collaboration, monthly info on grants and training opportunities, access to EPA technical assistance.
 - Provide annual plan updates to EPA describing relevant programs (e.g., mobile sources, transportation, energy efficiency, renewable energy, stationary, woodsmoke, education).
 - Plans for current partners are on the EPA website.
- There are a significant number of other areas with air quality values that are approaching the level of the ozone and PM_{2.5} NAAQS and may be good candidates for Advance.
 - We would be happy to schedule a presentation with your organization.
 - Contact Rich Damberg (damberg.rich@epa.gov) for more info.



Questions and Comments

NAAQS Reviews: Status Update

(September 2020)

	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>Sept 2019</u> Draft ISA ³ <u>Oct 2019</u> Draft PA <u>Aug 2020</u> Proposal <u>Dec 2020</u> Final	 <u>July 2020</u> Call for Information	 <u>TBD</u>	 <u>TBD</u>	 <u>Sept 2020</u> Final ISA <u>Early 2021</u> Draft PA with REA Appendices	<u>Dec 2019</u> Final ISA <u>Jan 2020</u> Final PA <u>April 30, 2020</u> Proposal <u>Dec 2020</u> Final	 <u>TBD</u>

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

NAAQS Implementation Milestones (September 2020)

Pollutant	Final NAAQS Signature	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 (Moderate) Dec 2019 (Serious)
Pb (2008)	Oct 2008	Dec 2010-2011	Oct 2011	June 2012-2013	Dec 2015-2016
PM _{2.5} (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016 (Moderate)	Dec 2021 (Moderate) Dec 2025 (Serious)
NO ₂ (2010) (primary)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A
SO ₂ (2010) (primary)	June 2010	Oct 2013, Sept 2016, Apr 2018 (early 2021)	June 2013	Apr 2015, Mar 2018, Oct 2019 (mid 2022)	Oct 2018, Sept 2021, Apr 2023 (early 2026)
Ozone (2008)	Mar 2008	July 2012	Mar 2011	July 2015-2016*	July 2018-2032
Ozone (2015)	Oct 2015	Aug 3, 2018 (Sep 24, 2018 for San Antonio, TX)	Oct 2018	Aug 2021-2022	Aug 2021-2038

* January 2017 for areas reclassified from Marginal to Moderate. August 2020 for areas reclassified from Moderate to Serious.

SIP Process Improvement Resources

- The SIP Lean Toolkit provides templates, checklists, and other helpful information intended to support early engagement between EPA and air agencies during state implementation plan development.
 - <https://www.epa.gov/air-quality-implementation-plans/state-implementation-plan-sip-lean-toolkit-collaboration-between>
- SPeCS for SIPs – Submit SIPs Online
 - <https://www.epa.gov/air-quality-implementation-plans/submit-sips-online>
- General Information and Updates on SIPs
 - [epa.gov/sips](https://www.epa.gov/sips)