

# FINAL STATE IMPLEMENTATION PLAN (SIP) REQUIREMENTS RULE FOR THE 2015 OZONE NAAQS

November 20, 2018  
Office of Air and Radiation



# Purposes of the rulemaking

- Provide state and local air management agencies with final rules and guidance for planning to meet the 2015 ozone NAAQS in designated nonattainment areas.
  - *Establish rules for the ozone implementation requirements contained in the Clean Air Act (written as part of 1990 amendments when ozone was a 1-hour standard) that are specific to the 2015 8-hour ozone NAAQS.*
  - *New rules will be found in subpart CC of 40 CFR 51, sections 51.1300 through 51.1319.*
- This final rule does not revoke the 2008 ozone NAAQS
  - *Implementing rules for the 2008 standards are found in subpart AA of 40 CFR 51, sections 51.1100 through 51.1119.*
  - *Some policies clarified in the final rule are equally applicable to implementation of the 2008 ozone NAAQS, including application of CAA sections 172(c)(6), 179B, 182(g), and NNSR interprecursor trading for ozone offsets.*



# Related rulemakings and guidance

## ■ Classifications Rule for 2015 Ozone NAAQS

- Signed March 1, 2018; published in Federal Register March 9, 2018 (83 FR 10376).
- Established air quality thresholds for each ozone nonattainment area classification.

## ■ Initial Nonattainment Area Designations for 2015 Ozone NAAQS

- For most of the U.S.: signed April 30, 2018 (83 FR 25766; June 4, 2018) – effective August 3, 2018
- For the San Antonio, TX area: signed July 17, 2018 (83 FR 35136; July 25, 2018) – effective Sep. 24, 2018

## ■ Updated Ozone Attainment Demonstration Modeling Guidance

- Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM<sub>2.5</sub>, and Regional Haze, available at: [http://www3.epa.gov/scram001/guidance\\_sip.htm](http://www3.epa.gov/scram001/guidance_sip.htm)

## ■ Updated Transportation Conformity Guidance

- Transportation Conformity Guidance for 2015 Ozone NAAQS Nonattainment Areas, available at: <https://www.epa.gov/state-and-local-transportation/policy-and-technical-guidance-state-and-local-transportation>
- A transportation conformity determination is due in metropolitan nonattainment areas no later than **1 year** after the effective date of nonattainment designation (i.e., summer 2019). See guidance for more details.



# Rulemaking timeline

- Official title: “Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements”
  - *Shorthand title: 2015 Ozone SRR*
  - *Docket number: EPA-HQ-OAR-2016-0202*
- Final 2015 Ozone SRR was signed by the Administrator on November 7, 2018.
- Anticipated publication in the *Federal Register*: about two weeks after signature
- Effective date: 60 days after publication, *i.e.*, late January 2019 (estimated)



# The “*South Coast II*” ruling

- In February 2018, the D.C. Circuit issued a decision in *South Coast Air Quality Management District v. EPA* (“*South Coast II*”), in which parties challenged different aspects of the SRR for the 2008 ozone NAAQS.
- The 2008 Ozone SRR did two things: (1) set out implementation requirements for the 2008 ozone NAAQS; and (2) revoked the 1997 ozone NAAQS and established related anti-backsliding requirements.
- The *South Coast II* ruling upheld and vacated particular aspects of the 2008 Ozone SRR, which informed the final rule approach for the 2015 ozone SRR.
  - *On panel rehearing, the court stayed issuance of the vacatur until February 16, 2019, for purposes of transportation conformity. The Agency’s petition for panel rehearing was denied in all other respects, and therefore the court’s vacatur of other portions of the 2008 ozone SIP Requirements Rule went into effect September 27, 2018.*
- We are assessing the implications of *South Coast II* on our proposed options for revoking the 2008 ozone NAAQS, and intend to address any revocation of the 2008 NAAQS in a separate action.



# Basic SIP components for nonattainment areas\*

- Emissions inventory and emissions statement rule
- Reasonable further progress (RFP) plan
- Reasonably available control technology (RACT)
- Reasonably available control measures (RACM)
- Attainment demonstration
- Contingency measures
- Nonattainment new source review (NNSR) program
- Motor vehicle emissions budget (CAA section 176(c))\*
- As applicable, a variety of area-wide mobile source and stationary source control programs
- For states in the Ozone Transport Region (OTR): RACT for major VOC and NOx sources

\* For areas classified *Marginal*, the only required components are emissions inventory, emissions statement rule, and NNSR.

\*\* Motor vehicle emissions budget(s) would only be applicable to nonattainment areas that submit RFP or attainment demonstration SIPs.



# Overview of CAA Ozone Nonattainment Area Planning & Control Requirements by Classification

		NSR Offset Ratio	Major Source Threshold	
<b>EXTREME</b> (20 years to attain)	TRAFFIC CONGESTION CONTROLS (if appropriate)	<b>1.5 : 1 Extreme</b>	<b>10 tpy</b>	
	CLEAN FUELS REQUIREMENT FOR BOILERS			
<b>SEVERE</b> (15/17 years to attain)	PENALTY FEE PROGRAM FOR MAJOR SOURCES	<b>1.3 : 1 Severe</b>	<b>25 tpy</b>	
	VMT GROWTH DEMONSTRATION (& TCMS if needed)			
<b>SERIOUS</b> (9 years to attain)	VMT REPORTING	<b>1.2 : 1 Serious</b>	<b>50 tpy</b>	
	NSR REQUIREMENTS FOR EXISTING SOURCE MODS			
	CLEAN FUELS PROGRAM OR SUBSTITUTE MEASURE FOR LARGER POP. AREAS			
	MODELED DEMO OF ATTAINMENT			MILESTONE DEMONSTRATIONS and CONTINGENCY MEASURES FOR RFP
	3% ANNUAL RFP UNTIL ATTAINMENT			ENHANCED I/M for larger population areas
	CONTINGENCY MEASURES FOR FAILURE TO ATTAIN			ENHANCED MONITORING PLAN
<b>MODERATE</b> (6 years to attain)	Stage-II Gasoline Vapor Recovery	<b>1.15 : 1 Moderate</b>	<b>100 tpy</b>	
	BASIC VEHICLE I/M for larger population areas			
	15% VOC ROP or 15% VOC/NOx RFP (OVER 6 YEARS)			
	VOC/NOx RACT for MAJOR/CTG SOURCES			ATTAINMENT DEMONSTRATION
<b>MARGINAL</b> (3 years to attain)	NONATTAINMENT NEW SOURCE REVIEW PROGRAM	<b>1.1 : 1 Marginal</b>	<b>100 tpy</b>	
	EMISSIONS STATEMENTS			
	BASELINE EMISSIONS INVENTORY (EI)		PERIODIC EMISSIONS INVENTORY UPDATES	

NOTE: Transportation and General Conformity apply in all ozone nonattainment areas.



# Final rule overview

- Final 2015 Ozone SRR largely follows approach adopted for the previous SRR for the 2008 ozone NAAQS.
- Key topics:
  - *Submitting nonattainment area and OTR SIP elements*
  - *RFP requirements*
  - *RACT – SIP revision submissions & implementation*
  - *RACM – consideration of sources of intrastate transport*
  - *NNSR – interprecursor trading (IPT) for ozone offsets*
  - *Policy on international emissions (CAA section 179B)*



## Submitting nonattainment area and OTR SIP elements

- The final rule adopts the existing approach to calculating deadlines for submitting revised SIP elements under the 2015 ozone NAAQS, for states with nonattainment areas and states in the ozone transport region (OTR).
- States with nonattainment areas must submit various SIP elements required under CAA sections 182 and 172 based on their statutory timeframes, measured from the effective date of area designations for the revised ozone NAAQS.
- Similarly, OTR states must submit RACT SIP revisions based on their statutory timeframe under CAA section 184 – **2 years** measured from the effective date of nonattainment area designations for the revised ozone NAAQS (*i.e.*, August 3, 2020).
- The final rule provides additional guidance on the form and content of SIP element submissions, which may be a written certification statement (also subject to state notice-and-comment procedures).



# SIP submission deadlines

Maximum timeframe associated with each element (from effective date of designation):

Emission inventories and emission statement SIPs are due no later than **2 years** (August 3, 2020; Sep. 24, 2020 for San Antonio).

RACT SIPs for Moderate and higher areas, and all states in the Ozone Transport Region (OTR), are due no later than **2 years** (August 3, 2020).

15% RFP (6-year rate-of-progress/RFP) SIPs for Moderate and higher areas are due no later than **3 years** (August 3, 2021).

NNSR SIPs are due no later than **3 years** (August 3, 2021; Sep. 24, 2021 for San Antonio).

Attainment plan with RACM and attainment demonstration SIPs are due no later than **3 years** (Moderate) or **4 years** (Serious and higher) (August 3, 2021 or August 3, 2022).

RFP SIPs showing an average of 3% reduction in emissions per year after the initial 6-year period for Serious and higher areas are due no later than **4 years** (August 3, 2022).

Vehicle I/M program SIP, where applicable, due no later than an area's attainment demonstration deadline (may be satisfied with a written certification statement, where appropriate).

Stationary source penalty fee program SIPs (CAA section 185) are due for Severe and Extreme areas no later than **10 years** (August 3, 2028).



## RFP requirements – General

- EPA is generally following the same interpretation of CAA subpart 2 requirements for RFP as was applied to areas for the 2008 and 1997 8-hour ozone NAAQS.
- An area that has a previously approved 15% VOC rate-of-progress (ROP) plan is considered to have already met that CAA requirement, and must instead meet a more flexible 15% RFP requirement where both NO<sub>x</sub> and VOC reductions are creditable.
- Reductions from sources outside the nonattainment area do not count toward meeting the RFP requirements.



## RFP requirements – Baseline year

- The RFP baseline year for the 2015 ozone NAAQS shall be the calendar year for the most recently available triennial emissions inventory preceding the year of the area's effective date of designation as nonattainment.
  - *We anticipate that most states with areas designated nonattainment in 2018 would use 2017 as the RFP baseline year.*
- Alternatively, states may choose to use the year that corresponds with the year of the effective date of an area's nonattainment designation for the RFP baseline year (e.g., 2018).



# RFP requirements – Milestone demonstrations

- The final rule establishes RFP provisions for milestone compliance demonstrations (MCDs) to address the demonstrations required under CAA section 182(g) for nonattainment areas classified Serious or higher.
- States must submit a compliance demonstration within 90 days after a RFP milestone showing that the Serious or higher area achieved RFP; the demonstration shall be “in such form and manner... as the Administrator shall require, by rule.”
- Adopted requirements allow states to use a measure that correlates with RFP emissions reductions (e.g., percent implementation of controls) for purposes of MCD, similar to the quantitative milestone approach for the PM<sub>2.5</sub> NAAQS).
- Air agencies could also rely on triennial emissions inventory data for MCD purposes where the appropriate data are obtainable within the 90-day MCD submittal timeframe.



# RACT – SIP revision submissions & implementation

- For SIP revisions triggered by initial designations for areas classified Moderate or higher and states in the OTR, RACT SIP revisions must be submitted no later than 24 months after the effective date of initial designations, and control measures implemented no later than January 1 of the fifth year after the effective date of initial designations.
- The final rule also establishes default SIP submission control measure and implementation deadlines for RACT requirements triggered by specific events occurring after initial area designations:
  - *Redesignations to nonattainment or area reclassifications upon failure to attain or voluntary request*
  - *Issuance of new/revised Control Techniques Guidelines (CTGs)*



# RACT – SIP revision submissions & implementation (continued)

- Adopted approach provides generic fixed deadlines, while articulating the Administrator’s authority to set case-specific deadlines.
  - *RACT SIP Submission:*
    - Reclassification – 24 months from effective date of action, or case-specific
    - New/revised CTG – 24 months from effective date of CTG issuance, or case-specific
  - *RACT Implementation – as expeditiously as practicable, but no later than:*
    - Reclassification
      - *the earlier of: 1) start of the attainment year ozone season associated with the area’s new attainment deadline, or 2) January 1 of the 3rd year after the associated SIP revision submission deadline; or*
      - *deadline established in the action finalizing the area reclassification*
    - New/revised CTG
      - *January 1 of the third year after the associated SIP submission deadline; or*
      - *deadline established in the final/issued CTG*



## RACM – consideration of sources of intrastate transport

- The final rule retains existing general RACM provisions, and clarifies EPA’s interpretation of the requirements of CAA section 172(c)(6).
- CAA section 172(c)(6) requires that SIP provisions include enforceable emission limitations and other control measures, means or techniques as may be necessary or appropriate to attain a standard by the applicable attainment date.
- EPA interprets “other control measures” to include those measures and technologies that can be applied to any emission source within an air agency’s jurisdiction, including those outside of a nonattainment area. EPA does not interpret CAA section 172(c)(6) to automatically require states to conduct an evaluation of all sources and all potential controls throughout the entire state regardless of attainment needs.
- *If necessary or appropriate to achieve attainment by the applicable attainment date, we believe the CAA obligates states to place emission controls on significant emissions sources elsewhere within the state as needed to achieve the necessary reductions.*



## NNSR – interprecursor trading (IPT) for ozone offsets

- The final rule adopts criteria and revised rule language to reaffirm the EPA’s longstanding IPT policy that, under certain circumstances, it is permissible under the CAA for air agencies to allow major stationary sources to use either NO<sub>x</sub> or VOC emissions reductions to satisfy specific nonattainment NSR offset requirements.
- The final rule also serves as a response to a petition for reconsideration challenging the previous IPT provision for ozone in the 2008 ozone SRR.
- Adopted IPT provisions would allow a new or modified major stationary source locating in an ozone nonattainment area to satisfy the NNSR emissions offset requirements with emissions reductions of VOC or NO<sub>x</sub> interchangeably if certain criteria are met.



## NNSR – IPT for ozone offsets (continued)

- IPT ratios could be area-specific default ratios, case-specific permit ratios, or a combination of the two options at the air agency's discretion.
- In response to comments received, the final rule:
  - *does not require air agencies to obtain EPA approval of the numerical values of the IPT ratios when implementing a case-specific IPT program or when developing default IPT ratios that are not included in the state regulations and the SIP; and*
  - *requires an air agency's periodic review of any area-specific default IPT ratio every 5 years, rather than every 3 years as proposed.*
- When adopting an IPT program for ozone, SIPs that do not expressly include numerical default IPT ratios must still include: (1) the authority to use IPT; (2) description of air quality model(s) used to develop default ratios; and (3) description of development approach to show that ratios provide an equivalent or greater ozone air quality benefit in the nonattainment area.
- Permit applicants proposing case-specific IPT ratios must apply similar information relating to development of the ratios, such that the information is available for public and EPA review during the permit issuance process.



## NNSR – IPT for ozone offsets (continued)

- Air agencies that include default ratios in their SIP would provide certainty to sources, since the validity of the ratio itself would not be open for comment for each permit that uses the ratio.
- We encourage air agencies to work with EPA in developing IPT ratios and notify EPA after developing any initial or revised area-specific default IPT ratios.
- EPA will also be able to review and comment on the application of any IPT ratio (default or case-specific) to a particular source or location during the public comment period as part of the NNSR permitting process.
- A Technical Guidance Document is available in the rulemaking docket.
  - *Technical Guidance for Demonstration of Interprecursor Trading (IPT) for Ozone in the Nonattainment New Source Review Program*
  - *Docket ID EPA-HQ-OAR-2016-0202-0129*



## Policy on international emissions (CAA section 179B)

- CAA section 179B allows EPA to (a) approve prospective attainment plans if the demonstration shows the area would attain “but for emissions emanating from outside the U.S.”; and (b) not reclassify an area upon a determination that an area would have attained by its attainment date “but for emissions emanating from outside the U.S.”
- The final rule reaffirms EPA’s previous interpretation that demonstrations under CAA section 179B are not limited to nonattainment areas adjoining international borders.
- The final rule does not adopt the proposal that would have required state demonstrations under CAA section 179B(b) for areas classified Marginal to include a showing that the air agency adopted all RACM (including RACT) for the area.
- EPA intends to provide detailed 179B guidance in early 2019.



## Additional information and contacts

- Final rule notice and fact sheet posted on EPA website:  
<https://www.epa.gov/ozone-pollution/implementation-2015-national-ambient-air-quality-standards-naaqs-ozone-state>
- Additional information on the ozone nonattainment areas is available on the EPA Green Book:  
<https://www.epa.gov/green-book/green-book-8-hour-ozone-2015-area-information>
- See also Docket No. EPA-HQ-OAR-2016-0202 at: <https://www.regulations.gov/>
- Questions?
  - *Robert Lingard*: [lingard.robert@epa.gov](mailto:lingard.robert@epa.gov) or 919-541-5272
  - *Butch Stackhouse*: [stackhouse.butch@epa.gov](mailto:stackhouse.butch@epa.gov) or 919-541-5208
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# Questions?

## Key topics covered in this presentation

- Submitting nonattainment area and OTR SIP elements
- RFP requirements
- RACT – SIP revision submissions & implementation
- RACM – consideration of sources of intrastate transport
- NNSR – interprecursor trading (IPT) for ozone offsets
- Policy on international emissions (CAA section 179B)

