



2026 State Implementation Plan Revision for the California Extreme Ozone Nonattainment Areas

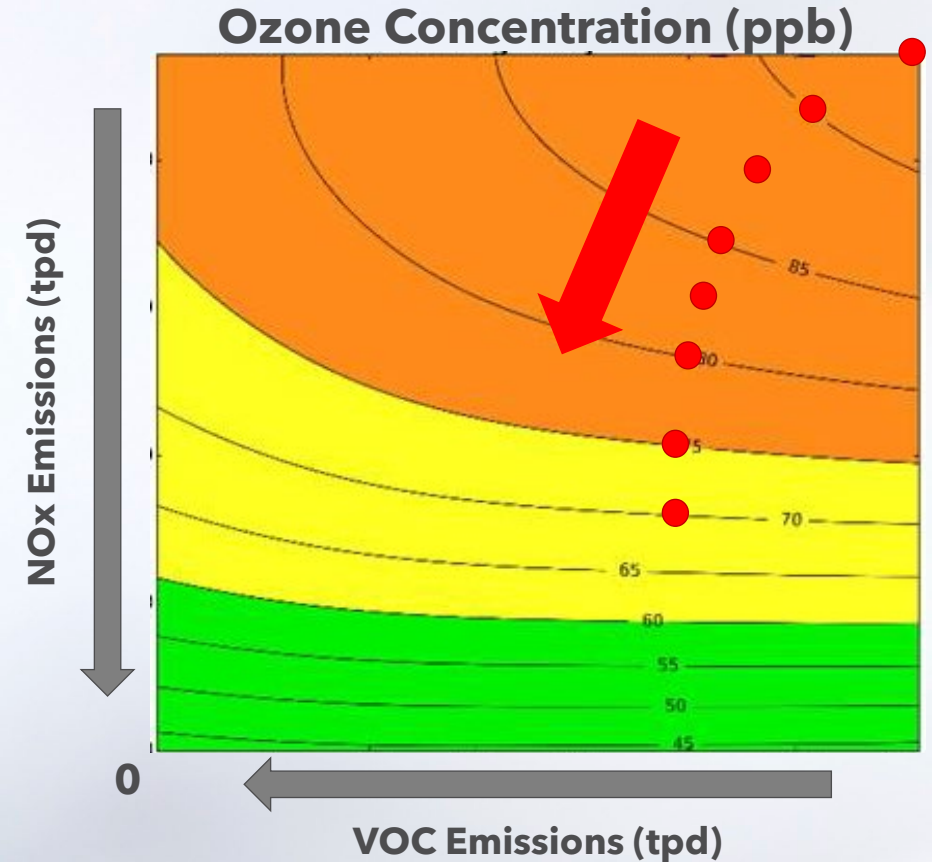
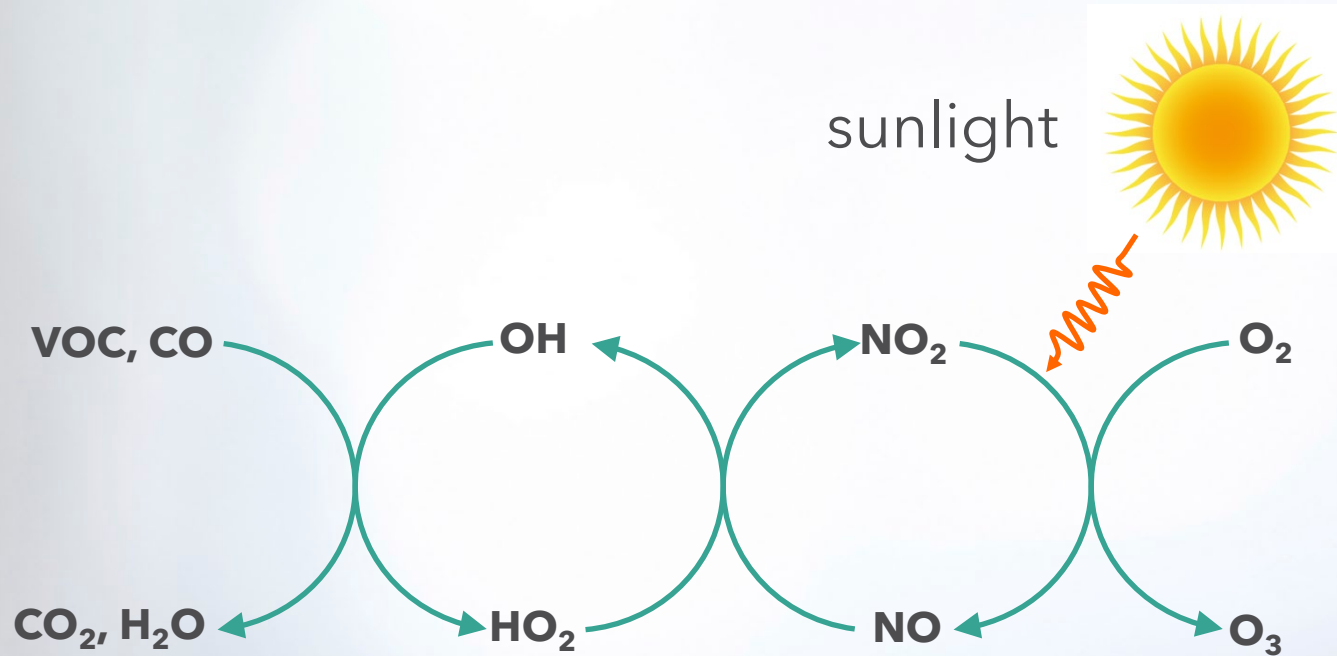
July 23, 2026
Board Meeting

State Implementation Plan (SIP)

- Federal Clean Air Act requires U.S. EPA set health-based national ambient air quality standards (NAAQS)
- States not meeting a NAAQS must develop an attainment plan demonstrating how areas will attain and meet other requirements
- Rules and regulations needed to meet requirements must also be submitted/approved into the SIP
- Any submittal approved by U.S. EPA into the SIP is enforceable in federal courts, including through lawsuits by citizens



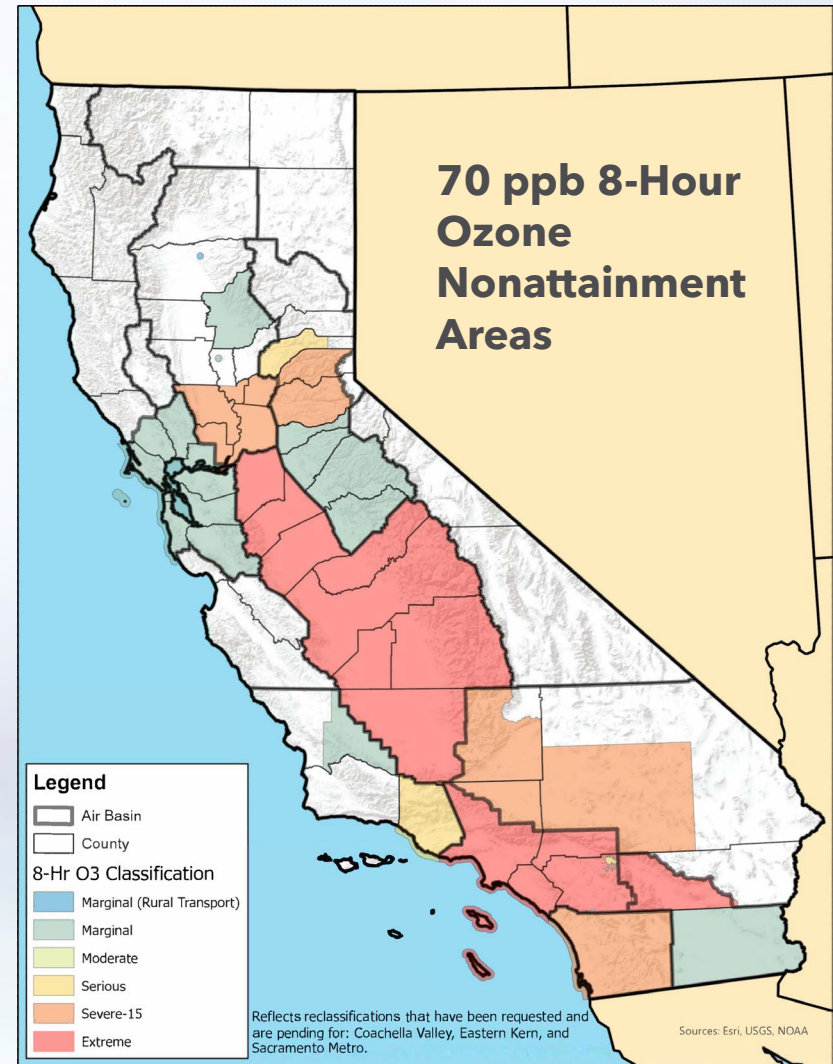
Science Drives SIP Development



- Ozone is formed from NO_x and VOCs in the presence of sunlight
- Air quality modeling shows that NO_x emissions reductions are most effective at reducing ozone levels in California into the future

70 ppb Attainment Challenge and the 2022 State SIP Strategy

- Federal 70 ppb 8-hour ozone standard established in 2015
- 19 California nonattainment areas, attainment years 2020-2037
- San Joaquin Valley and South Coast most challenging
- 2022 State SIP Strategy developed to define CARB commitments needed to support attainment
- Drove the pace and scale of CARB rulemakings



Attainment Plans Submitted and Awaiting U.S. EPA Action Rely on CARB Mobile Measures to Attain

70 ppb
8-hour ozone:

- South Coast Air Basin
- San Joaquin Valley
- Coachella Valley
- West Mojave Desert
- Sacramento Metro Area
- Eastern Kern County
- Ventura County

12 $\mu\text{g}/\text{m}^3$
annual PM_{2.5}:

- South Coast Air Basin
- San Joaquin Valley

Federal Actions Against Clean Air

January 2025

Lack of U.S. EPA action leading to withdrawal of Waiver Requests

- Advanced Clean Fleets
- In-Use Locomotive
- Partial: Commercial Harbor Craft, Transport Refrigeration Unit

May/June 2025

Illegal Congressional Resolutions

- Advanced Clean Cars II
- Heavy-Duty Omnibus
- Advanced Clean Trucks
 - Heavy-Duty Warranty
 - Zero-Emission Airport Shuttles
 - Zero-Emission Powertrain Certification

January 2026

Partial SIP Disapproval

- Clean Truck Check (Heavy-Duty Inspection and Maintenance)

Federal Attacks Will Significantly Increase NOx Emissions in California



Potential SIP Consequences Resulting from Federal Actions

Transportation Conformity Lapses / Freezes

- Metropolitan Planning Organizations may be unable to meet SIP-approved emissions budgets
- SIP disapprovals would trigger immediate freezes

Sanctions for Failing to Meet SIP Requirements:

- 18 months: Increased stationary source offsets
- 24 months: Federal highway funding withheld except for exempt projects
- 24 months: Federal Implementation Plan

Overview of 2026 Extreme Ozone SIP Revision

70 ppb Extreme Ozone Nonattainment Areas

- South Coast
- San Joaquin Valley
- Coachella Valley

Revises

- 2022 State SIP Strategy Measure and Emissions Reduction Commitments
- Planning emission inventories
- RFP demonstration
- Motor vehicle emission budgets

**2026 State Implementation Plan Revisions
for the California Extreme Ozone
Nonattainment Areas**

Released
April 17, 2026



Clean Air Act Section 182(e)(5) New Technologies Provisions Provide Necessary Flexibility



- Only available for Extreme nonattainment areas
- Allows for reductions in the attainment demonstration from the anticipated development of new control techniques or technologies
- Can't be used to achieve the incremental emission reductions required during the first 10 years
- Requires an enforceable commitment to develop and adopt measures if the anticipated technologies do not achieve planned reductions in the attainment year
- These measures must be submitted no later than 3 years before proposed implementation of the plan provisions

2022 State SIP Strategy Measures

On-Road

- Advanced Clean Fleets Regulation
- Zero-Emission Trucks Measure
- Clean Miles Standard
- On-Road Motorcycle New Emissions Standards
- Enhanced Analysis in State Implementation Plans

Off-Road

- Tier 5 Off-Road Engine Standard
- Amendments to In-Use Diesel-Fueled Fleets Regulation
- Transport Refrigeration Unit Regulation Part II
- Off-Road Zero-Emission Targeted Manufacturer Rule
- Commercial Harbor Craft Amendments
- Cargo Handling Equipment
- Clean Off-Road Fleet Recognition Program

Primarily Federally Regulated

- In-Use Locomotive Regulation
- Future Measures for Aviation Emissions
- Future Measures for OGV Emissions Reductions

Other

- Zero-Emission Standards for Space and Water Heaters
- Consumer Products

Measures in Baseline Emissions Inventory

- Advanced Clean Trucks Regulation
- Heavy-Duty Low NOx Omnibus Regulation
- Heavy-Duty Warranty Phase I
- Clean Truck Check

2016 State SIP Strategy Measures, quantified in 2022 State SIP

- Advanced Clean Cars II
- Transport Refrigeration Unit Part I
- Zero-Emission Forklift

Measures Unaffected

On-Road

- Advanced Clean Fleets Regulation
- ~~Zero-Emission Trucks Measure~~
Drive Forward: Heavy-Duty Trucks Measure
- **Clean Miles Standard**
- **On-Road Motorcycle New Emissions Standards**
- **Enhanced Analysis in State Implementation Plans**

Measures in Baseline Emissions Inventory

- Advanced Clean Trucks Regulation
- Heavy-Duty Low NOx Omnibus Regulation
- Heavy-Duty Warranty Phase I
- Clean Truck Check

Off-Road

- **Tier 5 Off-Road Engine Standard**
- **Amendments to In-Use Diesel-Fueled Fleets Regulation**
- Transport Refrigeration Unit Measure Part II
- ~~Off-Road Zero-Emission Targeted Manufacturer Rule~~
Phased Advanced Clean Equipment Regulation
- Commercial Harbor Craft Amendments
- **Cargo Handling Equipment**
- **Clean Off-Road Fleet Recognition Program**

Primarily Federally Regulated

- In-Use Locomotive Regulation
- **Future Measures for Aviation Emissions**
- **Future Measures for OGV Emissions Reductions**

Other

- ~~Zero-Emission Standards for Space and Water Heaters~~
Clean Space and Water Heater Standards
- **Consumer Products**

2016 State SIP Strategy Measures, quantified in 2022 State SIP

- Advanced Clean Cars II
- Transport Refrigeration Unit Part I
- **Zero-Emission Forklift**

Measures Addressed in Revision

On-Road

- **Advanced Clean Fleets Regulation**
- ~~Zero-Emission Trucks Measure~~
Drive Forward: Heavy-Duty Trucks Measure
- Clean Miles Standard
- On-Road Motorcycle New Emissions Standards
- Enhanced Analysis in State Implementation Plans

Measures in Baseline Emissions Inventory

- **Advanced Clean Trucks Regulation**
- **Heavy-Duty Low NOx Omnibus Regulation**
- **Heavy-Duty Warranty Phase I**
- **Clean Truck Check**

Off-Road

- Tier 5 Off-Road Engine Standard
- Amendments to In-Use Diesel-Fueled Fleets Regulation
- **Transport Refrigeration Unit Measure Part II**
- ~~Off-Road Zero-Emission Targeted Manufacturer Rule~~
Phased Advanced Clean Equipment Regulation
- **Commercial Harbor Craft Amendments**
- Cargo Handling Equipment
- Clean Off-Road Fleet Recognition Program

Primarily Federally Regulated

- **In-Use Locomotive Regulation**
- Future Measures for Aviation Emissions
- Future Measures for OGV Emissions Reductions

Other

- ~~Zero-Emission Standards for Space and Water Heaters~~
Clean Space and Water Heater Standards
- Consumer Products

2016 State SIP Strategy Measures, quantified in 2022 State SIP

- **Advanced Clean Cars II**
- **Transport Refrigeration Unit Part I**
- Zero-Emission Forklift

Updated / Renamed Measures

On-Road

- Advanced Clean Fleets Regulation
- ~~Zero-Emission Trucks Measure~~
Drive Forward: Heavy-Duty Trucks Measure
- Clean Miles Standard
- On-Road Motorcycle New Emissions Standards
- Enhanced Analysis in State Implementation Plans

Measures in Baseline Emissions Inventory

- Advanced Clean Trucks Regulation
- Heavy-Duty Low NOx Omnibus Regulation
- Heavy-Duty Warranty Phase I
- Clean Truck Check

Off-Road

- Tier 5 Off-Road Engine Standard
- Amendments to In-Use Diesel-Fueled Fleets Regulation
- Transport Refrigeration Unit Measure Part II
- ~~Off-Road Zero-Emission Targeted Manufacturer Rule~~
Phased Advanced Clean Equipment Regulation
- **Commercial Harbor Craft Amendments**
- Cargo Handling Equipment
- Clean Off-Road Fleet Recognition Program

Primarily Federally Regulated

- In-Use Locomotive Regulation
- Future Measures for Aviation Emissions
- Future Measures for OGV Emissions Reductions

Other

- ~~Zero-Emission Standards for Space and Water Heaters~~
Clean Space and Water Heater Standards
- Consumer Products

2016 State SIP Strategy Measures, quantified in 2022 State SIP

- Advanced Clean Cars II
- Transport Refrigeration Unit Part I
- Zero-Emission Forklift

Reductions Reallocated to other Measures

On-Road
• Advanced Clean Fleets Regulation • Zero-Emission Trucks Measure Drive Forward: Heavy-Duty Trucks Measure
• Clean Miles Standard
• On-Road Motorcycle New Emissions Standards
• Enhanced Analysis in State Implementation Plans

Measures in Baseline Emissions Inventory
• Advanced Clean Trucks Regulation • Heavy-Duty Low NOx Omnibus Regulation • Heavy-Duty Warranty Phase I
• Clean Truck Check

Off-Road
• Tier 5 Off-Road Engine Standard • Amendments to In-Use Diesel-Fueled Fleets Regulation • Transport Refrigeration Unit Measure Part II
• Off-Road Zero-Emission Targeted Manufacturer Rule Phased Advanced Clean Equipment Regulation
• Commercial Harbor Craft Amendments
• Cargo Handling Equipment
• Clean Off-Road Fleet Recognition Program

Primarily Federally Regulated
• In-Use Locomotive Regulation • Future Measures for Aviation Emissions • Future Measures for OGV Emissions Reductions

Other
• Zero-Emission Standards for Space and Water Heaters • Clean Space and Water Heater Standards • Consumer Products

2016 State SIP Strategy Measures, quantified in 2022 State SIP
• Advanced Clean Cars II • Transport Refrigeration Unit Part I • Zero-Emission Forklift

Reductions Reallocated to 182(e)(5)

On-Road

- Advanced Clean Fleets Regulation
- ~~Zero-Emission Trucks Measure~~
Drive Forward: Heavy-Duty Trucks Measure
- Clean Miles Standard
- On-Road Motorcycle New Emissions Standards
- Enhanced Analysis in State Implementation Plans

Measures in Baseline Emissions Inventory

- **Advanced Clean Trucks Regulation**
- **Heavy-Duty Low NOx Omnibus Regulation**
- **Heavy-Duty Warranty Phase I**
- **Clean Truck Check (portion)**

Off-Road

- Tier 5 Off-Road Engine Standard
- Amendments to In-Use Diesel-Fueled Fleets Regulation
- Transport Refrigeration Unit Measure Part II
- ~~Off-Road Zero-Emission Targeted Manufacturer Rule~~
Phased Advanced Clean Equipment Regulation
- Commercial Harbor Craft Amendments
- Cargo Handling Equipment
- Clean Off-Road Fleet Recognition Program

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- **In-Use Locomotive Regulation**
- Future Measures for Aviation Emissions
- Future Measures for OGV Emissions Reductions

Other

- ~~Zero-Emission Standards for Space and Water Heaters~~
Clean Space and Water Heater Standards
- Consumer Products

2016 State SIP Strategy Measures, quantified in 2022 State SIP

- **Advanced Clean Cars II**
- Transport Refrigeration Unit Part I
- Zero-Emission Forklift

South Coast 2037 NOx Emissions Reductions

CARB Program	2022 Adoption	2025 Federal Action	2026 Revision
Current Control Program	166.4	-11.2	155.2
CARB Commitments	95.7	+11.2	106.8
2016 State SIP Strategy Measures	6.4	-5.4	1.0
2022 State SIP Strategy Measures	89.3	-10.5	78.8
New 182(e)(5)	N/A	+27.0	27.0
Total Reductions	262.1	0.0	262.1

Note: Numbers may not add up due to rounding

San Joaquin Valley 2037 NOx Emission Reductions

CARB Program	2022 Adoption	2025 Federal Action	2026 Revision
Current Control Program	134.5	-11.5	122.9
CARB Commitments	25.3	+11.5	36.9
2016 State SIP Strategy Measures	1.9	-1.8	<0.1
2022 State SIP Strategy Measures	23.4	-10.9	12.5
New 182(e)(5)	N/A	+24.3	24.3
Total Reductions	159.8	0.0	159.8

Note: Numbers may not add up due to rounding

Coachella Valley 2037 NOx Emission Reductions

CARB Program	2022 Adoption	2025 Federal Action	2026 Revision
Current Control Program	9.7	-1.9	7.8
CARB Commitments	5.2	+1.9	7.1
2016 State SIP Strategy Measures	0.2	-0.2	<0.1
2022 State SIP Strategy Measures	5.0	-3.0	2.0
New 182(e)(5)	N/A	+5.1	5.1
Total Reductions	14.9	0.0	14.9

Note: Numbers may not add up due to rounding

Public Comments

Clean Air Act Section 182(e)(5)

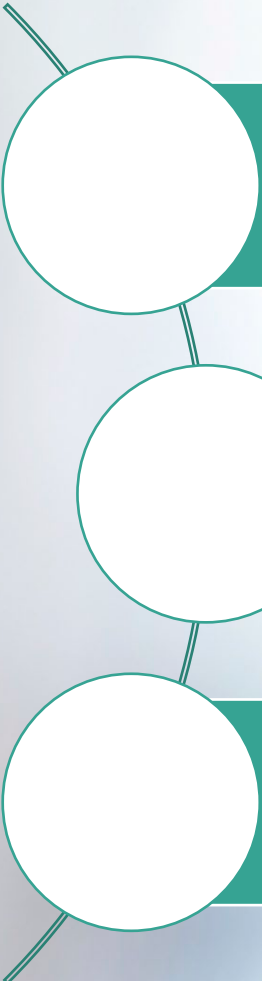
- 2026 Extreme Ozone SIP Revision does not meet requirements to use section 182(e)(5) of federal Clean Air Act
- Request for fewer 182(e)(5) commitments and more real emission reductions

Additional Comments

- Support for new agriculture-related measures (pesticides, soil NOx from fertilized fields, agricultural equipment)
- Support for more low-NOx options
- Support and opposition for clean space and water heaters

Staff Recommendation

Adopt Resolution 26-5



Adopt 2026 Extreme Ozone SIP Revision as a revision to the California SIP

Direct Executive Officer to submit 2026 Extreme Ozone SIP Revision to U.S. EPA for inclusion in the California SIP

Direct Executive Officer to take appropriate action to resolve issues regarding the SIP submission, including to revise the commitments to address any deficit in reductions

Actions Moving Forward

Fall 2026

Annual SIP Update
to Board

Winter 2026/2027

70 ppb Ozone
Severe Plan
Revisions
(Sac Metro, Eastern
Kern, West Mojave)

To Be Determined

12 $\mu\text{g}/\text{m}^3$ PM2.5
Plan Revisions (SJV,
South Coast)

35 $\mu\text{g}/\text{m}^3$ PM2.5
SJV Plan

9 $\mu\text{g}/\text{m}^3$ PM2.5
Plans

Thank you