



Central California Environmental Justice Network

May 18, 2026

Governing Board Members
California Air Resources Board
1001 I Street
Sacramento, California 95814
Via Electronic submittal

RE: 2026 SIP Revisions for the California Extreme Ozone Nonattainment Areas

Governing Board Members of the California Air Resources Board,

This document provides basic information about the “black box” method being used in the 2026 Ozone SIP revision to ensure proper briefing. Most importantly, it makes sure you understand there are three requirements that **MUST** be included in a SIP in order for the black box method to be used. Information contained here is copied directly from CARB’s SIP Revision, the Clean Air Act, or US EPA decisions with source websites so the information can be verified.

What are Black Box Emission Reductions?

What does the Clean Air Act (CAA) say about using new technologies for future, yet unknown emission reductions - often called the Black Box? ([link](#))

(5) NEW TECHNOLOGIES

The [Administrator](#) may, in accordance with [section 7410 of this title](#), approve provisions of an implementation plan for an [Extreme Area](#) which anticipate development of new control techniques or improvement of existing control technologies, and an attainment demonstration based on such provisions, if the [State](#) demonstrates to the satisfaction of the [Administrator](#) that—

(A) such provisions are not necessary to achieve the incremental emission reductions required during the first 10 years after November 15, 1990; and

(B) the [State](#) has submitted enforceable commitments to develop and adopt contingency measures to be implemented as set forth herein if the anticipated technologies do not achieve planned reductions.

Such contingency measures shall be submitted to the [Administrator](#) no later than 3 years before proposed implementation of the plan provisions and approved or disapproved by the [Administrator](#) in accordance with [section 7410 of this title](#). The contingency measures

The Black Box option, or the future use of new technologies or improvement of existing control technologies, to account for future emission reductions:

- Can only be used in areas designated extreme nonattainment for ozone - South Coast, San Joaquin Valley, and Coachella Valley are designated extreme.
- Can only be used if the associated SIP shows attainment, which CARB says it does.
- Section (A) is interpreted to mean the first 10 years after being designated for the applicable standard ([link](#)). Below are the applicable designation dates ([link](#)):
 - South Coast - Extreme: August 3, 2018
 - San Joaquin Valley - Extreme: August 3, 2018
 - Coachella Valley - Severe-15: August 3, 2018
 - All Federal Register documents and the South Coast's Air Quality Management Plan webpage say Coachella Valley is designated as Severe-15, which would not make them eligible to use the black box option.
- Section (B) will be addressed in the future, as contingency measures for black box items are not required until 3 years before the black box measure is implemented.

The CAA wording is not very specific in addressing “anticipated development” and “improving existing control technologies.” However, the US EPA has expanded on this in decisions involving black box submissions. Below is an example from [a recent decision in 2024 for the South Coast Air Basin](#). However, this expanded decision language is consistent with [EPA language since 1992](#) (middle bottom of the page).

<p>C. Clean Air Act Provisions for New Technologies</p> <p>For ozone nonattainment areas classified as Extreme, the CAA recognizes that an attainment plan may rely to a certain extent on new or evolving technologies, given the long time period between developing the initial plan and attaining the standards, and the amount of emissions reductions needed to attain. CAA section 182(e)(5) authorizes the EPA to approve provisions in an Extreme area plan that anticipate development of new technology measures, and to approve an attainment demonstration based on such provisions, if the state demonstrates that: (1) such provisions are not necessary to achieve the incremental emission reductions required during the first 10 years after the area's nonattainment designation;^[18] and (2) the state has submitted enforceable commitments to develop and adopt contingency measures to be implemented if the anticipated technologies do not achieve the planned reductions (“182(e)(5) contingency measures”).^[19] New technology measures may include those that anticipate future technological developments as well as those that require complex analyses, decision making, and coordination among a number of government agencies.^[20] An attainment demonstration that relies on planned reductions from new technology measures under section 182(e)(5) must identify the measures for which additional time would be needed for development and adoption. The plan must also show that the new technology measures cannot be fully developed and adopted by the submittal date for the attainment demonstration and must contain a schedule outlining the steps leading to final development and adoption of the measures.^[21]</p>	<p>development of new control technologies, or improvement of existing control technologies if the SIP satisfies the following criteria:</p> <p>(1) The plan containing the demonstration of attainment must identify all measures, including the long-term measure(s) for which additional time would be needed for development and adoption.</p> <p>(2) The plan must show that the long-term measure(s) cannot be fully developed and adopted by the submittal date for the attainment demonstration and must contain a schedule outlining the steps leading to final development and adoption of the measure(s).</p> <p>(3) The plan must contain commitments from those agencies that would be involved in developing and implementing the schedule for the measure.</p> <p>(4) The plan must contain a commitment to develop and submit contingency measures (in addition to those otherwise required for the area) that could be implemented if the measure is not developed or if it fails to</p>
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EPA decision wording explains black box requirements in more detail:

1. The actual measure that needs additional time must be identified.
2. The SIP must show the new technology measures cannot be fully developed and adopted now, and
3. The SIP must contain a schedule outlining the steps leading to final development and adoption of the measures.

Emission Reductions Requesting Black Box Use

All black box emission reductions in this revision are coming from existing or previous emission reduction programs that lost emission reductions from the disapproval or withdrawal of CAA federal preemption waivers. If you have not looked at the SIP revision yet, crossed out emission reductions are being removed from the previous SIP and underlined emission reductions are being added in this SIP revision.

South Coast

Measure	2037 NOx (tpd)	2037 ROG (tpd)
<u>Advanced Clean Cars II</u> ²²	5.0 <u>0.0</u>	3.8 <u>0.0</u>

⁹ For reductions previously associated with this measure, CARB requests U.S. EPA approval under the provisions of Section 182(e)(5) of the Clean Air Act.

Primarily-Federally and Internationally Regulated Sources - CARB Measures		
<u>In-Use Locomotive Regulation</u> ¹⁶	10.9 <u>0.0</u>	0.4 <u>0.0</u>

¹⁶ For reductions previously associated with this measure, CARB requests U.S. EPA approval under the provisions of Section 182(e)(5) of the Clean Air Act.

Measure	2037 NOx (tpd)	2037 ROG (tpd)
<u>Advanced Clean Trucks Regulation, Heavy-Duty Low-NOx Omnibus Regulation, Heavy-Duty Warranty Phase 1</u> ¹²	10.4	0.2
<u>Heavy-Duty Inspection and Maintenance</u> ¹⁸	0.3	<0.1
Total	10.8	0.2

2022 State SIP Strategy and the 2022 South Coast AQMP. Table 5 summarizes the emissions reductions originally associated with these programs, which have now been removed from the planning emissions inventories and for which CARB staff is proposing to be reallocated to commitments under 182(e)(5).

South Coast Black Box Totals: 26.7 NOx tpd, 4.4 ROG tpd

CARB Programs in South Coast	2037 NOx Emission Reductions (tpd)	
Current Control Program	166.4	<u>155.2</u>
Potential CARB Emission Reductions Commitments	95.7	<u>106.8</u>
2016 State SIP Strategy Measures (Not yet in baseline inventory)		6.4 <u>1.0</u>
2022 State SIP Strategy Measures		89.3 <u>79.0</u>
<u>Newly allocated to Clean Air Act Section 182(e)(5)</u>		<u>26.7</u>
Total Reductions	262.1	

Note: numbers may not add up due to rounding

San Joaquin Valley

Measure	2037 NOx (tpd)	2037 ROG (tpd)
<u>Advanced Clean Cars II</u> ²²	1.6 <u>0.0</u>	1.3 <u>0.0</u>

²⁹ For reductions previously associated with this measure, CARB requests U.S. EPA approval under the provisions of Section 182(e)(5) of the Clean Air Act.

Primarily Federally and Internationally Regulated Sources - CARB Measures		
In-Use Locomotive Regulation ³⁵	11.2 0.0	0.4 0.0

³⁵ For reductions previously associated with this measure, CARB requests U.S. EPA approval under the provisions of Section 182(e)(5) of the Clean Air Act.

Table 13 - San Joaquin Valley Emission Reductions from Regulations Removed from the Planning Emissions Inventory

Measure	2037 NOx (tpd)	2037 ROG (tpd)
Advanced Clean Trucks Regulation, Heavy-Duty Low-NOx Omnibus Regulation, Heavy-Duty Warranty Phase 1 ³⁴	7.3	0.1
Heavy-Duty Inspection and Maintenance ³²	3.5	<0.1
Total	10.8	0.1

2022 State SIP Strategy and the 2022 Valley Ozone Plan. Table 13 summarizes the emissions reductions originally associated with these programs, which have now been removed from the planning emissions inventories and which CARB staff are now proposing to be reallocated to commitments under 182(e)(5).

San Joaquin Valley Black Box Totals: 23.6 NOx tpd, 1.8 ROG tpd

Table 10 - San Joaquin Valley NOx Emission Reductions from CARB Programs

CARB Programs in San Joaquin Valley	2037 NOx Emission Reductions (tpd)
Current Control Program	134.5 122.9
Proposed CARB Emission Reductions Commitments	25.3 36.9
2016 State SIP Strategy Measures (Not yet in baseline inventory)	1.9 <0.1
2022 State SIP Strategy Measures	23.4 13.2
Clean Air Act Section 182(e)(5)	23.6
Total Reductions	159.8

Note: numbers may not add up due to rounding

Coachella Valley

Table 20 - Coachella Valley Emission Reductions from Remaining 2016 State SIP Strategy

Measure	2037 NOx (tpd)	2037 ROG (tpd)
Advanced Clean Cars II ⁴⁴	0.2 0.0	0.2 0.0

⁴⁴ For reductions previously associated with this measure, CARB requests U.S. EPA approval under the provisions of Section 182(e)(5) of the Clean Air Act.

Primarily Federally and Internationally Regulated Sources - CARB Measures		
In-Use Locomotive Regulation ⁵²	3.0 0.0	0.1 0.0

⁵² For reductions previously associated with this measure, CARB requests U.S. EPA approval under the provisions of Section 182(e)(5) of the Clean Air Act.

Table 22 - Coachella Valley Emission Reductions from Regulations Removed from the Planning Emissions Inventory

Measure	2037 NOx (tpd)	2037 ROG (tpd)
Advanced Clean Trucks Regulation, Heavy-Duty Low-NOx Omnibus Regulation, Heavy-Duty Warranty Phase 1 ⁵³	0.7	<0.1
Heavy-Duty Inspection and Maintenance ⁵⁴	1.1	<0.1
Total	1.8	<0.1

2022 State SIP Strategy and the 2022 South Coast AQMP. Table 22 summarizes the emissions reductions originally associated with these programs, which have now been removed from the planning emissions inventories and which CARB staff are now proposing to be reallocated to commitments under 182(e)(5).

Coachella Valley Black Box Totals: 5.1 NOx tpd, 0.4 ROG tpd

CARB Programs in South Coast	2037 NOx Emission Reductions (tpd)	
Current Control Program	9.7	7.8
Potential CARB Emission Reductions Commitments	5.2	7.1
2016 State SIP Strategy Measures (Not yet in baseline inventory)		0.2 < 0.1
2022 State SIP Strategy Measures	5.0	2.0
Clean Air Act Section 182(e)(5)		5.1
Total Reductions	14.9	

Note: numbers may not add up due to rounding

The combined totals of all black box assigned emission reductions are 55.4 tons of NOx per day and 6.6 tons of ROG per day.

Black Box Use Requirements

#1: Measure that needs additional time

As can be seen in the SIP revision or in the screenshots on the previous pages, CARB identifies the measures that need the black box option as the measures or programs that in full or in part did not receive federal approval of their CAA preemption waiver or CARB withdrew the preemption waiver assuming federal disapproval. But are the measures identified?

The first measure being proposed to use the black box in all three air basins is Advanced Clean Cars II. The footnote says “the reductions previously associated with this measure,” which were zero-emission and hybrid sales requirements. That measure was not approved and is being removed from the SIP, so what is the measure that needs additional time that is replacing it?

This same question can be asked of the locomotive measure. The SIP revision states the In-Use Locomotive Regulation was repealed in June, 2025. What measure is replacing this that needs additional black box time?

The last set of measures are related to trucks. Again, the parts not receiving waivers have been removed from the SIP. The Drive Forward: Heavy-Duty Trucks is an actual program replacing the zero-emission trucks measure. Is there an additional truck related black box measure or is it something different - the plan does not say.

It does not appear any specific measures that need additional time through the black box option have been identified.

#2: Full development and adoption now?

The second requirement to use the black box option is to show the new technology measures cannot be fully developed and adopted now. In order to answer this, we need to know what the measures are. I do not think we know because the SIP does not say.

But let's assume the measures are cleaner cars, cleaner locomotives, and cleaner trucks. What about these need additional time? Why can't they be developed and implemented now? One possible answer is - the federal government wouldn't approve the CAA preemption waivers. First, that answer wouldn't apply to the waiver requests that CARB chose to withdraw - no federal decision was made on them, but one could say the federal government wouldn't have approved them. Second, does the federal government not approving the CAA federal preemption waivers satisfy the requirement that California cannot adopt them now?

If we look back at the original wording, the black box option is for new technologies that need additional time for development or additional time to implement improved control technologies. Both of these items were laid out and approved in the 2022 Ozone SIP and the associated measures. CARB identified the schedule and the percentages that went from current conditions to the necessary future state in order to get the emission reductions needed. CARB showed it could be done. Technology did not prevent these measures from being adopted - the federal government did. The black box option does not authorize deferral of control measures based on the current federal enforcement posture.

#3: Schedule of Development Steps and Adoption

By now you're probably aware that no schedule outlining development steps for any measure is listed in the SIP because specific measures prohibited or limited by technology that actually need the black box option do not exist. Deferring measures for 2-4 years pending a change in federal policy does not satisfy the statutory criteria for black box use.

Conclusion

Hopefully you (1) understand what the black box option is, (2) see what removed measures CARB would like to use the black box for, and (3) see in the explanation in numbers 1, 2, and 3 above that the requirements necessary to use the black box option for future technology emission reductions were not fulfilled in this SIP revision.

As a reminder, these requirements have been in every US EPA evaluation of black box uses since 1992; their decisions on what is required has remained constant. A vote to adopt this SIP revision as submitted would approve a plan that does not meet the statutory requirements of the black box option - CAA § 182(e)(5).

Approving this SIP revision without meeting the Black Box (§ 182(e)(5)) requirements will lengthen the time residents of these three air basins are exposed to ozone concentrations above the federal health standard. In your vote on May 28th, please keep those communities at the forefront of your mind. Thank you.

Nayamin Martinez, Executive Director
Central California Environmental Justice Network