

Staff Report

CARB Review of the San Joaquin Valley 2022 Plan for the 70 ppb 8-Hour Ozone Standard

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Executive Summary

This report presents the California Air Resources Board (CARB or Board) staff's assessment of the 2022 Plan for the 2015 8-hour Ozone Standard (2022 Ozone Plan) for the San Joaquin Valley (Valley). CARB staff has concluded that the 2022 Ozone Plan meets State Implementation Plan (SIP) planning requirements of the federal Clean Air Act (Act), including an attainment demonstration, reasonable further progress (RFP), reasonably available control measure (RACM) and transportation conformity demonstrations, an emissions inventory, and other elements. The Board is scheduled to consider the 2022 Ozone Plan on January 26, 2023. If adopted, CARB will submit the 2022 Ozone Plan to the U.S. Environmental Protection Agency (U.S. EPA), along with an aggregate commitment to reduce emissions in the Valley, as revisions to the California SIP.

The Act requires U.S. EPA to set air quality standards and periodically review the latest health research to ensure that standards remain protective of public health. Based on research demonstrating adverse health effects at lower exposure levels, U.S. EPA has set increasingly health-protective ozone standards, beginning with a 1-hour ozone standard in 1979. Later health studies demonstrated the greater effects of exposure to ozone over longer time periods, resulting in U.S. EPA establishing 8-hour ozone standards of 80 parts per billion (ppb) in 1997, 75 ppb in 2008, and 70 ppb in 2015. On June 4, 2018, U.S. EPA designated the San Joaquin Valley as Extreme for the 70 ppb 8-hour ozone standard,¹ requiring attainment by August 3, 2038, meaning the area needs to meet the standard in the 2037 ozone season. CARB and the District have developed SIPs which detail the actions to meet these standards, with each SIP and the corresponding control programs providing the foundation for later planning efforts. The SIP process established under the Act has been an effective and important driver for air quality progress in the Valley.

The 2022 Ozone Plan addresses the 8-hour ozone standard of 70 ppb promulgated in 2015, representing the next building block in planning efforts to meet increasingly health-protective air quality standards. Under previous SIPs, the District has implemented emission reduction control measures for stationary and area sources under its jurisdiction. The District also operates an incentive grants program, which has invested over \$4.5 billion in public and private funding for clean-air projects to date that have reduced emissions by more than 222,000 tons.

CARB's comprehensive strategy to reduce emissions from mobile sources consists of emission standards for new vehicles including zero-emission requirements, an in-use program to reduce emissions from existing vehicles and equipment fleets, cleaner fuels, and incentive programs to accelerate market penetration of the cleanest vehicles beyond what is achieved by regulations alone. Together, these District and CARB efforts represent some of the

¹ 83 FR 25,776, June 4, 2018, effective August 3, 2018, "Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards," <https://www.govinfo.gov/content/pkg/FR-2018-06-04/pdf/2018-11838.pdf>

nation’s most protective air pollution emissions controls necessary to meet the challenging conditions in the Valley.

Building on existing programs, staff developed the 2022 State Strategy for the State Implementation Plan (2022 State SIP Strategy) to support attaining the 70 ppb 8-hour ozone standard across the State. The 2022 State SIP Strategy describes the control measures for State-regulated sources that CARB will pursue to reduce emissions to the levels needed for attainment of the 70 ppb 8-hour ozone standard in the Valley and across California. The measures in the 2022 State SIP Strategy will reduce emissions in the many low-income and underserved communities that continue to experience disproportionately high levels of air pollution and support other CARB planning efforts.

CARB and District measures, including new commitments, will provide reductions in emissions of ozone precursors, oxides of nitrogen (NOx) and reactive organic gases (ROG). The 2022 Ozone Plan reduces NOx emissions by about 73 percent and ROG emissions by about 12 percent between 2017 and 2037. These reductions provide for attainment of the 70 ppb 8-hour ozone standard throughout the Valley by the attainment year of 2037. As part of the 2022 State SIP Strategy, this CARB Staff Report proposes an aggregate commitment of emissions reductions of 25.3 tons per day (tpd) of NOx and 4.6 tpd of ROG in the Valley by 2037, with a subset to come specifically from on-road mobile source measures of 7.5 tpd NOx and 1.6 tpd ROG to be used for transportation conformity purposes. The proposed CARB emissions reductions commitment for the Valley is shown in Table 1.

Table 1 - Proposed CARB Emissions Reductions Commitment in the Valley

	2037 NOx (tpd)	2037 ROG (tpd)
Total Aggregate Emission Reduction Commitment	25.3	4.6
Subset from On-Road Mobile Source Measures	7.5	1.6

On September 22, 2022, the Board approved the 2022 State SIP Strategy and the commitments to pursue the measures included. When coupled with emissions reductions from current programs in the baseline inventory, reductions from measures in the 2022 State SIP Strategy will provide for attainment of the standard by the Valley’s attainment deadline of 2037. CARB staff has concluded that the 2022 Ozone Plan, with the CARB Staff Report, meets the requirements of the Act for the 70 ppb 8-hour ozone standard, and recommends that the Board adopt the aggregate emissions reduction commitment with the 2022 Ozone Plan as revisions to the California SIP.

I. Background

Ozone, a component of health-threatening smog, is a highly reactive and unstable gas capable of damaging living cells, such as those present in the linings of human lungs. This pollutant forms in the atmosphere through complex reactions between NO_x and ROG directly emitted from conventional internal-combustion engine vehicles, industrial plants, consumer products, and many other sources. Ozone is a powerful oxidant—its chemical reactions can be compared to household bleach, which can kill living cells (such as human skin cells) upon contact. Depending on the level of exposure, ozone can cause coughing and sore or scratchy throats; make it difficult to breathe deeply and vigorously; cause pain when taking a deep breath; inflame and damage the airways; make the lungs more susceptible to infection; aggravate lung diseases such as asthma, emphysema, and chronic bronchitis; and increase the frequency of asthma attacks.

The Act requires U.S. EPA to set air quality standards and periodically review the latest research on air pollution and health to ensure that standards remain protective of public health. Based on research demonstrating adverse health effects at lower exposure levels, U.S. EPA has set increasingly health-protective ozone standards, beginning with a 1-hour ozone standard in 1979. Later health studies demonstrated an even greater adverse response of exposure to ozone over longer time periods, resulting in U.S. EPA establishing 8-hour ozone standards of 80 ppb in 1997, 75 ppb in 2008, and 70 ppb in 2015.

Effective August 3, 2018, U.S. EPA designated the Valley as a nonattainment area with an Extreme classification and an August 3, 2038, attainment date.² To address the 70 ppb 8-hour ozone standard, on December 15, 2022, the District adopted the 2022 Ozone Plan. Due to the timing of the ozone season, the 2022 Ozone Plan must demonstrate the Valley will attain the standard in the calendar year of 2037, the last full ozone season prior to the attainment date. The 2022 Ozone Plan also addresses the Act's requirements applicable to an Extreme 8-hour ozone nonattainment area, consistent with U.S. EPA's 2018 Implementation Rule for the 70 ppb 8-hour ozone standard (Implementation Rule).³

II. Nature of the Ozone Problem in the San Joaquin Valley

The Valley covers an area of 23,490 square miles⁴ and is home to approximately 4 million residents. The Valley is bordered on the west by the coastal mountain ranges and on the east by the Sierra Nevada range. Most of the population is centered in the large urban areas of Bakersfield, Fresno, Modesto, and Stockton. The Valley can be divided into three regions

² 83 FR 25,776, Posted June 4, 2018, and effective August 3, 2018, "Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards," <https://www.govinfo.gov/content/pkg/FR-2018-06-04/pdf/2018-11838.pdf>

³ 83 FR 62,998, Posted December 6, 2018, "Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements," <https://www.govinfo.gov/content/pkg/FR-2018-12-06/pdf/2018-25424.pdf>

⁴ See Cal. Code Regs., tit. 17, § 60107.

characterized by distinct geography, meteorology, and air quality: the northern, central, and southern regions. A third of the Valley population lives in the northern region (which includes San Joaquin, Stanislaus, and Merced Counties). This lowland area is bordered by the Sacramento Valley and Delta lowland to the north, the central portion of the Valley to the south, and mountain ranges to the east and west. Because of the marine influence, which extends into this area through gaps in the coastal mountains to the west, the northern Valley experiences a more temperate climate than the rest of the air basin. These cooler temperatures and the predominant air flow patterns generally favor better air quality.

Similar to the northern region of the Valley, the central region (Madera, Fresno, and Kings Counties) and southern region (Tulare County and the western part of Kern County) are also low-lying areas, flanked by mountains on their west and east sides. The worst air quality within the Valley occurs in these two regions, where the population is primarily clustered around the Fresno and Bakersfield urban areas. In these regions the interaction between geography, climate, and a mix of natural (biogenic) and anthropogenic emissions pose significant challenges to air quality progress.

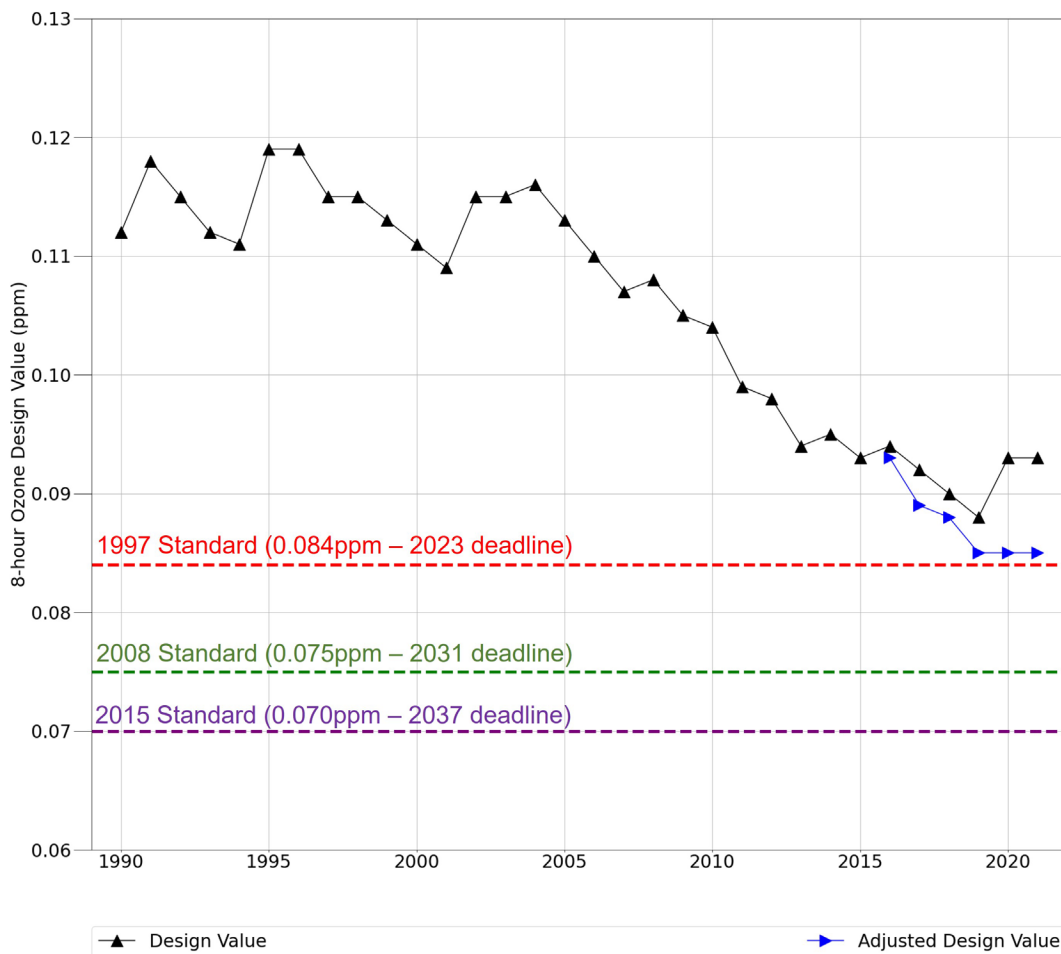
The southern region represents the terminus of the Valley and is flanked by mountains on the south. The surrounding mountains in both areas act as barriers to air flow and, combined with recirculation patterns and stable air, trap emissions and pollutants near the Valley floor. The higher temperatures and more stagnant conditions in these two regions lead to a build-up of ozone and overall poorer air quality.

During the summer months, high temperatures, atmospheric stagnation, and temperature inversions create an environment conducive to the formation of elevated ozone levels. The Valley averages over 260 sunny days per year. Nearly 90 percent of the annual precipitation in the Valley falls between the months of November through April, with little to none during the summer months. Ozone concentrations tend to be the highest from June to September, because high pressure systems that influence Valley meteorological and dispersion conditions occur most frequently during the summer months. Ozone concentrations rise from the beginning of the year toward the summer where levels reach their peak by August when temperatures are usually the warmest and when high pressure and stagnation over the Valley are most common.

Design values are used to demonstrate an area's ozone compliance status in relation to the standard. The design value is the 4th high, 8-hour ozone value averaged over three years. Figure 1 shows the design value concentration in the Valley from 2000 to 2021. In the past two decades, the 8-hour ozone design value within the Valley has declined steadily, but it has also exhibited a fair amount of variability due to year-to-year variability in meteorology and the associated changes in biogenic emissions. Overall, Valley-wide design values decreased by 16.2 percent from 111 ppb in 2000 (when all monitoring sites in the Valley had a design value that exceeded the 70 ppb 8-hour ozone standard) to 93 ppb in 2020. The number of days exceeding the 70 ppb 8-hour ozone standard declined by 22.6 percent from 155 to 120. Based on preliminary 2022 data, two monitoring sites in the Valley (Tracy and Tranquility) are currently meeting the 70 ppb 8-hour ozone standard.

In recent years, the prevalence of wildfires during the summer ozone season significantly impacted the air quality in the Valley. High ozone concentrations were observed at several Valley sites on days affected by forest fire (see Appendix H of the 2022 Ozone Plan for further details) and likely caused the upward trend in the design values seen between 2019 and 2020. To assess the impact of forest fires in 2020, 8-hour ozone design values were calculated by excluding⁵ high ozone days from these forest fires. After excluding the fire impacts, 8-hour ozone design values would be 85 ppb in 2020 (8 ppb lower than the observed 93 ppb design value). The number of exceedance days also dropped to 111 (from 119) in 2020 when the forest fire days were excluded.

Figure 1 - Ozone Design Values (parts per million, ppm) in the San Joaquin Valley



En route to attaining the 70 ppb 8-hour ozone standard, the Valley is also on track to meet the 8-hour ozone standard of 84 ppb by the projected 2023 attainment date and is making

⁵ CARB must submit extensive technical documentation and U.S. EPA must approve to officially exclude exceptional events from air quality datasets. The exceptional events discussed have not been submitted to or approved by U.S. EPA; however, CARB and the District are in the process of documenting the events for submittal.

progress toward attaining the 8-hour ozone standard of 75 ppb by the 2031 attainment deadline.

III. Emission Inventory

An emissions inventory is a critical tool used to evaluate, control, and mitigate air pollution. At its core, an emissions inventory is a systematic listing of the sources of air pollutants with the amount of pollutants emitted from each source or category over a given time period. SIPs must include emissions inventories for the nonattainment area as a basis for evaluating attainment and what sources may need to be targeted through control measures. The planning emissions inventory is divided into three major categories: stationary, area-wide, and mobile sources. The summer season inventory is used for ozone planning because it reflects the activity levels and conditions presented when higher ozone levels occur in the Valley.

The 2022 Ozone Plan uses a 2017 baseline inventory. The inventory uses 2017 emissions and activity levels; inventories for other years are back- or forecasted from that base inventory. The inventories reflect District rules submitted to U.S. EPA through March 2022 and CARB mobile source regulations adopted through December 2021.

On-road motor vehicle emissions were generated using CARB's mobile source emissions model, EMFAC2017. On-road motor vehicle activity data reflect the 2019 Federal State Transportation Improvement Program (FSTIP) activity data provided by the eight Metropolitan Planning Organizations (MPOs) in the Valley. Off-road mobile source emissions were generated using CARB's OFFROAD model. Both models were developed for the 2022 ozone SIP revisions and represent significant improvements over models used in prior SIP updates.

Table 2 and Table 3 summarize the NO_x and ROG emissions in the San Joaquin Valley. Within these categories, trains, farm equipment, heavy-heavy-duty diesel trucks, and off-road equipment contribute the largest portions of NO_x emissions in the Valley's 2037 baseline inventory. As discussed in Chapter 2 and throughout the 2022 Ozone Plan, the Valley's attainment challenges under the 70 ppb 8-hour ozone standard occur in the summer months. This plan focuses on summer (May through October) average daily emissions inventories, with emissions presented as tons per day. The emission inventories in the 2022 Ozone Plan include emissions for the San Joaquin Valley Air Basin for the years 2017, and 2022 through 2037. The base year (the year from which the inventory is projected forward and backward) for these inventories is 2017. 2037 is the Extreme attainment deadline for the 70 ppb 8-hour ozone standard.

Table 1 - San Joaquin Valley NO_x Emissions
(tpd, summer planning inventory)

Source Category	2017	2037
Stationary and Area-wide	32.2	19.8
On-Road Motor Vehicles	100.6	20.9
Off-Road Vehicles and Equipment	99.6	46.6
TOTAL	232.4	87.3

Source: Appendix B, 2022 Ozone Plan
Numbers may not add due to rounding

Table 2 - San Joaquin Valley ROG Emissions
(tpd, summer planning inventory)

Source Category	2017	2037
Stationary and Area-wide	238.7	252.1
On-Road Motor Vehicles	33.9	13.4
Off-Road Vehicles and Equipment	53.1	25.5
TOTAL	325.7	290.9

Source: Appendix B, 2022 Ozone Plan
Numbers may not add due to rounding

Appendix B of the 2022 Ozone Plan presents a summary of the data sources with revisions and improvements made to the emission inventory.

Federal New Source Review (NSR) rules require new and modified major stationary sources that increase emissions in amounts exceeding specified thresholds to provide emission reduction offsets to mitigate the emission growth. Emission reduction offsets represent either on-site emission reductions or the use of banked emission reduction credits (ERC). ERCs are voluntary, surplus emission reductions, which are registered, or banked, with the District for future use as offsets under the emission rules.

Per U.S. EPA policy, ERCs banked before the plan's emission inventory base year (2017 for this plan) must be explicitly treated as emissions in the air by being included in future growth or added to the modeling inventory. Table 4 shows the expected ERC usage in the Valley and the amount of ERCs that were not captured by growth. The emissions in the "ERC Beyond Growth" category were added to the modeling inventory per U.S. EPA policy. Further detail on ERCs is provided in Appendix I of the 2022 Ozone Plan.

Table 3 - San Joaquin Valley Expected Use of Emission Reduction Credits (ERCs)
(tpd, annual planning inventory)

Pollutant	ERC Total	ERC Beyond Growth
NO _x	3.40	2.43
ROG	9.60	0.0

Source: Appendix I, 2022 Ozone Plan

IV. Attainment Demonstration

SIPs must identify both the magnitude of reductions and the actions necessary to achieve those reductions as part of demonstrating attainment of the standard. CARB and the District have prepared an attainment demonstration that provides for expeditious attainment of the 70 ppb 8-hour ozone standard. The attainment demonstration includes the benefits of CARB and District control programs that provide ongoing emission reductions. Continued implementation of these programs provides new emission reductions each year. The attainment demonstration also includes emissions reductions from new measures committed to as a part of the 2022 State SIP Strategy adopted by the Board in September 2022.

The Act requires the use of air quality modeling to relate ozone levels to emissions in a region and simulate future air quality based on changes in emissions. The starting point for the attainment demonstration is the monitored design value, which is used to determine the compliance with the ozone standards. The design value for a specific monitor and year represents the three-year average of the annual 4th highest monitored 8-hour ozone level. The nonattainment area design value is the highest value of the monitoring sites. U.S. EPA recommends using an average of three design values to better account for the year-to-year variability in ozone levels due to meteorology. This average design value is called a weighted design value (in the context of the SIP, the weighted design value will also be referred to as the reference year design value or DVR). After consultation with U.S. EPA Region 9 staff, CARB decided to use 2018 as the reference year for modeling for the northern portion of the State. 2018 also represents the reference year for projecting design values to the future. Site-specific design values should be calculated for the three-year periods ending in 2018, 2019, and 2020, and then these three design values are averaged. However, 2020 was an atypical year with large societal changes in response to the COVID19 pandemic and is not suitable for the DVR calculation. To remove the impact from 2020 observations, CARB used an alternative methodology for calculating the average design values by excluding year 2020. In this method, the 8-hour ozone design value for 2020 was replaced by the two-year average of the 4th highest 8-hour ozone concentrations from 2018 and 2019. CARB conveyed this approach to U.S. EPA Region 9 staff as part of the process for developing the 2022 Ozone Plan, and they stated that this approach was reasonable.

The modeled attainment demonstration in the 2022 Ozone Plan was prepared using photochemical dispersion and meteorological modeling tools developed in response to

U.S. EPA modeling guidelines⁶ and recommendations from air quality modeling experts. The model uses emission inventories, with measurements of meteorology and air quality, to establish the relationship between emissions and air quality. The modeling is used to identify the benefits of controlling ozone precursors and the most expeditious attainment date. The anthropogenic emissions inventory used in this modeling was based on the California Emissions Projection Analysis Model (CEPAM) version 1.03 augmented with updates consistent with CEPAM version 1.04 (CEPAMv1.04) for select source categories. For a detailed description of the anthropogenic emissions inventory, updates to the inventory, and how it was processed from the planning totals to a gridded inventory for modeling, see Appendix G of the 2022 Ozone Plan.

For the Valley, a region classified as Extreme nonattainment, the modeling base year is 2018 and the attainment year is 2037. The attainment demonstration modeling includes the benefits of CARB’s existing mobile source control program of measures adopted through December 2021 and District rules submitted through March 2022. The attainment demonstration further includes emissions reductions from new measures committed to as a part of the 2022 State SIP Strategy. These measures provide the necessary control strategy, demonstrating that the Valley will meet the 70 ppb 8-hour ozone standard by 2037. Table 5 summarizes the 2037 emissions modeled in the attainment demonstration, including emissions reductions from the CARB measures commitments.

Table 4 - 2037 Modeled San Joaquin Valley NOx and ROG Emissions
(tpd, summer planning inventory)

2037 Emissions	NOx	ROG
Baseline Emissions Inventory	87.3	291.0
CARB Emissions Reductions Commitment	25.3	4.6
Attainment Emissions Inventory	62.0	286.8*

Source for baseline emissions inventory and attainment emissions inventory: Appendix F, 2022 Ozone Plan
Numbers may not add up due to rounding

* The attainment emissions inventory total does not reflect the 0.4 tpd ROG emissions reductions expected from the 1,3-Dichloropropene pesticide measure because the modeling attainment demonstration was completed prior to reductions being estimated from this measure.

Further detail on the modeled attainment demonstration is provided in Chapter 5 and Appendix F of the 2022 Ozone Plan.

A. Weight of Evidence

U.S. EPA modeling guidance requires that modeled attainment demonstrations come with a weight of evidence (WOE) analysis to provide a set of complementary analyses. Examining an air quality problem in many ways creates a more informed basis for the attainment strategy and better understanding of the overall problem and the level and mix of emissions controls

⁶ U.S. EPA, 2014, Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5 and Regional Haze, available at https://www.epa.gov/ttn/scram/guidance/guide/Draft_O3-PM-RH_Modeling_Guidance-2014.pdf

needed for attainment. CARB staff prepared the WOE, which is provided in Appendix H of the 2022 Ozone Plan. WOE analyses include assessment of trends in ozone air quality, ozone precursor emission trends, meteorology impacts on ozone air quality trends, and summary of corroborating analyses. Photochemical modeling performed to support the 2022 Ozone Plan shows that, with current and new emission reductions commitments, the Valley can be expected to attain the 70 ppb 8-hour ozone standard by 2037, which is consistent with the projection based on the historical design value trend. This is supported by additional analyses using observed ozone levels, meteorology, and precursor emissions. The WOE package comprises a set of complementary analyses that supplement the SIP-required modeling, providing additional support for the attainment demonstration based. Some findings in the WOE include:

- Trends for multiple indicators of ozone air quality have shown progress in the Valley, with a decrease in basin-wide design value of 16 percent from 2000 to 2020, and a 24 percent reduction in design values when looking at the adjusted design values that removed wildfire impacts.
- From 2000-2020, ambient NO_x concentrations across the Valley have decreased by 61 percent.
- Exceedance days have decreased by 25 percent in the past two decades, and the severity of ozone has significantly decreased throughout the Valley.
- Two of the five sites in the northern region are already meeting the standard. The highest site in 2020, Turlock-S Minaret Street, has shown a decrease in the official design value of 0.016 parts per million (ppm) (0.096 to 0.080 ppm) since 2000 and approximately 68 percent drop in exceedance days in the past two decades.
- The central region has exhibited progress, with a declining trend in design values over the past two decades. The highest site, Clovis-N Villa Avenue, has shown a decrease in official design value of 0.025 ppm (0.109 to 0.084 ppm) since 2000 and approximately 56 percent drop in exceedance days in the past two decades.
- Sites in the southern region have shown progress over the past two decades. The design site, Edison, has shown a decrease in the official design value of 0.018 ppm (0.111 to 0.093 ppm) since 2000 and approximately 30 percent drop in exceedance days in the past two decades.
- After wildfire impact days were removed, all the regions show a greater decrease in design values. Turlock-S Minaret Street shows a decrease of 0.018 ppm (0.096 to 0.079 ppm), Clovis-N Villa Avenue shows a decrease of 0.030 ppm (0.109 to 0.079 ppm), and Edison shows a decrease of 0.027 ppm (0.111 to 0.084 ppm).
- Accounting for meteorological variability, season average ozone levels declined between 2010-2020 in all three regions of the Valley. Met-adjusted design value trends show a greater response to emission reductions and a faster decline rate throughout the Valley.
- From the emission inventory, there has been a basin-wide baseline reduction of 64 percent (552 to 196 tpd) in NO_x and a reduction of 37 percent (500 to 314 tpd) in volatile organic compounds (VOCs) from 2000 to 2020. These reductions have driven the VOC/NO_x ratio in the Valley towards and into the NO_x-limited regime.

- The ozone weekday-weekend analysis supports that the Valley is transitioning to a NOx-limited regime.
- The weekday-weekend analysis in 2020 was significantly lower than other years due to the additional NOx emission reductions caused by the pandemic. This suggests that NOx emission control strategies in the Valley are expected to be effective in reducing ozone levels in future years.
- Based on all available ambient precursor trends, emissions inventory, weekday-weekend analyses, and field-based studies, the Valley will respond to NOx reductions.
- Between 2020 and 2037, current control programs are expected to reduce NOx emissions by approximately 36 percent (196 to 126 tons per day). However, recently adopted CARB and District NOx emission control measures and CARB's new NOx reduction commitments will further reduce NOx emissions.

Taken together, all these factors indicate that all sites in the Valley can be expected to attain the 70 ppb 8-hour ozone standard by 2037 with current CARB and District control programs and the aggregate emission reduction commitment for 2022 State SIP Strategy measures.

B. Control Strategy

The ongoing emission reductions from continued implementation of CARB and District current control programs, with reductions from the measures described in the 2022 State SIP Strategy, provide the attainment control strategy for the 2022 Ozone Plan. The following sections describe the ongoing and new CARB and District control measures that provide the emission reductions in the attainment demonstration.

1. CARB's Current Control Program

Given the severity of California's air quality challenges, CARB has implemented the most stringent mobile source emissions control program in the nation. CARB's comprehensive strategy to reduce emissions from mobile sources consists of emissions standards for new vehicles, in-use programs to reduce emissions from existing vehicle and equipment fleets, cleaner fuels, and incentive programs to accelerate the penetration of the cleanest vehicles beyond that achieved by regulations alone. A detailed description of the current mobile source control programs is included in Appendix D of the 2022 Ozone Plan.

2. CARB Commitments

SIPs may contain enforceable commitments to achieve the level of emissions necessary to meet federal air quality standards, as defined by the attainment demonstration. The 2022 State SIP Strategy lists new SIP measures and quantifies potential emissions reduction SIP commitments for the Valley based on the measures identified and quantified to date. Adoption of the 2022 State SIP Strategy and the measure schedule by the Board forms the basis of the commitments for emission reductions by the attainment deadlines for each region that will be proposed for Board consideration alongside the respective nonattainment area's SIP. The commitments consist of two components:

1. A commitment to bring an item to the Board for defined new measures or take other specified actions within CARB's authority; and
2. A commitment to achieve aggregate emission reductions by specific dates.

As part of each SIP needing emission reductions from the State, the total aggregate emission reductions and the obligation to make certain proposals to the Board or take other actions within CARB's authority specified in the 2022 State SIP Strategy would become enforceable upon approval by U.S. EPA. While the 2022 State SIP Strategy discusses a range of measures and actions, those measures and actions would still be subject to CARB's formal approval process and would not be final until the Board takes action.

a. Commitment to Act on Measures

For each of the SIP measures shown in Table 6, CARB committed in the 2022 State SIP Strategy to address each measure as described in this document. For each measure committed to, CARB staff would undertake the actions detailed for each measure. In the instance of measures that involve the development of a rule under CARB's regulatory authority, CARB commits to bring a publicly noticed item before the Board that is either a proposed rule, or is a recommendation that the Board direct staff to not pursue a rule covering that subject matter at that time. This recommendation would be based on an explanation of why such a rule is unlikely to achieve the relevant emission reductions in the relevant timeframe and would include a demonstration that the overall aggregate commitment will be achieved despite that rule not being pursued. This public process and CARB hearing would provide additional opportunity for public and stakeholder input, as well as ongoing technology review and assessments of costs and environmental impacts.

The measures, as proposed by staff to the Board or adopted by the Board, may provide more or less than the initial emission reduction estimates. In addition, action by the Board may include any action within its discretion.

Table 6 - CARB Measures and Schedule

Proposed Measure	Agency	Action	Implementation Begins
On-Road Heavy-Duty			
Advanced Clean Fleets Regulation	CARB	2023	2024
Zero-Emissions Trucks Measure	CARB	2028	2030
On-Road Light-Duty			
On-Road Motorcycle New Emissions Standards	CARB	2022	2025
Clean Miles Standard	CARB	2021	2023
Off-Road Equipment			
Tier 5 Off-Road Vehicles and Equipment	CARB	2025	2029
Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation	CARB	2022	2024
Transport Refrigeration Unit Regulation Part 2	CARB	2026	2028
Commercial Harbor Craft Amendments	CARB	2022	2023
Cargo Handling Equipment Amendments	CARB	2025	2026
Off-Road Zero-Emission Targeted Manufacturer Rule	CARB	2027	2031
Clean Off-Road Fleet Recognition Program	CARB	2025	2027
Spark-Ignition Marine Engine Standards	CARB	2029	2031
Other			
Consumer Products Standards	CARB	2027	2028
Zero-Emission Standard for Space and Water Heaters	CARB	2025	2030
Enhanced Regional Emission Analysis in State Implementation Plans ⁷	CARB	2025	2023
Pesticides: 1,3-Dichloropropene Health Risk Mitigation	DPR	2022	2024
Primarily-Federally and Internationally Regulated Sources – CARB Measures			
In-Use Locomotive Regulation	CARB	2023	2024
Future Measures for Aviation Emissions reductions	CARB	2027	2029

b. Pesticide Measure for 1,3-Dichloropropene

The September 2022 Board hearing to consider the 2022 State SIP Strategy included public comments on the Pesticide Measure. CARB added California Department of Pesticide Regulation’s (DPR) 1,3-Dichloropropene (1,3-D) regulation (Pesticide Measure)⁸ to the 2022 State SIP Strategy per DPR’s request. This regulation is under development by DPR and will address cancer and acute risk from the use of 1,3-D by shifting to application methods with lower 1,3-D emissions or use other measures to reduce exposure.

At the hearing to adopt the 2022 State SIP Strategy, the Board directed CARB staff to quantify the expected emissions reductions from the Pesticide Measure in the 2022 Ozone

⁷ Proposed CARB finalization

⁸ Department of Pesticide Regulation, Notice of Proposed Regulatory Action, Health Risk Mitigation and Volatile Organic Compound Emission Reduction for 1,3-Dichloropropene DPR Regulation No. 22-005, November 15, 2022, [DPR 22-005 Notice of Proposed Regulation Action and Notice of Public Hearing on a Proposed Ozone State Implementation Plan Amendment Regarding Pesticide Emissions in the Sacramento Metro, San Joaquin Valley, South Coast, Southeast Desert, and Ventura Nonattainment Areas \(ca.gov\)](#).

Plan. Since the September 2022 hearing, CARB has coordinated with DPR to obtain their quantified estimated emissions reductions associated with the Pesticide Measure. These expected emissions reductions (0.4 tpd ROG in the San Joaquin Valley in 2037) are included as part of CARB's aggregate emission reduction commitment for the San Joaquin Valley, as shown below in Table 9.

Staff were also directed at the September 2022 hearing to describe CARB's authority over pesticides. DPR has primary and broad authority to regulate pesticides. CARB has more limited authority to regulate only the emissions of pesticides that are toxic air contaminants and cannot regulate the use of pesticides—that is, where, when, and how pesticides are used. At this time, CARB is supporting DPR to use its broad authorities to limit harmful exposures to pesticides impacting communities across the State. Going forward, CARB will continue to partner with DPR and explore the best methods to limit these exposures, while also considering reducing emissions of volatile organic compounds and greenhouse gases, including through our work to discuss with communities what actions will be most effective to respond to their priority needs.

c. Commitment to Achieve Emission Reductions

The following section describes the estimated emission reductions and commitments from the SIP measures identified and quantified to date for the Valley. While the 2022 State SIP Strategy includes estimates of the emission reductions from each of the individual new measures, CARB's overall commitment is to achieve the total emission reductions necessary from State-regulated sources to attain the 70 ppb 8-hour ozone standard, reflecting the combined reductions from the existing control strategy and new measures. Therefore, if a particular measure does not get its expected emission reductions, the State's overall commitment to achieving the total aggregate emission reductions still exists. If actual emission decreases occur that exceed the projections reflected in the current emission inventory and the 2022 State SIP Strategy, CARB will submit an updated emissions inventory to U.S. EPA as part of a SIP revision. The SIP revision would outline the changes that have occurred and provide appropriate tracking to demonstrate that aggregate emission reductions sufficient for attainment are being achieved through enforceable emission reduction measures. CARB's emission reduction commitments may be achieved through a combination of actions including, but not limited to: the implementation of control measures; the expenditure of local, State or federal incentive funds; or through other enforceable measures.

Air quality modeling indicates that total NO_x emissions from all sources in the Valley will need to decrease to approximately 62 tpd in 2037 to meet the 70 ppb 8-hour ozone standard. A significant fraction of the needed reductions will come from the existing control program. In addition, although most of the 2016 State SIP Strategy measure commitments have been adopted, there is one (Zero-Emission Forklift) that the Board will be acting upon over the next year, and two that were recently adopted but are not yet accounted for in the baseline emissions inventory (Advanced Clean Cars II, Transport Refrigeration Unit Part 1), as outlined in Table 7. Action will be taken on the remaining measures in the coming year.

Table 7 - Reductions from Remaining 2016 State SIP Strategy Measures

Measure	Action	Implementation Begins	2037 NO _x (tpd)	2037 ROG (tpd)
Advanced Clean Cars II	2022	2026	1.6	1.3
Transport Refrigeration Unit Part I	2022	2023-2024	0.3	0.3
Zero-Emission Forklift	2023	2026	<0.1	<0.1
Total			1.9	1.7

Numbers may not add up due to rounding.

d. CARB’s Aggregate Emission Reduction Commitment

CARB proposes to commit, in support of the 2022 Ozone Plan for the San Joaquin Valley, to achieve an aggregate emission reduction in the Valley by 2037 of 25.3 tpd of NO_x and 4.6 tpd ROG. This commitment is shown below in Table 8. Collectively, emissions reductions from CARB’s current control programs, reductions from the 2016 State SIP Strategy measures still to be adopted, and reductions estimated from the measures in the 2022 State SIP Strategy provide the emissions reductions needed from State sources to support attainment of the 70 ppb 8-hour ozone standard in the Valley. The CARB aggregate emission reduction commitment reflects a limited portion of the reductions needed for attainment, 15.8 percent and 12.3 percent for NO_x and ROG, respectively.

Table 8 - San Joaquin Valley NO_x and ROG Emission Reductions from CARB Programs

CARB Programs in San Joaquin Valley	2037 NO _x Emissions Reductions (tpd)	2037 ROG Emissions Reductions (tpd)
Current Mobile Source Control Program ⁹	134.5	32.9
CARB Emissions Reductions Commitments	25.3	4.6
2016 State SIP Strategy Measures (Not yet in baseline inventory)	1.9	1.7
2022 State SIP Strategy Measures	23.4	2.9
Total Reductions	159.8	37.5
Aggregate Emissions Reductions Commitment: Percent of Total Reductions	15.8	12.3

Numbers may not add up due to rounding.

⁹ Source: CARB 2019 CEPAMv1.04

The measures in Table 9 reflect CARB commitments for State actions and the estimated emissions reductions for the Valley.

Table 9 - San Joaquin Valley Expected Emissions Reductions from the 2022 State SIP Strategy

Proposed Measure	2037 NOx (tpd)	2037 ROG (tpd)
On-Road Heavy-Duty		
Advanced Clean Fleets Regulation	5.9	0.4
Zero-Emissions Trucks Measure	NYQ	NYQ
Total On-Road Heavy-Duty Reductions	5.9	0.4
On-Road Light-Duty		
On-Road Motorcycle New Emissions Standards	0.3	0.6
Clean Miles Standard	<0.1	<0.1
Total On-Road Light-Duty Reductions	0.3	0.6
Off-Road Equipment		
Tier 5 Off-Road Vehicles and Equipment	1.4	NYQ
Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation	0.6	<0.1
Transport Refrigeration Unit Regulation Part 2	3.8	0.5
Commercial Harbor Craft Amendments	<0.1	<0.1
Cargo Handling Equipment Amendments	<0.1	<0.1
Off-Road Zero-Emission Targeted Manufacturer Rule	NYQ	NYQ
Clean Off-Road Fleet Recognition Program	NYQ	NYQ
Spark-Ignition Marine Engine Standards	0.3	0.6
Total Off-Road Equipment Reductions	6.1	1.2
Other		
Consumer Products Standards	-	NYQ
Zero-Emission Standard for Space and Water Heaters	NYQ	NYQ
Enhanced Regional Emission Analysis in State Implementation Plans	NYQ	NYQ
Pesticides: 1,3-Dichloropropene Health Risk Mitigation	--	0.4
Total Other	NYQ	NYQ
Primarily-Federally and Internationally Regulated Sources – CARB Measures		
In-Use Locomotive Regulation	11.2	0.4
Future Measures for Aviation Emission Reductions	NYQ	NYQ
Total Primarily-Federally and Internationally Regulated Sources – CARB Measures Reductions	11.2	0.4
Aggregate Emissions Reductions	23.4	2.9

Numbers may not add up due to rounding.

As a part of the aggregate emission reduction commitment for the Valley, CARB staff proposes to commit to emissions reductions specifically from on-road mobile sources. CARB continues to have an aggregate emission reduction commitment which is a sum of emissions reductions from on- and off-road mobile sources, consumer products, and other State-regulated sources as outlined above. The on-road mobile source commitment will provide the enforceability needed to support the use of motor vehicle emissions budgets that factor in reductions from the on-road mobile source measures in the 2022 State SIP Strategy. The proposed on-road mobile source commitment, shown below in Table 10, is a subset of

emissions reductions from the aggregate emission reduction commitment and is not additive to the aggregate emission reduction commitment.

Table 10 - Emissions Reductions from On-Road Mobile Source Measures

On-Road Mobile Source Reductions	2037 NOx (tpd)	2037 ROG (tpd)
San Joaquin Valley	7.5	1.6

e. 2022 State SIP Strategy and Title VI of the Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 (Title VI) provides that no person in the United States shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.¹⁰ As a recipient of federal funds, CARB must ensure it complies with Title VI and U.S. EPA’s Title VI implementation regulations¹¹ in its relevant programs and policies. In developing the 2022 State SIP Strategy robust suite of control measures, staff engaged in a thorough public process that addresses the requirements of Title VI. CARB will continue to address the requirements of Title VI in implementation of the 2022 State SIP Strategy and related Clean Air Act implementation activities. Written guidance from U.S. EPA is needed to provide additional detail on Title VI requirements and expectations and support for effective implementation efforts.

Many low-income and disadvantaged communities in nonattainment areas, and across the State, continue to experience disproportionately high levels of air pollution and the resulting detrimental impacts to their health from widespread pollution from a variety of activities, many longstanding. Research¹² shows large disparities in exposure to pollution between disadvantaged communities and other communities. There are disparities between white and non-white populations in California, with Black and Latino populations experiencing significantly greater air pollution impacts than white populations. Mobile source pollution exposures show some of the highest disparities.¹³ Mobile sources are the largest sources of pollution exposure disparity for Black populations and disadvantaged community residents, when compared to the average population in California. Specifically, mobile sources accounted for 45 percent of exposure disparity for the Black population, and 37 percent of exposure disparity for people in disadvantaged communities. While significant progress has been made in reducing mobile and stationary source pollution in California through regulatory and other program activities, disparities in the location of pollution and cumulative exposures continue despite CARB’s efforts to reduce pollution across the state.

CARB prioritizes environmental justice, incorporating racial equity, and conducting meaningful community engagement in its policy and planning efforts and programs to address the longstanding environmental and health inequities from elevated levels of toxic

¹⁰ 42 U.S.C. section 2000d.

¹¹ 40 C.F.R. Part 7.

¹² Apte et al. (2019). A Method to Prioritize Sources for Reducing High PM2.5 Exposures in Environmental Justice Communities in California. CARB Research Contract Number 17RD006

¹³ Ibid.

air contaminants, criteria pollutants, and secondary impacts of climate change. It is imperative to optimize California's control programs to maximize emissions reductions and provide targeted near-term benefits in those communities that continue to bear the brunt of poor air quality. Specific efforts include development of community air monitoring networks to learn about local exposures, development of a racial equity assessment lens to consider benefits and burdens of CARB programmatic work in the planning stages, continuously increasing and improving community engagement efforts, and implementation of Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) as described in more detail below. While significant progress has been made to address air pollution statewide and in local communities, ensuring all Californians have access to healthy air quality is imperative.

Besides these important efforts, the 2022 State SIP Strategy measures such as the Advanced Clean Fleets and In-Use Locomotive Regulations will reduce mobile source emissions from heavy-duty trucks and other sources around warehouses, railyards, and ports, as well as reducing other emissions, which in turn will reduce corresponding health risk in California's most impacted communities.

CARB prioritized public participation as an essential part of developing the measures in the 2022 State SIP Strategy. CARB initiated the public process with a workshop in July 2021, and after the workshop, staff reached out to and met with community-based organizations who provided input on the potential control measures. CARB released the Draft Measures document which considered the input from community-based organizations and comments during the first workshop. CARB staff held a second workshop in October 2021 and received input from stakeholders. CARB staff also participated in the Valley control measure workshops as part of their SIP development process. The Draft 2022 State SIP Strategy was released in January 2022, prior to a third workshop, and informational update at the Board Meeting in February 2022. The input from numerous stakeholders and community-based organizations framed the control measures in the strategy such as the Zero-Emissions Trucks and Pesticide Measures. These workshops and Board updates provided forums in both English and Spanish and allowed special accommodations if requested for the proposed measures to be discussed in a public setting and provide additional opportunity for public feedback, input, and ideas. And finally, CARB released the Proposed 2022 State SIP Strategy and hosted a fourth workshop in August 2022, prior to the Board adopting the 2022 State SIP Strategy in September 2022. The workshops were well attended by stakeholders, including community-based organizations. CARB staff listened to stakeholders, evaluated their recommendations, and included some of these recommendations as measures that were appropriate for the 2022 State SIP Strategy.

Following the Board's approval of the 2022 State SIP Strategy, the public processes will continue as each measure within the strategy goes through its own public process to engage with impacted communities and stakeholders to further develop the measures prior to being brought to the Board for consideration as a regulation or other program. As development and implementation of these measures progress, CARB staff will continue to identify and implement opportunities to mitigate air pollution associated with racial inequities and meaningfully engage and partner with communities most impacted to address longstanding disparities and challenges. CARB will also continue to partner with other authorities such as

air districts, other State agencies, and the federal government to ensure emissions reductions are achieved.

In addition to SIP efforts and individual regulatory processes reducing air pollution statewide, AB 617 requires community-focused and community-driven action to reduce air pollution and improve public health in communities that experience disproportionate burdens from exposure to air pollutants in California. CARB implements AB 617 through its Community Air Protection Program. AB 617 has created new opportunities for CARB and the local air districts to understand community member concerns through active participation in envisioning, developing, and implementing actions to clean the air in their communities. The Community Air Protection Program was first implemented starting in 2018 and has since had 17 communities selected into the Program as of December 2022. CARB is now engaging in a process to provide greater opportunities and additional support for impacted communities across the State through the revision of the AB 617 Statewide Strategy, also referred to as the Program Blueprint. The revision of the Program Blueprint seeks to design more efficient approaches to maximize similar air quality benefits for more impacted communities. Moving forward, the AB 617 Community Air Protection Program and complementary environmental justice and racial equity work across CARB programs, policies and SIP planning efforts will continue to evolve and grow. These connected efforts, as well as interagency efforts, will provide additional pathways to address Title VI requirements and support achieving the goal where zip code or race does not predict air pollution exposures. CARB has reviewed U.S. EPA and U.S. Department of Justice resources for Title VI and environmental justice policies, and looks forward to written Title VI guidance from U.S. EPA to address Act section 110(a)(2)(E) as the State develops future clean air plans.

3. District Control Program

Consistent with its regulatory authority, the District has adopted rules for reducing emissions from a broad range of stationary and area sources. Since 2017, the District has amended seven rules which provide NOx emission reductions, primarily in connection with efforts to attain multiple federal air quality standards for fine particulate matter (PM2.5). These measures are shown in Table 11.

Table 11 - District Rules Achieving NOx Emission Reductions Amended Since 2017

Measure	Amended
Rule 4306 Boilers, Steam Generators, and Process Heaters – Phase 3	December 17, 2020
Rule 4311 Flares	December 17, 2020
Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBTU/hr	December 17, 2020
Rule 4352 Solid Fuel Fired Boilers, Steam Generators, and Process Heaters	December 16, 2021
Rule 4354 Glass Melting Furnaces	December 16, 2021
Rule 4702 Internal Combustion Engines	August 19, 2021
Rule 4905 Natural Gas-Fired, Fan-Type Central Furnaces	December 16, 2021

Further detail on the District’s current control program is provided in Chapter 3 and Appendix C of the 2022 Ozone Plan.

The 2022 Ozone Plan includes several measures committing the District to explore and implement many stationary source emission reduction opportunities. These potential enhancements to the District’s regulations are included as SIP-strengthening measures since the emission reductions were not included in the modeled attainment demonstration. These measures are needed for the District’s Best Available Retrofit Control Technology (BARCT) analysis. Table 12 summarizes these District commitments.

Table 12 - District Commitments for Regulatory Control Measures

Measure	Action Date
Rule 4401 Steam-Enhanced Crude Oil Production Well Vents	2023/2024
Rule 4409 Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities	2023/2024
Rule 4455 Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants	2023/2024
Rule 4623 Storage of Organic Liquids	2023/2024
Rule 4624 Transfer of Organic Liquid	2023/2024
Rule 4402 Crude Oil Production Sumps	2023/2024

The District is also committing to evaluate the next generation of innovative control technologies and seek additional emission reduction opportunities across several stationary and area source sectors. The areas for further study are shown below in Table 13.

Table 13 - Stationary and Area Source Sectors for Further Study

Measure
Residential and Commercial Heating Measures
Stationary Combustion NOx Measures
Stationary Source VOC Measures
Energy and Climate Change Programs
Clean Landscaping Equipment and Practices
Other Innovative Measures

Further detail on the District’s commitments for SIP-strengthening and further study measures is provided in Chapter 3 of the 2022 Ozone Plan.

C. Reasonably Available Control Measures Demonstration

As specified in the Act, the SIP shall provide for implementing RACM as expeditiously as practicable to provide for attaining the ozone standard. RACM must also include emission reductions from existing sources that may be obtained through the adoption, at a minimum, of reasonably available control technology (RACT). U.S. EPA has interpreted RACM as those emission control measures that are technologically and economically feasible and when considered in aggregate, would advance the attainment date by at least one year.

The District is implementing all reasonably available control measures under its jurisdiction; therefore, there are no additional reasonably available control measures to implement that would provide further emissions reductions to advance attainment. Given the severity of

California’s air quality challenges, CARB has implemented the most protective mobile source emissions control program in the nation. CARB’s comprehensive strategy to reduce emissions from mobile sources includes stringent emissions standards for new vehicles, in-use programs to reduce emissions from existing vehicle and equipment fleets, cleaner fuels that minimize emissions, and incentive programs to accelerate the penetration of the cleanest vehicles beyond that achieved by regulations alone. California’s mobile source and consumer products measures, along with the DPR measure and the District’s strategy, meet the RACM requirement in the Valley.

Further detail on the RACM analysis for District and CARB measures is provided in Chapter 5 and Appendix C of the 2022 Ozone Plan.

D. Modeled Results

Results of the modeling attainment demonstration are shown in Table 14, in descending order of 2037 future year design value. The 2037 future year design values in this table account for all emissions controls described in Chapter 3 of the 2022 Ozone Plan. All monitoring sites in the Valley have a future design value less than 70 ppb based on the controlled 2037 emissions inventory, with the Clovis monitor in the central region having the highest predicted future design value of 68.8 ppb, truncated to 68 ppb in 2037. Therefore, the modeling attainment demonstration predicts the entire Valley will attain the 70 ppb 8-hour ozone standard by 2037 through the commitments outlined in the SIP.

Further information on the modeled attainment demonstration is included in Chapter 5 and Appendix F of the 2022 Ozone Plan.

Table 14 - Modeled 8-hour Ozone Design Values Demonstrating Attainment

Region	Site	2018 Modeling Base Year Design Value (ppb)	2037 Future Year Design Value (ppb)
Central	Clovis	85.3	68.8
Central	Fresno-Garland	85.7	68.4
Southern	Bakersfield-5558 California	87.3	66.7
Northern	Modesto-14th	79.3	66.4
Southern	Maricopa-Stanislaus	83.7	66.3
Northern	Turlock-S Minaret	82.3	65.9
Central	Fresno-Drummond	82.0	65.9
Central	Hanford-S Irwin	80.0	65.3
Northern	Tracy-Airport	73.7	64.4
Central	Parlier	84.3	64.2
Southern	Visalia-N Church	84.0	64.2
Southern	Oildale-3311 Manor	83.0	63.8
Central	Fresno-Sierra Skypark #2	80.0	63.5
Southern	Shafter-Walker	79.7	62.9
Southern	Edison	89.0	62.8

Region	Site	2018 Modeling Base Year Design Value (ppb)	2037 Future Year Design Value (ppb)
Southern	Sequoia and Kings Canyon Natl Park	86.7	61.9
Southern	Arvin-DiGiorgio	88.0	61.8
Central	Madera-Pump Yard	75.5	61.5
Southern	Bakersfield-Municipal Airport	85.3	61.2
Central	Tranquility	72.7	61.0
Central	Madera-28261 Avenue 14	77.7	60.4
Northern	Merced-S Coffee	76.7	60.3
Southern	Sequoia Natl Park-Lower Kaweah	83.3	59.4
Southern	Porterville-1839 Newcomb	78.0	58.6
Northern	Stockton-Hazelton	66.0	58.4

V. Additional Clean Air Act Requirements

Besides the elements related to the emissions inventory and attainment demonstration, the Act also requires SIPs for Extreme ozone nonattainment areas to address these elements, each described in further detail below:

- Provisions that demonstrate reasonable further progress (RFP).
- Motor vehicle emission budgets (MVEBs) to ensure transportation projects are consistent with the SIP.
- Provisions for sufficient contingency measures for RFP and attainment.

A. Reasonable Further Progress Demonstration

The Act and the Implementation Rule specify that each ozone nonattainment area must demonstrate ongoing emission reductions relative to the 2017 base year. Federal law requires a three percent per year reduction in ROG emissions. Where both ROG and NOx emissions have been shown to contribute to high ozone levels, the Act allows NOx emission reductions to augment ROG emission reductions to demonstrate RFP.

The cumulative ROG and NOx emission reductions in the San Joaquin Valley meets the RFP targets in the milestone years of 2023, 2026, 2029, 2032, and 2035 besides the attainment year, 2037. Under U.S. EPA guidance¹⁴ for implementing the 70 ppb 8-hour ozone standard attainment plans, the emissions reductions in the RFP demonstration occur inside the nonattainment area, are achieved through existing control regulations, and start from a baseline year of 2017.

¹⁴ 83 FR 62,998, Posted December 6, 2018, "Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements," <https://www.govinfo.gov/content/pkg/FR-2018-12-06/pdf/2018-25424.pdf>

The Valley 70 ppb 8-hour ozone RFP demonstration is developed using CARB’s California Emissions Projection Analysis Model (CEPAM), 2019 Emission Projections, Version 1.04 (see Appendix B of the 2022 Ozone Plan for more information on the planning emissions inventory). ERCs banked prior to the RFP baseline year of 2017 must be accounted for in RFP demonstrations for the 70 ppb 8-hour ozone standard. For the Valley, most of the pre-baseline year banked ERCs are accounted for in the growth projections in the CEPAM inventory; those that are above the amount projected in the CEPAM inventory are accounted for with an adjustment to the baseline emissions in the RFP demonstration (see Appendix I of the 2022 Ozone Plan for more information on ERCs). Further, to demonstrate consistency between the RFP demonstration and the MVEBs, a line-item adjustment is made in the RFP demonstration to account for the differences in the on-road mobile source emissions projections in the CEPAM inventory and the total of the MVEBs which are individually rounded up to the nearest tenth of a ton (see Appendix D for more information on the MVEBs).

Further detail on the RFP demonstration is provided in Chapter 6 of the 2022 Ozone Plan.

B. Motor Vehicle Emissions Budgets

Under section 176(c) of the Act, transportation plans, programs, and projects that receive federal funding or approval must be fully consistent with the SIP before being approved by an MPO. U.S. EPA’s transportation conformity rule¹⁵ details requirements for establishing MVEB’s in SIPs to ensure the conformity of transportation plans and programs with the SIP. The MVEB is the maximum allowable emissions from motor vehicles within an air basin and is used for determining whether transportation plans and projects conform to the SIP.

CARB has prepared the MVEBs for the 70 ppb 8-hour ozone standard for the ozone precursor pollutants of NO_x and ROG. The MVEBs established in this SIP apply as a “ceiling” or limit on transportation emissions for the eight Valley MPOs for the years in which they are defined and for all later years until another year for which a different budget is specified, or until a SIP revision modifies the budget. For the 2022 Ozone Plan, the milestone years and the attainment year of the SIP (also called the plan analysis years) are 2023, 2026, 2029, 2032, 2035, and 2037. The MVEBs were developed as required by using the most current at the time of the analysis U.S. EPA-approved motor vehicle emission model, EMFAC2017, and 2019 Federal State Transportation Improvement Program (FSTIP) activity data from the MPOs. They are consistent with the emission inventories and control measures in the 2022 Ozone Plan. These budgets will be effective once U.S. EPA determines they are adequate or approves them in the SIP action.

Further detail on the MVEBs is provided in Appendix D of the 2022 Ozone Plan.

¹⁵ Federal transportation conformity regulations are found in 40 CFR Part 51, subpart T – Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. of the Federal Transit Laws. Part 93, subpart A of this chapter was revised by U.S. EPA in the August 15, 1997, Federal Register.

C. Contingency Measures

Contingency measures are required by the Act to be implemented should an area fail to make RFP or attain the ozone standard by the required date. To date, U.S. EPA has interpreted this requirement to represent one year's worth of RFP, which amounts to three percent reductions compared to baseline emissions from measures that are already in place or that would take effect without further rulemaking action. Historically, U.S. EPA allowed contingency measure requirements to be met via excess emission reductions from ongoing implementation of adopted emission reduction programs, a method that CARB and local air districts have used for contingency measures and U.S. EPA has approved. However, although CARB's current programs continue to achieve emissions reductions in future years over what is needed for RFP and attainment, multiple court decisions over the last few years in the federal Ninth and District of Columbia Circuit Courts of Appeals have effectively disallowed this SIP-approved approach.

Given the judicial decisions over the last few years and under existing guidance, CARB and local air districts must implement contingency measures that, when triggered, would achieve one year's worth of emissions reductions, or at least the portion equivalent to the contribution of sources primarily regulated at the State and local level, unless a reasoned rationale for achieving fewer emission reductions can be provided. At this time, CARB is implementing the most stringent control programs and including a zero-emission component in most of our regulations, in both those that are recently adopted and those that are in development. Beyond the wide array of sources CARB has been regulating over the last few decades, and especially considering those we are requiring to reach zero emissions, there are few sources of emissions left for CARB to implement additional controls upon under its authorities. The few source categories without adequate control measures are primarily federally and internationally regulated categories that will account for approximately 56 percent of Statewide NO_x emissions by 2037.¹⁶ Considering the air quality challenges California and local air districts face, if an additional measure were available, CARB would implement this to support expeditious attainment of the air quality standard rather than withhold it for contingency measure purposes. However, CARB and the District continue to explore potential contingency measures to meet the contingency requirement in the Act and await U.S. EPA's written guidance for these requirements and fully intend to meet the contingency requirement in the Act.

Further discussion of contingency measures can be found in Chapter 6 of the 2022 Ozone Plan.

¹⁶ Source: CARB 2019 CEPAM v1.03; based on 2037 emissions totals.

VI. Requirements Addressed Through Separate Submittals

Besides the SIP requirements addressed in the 2022 Ozone Plan, there are many other requirements under the 70 ppb 8-hour ozone standard that have been or will be addressed through separate submittals, listed in Table 15 and described in more detail below.

Table 15 - 70 ppb SIP Elements Addressed in Separate Submittals

SIP Element	Submittal Title	Submittal Date
Emissions Statement	Emissions Statement Program Certification for the 2015 8-Hour Ozone Standard (Emissions Statement Program Certification) (Adopted by the District June 18, 2020)	August 3, 2020
Nonattainment New Source Review	District Rule 2201: New and Modified Stationary Source Review Rule	November 20, 2019
Reasonably Available Control Technology	2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard (2020 RACT Demonstration) (Adopted by the District June 18, 2020)	August 3, 2020
Vehicle Inspection and Maintenance Program	TBD	Scheduled: Early 2023
Clean Fuels for Fleets Program	California Clean Fuels for Fleets Certification for the 70 ppb Ozone Standard (Adopted by CARB January 27, 2022)	February 3, 2022
Vehicle Miles Traveled Offset Demonstration	70 ppb Ozone SIP Submittal (Adopted by CARB June 25, 2020)	July 27, 2020
Severe/Extreme Area Fee Program	TBD	Due August 3, 2028
Clean Fuels for Boilers Program	Certification that the San Joaquin Valley Unified Air Pollution Control District's Current Rules Address the Clean Air Act's (CAA) Clean Fuels for Boilers Requirements for the 2015 8-hour Ozone Standard (Certification for Clean Fuels for Boilers Requirements) (Adopted by the District June 17, 2021)	August 3, 2021

A. Emissions Statement

Section 182(a)(3)(B) of the Act requires ozone nonattainment areas submit into the SIP an Emissions Statement rule or program for stationary sources with potential to emit ROG and/or NOx emissions. An emissions inventory statement is required for those facilities with actual emissions of greater than or equal to 25 tons and an emissions inventory survey form is required for sources with potential emissions less than 25 tons. District Rule 1160, Emission Statements, addresses this requirement as stated in Appendix B of the 2022 Ozone Plan. To meet requirements under the 70 ppb 8-hour ozone standard, the District adopted the Emissions Statement Program Certification for the 2015 8-Hour Ozone Standard (Emissions Statement Program Certification) on June 18, 2020, and CARB submitted it to U.S. EPA on August 3, 2020, to include in the California SIP. The District certified that the existing provisions of District Rule 1160 meet the emissions statement requirements of the Act

through the submission of the Emissions Statement Program Certification. On August 29, 2022, U.S. EPA found that the Valley met the emissions statement requirements.¹⁷

B. Nonattainment New Source Review

Section 182(a)(2)(C) of the Act requires that ozone nonattainment areas submit into the SIP New Source Review rules or programs for permitting the construction and operation of new or modified major stationary sources. District Rule 2201, New and Modified Stationary Source Review Rule, addresses this requirement. The District amended Rule 2201 on August 15, 2019, and submitted it to U.S. EPA on November 20, 2019, to include in the California SIP to meet requirements under the 70 ppb 8-hour ozone standard.

C. Reasonably Available Control Technology

Section 182(b)(2) of the Act requires implementation of RACT in ozone nonattainment areas classified as Moderate or above. To demonstrate this, areas must develop and submit RACT analyses for stationary sources and applicable rules for which U.S. EPA has published Control Techniques Guidelines (CTG) and for major non-CTG stationary sources. Following U.S. EPA requirements, the District developed the 2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard (2020 RACT Demonstration) and reviewed existing stationary source rules to determine if those rules meet RACT requirements under the 70 ppb 8-hour ozone standard. The 2020 RACT Demonstration was adopted by the District on June 18, 2020, and submitted to U.S. EPA on August 3, 2020, to include in the California SIP.

The District reviewed its existing rules following U.S. EPA requirements to determine if its rules continue to meet RACT for the 70 ppb 8-hour ozone standard and concluded in the 2020 RACT Demonstration that all SIP-approved rules either continue to meet RACT or are not subject to RACT requirements. The 2020 RACT Demonstration also included negative declarations that no sources are present in the San Joaquin Valley nonattainment area under the jurisdiction of the District for the applicable CTGs and CTG source categories. For the 2022 Ozone Plan, the District evaluated any changes in RACT since it adopted the 2020 RACT Demonstration. In its evaluation, the District found that its rules meet or exceed RACT, apart from the following:

- Rule 4409, Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities.
- Rule 4455, Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants.
- Rule 4623, Storage of Organic Liquids; and
- Rule 4624, Transfer of Organic Liquid.

¹⁷ 87 FR 45,657, posted July 29, 2022, and effective August 29, 2022

For each of these rules, the District commits to amend them no later than 2024. Once amended, the rules will continue to meet or exceed RACT requirements for the applicable source category. Further discussion of the RACT evaluation conducted on any changes since adoption of the 2020 RACT Demonstration can be found in Chapter 3 and Appendix C of the 2022 Ozone Plan.

D. Vehicle Inspection and Maintenance Program

Sections 182(a)(2)(B), 182(b)(4), and 182(c)(3) of the Act require ozone nonattainment areas to have in place a vehicle inspection and maintenance program (I/M) to implement Basic and Enhanced I/M in the required areas that is at least as stringent as the federal program. In California, the Bureau of Automotive Repair (BAR) develops and implements the I/M program. California's I/M program was first submitted and approved by U.S. EPA to include in the California SIP in 1997, and later revisions were approved in 2007 and 2010. To meet requirements under the 70 ppb 8-hour ozone standard, CARB is working with BAR to conduct a performance standard evaluation to certify that California's existing program continues to meet requirements. This evaluation is under development and will be brought to the Board for consideration in early 2023.

E. Clean Fuels for Fleets Program

Sections 182(c)(4) and 246 of the Act require ozone nonattainment areas classified as Serious or above with a 1980 population of 250,000 or more to submit revisions to the SIP to implement a Clean-Fuel Vehicle Program for fleets. The Clean-Fuel Vehicle Program requires at least a specified percentage of all new covered fleet vehicles purchased by fleet operators to be clean-fuel vehicles and that they use clean alternative fuels when operating in the nonattainment area. Alternately, the State, and the nonattainment areas within the State that must meet the Clean-Fuel Vehicle Program requirement, can opt-out of the program by submitting a revision into the SIP for a program that will achieve long-term reductions in ozone-producing and toxic air emissions equal to those achievable by the U.S. EPA Program.

CARB's LEV programs are implemented statewide and exceed the emissions reductions achieved by federal vehicle emission standards. California ozone nonattainment areas classified as Serious and above have provided certification to this and opted out of the U.S. EPA Program since the first 1994 California SIP was submitted to U.S. EPA on November 15, 1994 and approved on September 27, 1999.¹⁸ California has consistently strengthened the requirements for light-duty passenger cars. The second-generation LEV II regulations were adopted in 1998 and the third-generation LEV III regulations in 2012 as part of the Advanced Clean Cars rulemaking package that also includes the State's ZEV regulation. The LEV III regulations include increasingly stringent emission standards for criteria pollutants and greenhouse gases for new passenger vehicles through the 2025 model year. In 2022, CARB adopted its Advanced Clean Cars II program that further strengthened

¹⁸ 64 FR 46,849, August 27, 1999

the criteria pollutant and zero-emission vehicles standards for model years 2026 and beyond. CARB is working to obtain a waiver of federal preemption for these standards and submit them to U.S. EPA to add to California's SIP.

To meet requirements under the 70 ppb 8-hour ozone standard, CARB developed the California Clean Fuels for Fleets Certification for the 70 ppb Ozone Standard which was adopted by the Board on January 27, 2022, and submitted to U.S. EPA for inclusion in the SIP.

F. Vehicle Miles Traveled Offset Demonstration

Section 182(d)(1)(A) of the Act requires a demonstration identifying specific enforceable transportation control strategies and transportation control measures to offset any growth in vehicle miles traveled (VMT) or number of vehicle trips within two years of designation for ozone nonattainment areas classified as Severe or above. CARB developed a VMT emissions offset demonstration for the 70 ppb 8-hour ozone standard which was adopted by the Board on June 25, 2020, and submitted to U.S. EPA on July 27, 2020, for inclusion in the California SIP. The demonstration was developed in accordance with the August 2012 U.S. EPA guidance entitled "Implementing Act section 182(d)(1)(A): Transportation Control Measures and Transportation Control Strategies to Offset Growth in Emissions Due to Growth in Vehicle Miles Traveled."

G. Severe/Extreme Area Fee Program

Sections 185 and 182(b)(4) of the Act require ozone nonattainment areas classified as Severe or above to have programs in place for the collection of fees from major stationary sources of NO_x or ROG. This requirement is to be submitted by August 3, 2028, and will be included in a future submittal.

H. Clean Fuels for Boilers Program

Section 182(e)(3) of the Act requires Extreme ozone nonattainment areas to have programs in place that require clean fuels for boilers. The District most recently addressed this requirement in the 2016 Ozone Plan for the 2008 8-hour Ozone Standard (pages 3-14 through 3-15). U.S. EPA approved this SIP in 2019,¹⁹ however, the District must make this demonstration for each ozone standard. To meet requirements under the 70 ppb 8-hour ozone standard, the District adopted on June 17, 2021, a certification that District Rules 4305, 4306, 4320, and 4352—which regulate NO_x emissions from existing, new, or modified boilers—continue to satisfy Section 182(e)(3) of the Act and therefore, there is no need to include additional control measures in the attainment plan to satisfy Section 182(e)(3) requirements for the 70 ppb 8-hour ozone standard. The District certified that the SIP-approved Rules 4305, 4306, 4320, and 4352 satisfy the 70 ppb 8-hour ozone standard

¹⁹ 84 FR 11,198, March 25, 2019

requirements for clean fuels or advanced control technology for new, modified and existing boilers.

VII. Environmental Impacts

A. Introduction

This chapter provides the basis for CARB’s determination that no subsequent or supplemental environmental analysis is required for the proposed 2022 Ozone Plan, with the CARB Staff Report (“project”). A brief explanation of this determination is provided in subsection C below.

CARB’s regulatory program which involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans for the protection and enhancement of the State’s ambient air quality has been certified by the California Secretary for Natural Resources under Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA) (see California Code of Regulations (CCR), title 14, section 15251(d)). Public agencies with certified regulatory programs are exempt from certain CEQA requirements, including but not limited to, preparing environmental impact reports, negative declarations, and initial studies. CARB, as a lead agency, prepares a substitute environmental document (Referred to as an “Environmental Analysis” or “EA”) as part of the Staff Report to comply with CEQA (See 17 CCR §§ 60000-60008). This EA serves as a substitute document equivalent to an addendum to the prior 2022 State SIP Strategy EA to explain CARB’s determination that no additional environmental analysis is required for this action.

B. Prior Environmental Analysis

The District prepared a Notice of Exemption (NOE) for the 2022 Ozone Plan.²⁰ The District’s NOE determined the 2022 Ozone Plan is exempt from CEQA under the common sense exemption (14 CCR § 15061(b)(3)) and the Class 8 exemption, actions for protection of the environment (14 CCR § 15308). The District’s NOE is incorporated here by reference.

Further, when the 2022 State SIP Strategy was proposed, CARB prepared an environmental analysis (EA) under its certified regulatory program (17 CCR §§ 60000-60008) to comply with the requirements of CEQA (Public Resources Code section 21080.5). The EA, included as Appendix B to the Proposed 2022 State SIP Strategy entitled Final Environmental Analysis for the proposed 2022 State Strategy for the State Implementation Plan, dated September 16, 2022,²¹ determined the 2022 State SIP Strategy could result in the following short-term and long-term impacts: beneficial impacts to air quality (long-term operational-

²⁰ The District’s Notice of Exemption for the 2022 Ozone Plan is available here: http://www.valleyair.org/notices/public_notices_idx.htm#California%20Environmental%20Quality%20Act%20Notices

²¹ The EA and associated documents are available at <https://ww2.arb.ca.gov/resources/documents/2022-state-strategy-state-implementation-plan-2022-state-sip-strategy>, and are incorporated here by reference.

related) and greenhouse gases; less-than-significant impacts to energy demand, mineral resources, population and housing, public services, recreational services and wildfire; and potentially significant and unavoidable adverse impacts to aesthetics, agriculture and forest resources, air quality (short-term construction-related), biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, transportation/traffic, tribal cultural resources, and utilities and service systems.

C. Analysis

1. Legal Standards

When considering further action on an activity for which an EIR or negative declaration (or equivalent substitute document) has previously been prepared, CARB looks to Public Resources Code section 21166 and CEQA Guidelines section 15162 for guidance on the requirements for subsequent or supplemental environmental review.

CEQA Guidelines section 15162 states:

- (a) *When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:*
 - (1) *Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.*
 - (2) *Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*
 - (3) *New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*
 - (A) *The project will have one or more significant effects not discussed in the previous EIR or negative declaration.*
 - (B) *Significant effects previously examined will be substantially more severe than shown in the previous EIR.*
 - (C) *Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more*

significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

- (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*

If a subsequent or supplemental EIR or negative declaration is not required, the lead agency may document its decision and supporting evidence in an addendum (14 CCR § 15164 (e)). The addendum and lead agency's findings should include a brief explanation, supported by substantial evidence, of the decision not to prepare a subsequent or supplemental EIR or negative declaration (14 CCR § 15164(e)). An addendum need not be circulated for public review but must be considered by the lead agency prior to making a decision on the project (14 CCR § 15164(c), (d)).

2. Basis for Determination

As noted above, the District evaluated the potential environmental impacts from the 2022 Ozone Plan and determined the Plan is exempt from CEQA. CARB analyzed the potential environmental impacts from the 2022 State SIP Strategy in the EA developed for that planning effort. The proposed project here involves compiling these measures, quantifying the emissions reductions associated with them, and submitting them to U.S. EPA for inclusion into the SIP. This exercise does not involve any modifications to any of the measures. There is no possibility that CARB's quantification of these emissions reductions resulting from measures to which CARB has already committed to pursue may result in a significant adverse impact on the environment, nor any substantial evidence indicating this proposal could adversely affect air quality or any other environmental resource area.

CARB staff has determined that the proposed 2022 Ozone Plan and associated CARB Staff Report do not involve any changes that result in any new significant adverse environmental impacts or a substantial increase in the severity of the significant adverse impacts previously disclosed in the 2022 SIP Strategy EA. Further, there are no changes in circumstances or new information that would otherwise warrant any subsequent or supplemental environmental review. The 2022 SIP Strategy EA and the District's NOE fully address the implementation of the proposed project, and no additional environmental analysis is required.

The basis for CARB's determination that none of the conditions requiring further environmental review are triggered by the proposed modifications is based on the following analysis.

- (1) *There are no substantial changes to the components of the proposed project that were previously analyzed in the 2022 SIP Strategy EA which require major revisions involving new significant environmental effects or a substantial increase in the severity of previously identified effects.*

The NOE for the 2022 Ozone Plan and the Final EA for the 2022 State SIP Strategy fully address the implementation of the 2022 Ozone Plan and CARB Staff Report, and no

additional environmental analysis is required. CARB has determined that the proposed project does not involve any changes that result in any new significant adverse environmental impacts or a substantial increase in the severity of the significant adverse impacts previously disclosed in the Final EA for the 2022 State SIP Strategy. CARB does not propose to modify any of the commitments previously analyzed in that document. The proposed project involves compiling these existing measures from the District's 2022 Ozone Plan and CARB's State SIP Strategy, quantifying the emissions reductions associated with them, and submitting them to U.S. EPA for inclusion into the SIP. As noted above, this exercise does not involve any modifications to any of the previously approved measures.

- (2) *There are no substantial changes with respect to the circumstances under which the proposed project is being undertaken which require major revisions to the previous CEQA analyses involving new significant environmental effects or a substantial increase in the severity of previously identified effects.*

There are no changes in circumstances that would otherwise warrant any subsequent or supplemental environmental review. CARB has determined that the proposed project does not involve any changes in circumstances that result in any new significant adverse environmental impacts or a substantial increase in the severity of the significant adverse impacts previously disclosed in the Final EA for the 2022 State SIP Strategy. As noted above, CARB does not propose to modify any of the commitments previously analyzed in the Final EA for the 2022 State SIP Strategy or the District's 2022 Ozone Plan. The proposed project involves compiling these existing measures from the District's 2022 Ozone Plan and CARB's State SIP Strategy, quantifying the emissions reductions associated with them, and submitting them to U.S. EPA for inclusion into the SIP. As noted above, this exercise does not involve any modifications to any of the previously approved measures.

- (3) *There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous CEQA analyses were completed, that changes the conclusions of the environmental analyses with regard to impacts, mitigation measures, or alternatives.*

There is no new information that would otherwise warrant any subsequent or supplemental environmental review. CARB has determined that the proposed project does not involve any new information that changes the conclusions of the Final EA for the 2022 State SIP Strategy or the District's NOE. As noted above, CARB does not propose to modify any of the commitments previously analyzed. The proposed project involves compiling these existing measures from the District's 2022 Ozone Plan and CARB's State SIP Strategy, quantifying the emissions reductions associated with them, and submitting them to U.S. EPA for inclusion into the SIP. As noted above, this exercise does not involve any modifications to any of the previously approved measures.

The District adopted its NOE in December 2022, and CARB certified the EA for the 2022 State SIP Strategy in September 2022. No supplemental or subsequent environmental analysis is required for the proposed project because, as described above, the proposed project does not result in any new environmental impacts or in a substantial increase in the

severity of the impacts previously disclosed for the 2022 State SIP Strategy or 2022 Ozone Plan. Further, there are no changes in circumstances or new information that would otherwise warrant any additional environmental review.

Finally, while in an abundance of caution CARB has prepared an addendum-equivalent analysis here, CARB notes that this SIP action also likely does not constitute a CEQA “project” in the first instance. As to the District-proposed measures, CARB lacks jurisdiction to modify or remove these measures for any purpose other than compliance with Clean Air Act requirements. Therefore, CARB’s review of those components is effectively ministerial. (See *San Diego Navy Broadway Complex Coalition v. City of San Diego* (2010) 185 Cal.App.4th 924, 934.) As to the CARB-derived measures, CARB has already committed to pursuing these measures as part of the State SIP Strategy. CARB’s actions here do not modify those previous commitments made at the time CARB approved the State SIP Strategy; rather, it amounts to quantifying the anticipated reductions from those commitments, and reaffirming CARB’s commitment to those reductions.

VIII. Staff Recommendation

CARB staff has reviewed the 2022 Ozone Plan and has concluded that it and the aggregate emissions reduction commitment in section IV.B.2.d in this CARB Staff Report meet the Act for the 70 ppb 8-hour ozone standard. CARB staff recommends that the Board:

1. Adopt the commitment to achieve aggregate emissions reductions of 25.3 tpd of NO_x and 4.6 tpd of ROG in the San Joaquin Valley by 2037, including a subset to come specifically from on-road mobile source measures of 7.5 tpd NO_x and 1.6 tpd ROG, as specified in section IV.B.2.d of this CARB Staff Report;
2. Adopt the 2022 Ozone Plan, including the emission inventories, attainment demonstration, RACM demonstration, RFP demonstration, contingency measures, and transportation conformity budgets, as a revision to the California SIP; and
3. Direct the Executive Officer to submit the 2022 Ozone Plan and the aggregate commitment as described in section IV.B.2.d in this CARB Staff Report to U.S. EPA as a revision to the California SIP.