6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2019-0241; FRL-10014-24-Region 9]

Approval of Air Quality Implementation Plans; California; Coachella Valley; 2008 8-Hour Ozone Nonattainment Area Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action to approve portions of two state implementation plan (SIP) revisions submitted by the State of California to meet Clean Air Act requirements for the 2008 8-hour ozone national ambient air quality standards (NAAQS or "standards") in the Coachella Valley ozone nonattainment area ("Coachella Valley"). The two SIP revisions include the portions of the "Final 2016 Air Quality Management Plan" and the "2018 Updates to the California State Implementation Plan" that address ozone in the Coachella Valley. These submittals address the nonattainment area requirements for the 2008 8-hour ozone NAAQS, including the requirements for an emissions inventory, emissions statements, attainment demonstration, reasonable further progress, reasonably available control measures, contingency measures, and motor vehicle emissions budgets. The EPA is taking final action to approve these submittals as meeting all the applicable ozone nonattainment area requirements except for the contingency measure requirements, for which the EPA is deferring action.

DATES: This rule will be effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-R09-OAR-2019-0241. All documents in the docket are listed on the *https://www.regulations.gov* web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available through *https://www.regulations.gov*, or please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section for additional availability information. If you need assistance in a language other than English or if you are a person with disabilities who needs a reasonable accommodation at no cost to you, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: John Ungvarsky, Air Planning Office (AIR-2), EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 972-3963 or *ungvarsky.john@epa.gov*.

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I. Summary of the Proposed Action

On January 17, 2020 (85 FR 2949), the EPA proposed to approve, under Clean Air Act (CAA) section 110(k)(3), and to conditionally approve, under CAA section 110(k)(4), portions of submittals from the California Air Resources Board (CARB) and the South Coast Air Quality Management District (SCAQMD or "District") as revisions to the California SIP for the

Coachella Valley ozone nonattainment area.[1] The relevant SIP revisions include the SCAQMD's Final 2016 Air Quality Management Plan ("2016 AQMP") and CARB's 2018 Updates to the California State Implementation Plan ("2018 SIP Update"). Collectively, we refer to the relevant portions of the two SIP revisions as the "2016 Coachella Valley Ozone SIP," and we refer to our January 17, 2020 proposed rule as the "proposed rule."

In our proposed rule, we provided background information on the ozone standards,[2] area designations, and related SIP revision requirements under the CAA, and the EPA's implementing regulations for the 2008 ozone standards, referred to as the 2008 Ozone SIP Requirements Rule ("2008 Ozone SRR"). To summarize, the Coachella Valley ozone nonattainment area is classified as Severe for the 2008 ozone standards, and the 2016 Coachella Valley Ozone SIP was developed to address the requirements for this Severe nonattainment area for the 2008 ozone NAAQS.

In our proposed rule, we also discussed a decision issued by the D.C. Circuit Court of Appeals in *South Coast Air Quality Management Dist. v. EPA* ("*South Coast II*")[3] that vacated certain portions of the EPA's 2008 Ozone SRR. The only aspect of the *South Coast II* decision that affects this action is the vacatur of the provision in the 2008 Ozone SRR that allowed states

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[1] The Coachella Valley is located within Riverside County, and its boundaries generally align with the Riverside County portion of the Salton Sea Air Basin. For a precise description of the geographic boundaries of the Coachella Valley, see 40 CFR 81.305.

[2] Ground-level ozone pollution is formed from the reaction of volatile organic compounds (VOC) and oxides of nitrogen (NO_X) in the presence of sunlight. The 1-hour ozone NAAQS is 0.12 parts per million (ppm) (one-hour average), the 1997 ozone NAAQS is 0.08 ppm (eight-hour average), and the 2008 ozone NAAQS is 0.075 ppm (eight-hour average). CARB refers to reactive organic gases (ROG) in some of its ozone-related submittals. The CAA and the EPA's regulations refer to VOC, rather than ROG, but both terms cover essentially the same set of gases. In this final rule, we use the term (VOC) to refer to this set of gases.

[3] *South Coast Air Quality Management Dist. v. EPA*, 882 F.3d 1138 (D.C. Cir. 2018). The term "*South Coast II*" is used in reference to the 2018 court decision to distinguish it from a decision published in 2006 also referred to as "*South Coast*." The earlier decision involved a challenge to the EPA's Phase 1 implementation rule for the 1997 ozone standard. *South Coast Air Quality Management Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006).

to use an alternative baseline year for demonstrating reasonable further progress (RFP). To address this, in the 2018 SIP Update, CARB submitted an updated RFP demonstration that relied on a 2011 baseline year as required, along with updated motor vehicle emissions budgets (MVEBs) associated with the new RFP milestone years.[4]

For our proposed rule, we reviewed the various SIP elements contained in the 2016 Coachella Valley Ozone SIP, evaluated them for compliance with statutory and regulatory requirements, and concluded that they meet all applicable requirements, with the exception of the attainment contingency measure element. More specifically, in our proposal rule, we determined the following:

- CARB and the District met all applicable procedural requirements for public notice and hearing prior to the adoption and submittal of the 2016 AQMP and 2018 SIP Update (see 85 FR 2953 from the proposed rule);
- The 2012 base year emissions inventory from the 2016 AQMP[5] is comprehensive, accurate, and current and thereby meets the requirements of CAA sections 172(c)(3) and 182(a)(1) and 40 CFR 51.1115 for the 2008 ozone NAAQS. Additionally, the future year baseline projections reflect appropriate calculation methods and the latest planning

[4] In a letter dated December 18, 2019, from Richard W. Corey, Executive Officer, CARB, to Michael Stoker, Regional Administrator, EPA Region 9, CARB requested withdrawal of the RFP demonstration included in the 2016 AQMP submitted in April 2017. The RFP demonstration in the 2018 SIP Update replaced the demonstration in the 2016 AQMP.

[5] The District provided the EPA with supplemental documentation ("2016 AQMP Inventory Supplement") for the 2012 and 2026 ozone season inventories relied on in the 2016 AQMP. See email dated June 28, 2019, from Zorik Pirveysian, SCAQMD, to John Ungvarsky, EPA, Subject: "RE: Coachella Valley ozone inventory clarification and update on possible contingency measures." The 2016 AQMP Inventory Supplement consists of two attachments to this email, which provide the detailed 2012 and 2026 ozone season inventories that were used for the summary in the 2016 AQMP. The inventories were generated on November 30, 2016.

assumptions and are properly supported by the SIP-approved stationary and mobile source measures (see 85 FR 2953-2955 from the proposed rule);

- The emissions statement element of the 2016 AQMP, including District Rule 301 (specifically, paragraphs (e)(1)(A) and (B), (e)(2), (e)(5) and (e)(8)), meets the requirements for emissions statements under CAA section 182(a)(3)(B) and 40 CFR 51.1102 for the 2008 ozone NAAQS (see 85 FR 2955 from the proposed rule);
- The process followed by the District to identify reasonably available control measures (RACM) is generally consistent with the EPA's recommendations; the District's rules and commitments made to adopt certain additional measures provide for the implementation of RACM for stationary and area sources of oxides of nitrogen (NO_X) and volatile organic compounds (VOC); CARB and the Southern California Association of Governments (SCAG) provide for the implementation of RACM for mobile sources of NO_X and VOC; there are no additional RACM that would advance attainment of the 2008 ozone NAAQS in the Coachella Valley by at least one year; and therefore, the 2016 AQMP and 2016 State Strategy[6] provide for the implementation of all RACM as required by CAA section 172(c)(1) and 40 CFR 51.1112(c) for the 2008 ozone NAAQS (see 85 FR 2955-2959 from the proposed rule);
- The photochemical modeling in the 2016 AQMP shows that existing CARB and District control measures, plus CARB and District commitments to achieve additional emissions

[6] CARB's RACM assessment and their 2016 State Strategy collectively contain CARB's evaluation of mobile source and other statewide control measures that reduce emissions of NO_X and VOC in California, including the Coachella Valley. On October 1, 2019, the EPA approved the 2016 State Strategy (84 FR 52005). Chapter 3 of 2016 State Strategy includes a commitment to take action on new measures and to achieve aggregate emissions reductions in the South Coast. Because the Coachella Valley's attainment of the 2008 ozone NAAQS is dependent on progress made in the upwind South Coast, this commitment will contribute to attainment in the Coachella Valley.

reductions in the South Coast as described in the 2016 AQMP and 2016 State Strategy, are sufficient to attain the 2008 ozone NAAQS by the applicable attainment dates in the Coachella Valley; given the extensive documentation in the 2016 AQMP of modeling procedures and good model performance, the modeling is adequate to support the attainment demonstrations for the 2008 ozone NAAQS; and therefore, the 2016 Coachella Valley Ozone SIP meets the attainment demonstration requirements of CAA section 182(c)(2)(A) and 40 CFR 51.1108 (see 85 FR 2959-2963 from the proposed rule);

- As provided in our SRR, the previously-approved 15 percent rate-of-progress (ROP) demonstration for the Coachella Valley[7] meets the ROP requirements of CAA section 182(b)(1) for the Coachella Valley for the 2008 ozone (see 85 FR 2963-2965 from the proposed rule);
- The RFP demonstration in the 2018 SIP Update provides for emissions reductions of VOC or NO_X of at least 3 percent per year on average for each three-year period from a 2011 baseline year through the attainment year and thereby meets the requirements of CAA sections 172(c)(2), 182(b)(1), and 182(c)(2)(B), and 40 CFR 51.1110(a)(2)(ii) for the 2008 ozone NAAQS (see 85 FR 2963-2965 from the proposed rule);
- The 2016 AQMP (specifically, Chapter 7 and Appendix VI-E ("VMT Offset Demonstration")) demonstrates that CARB and SCAG have adopted sufficient transportation control strategies to offset the growth in emissions from growth in vehicle-miles-traveled (VMT) and vehicle trips in the Coachella Valley, and thereby complies

[7] 82 FR 26854 (June 12, 2017).

with the VMT emissions offset requirement in CAA section 182(d)(1)(A) and 40 CFR 51.1102 for the 2008 ozone NAAQS (see 85 FR 2965-2968 from the proposed rule);[8]

- The MVEBs for the 2020 and 2023 RFP milestone years and the 2026 attainment year from the 2018 SIP Update are consistent with the RFP and attainment demonstrations, are clearly identified and precisely quantified, and meet all other applicable statutory and regulatory requirements in 40 CFR 93.118(e), including the adequacy criteria in 40 CFR 93.118(e)(4) and (5) (see 85 FR 2970-2971 from the proposed rule);[9] and
- Through previous EPA approvals of California's vehicle inspection and maintenance (I/M) program, the 1994 "Opt-Out Program" SIP revision, the 1993 Photochemical Assessment Monitoring Station SIP revision, and the 2016 annual monitoring network plan for the South Coast and Coachella Valley, the 2016 AQMP adequately addresses the 2008 ozone NAAQS; the enhanced I/M requirements in CAA section 182(c)(3) and 40 CFR 51.1102; the clean fuels fleet program in CAA sections 182(c)(4) and 246 and 40 CFR 51.1102; and the enhanced ambient air monitoring requirements in CAA section 182(c)(1) and 40 CFR 51.1102 (see 85 FR 2971-2973 from the proposed rule).

With respect to the RFP contingency measure element of the 2016 Coachella Valley Ozone SIP, we proposed to conditionally approve the element as meeting the requirements of

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[8] As discussed in section III.C.2.b and C.3 of the proposed rule (see 85 FR 2957-2959), because of the significant influence of pollutant transport from the South Coast Air Basin on ozone conditions in the Coachella Valley, no transportation control measures (TCMs) are reasonably available for implementation in the Coachella Valley for the purposes of meeting the RACM requirement and neither the District nor CARB relies on implementation of any TCMs in the Coachella Valley to demonstrate implementation of RACM in the 2016 Coachella Valley Ozone SIP. Similarly, no TCMs are included in the VMT emissions offset demonstration for the Coachella Valley.

[9] In light of CARB's request to limit the duration of the approval of the budgets in the 2018 SIP Update and in anticipation of the EPA's approval, in the near term, of an updated version of CARB's EMFAC (short for EMission FACtor) model for use in SIP development and transportation conformity in California to include updated vehicle mix and emissions data, we proposed to limit the duration of our approval of the budgets until replacement budgets have been found adequate. See 85 FR 2971 from the proposed rule.

CAA sections 172(c)(9) and 182(c)(9) for the 2008 ozone NAAQS, based on commitments by CARB and the District to supplement the element through submission of a SIP revision within one year of final conditional approval action that will include a revised or new District rule or rules. In the proposed rule, we did not propose action on the attainment contingency measure. See 85 FR 2968–2970 from the proposed rule.

Please see our proposed rule for more information concerning the background for this action and for a more detailed discussion of the rationale for approval or conditional approval of the above-listed elements of the 2016 Coachella Valley Ozone SIP.

II. Public Comments and EPA Responses

The public comment period on the proposed rule opened on January 17, 2020, the date of its publication in the *Federal Register*, and closed on February 18, 2020. During this period, the EPA received one comment letter submitted by a private individual and one comment letter submitted by Air Law for All on behalf of the Center for Biological Diversity and the Center for Environmental Health (collectively referred to herein as "CBD").[10]

[10] The EPA's proposed rule for this action (85 FR 2949) noted that the U.S. Department of Transportation and the EPA issued a notice of final rulemaking on September 27, 2019 (84 FR 51310) that withdrew the EPA's waiver of preemption of CARB's zero-emission vehicle sales mandate and greenhouse gas (GHG) standards. The EPA also noted that if the federal fuel economy and GHG standards were finalized prior to our final rulemaking on the 2016 Coachella Valley Ozone SIP, we would evaluate and address, as appropriate, the impact of the Safer Affordable Fuel-Efficient (SAFE) rule on the proposed rule (85 FR 2949, 2955). The EPA finalized SAFE on April 30, 2020 (85 FR 24174). The EPA did not receive any comments on the 2016 Coachella Valley Ozone SIP proposed rule regarding the impact of SAFE. The EPA believes that any potential adverse ozone impacts arising from SAFE, within the context of this SIP action, are inconsequential for reasons similar to those described in the EPA's June 2020 "Response to Comments Document for the EPA's Final Action on the San Joaquin Valley Serious Area Plan for the 2006 $PM_{2.5}$ NAAQS" ("Response to Comments Document") associated with the EPA's final rule, "Clean Air Plans; 2006 Fine Particulate Matter Nonattainment Area Requirements, San Joaquin Valley, California," 85 FR 44192 (July 22, 2020). See Response 4 on page 56 in the Response to Comments Document included in the docket for today's final rule.

Comment #1: The private individual expresses overall support for the proposed action. The commenter has experienced and witnessed the effects of air pollution in the Coachella Valley and describes incidences of asthma and breathing problems in the area. The commenter states that the measures established in the proposed rule allow for a better understanding and stronger analysis of the factors that affect air quality in the Coachella Valley, and cites examples of the health and environmental benefits of reduced air pollution. The commenter supports the proposed rule because it will help address those factors. The commenter also suggests that a localized analysis of air quality in desert cities in the Coachella Valley would be appreciated, and questions whether there is a study available regarding gas absorption by the Salton Sea and whether pollutants might be emanating from the Salton Sea.

Response to Comment #1: The EPA thanks the commenter for their support for the proposed action. We agree with the commenter that this rule will lead to air quality improvements in the Coachella Valley. Regarding the commenter's suggestion for a localized analysis of air quality in desert cities of the Coachella Valley, we direct the commenter's attention to the District's "Annual Air Quality Monitoring Network Plan," which contains additional information and analysis on the District's monitoring sites and instrumentation, including in the Coachella Valley.[11] This analysis reflects the federal monitoring requirements for ambient ozone,[12] which are based on populations and monitored ozone concentrations for a Metropolitan Statistical Area (MSA). The Coachella Valley is located within the Riverside–San

[11] SCAQMD, Annual Air Quality Monitoring Network Plan, July 1, 2019 ("Monitoring Network Plan"). This is the most recent version reviewed by the EPA. The District recently prepared a 2020 update to this plan, available at *http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan/annual-air-quality-monitoring-network-plan-v2.pdf*.

[12] 40 CFR part 58, Appendix D, section 4.1.

Bernardino–Ontario, CA ("RSBO") MSA. Based on population and monitored ozone concentrations in the RSBO MSA, a minimum of three ozone monitoring sites are required.[13] The SCAQMD operates 13 monitoring sites in the RSBO MSA, including the Palm Springs and Indio monitors located near significant population centers in the Coachella Valley. The Palm Springs and Indio ozone monitoring sites are "neighborhood scale" sites that characterize concentrations within a few kilometers, which is an appropriate spatial scale for identifying maximum ozone concentrations for the Coachella Valley.[14] In addition, the SCAQMD is required to submit to the EPA a network assessment every 5 years that includes a determination of whether the network meets monitoring objectives, such as compliance with ambient air quality standards and providing air pollution data to the public in a timely manner, and whether any new sites are needed to meet these objectives.[15] This regular evaluation ensures that the existing SCAQMD ozone monitoring network provides an adequate measure of ozone air quality in the Coachella Valley, including desert cities in the area, to serve as the basis for the control strategy and other planning elements of the Coachella Valley Ozone SIP. Localized analysis of other potential pollutants is beyond the scope of this rulemaking.

Regarding the comments pertaining to the Salton Sea, we note that efforts are ongoing to study and address the anticipated dust impacts associated with greater exposure of playa as the Salton Sea shoreline recedes. For example, the Salton Sea Task Force established in 2015 has developed a 10-year plan that endeavors to expedite wildlife habitat construction and to suppress dust from playa that will be exposed in the future. In 2013, the District established a new

[13] Monitoring Network Plan, 26.
[14] Monitoring Network Plan, Appendix B.
[15] 40 CFR 58.10(d).

monitoring station in the community of Mecca, closer to the Salton Sea in the southeastern portion of the Coachella Valley. It is measuring coarse particulate matter continuously, as well as hydrogen sulfide (H_2S), a gas that smells like rotten eggs and is associated with natural processes occurring in the Salton Sea. An additional monitoring station measuring only H_2S was also established in 2013 near the shore of the Salton Sea. However, concerns and efforts regarding H_2S are not germane to the EPA's Coachella Valley proposed action relating to the 2008 ozone NAAQS. H_2S is not a contributor to ambient ozone formation, and thus, not addressed in our proposed action on the 2016 Coachella Valley ozone SIP. The SCAQMD has issued odor advisories for the Coachella Valley due to elevated levels of H_2S. Health information on H_2S is available from the Agency for Toxic Substances and Disease Registry (ATSDR).[16] Additionally, the SCAQMD maintains a website with current H_2S monitored values in the Salton Sea area where visitors can sign up for H_2S alerts.[17]

Comment #2: CBD comments that the submittal fails to show that the substitute NO_X emissions reductions will "result in a reduction of ozone concentrations at least equivalent" to the required 3 percent per annum VOC emissions reductions, and as a result, the EPA's proposed approval is arbitrary and capricious and contrary to law.

The commenter describes the relative roles of VOC and NO_X in ozone formation, including the existence of an "optimum" VOC to NO_X ratio for a given level of VOC (i.e., a NO_X concentration at which the maximum amount of ozone is produced). As explained by the commenter, in a "NO_X saturated" situation where NO_X levels exceed this optimum ratio, a

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[16] See ATSDR, "ToxGuide™ for Hydrogen Sulfide H_2S," December 2016, available at *http://www.atsdr.cdc.gov/toxguides/toxguide-114.pdf*.
[17] *https://saltonseaodor.org*.

reduction in NO_X levels can lead to increases in ozone levels and in a "NO_X limited" situation with NO_X levels below the optimum ratio, VOC reductions toward the optimum ratio may have little effect on ozone levels. As a result, the commenter says, ozone response to precursor control can vary greatly between areas. The commenter argues that language in the CAA, including CAA sections 185B, 182(f), and 182(c)(2)(C), indicates that Congress was aware of these issues, including that in some scenarios NO_X reductions may not decrease ozone concentrations.

The commenter also points to the EPA's consideration of the relative effectiveness of NO_X and VOC controls for interpollutant offset trading under the new source review (NSR) permitting program and in applying requirements for major stationary sources of VOC to NO_X sources under CAA 182(f), noting that in these situations EPA guidance indicates that photochemical grid modeling of multiple scenarios should be conducted to support demonstrations related to the relative effectiveness of controls. Through these comparisons, the commenter suggests that the Coachella Valley submittal should have included similar photochemical grid modeling to determine whether the substitute NO_X emission reductions result in equivalent ozone reductions. In a footnote, the commenter acknowledges that the submittal includes photochemical grid modeling for the attainment demonstration, but asserts that the results of this modeling "do not rationally relate" to the required demonstration for section 182(c)(2)(C), citing arguments that the attainment demonstration modeling addresses only a single data point rather than multiple scenarios, and that the underlying control strategy reflects other factors such as politics.

Response to comment #2: We disagree with the commenter's characterization of the District's submittal and the EPA's proposed approval. As described below, we find that the analysis included with the modeling and control strategy in the 2016 Coachella Valley Ozone

SIP and 2016 South Coast Ozone SIP adequately demonstrates that annual and cumulative NO_X reductions in the South Coast and Coachella Valley will result in a reduction in ozone concentrations that is at least equivalent to the ozone reductions that would be achieved by VOC emission reductions alone. We therefore agree with the District's use of NO_X substitution in the RFP demonstration for the Coachella Valley.

In general, we agree with the commenter's descriptions of (1) the relative roles of VOC and NO_X in ozone formation; (2) the potential to calculate an "optimum" VOC to NO_X ratio for a given level of VOC; and (3) geographic differences in the ozone response to precursor control, depending on whether an area is "NO_X saturated" or "NO_X limited." We also agree with the commenter that Congress was aware of these issues and provided for the EPA to address them under provisions of the CAA. We find that the District's submittal adequately accounts for these issues, and that the District's control strategy and use of NO_X substitution is consistent with the needs of the Coachella Valley.

The modeling and control strategy included in the 2016 Coachella Valley Ozone SIP and 2016 South Coast Ozone SIP demonstrate that significant NO_X reductions are needed for these areas to attain the 2008 ozone standards in 2026 and 2031, respectively. During development of the 2016 AQMP, the District evaluated the relative role of VOC and NO_X reductions at 24 monitoring stations throughout the South Coast and Coachella Valley nonattainment areas, with each station representing the region surrounding the station site. The District ran a set of simulations with incremental VOC and NO_X emissions reductions. This information is presented in graphs, called ozone isopleths, of ozone levels resulting from various levels of emission

reductions for each monitoring station.[18] Each ozone isopleth provides a visual reference to evaluate hypothetical scenarios for reducing VOC and NO_X emissions in sufficient amounts to reach attainment by showing the relative change in ozone concentration that would result from reductions in VOC and NO_X.[19]

These isopleths illustrate that a NO_X-limited scenario persists throughout both areas, indicating that NO_X reductions will be generally more effective than VOC reductions in reducing ozone concentrations. The isopleths for the two Coachella Valley monitoring sites (Indio-Jackson Street and Palm Springs-Fire Station) show that ozone concentrations are more sensitive to reductions in NO_X than reductions in VOC across a wide range of VOC emissions quantities.[20] These graphs represent ozone concentrations at various levels of VOC emissions (shown on the horizontal x-axis) and NO_X emissions (shown on the vertical y-axis). The graphs show that when NO_X emissions are reduced, the level of ozone decreases substantially, and that, in contrast, reducing the level of VOC emissions results in much less reduction in the level of ozone. The curve of the line on the graph indicates that reductions in NO_X emissions will be considerably more effective than VOC reductions in reducing ozone concentrations on both a mass and percentage basis, and that VOC reductions will achieve only minor reductions in ozone concentrations even under scenarios involving large VOC reductions relative to current levels.[21]

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[18] See 2016 AQMP, Appendix V, Attachments 4 (2031 8-Hour Ozone Isopleths) and Attachment 5 (2023 8-Hour Ozone Isopleths). Isopleths for the 1-hour ozone NAAQS are included as Attachment 6 (22 1-Hour Ozone Isopleths).

[19] Contrary to the commenter's characterization of the District's modeling as representing only a single data point, these isopleths represent the results of the photochemical modeling of multiple scenarios across a range of VOC and NO_X emission reduction levels, and allow for a comparison of the relative effectiveness of reducing one precursor or the other, or both, in greater or lesser quantities.

[20] 2016 AQMP, Appendix V, Attachment 4 at 9 and 16; Attachment 5 at 10 and 17.

[21] In the South Coast air basin, the Fontana-Arrow Highway site ("Fontana site") has the highest ozone design value and is a key site used in the modeling of attainment. The Fontana site isopleths for the 1997 and 2008 ozone standards demonstrate that relying on VOC reductions alone would not reduce ozone levels as quickly as a strategy

Based on the modeling and evaluation of attainment strategy options, the District determined that the most effective strategy in the South Coast for the 1997 and 2008 ozone standards would be to reduce NO_X emissions at a greater rate than VOC emissions, equal to roughly two tons of NO_X for every ton of VOC.[22] Specifically, the District determined that an additional 65.3 tons per day (tpd) of VOC and 116.6 tpd of NO_X beyond projected 2023 baseline emissions would be needed to attain the 1997 ozone standards, and that an additional 71.0 tpd of VOC and 118.7 tpd of NO_X beyond projected 2031 baseline emissions would be needed to attain the 2008 ozone standards. Accordingly, the District's control strategy for the 2008 ozone NAAQS in the South Coast and Coachella Valley areas relies on reductions of both pollutants, while prioritizing NO_X reductions.[23] The EPA agrees with this approach, based on the District's modeling and the isopleths included in the 2016 AQMP, and the accompanying analysis included in the submittal. Similarly, we find that this modeling and analysis adequately demonstrates that the NO_X emissions reductions in the District's RFP demonstration will result in a reduction in ozone concentrations that is at least equivalent to what would result from an equal percentage of

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aimed at NO_X reductions. The isopleths for the Fontana site show a similar pattern to those for the two Coachella Valley monitoring sites. Id.; 2016 AQMP, Appendix V, Attachment 4 at 7; Attachment 5 at 8.

[22] 2016 AQMP, Appendix V, Draft CEPA Source Level Emissions Reduction Summary, 2031 8-hour Ozone Attainment Scenario and 2023 8-hour Ozone Attainment Scenario, 1-8.

[23] See, e.g., 2016 AQMP at ES-8 ("In order to meet ozone standards, both NO_X and [VOC] emissions need to be addressed. However, air quality modeling demonstrates that NO_X reductions prove to be much more effective in reducing ozone levels and will also lead to significant improvement in $PM_{2.5}$ concentrations."); 7-27 ("As mentioned a number of times in this chapter, poor ozone air quality in the Coachella Valley is primarily due to transport of ozone and its precursors from the upwind source region of the Basin and attainment in Coachella Valley is only possible with substantial emission reductions in the Basin. With this in mind, the proposed control strategy consists of two components: 1) an aggressive control strategy for NO_X emission sources in the Basin; and 2) control of locally generated emissions via proposed state-wide or nationally-applied control measures implemented by state and federal actions."). In contrast, for attaining the 1-hour ozone standard, the District determined that VOC reductions would be as effective as NO_X reductions. See 2016 AQMP at 5-13.

VOC emission reductions, based on the NO_X-limited condition in the area and the relative effectiveness of reductions of each pollutant in reducing ozone concentrations.

We disagree with the commenter's suggestion that section 182(c)(2)(C) would require the District to provide additional photochemical grid modeling to demonstrate that the substituted NO_X reductions are at least as effective as the VOC reductions that would otherwise be required under 182(c)(2)(B). Further, we believe that the commenter's comparison to the EPA's requirements and recommendations for interpollutant trading and exemption from NO_X requirements under CAA 182(f) misunderstands the purpose of and requirements for NO_X substitution under CAA 182(c)(2)(B) relative to these other examples. The guidance documents cited by the commenter for these examples are non-binding and do not constrain the EPA's discretion to adopt a different approach where appropriate.[24] The documents recommend photochemical grid modeling in some scenarios, but do not require this approach or any other specific demonstration. This reflects the EPA's acknowledgement that the level of analysis required for any particular demonstration related to NO_X and VOC reductions will differ based on context and local conditions, such as those noted by the commenter regarding the relative effectiveness of controlling each. In the context of CAA 182(c)(2)(C), in an area where isopleths generated through photochemical grid modeling and accompanying analysis indicate that the VOC reductions required under CAA 182(c)(2)(B) will be less effective for reducing ozone

[24] See EPA, "Guideline for Determining the Applicability of Nitrogen Oxide Requirements under Section 182(f)" (Dec. 16, 1993), 1; Memorandum dated January 14, 2005, from Stephen D. Page, Director, Office of Air Quality Planning and Standards, U.S. EPA, to EPA Regional Air Directors, Regions I-X, Subject: "Guidance on Limiting Nitrogen Oxides (NO_X) Requirements Related to 8-Hour Ozone Implementation," 3; EPA-454/R-18-004, "Technical Guidance for Demonstration of Inter-Precursor Trading (IPT) for Ozone in the Nonattainment New Source Review Program," Office of Air Quality Planning and Standards (May 2018) ("IPT Guidance"), 2. The IPT Guidance specifically excludes applicability to RFP demonstrations. IPT Guidance at 2, n.1.

concentrations than a corresponding percentage reduction in NO_X emissions, no additional modeling or demonstration is required.

For the reasons addressed above, we find that the District has provided ample evidence to demonstrate that NO_X reductions will be more effective at reducing ozone concentrations in the South Coast and Coachella Valley. In this context, we find that the photochemical grid modeling conducted for the attainment demonstration, in combination with the supporting analysis accompanying the control strategy and other demonstrations, is sufficient to support the District's use of NO_X substitution.

Comment #3: CBD says that the EPA fails to give notice of how the submittal addresses the demonstration required under CAA 182(c)(2)(C) and thus the EPA's proposal is not in accordance with procedure required by law. In particular, the commenter says that EPA has failed to give adequate notice of its proposed interpretation of section 182(c)(2)(C).

The commenter observes that Table 5 of the proposed rule treats a percentage of NO_X reductions as equivalent to an equal percentage of VOC reductions, but says that the proposed rule does not explain why a percentage reduction in NO_X emissions results in equivalent ozone reductions to an equal reduction in VOC emissions, as required by section 182(c)(2)(C). The commenter suggests that the proposed rule may have used the procedure recommended in a December 1993 guidance document from the EPA's Office of Air Quality Planning and Standards entitled "NO_X Substitution Guidance," but notes that the NO_X Substitution Guidance is not cited in the notice and is not listed in the docket index. The commenter argues that because the NO_X Substitution Guidance is non-binding, the notice must indicate whether the EPA intends to adopt the Guidance's interpretation of the CAA, and that if the EPA instead believes that the

Coachella Valley calculation is a legitimate demonstration for other reasons, it must re-propose the action.

Response to Comment #3: The EPA disagrees with the commenter that the proposed rulemaking fails to give adequate notice regarding our proposed approval of the District's use of NO_X substitution, or that we would be required to re-propose with additional justification prior to taking final action on this portion of the proposal. As described in Response #1 above, the modeling and analysis submitted to support the District's control strategy and attainment and RFP demonstrations highlight the need for significant NO_X reductions in the Coachella Valley and South Coast Basin for the Coachella Valley to attain the 2008 ozone NAAQS, and demonstrate that these NO_X reductions will be more effective on a percentage basis than VOC reductions at reducing ozone concentrations in the nonattainment area. As described below, our proposal includes a summary and analysis of all relevant portions of the District's submittal, including NO_X substitution in the RFP demonstration.

Section III.E of the proposed rulemaking describes our proposed approval of the District's RFP demonstration.[25] This section describes the statutory and regulatory requirements for an RFP demonstration, including the option under CAA 182(c)(2)(C) to substitute NO_X emissions reductions for VOC reductions, and the reasons for the EPA's approval of this demonstration. The discussion includes citations to CAA 182(c)(2)(C) and the implementing regulations for the 2008 ozone NAAQS, as well as relevant portions of the preamble to the 2008 Ozone SRR that address the applicable requirements.[26] The proposal explains that the District's RFP demonstration substitutes NO_X reductions for VOC reductions beginning in milestone year

[25] 85 FR 2949, 2963-2965.
[26] Id. at 2964 (see footnotes 98 and 103).

2020, and the RFP demonstration, including the District's substitution of NO_X reductions for VOC reductions on a percentage basis, is summarized in Table 5.[27]

As the commenter notes, the proposed rulemaking does not include a specific justification in support of the District's use of NO_X substitution on a percentage basis. However, the discussion and analysis are consistent with and supportive of this approach. For example, the discussion of the District's control strategy in section III.D.2.b of the proposed rulemaking explains that already-adopted measures are expected to achieve approximately 66 percent of the NO_X reductions needed from the 2012 base year for the South Coast to attain the NAAQS in 2023, and tables 2, 3, and 4 show the remaining additional NO_X reductions needed to show continued progress and attainment in the Coachella Valley. The discussion and tables in this section document the need for additional NO_X reductions far exceeding the necessary additional VOC reductions, and show that ongoing NO_X reductions are linked with the downward trend in ozone concentrations leading to attainment, consistent with the District's control strategy. As addressed above, given this need for NO_X reductions and the modeled anticipated impact on the Coachella Valley, substituting NO_X for VOC on a percentage-reduction basis represents a conservative approach that will result in considerably lower ozone concentrations than would result through the VOC reductions required under CAA 182(c)(2)(B).

As the commenter notes, this approach is consistent with the procedures outlined in the EPA's 1993 NO_X Substitution Guidance. However, as the commenter notes, the NO_X Substitution Guidance is non-binding, and the EPA must ensure that any use of NO_X substitution

[27] Id. at 2964-2965.

is reasonable in light of local conditions and needs.[28] In this case, our approval is supported by the NO_X-limited conditions in the area and the need for NO_X reductions as set out in the District's control strategy. For this reason, we find that the proposed rulemaking and associated supporting documents included in the docket for that action provide sufficient documentation that the NO_X substitution used in the District's RFP demonstration is consistent with CAA section 182(c)(2)(C), and we disagree that the EPA would be required to re-propose with additional analysis or justification.

Comment #4: CBD provides numerous comments directed at the EPA's NO_X Substitution Guidance, contending that if the EPA intended to adopt the positions set forth in the NO_X Substitution Guidance, the proposal would be arbitrary and capricious and contrary to law because of problems with the NO_X Substitution Guidance. These comments assert generally that the NO_X Substitution Guidance contradicts CAA 182(c)(2)(C) by recommending a procedure that fails to demonstrate any equivalence between VOC and NO_X reductions, relies on incorrect policy assumptions, and gives legal justifications that are without merit.

Response to Comment #4: Comments relating solely to the NO_X Substitution Guidance are outside the scope of this rulemaking action. As noted in our response to Comment #3 above, our approval of the District's use of NO_X substitution is supported by local conditions and needs as documented in the modeling and analysis included in the 2016 Coachella Valley Ozone SIP, and is consistent with the requirements in CAA 182(c)(2)(C).

Comment #5: CBD challenges the EPA's proposed conditional approval of RFP contingency measures as arbitrary and capricious, and contrary to law based on CAA

[28] See NO_X Substitution Guidance at 3 (noting that the EPA approves substitution proposals on a case-by-case basis, including any reasonable substitution proposal).

requirements and interpreting case law. The commenter also argues that the District's commitment does not qualify for conditional approval.

Response to Comment #5: Because the EPA is not finalizing our proposed conditional approval of the District's RFP contingency measures at this time, comments on this issue are outside the scope of this action and we are not providing specific responses to these comments.

III. Final Action

For the reasons discussed in detail in the proposed rule and summarized herein, under CAA section 110(k)(3), the EPA is taking final action to approve as a revision to the California SIP the following portions of the Final 2016 Air Quality Management Plan submitted by CARB on April 27, 2017, and the 2018 SIP Update submitted on December 5, 2018, that compose the 2016 Coachella Valley Ozone SIP.

- Base year emissions inventory element in the 2016 AQMP as meeting the requirements of CAA sections 172(c)(3) and 182(a)(1) and 40 CFR 51.1115 for the 2008 ozone NAAQS;
- RACM demonstration element in the 2016 AQMP as meeting the requirements of CAA section 172(c)(1) and 40 CFR 51.1112(c) for the 2008 ozone NAAQS;
- Attainment demonstration element for the 2008 ozone NAAQS in the 2016 AQMP as meeting the requirements of CAA section 182(c)(2)(A) and 40 CFR 51.1108;
- ROP demonstration element in the 2016 AQMP as meeting the requirements of CAA 182(b)(1) and 40 CFR 51.1110(a)(2) for the 2008 ozone NAAQS;
- RFP demonstration element in the 2018 SIP Update as meeting the requirements of CAA sections 172(c)(2), 182(b)(1), and 182(c)(2)(B), and 40 CFR 51.1110(a)(2)(ii) for the 2008 ozone NAAQS;

- VMT emissions offset demonstration element in the 2016 AQMP as meeting the requirements of CAA section 182(d)(1)(A) and 40 CFR 51.1102 for the 2008 ozone NAAQS;
- Motor vehicle emissions budgets in the 2018 SIP Update for the 2020 and 2023 RFP milestone years and the 2026 attainment year, as shown below, because they are consistent with the RFP and attainment demonstrations for the 2008 ozone NAAQS finalized for approval herein and meet the other criteria in 40 CFR 93.118(e);

Transportation Conformity Budgets for the 2008 Ozone NAAQS in the South Coast (summer planning inventory, tpd)		
Budget Year	**VOC**	**NO_X**
2020	3.7	8.4
2023	3.3	4.6
2026	3.0	4.2

- Enhanced vehicle I/M program element in the 2016 AQMP as meeting the requirements of CAA section 182(c)(3) and 40 CFR 51.1102 for the 2008 ozone NAAQS;
- Clean fuels fleet program element in the 2016 AQMP as meeting the requirements of CAA sections 182(c)(4)(A) and 246 and 40 CFR 51.1102 for the 2008 ozone NAAQS; and
- Enhanced monitoring element in the 2016 AQMP as meeting the requirements of CAA section 182(c)(1) and 40 CFR 51.1102 for the 2008 ozone NAAQS.[29]

[29] Regarding other applicable requirements for the 2008 ozone NAAQS in the Coachella Valley, the EPA has previously approved SIP revisions that address the nonattainment area requirements for new source review (NSR) and for implementation of reasonably available control technology (RACT) for the South Coast, including the Coachella Valley, for the 2008 ozone NAAQS. See 83 FR 64026 (December 13, 2018) (for NSR) and 82 FR 43850 (September 20, 2017) (for RACT). SIP revisions for the Coachella Valley addressing the penalty fee requirements under CAA sections 181(b)(4) and 185 are not yet due for the 2008 ozone NAAQS.

With respect to the MVEBs, we are taking final action to limit the duration of the approval of the MVEBs to last only until the effective date of the EPA's adequacy finding for any subsequently submitted budgets. We are doing so at CARB's request and in light of the benefits of using EMFAC2017-derived budgets[30] prior to our taking final action on the future SIP revision that includes the updated budgets.

We are taking final action to determine that paragraphs (e)(1)(A) and (B), (e)(2), (e)(5) and (e)(8) of District Rule 301 ("Permitting and Associated Fees"), submitted to the EPA on August 5, 2019, and approved on October 1, 2019, at 84 FR 52005, meet the emission statement requirements of CAA section 182(a)(3)(B) and 40 CFR 51.1102 for the 2008 ozone NAAQS.

Lastly, we are deferring final action on the contingency measures element of the 2016 Coachella Valley Ozone SIP as meeting the requirements of CAA sections 172(c)(9) and 182(c)(9) for RFP and attainment contingency measures.

IV. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves state plans as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563

[30] On August 15, 2019, the EPA approved and announced the availability of EMFAC2017, the latest update to the EMFAC model for use by State and local governments to meet CAA requirements. See 84 FR 41717.

(76 FR 3821, January 21, 2011);

- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide the EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any

other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. section 801 *et seq*., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A major rule cannot take effect until 60 days after it is published in the *Federal Register*. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference,

Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: August 25, 2020.

John Busterud,
Regional Administrator,
Region IX.

For the reasons stated in the preamble, the EPA amends chapter I, title 40 of the Code of Federal Regulations as follows:

PART 52 - APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart F–California

2. Section 52.220 is amended by adding paragraphs (c)(514)(ii)(A)(*7*) and (c)(517)(ii)(B)(*6*) to read as follows:

§52.220 Identification of plan - in part.

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(c) * * *

(514) * * *

(ii) * * *

(A) * * *

(*7*) 2018 Updates to the California State Implementation Plan, adopted on October 25, 2018, chapter VII ("SIP Elements for the Coachella Valley"), excluding section VII.D ("Contingency Measures"); and pages A-23 through A-26 of appendix A ("Nonattainment Area Inventories").

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(517) * * *

(ii) * * *

(B) * * *

(*6*) Final 2016 Air Quality Management Plan (March 2017), Chapter 7 ("Current and Future Air Quality – Desert Nonattainment Areas"), adopted on March 3, 2017, excluding the portions of

pages 7-13 to 7-22 regarding particulate matter and other criteria pollutants, and excluding the portions of pages 7-26 to 7-30 regarding reasonable further progress.

* * * * *

3. Section 52.244 is amended by adding paragraph (a)(11) to read as follows:

§52.244 Motor vehicle emissions budgets.

(a) * * *

(11) Coachella Valley, approved **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

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[FR Doc. 2020-19162 Filed: 9/15/2020 8:45 am; Publication Date: 9/16/2020]