



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2019-0440; FRL-10018-44-Region 9]

Clean Air Plans; 2008 8-Hour Ozone Nonattainment Area Requirements; Western Nevada
County, California

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve, or conditionally approve, all or portions of a state implementation plan (SIP) revision submitted by the State of California to meet Clean Air Act (CAA or “Act”) requirements for the 2008 8-hour ozone national ambient air quality standards (NAAQS or “standards”) in the Nevada County (Western part), California ozone nonattainment area (“Western Nevada County”). The SIP revision is the “Ozone Attainment Plan, Western Nevada County, State Implementation Plan for the 2008 Primary Federal 8-Hour Ozone Standard of .075 ppm” (“2018 Western Nevada County Ozone Plan” or “Plan”). The 2018 Western Nevada County Ozone Plan addresses the Serious nonattainment area requirements for the 2008 ozone NAAQS, including the requirements for emissions inventories, attainment demonstration, reasonable further progress, reasonably available control measures, and contingency measures, among others; and establishes motor vehicle emissions budgets. The EPA is proposing to approve the 2018 Western Nevada County Ozone Plan as meeting all the applicable ozone nonattainment area requirements except for the contingency measures requirement, for which the EPA is proposing conditional approval. In addition, the EPA is beginning the adequacy process for the 2020 motor vehicle emissions budgets in the 2018 Western Nevada County Ozone Plan through this proposed rulemaking.

DATES: Written comments must arrive on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R09-OAR-2019-0440 at <https://www.regulations.gov>. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>. 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: T. Khoi Nguyen, Air Planning Office (AIR-2), EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 947-4120, or by email at nguyen.thien@epa.gov.

SUPPLEMENTAL INFORMATION: Throughout this document, “we,” “us,” and “our” refer to the EPA.

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I. Regulatory Context

A. Ozone Standards, Area Designations, and SIPs

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.¹ These two pollutants, referred to as ozone precursors, are emitted by many types of sources, including on-and off-road motor vehicles and engines, power plants and industrial facilities, and smaller area sources such as lawn and garden equipment and paints.

Scientific evidence indicates that adverse public health effects occur following exposure to ozone, particularly in children and adults with lung disease. Breathing air containing ozone can reduce lung function and inflame airways, which can increase respiratory symptoms and aggravate asthma or other lung diseases.²

Under section 109 of the CAA, the EPA promulgates NAAQS for pervasive air pollutants, such as ozone. The NAAQS are concentration levels that, the attainment and maintenance of which, the EPA has determined to be requisite to protect public health and welfare. Section 110 of the CAA requires states to develop and submit SIPs to implement, maintain, and enforce the NAAQS.

¹ The State of California refers to reactive organic gases (ROG) rather than VOC in some of its ozone-related SIP submissions. As a practical matter, ROG and VOC refer to the same set of chemical constituents, and for the sake of simplicity, we refer to this set of gases as VOC in this proposed rule.

² “Fact Sheet – 2008 Final Revisions to the National Ambient Air Quality Standards for Ozone” dated March 2008.

In 1979, the EPA established the 1-hour ozone NAAQS of 0.12 parts per million (ppm) (referred to herein as the “1-hour ozone NAAQS”).³ All of Nevada County was designated “Unclassifiable/Attainment” for the 1-hour standard on November 15, 1990.⁴

In 1997, the EPA revised the NAAQS for ozone, setting it at 0.08 ppm averaged over an 8-hour timeframe (referred to herein as the “1997 ozone NAAQS”) to replace the existing 1-hour ozone NAAQS.⁵ In 2004, the EPA initially designated and classified Western Nevada County as a “Subpart 1” nonattainment area for the 1997 ozone NAAQS.⁶ In response to a decision of the United States Court of Appeals for the District of Columbia Circuit vacating the EPA’s subpart 1 designations, the EPA in 2012 revised the area’s classification for the 1997 ozone NAAQS to “Moderate,” with an outermost attainment date of June 15, 2011.⁷ In 2011, the design value for the area was 0.079 ppm, and the EPA published a clean data determination on December 3, 2012, suspending attainment-related planning requirements for the 1997 ozone NAAQS.⁸

In 2008, the EPA lowered the 8-hour ozone NAAQS to 0.075 ppm (referred to herein as the “2008 ozone NAAQS”) to replace the 1997 ozone NAAQS of 0.08 ppm.⁹ In 2012, the EPA designated Western Nevada County as nonattainment for the 2008 ozone NAAQS and classified the area as Marginal.¹⁰ Areas classified as Marginal must attain the NAAQS within 3 years of the effective date of the nonattainment designation. For Western Nevada County, the applicable Marginal area attainment date was as expeditiously as practicable but no later than July 20, 2015. The area failed to attain the 2008 ozone NAAQS by this date, and the EPA published a reclassification to Moderate on May 4, 2016.¹¹ Upon reclassification, Western Nevada County

³ 44 FR 8202 (February 8, 1979).

⁴ 56 FR 56694 (November 6, 1991).

⁵ 62 FR 38856 (July 18, 1997). The 1-hour ozone standard was revoked effective June 15, 2005. See 70 FR 44470 (August 3, 2005).

⁶ 69 FR 23857 (April 30, 2004).

⁷ 77 FR 28423 (May 14, 2012). For more details on the revised classification, see 77 FR 56775, 56776 (September 14, 2012).

⁸ 77 FR 71551 (December 3, 2012).

⁹ 73 FR 16436 (March 27, 2008). The EPA further tightened the 8-hour ozone NAAQS to 0.070 ppm in 2015, but today’s proposed action relates to the requirements for the 2008 ozone NAAQS only. Information on the 2015 ozone NAAQS is available at 80 FR 65292 (October 26, 2015).

¹⁰ 77 FR 30088 (May 21, 2012).

¹¹ 81 FR 26697 (May 4, 2016).

was required to attain the 2008 ozone NAAQS as expeditiously as practicable but no later than July 20, 2018.

In November 2018, pursuant to CAA section 181(b)(2), the EPA proposed to determine that the Western Nevada County Moderate nonattainment area failed to attain the 2008 ozone NAAQS by the Moderate area attainment date.¹² Additionally, following the EPA's November 2018 proposal, the California Air Resources Board (CARB) submitted a request under CAA section 181(b)(3) to voluntarily reclassify the Western Nevada County nonattainment area from Moderate to Serious nonattainment for the 2008 ozone standards accompanied by a SIP revision to address planning elements for a Serious area.¹³

In a final rule dated August 23, 2019, the EPA found that Western Nevada County failed to attain the 2008 ozone NAAQS by the applicable attainment date, and reclassified the area as Serious by operation of law, effective September 23, 2019.¹⁴ Once reclassified to Serious, the area is required to attain the standard as expeditiously as practicable, but no later than 9 years after the initial designation as nonattainment, i.e., July 20, 2021.

The SIP revision that is the subject of today's proposed action addresses the Serious nonattainment area requirements that apply to Western Nevada County for the 2008 ozone NAAQS.

B. The Western Nevada County Ozone Nonattainment Area

The Western Nevada County nonattainment area for the 2008 ozone NAAQS consists of the portion of Nevada County west of the ridge of the Sierra Nevada mountains. Western Nevada County encompasses an area of approximately 800 square miles. The nonattainment area is bounded on the north by the Middle Yuba River and most of the southern border is defined by

¹² 83 FR 56781 (November 14, 2018).

¹³ See letter dated December 2, 2018, from Richard W. Corey, Executive Officer, CARB, to Michael Stoker, Regional Administrator, EPA Region IX, and letter dated November 14, 2018 from Gretchen Bennett, Executive Director, NSAQMD, to Richard W. Corey, Executive Officer, CARB, subject "Submittal of the Northern Sierra Air Quality Management District Ozone Attainment Plan for the 2008 Federal 8-hour Ozone Standard."

¹⁴ 84 FR 44238. The notice for this action acknowledges CARB's request for voluntary reclassification, and notes that the EPA's determination resulted in the same outcome as would occur with an approval of that request.

the Bear River. The eastern boundary is a line running north/south that generally follows the ridge of the Sierra Nevada mountains.¹⁵ The population of the Western Nevada County nonattainment area is about 83,000 people.¹⁶

Air quality in Western Nevada County is regulated jointly by the Northern Sierra Air Quality Management District (NSAQMD or “District”) and CARB. The Nevada County Transportation Commission (NCTC) is the regional transportation planning agency for the County of Nevada. For transportation planning purposes, the area is an isolated rural area.¹⁷

C. CAA and Regulatory Requirements for 2008 Ozone Nonattainment Area SIPs

States must implement the 2008 ozone NAAQS under title I, part D of the CAA, including sections 171–179B of subpart 1, “Nonattainment Areas in General,” and sections 181–185 of subpart 2, “Additional Provisions for Ozone Nonattainment Areas.” To assist states in developing effective plans to address ozone nonattainment problems, in 2015, the EPA issued a SIP Requirements Rule (SRR) for the 2008 ozone NAAQS (“2008 Ozone SRR”) that addressed implementation of the 2008 standards, including attainment dates, requirements for emissions inventories, attainment and reasonable further progress (RFP) demonstrations, among other SIP elements, as well as the transition from the 1997 ozone NAAQS to the 2008 ozone NAAQS and associated anti-backsliding requirements.¹⁸ The 2008 Ozone SRR is codified at 40 CFR part 51, subpart AA. We discuss the CAA and regulatory requirements for the elements of 2008 ozone plans relevant to this proposal in more detail in Section III of this document.

The EPA’s 2008 Ozone SRR was challenged, and on February 16, 2018, the U.S. Court of Appeals for the D.C. Circuit (“D.C. Circuit”) published its decision in *South Coast Air Quality*

¹⁵ For a precise definition of the boundaries of the Western Nevada County 2008 ozone nonattainment area, see 40 CFR 81.305.

¹⁶ 2018 Western Nevada County Ozone Plan, page 12.

¹⁷ Isolated rural nonattainment and maintenance areas are defined in 40 CFR 93.101 as areas that do not contain or are not part of any metropolitan planning area as designated under the transportation planning regulations.

¹⁸ 80 FR 12264 (March 6, 2015).

*Management. District v. EPA (“South Coast II”)*¹⁹ vacating portions of the 2008 Ozone SRR.

The only aspect of the *South Coast II* decision that relates to this proposed action is the vacatur of the alternative baseline year for RFP plans. More specifically, the 2008 Ozone SRR required states to develop the baseline emissions inventory for RFP plans using the emissions inventory for the most recent calendar year for which states submit a triennial inventory to the EPA under subpart A, “Air Emissions Reporting Requirements,” of 40 CFR part 51, which was 2011. The 2008 Ozone SRR, however, allowed states to use an alternative year, between 2008 and 2012, for the baseline emissions inventory provided the state demonstrated why the alternative baseline year was appropriate. In the *South Coast II* decision, the D.C. Circuit vacated the provisions of the 2008 Ozone SRR that allowed states to use an alternative baseline year for demonstrating RFP.

II. The 2018 Western Nevada County Ozone Plan

A. Summary of Submission

On December 2, 2018, CARB submitted the 2018 Western Nevada County Ozone Plan to the EPA as a revision to the California SIP to address the nonattainment area requirements for Western Nevada County for the 2008 ozone NAAQS.²⁰ The 2018 Western Nevada County Ozone Plan includes various chapters and appendices, described further below, plus the District’s resolution of adoption for the Plan (District Resolution 2018-07) and CARB’s resolution of adoption of the Plan as a revision to the California SIP (CARB Resolution 18-36).²¹ The Plan addresses the CAA requirements for emissions inventories, air quality modeling demonstrating attainment, reasonably available control measures (RACM), RFP, and motor vehicle emissions budgets, among other requirements.

¹⁹ *South Coast Air Quality Management District 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 NAAQS. *South Coast Air Quality Management Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006).

²⁰ Letter dated December 2, 2018, from Richard Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, U.S. Environmental Protection Agency Region 9.

²¹ NSAQMD Board Resolution 2018-7, October 22, 2018; CARB Board Resolution 18-36, 2018 Ozone Attainment Plan for Western Nevada County.

The 2018 Western Nevada County Ozone Plan begins with an executive summary, an introductory section discussing ozone pollution and the Western Nevada County nonattainment area generally, a discussion about specific challenges in meeting air quality standards in the area, and a formal request to reclassify the area to Serious for the 2008 ozone NAAQS. Chapters IV through XIII address specific planning elements for a Serious area, including emissions inventory, transportation conformity budgets, emissions statements, new source review (NSR), RACM, RFP, attainment demonstration, and contingency measures. The Plan also includes eight appendices providing additional information on emissions inventories, CARB control measures, CARB analysis of key mobile source regulations and programs, a mobile sources and consumer products RACM demonstration, and the modeled attainment demonstration, a modeling emissions inventory for the nonattainment area, a description of the conceptual model for the nonattainment area, and CARB's modeling protocol used for the photochemical modeling.

Additionally, to further supplement the contingency measures element of the 2018 Western Nevada County Ozone Plan, CARB forwarded an October 26, 2020 letter from the District²² committing to adopt as a rule the most recent Architectural Coatings Suggested Control Measure (SCM) developed and approved by CARB to serve as a contingency measure that would be triggered if the area fails to meet an RFP milestone for the 2008 ozone NAAQS or to reach attainment by a July 20, 2021 attainment date. In the letter forwarding this commitment, dated November 16, 2020, CARB commits to submit the new District rule to the EPA as a SIP revision within 12 months of the EPA's final action on the contingency measures element of the 2018 Western Nevada County Ozone Plan.

In a technical memorandum submitted by email on October 27, 2020, CARB provided additional information related to the motor vehicle emissions budgets in the 2018 Western

²² Letter dated November 16, 2020, from Richard Corey, Executive Officer, CARB, to John Busterud, Regional Administrator, EPA Region IX. CARB's letter also forwarded the District's commitment letter to the EPA. The District's letter is dated October 26, 2020, from Gretchen Bennitt, NSAQMD Air Pollution Control Officer, to Richard Corey, CARB Executive Officer.

Nevada County Ozone Plan.²³ Additionally, CARB has provided a copy of the 2019 emissions inventory for the nonattainment area,²⁴ and clarifications to emissions tables in the Plan.²⁵

B. Clean Air Act Procedural Requirements for Adoption and Submission of SIP Revisions

CAA sections 110(a) and 110(l) require a state to provide reasonable public notice and opportunity for public hearing prior to the adoption and submission of a SIP or SIP revision. To meet this requirement, every SIP submittal should include evidence that adequate public notice was given and an opportunity for a public hearing was provided consistent with the EPA's implementing regulations in 40 CFR 51.102.

Both the District and CARB have satisfied the applicable statutory and regulatory requirements for reasonable public notice and hearing prior to the adoption and submittal of the 2018 Western Nevada County Ozone Plan. On September 21, 2018, the District published a notice in the local newspaper of a public hearing to be held on October 22, 2018, for the adoption of the 2018 Western Nevada County Ozone Plan.²⁶ The District adopted the Plan through Resolution #2018-07 at the October 22, 2018 hearing, and directed the Executive Director to forward the Plan to CARB for inclusion in the California SIP.²⁷

CARB also provided public notice and opportunity for public comment on the 2018 Western Nevada County Ozone Plan. On October 12, 2018, CARB released for public review its Staff Report for the Plan and published a notice of public meeting to be held on November 15, 2018, to consider adoption.²⁸ At the November 15, 2018 hearing, CARB adopted the Plan as a revision to the California SIP, excluding those portions not required to be submitted to the EPA, and directed the Executive Officer to submit the Plan to the EPA for approval into the California

²³ See attachment to email dated October 27, 2020 from Nesamani Kalandiyur, CARB, to Khoi Nguyen and Karina O'Connor, EPA Region 9.

²⁴ Email dated May 14, 2020 from Earl Withycombe, CARB, to Khoi Nguyen, EPA Region 9, for attachment of the 2019 emission inventory for the nonattainment area.

²⁵ Email dated August 17, 2020 from Webster Tasat, CARB, to Khoi Nguyen, EPA Region 9, for clarifications of the emission tables.

²⁶ Affidavit of Publication from Nevada County Publishing Company including a copy of the proof of publication and of the September 21, 2018 notice for the October 22, 2018 public hearing.

²⁷ See NSAQMD Resolution #2018-07, October 22, 2018.

²⁸ Notice of Public Meeting to Consider the Ozone Attainment Plan for Western Nevada County, signed by Richard Corey, Executive Officer, CARB, October 12, 2018.

SIP. On December 2, 2018, the Executive Officer of CARB submitted the Plan to the EPA, including the CARB Board resolution adopting the 2018 Western Nevada County Ozone Plan.²⁹ On June 20, 2019, the EPA determined that certain portions of this submittal applicable to the 2008 ozone NAAQS were complete.³⁰

Based on information provided in the SIP revision summarized above, the EPA has determined that all hearings were properly noticed. Therefore, we find that the submittal of the 2018 Western Nevada County Ozone Plan meets the procedural requirements for public notice and hearing in CAA sections 110(a) and 110(l) and 40 CFR 51.102.

III. Evaluation of the 2018 Western Nevada County Ozone Plan

A. Emissions Inventories

1. Statutory and Regulatory Requirements

CAA sections 172(c)(3) and 182(a)(1) require states to submit for each ozone nonattainment area a “base year inventory” that is a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in the area. In addition, the 2008 Ozone SRR requires that the inventory year be selected consistent with the baseline year for the RFP demonstration, which is the most recent calendar year for which a complete triennial inventory is required to be submitted to the EPA under the Air Emissions Reporting Requirements.³¹

²⁹ CARB Resolution 18-36.

³⁰ Letter dated June 20, 2019, from Elizabeth Adams, Director, Air and Radiation Division, EPA Region IX, to Richard Corey, Executive Officer, CARB. The Plan was deemed complete by operation of law on June 2, 2019, 6 months after submittal, but the EPA completeness finding for the following SIP elements: contingency measures for VOC and NO_x; emissions statement; ozone attainment demonstration; and RFP demonstration for VOC and NO_x for moderate nonattainment areas was necessary to stop clocks for mandatory sanctions in the Western Nevada nonattainment area under section 179(a) of the CAA resulting from a December 11, 2017 finding of failure to submit. See 82 FR 58118.

³¹ 2008 Ozone SRR at 40 CFR 51.1115(a) and the Air Emissions Reporting Requirements at 40 CFR part 51, subpart A.

The EPA has issued guidance on the development of base year and future year emissions inventories for ozone and other pollutants.³² Emissions inventories for ozone must include emissions of VOC and NO_x and represent emissions for a typical ozone season weekday.³³ States should include documentation explaining how the emissions data were calculated. In estimating mobile source emissions, states should use the latest emissions models and planning assumptions available at the time the SIP is developed.³⁴

Future baseline emissions inventories must reflect the most recent population, employment, travel and congestion projections for the area. In this context, future “baseline” emissions inventories refer to emissions estimates for a given year and area that reflect rules and regulations and other measures that are already adopted and that consider expected growth. Future baseline emissions inventories are necessary to show the projected effectiveness of SIP control measures. Both the base year and future year inventories are necessary for photochemical modeling to demonstrate attainment.

2. Summary of State’s Submission

The 2018 Western Nevada County Ozone Plan includes base year (2011) and future year (2012, 2014, 2017, 2020, and 2021) baseline inventories for NO_x and VOC for the Western Nevada County ozone nonattainment area. Documentation for the inventories are found in Chapter IV, “Emissions Inventory Background,” Chapter V, “Summary of Emissions Inventory Methodologies,” Appendix A, “Emissions Inventories for 2011, 2012, 2014, 2017, 2020 and 2021,” and Appendix F, “Modeling Emission Inventory for the 8-Hour Ozone State Implementation Plan in Western Nevada County Non-attainment Area (WNNA).”

³² “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations,” EPA-454/B-17-002, May 2017. At the time the 2018 Western Nevada County Ozone Plan was developed, the following EPA emissions inventory guidance applied: “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations,” EPA-454-R-05-001, August 2005.

³³ 40 CFR 51.1115(a) and (c), and 40 CFR 51.1100(bb) and (cc).

³⁴ 80 FR 12264, at 12290 (March 6, 2015).

The emissions inventories represent average summer day emissions, consistent with the observation that higher ozone levels in Western Nevada County typically occur from May through October. The 2011 base year and future year inventories in the 2018 Western Nevada County Ozone Plan reflect District rules and CARB regulations submitted through November 2016.³⁵ The mobile source portions of both base year and projected future year inventories were developed using California's EPA-approved mobile source emissions model, EMFAC2014, for estimating on-road motor vehicle emissions.³⁶

Emissions estimates of VOC and NO_x in the 2018 Western Nevada County Ozone Plan are grouped into three categories: (1) stationary point sources, (2) areawide sources, (3) on-road and other mobile sources. Stationary point sources refer to larger sources that have a fixed geographic location, such as power plants, industrial engines, and oil storage tanks. This inventory includes emissions from stationary internal combustion engines and gasoline dispensing facilities; these are not inventoried individually but estimated as a group and reported as an aggregated total. Areawide sources are emissions sources occurring over a wide geographic area, such as consumer products and architectural coatings. The on-road sources include light-duty automobiles, light-, medium-, and heavy-duty trucks, and motorcycles. Other mobile (off-road) sources include aircraft, recreational boats, and off-road equipment.

For the 2018 Western Nevada County Ozone Plan, stationary point source emissions for the 2011 base year emissions inventory are based on reported data from all stationary point sources in Western Nevada County using the District's annual emissions reporting program, which applies under District Rule 513, "Emissions Statements and Recordkeeping," to stationary

³⁵ "Staff Report: CARB Review of the Ozone Attainment Plan for Western Nevada County," CARB, October 12, 2018, page 6 ("CARB Staff Report").

³⁶ EMFAC is short for EMISSION FACTOR. In December 2015, the EPA approved EMFAC2014 for SIP development and transportation conformity purposes in California. 80 FR 77337 (December 14, 2015). EMFAC2014 was the most recently approved version of the EMFAC model that was available at the time of preparation of the Western Nevada County Ozone Attainment Plan. The EPA recently approved an updated version of the EMFAC model, EMFAC2017, for future SIP development and transportation purposes in California. 84 FR 41717 (August 15, 2019).

sources that emit VOC or NO_x.³⁷ Areawide sources include smaller emissions sources distributed across the nonattainment area. CARB and the District estimate emissions for areawide sources using the most recent models and methodologies, including publicly available emission factors and activity information. CARB also reviewed the growth profiles for point and areawide source categories and updated them as necessary to ensure that the emission projections are based on data that reflect historical trends, current conditions, and recent economic and demographic forecasts. Growth forecasts for most point and areawide sources were developed by CARB.

On-road emissions inventories in the 2018 Western Nevada County Ozone Plan are based on 2012 travel activity data provided by the California Department of Motor Vehicles. CARB provided emissions inventories for off-road equipment, including locomotives, pleasure craft and recreational vehicles, in-use off-road equipment, transport refrigeration units, cargo handling equipment, diesel agricultural equipment, and fuel storage and handling. Emissions from off-road sources were estimated using a suite of category-specific models or, where a new model was not available, the OFFROAD2007 model. A detailed list of the updates made to specific emissions inventory categories can be found in Chapter V.

CARB developed the emission forecasts in the 2018 Western Nevada County Ozone Plan by applying growth and control profiles to the base year inventory. Growth profiles for stationary point and areawide sources are derived from surrogates such as economic activity, fuel usage, population, housing units, etc. Growth projections were obtained from government entities with expertise in developing forecasts for specific sectors, and from econometric models. Control profiles, which account for emissions reductions resulting from adopted rules and regulations,

³⁷ The Air Pollution Control Officer of the NSAQMD may waive the applicability of the reporting required by District Rule 513 for certain classes or categories of sources with actual emissions or potential to emit less than 10 tons per year of actual facility-wide VOC or NO_x emissions if the emissions for the class or category of source are included in the base year and periodic emission inventories and the emissions are calculated using emission factors established by the EPA or other methods acceptable to the EPA. As described in Section B of this document, this approach is consistent with CAA section 182(a)(3)(B)(ii).

are derived from data provided by the regulatory agencies responsible for the affected emission categories.³⁸

Table 1 provides a summary of the District’s 2011 base year, 2012 baseline year for modeling, and 2020 attainment year baseline VOC and NO_x emissions estimates in tons per day (tpd) for an average summer day. All inventory years in the 2018 Western Nevada County Ozone Plan are derived from the 2011 base year inventory, except that 2012 is used as the baseline year for attainment modeling. These inventories provide the basis for the control measure analysis and the attainment demonstration in the Plan. Based on the inventory for 2011, mobile sources are the predominant sources for both VOC and NO_x emissions. For a more detailed discussion of the inventories, see Appendix A of the Plan.

Table 1 - Western Nevada 2011 Base Year, 2012 Baseline Year for Modeling, and 2020 Attainment Year Emissions Inventories (summer planning inventory, tpd)

Category	2011		2012		2020	
	VOC	NO _x	VOC	NO _x	VOC	NO _x
Stationary	0.7620	0.0999	0.7006	0.0997	0.7843	0.0918
Area Sources	1.4109	0.1452	1.3946	0.1349	1.5150	0.1377
On-Road and Other Mobile Sources	3.3227	5.4415	3.1131	4.9124	1.9559	2.8886
Total for Western Nevada County Nonattainment Area	5.4956	5.6866	5.2083	5.1470	4.2552	3.1181

Source: 2018 Western Nevada County Ozone Plan, Appendix A. The sum of the emissions values may not equal the total shown due to rounding of the numbers.

3. The EPA’s Review of the State’s Submission

We have reviewed the 2011 base year emissions inventory in the 2018 Western Nevada County Ozone Plan and the inventory methodologies used by the District and CARB for consistency with CAA requirements and EPA guidance. First, as required by EPA regulation, we find that the 2011 inventory includes estimates for VOC and NO_x for a typical ozone season

³⁸ 2018 Western Nevada County Ozone Plan, page 23.

weekday, and that the Plan provides adequate documentation explaining how the emissions are calculated.

Second, we find that the 2011 base year emissions inventory in the Plan reflects appropriate emissions models and methodologies, and, therefore, represents a comprehensive, accurate, and current inventory of actual emissions during that year in the Western Nevada County nonattainment area. Therefore, the EPA is proposing to approve the 2011 emissions inventory in the 2018 Western Nevada County Ozone Plan as meeting the requirements for a base year inventory set forth in CAA section 182(a)(1) and 40 CFR 51.1115.

With respect to future year baseline projections, we have reviewed the growth and control factors and find them acceptable and conclude that the future baseline emissions projections in the 2018 Western Nevada County Ozone Plan reflect appropriate calculation methods and the latest planning assumptions.

Furthermore, we note that the future year baseline projections take into account emissions reductions from control measures in adopted state and local rules and regulations. As a general matter, the EPA will approve a SIP revision that takes emissions reduction credit for such control measures only where the EPA has approved the control measures as part of the SIP. See Appendix B of the 2018 Western Nevada County Ozone Plan, “CARB Control Measures, 1985 to 2016,” 2018 Western Nevada County Ozone Plan for the list of control measures.

With respect to mobile sources, the EPA has taken action in recent years to approve CARB mobile source regulations into the California SIP.³⁹ We therefore find that the future year baseline projections in the 2018 Western Nevada County Ozone Plan are properly supported by SIP-approved stationary and mobile source control measures.

B. Emissions Statements

1. Statutory and Regulatory Requirements

³⁹ See 81 FR 39424 (June 16, 2016), 82 FR 14446 (March 21, 2017), and 83 FR 23232 (May 18, 2018).

Section 182(a)(3)(B)(i) of the Act requires each state to submit a SIP revision requiring owners or operators of stationary sources of VOC or NO_x to provide the state with statements of actual emissions from such sources. Statements must be submitted at least every year and must contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Section 182(a)(3)(B)(ii) of the Act allows states to waive the emissions statement requirement for any class or category of stationary sources that emit less than 25 tpy of VOC or NO_x, if the state provides an inventory of emissions from such class or category of sources as part of the base year or periodic inventories required under CAA sections 182(a)(1) and 182(a)(3)(A), based on the use of emission factors established by the EPA or other methods acceptable to the EPA.

The preamble of the 2008 Ozone SRR states that if an area has a previously approved emissions statement rule for the 1997 ozone NAAQS or the 1-hour ozone NAAQS that covers all portions of the nonattainment area for the 2008 ozone NAAQS, such rule should be sufficient for purposes of the emissions statement requirement for the 2008 ozone NAAQS.⁴⁰ The state should review the existing rule to ensure it is adequate and, if so, may rely on it to meet the emission statement requirement for the 2008 ozone NAAQS. Where an existing emissions statement program is still adequate to meet the requirements of this rule, states can provide the rationale for that determination to the EPA in a written statement in the SIP to meet this requirement. States should identify the various requirements and how each is met by the existing emissions statement program. Where an emissions statement requirement is modified for any reason, states must provide the revision to the emissions statement as part of its SIP.

2. Summary of the State's Submission

The 2018 Western Nevada County Ozone Plan addresses compliance with the emissions statement requirement in CAA section 182(a)(3)(B) for the 2008 ozone NAAQS by reference to District Rule 513, "Emission Statements and Recordkeeping," which, among other things,

⁴⁰ 80 FR 12264, at 12291 (March 6, 2015).

requires emissions reporting from all stationary sources of NO_x and VOC greater than or equal to 10 tpy. The EPA approved District Rule 513 as a revision to the California SIP on June 21, 2017, finding that Rule 513 fulfills the relevant emissions statement requirements of CAA section 182(a)(3)(B)(i).⁴¹

3. The EPA's Review of the State's Submission

We find that District Rule 513 applies within the entire ozone nonattainment area; applies to all stationary sources emitting NO_x and VOC, except those emitting less than 10 tpy for which the District has waived the requirement (consistent with CAA section 182(a)(3)(B)(ii)); and requires reporting, on an annual basis, of total emissions of VOC and NO_x. Also, as required under CAA section 182(a)(3)(B), District Rule 513 requires certification that the information provided to the District is accurate to the best knowledge of the individual certifying the emissions data.

Therefore, for the reasons described in the preceding paragraph, we propose to find that District Rule meets the emissions statement requirements for the 2008 ozone NAAQS under CAA section 182(a)(3)(B).

C. Reasonably Available Control Measures Demonstration

1. Statutory and Regulatory Requirements

CAA section 172(c)(1) requires that each attainment plan provide for the implementation of all RACM as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through implementation of reasonably available control technology (RACT)), and also provide for attainment of the NAAQS. The 2008 Ozone SRR requires that, for each nonattainment area required to submit an attainment demonstration, the state concurrently submit a SIP revision demonstrating that it has adopted all RACM

⁴¹ 82 FR 28240.

necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements.⁴²

The EPA has previously provided guidance interpreting the RACM requirement in the General Preamble for the Implementation of the CAA Amendments of 1990 (“General Preamble”) and in a memorandum entitled “Guidance on the Reasonably Available Control Measure Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas.”⁴³ In short, to address the requirement to adopt all RACM, states should consider all potentially reasonable control measures for source categories in the nonattainment area to determine whether they are reasonably available for implementation in that area and whether they would, if implemented individually or collectively, advance the area’s attainment date by one year or more.⁴⁴ Any measures that are necessary to meet these requirements that are not already either federally promulgated, or part of the state’s SIP, must be submitted in enforceable form as part of the state’s attainment plan for the area.⁴⁵

2. Summary of the State’s Submission

For the 2018 Western Nevada County Ozone Plan, the District and CARB each undertook a process to identify and evaluate potential RACM that could contribute to

⁴² 40 CFR 51.1112(c).

⁴³ See General Preamble, 57 FR 13498 at 13560 (April 16, 1992) and memorandum dated November 30, 1999, from John Seitz, Director, OAQPS, to Regional Air Directors, titled “Guidance on the Reasonably Available Control Measure Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas.”

⁴⁴ Id. See also 44 FR 20372 (April 4, 1979), and memorandum dated December 14, 2000, from John S. Seitz, Director, OAQPS, to Regional Air Directors, titled “Additional Submission on RACM From States with Severe One-Hour Ozone Nonattainment Area SIPs.”

⁴⁵ For ozone nonattainment areas classified as Moderate or above, CAA section 182(b)(2) also requires implementation of RACT for all major sources of VOC and for each VOC source category for which the EPA has issued a control techniques guideline. CAA section 182(f) requires that RACT under section 182(b)(2) also apply to major stationary sources of NO_x. In Serious areas, a major source is a stationary source that emits or has the potential to emit at least 50 tpy of VOC or NO_x (see CAA section 182(c) and (f)). Under the 2008 Ozone SRR, states were required to submit SIP revisions meeting the RACT requirements of CAA sections 182(b)(2) and 182(f) no later than 24 months after the effective date of designation for the 2008 Ozone NAAQS and to implement the required RACT measures as expeditiously as practicable but no later than January 1 of the 5th year after the effective date of designation (see 40 CFR 51.1112(a)). California submitted the CAA section 182 RACT SIP for Western Nevada County for the 2008 ozone NAAQS on June 7, 2018. Although Western Nevada County was classified as Moderate nonattainment for the 2008 ozone NAAQS at the time of submittal, the RACT SIP evaluated the area for compliance with applicable RACT requirements based on the 50 tpy Serious major source thresholds, in anticipation of the area’s reclassification to the higher classification. The EPA found this submission complete on November 29, 2018 (see letter dated November 29, 2018 from Elizabeth Adams, Acting Director, Air Division, EPA Region IX, to Richard Corey, Executive Officer, California Air Resources Board, and finalized the RACT SIP submission on January 15, 2020 (85 FR 2313).

expeditious attainment of the 2008 ozone NAAQS in Western Nevada County. We describe each agency's efforts below.

a. District's RACM Analysis

The District's RACM demonstration for the 2008 ozone NAAQS is described in Chapter X, "Reasonably Available Control Measures Demonstration," of the 2018 Western Nevada County Ozone Plan. This discussion summarizes the District's analysis of potential additional control measures for stationary sources conducted in the District's RACT SIP,⁴⁶ and describes additional controls in place for "areawide" source categories, such as architectural and automotive coatings. Chapter X and Appendices B–D discuss CARB's mobile source and consumer products RACM assessment. The District concludes that there are no additional control measures reasonably available in the area that can advance attainment by a year or more.

The District's RACM analysis builds upon a foundation of District rules developed for earlier ozone plans and approved as part of the SIP.⁴⁷ The District has adopted rules to address various source categories of NO_x and VOC. We provide a list of the District's NO_x and VOC rules approved into the California SIP in Table 1 of our December 3, 2020 memorandum to file in the docket for this proposed action. The SIP-approved District VOC or NO_x rules listed in Table 1 of our memorandum establish emission limits or other types of emissions controls for a wide range of sources, including incinerator burning, orchard or citrus heaters, fossil fuel steam generator facilities, gas stations, and more. These rules have already provided significant and ongoing reductions toward attainment of the 2008 ozone NAAQS by 2021.

Tables 2 and 3 of the December 3, 2020 memorandum provide a crosswalk of the area's top-emitting stationary and area source categories of NO_x and VOC with related District control rules. As shown in these tables, the area's 2020 stationary and area source emissions inventory includes about 0.23 tpd of NO_x and 2.20 tpd of VOC. The top NO_x source categories for this

⁴⁶ The EPA approved the District's RACT SIP on January 15, 2020. 85 FR 2313.

⁴⁷ 2018 Western Nevada County Ozone Plan, page 42.

year are residential fuel combustion (0.13 tpd; 4.26 percent of 2020 inventory) and service/commercial fuel combustion (0.04 tpd; 1.25 percent of 2020 inventory); all other categories each represent less than 1 percent of the 2020 inventory.⁴⁸ The top VOC source categories for this year are consumer products (0.44 tpd; 10.28 percent of 2020 inventory), asphalt paving/roofing (0.38 tpd; 8.98 percent of 2020 inventory), and architectural coatings (0.32 tpd; 7.55 percent of 2020 inventory).

The District's October 26, 2020 commitment letter for contingency measures includes further analysis of potential additional controls for regulated high-emission source categories. As mentioned above, the two largest NO_x source categories are residential fuel combustion and service/commercial fuel combustion. For residential fuel combustion, the District evaluated Sacramento Metropolitan Air Quality Management District (SMAQMD) Rule 414 for water heaters, boilers, and process heaters rated less than a million BTU per hour. Based on its analysis, and considering especially the low population in the nonattainment area, the District concluded that potential cumulative reductions in NO_x from a similar rule in the District would produce only about 0.0005 tpd each year, and that these reductions would occur too slowly to make any meaningful difference in attainment. For service/commercial fuel combustion, the District evaluated SMAQMD Rule 419 for miscellaneous combustion units. The District concluded that emission reductions from applying Rule 419 controls in the area would be approximately zero, because applying the rule would not be feasible for two of the three sources in the nonattainment area that would be subject to the rule and would not result in a more stringent emissions limit for the last applicable source in the nonattainment area. For VOC reductions, the District evaluated state measures for architectural coatings and automotive coatings,⁴⁹ and found that reductions would be equivalent to 0.010 tpd and 0.003 tpd,

⁴⁸ For a further breakdown of the area's NO_x and VOC sources, see Table 3 of the EPA's December 3, 2020 memorandum to file.

⁴⁹ Architectural coatings is Western Nevada County's third largest VOC source category. The largest VOC source categories in the area are consumer products and asphalt paving/roofing, and they are already regulated, respectively, by multiple CARB regulations and District Rule 227. See Table 3 of our December 3, 2020 memorandum to file.

respectively. The District found that the estimated reductions for automotive coatings was negligible and not cost effective but committed to adopting a rule for architectural coatings as a contingency measure.⁵⁰

Transportation Control Measures (TCMs) are projects that reduce air pollutants from transportation sources by reducing vehicle use, traffic congestion, or vehicle miles traveled. The Nevada County Regional Transportation Plan 2015–2035 (“Transportation Plan”), prepared by NCTC in January 2018, summarizes and highlights TCMs in Nevada County, including the Western portion of Nevada County, and is included in the docket for this action. Sample measures in Western Nevada County are included within the TCM categories of CAA section 108(f)(1)(A). They include proposed bikeways, for example, in Grass Valley,⁵¹ a 511 traveler information system that provides information on ridesharing and directs drivers to other regional resources for carpools and vanpools,⁵² and programs for improved public transit,⁵³ including improvements and maintenance for bus stops and shelters.

As explained above, the District identified potential candidate measures for RACM based upon categories with high NO_x and VOC emissions and relevant local or state measures. This analysis was included in the District’s commitment letter for contingency measures and is further described in Section III.F.2. Based on its evaluation of all available measures and the NO_x-limited nature of the nonattainment area, the District concludes that the District’s existing rules for stationary and area sources are generally as stringent as, or more stringent than the analogous rules in other districts. Further, the District concludes that, based on its comprehensive review and evaluation of potential candidate measures, the District meets the RACM requirement for the 2008 ozone NAAQS for all sources under the District’s jurisdiction.

b. CARB’s RACM Analysis

⁵⁰ The emission reductions from the adopting an architectural coatings rule for VOC (0.010 tpd) is less than the value needed to advance attainment by a year for VOC (0.075 tpd), as calculated below in Section III.C.3.

⁵¹ Transportation Plan, Appendix D, page D-1.

⁵² Transportation Plan, page 126.

⁵³ Transportation Plan, Tables 42-46.

CARB's RACM analysis is contained in Chapter X as well as Appendices B–D of the 2018 Western Nevada County Ozone Plan. CARB's RACM analysis provides a general description of CARB's existing mobile source programs. A more detailed description of CARB's mobile source control program, including a comprehensive table listing on- and off-road mobile source regulatory actions taken by CARB since 1985, is contained in Appendix A. The RACM assessment contains CARB's evaluation of mobile source and other statewide control measures that reduce emissions of NO_x and VOC in Western Nevada County.

Source categories for which CARB has primary responsibility for reducing emissions in California include most new and existing on- and off-road engines and vehicles, motor vehicle fuels, and consumer products.

Given the need for substantial emissions reductions from mobile and area sources to meet the NAAQS in California nonattainment areas, CARB has established stringent control measures for on-road and off-road mobile sources and the fuels that power them. California has authority under CAA section 209 (subject to a waiver by the EPA) to adopt and implement new emission standards for many categories of on-road vehicles and engines, and new and in-use off-road vehicles and engines.

CARB's mobile source program extends beyond regulations that are subject to the waiver or authorization process set forth in CAA section 209 to include standards and other requirements to control emissions from in-use heavy-duty trucks and buses, gasoline and diesel fuel specifications, and many other types of mobile sources. Generally, these regulations have been submitted and approved as revisions to the California SIP.⁵⁴

CARB's Consumer Products Program has established regulations that limit VOC emissions from 129 consumer product categories, which apply in Western Nevada County.⁵⁵ The

⁵⁴ See, e.g., the EPA's approval of standards and other requirements to control emissions from in-use heavy-duty diesel-powered trucks, at 77 FR 20308 (April 4, 2012), revisions to the California on-road reformulated gasoline and diesel fuel regulations at 75 FR 26653 (May 12, 2010), and revisions to the California motor vehicle inspection and maintenance program at 75 FR 38023 (July 1, 2010).

⁵⁵ 2018 Western Nevada County Ozone Plan, page 51 and Appendix D, "Reasonably Available Control Measures Assessment for Mobile Sources and Consumer Products."

EPA has approved many CARB measures into the California SIP that limit VOC emissions from a wide array of products, including antiperspirants and deodorants, aerosol coating products, and other consumer products.⁵⁶

CARB's RACM analysis determines that, with the current mobile source program and proposed measures, there are no additional RACM that would advance attainment of the 2008 ozone NAAQS in Western Nevada County. As a result, CARB concludes that California's mobile source programs fully meet the RACM requirement.⁵⁷

3. The EPA's Review of the State's Submission

As described above and in our December 3, 2020 memorandum to file in the docket for this proposed action, the District has implemented rules to reduce VOC and NO_x emissions from stationary sources in the Western Nevada nonattainment area. For the 2018 Western Nevada County Ozone Plan, the District indicates that its ozone precursor control strategy focuses on NO_x emission reductions due to the NO_x-limited nature of the nonattainment area.⁵⁸

The District evaluated a range of potentially available measures and was unable to find a combination of potential additional control measures for RACM. The EPA further calculated the additional reductions that would be necessary to advance attainment by a year. Subtracting the District's 2020 attainment year emissions inventory from the 2019 emissions inventory yields a difference of 0.21 tpd NO_x and 0.075 tpd VOC, equivalent to the reductions needed to advance attainment by a year.⁵⁹ Based on our review of the District's analysis, we agree that no additional

⁵⁶ CARB's consumer product measures are found in Title 17 California Code of Regulations section 94500 et seq. The compilation of such measures that have been approved into the California SIP, including *Federal Register* citations, is available at: <https://www.epa.gov/sips-ca/epa-approved-regulations-california-sip>. EPA's most recent approval of amendments to California's consumer products regulations was in 2014. 79 FR 62346 (October 17, 2014).

⁵⁷ Appendix VI-A, Attachment VI-A-3, page VI-A-106.

⁵⁸ 2018 Western Nevada County Ozone Plan, page 41. As explained in Section III.D.2.a of this document, Western Nevada County is "NO_x limited" because ozone formation in the area is driven primarily by NO_x emissions. As a result, reducing NO_x emissions is more effective for reducing ozone than reducing VOC emissions.

⁵⁹ The Plan's RACM analysis incorrectly identifies the necessary year-to-year reductions as 0.06 tpd of VOC and 0.23 tpd of NO_x, based on a comparison of 2020 and 2021 inventories. Given the small discrepancy in these numbers, relative to the emission reductions available in the area, we find that the District's RACM analysis is adequately supported.

control measures are available for stationary and area source categories in the nonattainment area that would provide the emissions reductions needed to advance attainment by a year.

With respect to mobile sources, CARB's current program addresses the full range of mobile sources in the Western Nevada County nonattainment area through regulatory programs for both new and in-use vehicles. With respect to TCMs, we find that the TCMs being implemented in Western Nevada County (i.e., the TCMs described in the Transportation Plan) are inclusive of all TCM RACM to be reasonably justified and supported.

We also find that CARB's consumer products program comprehensively addresses emissions from consumer products in the Western Nevada County nonattainment area. CARB measures are more stringent than the EPA's consumer products regulation promulgated in 1998,⁶⁰ and generally exceed the controls in place throughout other areas of the country.

Based on our review of these RACM analyses and the District's and CARB's adopted rules, we propose to find that there are, at this time, no additional RACM (including RACT) that would advance attainment of the 2008 ozone NAAQS in Western Nevada County. For the foregoing reasons, we propose to find that the 2018 Western Nevada County Ozone Plan provides for the implementation of all RACM as required by CAA section 172(c)(1) and 40 CFR 51.1112(c).

D. Attainment Demonstration

1. Statutory and Regulatory Requirements

Section 182(c)(2)(A) of the CAA requires that a plan for an ozone nonattainment area classified Serious or above include a "demonstration that the plan ... will provide for attainment of the ozone [NAAQS] by the applicable attainment date. This attainment demonstration must be based on photochemical grid modeling or any other analytical method determined ... to be at least as effective." The attainment demonstration predicts future ambient concentrations for comparison to the NAAQS, making use of available information on measured concentrations,

⁶⁰ 63 FR 48819 (September 11, 1998).

meteorology, and current and projected emissions inventories of ozone precursors, including the effect of control measures in the Plan.

Areas classified Serious for the 2008 ozone NAAQS must demonstrate attainment as expeditiously as practicable, but no later than 9 years after the effective date of designation as nonattainment. Western Nevada County was designated as a Marginal nonattainment area for the 2008 ozone NAAQS effective July 20, 2012.⁶¹ It was subsequently reclassified to Moderate,⁶² and then to Serious,⁶³ and accordingly must demonstrate attainment of the standards by no later than July 20, 2021.⁶⁴ An attainment demonstration must show attainment of the standards for a full calendar year before the attainment date, so in practice, Serious nonattainment areas must demonstrate attainment for the attainment year 2020.

The EPA's recommended procedures for modeling ozone as part of an attainment demonstration are contained in "Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze" ("Modeling Guidance").⁶⁵ The Modeling Guidance includes recommendations for a modeling protocol, model input preparation, model performance evaluation, use of model output for the numerical NAAQS attainment test, and modeling documentation. Air quality modeling is performed using meteorology and emissions from a base year, and the predicted concentrations from this base case modeling are compared to air quality monitoring data from that year to evaluate model performance. Once the model performance is determined to be acceptable, future year emissions are simulated with the model. The relative (or percent) change in modeled concentration due to future emissions reductions

⁶¹ 77 FR 30088 (May 21, 2012).

⁶² 81 FR 26697 (April 4, 2015).

⁶³ 84 FR 44238 (August 23, 2019).

⁶⁴ Nine years after the initial designation, 84 FR 44244.

⁶⁵ "Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM_{2.5}, and Regional Haze," EPA 454/R-18-009, EPA OAQPS, November 2018; available at <https://www.epa.gov/scram/state-implementation-plan-sip-attainment-demonstration-guidance>. See also December 2014 draft of this guidance, available at https://www3.epa.gov/ttn/scram/guidance/guide/Draft-O3-PM-RH-Modeling_Guidance-2014.pdf. The December 2014 draft guidance was available during development of the Plan; the final version differs mainly in organization, and in updates to the regional haze portion and to other document references. Additional EPA modeling guidance can be found in 40 CFR 51 Appendix W, *Guideline on Air Quality Models*, 82 FR 5182 (January 17, 2017); available at <https://www.epa.gov/scram/clean-air-act-permit-modeling-guidance>.

provides a relative response factor (RRF). Each monitoring site's RRF is applied to its monitored base year design value to give the future design value for comparison to the NAAQS. The Modeling Guidance also recommends supplemental air quality analyses, which may be used as part of a weight of evidence (WOE) analysis. A WOE analysis corroborates the attainment demonstration by considering evidence other than the main air quality modeling attainment test, such as trends and additional monitoring and modeling analyses.

Unlike the RFP demonstration and the emissions inventory requirements, the 2008 SRR does not specify that a specific year must be used for the modeled base year for the attainment demonstration. The Modeling Guidance also does not require a particular year to be used as the base year for 8-hour ozone plans.⁶⁶ The Modeling Guidance states that the most recent year of the National Emissions Inventory may be appropriate for use as the base year for modeling, but that other years may be more appropriate when considering meteorology, transport patterns, exceptional events, or other factors that may vary from year to year.⁶⁷ Therefore, the base year used for the attainment demonstration need not be the same year used to meet the requirements for emissions inventories and RFP.

With respect to the list of adopted measures, CAA section 172(c)(6) requires that nonattainment area plans include enforceable emissions limitations, and such other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for timely attainment of the NAAQS.⁶⁸ Under the 2008 Ozone SRR, all control measures needed for attainment must be implemented no later than the beginning of the attainment year ozone season.⁶⁹ The attainment year ozone season is defined as

⁶⁶ Modeling Guidance section 2.7.1, 35.

⁶⁷ Id.

⁶⁸ See also CAA section 110(a)(2)(A).

⁶⁹ 40 CFR 51.1108(d).

the ozone season immediately preceding a nonattainment area's maximum attainment date;⁷⁰ in the case of the Western Nevada County area, the attainment year is 2020.

2. Summary of the State's Submission

a. Photochemical Modeling

CARB performed the air quality modeling for the Western Nevada Ozone Plan, and has included documentation of this modeling within the Plan and the Staff Report that accompanied CARB's submittal of the 2018 Ozone Plan ("CARB Staff Report").⁷¹ The modeling relies on a 2012 base year and projects design values for 2020. The Plan's modeling protocol is in Appendix H of the 2018 Western Nevada County Ozone Plan and contains all the elements recommended in the Modeling Guidance, with the exception of a conceptual description and a WOE analysis, which appear in the CARB Staff Report.⁷² The area is dominated by transport of ozone and precursors from the Sacramento Metro nonattainment area, which has a much higher population and emissions about twenty times larger.⁷³ Concentrations at Western Nevada County's single monitor, Grass Valley, have paralleled those in the eastern portions of the Sacramento area for the past two decades. The Western Nevada County area has multiple valleys extending from southwest to northeast into the higher elevations of the Sierra Nevada mountain range. Upslope-downslope flows in those valleys lead to recirculation of pollutants, and the Sierra crest tends to block flow further east; both of these enhance ozone concentrations. The area is mainly rural, with generally low NO_x emissions and relatively high VOC emissions, so that ozone formation

⁷⁰ 40 CFR 51.1100(h).

⁷¹ "Staff Report: CARB Review of the Ozone Attainment Plan for Western Nevada County," CARB, October 12, 2018.

⁷² CARB Staff Report, 2 and 20.

⁷³ The summer 2020 emissions inventories for the Sacramento nonattainment area and Western Nevada Nonattainment NO_x are 63.2 and 3.1 tpd, respectively; VOC emissions are 86.8 and 4.3 tpd, respectively, 2018 Western Nevada County Ozone Plan, E-27. The 2020 Sacramento County population is 1,543,522, about 14 times the size of the Nevada County population of 104,343, Almanac of Emissions & Air Quality, California Air Resources Board, 2013, Appendix C, available at <https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac>.

there is expected to be NO_x-limited.⁷⁴ The recirculation and the lack of NO_x emissions prevents the removal of ozone through the NO_x titration process. This allows carryover of pollution from the previous day, leading to high ozone values that persist through the night at the start of the following morning, unlike the typical pattern for areas with ozone caused by locally generated emissions.⁷⁵

The modeling and the modeled attainment demonstration are described in Chapter XII of the 2018 Western Nevada County Ozone Plan and in more detail in Appendix E, which provides a description of model input preparation procedures and various model configuration options. Appendix F of the 2018 Western Nevada County Ozone Plan provides the coordinates of the modeling domain and thoroughly describes the development of the modeling emissions inventory, including its chemical speciation, its spatial and temporal allocation, its temperature dependence, and quality assurance procedures. The modeling analysis uses version 5 of the Community Multiscale Air Quality (CMAQ) photochemical model developed by the EPA, using the 2007 version of the Statewide Air Pollution Research Center (SAPRC07) chemical mechanism. The CMAQ modeling domain covers most of California, nested within a domain covering the entire state. To prepare meteorological inputs for CMAQ, CARB used the Weather and Research Forecasting model version 3.6 (WRF) from the National Center for Atmospheric Research. The WRF domain covers the entire state of California, nested within a domain covering most of the western United States. The modeling used inputs prepared from routinely available meteorological and air quality data collected during 2012. Those data cover May through September, a period that spans the period of highest ozone concentrations in Western Nevada County. The Modeling Guidance recognizes both CMAQ and WRF as technically

⁷⁴ Ozone is generally NO_x-limited in rural areas and downwind suburban areas. See pages 24 and 38 of CARB Staff Report and also Chapter 2.1 Ozone Chemistry, “Final Ozone NAAQS Regulatory Impact Analysis,” March 2008, EPA Office of Air Quality Planning and Standards, available at https://www3.epa.gov/ttnecas1/regdata/RIAs/452_R_08_003.pdf. The term “NO_x-limited” can mean either that reducing NO_x emissions decrease ozone (as opposed to increasing it); or that reducing NO_x is much more effective at decreasing ozone than is reducing VOC. As discussed below and on page 42 of CARB Staff Report, ozone in Western Nevada County are decreased by reducing NO_x emissions.

⁷⁵ 2018 Western Nevada Ozone Plan, page H-16.

sound, state-of-the-art models. The areal extent and the horizontal and vertical resolution used in these models is adequate for modeling Western Nevada County ozone.

The WRF meteorological model results and performance statistics are described in Appendix E.⁷⁶ The performance evaluation focuses on a smaller area than the full domain but encompassing the Western Nevada County nonattainment area and the greater Sacramento area, with special attention on the winds for high ozone days. There is a slight overprediction of wind speeds and underprediction of temperatures in the eastern portion of the nonattainment area, but overall, modeled wind speed, wind direction, and temperature all track observations very well, as shown in scatter and time series plots. The modeling replicates some important meteorological features such as the upslope-downslope flows in the Sierra Nevada foothills, and the “Schulz eddy” known to occur in the greater Sacramento area. The 2018 Western Nevada County Ozone Plan states that the bias and error are relatively small and are comparable to those seen in previous meteorological modeling of central California and cited in the Plan. In summary, the 2018 Western Nevada County Ozone Plan’s meteorological modeling performance statistics appear satisfactory.

Ozone model performance statistics are described in the 2018 Western Nevada County Ozone Plan at Appendix E.⁷⁷ Appendix E includes tables of statistics recommended in the Modeling Guidance for 8-hour and 1-hour daily maximum ozone concentrations. Predicted concentrations have a small negative bias (underprediction) of 4.1 ppb.⁷⁸ This compares well to the range of 2.7 to 10.8 ppb seen in a previous modeling exercise for central California that is cited in the Plan; bias and error are both at the low end of those seen in a comparative study of 69 modeling exercises.⁷⁹ The Plan’s supplemental figures with hourly time series show good performance; although some individual daily ozone peaks are missed in May and September,

⁷⁶ Appendix E, section 3.2, E-17; also, refer to supplemental figures S.1–S.11, E-48.

⁷⁷ Appendix E, section 5.2, E-32; also, refer to supplemental figures S.12–S.16, E-55.

⁷⁸ Because only the relative response to emissions changes (RRF) from the modeling is used, the underprediction of absolute ozone concentrations does not mean that future concentrations will be underestimated.

⁷⁹ Simon, H., Baker, K. R., Phillips, S, 2012, Compilation and Interpretation of Photochemical Model Performance Statistics Published Between 2006 and 2012, *Atmos. Environ.*, 61, 124-139. doi:10.1016/j.atmosenv.2012.07.012.

there are days for which the modeled highest concentration is close to the value of the highest observed concentration. This supports the adequacy of the model for use in the attainment demonstration.

As noted in the 2018 Western Nevada County Ozone Plan's modeling protocol, the Modeling Guidance recognizes that limited time and resources can constrain the extent of the diagnostic and dynamic evaluation of model performance undertaken.⁸⁰ The Plan describes a dynamic evaluation⁸¹ in which model predictions of ozone concentrations for weekdays and weekends were compared to each other and to observed concentrations. This evaluation provides useful information on how well the model simulates the effect of emissions changes, since NO_x emissions are lower on weekends than on weekdays, but the days are otherwise similar. The modeled ozone decreased in response to the weekend NO_x reductions, which matches the observed decrease, and indicates that the model is simulating the chemistry correctly. The Plan also contains results of an analysis of weekday and weekend ozone concentrations during the 2000–2015 period. It notes a shift over the years toward lower ozone on weekends, especially after 2010, showing that lower NO_x emissions lead to lower ozone concentrations.⁸² Both the modeling and the observed weekday-weekend trends show that ozone responds to NO_x emissions reductions, i.e., that ozone formation is NO_x-limited. The modeled 2012 base year is also NO_x-limited, with the weekday-weekend difference comparable to those seen historically. This match lends confidence to the modeling.

After accepting the model performance for the 2012 base case, CARB used the model to develop RRFs for the attainment demonstration.⁸³ This entailed running the model with the same meteorological inputs as before, but with emissions inventories to reflect the expected changes between the 2012 base year and the 2020 future year. These modeling inventories exclude

⁸⁰ 2018 Western Nevada County Ozone Plan, Appendix H, "Modeling Protocol," H-31; Modeling Guidance, 63.

⁸¹ See "Diagnostic Evaluation" in Appendix E section 5.2.1, E-36.

⁸² 2018 Western Nevada County Ozone Plan, Appendix E, E-40.

⁸³ Id. at 57, and Appendix H, "Modeling Protocol," section 10.3, H-34.

“emissions events which are either random and/or cannot be projected to the future ... wildfires, and events such as the [San Francisco Bay Area] Chevron refinery fire.”⁸⁴ The future inventories project the base year with these exclusions into the future by including the effect of economic growth and emissions control measures.

The 2018 Western Nevada County Ozone Plan carries out the attainment test procedure consistent with the Modeling Guidance. The RRF is calculated as the ratio of future to base year concentrations; these are then applied to the 2013 weighted design values for the Grass Valley monitor to arrive at a future year design value.⁸⁵ Typically the RRFs would be applied to a weighted design value for 2012, the model base year,⁸⁶ but in this case CARB used the somewhat higher value for 2013, considering the upward trend design values starting in 2013.⁸⁷ The predicted 2020 ozone design value is 67 ppb or 0.067 ppm, well below the level of the 2008 8-hour ozone NAAQS of 0.075 ppm.

Finally, the 2018 Western Nevada County Ozone Plan modeling includes an “Unmonitored Area Analysis” (UAA) to assess whether locations without a monitor are able to reach attainment; the standard attainment test procedure covers only locations with a monitor.⁸⁸ The Modeling Guidance describes a procedure utilizing “gradient adjusted spatial fields,” as well as the EPA software used to carry it out.⁸⁹ This procedure uses a form of interpolation, combining monitored concentrations and modeled gradients (modeled changes in concentration with distance from a monitor) to estimate future concentrations at locations without a monitor. The 2018 Western Nevada County Ozone Plan describes a UAA carried out using software

⁸⁴ Id. at Appendix H, H-33; and, Appendix F, “Modeling Emissions Inventory,” F-35. To include the fires in the base year but not the future year would effectively credit the Plan’s control measures with eliminating emissions from the fire.

⁸⁵ Id. at 57, and Appendix H, “Modeling Protocol,” section 10.3, H-34. The combination of years used is illustrated in Appendix E, Table 1, E-11.

⁸⁶ The Modeling Guidance recommends that RRFs be applied to the average of three three-year design values, for the base year and the two subsequent years. This amounts to a 5-year weighted average of individual year 4th high concentrations, centered on the base year, and so is referred to as a weighted design value.

⁸⁷ 2018 Western Nevada County Ozone Plan, Appendix E, E-10; also Plan, 58.

⁸⁸ 2018 Western Nevada County Ozone Plan, Appendix E, section 5.4, E-41.

⁸⁹ Modeling Guidance section 4.7, 138.

developed by CARB and implemented in “R,”⁹⁰ using a procedure virtually the same as that outlined in the Modeling Guidance. The Plan states that the 2020 results show concentrations below 75 ppb at all locations in the nonattainment area; it did not examine the surrounding area. Because the results are well below the 2008 ozone NAAQS level of 75 ppb, the UAA supports the demonstration that all locations in Western Nevada County will attain the NAAQS in 2020.

In addition to the formal attainment demonstration, the Plan also contains a WOE analysis within Appendix A to the CARB Staff Report. It mainly shows the long-term downward trends that continue through 2017, the latest year available prior to development of the 2018 Western Nevada County Ozone Plan. As described in the WOE, Western Nevada County has shown a general downward trend in measured ozone concentrations and number of days above the ozone NAAQS but has recently seen increases in 2017 and 2018. Atypical high ozone concentrations were observed in 2017, though CARB’s staff analysis does not point to specific anthropogenic or biogenic emission increases or meteorology as likely causes for the unusual number of exceedances. Additionally, the area may have experienced higher than normal ozone concentrations in 2018 due to wildfire impacts in the surrounding areas during the summer and fall months. Despite the recent exceptions, there are strong downward trends in emissions of ozone and of the ozone precursors NO_x and VOC, both within the Western Nevada County area and in the upwind Sacramento and San Francisco Bay areas.⁹¹ These all show the substantial air quality progress made in the Western Nevada County Area and add support to the attainment demonstration for 2020.

b. Control Strategy

The control strategy for attainment of the 2008 ozone NAAQS is detailed in Chapter IV of the 2018 Western Nevada County Ozone Plan. The Plan’s strategy relies primarily on emissions reductions from control measures that have been adopted by the Districts and CARB

⁹⁰ The R Project for Statistical Computing, <https://www.r-project.org>.

⁹¹ 2018 Western Nevada County Ozone Plan, page 41.

prior to the submittal of the Plan. The District has adopted rules for reducing emissions from a broad scope of stationary and area sources into its RACT SIP. Additionally, a detailed description of the mobile source control programs and a comprehensive list of CARB regulations are included in Appendices B and C of the Plan. 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.

As Table 2 and Table 3 show, the vast majority of emissions reductions relied upon by the Plan’s control strategy are from the on- and off-road mobile source inventory and can be largely attributed to control measures adopted by CARB, subsequently approved by the EPA, and cited in detail in Section III.C. Generally, the bulk of the emissions reductions on which the control strategies rely is expected to come from already-adopted measures, which are discussed in Section III.C of this document. For the 2008 ozone NAAQS, already-adopted measures are expected to achieve all of the reductions needed from the 2012 base year to attain the NAAQS in 2020.

Table 2 – 2012 and 2020 NO_x Emissions for Western Nevada County (summer planning inventory, tpd)

Source Category	2012	2020	Emissions Difference from 2012 to 2020	Percentage of Total Emissions Change
Stationary Sources	0.106	0.096	-0.010	-9.4%
Area Sources	0.135	0.138	+0.003	2.2%
On-Road Mobile Sources	3.976	2.160	-1.816	-45.7%
Other Mobile Sources	0.944	0.738	-0.206	-21.8%
Total	5.160	3.131	-2.029	-39.3%

Source: 2018 Western Nevada County Ozone Plan, Chapter XII, Table 11, 57. The sum of the emissions values may not equal the total shown due to rounding.

**Table 3 – 2012 and 2020 Anthropogenic VOC Emissions for Western Nevada County
(summer planning inventory, tpd)**

Source Category	2012	2020	Emissions Difference from 2012 to 2020	Percentage of Total Emissions Change
Stationary Sources	0.702	0.785	+0.083	11.8%
Area Sources	1.394	1.515	+0.121	8.7%
On-Road Mobile Sources	1.793	1.007	-0.786	-43.8%
Other Mobile Sources	1.327	0.958	-0.369	-27.8%
Total	5.215	4.265	-0.950	-18.2%

Source: 2018 Western Nevada County Ozone Plan, Chapter XII, Table 11, 57. The sum of the emissions values may not equal the total shown due to rounding.

c. Attainment Demonstration

Chapter XII of the Plan describes the attainment demonstration in general terms, including photochemical modeling results, while Appendix E to the Plan provides more detail concerning photochemical modeling. Other aspects of this demonstration are included throughout the Plan, including emissions inventory forecasts included in Appendix A and the control strategy described in Chapter IV. The WOE analysis in Appendix A to the CARB Staff Report includes additional supporting information to complement the photochemical modeling and to provide context for this attainment demonstration, such as analyses of anthropogenic emissions, ambient ozone data, and meteorological analyses.

3. The EPA’s Review of the State’s Submission

a. Photochemical Modeling

To approve a SIP’s attainment demonstration, the EPA must make several findings. First, we must find that the demonstration’s technical bases, including the emissions inventories and air quality modeling, are adequate. As discussed above in Section III.A of this document, we are proposing to approve the base year emissions inventory and to find that the future year emissions projections in the 2018 Western Nevada County Ozone Plan reflect appropriate calculation methods and that the latest planning assumptions are properly supported by SIP-approved stationary and mobile source measures.

The modeling followed the Modeling Guidance in essentially all respects, and both the meteorological and the photochemical models showed good performance. One difference between CARB's modeling and the Modeling Guidance was that the state applied RRFs to a weighted design value based on the year 2013, instead of 2012, as would be typical for modeling of a 2012 base year. The Modeling Guidance recognizes that there is no one correct method for choosing base design values,⁹² and provides for other calculations with appropriate justification, such as consideration of unusual meteorological conditions. As noted above, the state's choice of 2013 was based on design values increasing relative to 2012. Since a higher starting point base design value will yield a higher 2020 attainment year design value, the state's use of 2013 adds conservatism to the attainment demonstration.

An important difference from the Modeling Guidance is that the state presented a model performance evaluation only for the single monitoring site in the nonattainment area, in Grass Valley. The Modeling Guidance recommends a performance evaluation using all available ambient monitoring data.⁹³ This is of particular importance for the Western Nevada County area. As described in the conceptual description in the Plan discussed above, ozone in the area is largely due to emissions in and transport from the upwind Sacramento area. The chemical evolution of the pollutant plume as it travels from Sacramento to Nevada County necessitates evaluation at more than a single downwind location. This means that the submitted modeling performance evaluation alone may not be adequate for assessing the performance model, which is influenced by emissions from a much larger area, with various meteorological and terrain impacts. However, because the 2012 modeling exercise in the Plan was essentially the same as that undertaken for the 2017 Sacramento Regional Ozone Plan, the EPA is relying on the latter plan's more complete model performance evaluation. As discussed in the technical support

⁹² Modeling Guidance, section 4.1.1, "Establishing the Base Design Value," 103.

⁹³ Modeling Guidance, section 3.1, "Overview of Model Performance Evaluation," 68.

document⁹⁴ accompanying the EPA's proposed action on the Sacramento plan, the state followed EPA recommended modeling procedures and the modeling had good performance. That was shown in statistical and dynamic performance analyses that covered a larger portion of the modeling domain than the analyses in the submittal for the 2018 Western Nevada County Ozone Plan, encompassing the Western Nevada County as well as the Sacramento area. Overall, the EPA therefore considers the modeling in the 2018 Western Nevada County Ozone Plan to be adequate for establishing modeling performance.

The modeling shows that existing control measures from CARB and the Districts are sufficient to attain the 2008 8-hour ozone NAAQS by 2020 at all monitoring sites in the Western Nevada County area. The Plan follows the procedures recommended in the EPA Modeling Guidance, properly incorporates all modeling and input preparation procedures, tests, and performance analyses called for in the modeling protocol, demonstrates good model performance, and responds to emission changes consistent with observations. Therefore, based on the documentation included in the modeling performance analysis, UAA, and WOE analysis, the EPA finds that the photochemical modeling is adequate for purposes of supporting the attainment demonstration.

b. Control Strategy

As discussed above, the 2018 Western Nevada County Ozone Plan relies on previously adopted measures to achieve all of the emissions reductions needed to attain the 2008 ozone NAAQS in 2020. For the reasons described above, we find that the emissions reductions that are relied on for attainment are creditable and are sufficient to provide for attainment.

c. Attainment Demonstration

The 2018 Western Nevada County Ozone Plan follows the modeling procedures recommended in the EPA's Modeling Guidance and shows excellent performance in simulating

⁹⁴ Docket EPA-R09-OAR-2020-0425, item A-85, "Modeling Technical Support Document (TSD) for the '2017 Sacramento Regional Ozone Plan', 2008 8-hour ozone National Ambient Air Quality Standard," September 14, 2020, Air and Radiation Division, EPA Region IX.

observed ozone concentrations in the 2012 base year. Given the extensive discussion of modeling procedures, tests, and performance analyses called for in the modeling protocol, the good model performance, and the model response to emissions changes consistent with observations, the EPA finds that the modeling is adequate for purposes of supporting the attainment demonstration. Based on our review of the 2018 Western Nevada County Ozone Plan and our proposed findings that the photochemical modeling and control strategy are acceptable and demonstrate attainment by the applicable attainment date, we propose to approve the attainment demonstration for the 2008 ozone NAAQS in the Western Nevada County Ozone Plan as meeting the requirements of CAA section 182(c)(2)(A) and 40 CFR 51.1108.

E. Rate of Progress Plan and Reasonable Further Progress Demonstration

1. Statutory and Regulatory Requirements

Requirements for RFP for ozone nonattainment areas are specified in CAA sections 172(c)(2), 182(b)(1), and 182(c)(2)(B). CAA section 172(c)(2) requires that plans for nonattainment areas provide for RFP, which is defined at CAA section 171(1) as such annual incremental reductions in emissions of the relevant air pollutant as are required under part D, “Plan Requirements for Nonattainment Areas,” or may reasonably be required by the EPA for the purpose of ensuring attainment of the applicable NAAQS by the applicable date. CAA section 182(b)(1) specifically requires that ozone nonattainment areas that are classified as Moderate or above demonstrate a 15 percent reduction in VOC within the first six years of the planning period. The EPA has typically referred to section 182(b)(1) as the Rate of Progress (ROP) requirement. For ozone nonattainment areas classified as Serious or higher, section 182(c)(2)(B) requires reductions averaged over each consecutive 3-year period, beginning 6 years after the baseline year until the attainment date, of at least 3 percent of baseline emissions per year. CAA section 182(c)(2)(B)(ii) allows an amount less than 3 percent of such baseline emissions each year if the state demonstrates to the EPA that a plan includes all measures that can feasibly be implemented in the area in light of technological achievability. To meet CAA

sections 172(c)(2) and 182(c)(2)(B) RFP requirements, the state may substitute NO_x emissions reductions for VOC reductions.⁹⁵

The 2008 Ozone SRR provides that areas classified Moderate or higher for the 2008 8-hour ozone standard will have met the ROP requirements of CAA section 182(b)(1) if the area has a fully approved 15 percent ROP plan for the 1979 1-hour or 1997 8-hour ozone standards, provided the boundaries of the ozone nonattainment areas are the same.⁹⁶ Western Nevada County does not have a fully approved 15 percent ROP plan for either the 1979 1-hour or the 1997 8-hour ozone standards.⁹⁷ Therefore, the 15 percent ROP requirement of section 182(b)(1) remains applicable to Western Nevada County, and the area must show a 15 percent reduction in VOC within the first six years of the planning period.

Except as specifically provided in CAA section 182(b)(1)(C), emissions reductions from all SIP-approved, federally promulgated, or otherwise SIP-creditable measures that occur after the baseline year are creditable for purposes of demonstrating that the RFP targets are met. Because the EPA has determined that the passage of time has caused the effect of certain exclusions to be de minimis, the RFP demonstration is no longer required to calculate and specifically exclude reductions from measures related to motor vehicle exhaust or evaporative emissions promulgated by January 1, 1990; regulations concerning Reid vapor pressure promulgated by November 15, 1990; measures to correct previous RACT requirements; and, measures required to correct previous inspection and maintenance (I/M) programs.⁹⁸

The 2008 Ozone SRR requires the RFP baseline year to be the most recent calendar year for which a complete triennial inventory was required to be submitted to the EPA. For the

⁹⁵ 40 CFR 51.1110(a)(2)(i)(C) and 40 CFR 51.1110(a)(2)(ii)(B); and 70 FR 12264, at 12271 (March 6, 2015).

⁹⁶ 70 FR 12264, 12271 (March 6, 2015). For more information about how the RFP requirement of section 172(c)(2) applies in such areas, see 84 FR 28132, 28157 (June 17, 2019).

⁹⁷ As explained above in Section I, for the 1979 1-hour ozone NAAQS, the EPA classified Western Nevada County as Unclassifiable/Attainment and, thus, it was not subject to the ROP requirement. 62 FR 38856 (July 18, 1997). For the 1997 8-hour ozone NAAQS, the EPA initially designated Western Nevada County as a “Subpart 1” nonattainment area and later reclassified the area to Moderate, triggering the ROP requirement, but subsequently issued a clean data determination, which suspended attainment-related planning requirements, including the ROP requirement. 69 FR 23857 (April 30, 2004); 77 FR 28423 (May 14, 2012); 77 FR 71551 (December 3, 2012).

⁹⁸ 40 CFR 51.1110(a)(7).

purposes of developing RFP demonstrations for the 2008 ozone NAAQS, the applicable triennial inventory year is 2011. As discussed previously, the 2008 Ozone SRR provided states with the opportunity to use an alternative baseline year for RFP,⁹⁹ but this provision was vacated by the D.C. Circuit in the *South Coast II* decision.

2. Summary of the State's Submission

Documentation for the Western Nevada County RFP baseline and milestone emissions inventories is found in the 2018 Western Nevada County Ozone Plan on pages 21-34, 54-56, and in Appendix A. Consistent with the *South Coast II* decision, CARB's RFP demonstration for Western Nevada County uses a 2011 RFP baseline emissions inventory.¹⁰⁰ To develop the 2011 RFP baseline inventory, CARB relied on actual emissions reported from industrial point sources for year 2011 and backcasted emissions from smaller stationary sources and area sources from 2012 to 2011 using the same growth and control factors used for future years.¹⁰¹ The Plan indicates that the 2012 inventory base year for modeling and the 2011 baseline year inventory for RFP are consistent with each other since they both use actual emissions for stationary sources and the same growth profiles. Emissions estimates in the baseline emissions inventory reflect District and CARB rules submitted to the EPA through November 2016.

The RFP demonstration for Western Nevada County for the 2008 ozone NAAQS is shown in Table 10 of the 2018 Western Nevada County Ozone Plan, which is reproduced as Table 4 below. As Western Nevada County is a Serious nonattainment area without a previously approved ROP plan, the Plan demonstrates a reduction in VOC of 15 percent from baseline emissions within six years of the RFP baseline year period, consistent with CAA 182(b)(1). The Plan shows an additional 3 percent reduction of VOC or NO_x emissions, averaged over each consecutive 3-year period until the attainment year. The RFP demonstration calculates future year VOC targets from the 2011 baseline, consistent with CAA 182(c)(2)(B)(i), and it substitutes

⁹⁹ See 40 CFR 51.1110(b).

¹⁰¹ 2018 Western Nevada County Ozone Plan, page 23.

NO_x reductions for VOC reductions beginning in milestone year 2020 to meet VOC emission targets as allowed under CAA section 182(c)(2)(C).¹⁰² CARB concludes that the RFP demonstration meets the applicable requirements for each milestone year as well as the attainment year.

Table 4 – 2008 Ozone RFP Demonstration Western Nevada County (summer planning inventory, tpd or percent)

	VOC		
	2011	2017	2020
Baseline VOC	5.50	4.50	4.20
Required change since 2011 (VOC or NO _x), %		15%	24%
Target VOC level		4.7	4.2
Apparent shortfall (-)/ surplus (+) in VOC		+0.2	-0.1
Apparent shortfall (-)/ surplus (+) in VOC, %		+3.2%	-1.4%
Actual VOC shortfall (-)/ surplus (+), %		+3.2%	-1.4%
	NO _x		
	2011	2017	2020
Baseline NO _x	5.69	3.74	2.89
Change in NO _x since 2011		1.95	2.8
Change in NO _x since 2011, %		34%	49%
NO _x reductions used for VOC substitution through last milestone year, %			3.1%
NO _x reductions since 2011 available for VOC substitution in this milestone year, %		34%	49%
NO _x reductions since 2011 used for VOC substitution in this milestone year, %		0%	3.1%
NO _x reductions since 2011 surplus after meeting VOC substitution needs in this milestone year, %		34%	45.9%
Total shortfall for RFP		0	0
RFP met?		Yes	Yes

Source: 2018 Western Nevada County Ozone Plan, Table 10, p. 55.

3. The EPA's Review of the State's Submission

Based on our review of the emissions inventory documentation in the 2018 Western Nevada County Ozone Plan, we find that CARB and the District have used the most recent

¹⁰² See also 40 CFR 51.1110(a)(2)(i)(C) and 40 CFR 51.1110(a)(2)(ii)(B); and 70 FR 12264, at 12271 (March 6, 2015). The District's RFP demonstration substitutes NO_x reductions for VOC reductions on a percentage basis. See EPA, NO_x Substitution Guidance (December 1993).

planning and activity assumptions, emissions models, and methodologies in developing the RFP baseline and milestone year emissions inventories. We have also reviewed the calculations in Table 10 of the Plan and presented in Table 4 above and find that the District and CARB have used an appropriate calculation method to demonstrate RFP.

We have also reviewed the comparison of the VOC emission reductions against the 15 percent ROP requirement. As shown in Table 4, the RFP demonstration shows that Western Nevada County meets the 15 percent reduction in VOC emissions with an additional 3.2 percent surplus in VOC emissions reductions from 2011 to 2017. Such reductions satisfy the ROP requirement for Western Nevada County for the 2008 ozone NAAQS. As a result, we find that the District and CARB have met the ROP requirements of CAA section 182(b)(1) for Western Nevada County with respect to the 2008 ozone NAAQS.

We find that the District's use of substitution of NO_x reductions for VOC reductions in this demonstration is appropriate under CAA section 182(c)(2)(C). As described in Section III.D.2.a of this document, ozone formation in Western Nevada County is NO_x-limited, and the substituted NO_x reductions are expected to achieve an equal or greater reduction in ozone concentrations as would result from the VOC emissions reductions described in CAA section 182(c)(2)(B).¹⁰³

For these reasons, we have determined that the 2018 Western Nevada County Ozone Plan demonstrates RFP in each milestone year and the attainment year, consistent with applicable CAA requirements and EPA guidance. We therefore propose to approve the RFP demonstrations

¹⁰³ As discussed above, modeling for the Sacramento nonattainment area used a modeling domain that encompassed the Western Nevada nonattainment area, and was used to create an isopleth diagram showing ozone for various levels of NO_x and VOC emissions. Sacramento Regional 2008 NAAQS 8-hour Attainment and Reasonable Further Progress Plan ("2017 Sacramento Regional Ozone Plan"), July 24, 2017, Appendix B-4, p.B-158, Figure 16, available at <https://ww2.arb.ca.gov/resources/documents/2017-sacramento-regional-2008-8-hour-ozone-attainment-and-further-reasonable>. The EPA used this information to estimate the sensitivity of ozone to NO_x reductions and to VOC reductions, and found NO_x reductions to be 23 times as effective at reducing ozone as VOC reductions, on a tonnage basis, and 13 times as effective on a percentage basis. Docket EPA-R09-OAR-2020-0425, item A-86, "Assessment of Sacramento Metro NAA Conformity Motor Vehicle Emissions Budget Consistency with O3 NAAQS Attainment," September 14, 2020, Air and Radiation Division, EPA Region IX.

for the Western Nevada County nonattainment area for the 2008 ozone NAAQS under sections 172(c)(2), 182(b)(1) and 182(c)(2)(B) of the CAA and 40 CFR 51.1110(a)(2)(ii).

F. Contingency Measures

1. Statutory and Regulatory Requirements

Under the CAA, 8-hour ozone nonattainment areas classified under subpart 2 as Moderate or above must include in their SIPs contingency measures consistent with sections 172(c)(9) and 182(c)(9). Contingency measures are additional controls or measures to be implemented in the event the area fails to make reasonable further progress or to attain the NAAQS by the attainment date. The SIP should contain trigger mechanisms for the contingency measures, specify a schedule for implementation, and indicate that the measure will be implemented without significant further action by the state or the EPA.¹⁰⁴

Neither the CAA nor the EPA's implementing regulations establish a specific level of emissions reductions that implementation of contingency measures must achieve, but the EPA's 2008 Ozone SRR reiterates the EPA's policy that contingency measures should generally provide for emissions reductions approximately equivalent to one year's worth progress, amounting to reductions of 3 percent of the baseline emissions inventory for the nonattainment area.¹⁰⁵

It has been the EPA's longstanding interpretation of CAA section 172(c)(9) that states may rely on federal measures (e.g., federal mobile source measures based on the incremental turnover of the motor vehicle fleet each year) and local measures already scheduled for implementation that provide emissions reductions in excess of those needed to provide for RFP or expeditious attainment. The key is that the Act requires that contingency measures provide for additional emissions reductions that are not relied on for RFP or attainment and that are not included in the RFP or attainment demonstrations as meeting part or all of the contingency

¹⁰⁴ 70 FR 71612 (November 29, 2005). See also 2008 Ozone SRR, 80 FR 12264, at 12285 (March 6, 2015).

¹⁰⁵ 80 FR 12264 at 12285 (March 6, 2015).

measures requirements. The purpose of contingency measures is to provide continued emissions reductions while the plan is being revised to meet the missed milestone or attainment date.

The EPA has approved numerous SIPs under this interpretation, i.e., SIPs that use as contingency measures one or more federal or local measures that are in place and provide reductions that are in excess of the reductions required by the attainment demonstration or RFP plan,¹⁰⁶ and there is case law supporting the EPA's interpretation in this regard.¹⁰⁷ However, in *Bahr v. EPA*, the United States Court of Appeals for the Ninth Circuit ("Ninth Circuit") rejected the EPA's interpretation of CAA section 172(c)(9) as allowing for early implementation of contingency measures.¹⁰⁸ The Ninth Circuit concluded that contingency measures must take effect at the time the area fails to make RFP or attain by the applicable attainment date, not before.¹⁰⁹ Thus, within the geographic jurisdiction of the Ninth Circuit, states cannot rely on early-implemented measures to comply with the contingency measures requirements under CAA section 172(c)(9) and 182(c)(9).¹¹⁰

2. Summary of the State's Submission

In the 2018 Western Nevada County Ozone Plan, CARB calculates the extent of surplus emission reductions (i.e., surplus to meeting the RFP milestone requirement for a given milestone year) in the milestone years and estimates the incremental emissions reductions in the year following the attainment year.¹¹¹ In light of the *Bahr v. EPA* decision, however, the 2018 Western Nevada County Ozone Plan does not rely on the surplus or incremental emissions

¹⁰⁶ See, e.g., 62 FR 15844 (April 3, 1997) (direct final rule approving an Indiana ozone SIP revision); 62 FR 66279 (December 18, 1997) (final rule approving an Illinois ozone SIP revision); 66 FR 30811 (June 8, 2001) (direct final rule approving a Rhode Island ozone SIP revision); 66 FR 586 (January 3, 2001) (final rule approving District of Columbia, Maryland, and Virginia ozone SIP revisions); and 66 FR 634 (January 3, 2001) (final rule approving a Connecticut ozone SIP revision).

¹⁰⁷ See, e.g., *LEAN v. EPA*, 382 F.3d 575 (5th Cir. 2004) (upholding contingency measures that were previously required and implemented where they were in excess of the attainment demonstration and RFP SIP).

¹⁰⁸ *Bahr v. EPA*, 836 F.3d 1218, at 1235-1237 (9th Cir. 2016).

¹⁰⁹ *Id.* at 1235-1237.

¹¹⁰ The *Bahr v. EPA* decision involved a challenge to an EPA approval of contingency measures under the general nonattainment area plan provisions for contingency measures in CAA section 172(c)(9), but, given the similarity between the statutory language in section 172(c)(9) and the ozone-specific contingency measures provision in section 182(c)(9), we find that the decision affects how both sections of the Act must be interpreted.

¹¹¹ CARB Staff Report, Section D, 10-11.

reductions to comply with the contingency measures requirements of sections 172(c)(9) and 182(c)(9) but, rather, to provide context in which to evaluate the adequacy of *Bahr*-compliant (i.e., to take effect if triggered) contingency measures for the 2008 ozone NAAQS.

To comply with sections 172(c)(9) and 182(c)(9), as interpreted in the *Bahr v. EPA* decision, the state must develop, adopt and submit a contingency measure to be triggered upon a failure to meet RFP milestones or failure to attain the NAAQS by the applicable attainment date regardless of the extent to which already-implemented measures would achieve surplus emissions reductions beyond those necessary to meet RFP milestones and beyond those predicted to achieve attainment of the NAAQS. Therefore, to fully address the contingency measures requirement for the 2008 ozone NAAQS in the Western Nevada nonattainment area, the District has committed to develop, adopt and submit a contingency measure to CARB in sufficient time to allow CARB to submit the contingency measure as a SIP revision to the EPA within 12 months of the EPA's final conditional approval of the contingency measures element of the 2018 Western Nevada County Ozone Plan.¹¹²

The District's commitment is to adopt the 2019 (or most recent) Architectural Coatings Suggested Control Measure (SCM), developed and approved by CARB, as a rule to take effect upon adoption throughout the nonattainment area upon a determination that the Western Nevada County nonattainment area failed to meet an RFP milestone or failed to attain the 2008 ozone NAAQS by the applicable attainment date. The District estimates that adoption of this new measure will yield an estimated 0.010 tpd in VOC emissions reductions in the nonattainment area. The District also evaluated three other additional categories for potential contingency measures. The categories are automotive coatings, water heaters, boilers, and process heaters

¹¹² Letter dated October 26, 2020, from Gretchen Bennitt, Executive Director, NSAQMD, to Richard Corey, Executive Officer, CARB.

rated less than a million BTU per hour, and miscellaneous combustion units. However, the District determined that these categories did not yield meaningful reductions.¹¹³

CARB attached the District's commitment to a letter committing CARB to adopt and submit the revised NSAQMD rule to the EPA within one year of the EPA's final conditional approval of the contingency measures element of the 2018 Western Nevada County Ozone Plan.¹¹⁴

3. The EPA's Review of the State's Submission

CAA sections 172(c)(9) and 182(c)(9) require contingency measures to address potential failures to achieve RFP milestones or to attain the NAAQS by the applicable attainment date through implementation of additional emissions controls in the event the area fails to make RFP or to attain the NAAQS by the applicable attainment date. Contingency measures must provide for the implementation of additional emissions controls, if triggered, without significant further action by the state or the EPA. For the purposes of evaluating the adequacy of the emissions reductions from the contingency measures (once adopted and submitted), we find it useful to distinguish between contingency measures to address potential failure to achieve RFP milestones ("RFP contingency measures") and contingency measures to address potential failure to attain the NAAQS ("attainment contingency measures").

With respect to the RFP contingency measures requirement, we have reviewed the surplus emissions estimates in each of the RFP milestone years, as shown in CARB's Staff Report, and find that the calculations are correct. We therefore agree that the 2018 Western Nevada County Ozone Plan provides surplus emissions reductions well beyond those necessary to demonstrate RFP in all of the RFP milestone years. While such surplus emissions reductions in the RFP milestone years do not represent contingency measures themselves, we believe they

¹¹³ Appendix to Letter dated October 26, 2020, from Gretchen Bennitt, Executive Director, NSAQMD, to Richard Corey, Executive Officer, CARB.

¹¹⁴ Letter dated November 16, 2020, from Richard W. Corey, Executive Officer, CARB, to John Busterud, Regional Administrator, EPA Region IX.

are relevant in evaluating the adequacy of RFP contingency measures that are submitted (or will be submitted) to meet the requirements of sections 172(c)(9) and 182(c)(9).

The attainment year for the 2008 ozone NAAQS in Western Nevada County coincides with the 2020 RFP milestone, and thus, we have reviewed the emissions reductions estimated by the District for the committed contingency measures in light of the facts and circumstances in Western Nevada County in the year following the attainment year, to determine whether there will be sufficient continued progress in that area in the event the area fails to achieve the 2020 RFP milestone or fails to attain the 2008 ozone NAAQS by the 2020 attainment year.¹¹⁵

As discussed above, 2018 Western Nevada County Ozone Plan provides estimates of emissions reductions that are surplus of the reductions necessary for RFP or attainment, but does not include measures that would implement additional emissions controls, if triggered, without significant further action by the state or the EPA. However, CARB and the District have submitted commitments to adopt and submit a revised District rule with the necessary provisions as a SIP revision within one year of the EPA's final action on the contingency measures element of the Plan. The specific revisions the District has committed to make, such as tightening control efficiencies or establishing content limits, upon a failure to achieve a milestone or a failure to attain, would comply with the requirements in CAA sections 172(c)(9) and 182(c)(9) because the additional controls would be undertaken if the area fails to achieve a milestone or fails to attain, and would take effect without significant further action by the State or the EPA.

We find that the contingency measures described in the District and CARB's commitment letters would provide adequate emissions reductions when triggered. Neither the CAA nor the EPA's implementing regulations for the ozone NAAQS establish a specific amount of emissions reductions that implementation of contingency measures must achieve, but we generally expect that contingency measures should provide for emissions reductions

¹¹⁵ CAA section 182(g)(2) provides that states must submit RFP milestone compliance demonstrations within 90 days after the date on which an applicable milestone occurs, except where the milestone and attainment date are the same and the standard has been attained.

approximately equivalent to one year's worth of RFP, which, for ozone, amounts to reductions of 3 percent of the RFP baseline year emissions inventory for the nonattainment area. For the 2008 ozone NAAQS in Western Nevada County, one year's worth of RFP is approximately 0.16 tpd of VOC or 0.17 tpd of NO_x reductions.¹¹⁶ The District's commitment letter estimates the potential additional emission reductions from its contingency measure commitment at 0.010 tpd VOC. However, emissions in the year following the attainment year (2021) in Western Nevada County are expected to be approximately 0.048 tpd lower for VOC and 0.23 tpd lower for NO_x than in the attainment year (2020).¹¹⁷ The downward trend in emissions reflects the continuing benefits of already-implemented measures and is primarily the result of vehicle turnover, which refers to the ongoing replacement by individuals, companies, and government agencies of older, more polluting vehicles and engines with newer vehicles and engines. While the continuing reductions from such already-implemented measures do not constitute contingency measures themselves, they provide context in which we evaluate the adequacy of the contingency measures submitted (or, in this case, to be submitted) to fulfill the requirements of CAA sections 172(c)(9) and 182(c)(9).

In this instance, we find that the emissions reductions from the to-be-adopted contingency measures together with the reductions expected to occur due to already-implemented measures are consistent with our guidance recommending that contingency measures provide for one year's worth of progress in the event of a failure to meet an RFP milestone or a failure to attain the NAAQS by the applicable attainment date. Therefore, in light of the year-to-year reductions in the VOC and NO_x inventories, we find that the contingency measures described in the District's and CARB's commitment letters would provide sufficient

¹¹⁶ One year's worth of RFP for Western Nevada County corresponds to 3 percent of the 2011 RFP baseline year inventories for VOC (5.496 tpd) and NO_x (5.687 tpd).

¹¹⁷ Estimates for the emissions reductions in the year following the attainment year are based on the emissions inventories for Western Nevada County in Appendix A of the Plan. The estimate of the reductions in emissions of 0.048 tpd of VOC and 0.23 tpd of NO_x in 2021 (relative to 2020) amounts to approximately 29 percent and 132 percent of one year's worth of progress, respectively in this area based on the 2011 RFP baseline inventory.

emissions reductions even though reductions from the measures would be lower than the EPA normally recommends for such measures.

For these reasons, and in light of commitments from the District and CARB to adopt and submit a District rule that will apply tighter limits or requirements upon a failure to achieve an RFP milestone or the 2008 ozone NAAQS by the applicable attainment date, we propose to approve conditionally the contingency measures element of the 2018 Western Nevada County Ozone Plan as meeting the contingency measures requirements of CAA sections 172(c)(9) and 182(c)(9). Our proposed approval is conditional because it relies upon commitments to adopt and submit a specific enforceable contingency measure (i.e., a revised District rule or rules with contingent provisions). Conditional approvals are authorized under CAA section 110(k)(4).

G. Motor Vehicle Emissions Budgets for Transportation Conformity

1. Statutory and Regulatory Requirements

Section 176(c) of the CAA requires federal actions in nonattainment and maintenance areas to conform to the SIP's goals of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of the standards. Conformity to the SIP's goals means that such actions will not: (1) cause or contribute to violations of a NAAQS, (2) worsen the severity of an existing violation, or (3) delay timely attainment of any NAAQS or any interim milestone.

Actions involving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to the EPA's transportation conformity rule, codified at 40 CFR part 93, subpart A. Under this rule, metropolitan planning organizations in nonattainment and maintenance areas coordinate with state and local air quality and transportation agencies, the EPA, the FHWA, and the FTA to demonstrate that an area's regional

transportation plans and transportation improvement programs conform to the applicable SIP.¹¹⁸

This demonstration is typically done by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the motor vehicle emissions budgets (“budgets”) contained in all control strategy SIPs. Budgets are generally established for specific years and specific pollutants or precursors. Ozone plans should identify budgets for on-road emissions of ozone precursors (NO_x and VOC) in the area for each RFP milestone year and, if the plan demonstrates attainment, the attainment year.¹¹⁹

For budgets to be approvable, they must meet, at a minimum, the EPA’s adequacy criteria (40 CFR 93.118(e)(4)) and be approvable under all pertinent SIP requirements. To meet these requirements, the budgets must be consistent with the attainment and RFP requirements and reflect all of the motor vehicle control measures contained in the attainment and RFP demonstrations.¹²⁰

The EPA’s process for determining adequacy of a budget consists of three basic steps: (1) providing public notification of a SIP submission; (2) providing the public the opportunity to comment on the budget during a public comment period; and (3) making a finding of adequacy or inadequacy.¹²¹

2. Summary of the State’s Submission

Chapter VI of the 2018 Western Nevada County Ozone Plan includes budgets for the 2020 RFP milestone and attainment year. The budgets were derived from the 2011 base year.

¹¹⁸ As mentioned in Section I.B, Western Nevada County is an isolated rural area. Isolated rural areas do not have federally required metropolitan transportation plans and transportation improvement programs, and they are not subject to the frequency requirements for conformity determinations on transportation plans and transportation improvement programs (40 CFR 93.104(b), (c), and (e)). Instead, in an isolated rural area, a conformity determination is required for the 2008 ozone and other applicable NAAQS only when a non-exempt FHWA/FTA project(s) needs funding or approval, based on the conformity requirements for isolated rural areas at 40 CFR 93.109(g). See also “Transportation Conformity Guidance for 2008 Ozone Nonattainment Areas,” July 2012, EPA Office of Transportation and Air Quality, Transportation and Climate Division, available at https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20120701_otaq_epa-420_b-12-045_guidance_transport_conformity_2008_oxone_naaqs.pdf.

¹¹⁹ 40 CFR 93.102(b)(2)(i).

¹²⁰ 40 CFR 93.118(e)(4)(iii), (iv) and (v). For more information on the transportation conformity requirements and applicable policies on budgets, please visit our transportation conformity web site at: <http://www.epa.gov/otaq/stateresources/transconf/index.htm>.

¹²¹ 40 CFR 93.118(f)(2).

The budgets were calculated using EMFAC2014, CARB’s then-current and latest approved version of the EMFAC model for estimating emissions from on-road vehicles operating in California and are rounded up to the nearest whole number. The budgets in the Plan reflect updated VMT estimates from the NCTC 2015–2035 Regional Transportation Plan, adopted by NCTC in January 2018, which are lower than the conservative estimate of on-road emissions in the emissions inventory. Given the use of updated travel data and CARB’s convention of rounding emissions up to the next tenth (0.1), there are some differences between the budgets and the emissions inventories in the Plan for the RFP and attainment demonstrations. CARB’s addendum to the technical clarification memorandum dated October 27, 2020 indicates that the differences are quite small (VOC: 0.55 tpd; NO_x: 0.26 tpd) and do not impact the RFP or attainment demonstrations.¹²² The conformity budgets for NO_x and VOC in the Plan for the Western Nevada County area are provided in Table 5 below.

Table 5 - Transportation Conformity Budgets for 2020 for the 2008 Ozone NAAQS in Western Nevada County (summer planning inventory, tpd)

	2020	
	VOC	NO _x
Motor vehicle emissions budget	0.8	1.7

Source: Table 7 of the 2018 Western Nevada County Ozone Plan.

3. The EPA’s Review of the State’s Submission

As part of our review of the approvability of the budgets in the 2018 Western Nevada County Ozone Plan, we have evaluated the budgets using our adequacy criteria in 40 CFR 93.118(e)(4) and (5). We will complete the adequacy review concurrent with our final action on the 2018 Western Nevada County Ozone Plan. The transportation conformity rule does not require the EPA to find budgets adequate prior to proposing approval of them.¹²³ Today, the EPA is announcing the beginning of the adequacy process for these budgets, and the public has 30

¹²² This is addressed in more detail in our memorandum for the budgets, as detailed in Section III.G.3.

¹²³ Under the transportation conformity regulations, the EPA may review the adequacy of submitted motor vehicle emission budgets simultaneously with the EPA’s approval or disapproval of the submitted implementation plan. 40 CFR 93.118(f)(2).

days to comment on their adequacy, per the transportation conformity regulation at 40 CFR 93.118(f)(2)(i) and (ii).

As documented in a separate memorandum included in the docket for this rulemaking, we preliminarily conclude that the budgets in the 2018 Western Nevada County Ozone Plan meet each adequacy criterion.¹²⁴ While adequacy and approval are two separate actions, reviewing the budgets in terms of the adequacy criteria informs the EPA's decision to propose to approve the budgets. We have completed our detailed review of the 2018 Western Nevada County Ozone Plan and are proposing herein to approve the SIP's attainment and RFP demonstrations. We have also reviewed the budgets in the 2018 Western Nevada County Ozone Plan and found that they are consistent with the attainment and RFP demonstrations for which we are proposing approval, are based on control measures that have already been adopted and implemented, and meet all other applicable statutory and regulatory requirements including the adequacy criteria in 40 CFR 93.1118(e)(4) and (5). Therefore, we are proposing to find adequate and approve the 2020 budgets in the 2018 Western Nevada County Ozone Plan (and shown in Table 5, above). If we finalize our adequacy determination and approval of the budgets for the 2008 ozone NAAQS in the Plan as proposed, then they will be approved for use in transportation conformity determinations.

Under our transportation conformity rule, as a general matter, once budgets are approved, they cannot be superseded by revised budgets submitted for the same CAA purpose and the same period of years addressed by the previously approved SIP until the EPA approves the revised budgets as a SIP revision. In other words, as a general matter, such approved budgets cannot be superseded by revised budgets found adequate, but rather only through approval of the revised

¹²⁴ Memorandum dated December 4, 2020, from Khoi Nguyen, Air Planning Office, EPA Region 9, to the docket for this proposed rulemaking, titled "Adequacy Documentation for Plan Motor Vehicle Emission Budgets in 2018 Western Nevada County Ozone Plan."

budgets, unless the EPA specifies otherwise in its approval of a SIP by limiting the duration of the approval to last only until subsequently submitted budgets are found adequate.¹²⁵

In this instance, CARB originally requested that we limit the duration of our approval of the budgets in the 2018 Western Nevada County Ozone Plan only until the effective date of the EPA's adequacy finding for any subsequently submitted budgets.¹²⁶ However, in an email dated August 17, 2020, CARB indicated its decision to no longer request limited approval of the budgets for Western Nevada.¹²⁷

H. Other Clean Air Act Requirements Applicable to Serious Ozone Nonattainment Areas

In addition to the SIP requirements discussed in the previous sections, the CAA includes certain other SIP requirements applicable to Serious ozone nonattainment areas, such as Western Nevada County. We describe these provisions and their current status below for informational purposes only.

1. Enhanced Vehicle Inspection and Maintenance Programs

Section 182(c)(3) of the CAA requires states with ozone nonattainment areas classified under subpart 2 as Serious or above to implement an enhanced motor vehicle I/M program in each urbanized area within the nonattainment area, as defined by the Bureau of the Census, with a 1980 population of 200,000 or more. The requirements for those programs are provided in CAA section 182(c)(3) and 40 CFR part 51, subpart S.

Consistent with the 2008 Ozone SRR, no new I/M programs are currently required for nonattainment areas for the 2008 ozone NAAQS.¹²⁸ Further, because there are no urbanized areas in Nevada County, the Western Nevada County nonattainment area is not required to

¹²⁵ 40 CFR 93.118(e)(1).

¹²⁶ CARB's request to limit the duration of the approval of the Western Nevada County ozone budgets is contained in a letter dated December 2, 2018, from Richard Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, EPA Region IX.

¹²⁷ See email dated August 17, 2020 from Nesamani Kalandiyur, CARB, to EPA Region 9.

¹²⁸ 2008 Ozone SRR, 80 FR 12264, 12283 (March 6, 2015).

implement an enhanced I/M program. Nevada County has had a basic smog check program in place since 1998.¹²⁹

2. New Source Review Rules

Section 182(a)(2)(C) of the CAA requires states to develop SIP revisions containing permit programs for each of its ozone nonattainment areas. The SIP revisions are to include requirements for permits in accordance with CAA sections 172(c)(5) and 173 for the construction and operation of each new or modified major stationary source for VOC and NO_x anywhere in the nonattainment area. The 2008 Ozone SRR includes provisions and guidance for nonattainment NSR programs.¹³⁰

The 2018 Western Nevada County Ozone Plan cites District Rule 428, “New Source Review Requirements for New and Modified Major Sources in Federally Designated Non-attainment Areas,” as amended by the District on June 27, 2016, as the rule that meets Serious area requirements for nonattainment NSR.¹³¹ Since the Plan’s submittal, the District rescinded the previously adopted Rule 428 and concurrently adopted a new Rule 428, “NSR Requirements for New and Modified Major Sources in Nonattainment Areas,” on November 25, 2019. The rule was submitted to the EPA on February 19, 2020. We approved this version of Rule 428 into the SIP on November 20, 2020.¹³²

3. Clean Fuels Fleet Program

Sections 182(c)(4)(A) and 246 of the CAA require California to submit to the EPA for approval into the SIP measures to implement a Clean Fuels Fleet Program. Section 182(c)(4)(B) of the CAA allows states to opt out of the federal clean-fuel vehicle fleet program by submitting a SIP revision consisting of a program or programs that will result in at least equivalent long-term reductions in ozone precursors and toxic air emissions.

¹²⁹ 2018 Western Nevada County Ozone Plan, page 50.

¹³⁰ 80 FR 12264 (March 6, 2015).

¹³¹ 2018 Western Nevada County Ozone Plan, 40.

¹³² 85 FR 74263 (November 20, 2020).

In 1994, CARB submitted a SIP revision to the EPA to opt out of the federal clean-fuel fleet program. The submittal included a demonstration that California's low-emissions vehicle program achieved emissions reductions at least as large as would be achieved by the federal program. The EPA approved the SIP revision to opt out of the federal program on August 27, 1999.¹³³ There have been no changes to the federal Clean Fuels Fleet program since the EPA approved the California SIP revision to opt out of the federal program, and thus, no corresponding changes to the SIP are required. Thus, we find that the California SIP revision to opt out of the federal program, as approved in 1999, meets the requirements of CAA sections 182(c)(4)(A) and 246 for Western Nevada County for the 2008 ozone NAAQS.

4. Gasoline Vapor Recovery

Section 182(b)(3) of the CAA requires states to submit a SIP revision by November 15, 1992, that requires owners or operators of gasoline dispensing systems to install and operate gasoline vehicle refueling vapor recovery ("Stage II") systems in ozone nonattainment areas classified as Moderate and above. California's ozone nonattainment areas implemented Stage II vapor recovery well before the passage of the CAA Amendments of 1990.¹³⁴

Section 202(a)(6) of the CAA requires the EPA to promulgate standards requiring motor vehicles to be equipped with onboard refueling vapor recovery (ORVR) systems. The EPA promulgated the first set of ORVR system regulations in 1994 for phased implementation on vehicle manufacturers, and since the end of 2006, essentially all new gasoline-powered light and medium-duty vehicles are ORVR-equipped.¹³⁵ Section 202(a)(6) also authorizes the EPA to waive the SIP requirement under CAA section 182(b)(3) for installation of Stage II vapor recovery systems after such time as the EPA determines that ORVR systems are in widespread use throughout the motor vehicle fleet. Effective May 16, 2012, the EPA waived the requirement of CAA section 182(b)(3) for Stage II vapor recovery systems in ozone nonattainment areas

¹³³ 64 FR 46849 (August 27, 1999).

¹³⁴ General Preamble, 57 FR 13498 at 13514 (April 16, 1992).

¹³⁵ 77 FR 28772, at 28774 (May 16, 2012).

regardless of classification.¹³⁶ Thus, a SIP submittal meeting CAA section 182(b)(3) is not required for the 2008 ozone NAAQS.

While a SIP submittal meeting CAA section 182(b)(3) is not required for the 2008 ozone NAAQS, under California State law (i.e., Health and Safety Code section 41954), CARB is required to adopt procedures and performance standards for controlling gasoline emissions from gasoline marketing operations, including transfer and storage operations. State law also authorizes CARB, in cooperation with local air districts, to certify vapor recovery systems, to identify defective equipment and to develop test methods. CARB has adopted numerous revisions to its vapor recovery program regulations and continues to rely on its vapor recovery program to achieve emissions reductions in ozone nonattainment areas in California.

In Western Nevada County, the installation and operation of CARB-certified vapor recovery equipment is required and enforced through NSAQMD Rule 215, “Phase II Vapor Recovery System Requirements,” which was most recently approved into the SIP on July 26, 2011.¹³⁷

5. Enhanced Ambient Air Monitoring

Section 182(c)(1) of the CAA requires that all ozone nonattainment areas classified as Serious or above implement measures to enhance and improve monitoring for ambient concentrations of ozone, NO_x, and VOC, and to improve monitoring of emissions of NO_x and VOC. The enhanced monitoring network for ozone is referred to as the Photochemical Assessment Monitoring Station (PAMS) network. The EPA promulgated final PAMS regulations on February 12, 1993.¹³⁸

Prior to 2006, the EPA’s ambient air monitoring regulations in 40 CFR part 58, “Ambient Air Quality Surveillance,” set forth specific SIP requirements (see former 40 CFR 52.20). In

¹³⁶ See 40 CFR 51.126(b).

¹³⁷ 76 FR 44493 (July 26, 2011).

¹³⁸ 58 FR 8452 (February 12, 1993).

2006, the EPA significantly revised and reorganized 40 CFR part 58.¹³⁹ Under revised 40 CFR part 58, SIP revisions are no longer required; rather, compliance with EPA monitoring regulations is established through review of required annual monitoring network plans.¹⁴⁰ The 2008 Ozone SRR made no changes to these requirements.¹⁴¹

The 2018 Western Nevada County Ozone Plan does not specifically address the enhanced ambient air monitoring requirement in CAA section 182(c)(1). However, we note that CARB includes the ambient monitoring network within Western Nevada County, in its annual monitoring network plan that is submitted to the EPA, and that we have approved the most recent annual monitoring network plan (“Annual Network Plan Covering Monitoring Operations in 25 California Air Districts, July 2020” or “2020 ANP”) with respect to Western Nevada County.¹⁴² In addition, CARB has fulfilled the requirement under 40 CFR part 58, Appendix D, section 5(h), to submit an enhanced monitoring plan for Western Nevada County.¹⁴³ Based on our review and approval of the 2020 ANP with respect to Western Nevada County and CARB’s submittal of an enhanced monitoring plan for Western Nevada County, we propose to find that CARB and the NSAQMD meet the enhanced monitoring requirements under CAA section 182(c)(1) for Western Nevada County with respect to the 2008 ozone NAAQS.

IV. Proposed Action

For the reasons discussed in this notice, under CAA section 110(k)(3), the EPA is proposing to approve as a revision to the California SIP the following portions of the 2018 Western Nevada County Ozone Plan submitted by CARB on December 2, 2018:

¹³⁹ 71 FR 61236 (October 17, 2006).

¹⁴⁰ 40 CFR 58.2(b) now provides “The requirements pertaining to provisions for an air quality surveillance system in the SIP are contained in this part.”

¹⁴¹ The 2008 ozone SRR addresses PAMS-related requirements at 80 FR 12264, at 12291 (March 6, 2015).

¹⁴² Letter dated November 5, 2020, from Gwen Yoshimura, Manager, Air Quality Analysis Office, EPA Region IX, to Ravi Ramalingam, Chief, Consumer Products and Air Quality Assessment Branch, Air Quality Planning and Science Division, CARB.

¹⁴³ Letter dated November 9, 2020, from Dr. Michael T. Benjamin, Chief, Air Quality Planning and Science Division, CARB, to Meredith Kurpius, Assistant Director, EPA Region 9, enclosing the “2020 Monitoring Network Assessment (October 2020).” The assessment includes a five-year network assessment and an updated enhanced monitoring plan, as required by 40 CFR 58, Appendix D, Section 5(a).

- Base year emissions inventory element 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 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 as meeting the requirements of CAA section 182(c)(2)(A) and 40 CFR 51.1108;
- ROP demonstration element as meeting the requirements of CAA 182(b)(1) and 40 CFR 51.1110(a)(4)(i) for the 2008 ozone NAAQS;
- RFP demonstration element as meeting the requirements of CAA sections 172(c)(2), 182(b)(1), and 182(c)(2)(B), and 40 CFR 51.1110(a)(4)(iii) for the 2008 ozone NAAQS;
- Motor vehicle emissions budgets for the RFP milestone and attainment year of 2020 (see Table 5) because they are consistent with the RFP and attainment demonstrations for the 2008 ozone NAAQS proposed for approval herein and meet the other criteria in 40 CFR 93.118(e);

We are also proposing to find that the:

- California SIP revision to opt-out of the federal Clean Fuels Fleet Program meets the requirements of CAA sections 182(c)(4)(A) and 246 and 40 CFR 51.1102 for the 2008 ozone NAAQS with respect to Western Nevada County; and
- Requirements for enhanced monitoring under CAA section 182(c)(1) and 40 CFR 51.1102 for Western Nevada County for the 2008 ozone NAAQS have been met.

In addition, we are proposing, under CAA section 110(k)(4), to approve conditionally the contingency measures element of the 2018 Western Nevada County Ozone Plan as meeting the requirements of CAA sections 172(c)(9) and 182(c)(9) for RFP and attainment contingency measures. Our proposed approval is based on commitments by the District and CARB to supplement the element through submission, as a SIP revision (within one year of our final conditional approval action), of a new District rule that would add new limits or other

requirements if an RFP milestone is not met or if Western Nevada County fails to attain the 2008 ozone NAAQS by the applicable attainment date.

V. 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 proposed action merely proposes to approve, or conditionally approve, state plans as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed 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 (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 proposed 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).

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: December 21, 2020.

John Busterud,
Regional Administrator,
Region IX.

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