ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R09–OAR–2011–0622; FRL–9464–8]

Approval of Air Quality Implementation Plans; California; South Coast; Attainment Plan for 1997 8-Hour Ozone Standard

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve state implementation plan (SIP) revisions submitted by California to provide for attainment of the 1997 8-hour ozone national ambient air quality standards in the Los Angeles-South Coast Area (South Coast). These SIP revisions are the South Coast 2007 Air Quality Management Plan (South Coast 2007 AQMP) (revised 2011) and South Coast-related portions of the 2007 State Strategy (revised 2009 and 2011). EPA is proposing to approve the emissions inventories, reasonably available control measures, provisions for transportation control strategies and measures, reasonable further progress (RFP) and attainment demonstrations, transportation conformity motor vehicle emissions budgets for all RFP milestone years and the attainment year, contingency measures for failure to make RFP or attain, and Clean Air Act section 182(e)(5) new technologies provisions and associated commitment to adopt contingency measures. EPA is also proposing to approve commitments to measures and reductions by the South Coast Air Quality Management District and the California Air Resources Board. Simultaneously and in the alternative, EPA is proposing to disapprove the SIP with respect to certain provisions for transportation control strategies and measures pending resolution of petitions filed before the 9th Circuit U.S. Court of Appeals in *Association of Irritated Residents* v. *EPA,* 632 F.3d 584 (9th Cir. 2011).

DATES: Any comments must be submitted by October 17, 2011.

ADDRESSES: Submit comments, identified by docket number EPA–R09–OAR–2011–0622, by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the on-line instructions.
- *E-mail: tax.wienke@epa.gov.*
- *Mail or deliver:* Marty Robin, Office of Air Planning (AIR–2), U.S. Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Instructions: All comments will be included in the public docket without change and may be made available online at *http://www.regulations.gov,* including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider CBI or otherwise protected should be clearly identified as such and should not be submitted through *http://www.regulations.gov* or e-mail. The *http://www.regulations.gov* Web site is an ''anonymous access'' system, and EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send e-mail directly to EPA, your e-mail address will be automatically captured and included as part of the public comment. If EPA cannot read your comments due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment.

Docket: The index to the docket for this action is available electronically on the *http://www.regulations.gov* Web site and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California, 94105. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (*e.g.,* copyrighted material), and some may not be publicly available at either location (*e.g.,* CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section below.

Copies of the SIP materials are also available for inspection at the following locations:

- California Air Resources Board, 1001 I Street, Sacramento, California 95812, and
- South Coast Air Quality Management District, 21865 E. Copley Drive, Diamond Bar, California 91765.

The SIP materials are also electronically available at: *http://aqmd.gov/aqmp/07aqmp/index.html* and *http://www.arb.ca.gov/planning/sip/sip.htm.*

FOR FURTHER INFORMATION CONTACT: Wienke Tax, Air Planning Office (AIR–2), U.S. Environmental Protection Agency, Region IX, (415) 947–4192, *tax.wienke@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, ''we,'' ''us'' and ''our'' refer to EPA.

Table of Contents

I. The 8-Hour Ozone National Ambient Air Quality Standard (NAAQS) and the South Coast Nonattainment Area

A. Background on the 8-Hour Ozone NAAQS

Ground-level ozone is formed when oxides of nitrogen (NO_X) and volatile organic compounds (VOC) react in the presence of sunlight.[1] These two pollutants, referred to as ozone precursors, are emitted by many types of pollution 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. Ozone

[1] California plans sometimes use the term Reactive Organic Gases (ROG) for VOC. These terms are essentially synonymous. For simplicity, we use the term VOC herein to mean either VOC or ROG.

exposure also has been associated with increased susceptibility to respiratory infections, medication use, doctor visits, and emergency department visits and hospital admissions for individuals with lung disease. Ozone exposure also increases the risk of premature death from heart or lung disease. Children are at increased risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors, which increases their exposure. See ''Fact Sheet, Proposal To Revise the National Ambient Air Quality Standards for Ozone,'' January 6, 2010 and 75 FR 2938 (January 19, 2010).

In 1979, under section 109 of the CAA, EPA established primary and secondary national ambient air quality standards (NAAQS or standard) for ozone at 0.12 parts per million (ppm) averaged over a 1-hour period. See 44 FR 8202 (February 8, 1979).

On July 18, 1997, EPA revised the primary and secondary NAAQS for ozone to set the acceptable level of ozone in the ambient air at 0.08 ppm, averaged over an 8-hour period. See 62 FR 38856 (July 18, 1997).[2] EPA set the 8-hour ozone standard based on scientific evidence demonstrating that ozone causes adverse health effects at lower concentrations and over longer periods of time than was understood when the pre-existing 1-hour ozone standard was set. EPA determined that the 8-hour standard would be more protective of human health, especially children and adults who are active outdoors, and individuals with a pre-existing respiratory disease, such as asthma.

B. The South Coast 8-Hour Ozone Nonattainment Area

Following promulgation of a new or revised NAAQS, EPA is required by the Clean Air Act (CAA) to designate areas throughout the nation as attaining or not attaining the NAAQS. On April 15, 2004, EPA designated the South Coast as nonattainment for the 1997 8-hour ozone standard and classified it as ''severe-17'' under CAA section 181(a)(1) and 40 CFR 51.903(a), Table 1. See 69 FR 23858 at 23888–89 (April 30, 2004) and 40 CFR 81.305. The designations and classifications became effective on June 15, 2004.

In 2007, California requested that EPA reclassify the South Coast from ''severe-17'' to ''extreme'' nonattainment for the 1997 8-hour ozone standard under CAA section 181(b)(3).[3] We granted California's request on May 5, 2010 and reclassified the South Coast to extreme nonattainment for the 1997 8-hour ozone standard effective June 4, 2010. See 75 FR 24409. The South Coast 2007 AQMP was developed to address the extreme area planning requirements for the 1997 8-hour ozone standard in the CAA and EPA's implementing regulations and thus California did not need to make additional submittals in response to this reclassification.

The South Coast 8-hour ozone nonattainment area is home to about 17 million people, has a diverse economic base, and contains one of the highest-volume port areas in the world. For a precise description of the geographic boundaries of the South Coast 8-hour ozone nonattainment area, see 40 CFR 81.305. The local air district with primary responsibility for developing a plan to attain the 1997 8-hour ozone NAAQS in this area is the South Coast Air Quality Management District (District or SCAQMD).

Ambient 8-hour ozone levels in the South Coast are well above the 1997 8-hour ozone NAAQS. The maximum design value for the area, based on monitored readings at the Crestline monitor, is 0.112 ppm for the 2008–2010 period.[4]

II. CAA and Regulatory Requirements for Ozone Nonattainment SIPs

States must implement the 1997 8-hour ozone standard under Title 1, Part D of the CAA, which includes section 172, ''Nonattainment plan provisions,'' and subpart 2, ''Additional Provisions for Ozone Nonattainment Areas'' (sections 181–185).

In order to assist states in developing effective plans to address their ozone nonattainment problem, EPA issued the 8-hour ozone implementation rule. This rule was finalized in two phases. The first phase of the rule addresses classifications for the 1997 8-hour ozone standard, applicable attainment dates for the various classifications, and the timing of emissions reductions needed for attainment. See 69 FR 23951 (April 30, 2004). The second phase addresses SIP submittal dates and the requirements for reasonably available control technology and measures (RACT and RACM), reasonable further progress (RFP), modeling and attainment demonstrations, contingency measures, and new source review. See 70 FR 71612 (November 29, 2005). The rule is codified at 40 CFR part 51, subpart X.[5] We discuss each of these CAA and regulatory requirements for 8-hour ozone nonattainment plans in more detail below.

III. California's State Implementation Plan Submittals To Address 8-Hour Ozone Nonattainment in the South Coast Nonattainment Area

A. California's SIP Submittals

Designation of an area as nonattainment starts the process for a state to develop and submit to EPA a State implementation plan (SIP) providing for attainment of the NAAQS under title 1, part D of the CAA. For 8-hour ozone areas designated as nonattainment effective June 15, 2004, this attainment SIP was due by June 15, 2007. See CAA 172(b) and 40 CFR 51.908(a) and 51.910.

California has made five SIP submittals to address the CAA's planning requirements for attaining the 1997 8-hour ozone standard in the South Coast nonattainment area. We refer to these submittals collectively as ''the South Coast 2007 8-Hour Ozone SIP'' or ''the South Coast 2007 Ozone SIP.'' The two principal ones are the District's 2007 8-Hour Ozone Plan (South Coast 2007 AQMP) and the California Air Resources Board's (CARB's) State Strategy for California's 2007 State Implementation Plan (2007 State Strategy).

1. 2007 South Coast AQMP

The ''Final 2007 Air Quality Management Plan, June 2007'' (South Coast 2007 AQMP) was adopted by the District on June 1, 2007 and submitted to CARB on October 24, 2007.[6] [7] On

[2] In March 2008, EPA completed another review of the primary and secondary ozone standards and tightened them further by lowering the level for both to 0.075 ppm. 73 FR 16436 (March 27, 2008).

[3] See SCAQMD Governing Board Resolution No. 07–9 (June 1, 2007), p. 12; CARB Resolution No. 07–41 (September 27, 2007), p. 8; and letter, James Goldstene, Executive Officer, CARB to Wayne Nastri, Regional Administrator, EPA Region 9, November 28, 2007.

[4] See EPA, Air Quality System Quick Look Report dated April 14, 2011 in the docket for today's action. A design value is an ambient concentration calculated using a specific methodology to evaluate monitored air quality data and is used to determine whether an area's air quality is meeting a NAAQS. The methodology for calculating design values for the 8-hour ozone NAAQS is found in 40 CFR part 50, Appendix I. This value is preliminary because while 2008 and 2009 data are complete, validated, and certified, 2010 data have not yet been certified by the District.

[5] EPA has revised or proposed to revise several elements of the 8-hour ozone implementation rule since its initial promulgation in 2004. See, *e.g.,* 74 FR 2936 (January 16, 2009); 75 FR 51960 (August 24, 2010); and 75 FR 80420 (December 22, 2010). None of these revisions affect any provision of the rule that is applicable to EPA's proposed actions on the South Coast 2007 8-Hour Ozone Plan.

[6] See November 28, 2007 letter to Wayne Nastri, Regional Administrator, EPA Region 9, from James N. Goldstene, Executive Officer, CARB, with enclosures.

[7] The South Coast 2007 AQMP is the first South Coast Plan to address the 8-hour ozone NAAQS. We

Continued

November 28, 2007, CARB submitted the South Coast 2007 AQMP to EPA. The South Coast 2007 AQMP includes an 8-hour ozone attainment demonstration for the South Coast nonattainment area, commitments by the SCAQMD to adopt control measures to achieve emissions reductions from sources under its jurisdiction (primarily stationary sources), and motor vehicle emissions budgets (budgets) used for transportation conformity purposes. The attainment demonstration includes air quality modeling, an analysis of CAA section 172 reasonably available control measures (RACM), base year and projected year emissions inventories, and contingency measures.

In today's proposal, we are evaluating only those portions of the South Coast 2007 AQMP and its revisions that are relevant to attainment of the 1997 8-hour ozone standard in the South Coast.

2. CARB 2007 State Strategy

To demonstrate attainment, the South Coast 2007 AQMP relies to a large extent on measures and commitments in CARB's 2007 State Strategy. The 2007 State Strategy was adopted by CARB on September 27, 2007 and submitted to EPA on November 16, 2007.[8] It describes CARB's overall approach to addressing, in conjunction with local plans, attainment of both the 1997 8-hour ozone and fine particulate ($PM_{2.5}$) NAAQS not only in the South Coast nonattainment area but also in the San Joaquin Valley and the Sacramento area. It also includes CARB's commitments to propose 15 defined State measures[9] and to obtain specific amounts of aggregate emissions reductions of NO_X and VOC emissions in the South Coast from sources under the State's jurisdiction, primarily on- and off-road motor vehicles and engines. In addition, it contains an RFP demonstration and contingency measures for the South Coast 8-hour ozone nonattainment area.

On August 12, 2009, CARB submitted the ''Status Report on the State Strategy for California's 2007 State Implementation Plan (SIP) and Proposed Revision to the SIP Reflecting Implementation of the 2007 State Strategy,'' dated March 24, 2009 and adopted April 24, 2009 (''2009 State Strategy Status Report'').[10] This submittal updated the 2007 State Strategy to reflect its implementation during 2007 and 2008.

In today's proposal, we are evaluating only those portions of the 2007 State Strategy and its revisions that are relevant to attainment of the 1997 8-hour ozone standard in the South Coast.

3. CARB's 2011 SIP Revisions

On May 18, 2011, CARB submitted a SIP revision entitled *Progress Report on Implementation of $PM_{2.5}$ State Implementation Plans (SIP) for the South Coast and San Joaquin Valley Air Basins and Proposed SIP Revisions,* dated March 29, 2011 and adopted April 28, 2011, together with the adopting resolution and other supporting documentation[11] [12] (2011 Progress Report). Appendix F of this 2011 Progress Report provides revised control measure commitments and a revised rule implementation schedule for the South Coast 2007 AQMP.[13] We refer to this SIP revision as the ''2011 Progress Report, Appendix F.''

On July 29, 2011, CARB submitted the ''8-Hour Ozone State Implementation Plan Revisions and Technical Revisions to the $PM_{2.5}$ State Implementation Plan Transportation Conformity Budgets for the South Coast and San Joaquin Valley Air Basins,'' dated June 20, 2011 and adopted July 21, 2011 (2011 Ozone SIP Revision).[14] This SIP revision updates the 2007 State Strategy and 2009 State Strategy Status Report. Specifically, it updates the emissions inventories, RFP demonstration, contingency measures, and transportation conformity budgets for the South Coast to reflect rule adoptions and improvements to emissions estimates. CARB provided supplemental documentation for the 2011 Ozone SIP Revision on August 10, 2011 (2011 Ozone SIP Supplement).[15]

Future references in this proposal to the 2007 State Strategy and to the South Coast 2007 AQMP will be to the State Strategy as revised in 2009 and 2011, and the AQMP as revised in 2011, respectively, unless otherwise noted.

B. CAA Procedural and Administrative Requirements for SIP Submissions

CAA sections 110(a)(1) and (2) 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 EPA's implementing regulations in 40 CFR 51.102.

Both the District and CARB have satisfied applicable statutory and regulatory requirements for reasonable public notice and hearing prior to adoption and submission of the South Coast 2007 Ozone Plan. The District conducted public workshops, provided public comment periods, and held public hearings prior to the adoption of the South Coast 2007 AQMP on June 1, 2007 (See SCAQMD Governing Board Resolution No. 07–9). CARB provided the required public notice and opportunity for public comment prior to its September 27, 2007 public hearing on the plan. See CARB Resolution No. 07–41. The District also provided the

---

have previously acted on numerous South Coast air quality plans for ozone, PM-10, carbon monoxide, and NO_2, such as the 1997/1999 AQMP. We approved the ozone portion of the 1997 South Coast AQMP, as amended in 1999, on April 10, 2000 (see 65 FR 18903). Our most recent action on a SIP addressing the CAA requirements for the South Coast ozone nonattainment area was our partial approval and partial disapproval of the 2003 AQMP, which addressed 1-hour ozone (see 74 FR 10176, March 10, 2009). Our 2009 final action was challenged in the Ninth Circuit Court of Appeals, which published an opinion remanding certain aspects of EPA's action for further action consistent with the opinion. See *Association of Irritated Residents* v. *EPA,* 632 F.3d 584 (9th Cir. 2011). The issues in dispute relate to the consequences of an EPA disapproval of a SIP submittal, the adequacy of EPA's evaluation of a particular control measure from the 2003 State Strategy, and the rationale for EPA's approval of the State's submittal as meeting the requirements of CAA section 182(d)(1)(A) (TCMs to offset growth in emissions from growth in VMT) in the South Coast. EPA has sought rehearing on some of the issues, and the mandate in this case has not yet been issued pending action by the court on the petition for rehearing.

[8] See CARB Resolution No. 07–28, September 27, 2007 with attachments and letter from James N. Goldstene, Executive Officer, CARB, to Wayne Nastri, Regional Administrator, EPA Region 9, November 16, 2007 with enclosures.

[9] The 2007 State Strategy also includes measures to be implemented by the California Bureau of Automotive Repair (Smog Check improvements) and the California Department of Pesticide Regulation (VOC reductions from pesticide use). See 2007 State Strategy, pp. 64–65 and CARB Resolution 7–28, Attachment B, p. 8.

[10] See CARB Resolution No. 09–34, April 24, 2009 and letter, James N. Goldstene, Executive Officer, CARB, to Wayne Nastri, Regional Administrator, EPA Region 9, August 12, 2009 with enclosures. Only pages 11–27 of the 2009 State Strategy Status Report are submitted as a SIP revision. The balance of the report is for informational purposes only. See Attachment A to CARB Resolution No. 09–34.

[11] See CARB Board Resolution 11–24, April 28, 2011 and letter, James N. Goldstene, Executive Officer, CARB, to Jared Blumenfeld, Regional Administrator, EPA Region 9, May 18, 2011 with enclosures.

[12] Only Appendices B, C, and D of the 2011 Progress Report are submitted as a SIP revision. The balance of the report is for informational purposes only. See letter, James Goldstene, Executive Officer, CARB, to Jared Blumenfeld, Regional Administrator, EPA Region 9, May 18, 2011.

[13] See letter, Lynn Terry, Deputy Executive Officer, CARB, to Jared Blumenfeld, Regional Administrator, EPA Region 9, dated May 19, 2011, and enclosed ARB Board Resolution 11–24.

[14] See CARB Resolution 11–22, July 21, 2011 and letter, James N. Goldstene, Executive Officer, CARB, to Jared Blumenfeld, Regional Administrator, EPA Region 9, July 29, 2011 with enclosures. Only Appendix A of the 2011 Ozone SIP Revision is submitted as a SIP revision. The balance of the report is for informational purposes only.

[15] See letter, Lynn Terry, Executive Officer, CARB, to Deborah Jordan, Director, Region 9 Air Division, dated August 10, 2011 with attachments.

required public notice and hearing on its 2011 revision to the 2007 AQMP. See SCAQMD Governing Board Resolution 11–9.

CARB conducted public workshops, provided public comment periods, and held a public hearing prior to the adoption of the 2007 State Strategy on September 27, 2007 (See CARB Resolution No. 07–28). CARB also provided the required public notice, opportunity for public comment, and a public hearing prior to its April 24, 2009 adoption of the 2009 State Strategy Status Report. See CARB Resolution 09–34, April 24, 2009. Finally, CARB provided the required public notice, opportunity for public comment, and a public hearing prior to its April 28, 2011 and July 21, 2011 adoption of the 2011 Progress Report and the 2011 Ozone SIP Revision, respectively. See CARB Resolution 11–11, April 28, 2011, and CARB Resolution 11–22, July 21, 2011.

The SIP submittals include proof of publication for notices of the District and CARB public hearings, as evidence that all hearings were properly noticed. We find, therefore, that each of the five submittals meet the procedural requirements for public notice and hearing in CAA sections 110(a) and 110(l).

CAA section 110(k)(1)(B) requires EPA to determine whether a SIP submittal is complete within 60 days of receipt. This section also provides that any plan that EPA has not affirmatively determined to be complete or incomplete will be deemed complete 6 months after the date of submission by operation of law. EPA's SIP completeness criteria are found in 40 CFR part 51, Appendix V.

The November 28, 2007 submittal of the South Coast 2007 AQMP became complete by operation of law on May 28, 2008. The November 16, 2007 submission of the 2007 State Strategy and the August 12, 2009 revisions to the Strategy became complete by operation of law on May 16, 2008 and February 12, 2010, respectively.

We determined that CARB's 2011 Progress Report submittal of May 18, 2011 was complete on June 13, 2011. See Letter, Deborah Jordan, Air Division Director, US EPA Region 9, to James Goldstene, Executive Officer, CARB, dated June 13, 2011. We determined that CARB's 2011 Ozone SIP Update submittal of July 29, 2011 was complete on August 23, 2011.[16]

[16] See Letter, Deborah Jordan, Air Division Director, US EPA Region 9, to James Goldstene, Executive Officer, CARB, dated August 23, 2011.

IV. Review of the South Coast 2007 AQMP and the South Coast Portion of the Revised 2007 State Strategy

We provide our evaluation of the South Coast 2007 8-Hour Ozone SIP's compliance with applicable CAA and EPA regulatory requirements below. A more detailed evaluation can be found in the technical support document (TSD) for this proposal, which is available online at *http://www.regulations.gov* under docket number EPA–R09–OAR–2011–0622, or from the EPA contact listed at the beginning of this notice.

A. Emissions Inventories

1. Requirements for Emissions Inventories

CAA section 182(a)(1) requires each state with an ozone nonattainment area classified under subpart 2 to submit, within two years of the area's designation as nonattainment, a ''comprehensive, accurate, current inventory of actual emissions from all sources'' of the relevant pollutant or pollutants in accordance with guidance provided by EPA. CAA 182(a)(1), 40 CFR 51.915. EPA has issued ''Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter NAAQS and Regional Haze Regulations,'' (EPA–454/R–05–001), November 2005 (''EI Guidance'') which provides guidance on how to develop base year and baseline emissions inventories for 8-hour ozone, $PM_{2.5}$, and regional haze SIPs.

For areas that were initially designated nonattainment for the 8-hour ozone standard in 2004, EPA recommends using calendar year 2002 as the base year for the inventory required by CAA section 182(a)(1). EI Guidance, p. 8.

Emissions inventories for ozone should include emissions of VOC, NO_X, and carbon monoxide (CO) and represent an average summer week day during the ozone season. EI Guidance, pp. 14 and 17. States should include documentation in their submittals explaining how emissions data were calculated. 70 FR 71612 at 71664 and EI Guidance, p. 40. In estimating mobile source emissions, states should use the latest emission models and planning assumptions available at the time the SIP is developed. 66 FR at 32854 and 70 FR 61612, at 71666. For California, the latest available mobile source emissions model is EMFAC2007, which EPA approved in 2008 for use in SIPs and transportation conformity analyses. See 73 FR 3464 (January 18, 2008).

2. Emissions Inventories in the South Coast 2007 AQMP

The base year and future year baseline inventories for ozone precursors for the South Coast ozone nonattainment area together with additional documentation for the inventories are found in Chapter 3 and Appendix III of the South Coast 2007 AQMP.[17] These inventories represent average summer day (ozone season) emissions. Inventories are provided for the base year of 2002; the RFP milestone years of 2008, 2011, 2014, 2017, 2020; and the attainment year of 2023. The projected baseline inventories include reductions from Federal, State, and District measures adopted prior to 2007. See South Coast 2007 AQMP, page 3–1 and 2007 State Strategy, Appendix A, p. 1. All inventories include emissions from point, area, on-road and non-road sources.

As a starting point for the South Coast 2007 AQMP's inventories, the District used CARB's inventory for the year 2002. This inventory and CARB's documentation for its inventories can be found in Appendices A and F, respectively, of the 2007 State Strategy. The 2002 inventory for the South Coast nonattainment area was projected to 2005 and future years using CARB's California Emission Forecasting System (CEFS). Both base year and projected baseline inventories use the most current version of California's mobile source emissions model, EMFAC2007, for estimating on-road motor vehicle emissions. EPA has approved this model for use in SIPs and transportation conformity analyses. 73 FR 3464 (January 18, 2008). Off-road inventories were developed using the CARB off-road model.

As part of its 2011 Ozone SIP Revision, CARB submitted revised base year and future year baseline inventories for the South Coast nonattainment area. See Table 1 below. These revised inventories incorporate improved activity data and/or emission factors for diesel trucks and buses and off-road equipment that were developed as part of CARB's December 2010 rulemakings amending its In-Use On-Road Truck and Bus Rule and In-Use Off-Road Engine rule. The State estimates that these changes collectively reduce the 2002 base year total inventory in the South Coast by 5 percent for NO_X and less than 2 percent

[17] By ''future year baseline inventories'' or ''projected baseline inventories,'' we mean projected emissions inventories for future years that account for, among other things, the effects of economic growth and adopted emissions control requirements.

for VOC.[18] The projected baseline inventories for subsequent years were also revised to reflect the ongoing effects of the 2007–2009 economic recession, which has significantly reduced activity levels and associated emissions from the State's construction and goods movement sectors. CARB estimates that emissions levels and growth rates will return to normal levels by the 2017–2018 timeframe. 2011 Ozone SIP Revision, Appendix B. As a result, projected emission levels from these categories in the years up to 2017–2018 are now substantially lower than were originally projected in the South Coast 2007 AQMP and 2007 State Strategy as submitted in November 2007. These recession-related decreases in emissions do not in themselves affect the Plan's emissions inventories for the modeling validation years (1997, 2004, and 2005), the base year (2002), or future years (2020 and 2023), and thus do not change the carrying capacity estimates in the plan (*i.e.,* they do not in themselves affect the target level of overall emissions reductions needed to demonstrate attainment), nor do they alter the 2002 adjusted baseline emissions, which provide the starting point for the reasonable further progress demonstration. The principal effect of the recession-related decreases in projected emissions estimates is to reduce the amount of reductions needed from the SIP's control strategy to demonstrate RFP in the years prior to 2018.

TABLE 1—SOUTH COAST BASE YEAR AND ATTAINMENT YEAR EMISSIONS INVENTORY SUMMARY

[Summer planning inventory emissions in tons per day] [a]

Emissions inventory category	NO_x		VOC	
Year	2002	2023	2002	2023
Stationary/Areawide Sources	89	68	318	273
On-road Mobile Sources	652	140	361	98
Off-road Mobile Sources	283	170	202	142
TOTAL	1024	378	881	513

[a] Numbers may not add up to precise totals due to rounding. Source: 2011 Ozone SIP Revision, Appendix B, p. B–2.

3. Proposed Action on the Base Year Emissions Inventory

We have reviewed the 2002 base year emissions inventory in the South Coast 2007 AQMP and the inventory methodologies used by the District and CARB in developing that inventory and have determined that the inventory was developed consistent with CAA requirements as reflected in the 8-hour ozone implementation rule, and EPA's guidance. The revised 2002 base year inventory is a comprehensive, accurate, and current inventory of actual emissions of 8-hour ozone precursors in the South Coast nonattainment area. We therefore propose to approve the base year inventory as meeting the requirements of CAA section 182(a)(1) and EPA's 8-hour ozone implementation rule. 40 CFR 51.915. We provide detail on our review of the base year inventory in section II.A. of the TSD for this proposal.

B. Reasonably Available Control Measures (RACM) Demonstration and Control Strategy

1. Requirements for RACM and Control Strategy

CAA section 172(c)(1) requires that each attainment plan ''provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology), and shall provide for attainment of the national primary ambient air quality standards.'' The 8-hour ozone implementation rule requires that for each nonattainment area that is required to submit an attainment demonstration, the state must also submit concurrently a SIP revision demonstrating that it has adopted all RACM necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements. 40 CFR 51.912(d).

EPA has previously provided guidance interpreting the RACM requirement in the General Preamble at 13560 [19] and in a memorandum entitled ''Guidance on Reasonably Available Control Measures (RACM) Requirements and Attainment Demonstration Submissions for the Ozone NAAQS,'' John Seitz, November 30, 1999. (Seitz memo). In summary, EPA guidance provides that 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. *See* Seitz memo and General Preamble at 13560; *see also* ''State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas,'' 44 FR 20372 (April 4, 1979) and Memorandum dated December 14, 2000, from John S. Seitz, Director, Office of Air Quality Planning and Standards, ''Additional Submission on RACM from States with Severe One-Hour Ozone Nonattainment Area SIPs.''

Any measures that are necessary to meet these requirements that are not already either federally promulgated, part of the state's SIP, or otherwise creditable in SIPs must be submitted in enforceable form as part of a state's attainment plan for the area. 72 FR 20586, at 20614.[20]

[18] See Appendix A of 2011 Ozone SIP Revision.

[19] The ''General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,'' published at 57 FR 13498 on April 16, 1992, describes EPA's preliminary view on how we would interpret various SIP planning provisions in title I of the CAA as amended in 1990, including those planning provisions applicable to the 1-hour ozone standard. EPA continues to rely on certain guidance in the General Preamble to implement the 8-hour ozone standard under title I.

[20] 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 EPA has issued a Control Techniques Guideline (CTG). CAA section 182(f) requires that RACT under section 182(b)(2) also apply to major stationary sources of NO_X. In extreme areas, a major source is a stationary source that emits or has the potential to emit at least 10 tons of VOC or NO_X per year. CAA section 182(e) and (f). Under the 8-hour ozone implementation rule, states were required to submit SIP revisions meeting the RACT

CAA section 172(c)(6) requires nonattainment plans to ''include enforceable emission 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 attainment of such standard in such area by the applicable attainment date * * *.'' *See also* CAA section 110(a)(2)(A). The ozone implementation rule requires that all control measures needed for attainment be implemented no later than the beginning of the attainment year ozone season. 40 CFR 51.908(d). The attainment year ozone season is defined as the ozone season immediately preceding a nonattainment area's attainment date. 40 CFR 51.900(g).

2. RACM Demonstration and Control Strategy

For the 2007 Ozone Plan and the 2007 State Strategy, CARB, the District, and the local agency (through the South Coast's metropolitan planning organization (MPO), the Southern California Association of Governments (SCAG)) each undertook a process to identify and evaluate potential reasonably available control measures that could contribute to expeditious attainment of the 1997 8-hour ozone standards in the South Coast nonattainment area. We describe each agency's efforts below.

a. District's RACM Demonstration and Control Strategy

The District's RACM demonstration, which focuses on stationary and area source controls, is described in Chapter 6 and Appendix VI of the South Coast 2007 AQMP. In developing the South Coast 2007 AQMP, the District conducted a process to identify RACM for the South Coast that involved public meetings to solicit input, evaluation of EPA's suggested RACM, and evaluation of other air agencies' regulations. See South Coast 2007 AQMP, Appendix VI.

To identify potential reasonably available measures for the South Coast, the District evaluated measures implemented in other nonattainment areas (including the San Joaquin Valley, the San Francisco Bay Area, Sacramento, Ventura, Dallas-Fort Worth, and the Houston-Galveston area) and measures identified by the Lake Michigan Air Directors Consortium (LADCO), and held meetings with CARB, technical experts, local government representatives, and the public during development of the South Coast 2007 AQMP. The District sponsored an AQMP summit, which generated 200 potential control measures. The District also reevaluated all 82 of the existing SIP-approved District rules and regulations.

From the set of identified potential controls, the District then screened the identified measures and rejected those that would not individually or collectively advance attainment in the area, had already been adopted as rules, or were in the process of being adopted. The remaining measures were evaluated taking into account baseline inventories, available control technologies, and potential emission reductions as well as whether the measure could be implemented on a schedule that would advance attainment of the 1997 8-hour ozone standard by at least a year, assuming a 2024 deadline. South Coast 2007 AQMP, Appendix VI.

In general, EPA believes that the District's current rules and regulations are equivalent to or more stringent with respect to emissions of ozone precursors than those developed by other air districts.

Based on its RACM analysis for stationary and area sources under its jurisdiction, the District scheduled 15 new or revised stationary source control measures for development and adoption, including measures at least as stringent as those identified in other California districts' AQMPs and several innovative measures. Since submission of the AQMP in 2007, the District has adopted 13 of these rules and submitted them to EPA for approval into the SIP. These rules are part of the District's enforceable commitment to achieve emissions reductions of 9 tons per day (tpd) of NO_X and 19 tpd of VOC by 2023. As to the few remaining measures that the District rejected from its RACM analysis, the District determined that these measures would not advance the attainment date or contribute to RFP due to the insignificant or unquantifiable emissions reductions they would potentially generate. See South Coast 2007 AQMP, Appendix VI.

The District has made new commitments in its South Coast 2007 AQMP to achieve specific reductions from VOC and NO_X sources in the South Coast area. The District committed to adopt and submit measures that will achieve the following additional emissions reductions by 2023: 9 tpd NO_X and 19 tpd VOC. See South Coast 2007 AQMP, Table 4–2A, page 4–10 and CARB Staff Report on the South Coast 2007 AQMP, page 13.[21] The District expects to meet its emissions reductions commitments for VOC and NO_X (see Table 2 below) by adopting new control measures and programs and strengthening existing control measures, such as those identified in Table 4–2A of the South Coast 2007 AQMP (see South Coast 2007 AQMP, page 4–10 and CARB Staff Report on South Coast 2007 AQMP, p. 13), and through the additional actions summarized in the CARB Staff Report on the South Coast 2007 AQMP (See CARB Staff Report on South Coast 2007 AQMP, p. 18). These new or revised control measures include rules to regulate lubricants, consumer products, non-RECLAIM ovens, dryers and furnaces, space heaters, facility modernizations, livestock waste, and residential wood burning. The South Coast 2007 AQMP also identifies 22 measures (beyond the new control measures and additional actions just discussed) for further review, which may yield additional emission reductions.

SCAQMD has committed to adopt and implement control measures that will achieve the total tonnage of emission reductions identified in Tables 2 and 3 of Appendix F of the 2011 Progress report. As discussed above, the District's commitment is to achieve the total tonnage of reductions of each pollutant by the specified dates. If SCAQMD determines that a particular measure is infeasible, in whole or in part, SCAQMD commits to achieve equivalent reductions on the same schedule through substitute controls. South Coast 2007 AQMP, p. 4–73.

requirements of CAA sections 182(b)(2) and 182(f) no later than 27 months after designation for the 8-hour ozone standard (September 15, 2006 for areas designated in April 2004) and to implement the required RACT measures no later than 30 months after that submittal deadline. See 40 CFR 51.912(a). California submitted the CAA section 182 RACT SIP for the South Coast 8-hour ozone nonattainment area on January 31, 2007, which EPA fully approved on December 18, 2008. See 73 FR 76947.

[21] The CARB Staff Report on the South Coast 2007 AQMP, page ES–4, incorrectly states the SCAQMD commitments as 19 tpd NO_X and 9 tpd VOC.

TABLE 2—DISTRICT SHORT AND INTERMEDIATE TERM CONTROL MEASURES CREDITED IN SOUTH COAST 2007 AQMP ATTAINMENT DEMONSTRATION, AS REVISED IN 2011

Control measure	Rule No.	Title	Emissions reduction commitment in South Coast 2007 AQMP, as revised in 2011		Emissions reductions achieved [a]	
			NO_X	VOC	NO_X	VOC
BCM–03	445	Woodburning fireplaces and woodstoves.	n/a	n/a	0.1 tpd	0.7 tpd.
CTS–01	1144	Metalworking fluids and direct-contact lubricants.	n/a	2.0 tpd	n/a	4.2 tpd.
CTS–03 [b]	.....	Consumer Products Certification and Emissions Reductions from the Use of Consumer Products at Inst. and Comm'l Facilities.	n/a	n/a	n/a	n/a.
CTS–04	1143	Consumer Paint Thinners and Multi-Purpose Solvents.	n/a	n/a	n/a	10.1 tpd.
CMB–01	1147	NO_X reductions from miscellaneous sources.	4.1 tpd	.....	4.1 tpd	
FUG–02	461	Gasoline transfer and dispensing	n/a	4.0 tpd	n/a	Met via excess from Rule 1143.
FUG–04	1149	Storage Tank and Pipeline Cleaning and Degassing.	n/a	n/a	n/a	0.04 tpd.
CMB–03	1111	Further NO_X reductions from space heaters.	1.1 tpd	n/a	3.0 tpd	n/a.
MCS–01	1110.2	Liquid and gaseous fuels—stationary ICEs.	2.2 tpd	9.2 tpd	0.54 tpd	0.3 tpd.
Measures not yet adopted or not fully approved by EPA [c]						
		.....	NO_X ..	VOC ..		
MCS–01	1146	NO_X from industrial, institutional, & commercial boilers, steam generators, and process heaters.	.....	.....	Emissions reductions not currently creditable; EPA proposed limited approval/limited disapproval published July 8, 2011, see 76 FR 40303.	
	1146.1	NO_X from small ind, inst, & comm'l boilers, steam gens, and proc. htrs.	.....	.....	Emissions reductions not currently creditable; EPA proposed limited approval/limited disapproval published July 8, 2011, see 76 FR 40303.	
EGM–01	2301	Emissions reductions from new or redevelopment projects.	0.8 tpd	0.5 tpd	Scheduled for adoption in 2012.	
MCS–05	1127	Livestock waste	n/a	0.6 tpd	EPA has not yet acted on this rule.	
FLX–02	.....	Refinery pilot program	n/a	1.6 tpd	Not yet adopted.	
MOB–05	.....	AB923 LDV high emitter program	0.4 tpd	0.7 tpd	No rule associated with this measure.	
MOB–06	.....	AB923 MDV high emitter program	0.6 tpd	0.6 tpd	No rule associated with this measure.	

SIP Commitments and Currently Creditable Reductions

2023 SIP commitment—NO_X	9.2 tpd NO_X	SIP-creditable reductions—NO_X ..	7.7 tpd.
2023 SIP commitment—VOC	19.3 tpd VOC	SIP-creditable reductions—VOC ..	15.3 tpd.

[a] From SCAQMD's 2011 "Revisions to $PM_{2.5}$ and Ozone State Implementation Plan for South Coast Air Basin and Coachella Valley," which was included as Appendix F in CARB's 2011 Progress Report, Tables 2 and 3, and District rule evaluation forms. Some emissions reduction commitments were revised from the information originally provided in the South Coast 2007 AQMP.

[b] Adopted by CARB in November 2010.
[c] EPA can only credit District rules that have been adopted, submitted to EPA, and approved for credit in the SIP.
n/a = not applicable.

TABLE 3—STATUS OF DISTRICT RULES IN THE SOUTH COAST 2007 AQMP FOR 8-HOUR OZONE

Rule	Adoption date	Implementation date	SIP status	Federal Register cite
Rule 445—Woodburning fireplaces and woodstoves.	2008	2008–2014	SIP-approved	74 FR 27716, 06/11/09.
Rule 461—Gasoline transfer and dispensing.	2009	2010–2012	SIP-approved	71 FR 18216, 04/11/06.
Rule 1149—storage tank and pipeline cleaning and degreasing.	2008	2008	SIP-approved	74 FR 67821, 12/21/09.
Rule 1144—Vanishing oils and rust inhibitors.	2009	2011	Proposed for SIP-approval	75 FR 41744, 07/15/11.
Rule 1143—Consumer Paint Thinners and Multi-Purpose Solvents.	2009	2011	Proposed for SIP-approval	76 FR 41744, 07/15/11.
Rule 1147—NO_X reductions from miscellaneous sources.	2008	2010	SIP-approved	75 FR 46845, 08/04/10.
Rule 1111—Further NO_X reductions from space heaters.	2009	2012–2043	SIP-approved	75 FR 46845, 08/04/10.
Rule 1110.2—Liquid and gaseous fuels—stationary ICEs.	2008	2011	SIP-approved	74 FR 18995, 4/27/09.
Rule 1146—NO_X from industrial, institutional, commercial boilers, steam generators, and process heaters.	2008	2011	Submitted	Proposed limited approval/limited disapproval 7/8/11, 76 FR 40303.
Rule 1146.1—NO_X from small industrial, institutional, commercial boilers, steam generators, and process heaters.	2008	2011	Submitted	Proposed limited approval/limited disapproval 7/8/11, 76 FR 40303.
Rule 1127—Livestock Waste	2006	2011	Submitted to EPA on 10/05/06	Found complete on 10/25/06.
Refinery Pilot Program	2008	2010	Not yet adopted	N/A.
Rule 2301—Indirect Source Review.	2012	2014	Not yet adopted	N/A.
AB923—Light duty vehicle high emitter program.	[a]	[a]	No rule associated with this measure.	N/A.
AB923—Light duty vehicle high emitter program.	[a]	[a]	No rule associated with this measure.	N/A.

[a] Ongoing.

b. The Local Jurisdiction's RACM Analysis

The local jurisdiction's RACM analysis was conducted by the metropolitan planning organization (MPO) for the South Coast region, the Southern California Association of Governments (SCAG). This analysis focused on transportation control measures (TCMs). TCMs are, in general, measures designed to reduce emissions from on-road motor vehicles through reductions in vehicle miles traveled or traffic congestion. SCAG's analysis is described in Appendix IV–C of the South Coast 2007 AQMP. The TCMs in the South Coast 2007 AQMP are derived from TCM projects in the 2006 SCAG Regional Transportation Improvement Program (RTIP). This evaluation, described beginning on page 49 of Appendix IV–C of the South Coast 2007 AQMP, resulted in extensive local government commitments to implement programs to reduce auto travel and improve traffic flow. South Coast 2007 AQMP page 6–6 and Appendix IV–C. Attachment A to Appendix IV–C contains an extensive list of TCMs under development and newly scheduled TCMs. See South Cost 2007 AQMP, Appendix IV–C, p. 39.

SCAG evaluated a wide variety of transportation control measures, including those measures listed in CAA section 108(f), and determined that there were no combinations of reasonable measures that would advance attainment of the 8-hour ozone standard in the South Coast. See South Coast 2007 AQMP, Appendix IV–C.

c. CARB's RACM Demonstration and Control Strategy

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 significant emissions reductions from mobile and area sources to meet the NAAQS in California nonattainment areas, the State of California has been a leader in the development of stringent control measures nationwide for on-road and off-road mobile sources and the fuels that power them. *See, e.g.,* 2007 State Strategy, p. 37; *see also* TSD at Appendix A. California has unique authority under CAA section 209 (subject to a waiver by 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.

The State is working with EPA on goods movement activities and is implementing programs to reduce emissions from ship auxiliary engines, locomotives, harbor craft and new cargo handling equipment. In addition, the State has standards for lawn and garden equipment, recreational vehicles and boats, and other off-road sources that require newly manufactured equipment to be 80–98 percent cleaner than their uncontrolled counterparts. *Id.* Finally, the State has adopted many measures that focus on achieving reductions from in-use mobile sources that include more stringent inspection and maintenance requirements in California's Smog

Check program, truck and bus idling restrictions, and various incentive programs. Appendix A of the TSD includes a list of all measures adopted by CARB between 1990 and the beginning of 2007. These measures, reductions from which are reflected in the Plan's baseline inventories, fall into two categories: measures that are subject to a waiver of Federal pre-emption under CAA section 209 (section 209 waiver measures or waiver measures) and those for which the State is not required to obtain a waiver (non-waiver measures). Emissions reductions from waiver measures are fully creditable in attainment and RFP demonstrations and may be used to meet other CAA requirements, such as contingency measures. See TSD, section II.C. and EPA's proposed and final approval of the SJV 1-Hour Ozone Plan at 74 FR 33933, 33938 (July 14, 2009) and 75 FR 10420 (March 8, 2010). Generally, the State's baseline non-waiver measures have been approved by EPA into the SIP and are fully creditable for meeting CAA requirements. See TSD, Appendix A.

CARB developed its proposed 2007 State Strategy after an extensive public consultation process to identify potential SIP measures.[22] Through this process, CARB identified and has committed to develop 15 new or revised control measures. See also the discussion on enforceable commitments below. These measures focus on cleaning up the in-use fleet as well as increasing the stringency of emissions standards for a number of engine categories, fuels, and consumer products. They build on CARB's existing program, which addresses emissions from all types of mobile sources through both regulations and incentive programs. See Appendix A of the TSD. Table 4 lists the defined measures in the 2007 State Strategy and their current adoption and approval status. Table 5 provides the State's current estimate of the expected emissions reductions from these measures in the attainment year (2023), which would contribute to achieving the State's aggregate emission reduction commitment for that year.

TABLE 4—2007 STATE STRATEGY DEFINED MEASURES SCHEDULED FOR CONSIDERATION AND CURRENT STATUS

[Updated July 2011]

State measure	Expected action year	Current status
Smog Check Improvements	2007–2009	Elements approved 75 FR 38023 (July 1, 2010).[23]
Expanded Vehicle Retirement	2007	Adopted by CARB June 2009; by BAR, September 2010.
Modifications to Reformulated Gasoline Program	2007	Approved, see 75 FR 26653 (May 2, 2010).
Cleaner In-use Heavy Duty Trucks	2007, 2008, 2010	Proposed approval 76 FR 40652 (July 11, 2011).
Auxiliary Ship Cold Ironing and Other Clean Technologies	2007–2008	Adopted December 2007.
Cleaner Main Ship Engines and Fuels	Fuel: 2008–2011 Engines: 2008	Proposed approval 76 FR 40652 (July 11, 2011).
Port Truck Modernization	2007, 2008, 2010	Adopted December 2007 and December 2008.
Accelerated Introduction of Cleaner Locomotives	2008	Prop 1B funds awarded to upgrade line-haul locomotive engines not already accounted for by enforceable agreements with the railroads. Those cleaner line-hauls will begin operation by 2012.
Clean Up Existing Harbor Craft	2007, 2010	Adopted November 2007, revised June 2010.
Cleaner In-Use Off-Road Equipment	2007, 2010	Waiver decision pending.
New Emissions Standards for Recreational Boats	2013	Action expected in 2013.
Expanded Off-Road Recreational Vehicle Emissions Standards.	2013	Action expected in 2013.
Enhanced Vapor Recovery for Above Ground Storage Tanks.	2008	Adopted June 2007, effective June 2008.
Additional Evaporative Emissions Standards	2009, 2013	Action expected 2013.
Consumer Products Program (I & II)	2008, 2009, & 2011	Approved 74 FR 57074 (November 4, 2009) and 76 FR 27613 (May 12, 2011).

Source: 2009 State Strategy Status Report, p. 23, 2011 Progress Report, Table 1, and 2011 Ozone SIP Revision, Appendix A–3. Additional information from *http://www.arb.ca.gov*.

TABLE 5—EXPECTED EMISSIONS REDUCTIONS FROM DEFINED MEASURES IN THE 2007 STATE STRATEGY FOR THE SOUTH COAST

[2023 planning inventory, tpd]

Measure	2023 NO_X	2023 VOC
Smog Check Improvements (BAR) [partial]	1.2	5.3
Cleaner In-Use Heavy-Duty Trucks	27.4	1.3
Ship Auxiliary Engine Cold Ironing & Clean Technology	28.4	0.7
Cleaner Main Ship Engines and Fuel [engine portion]	44.5	0.8
Clean Up Existing Harbor Craft	10	0.4
Cleaner In-Use Off-Road Equipment (>25hp)	3.2	0.3

[22] More information on this public process including presentations from the workshops and symposium that preceded the adoption of the 2007 State Strategy can be found at *http://www.arb.ca.gov/planning/sip/2007sip/2007sip.htm*.

[23] California Assembly Bill 2289, passed in 2010, requires the Bureau of Automotive Repair (BAR) to direct older vehicles to high performing auto technicians and test stations for inspection and certification effective 2013. Reductions shown for the SmogCheck program in the 2011 Progress Report do not include reductions from AB 2289 improvements. See CARB Progress Report Supplement, Attachment 5.

TABLE 5—EXPECTED EMISSIONS REDUCTIONS FROM DEFINED MEASURES IN THE 2007 STATE STRATEGY FOR THE SOUTH COAST—Continued

[2023 planning inventory, tpd]

Measure	2023 NO_X	2023 VOC
Consumer Products Program [partial]	—	7.1
Totals	114.7	15.9

Source: CARB 2011 Ozone SIP Revision Supplement, Attachment 1.

The 2007 State Strategy includes an enforceable commitment to achieve aggregate emissions reductions of 141 tpd of NO_X and 54 tpd of VOC by the attainment year (2023). See Table 6. The 2007 State Strategy demonstrates that these CARB commitments, in combination with existing SIP-creditable measures, the District's commitments, and reduction commitments from the CAA section 182(e)(5) new technologies provision, will be sufficient to attain the 1997 8-hour NAAQS in the South Coast nonattainment area by the applicable attainment date of June 15, 2024. CARB also made enforceable commitments to achieve aggregate emissions reductions in the RFP milestone years of 2014 and 2020. See 2009 State Strategy Status Report, p. 20 and CARB Resolution 07–28, Attachment B, p. 4. See Table 6 below. The nature of these commitments is described in the State Strategy as follows:

> The total emission reductions from the new measures necessary to attain the federal standards are an enforceable State commitment in the SIP. While the proposed State Strategy includes estimates of the emission reductions from each of the individual new measures, it is important to note that the commitment of the State Strategy is to achieve the total emission reductions necessary to attain the federal standards, which would be the aggregate of all existing and proposed new measures combined. Therefore, if a particular measure does not get its expected emission reductions, the State still commits to achieving the total aggregate emission reductions, whether this is realized through additional reductions from the new measures or from alternative control measures or incentive programs. If actual emission decreases occur in any air basin for which emission reduction commitments have been made that are greater than the projected emissions reductions from the adopted measures in the State Strategy, the actual emission decreases may be counted toward meeting ARB's total emission reduction commitments.

CARB Resolution 07–28 (September 27, 2007), Appendix B, p. 3.

TABLE 6—CARB COMMITMENTS TO SPECIFIC AGGREGATE EMISSIONS REDUCTIONS

[Tons per summer day]

	2014	2020 [1]	2023	2023 CAA section 182(e)(5) [2]
VOC	46	52	54	40
NO_X	152	144	141	241

Source: 2009 State Strategy Update, p. 20.

[1] No commitments to VOC or NO_X reductions in 2017; 2020 commitment in the South Coast is necessary to provide for attainment in the downwind nonattainment areas.

[2] The anticipated reductions of VOC and NO_X from 182(e)(5) measures will be reassessed as new SIPs are developed and revised. 2009 State Strategy Update, p. 20.

d. CAA Section 182(e)(5) New or Improved Technologies Provisions

For ozone nonattainment areas classified as extreme, the CAA recognizes that an attainment demonstration may need to rely to a certain extent on new or evolving technologies, given the relatively long time between developing the initial plan and attaining the standard and the degree of emissions reductions needed to attain. To address these needs, CAA section 182(e)(5) authorizes EPA to approve provisions in an extreme area plan which ''anticipate development of new control techniques or improvement of existing control technologies,'' and to approve an attainment demonstration based on such provisions, if the State demonstrates that: (1) Such provisions are not necessary to achieve the incremental emission reductions required during the first 10 years after November 15, 1990;[24] and (2) the State has submitted enforceable commitments to develop and adopt contingency measures to be implemented if the anticipated technologies do not achieve the planned reductions. CAA 182(e)(5). The State must submit these contingency measures to EPA no later than 3 years before proposed implementation of these long-term measures, and the contingency measures must be ''adequate to produce emissions reductions sufficient, in conjunction with other approved plan provisions, to achieve the periodic emissions reductions required by [CAA sections 182(b)(1) or (c)(2)] and attainment by the applicable dates.'' *Id.*

The General Preamble further provides that the new technology measures contemplated by section 182(e)(5) may include those that anticipate future technological developments as well as those that require complex analyses, decision making and coordination among a number of government agencies. See General Preamble at 13524. An attainment demonstration that relies on long-term new technology measures under section 182(e)(5) must identify any such measures and contain a schedule outlining the steps leading to final development and adoption of the measures. *Id.*

CARB and the SCAQMD have demonstrated a clear need for emissions reductions from new and improved control technologies to reduce air

[24] Consistent with provisions in our implementation regulations for the 1997 ozone NAAQS at 40 CFR part 51, subpart X, we interpret this 10 year timeframe to run from the effective date of designation for the 1997 ozone NAAQS.

pollution in the South Coast. The adopted control measures and enforceable commitments, discussed above, provide the majority, but not all, of the balance of the emissions reductions needed to attain by June 15, 2024. See 2007 State Strategy, p. 54. The State Strategy and South Coast AQMP rely on commitments to achieve additional reductions of 241 tpd NO_X and 40 tpd VOC by 2023 from new and improved technologies consistent with the requirements of section 182(e)(5). See 2009 State Strategy Status Report, p. 20. The new technology provisions (also called ''long-term measures'') described in the revised 2007 State Strategy and South Coast 8-Hour Ozone SIP are not relied on to demonstrate RFP; they are relied on solely for attainment by June 15, 2024. They are accompanied by an enforceable commitment by the State to adopt and submit contingency measures no later than 3 years before implementation, as required by CAA section 182(e)(5). We provide our analysis of these new technology provisions below.

CARB and the California districts have a longstanding history of successfully adopting and implementing technology-advancing regulations and innovative control measures. They have worked closely with research scientists and the regulated industry to develop regulations that are stringent enough to compel technology development, yet flexible enough to encourage industry innovations. CARB has provided a list of potential long-term control measures which include increased durability of emission control equipment in passenger vehicles, tighter engine emission standards, cleaner ground support equipment at airports, and prioritizing Federal transportation funding to support air quality goals. See pp. 56–57 of the 2007 State Strategy. The SCAQMD has also provided a list of potential advanced control technologies and innovative approaches that could achieve the long-term reductions (See South Coast 2007 AQMP, pp. 4–54 to 4–71). SCAQMD also has an active Technology Advancement Office. The South Coast technology advancement efforts include, though are not limited to: Heavy-Duty Class 8 Electric Trucks, Vehicle Maintenance, Commercial Green Cleaners, Fireplace Gas Log Buy-down, Residential Yard Equipment and Commercial Leaf Blower Exchange, Boiler and Process Heater Efficiency Upgrades, Architectural Coating Rebates, and zero-emission electric delivery trucks.

CARB has also provided updates to its list of potential long-term measures in both the 2009 State Strategy update and the 2011 ozone SIP revision. The SCAQMD has also provided a more specific list of potential technologies, which may be used to fulfill the new technology commitments. SCAQMD's list of potential projects includes (but is not limited to) extensive retirement of high-emitting light duty vehicles, accelerated penetration of zero-emitting vehicles, retrofit and I/M for heavy duty vehicles, more stringent fuel specifications and use of diesel alternatives, more stringent marine vessel standards and programs, advanced and zero-emitting technologies for locomotives/cargo transportation, accelerated replacement of pleasure craft, more stringent aircraft standards, and ultra-low VOC formulations for consumer products. See South Coast AQMP, Table 4–9, p. 4–56. See 2009 State Strategy Status Report, pp. 25–27 and 2011 Ozone SIP Revision, Appendix A, pp. A–8 to A–12.

To implement the long-term strategy, CARB has committed to a process that will help ensure that the long-term measures are adopted and that reductions are achieved by the beginning of the last full ozone season before the attainment date. CARB is coordinating a government, private and public effort to establish emission goals for critical mobile and stationary emission source categories. The effort includes periodic assessment of technology advancement opportunities and updates to the Board and the public regarding new emission control opportunities and progress in achieving the long-term measure reductions. CARB's commitment for implementing the long-term strategy also includes (a) sharing results through periodic briefings to the Board, workshops, conferences, symposia, Web site postings and other means, (b) working to secure resources for continuing research and development of new technologies, and (c) developing schedules for moving from research to implementation. *Id.*

An initial step in the long-term strategy was the signing of a Memorandum of Agreement (MOA) between the U.S. EPA, CARB and the South Coast and San Joaquin Valley Air Districts to commit to developing and testing new sustainable technologies to accelerate progress in meeting air quality goals. The goal of the MOA is to help align agency research resources to evaluate innovative technologies and assess new monitoring equipment to better measure mobile and stationary source emissions. The MOA agencies have also established a Clean Air Technology Working Group to help bring together the necessary participants (*e.g.,* scientists, engineers, analysts and agency specialists) to achieve the goals of the MOA. 2009 State Strategy Status Report, pp. 25–27. For the South Coast, the focus has been on demonstrating new technologies for goods movement activities at a large intermodal rail yard in the City of San Bernardino, and on the more than 1,000 stationary and area emission sources in the South Coast (*e.g.,* auto repair shops, transportation facilities, concrete and aggregate operations, military installations, printing and coating operations, and manufacturing facilities). See 2011 Ozone SIP Revision, p. A–9.

Other State programs that may achieve emissions reductions to help meet CARB's 182(e)(5) commitment include: potential co-benefits from California's climate change programs where State legislation (Assembly Bill 32—Global Warming Solutions Act of 2006 (AB 32)) aims to reduce Greenhouse Gas (GHG) in 2020 to 1990 levels or by about 30%; California's Air Quality Improvement Program (AQIP), an incentive program that supports the deployment of hybrid and zero-emission vehicles and other advanced technologies today in order to achieve the large-scale reductions needed in the future; and California's annual research program, which identifies projects and provides funding to help provide timely scientific and technical information needed for air quality control programs. In addition, the South Coast AQMD has identified a clean energy strategy that focuses agencies and business leaders on using the cleanest technologies, making efficient land-use decisions, cleaner energy generation (solar and fuel cells), modernizing old inefficient power plants and improving building energy use. See 2011 Ozone SIP Revision, pp. A–10 to A–12.

In addition to its commitment to the process discussed above, CARB has committed to submit an 8-hour ozone SIP revision by 2020 that will: (1) Reflect modifications to the 2023 emission reduction target based on updated science and (2) identify additional strategies and implementing agencies needed to achieve the needed reductions by the beginning of the 2023 ozone season. See 2011 Ozone SIP Revision, p. A–8.

CARB's 2011 Ozone SIP Revision updates and reaffirms both the ''long-term strategy commitment to identify and implement advanced technologies to reduce ozone-forming emissions in the State Strategy'' and the State's enforceable commitment ''to develop, adopt, and submit contingency measures by 2020 if advanced

technology measures do not achieve planned reductions.'' See CARB Resolution 11–22, July 21, 2011. Finally, CARB has committed to meet annually with EPA to discuss strategies to maximize the clean air benefits of emerging advanced technologies and to provide annual summaries of strategies and activities.[25]

The long-term strategy commitment for the South Coast 8-Hour Ozone SIP satisfies the two criteria in CAA section 182(e)(5)(A) and (B) as follows. First, as mentioned above, the South Coast 8-Hour Ozone SIP does not rely on any of these new technology reductions to demonstrate RFP in any milestone year between 2008 and 2020. CARB has committed to achieve 241 tpd of NO_X and 40 tpd of VOC reductions through new technology measures approved under section 182(e)(5) only in the attainment year (2023). We note that the amount and relative proportion of reductions from measures scheduled for long-term adoption under section 182(e)(5), as compared to measures already adopted in regulatory form or scheduled for near-term adoption, should clearly decrease in any future SIP update, and that EPA will not approve a SIP revision that contains an increase in the amount or relative proportion of section 182(e)(5) new technology measures without a convincing showing in a SIP revision that the technologies relied upon in the near-term rules have been found to be technologically infeasible or ineffective in achieving emissions reductions in the near term.

Second, CARB has submitted an enforceable commitment to submit adopted contingency measures to EPA by 2020 as required by CAA section 182(e)(5). See CARB Resolution 11–22, July 21, 2011. These contingency measures must be adequate to produce emissions reductions sufficient, in conjunction with other approved plan provisions, to achieve the periodic emissions reductions required by CAA sections 182(b)(1) or (c)(2) and attainment by the applicable dates. See CAA 182(e)(5). EPA will approve or disapprove these contingency measures in accordance with CAA section 110.

Based on the above discussion and evaluations, we propose to determine that the long-term strategy for the South Coast 8-Hour Ozone SIP satisfies the requirements of CAA 182(e)(5).

[25] See letter, James Goldstene, Executive Officer, CARB, to Jared Blumenfeld, Regional Administrator, EPA Region 9, dated August 29, 2011.

3. Proposed Actions on RACM Demonstration and Control Strategy

As described above, the District evaluated a range of potentially available measures for inclusion in its 2007 Ozone Plan and committed to adopt those it found to be reasonably available for implementation in the South Coast nonattainment area. The process and the criteria the District used to select certain measures and reject others were consistent with EPA's RACM guidance. The evaluation processes undertaken by SCAG and the State were also consistent with EPA's RACM guidance. See *e.g.,* General Preamble at 13560 and Seitz memo.

Based on our review of these RACM analyses and the District's and California's adopted rules, as well as their commitments to adopt and implement additional control measures, we propose to find that there are, at this time, no additional reasonably available control measures (including reasonably available control technology) that would advance attainment of the 1997 8-hour ozone standard in the South Coast. Therefore, we propose to find that the South Coast 2007 AQMP, together with the 2007 State Strategy, provide for the implementation of all RACM as required by CAA section 172(c)(1).

We propose to approve the SCAQMD's commitments to achieve specific aggregate reductions of NO_X and VOC emissions by specific years as given in Table 4–2A of the 2007 AQMP, as revised by Tables 2 and 3 of the 2007 Progress Report, Appendix F, and as shown in Table 2 above.

We propose to approve CARB's commitments to propose certain defined measures, as given in Table B–1 in Appendix B of the 2011 Progress Report, and Appendix B, Table B–1 in the 2011 Ozone SIP Revision. We also propose to approve CARB's commitment to achieve the total aggregate emissions reductions necessary to demonstrate RFP and to attain the 1997 8-hour ozone standard in the South Coast nonattainment area, as given in 2009 State Strategy Status Report, p. 20 and CARB Resolution 07–28, Attachment B, p. 4, and shown in Table 6 above. See CARB Resolution 07–28 (September 27, 2007), Appendix B, p. 4.

Finally, we are proposing to approve CARB's and the District's long-term strategy commitments in the South Coast 2007 8-Hour Ozone Plan under the new technology provisions of CAA section 182(e)(5). This proposal is based on our proposed findings that these commitments satisfy the two criteria in CAA section 182(e)(5)(A) and (B). First, the South Coast 2007 8-Hour Ozone Plan does not rely on any of these new technology reductions to demonstrate RFP in any milestone year between 2008 and 2020. CARB has committed to achieve 241 tpd of NO_X and 40 tpd of VOC reductions through new technology measures approved under section 182(e)(5) only in the attainment year (2023). We note that the amount and relative proportion of reductions from measures scheduled for long-term adoption under 182(e)(5), as compared to measures already adopted in regulatory form or scheduled for near-term adoption, should clearly decrease in any future SIP update, and that EPA will not approve a SIP revision that contains an increase in the amount or relative proportion of 182(e)(5) new technology measures without a convincing showing in a SIP revision that the technologies relied upon in the near-term rules have been found to be technologically infeasible or ineffective in achieving emissions reductions in the near-term.

Second, CARB has submitted an enforceable commitment to submit adopted contingency measures to EPA by 2020 as required by CAA 182(e)(5). See CARB Resolution 11–22, July 21, 2011. These contingency measures must be adequate to produce emissions reductions sufficient, in conjunction with other approved plan provisions, to achieve the periodic emissions reductions required by CAA section 182(b)(1) or (c)(2) and attainment by the applicable attainment date. See CAA 182(e)(5). Following the State's submittal of these contingency measures, EPA will approve or disapprove the provisions in accordance with CAA section 110.

C. Attainment Demonstration

1. Requirements for Attainment Demonstrations

CAA section 182(c)(2)(A) requires states with ozone nonattainment areas classified as serious or above to submit plans that demonstrate attainment of the applicable ambient air quality standard as expeditiously as practicable but no later than the outside date established in the CAA.[26] The attainment demonstration is due within three years of the area's designation as nonattainment (40 CFR 51.908), and should include:

(1) Technical analyses that locate and identify sources of emissions that are

[26] EPA's regulation at 40 CFR 51.903(a) translates the maximum attainment periods in Table 1 of section 181, which are specifically linked to enactment of the 1990 CAA Amendments, for purposes of attaining the 1997 8-hour ozone NAAQS.

contributing to violations of the 8-hour ozone NAAQS within the nonattainment area;

(2) adopted measures with schedules for implementation and other means and techniques necessary and appropriate for attainment; and

(3) contingency measures required under section 172(c)(9) of the CAA.

See 70 FR 71612 at 71624.

The requirements for the first two items are described in the sections on emissions inventories and RACM above (sections IV.A. and IV.C.) and in the sections on air quality modeling and attainment demonstration that follow immediately below. Requirements for the third item are described in the sections on the control strategy and the contingency measures (sections V.B. and V.F.), respectively.

2. Air Quality Modeling in the South Coast 2007 AQMP

Below, we discuss the applicable statutory and regulatory requirements for modeled attainment demonstrations and EPA guidance on air quality modeling for the 1997 8-hour ozone standard, the air quality modeling analysis supporting the attainment demonstration in the State's submittal, and our evaluation of these modeling analyses as part of the attainment demonstration SIP.

a. CAA and Regulatory Requirements for 8-Hour Ozone Air Quality Modeling and EPA Guidance

For any ozone nonattainment area classified as serious or above, section 182(c)(2)(A) of the CAA specifically requires the State to submit a modeled attainment demonstration based on a photochemical grid modeling evaluation or any other analytical method determined by the Administrator to be at least as effective as photochemical modeling. EPA's ozone implementation rule in 40 CFR section 51.908 also specifies this requirement and in addition requires that each attainment demonstration meet the requirements of section 51.112, including Appendix W to 40 CFR part 51, as interpreted in EPA guidance. *See, e.g.,* ''Guidance on the Use of Models and Other Analyses for Air Quality Goals in Attainment Demonstrations for Ozone, $PM_{2.5,}$ and Regional Haze,'' April 2007 (hereafter referred to as ''EPA's 2007 attainment demonstration guidance documents''). These guidance documents describe the criteria that an air quality model and its application should meet to qualify for use in an 8-hour ozone attainment demonstration. For more detail on EPA's evaluation of the modeling in the South Coast 8-hour ozone attainment demonstration, see the ''Modeling and Other Analyses Attainment Demonstration'' (section II.B.) of the TSD for today's proposal. The modeling section of the TSD also includes a complete list of applicable modeling guidance documents. These documents describe the components of the attainment demonstration, explain how the modeling and other analyses should be conducted, and provide overall guidance on the technical analyses for attainment demonstrations.

As with any predictive tool, inherent uncertainties are associated with photochemical grid modeling. EPA's guidance recognizes these limitations and provides recommended approaches for considering other analytical evidence to help assess whether attainment of the NAAQS is likely. This process is called a weight of evidence (WOE) analysis.

EPA's modeling guidance (updated in 1996, 1999, and 2002) discusses various WOE analyses. EPA's modeling guidance was updated in 2005 and 2007 for the 1997 8-hour attainment demonstration procedures to include a WOE analysis as an integral part of any attainment demonstration. This guidance strongly recommends that all attainment demonstrations include supplemental analyses beyond the recommended modeling. These supplemental analyses would provide additional information such as data analyses, and emissions and air quality trends, which would help strengthen the conclusion based on the photochemical grid modeling. A WOE analysis is specifically recommended for inclusion in any attainment demonstration SIP where the modeling results predict Future Design Values (FDVs) ranging from 82 to less than 88 ppb (see EPA's 2007 attainment demonstration guidance documents).

b. 8-Hour Attainment Demonstration Modeling and Weight of Evidence in the South Coast 2007 AQMP

i. Photochemical Grid Modeling Attainment Demonstration Results

a. Photochemical Grid Model. The model selected for the Final 2007 AQMP attainment demonstrations is the Comprehensive Air Quality Model with Extensions (CAMx), version 4.4 (Environ, 2006), using Statewide Air Pollution Research Center-99 (SAPRC–99) gas phase mechanisms (Carter, 2000).[27] The modeling system (including the photochemical model, meteorological inputs, and chemical mechanism) is consistent with the previous advice of outside peer reviewers. CAMx is a state-of-the-art air quality model that can simulate ozone and $PM_{2.5}$ concentrations together in a ''one-atmosphere'' approach for attainment demonstrations. CAMx is designed to integrate the output from both prognostic and diagnostic meteorological models.

b. Episode Selection. Six meteorological episodes from three years are used as the basis for the plan. The 2003 AQMP benefited from the intensive monitoring conducted under the 1997 Southern California Ozone Study (SCOS 1997) where the August 4–7, 1997 episode was the cornerstone of the modeling analysis. One of the primary modeling episodes that was used in the 2003 AQMP, August 5–6, 1997, was also selected for this plan. In addition, five episodes that occurred during the Multiple Air Toxics Exposure Study III (MATES–III) sampling program in 2004 (August 7–8) and 2005 (May 21–22, July 15–19, August 4–6, and August 27–28) were selected.

c. Model Performance. Model performance was evaluated in three zones in the South Coast Basin: the San Fernando Valley; the eastern San Gabriel, Riverside and San Bernardino Valleys; and Los Angeles and Orange County. Normalized Gross Bias, Normalized Gross Error, and Peak Prediction Accuracy were determined for each area. Although not a requirement for determining acceptable model performance, the performance statistics were compared to the EPA performance goals presented in guidance documents. The performance goals for Normalized Gross Error and Peak Prediction Accuracy were met in the eastern San Gabriel, Riverside and San Bernardino Valleys. In general, the statistic for bias (Normalized Gross Bias) tends to be negative, indicating that the model tends to slightly under-predict ozone. Based on their analysis, South Coast concludes and EPA agrees that model performance is acceptable for this application.

ii. Modeling Approaches for the SCAQMD Attainment Demonstration

CAMx simulations were conducted for the base year 2002, and future-year 2023 baseline and controlled emissions.[28]

[27] Carter, W.P.L., May 8, 2000a. Documentation of the SAPRC–99 chemical mechanism for VOC reactivity assessment. Report to the California Air Resources Board, Contracts 92–329 and 95–308.

[28] Future year controlled emissions were estimated from the baseline emissions using the CEPA control factors for the simulations, are given in Table V–4–4 of the 2007 South Coast AQMP, Appendix V.

The ozone attainment demonstration relies on the use of site-specific relative response factors (RRFs) being applied to the 2002 weighted design values. The RRFs are determined from the future year controlled and the 2002 base year simulations. The initial screening for station days to be included in the attainment demonstration included the following criteria: (1) Having an observed concentration equaling or exceeding 85 ppb, and (2) a simulation predicted base year (1997, 2004 or 2005) concentration over 60 ppb. Additional criteria were added to the selection process as the simulations were evaluated. A minimum of five episode days are recommended to determine the site specific RRF. The selection criteria for the episode days and the process of applying the RRFs to the CAMx modeling are discussed in more detail in the TSD for today's action.

iii. Results of SCAQMD Modeling

The results of the attainment demonstration for 2023 indicate that the Federal 1997 8-hour ozone standard would be attained by June 15, 2024 at all monitors with the 2023 controlled emissions inventory. The attainment targets (420 tpd VOC and 114 tpd NO_X) are based on both short-term and long-term control measures. With controls in place, it is expected that all stations in the South Coast ozone nonattainment area will meet the Federal 1997 8-hour ozone standard in calendar year 2023 (*i.e.,* by June 15, 2024). The east Basin stations of Crestline and Fontana are projected to have the highest 8-hour ozone design values of 83 ppb and 81 ppb respectively. Both sites are downwind receptors along the primary wind transport route that moves precursor emissions and developing ozone eastward by the daily sea breeze. Future year projections of ozone along the northerly transport route through the San Fernando Valley indicate that the ozone design value in the Santa Clarita Valley will be 74 ppb, which is approximately 13 percent below the standard, in 2023.

In addition to the monitor-based attainment test, the AQMP includes an unmonitored area analysis. This review is intended to ensure that a control strategy leads to reductions in ozone at other locations which could have baseline (and future) design values exceeding the NAAQS were a monitor deployed there. The unmonitored area analysis indicates projected 2024 controlled 8-hour ozone design concentrations at or below 84 ppb for all grid cells in the South Coast Air Basin.

c. EPA's Evaluation and Proposed Conclusion on the Modeling Demonstration

Our evaluation of the air quality modeling analyses and supporting information provided in the South Coast 2007 Ozone SIP indicate that the South Coast area will attain the 1997 8-hour ozone standard by its attainment date of June 15, 2024. In addition to the attainment demonstration provided in the South Coast 2007 Ozone SIP, we have considered supplemental technical information, including ambient air quality monitoring data, which was not available at the time the attainment modeling was performed by SCAQMD. This information is discussed in more detail in the TSD. The modeling shows significant reductions in ozone from the base period. The modeling predicts values of 83 ppb or below at all of the twenty ozone monitoring stations. The most recent ambient air quality data that we have reviewed indicate that the area is on track to attain the 1997 8-hour ozone standard by 2024. The peak ozone design values have dropped from 128 ppb in 2000–2002 to 112 ppb in 2008–2010.

Based on the analysis above and in the TSD, EPA proposes to find that the air quality modeling provides an adequate basis for the RACM, RFP and attainment demonstrations in the South Coast 2007 8-Hour Ozone Plan.

3. Enforceable Commitments in the Attainment Demonstration

Table 8 below summarizes the measures that are relied upon in the South Coast 2007 AQMP's 8-hour ozone attainment demonstration to achieve the carrying capacities shown in Table 7. This attainment demonstration was updated by the 2011 Ozone SIP revision to reflect adjustments to future year baseline inventories and adopted controls.

TABLE 7—EMISSIONS CARRYING CAPACITY ESTIMATES FOR THE SOUTH COAST NONATTAINMENT AREA FOR 8-HOUR OZONE ATTAINMENT

[Tons/day, based on summer planning inventory]

NO_X	VOC
114	420

Source: South Coast 2007 AQMP, Table 5–6, page 5–21.

As shown in Table 8, the majority of emissions reductions the State projects are needed for attaining the 8-hour ozone standard in the South Coast nonattainment area by 2024 come from baseline measures. These baseline measures include numerous adopted District and State measures that generally have been approved by EPA either through the SIP process or the CAA section 209 waiver process. See Appendices A and B of the TSD for a list of these measures. We have also accounted for ARB's improvements to the emissions inventories, discussed above in section IV.A, in the attainment year baseline emissions level (see Table 8, row D). The remaining reductions needed for attainment are to be achieved through the District's and CARB's enforceable commitments to achieve aggregate emission reductions in the South Coast either through defined control measures or through their commitments to develop new or improved technologies under CAA section 182(e)(5). Since the submittal of the South Coast 2007 AQMP and 2007 State Strategy, the District and CARB have adopted numerous control measures that have significantly reduced the amount of emissions reductions that still need to be achieved through these commitments. See Table 9.

TABLE 8—SUMMARY OF SOUTH COAST'S 8-HOUR OZONE ATTAINMENT DEMONSTRATION

[Tons per summer planning day]

		NO_X	VOC
A	Revised 2002 baseline emissions level	1024	881
B	Attainment target level	114	420
C	Total reductions needed from 2002 baseline levels to demonstrate attainment (A–B)	910	461
D	Attainment year baseline emissions level (from 2011 Ozone SIP Revision Supplement, "new 2023 baseline").	493	529
E	Reductions from baseline measures and improvements to the emissions inventory (A–D).	531	352

TABLE 8—SUMMARY OF SOUTH COAST'S 8-HOUR OZONE ATTAINMENT DEMONSTRATION—Continued

[Tons per summer planning day]

		NO_X	VOC
F	Reductions needed from control strategy measures including reductions from new technologies (D–B).	379	109

Source: 2011 Ozone SIP Revision, Appendix B, and 2011 Ozone SIP Revision Supplement.

TABLE 9—REDUCTIONS NEEDED FOR ATTAINMENT REMAINING AS COMMITMENTS BASED ON SIP–CREDITABLE MEASURES

[Tons per summer planning day in 2023]

		NO_X	VOC
A	Total reductions needed from baseline and control strategy measures to attain	910	461
B	Reductions from baseline measures and emissions inventory improvements	531	352
C	Total reductions from approved measures (District—Table 2 above, and CARB—Table 5 above).	7.7 + 114.7 = 122.4	15.3 + 15.9 = 31.2
D	Total reductions remaining as commitments and reductions from new technology measures (A–B–C).	256.6	77.8
E	Reductions remaining as CARB enforceable commitments [1]	14.3	33.1
F	Reductions remaining as District enforceable commitments [2]	1.5	3.9
G	Total reductions remaining as reductions from new technologies (CAA section 182(e)(5)	241	40
H	Percent of reductions needed for attainment from new control measures, not including reductions from new technologies [(E + F)/A].	2%	8%

[1] Calculated by subtracting from CARB's 2023 NO_X commitment of 141 tpd and VOC commitment of 54 tpd (Table 8) the adjustments to baseline from State and Federal sources from 2011 Ozone SIP Revision Supplement, Attachment 1 (12 tpd NO_X, 5 tpd VOC) and emissions reductions from currently SIP-creditable State measures from Table 5 (114.7 tpd NO_X, 15.9 tpd VOC).

[2] From Table 2 above in section IV.B., difference between District commitments and SIP-creditable measures.

As shown in Table 9, reductions in the projected baseline inventory from measures already adopted by the District and State (both prior to and as part of the South Coast 2007 AQMP and 2007 State Strategy), which EPA has approved/waived or proposed to approve, provide the great majority of the emissions reductions needed to demonstrate attainment of the 1997 8-hour ozone standard in the South Coast. The balance is in the form of either enforceable commitments to specific aggregate emissions reductions by the District and CARB, or emissions reductions from new or improved technologies under CAA section 182(e)(5). In this section, we discuss the enforceable commitments that are a part of the attainment demonstration in the South Coast 2007 Ozone Plan.[29]

We believe that, with respect to the 2007 South Coast 8-hour Ozone SIP, circumstances warrant the consideration of enforceable commitments as part of the attainment demonstration for the South Coast. As shown in Table 9 above, a substantial portion of NO_X emissions reductions and the majority of the VOC reductions needed to demonstrate attainment in the South Coast come from rules and regulations that were adopted prior to 2007, *i.e.,* from baseline measures. As a result of these State and District efforts, most sources in the South Coast nonattainment area are currently subject to stringent rules adopted and approved by EPA prior to the development of the 2007 State Strategy and the South Coast 2007 AQMP, leaving few opportunities (and generally more technologically and economically challenging ones) to further reduce emissions. In the South Coast 2007 AQMP and the 2007 State Strategy, the District and CARB identified potential control measures that could provide many of the additional emissions reductions needed for attainment. See 2007 Ozone Plan, Chapter 5 and 2007 State Strategy, Chapter 5. However, the timeline needed to develop, adopt, and implement these measures went beyond the November 2007 submittal date of the South Coast 8-hour Ozone SIP. These circumstances warrant the District's and CARB's reliance on enforceable commitments as part of the attainment demonstration in the South Coast 2007 AQMP and 2007 State Strategy.

Given the State's demonstrated need for reliance on enforceable commitments, we now consider the three factors EPA uses to determine whether the use of enforceable commitments in lieu of adopted measures to meet a CAA planning requirements is approvable: (a) Does the commitment address a limited portion of the statutorily-required program; (b) is the state capable of fulfilling its commitment; and (c) is the commitment for a reasonable and appropriate period of time.

a. Commitments are a Limited Portion of Required Reductions

For the first factor, we look to see if the commitment addresses a limited portion of a statutory requirement, such as the amount of emissions reductions needed to demonstrate attainment in a nonattainment area. For this calculation, reductions assigned to the new technologies provision (CAA section 182(e)(5) are not counted as commitments.[30]

As shown in Table 9 above, the remaining portions of the emission

[29] Based on SIP-creditable measures adopted to date, the South Coast 2007 Ozone Plan does not rely on enforceable commitments to aggregate emissions reductions to demonstrate RFP or to meet any other applicable requirement of the CAA. Therefore, we discuss here only those enforceable commitments relied on to demonstrate attainment.

[30] CAA section 182(e)(5) specifically allows EPA to approve an attainment demonstration that relies on reductions from new technologies. This provision is separate from the requirement in CAA section 172(c)(6) for enforceable emissions limitations under which enforceable commitments are considered. As a result, reductions attributed in the attainment demonstration to new technologies are not considered part of the State's enforceable commitments for purposes of determining the percentage of reductions needed for attainment that remain as commitments.

reductions needed to demonstrate attainment of the 1997 8-hour ozone standard in the South Coast nonattainment area (*i.e.*, of the State's total enforceable commitments), after accounting for State and District measures approved/waived by EPA since 2007 and emissions reduction commitments assigned to CAA section 182(e)(5) measures, are 15.8 tpd NO_X and 37 tpd VOC. When compared to the total reductions needed to demonstrate attainment (not including the CAA section 182(e)(5) reductions in the attainment demonstration), the remaining portion of the enforceable commitments represents approximately 2 percent of the needed NO_X reductions and 8 percent of the needed VOC reductions. Historically, EPA has approved SIPs with enforceable commitments in the range of 10 percent or less of the total needed reductions for attainment. See our approval of the SJV PM_{10} Plan at 69 FR 30005 (May 26, 2004), the SJV 1-hour ozone plan at 75 FR 10420 (March 8, 2010), the Houston-Galveston 1-hour ozone plan at 66 FR 57160 (November 14, 2001), proposed approval of the SJV 2007 $PM_{2.5}$ SIP at 76 FR 41338 (July 13, 2011), and proposed approval of the South Coast $PM_{2.5}$ SIP at 76 FR 41562 (July 14, 2011). Thus, the State's commitment addresses a limited proportion of the required emission reductions.

b. The State Is Capable of Fulfilling its Commitment

For the second factor, we consider whether the District and State are capable of fulfilling their commitments.

As discussed above, CARB has adopted and submitted the 2009 State Strategy Status Report and the 2011 Ozone SIP Revision which update and revise the 2007 State Strategy. These submittals show that CARB has made significant progress in meeting its enforceable commitments for the South Coast 8-hour ozone nonattainment area and several other nonattainment areas in California. The District has also made significant progress in meeting its enforceable commitments for the attainment year of 2023. It has adopted rules that are projected to achieve additional reductions of NO_X and VOC in future years as shown in Table 2 above. In addition to the rules discussed above, both CARB and the District have well-funded incentive grants programs to reduce emissions from the on- and off-road engine fleets. Reductions from several of these programs have yet to be quantified and/or credited in the attainment demonstration. See, for example, Tables 2 and 3 in Appendix F of the 2011 Progress Report.

Given the State's and District's efforts to date to reduce emissions, we believe that the State and District are capable of meeting their enforceable commitments to adopt measures that will reduce emissions of NO_X and VOC to the levels needed to attain the 1997 8-hour ozone standard in the South Coast 8-hour ozone nonattainment area by the attainment date, as shown in Table 9.

c. The Commitment Is for a Reasonable and Appropriate Timeframe

For the third and last factor, we consider whether the commitment is for a reasonable and appropriate period of time.

In order to meet the commitments to adopt measures to reduce emissions to the levels needed to attain the 1997 8-hour ozone standard in the South Coast nonattainment area by 2023, the South Coast 2007 AQMP and 2007 State Strategy include ambitious rule development, adoption, and implementation schedules. The State has committed to adopt the rules needed to achieve the few remaining reductions by 2023. We believe that this period is appropriate given the technological and economic challenges associated with the control measures that will be needed to achieve these reductions and the State's required procedures for development and adoption of these measures. In addition, these reductions are not needed to meet earlier RFP targets and the adoption and submission timeframe ensures adequate time for implementation by the beginning of the last full ozone season (2023) prior to the June 15, 2024 attainment date. See Tables 2 and 4 above. Thus, the commitment is for a reasonable and appropriate period of time.

4. Proposed Action on Attainment Demonstration

In order to approve a SIP's attainment demonstration, 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 IV.A and IV.C.2, we are proposing to approve the revised base year emissions inventory, and to find the air quality modeling adequate to support the attainment demonstration.

Second, we must find that the SIP provides for expeditious attainment through the implementation of all RACM. As discussed above in section IV.C., we are proposing to approve the RACM demonstration in the South Coast 2007 AQMP as meeting the requirements of CAA section 172(c)(1).

Third, we must find that the emissions reductions that are relied on for attainment are creditable and are sufficient to provide for attainment. As shown in Table 9, the South Coast 2007 AQMP relies primarily on adopted and approved/waived rules to achieve the emissions reductions needed to attain the 1997 8-hour ozone standards in the South Coast by June 15, 2024. The balance of the reductions projected to be needed for attainment is currently in the form of enforceable commitments to adopt measures to achieve aggregate tonnage reductions of VOC or NO_X in the near term from available technologies and measures, and an enforceable commitment to adopt and submit in the longer term measures relying on the development and deployment of new technologies that will achieve specific aggregate tonnage reductions of VOC and NO_X.

EPA has previously accepted enforceable commitments in lieu of adopted control measures in attainment demonstrations when the circumstances warrant them and the commitments meet three criteria. As discussed above in section IV.C.3., we believe that circumstances here warrant the consideration of enforceable commitments, and that the three criteria are met: (1) The commitments constitute a limited portion of the required emissions reductions; (2) both the State and District are capable of meeting their commitments; and (3) the commitments are for an appropriate timeframe. Based on these evaluations, we are proposing to approve the enforceable commitments as part of the attainment demonstration.

CAA section 182(e)(5) allows extreme ozone nonattainment area plans under certain conditions to include provisions for the development of new technologies in the SIP and allows EPA to approve attainment demonstrations based, in part, on those provisions. For the reasons discussed in section IV.B., we propose to find that California has met the conditions for relying on new technology provisions in its attainment demonstration for the South Coast nonattainment area.

For the foregoing reasons, we propose to approve the attainment demonstration in the South Coast 2007 Ozone Plan.

D. Reasonable Further Progress Demonstration

1. Requirements for Reasonable Further Progress

CAA Section 172(c)(2) requires that plans for nonattainment areas shall provide for reasonable further progress (RFP). RFP is defined in section 171(1) as ''such annual incremental reductions in emissions of the relevant air pollutant as are required by [Part D—Plan Requirements for Nonattainment Areas] or may reasonably be required by the Administrator 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 ozone precursor emissions between the years of 1990 and 1996. For ozone nonattainment areas classified as serious or higher, section 182(c)(2)(B) also requires a 3 percent per year reduction of ozone precursor emissions until attainment, in addition to the 15 percent reduction required under CAA 182(b)(1).

CAA Section 182(b)(1)(D) prohibits the state from including emissions reductions from pre-1990 Federal motor vehicle programs when demonstrating RFP. In other words, the reductions from these programs are not creditable when demonstrating RFP.

The ozone implementation rule for the 1997 8-hour ozone NAAQS interprets the RFP requirements for the purposes of the 1997 8-hour ozone standards, establishing requirements for RFP that depend on the area's classification as well as whether the area has an approved 15 percent reduction plan for the 1-hour ozone standard that covers all of the 8-hour ozone nonattainment area. See 40 CFR 51.910(a) and 70 FR 71612. In 1997, EPA approved a 15 percent rate of progress (ROP) plan for the South Coast, which covers the entire nonattainment area for the 1997 8-hour ozone standard. See 62 FR 1150 (January 8, 1997). As a result, the State does not need to demonstrate another 15 percent reduction in VOC for this area. Instead, under the ozone implementation rule, the 8-hour ozone SIP for South Coast must provide for an average of 3 percent per year of VOC and/or NO_X emissions reductions for (1) the 6-year period beginning January 1 of the year following the year used for the baseline and (2) all remaining 3-year periods after the first 6-year period out to the area's attainment date. 40 CFR 51.910(a)(1)(ii)(B). 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 are creditable for purposes of demonstrating that the RFP targets are met.

The RFP demonstration must calculate and exclude the non-creditable reductions described in CAA 182(b)(1)(D). These non-creditable reductions include emissions reductions from pre-1990 Federal motor vehicle programs. The method for calculating the target emissions levels is found in Appendix A to the preamble of the ozone implementation rule. See 70 FR 71612 at 71696.

2. RFP Demonstration in the South Coast 2007 AQMP

California has made several submittals to address the RFP requirement for the 1997 8-hour ozone standard in the South Coast 8-hour ozone nonattainment area. The original RFP demonstration is in Chapter 6 of the South Coast 2007 AQMP. The demonstration addresses NO_X and VOC emissions and uses the 2002 annual average inventory as the baseline emissions inventory and 2023 as the attainment year. See South Coast 2007 AQMP, Table 6–2A and 6–2B. CARB submitted a revised RFP demonstration for the South Coast 8-hour ozone nonattainment area on July 29, 2011 as part of the 2011 Ozone SIP Revision. The 2011 submission reflected revisions to several significant control measures since the submission of the SIP in 2007, as well as changes to the on-road diesel and off-road construction emissions estimates. Table 10 below summarizes the South Coast ozone RFP demonstration as revised by the 2011 Ozone SIP Revision.

TABLE 10—2011 REVISIONS TO THE 8-HOUR OZONE SIP REASONABLE FURTHER PROGRESS CALCULATIONS SOUTH COAST

[Summer season, tons per day]

	2002	2008	2011	2014	2017	2020	2023
Baseline ROG	880.5	632.0	579.9	535.2	519.8	513.9	513.4.
CA MVCP/RVP Adjustment	0.0	56.1	73.0	86.6	93.7	98.3	101.6.
RACT Corrections	0.0	0.0	0.0	0.0	0.0	0.0	0.0.
Adjusted 2002 Baseline ROG in milestone year	880.5	824.5	807.6	793.9	786.8	782.3	778.9.
RFP commitment for ROG reductions from new measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0.
Future Year ROG with existing and proposed measures	.....	632.0	579.9	535.2	519.8	513.9	513.4.
Required % change since previous milestone year (ROG or NO_X) compared to 2002	.....	18%	9%	9%	9%	9%	9%.
Required % change since 2002 (ROG or NO_X)	.....	18%	27%	36%	45%	54%	63%.
Target ROG levels	.....	676.1	599.8	533.4	479.0	431.7	389.8.
Apparent shortfall in ROG	.....	−44.1	−19.9	1.7	40.8	82.2	123.6.
Apparent shortfall in ROG, %	.....	−5.3%	−2.5%	0.2%	5.2%	10.5%	15.9%.
ROG shortfall previously provided by NO_X substitution, %	.....	0%	0.0%	0.0%	0.2%	5.2%	10.5%.
Actual ROG shortfall, %	.....	−5.3%	−2.5%	0.2%	5.0%	5.3%	5.4%.
Baseline NO_X	1024.1	728.3	591.2	532.1	478.8	428.2	378.4.
CA MVCP Adjustment	0.0	64.7	80.6	93.0	98.3	102.4	105.9.
Adjusted 2002 Baseline NO_X in milestone year	1024.1	959.4	943.4	931.1	925.8	921.7	918.2.
RFP commitment for NO_X reductions from new measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0.
Change in NO_X since 2002	.....	231.1	352.3	398.9	447.0	493.5	539.7.
Change in NO_X since 2002, %	.....	24.1%	37.3%	42.8%	48.3%	53.5%	58.8%.
NO_X reductions since 2002 already used for RFP substitution and contingency through last milestone year, %	.....	0.0%	3.0%	3.0%	3.2%	8.2%	13.5%.
NO_X reductions since 2002 available for RFP substitution and contingency in this milestone year, %	.....	24.1%	34.3%	39.8%	45.1%	45.4%	45.3%.
Change in NO_X since 2002 used for ROG substitution in this milestone year, %	.....	0.0%	0.0%	0.2%	5.0%	5.3%	5.4%.

TABLE 10—2011 REVISIONS TO THE 8-HOUR OZONE SIP REASONABLE FURTHER PROGRESS CALCULATIONS SOUTH COAST—Continued

[Summer season, tons per day]

	2002	2008	2011	2014	2017	2020	2023
Change in NO_X since 2002 available for contingency in this milestone year, %	.....	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%.
Change in NO_X since 2002 surplus after meeting substitution and contingency needs in this milestone year, %	.....	21.1%	34.3%	39.6%	40.1%	40.0%	39.9%.
RFP Met?	.....	YES	YES	YES	YES	YES	YES

Source: CARB 2011 Ozone SIP Revision, Appendix A, Table A–1.

3. Proposed Action on the RFP Demonstration

CARB has correctly calculated the RFP target levels for the appropriate years following the method provided in the ozone implementation rule and preamble. See 40 CFR 51.910 and 70 FR 71612 at 71631–71650. As shown in Table 10, the South Coast 2007 8-hour Ozone SIP provides for RFP in each milestone year, consistent with applicable CAA requirements and EPA guidance. We propose, therefore, to approve the RFP demonstration under sections 182(b)(1) and 182(c)(2) of the CAA.

E. Transportation Control Strategies and Transportation Control Measures and Vehicle Miles Travelled Offset Emissions Increases From VMT Increases, To Provide for RFP and Attainment

1. Requirements for Transportation Control Strategies and Transportation Control Measures To Offset Emissions Growth, To Provide for RFP and Attainment

CAA section 182(d)(1)(A) requires that areas classified as severe or extreme submit transportation control strategies (TCSs) and transportation control measures (TCMs) sufficient to offset any growth in emissions from growth in VMT or the number of vehicle trips, and to provide (along with other measures) the reductions needed to meet the applicable RFP requirement. CAA section 182(d)(1)(A) also requires that states choose and implement such measures as are specified in section 108(f), to the extent needed to demonstrate attainment. In selecting the measures, Congress directed that States ''should ensure adequate access to downtown, other commercial and residential areas, and should avoid measures that increase or relocate emissions and congestion rather than reduce them.'' CAA 182(d)(1)(A).

EPA believes that it is appropriate to treat the three required elements of section 182(d)(1)(A) (*i.e.,* offsetting emissions growth, attainment of the RFP reduction, and attainment of the ozone NAAQS) as separable. As to the first element of CAA section 182(d)(1)(A) (*i.e.,* offsetting emissions growth), EPA has historically interpreted this CAA provision to allow areas to meet the requirement by demonstrating that emissions from motor vehicles decline each year through the attainment year. General Preamble at 13521, 13522.[31]

2. Transportation Control Strategies and Transportation Control Measures To Offset Emissions Growth, To Provide for RFP and Attainment in the South Coast 2007 Ozone SIP

Information in Table 6–12 on page 6–27 of the South Coast AQMP reproduced in Table 11 shows that on-road motor vehicle emissions of VOC and NO_X decline steadily in the South Coast from 2002 to 2023. This decline in emissions is due to EPA's and California's on-road mobile source programs, California's clean fuels and SmogCheck programs, and CARB's in-use truck and bus rule. As discussed above in section IV.B, these programs are fully creditable for SIP planning purposes in attainment and RFP demonstrations, including demonstrating compliance with section 182(d)(1). The on-road emissions in Table 11 are calculated using EMFAC2007 (the most recent EPA-approved mobile source emissions model in California) and the same transportation activity projections used to develop the RFP and attainment demonstrations and transportation conformity motor vehicle emissions budgets in the South Coast 2007 Ozone Plan. South Coast 2007 AQMP, p. 6–23 and 6–27.

TABLE 11—ON-ROAD MOTOR VEHICLE EMISSIONS IN THE SOUTH COAST 2002–2023

[Summer planning inventory, tons per day] [1] [2]

Year	Baseline		Remaining	
	VOC	NO_X	VOC	NO_X
2002	360	611	360	611
2003	341	595	341	595
2004	321	579	321	579
2005	302	563	302	563
2006	273	518	273	518
2007	243	472	243	472
2008	214	441	210	438
2009	199	419	195	413

[31] See also 60 FR 48896 (September 21, 1995), approval of Illinois' vehicle miles traveled plan for the Chicago area; 62 FR 23410 (April 30, 1997) and 62 FR 35100 (June 30, 1997), proposed and final approval of New Jersey's 15 percent ROP plan and other provisions for the New York-New Jersey-Connecticut ozone nonattainment area; 66 FR 23849 (May 10, 2001), approval of New York's attainment demonstration and related provisions for the New York-New Jersey-Connecticut ozone nonattainment area; 66 FR 57247 (November 14, 2001), approval of the VMT offset plan for the Houston-Galveston ozone nonattainment area; 70 FR 25688 (May 13, 2005), approval of the Washington, DC area's 1-hour attainment demonstration and related provisions; and 70 FR 34358 (June 14, 2005), approval of Atlanta's VMT plan.

TABLE 11—ON-ROAD MOTOR VEHICLE EMISSIONS IN THE SOUTH COAST 2002–2023—Continued

[Summer planning inventory, tons per day] [1] [2]

Year	Baseline		Remaining	
	VOC	NO_X	VOC	NO_X
2010	186	379	164	330
2011	176	355	154	291
2012	166	331	144	252
2013	157	309	135	219
2014	148	287	126	191
2015	142	269	119	174
2016	135	250	113	162
2017	129	232	109	160
2018	124	216	101	135
2019	119	200	96	120
2020	114	184	93	112
2021	110	176	91*	78
2022	107	169	88*	52
2023	103	161	86	27
2024	95	146	76	24

Source: South Coast 2007 AQMP, Chapter 6, Table 6–12.

[1] These values were incorrectly listed as 88 for 2021 and 85 for 2022 in the 2007 South Coast AQMP. See Letter, Elaine Chang, DrPH, Deputy Executive Officer, SCAQMD, to Wienke Tax, EPA Region 9, Air Division, dated August 12, 2011 in the docket for today's action.

[2] ''Baseline'' emissions account for controls adopted prior to the 2007 AQMP. ''Remaining'' emissions include the impacts of economic growth and implementation of the plan's control strategy.

As described above in section IV.B., SCAG evaluated a wide variety of transportation control strategies and measures, including those measures listed in CAA section 108(f), and determined that there were no combinations of reasonable measures that would expedite attainment of the 8-hour ozone standard in the South Coast. See South Coast 2007 AQMP, Appendix IV–C.

3. Evaluation and Conclusions

Because both VOC and NO_X emissions from on-road mobile sources decline steadily over the entire time period covered by the South Coast 2007 Ozone Plan, the SIP need not include additional TCSs and TCMs to offset growth in motor vehicle emissions from growth in VMT. We propose, therefore, to find that the South Coast 2007 8-hour ozone SIP, as corrected on August 12, 2011, meets the requirement in CAA section 182(d)(1)(A) to include TCSs and TCMs sufficient to offset any growth in emissions from growth in VMT or the number of vehicle trips.

In *Association of Irritated Residents* v. *EPA,* 632 F.3d 584 (9th Cir. 2011), the U.S. Court of Appeals for the Ninth Circuit held that, with respect to the first element, section 182(d)(1)(A) of the CAA requires States to adopt transportation control measures and strategies whenever vehicle emissions are projected to be higher than they would have been had vehicle miles traveled not increased, even when aggregate vehicle emissions are actually decreasing. EPA has filed a petition for rehearing on this issue. Docket Nos. 09–71383 and 09–71404 (consolidated), Docket Entry 41–1, *Petition for Panel Rehearing.*

The Ninth Circuit has yet to issue its mandate in the *Association of Irritated Residents* case, and EPA has not adopted the court's interpretation for the reasons set forth in the Agency's petition for rehearing, pending a final decision by the court. If the court denies the Agency's petition for rehearing and issues its mandate before EPA issues a final rule on the South Coast 2007 Ozone SIP, then we anticipate that we would not be able to finalize approval of the South Coast 2007 Ozone SIP with respect to the first element (*i.e.,* offsetting emissions growth) of section 182(d)(1)(A). Therefore, in today's action, and in the alternative to the proposed approval, we are simultaneously proposing to disapprove the South Coast 2007 Ozone SIP with respect to the first element (*i.e.,* offsetting emissions growth) of section 182(d)(1)(A) based on the plan's failure to include sufficient transportation control strategies and TCMs to offset the emissions from growth in VMT. If EPA were to finalize the proposed disapproval, the area would be eligible for a protective finding under the transportation conformity rule because the submitted SIP contains adopted control measures and enforceable commitments that fully satisfy the emissions reductions requirements for reasonable further progress and attainment.[32] 40 CFR 93.120(a)(3)

As discussed above in section IV.D., we are proposing to find that the South Coast 2007 8-Hour Ozone SIP provides for RFP consistent with all applicable CAA and EPA regulatory requirements. Therefore, we also propose to find that the SIP meets requirement in CAA section 182(d)(1)(A) to include TCSs and TCMs as necessary to provide (along with other measures) the reductions needed to meet the applicable RFP requirement.

Finally, as discussed in section IV.B. and IV.C. above, we are proposing to find that the South Coast 2007 8-Hour Ozone SIP provides for expeditious attainment of the 1997 8-hour ozone standard. Therefore, we propose to find that the SIP meets the requirement in CAA section 182(d)(1)(A) to include strategies and measures to the extent needed to demonstrate attainment.

F. Contingency Measures

1. Requirements for Contingency Measures

Under the CAA, 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

[32] An area would not be eligible for a protective finding under the transportation conformity regulation if EPA finalizes a disapproval of a control strategy implementation plan revision (*i.e.,* a plan that demonstrates reasonable further progress or attainment) because the plan revision does not contain adopted control measures or written commitments to enforceable control measures that fully satisfy the emissions reductions requirements relevant to the statutory provision for which the implementation plan revision was submitted. 40 CFR 93.120(a)(3)

measures to be implemented in the event the area fails to meet an RFP milestone or fails to attain by the applicable attainment date. These contingency measures must be fully adopted rules or control measures that are ready to be implemented quickly upon failure to meet the milestones or attainment. 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 by EPA. See 68 FR 32802 at 32837 and 70 FR 71612 at 71650.

Additional guidance on the CAA contingency measure provisions is found in the General Preamble, 57 FR at 13510–13512 and 13520. The guidance indicates that states should adopt and submit contingency measures sufficient to provide a 3 percent emissions reduction from the adjusted RFP baseline. EPA concludes this level of reductions is generally acceptable to offset emission increases while States are correcting their SIPs. These reductions should be beyond what is needed to meet the attainment and/or RFP requirement. States may use reductions of either VOC or NO_X or a combination of both to meet the contingency measure requirements. 57 FR at 13520, footnote 6.

EPA guidance provides that contingency measures may be implemented early, *i.e.,* prior to the milestone or attainment date.[33] Consistent with this policy, States are allowed to use excess reductions from already adopted measures to meet the CAA sections 172(c)(9) and 182(c)(9) contingency measures requirement. This is because the purpose of contingency measures is to provide extra reductions that are not relied on for RFP or attainment, and that will provide a cushion while the plan is being revised to fully address the failure to meet the required milestone. Nothing in the CAA precludes a State from implementing such measures before they are triggered. This approach has been approved by EPA in numerous SIPs. See 62 FR 15844 (April 3, 1997) (approval of the Indiana portion of the Chicago area 15 percent ROP plan); 62 FR 66279 (December 18, 1997) (approval of the Illinois portion of the Chicago area 15 percent ROP plan); 66 FR 30811 (June 8, 2001) (proposed approval of the Rhode Island post-1996 ROP plan); 66 FR 586 and 66 FR 634 (January 3, 2001) (approval of the Massachusetts and Connecticut 1-hour ozone attainment demonstrations). In the only adjudicated challenge to this approach, the court upheld it. *See LEAN* v. *EPA,* 382 F.3d 575 (5th Cir. 2004). 70 FR 71612 at 71651.

In addition, CAA section 182(e)(5) authorizes EPA to ''approve provisions of an implementation plan for an Extreme Area which anticipate development of new control techniques or improvement of existing control techniques, and an attainment demonstration based on such provisions,'' if the State meets certain criteria. CAA 182(e)(5). Such plan provisions may include enforceable commitments to submit, at a later date, contingency measures for failure to attain under CAA section 172(c)(9), in addition to the contingency measures to be implemented if the anticipated technologies approved under section 182(e)(5) do not achieve planned reductions. These contingency measures must be submitted no later than three years before proposed implementation of the plan provisions and approved or disapproved by EPA in accordance with CAA section 110. *Id.*

2. Contingency Measures in the South Coast 2007 AQMP

The attainment plan for the South Coast nonattainment area includes contingency measures to be implemented if the area fails to attain by its attainment date or fails to meet RFP requirements. The contingency measures for the South Coast nonattainment area are described in Chapter 9 of the South Coast 2007 AQMP, discussed in more detail in Appendix IV–A, section 2 of the AQMP, and also discussed in Appendix D of the 2007 State Strategy as updated on February 1, 2008. The provisions were again updated in CARB's 2011 Ozone SIP Revision, Appendix A.

Contingency measures for failure to make RFP. To provide for contingency measures for failure to make RFP, the SIP relies on surplus NO_X reductions in the RFP demonstration. See 2011 Ozone SIP Revision, Attachment A, p. A–1. See also Table 10 above.

Contingency measures for failure to attain. To provide for contingency measures for failure to attain, the SIP relies on the additional incremental emissions reductions resulting from fleet turnover in calendar year 2024. This includes the incremental additional emissions reductions that will occur in 2024 (the year after the attainment year) from the continuing implementation of both on- and off-road motor vehicle controls. For the South Coast, these reductions are 2 tpd of NO_X and 1 tpd of VOC. See CARB 2011 Ozone SIP Supplement, Attachment 2.

Additionally, as discussed above in section IV.B., we are proposing to determine that CARB and the SCAQMD have satisfied the criteria in section 182(e)(5) for reliance on the new technology provision as part of the attainment demonstration in the South Coast 8-Hour Ozone SIP. Based on the State's anticipated development of these new technologies, CARB has submitted an enforceable commitment to submit, no later than 2020, additional contingency measures under CAA section 182(e)(5) that meet the requirements for attainment contingency measures in CAA section 172(c)(9), in addition to contingency measures to be implemented if the anticipated long-term measures approved pursuant to section 182(e)(5) do not achieve planned reductions. CARB Resolution 11–22, July 2011, p. 4.

3. Proposed Action on the Contingency Measures

Contingency measures for failure to make RFP. As discussed above in section IV.D., we are proposing to approve the South Coast 2007 8-Hour Ozone SIP's RFP demonstration. As seen from the RFP demonstration in Table 10, there are sufficient excess reductions of NO_X in each milestone year beyond those needed to meet the next RFP percent reduction requirement to provide the 3 percent of adjusted baseline emissions reductions needed to meet the RFP contingency measure requirement for 2011, 2014, 2017, and 2020.

No RFP contingency measures are needed for 2008, since the 2011 Ozone SIP Revision demonstrates that South Coast has already met its 2008 milestone. See Table 10 above. As a result, contingency measures for failure to meet the 2008 RFP benchmark would never be triggered and thus are not needed.

Contingency measures for failure to attain. The incremental additional emissions reductions that will occur in 2024 (the year after the attainment year) from the continuing implementation of both on- and off-road motor vehicle controls may be used to meet the contingency measure requirement for failure to attain. For the South Coast, these reductions are 2 tpd of NO_X and 1 tpd of VOC. See 2011 Ozone SIP Revision Supplement, Attachment 2.

In addition, based on our proposal to determine that the State has satisfied the criteria in section 182(e)(5) for reliance on long-term measures as part of the attainment demonstration in the South Coast 8-Hour Ozone SIP, we propose to

[33] Memorandum, G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch to Air Directors, ''Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations,'' June 1, 1992.

approve CARB's enforceable commitment to submit no later than 2020, additional contingency measures under CAA section 182(e)(5) which meet the requirements for attainment contingency measures in CAA section 172(c)(9), in addition to contingency measures to be implemented if the anticipated long-term measures approved pursuant to section 182(e)(5) do not achieve planned reductions.[34]

Accordingly, we propose to approve the RFP and attainment contingency measures in the South Coast 2007 Ozone SIP under CAA sections 172(c)(9) and 182(c)(9), based in part on CARB's commitment to submit by 2020 additional contingency measures meeting the requirements of CAA sections 172(c)(9) and 182(e)(5). Following the State's submittal of these additional contingency measures, EPA will approve or disapprove the provisions in accordance with CAA section 110.

G. Motor Vehicle Emissions Budgets for Transportation Conformity

CAA Section 176(c) 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 standard. 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 that involve Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to EPA's transportation conformity rule, which is codified in 40 CFR part 93, subpart A. Under this rule, metropolitan planning organizations (MPOs) in nonattainment and maintenance areas coordinate with state and local air quality and transportation agencies, EPA, FHWA, and FTA to demonstrate that an area's regional transportation plans (RTP) and transportation improvement programs (TIP) conform to the applicable SIP. 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 the SIP. An attainment, maintenance, or RFP SIP establishes budgets for the attainment year, each required RFP year or last year of the maintenance plan, as appropriate. Budgets are generally established for specific years and specific pollutants or precursors.

Ozone attainment and RFP plans establish budgets for NO_X and VOC. See 40 CFR 93.102(b)(2)(i).

Before an MPO may use budgets in a submitted SIP, EPA must first either determine that the budgets are adequate or approve the budgets. In order for us to find the budgets adequate and approvable, the submittal must meet the conformity adequacy requirements of 40 CFR 93.118(e)(4) and (5) and be approvable under all pertinent SIP requirements. To meet these requirements, the budgets must be consistent with the approvable attainment and RFP demonstrations and reflect all of the motor vehicle control measures contained in the attainment and RFP demonstrations. See 40 CFR 93.118(e)(4)(iii), (iv) and (v).

2. Motor Vehicle Emissions Budgets in the South Coast 2007 8-Hour Ozone SIP

As submitted on November 28, 2007, the 2007 South Coast AQMP included a set of ozone precursor budgets for VOC and NO_X for RFP years 2008, 2011, 2014, 2017 and 2020 and an attainment year budget for 2023. On April 30, 2008, CARB submitted a SIP revision that replaced the original set of 8-hour ozone budgets with two sets of replacement budgets. CARB labeled these sets as ''baseline'' and ''SIP-based'' budgets with sets of 8-hour ozone budgets for RFP years 2008, 2011, 2014, 2017, 2020, the attainment year 2023, and analysis year 2030. See CARB Resolution 07–05, which revised the budgets in the 2007 South Coast AQMP as adopted by the District, and which was included in the November 28, 2007 submission.

EPA Region 9 sent a letter to the CARB on May 7, 2008 stating that the ''baseline'' motor vehicle emissions budgets in the amended 2007 South Coast SIP for the reasonable further progress (RFP) milestone years of 2008, 2011, 2014, 2017, and 2020 were adequate. We found the ''SIP-based'' motor vehicle emissions budgets in the amended 2007 South Coast SIP inadequate for transportation conformity purposes. The amended 2007 South Coast SIP included ''SIP-based'' budgets for 2008, 2011, 2014, 2017, 2020, and 2023. The State has included additional on-road mobile source emissions reductions in the ''SIP-based'' budgets from the 2007 State Strategy for the California SIP. The ''baseline'' budgets include no such reductions but rather reflect emissions reductions from CARB rules that were adopted as of October 2006. EPA has determined that the ''SIP-based'' budgets are inadequate because all of the ''SIP-based'' budgets after 2009 include new emission reductions that do not result from specific or enforceable control measures. Our notice of adequacy/inadequacy of the budgets was published on May 15, 2008 at 73 FR 28110 (corrected on June 18, 2008 at 73 FR 34837), and was effective on May 30, 2008. More information on this finding can be found in the TSD for today's action.

CARB submitted revised budgets for the South Coast nonattainment area and their documentation in Appendices A and C, respectively, of the 2011 Ozone SIP Revisions. The revised budgets are for NO_X and VOC for the RFP years of 2011, 2014, 2017 and 2020, and the attainment year of 2023. No budgets were included for the RFP year of 2008 because it is no longer applicable as a conformity analysis year. Additional information associated with the motor vehicle emission budget calculations were provided in Attachment 1 of the CARB Ozone SIP Revision supplement and an electronic mail from CARB.[35]

3. Proposed Action on the Revised Budgets

As part of its review of the budgets' approvability, EPA has evaluated the revised budgets using our adequacy criteria in 40 CFR 93.318(e)(4) and (5). As documented in Table H–3 in the TSD, we found that they meet each adequacy criterion. We have completed our detailed review of the 2007 South Coast 8-hour Ozone SIP and supplemental submittals including the 2011 Ozone SIP Revision and 2011 Ozone SIP Supplement, and are proposing to approve the SIP's attainment and RFP demonstrations. We have also reviewed the proposed budgets submitted with the 2011 Ozone SIP Revision and have found that they are consistent with the attainment and RFP demonstrations, were 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 93.118(e)(4) and (5). Therefore, we are proposing to

[34] These contingency measures should, at a minimum, ensure that an appropriate level of emissions reduction progress continues to be made if attainment is not achieved and additional planning by the State is needed. See General Preamble at 13524.

[35] See electronic mail from Douglas Ito, Chief, Air Quality and Transportation Planning Branch, CARB, to Elizabeth Adams, Deputy Director, Air Division, EPA Region 9, dated August 11, 2011.

approve the 2011, 2014, 2017, 2020, and 2023 budgets as shown in Table 12.

TABLE 12—MOTOR VEHICLE EMISSIONS BUDGETS IN THE SOUTH COAST 2007 8-HOUR OZONE SIP AS REVISED ON JULY 21, 2011

[Tons per summer day]

	2011		2014		2017		2020		2023	
	VOC	NO_X	VOC	NO_X	VOC	NO_X	VOC	NO_X	VOC	NO_X
South Coast Air Basin	172	328	136	277	119	224	108	185	99	140

Source: "8-Hour Ozone State Implementation Plan Revisions and Technical Revisions to the $PM_{2.5}$ State Implementation Plan Transportation Conformity Budgets for the South Coast and San Joaquin Valley Air Basins," Appendix C, submitted July 29, 2011.

EPA is not required under its transportation conformity rule to find budgets adequate prior to proposing approval of them. However, we will complete the adequacy review of these budgets either prior to or concurrently with our final action on South Coast 2007 8-Hour Ozone SIP. We will also post the revised budgets on EPA's adequacy review Web page.

If the budgets are found adequate and/or the proposed approval of the budgets is finalized, then these budgets will replace the budgets previously found adequate and SCAG and the U.S. Department of Transportation will be required to use the new budgets in transportation conformity determinations after the effective date of the approval or adequacy finding, whichever is earlier. For conformity determinations, the plan emissions should be used at the same level of accuracy as in the revised updated budgets from the plan (see Section H of the TSD for more conformity implementation details).

As stated in section IV.E., if we were to finalize a disapproval with respect to the plan's section 182(d)(1)(A) element, then the area would be eligible for a protective finding under the transportation conformity rule because the submitted SIP contains adopted control measures and enforceable commitments that fully satisfy the emissions reductions requirements for reasonable further progress and attainment. 40 CFR 93.120(a)(3).

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

In addition to the requirements discussed above, Title I, subpart D of the CAA includes other provisions applicable to extreme ozone nonattainment areas such as the South Coast nonattainment area. Below, we discuss the current status of each of these requirements for informational purposes only.

1. Enhanced Vehicle Inspection and Maintenance (I/M) Requirement

CAA section 182(c)(3) requires states with ozone nonattainment areas classified under subpart 2 as serious or above to implement an enhanced motor vehicle inspection and maintenance (I/M) program in those areas. The requirements for those programs are provided in section 182(c)(3) and 40 CFR part 51, subpart S.

On July 1, 2010 (75 FR 38023), EPA approved California's inspection and maintenance program in the South Coast as meeting the requirements of the CAA and applicable EPA regulations for enhanced I/M programs.

2. Reformulated Gasoline Program

As an extreme ozone nonattainment area for the 1-hour ozone standard, the South Coast was covered under the Federal reformulated gasoline (RFG) program. See CAA section 211(k)(10)(D). As an 8-hour ozone nonattainment area, the South Coast continues to be covered under the Federal RFG program. See 40 CFR 80.70(m)(1)(i) and 70 FR 71685. California has its own RFG program (California Phase III RFG (CaRFG3)), which also applies in the South Coast nonattainment area. EPA approved CaRFG3 program into the California SIP on May 12, 2010. See 75 FR 26633.

3. New Source Review

CAA section 182(a)(2)(C) 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 172(c)(5) and 173 for the construction and operation of each new or modified major stationary source (with respect to ozone) anywhere in the nonattainment area. See also CAA section 182(e). EPA's implementing regulations for nonattainment new source review (NSR) programs are in 40 CFR 51.165, and guidance specific to ozone nonattainment areas was provided in the preamble to the 8-hour ozone implementation rule, 70 FR 71612 at 71671–71684.

On December 4, 1996 (61 FR 64291), EPA approved SCAQMD's NSR rules (the District's Regulation XIII) for the South Coast air basin as satisfying the NSR requirements in title I, part D of the CAA for ''extreme'' ozone nonattainment areas. See also 64 FR 13514 (March 19, 1999) and 71 FR 35157 (June 19, 2006).

4. Clean-fuel Vehicle Program

CAA sections 182(c)(4)(A) and 246 require states to submit a SIP revision for EPA approval that includes measures to implement the Clean-Fuel Vehicle Program in serious and above ozone nonattainment areas. Section 182(c)(4)(B) of the Act allows states to ''opt-out'' of the clean-fuel vehicle fleet program by submitting for EPA approval a SIP revision consisting of a program or programs that will result in at least equivalent long term reductions in ozone-producing and toxic air emissions.

In 1994, CARB submitted a SIP revision to opt-out of the Federal clean fuel fleet program demonstrating that its low-emission vehicle (LEV) program achieved emission reductions at least as large as the Federal program would. We approved the substitution of the LEV program for a Clean Fuel Fleet program into the California SIP on August 27, 1999. See 64 FR 46849.

5. Gasoline Vapor Recovery

CAA section 182(b)(3) mandates that States submit a revised SIP 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. See General Preamble at 13514. California's ozone nonattainment areas had implemented Stage II vapor recovery well before the passage of the CAA Amendments of 1990.

Under California State law (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 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. See Table A–7 in Appendix A to the TSD for today's action. See also CARB's Web site, *http://www.evrhome.org.*

In the South Coast, the installation and operation of ARB-certified vapor recovery equipment is required and enforced by SCAQMD Rules 461 and 462, the latest versions of which were approved into the SIP on April 11, 2006 and July 21, 1999, respectively. See 71 FR 18216 (April 11, 2006) and 64 FR 39037 (July 21, 2006).

6. Enhanced [Ambient Air Quality] Monitoring

CAA Section 182(c)(1) 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 VOCs, and to improve monitoring of emissions of NO_X and VOCs.

The South Coast Photochemical Assessment Monitoring Station (PAMS) network was initiated in 1994 at two monitoring sites in the Basin and subsequently expanded through 2001. The SCAQMD's Annual Air Quality Monitoring Network Plan (July 2010) describes the steps the state has taken to address the requirements of CAA section 182(c)(1). Pages 4 through 6 and 17 of the monitoring network plan describe the South Coast Air Basin's PAMS network.[36] [37] We have determined that the SCAQMD's PAMS network meets EPA requirements for enhanced monitoring programs.[38] More detail is provided in the TSD for today's action.

7. Clean Fuels or Advanced Control Technology for Boilers

CAA section 182(e)(3) provides that SIPs for extreme areas must require each new, modified, and existing electric utility and industrial and commercial boiler that emits more than 25 tons per year (tpy) of NO_X to either burn as its primary fuel natural gas, methanol, or ethanol (or a comparably low polluting fuel), or use advanced control technology (such as catalytic control technology or other comparably effective control methods). Further guidance on this requirement is provided in the General Preamble at 13523. According to the General Preamble, a boiler should generally be considered as any combustion equipment used to produce steam and generally does not include a process heater that transfers heat from combustion gases to process streams. General Preamble at 13523, 13524. In addition, boilers with rated heat inputs less that 15 million Btu (MMBtu) per hour which are oil- or gas-fired may generally be considered de minimis and exempt from these requirements since it is unlikely that they will exceed the 25 tpy NO_X emission limit. General Preamble at 13524.

The South Coast 2007 AQMP does not directly address CAA section 182(e)(3) requirements for 8-hour ozone. CARB has previously submitted SIP revisions for the South Coast Air Basin addressing the clean fuels for boilers requirement under section 182(e)(3) for the 1-hour ozone standard. See 61 FR 57775 (November 8, 1996) for EPA's approval of the rule submitted to satisfy the CAA section 182(e)(3) requirement in the South Coast.

South Coast Rule 1146 ''Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters,'' as revised on November 17, 2000 and approved by EPA on April 8, 2002 (67 FR 16640), regulates emissions from boilers larger than 5 MMBtu/hour burning gaseous or non-gaseous fuels. The limits in the rule range between 0.036 and 0.052 lb/MMBtu, depending on the size of the boiler and its capacity factor. This limit is lower than the level of emissions expected from uncontrolled natural gas-fired boilers. Thus, the rule essentially requires all subject boilers to burn fuels that are comparably low polluting (compared to natural gas combustion) or to use control technologies to achieve emissions levels that are similar to those obtained by burning natural gas, methanol, ethanol, or other comparably low polluting fuels.

South Coast Regulation XIII (New Source Review (NSR) Program). Regulation XIII (consisting of Rules 1301, 1302, 1303, 1304, 1306, 1309, 1309.1, 1310, and 1313), which EPA has approved into the South Coast portion of the California SIP (see 61 FR 64291, December 4, 1996), applies to any new or modified boiler proposing to locate in the South Coast that emits or has the potential to emit at least 10 tons per year (tpy) of NO_X or VOC, among other sources. See Rules 1301 and 1302. Under Rule 1303, any such boiler is required to employ Best Available Control Technology, which must be at least as stringent as the Lowest Achievable Emissions Rate (LAER) as defined in CAA section 171(3). See Rule 1302(f) and 1303(a). The LAER standard essentially requires, at a minimum, combustion of low-polluting fuels and/or use of advanced control technologies consistent with the requirements of CAA section 182(e)(3). See CAA 171(3).[39] Accordingly, the SCAQMD's SIP-approved NSR program in Regulation XIII, which establishes LAER-level control requirements for any new or modified boiler that emits more than 10 tpy of NO_X, satisfies the requirements of CAA section 182(e)(3) for each new or modified electric utility and industrial and commercial boiler that emits more than 25 tpy of NO_X. As to existing boilers that emit more than 25 tpy of NO_X, the District has demonstrated that each such boiler currently operating in the South Coast either burns as its primary fuel natural gas or a comparably low polluting fuel, or uses advanced control technology such as SCR or another comparably effective control method (*e.g.,* SNCR), in accordance with SIP-approved requirements such as Rule 1146. See letter, Elaine Chang, DrPH, Deputy Executive Officer, SCAQMD, to Elizabeth Adams, Deputy Director, Air Division, EPA Region 9, dated August 23, 2011.

8. CAA Section 185 Fee Program

CAA Section 185 requires that the SIP for each severe and extreme ozone nonattainment area provide that, if the area fails to attain by its applicable attainment date, each major stationary source of VOCs and NO_X located in the

[36] Starting in 2007, EPA's monitoring rules (see 71 FR 61236), October 17, 2006) required the submittal and EPA action on annual monitoring network plans.

[37] SCAQMD's 2010 monitoring network plan can be found in the docket for today's action.

[38] See SCAMQD's 2010 monitoring network plan and letter, Matthew Lakin, Chief, Air Quality Analysis Office, EPA Region 9, to Dr. Chung Liu, Deputy Executive Officer, SCAQMD, dated November 1, 2010, approving the 2009 South Coast Air Quality Monitoring Network Plan.

[39] Section 171(3) of the CAA defines LAER, in relevant part, as ''that rate of emissions which reflects—(A) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or (B) the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent.''

nonattainment area shall pay a fee to the State as a penalty for such failure for each calendar year beginning after the attainment date, until the area is redesignated as an attainment area for ozone. States are not yet required to implement CAA section 185 fee programs for the 1997 8-hour ozone standard.[40]

V. EPA's Proposed Actions

For the reasons discussed above, EPA is proposing to fully approve California's attainment SIP for the South Coast nonattainment area for the 1997 8-hour ozone standard. Simultaneously and in the alternative, EPA is proposing to disapprove the submitted SIP with respect to certain requirements for transportation control strategies and TCMs pending resolution of petitions before the 9th Circuit U.S. Court of Appeals in *Association of Irritated Residents* v. *EPA,* 632 F.3d 584 (9th Cir. 2011). This SIP submittal consists of the South Coast 2007 AQMP (as revised March 4, 2011) and those portions of CARB's revised 2007 State Strategy as revised in 2009 and 2011 that address the CAA's requirements for attainment of the 1997 8-hour ozone NAAQS in the South Coast nonattainment area.

Specifically, EPA is proposing to approve under CAA section 110(k)(3) the following elements of the South Coast 2007 8-Hour Ozone Plan:

1. The revised 2002 base year emissions inventory as meeting the requirements of CAA section 182(a)(1) and 40 CFR 51.915;

2. The reasonably available control measure demonstration as meeting the requirements of CAA section 172(c)(1) and 40 CFR 51.912(d);

3. The reasonable further progress demonstration as meeting the requirements of CAA sections 172(c)(2) and 182(c)(2)(B) and 40 CFR 51.910;

4. The attainment demonstration as meeting the requirements of CAA section 182(c)(2)(A) and 40 CFR 51.908;

5. The provisions for the development of new technologies pursuant to CAA section 182(e)(5) and CARB's commitment to adopt and submit by 2020 contingency measures to be implemented if the new technologies do not achieve the planned emissions reductions, as well as additional attainment contingency measures meeting the requirements of CAA section 172(c)(9), pursuant to CAA section 182(e)(5); and to develop and submit by 2020, revisions to the SIP that will (1) reflect modifications to the 2023 emission reduction target based on updated science and (2) identify additional strategies and implementing agencies needed to achieve the needed reductions by the beginning of the 2023 ozone season.

6. The contingency measure provisions for failure to make RFP and to attain as meeting the requirements of CAA sections 172(c)(9) and 182(c)(9);

7. The demonstration that the SIP provides for transportation control strategies and measures sufficient to offset any growth in emissions from growth in VMT or the number of vehicle trips, and to provide for RFP and attainment, as meeting the requirements of CAA section 182(d)(1)(A);

8. The revised motor vehicle emissions budgets for the RFP milestone years of 2011, 2014, 2017 and 2020, and for the attainment year of 2023, because they are derived from approvable RFP and attainment demonstrations and meet the requirements of CAA sections 176(c) and 40 CFR part 93, subpart A;

9. The SCAQMD's commitments to achieve specific aggregate emission reductions of NO_X and VOC as listed in Table 4–2A of the South Coast 2007 AQMP (as revised March 4, 2011); and

10. CARB's commitments to propose certain defined measures, as listed in Table B–1 on page 1 of Appendix B of the 2011 Progress Report and in Appendix B, Table B–1 of the 2011 Ozone SIP Revision, to achieve specific aggregate emission reductions of VOC and NO_X in the South Coast nonattainment area by 2023 as provided in CARB Resolution 07–28, Attachment B, and the 2009 State Strategy update, p. 20; and to achieve the emissions reductions needed to attain the 8-hour ozone standard in the South Coast nonattainment area as provided in CARB Resolution 07–28, Attachment B, p. 4, 2009 State Strategy Status Report, p. 20.

Simultaneously and in the alternative, if the U.S. Court of Appeals for the 9th Circuit denies the Agency's petition for rehearing in *AIR* v. *EPA* and issues its mandate before EPA issues a final rule on the South Coast 2007 Ozone SIP, we propose to disapprove the SIP under CAA section 110(k)(3) with respect to the first element (*i.e.*, offsetting emissions growth) of CAA section 182(d)(1)(A) based on the plan's failure to include sufficient transportation control strategies and TCMs to offset the emissions from growth in VMT.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866, Regulatory Planning and Review

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled ''Regulatory Planning and Review.''

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* Burden is defined at 5 CFR 1320.3(b).

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This proposed rule will not have a significant impact on a substantial number of small entities because proposed SIP approvals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply propose to approve requirements that the State is already imposing. Therefore, because this proposed Federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities. Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of State action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co.,* v. *U.S. EPA,* 427 U.S. 246, 255–66 (1976); 42 U.S.C. 7410(a)(2).

D. Unfunded Mandates Reform Act

Under sections 202 of the Unfunded Mandates Reform Act of 1995 (''Unfunded Mandates Act''), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate; or to the private sector, of $100 million or more. Under section 205, EPA must select the most cost-

[40] SCAQMD submitted Rule 317, ''Clean Air Act Non-attainment Fees,'' a fee-equivalent program to address the requirements of section 185 for the 1-hour ozone standard, on April 22, 2011.

effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the proposed approval action does not include a Federal mandate that may result in estimated costs of $100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action proposes to approve pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

E. Executive Order 13132, Federalism

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

This proposed rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely proposes to approve a State rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

F. Executive Order 13175, Coordination With Indian Tribal Governments

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' This proposed rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. Thus, Executive Order 13175 does not apply to this rule.

EPA specifically solicits additional comment on this proposed rule from tribal officials.

G. Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5–501 of the Executive Order has the potential to influence the regulation. This proposed rule is not subject to Executive Order 13045, because it proposes to approve a State rule implementing a Federal standard.

H. Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use

This proposed rule is not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use ''voluntary consensus standards'' (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

The EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Population

Executive Order (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. EPA lacks the discretionary authority to address environmental justice in this rulemaking. In reviewing SIP submittals, EPA's role is to approve or disapprove State choices, based on the criteria of the CAA. Accordingly, this action merely proposes to approve certain State requirements for inclusion into the SIP under CAA section 110 and subchapter I, part D will not in-and-of itself create any new requirements. Accordingly, it does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

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

Dated: September 7, 2011.

Jared Blumenfeld,

Regional Administrator, EPA Region 9.

[FR Doc. 2011–23659 Filed 9–15–11; 8:45 am]

BILLING CODE 6560–50–P