Final

Technical Support Document

for the Action on the

San Joaquin Valley Extreme 1-Hour Ozone Standard Plan and
San Joaquin Portion of the 2003 State Strategy

Office of Air Planning
Air Division
Environmental Protection Agency – Region 9

December 11, 2009

Technical Support Document for the Action on the San Joaquin Valley Extreme 1-Hour Standard Ozone Plan and SJV Portion of the 2003 State Strategy

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I. Introduction and Background

This technical support document (TSD) provides EPA's[1] detailed analysis of the air quality modeling and control measures in support of its actions to approve, under the Clean Air Act and EPA regulations, the San Joaquin Valley 1-hour ozone standard plan. It also includes our full responses to all comments received on the July 14, 2009 (74 FR 33933) and October 2, 2009 (74 FR 50936) proposed rulemakings.

A. Ozone Air Quality Planning in the San Joaquin Valley

The San Joaquin Valley Air Pollution Control District (SVAPCD) adopted the "Extreme Ozone Attainment Demonstration Plan" on October 8, 2004 and amended it on October 20, 2005 to, among other things, substitute a new "Chapter 4: Control Strategy." The State submitted the plan (with the exception of Chapter 8[2]) and amendment as revisions to the California State Implementation Plan (SIP) on November 15, 2004 and March 6, 2006, respectively. See letters from Catherine Witherspoon, California Air Resources Board (ARB), to Wayne Nastri, EPA, November 15, 2004 and March 6, 2006. The plan and amendment, collectively, will be referred to as the "2004 SIP" in this TSD. The 2004 SIP addresses CAA requirements for extreme 1-hour ozone areas, including emission inventories, modeling, control measures, and rate-of-progress (ROP) and attainment demonstrations.

For the reductions needed to demonstrate attainment and ROP, the 2004 SIP relies in part on the "2003 State and Federal Strategy for the California State Implementation Plan." This strategy document identifies ARB's regulatory agenda to reduce ozone and particulate matter in California and includes defined statewide control measures to be reflected in future SIPs and provisions specific to air quality plans for the San Joaquin Valley. On October 23, 2003, ARB adopted the "2003 State and Federal Strategy for the California State Implementation Plan," which consists of two elements: 1) the Proposed 2003 State and Federal Strategy for the California State Implementation Plan (released August 25, 2003); and 2) ARB Board Resolution 03-22 which approves the Proposed 2003 State and Federal Strategy with the revisions to that Strategy set forth in Attachment A. On January 9, 2004, ARB submitted the strategy to EPA. Letter from Catherine Witherspoon, ARB, to Wayne Nastri, EPA, January 9, 2004.[3]

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[1] Throughout this document, the terms "we," "us," and "our" mean U.S. EPA.

[2] Chapter 8 "California Clean Air Act Triennial Progress Report and Plan Review" was included in the plan to meet a State requirement to report every three years on the area's progress toward meeting California's air quality standards. Nothing in the chapter was intended to address federal Clean Air Act requirements.

[3] On February 13, 2008, ARB withdrew from EPA consideration certain commitments related to the South Coast Air Basin in the "Final 2003 State and Federal Strategy for the California State Implementation Plan." These withdrawals do not change the 2003 Strategy's provisions that apply to the San Joaquin Valley. Letter from James

In this TSD, we refer to the two documents comprising the "Final State and Federal Strategy for the California State Implementation Plan" as the "2003 State Strategy"

On August 21, 2008, the SJVAPCD adopted "Clarifications Regarding the 2004 Extreme Ozone Attainment Demonstration Plan" ("2008 Clarifications"). The State submitted the 2008 Clarifications on September 5, 2008. Letter from James N. Goldstene, ARB, to Wayne Nastri, EPA, with enclosures, September 5, 2008. The 2008 Clarifications provide updates to the 2004 SIP related to reasonably available control technology (RACT) measures adopted by the SJVAPCD, the ROP demonstration, and contingency measures.

We refer to the three submittals combined as the "2004 SJV 1-hour ozone plan" or "2004 1-hour ozone plan."

SJVAPCD and ARB began work on the 2004 1-hour ozone plan in June 2002 using the best information and data then available. See 2004 SIP, p. 1-10. The plan's air quality modeling is a product of the Central California Ozone Study (CCOS). CCOS is a multi-phase project designed to improve the understanding of the transport, formation, and fate of lower atmosphere ozone throughout a large portion of central and northern California. The project included an extensive field meteorology and air quality measurement program during the summer of 2000 with some additional fieldwork in 2001. It also included emission inventory development, data analysis, and air quality simulation modeling. CCOS and its companion study, the California Regional Particulate Air Quality Study (CRPAQS), also provide the technical underpinnings of the Valley's 8-hour ozone standard and PM2.5 standards attainment plans. CCOS represents an $18 million public-private investment in understanding and improving the Valley's air pollution problem.

Based on the area's attainment needs as determined by the air quality modeling, SJVAPCD committed to adopt or revise 30 VOC and NOx rules as well as to achieve an additional 5 tpd VOC and 5 tpd NOx reductions from further study measures. See Table 1 below. See also, 2004 SIP, table 4-1 and p. 5-12. In total, the District committed to reduce emissions from sources under its control by 33.3 tons per day (tpd) VOC and 21.1 tpd NOx. In addition to the District's commitments, ARB committed to achieve 15 tpd VOC and 20 tpd NOx reductions in the San Joaquin Valley by 2010. See 74 FR at 33938.

Between State and District controls, the 2004 1-hour ozone plan provides over 48 tpd VOC and 41 tpd NOx reductions from rules and commitments. Rules adopted by EPA, ARB, and the District prior to the plan's development contribute an additional 80.8 tpd VOC and 172 tpd NOx reductions over the 10-year timeframe of the plan. In all, emissions in the Valley were projected to decrease by 129 tpd VOC and 213 tpd NOx from 2000 to 2010. See Table 2 below and ARB Staff Report, p. 3.[4]

N. Goldstene, ARB, to Wayne Nastri, EPA, February 13, 2008.

[4] ARB, "Proposed 2004 State Implementation Plan for Ozone in the San Joaquin Valley, Staff Report," released September 28, 2004.

Table 1
San Joaquin Valley Air Pollution Control District
2004 Plan Specific Rule Commitments

NOx Control Measures

Rule Number and Description from 2004 SIP	2004 SIP Commitment (2010–tpd)	Achieved Emission Reductions (2010-tpd)	Local Adoption	Approval Cite/Date
9310 - Fleet School buses	0.1	0.6[5]	9/21/06	Final signed 12/11/09
9510 - Indirect Source Mitigation	4.0	--	12/15/05	See note below
4307 - Small Boilers (2-5 MMBtu/hr)	1.0	5.1	4/20/06	72 FR 29887 (5/30/07)
4352 - Solid Fuel Boilers	0.0	0.0	5/18/06	Proposal: 74 FR 65042 (12/9/09)
4702 - Stationary. Internal Combustion Engines	8.0	16.8	1/18/07	73 FR 1819 (1/10/08)
4309 - Commercial Dryers (I)	1.0	0.7	12/15/05	72 FR 29887 (5/30/07)
4308 - Water Heaters (0.075 to 2 MMBtu/hr)	0.2	0.8	10/20/05	72 FR 29887 (5/30/07)
4103 - Open Burning	1.1	1.7	5/17/07	74 FR 57907 (11/10/09)
4703 - Stationary Gas Turbines	0.6	1.9	8/17/06	74 FR 74 53888 (10/21/09)
Long-term measures	5.0	--		See notes below
NOx Totals	**21.1**	**27.6**		

VOC Control Measures

Rule Number and Description from 2004 SIP	2004 SIP Commitment (2010–tpd)	Achieved Emission Reductions (2010-tpd)	Local Adoption	Approval Cite/Date
4409 - Oil & Gas Fugitives	4.7	5.1	4/20/05	71 FR 14653 (3/23/06)
4455 - Refinery. & Chemical Process Fugutives	0.2	0.3	4/20/05	71 FR 14653 (3/23/06)
4694 - Wineries	0.7	--	12/15/05	See notes below.
4565 - Composting/Biosolids	0.1	--	3/15/07	See notes below.
4612 - Automotive Coating (incorporates Rule 4602)	0.1	1.0	9/20/07	Final signed: 12/3/09
4570 - CAFO Rule	15.8	17.7	6/15/06	Final signed: 12/11/09
4662 - Organic Solvent Degreasing				74 FR 37948 (7/30/09)
4663 - Organic Solvent Cleaning				74 FR 37948 (7/30/09) Final signed: 12/3/09

[5] Table 1 in the 2008 Clarifications erroneously gives this reduction as 1.6 tpd. See email, Jessi Hafer, SJVAPCD, to Frances Wicher, EPA, February 18, 2009, "Reductions from 1-hour SIP clarifications."

Table 1 San Joaquin Valley Air Pollution Control District 2004 Plan Specific Rule Commitments				
4603 - Metal Parts/Products 4604 - Can and Coil Coating 4605 - Aerospace Coating 4606 Wood Products Coating 4607 - Graphic Arts 4612 - Automotive Coating 4653 - Adhesives 4684 - Polyester Resin Operation	1.3	3.1	9/20/07	Final signed: 12/3/09 Final signed: 12/11/09 74 FR 52894 (10/15/09) 74 FR 52894 (10/15/09) Final signed: 12/3/09 74 FR 52894 (10/15/09) Final signed: 12/11/09
4401 - Steam-Enhanced Oil-Well	1.4	0.3	12/14/06	Final signed: 12/11/09
4651 - Soil Decontamination	<0.05	0.0	9/20/07	74 FR 33397 (7/13/09)
4103- Open Burning	2.9	3.9	5/17/07	74 FR 57907 (11/10/09)
4682 - Polymeric Foam Manufacturing	0.1	--	9/20/07	See notes below
4621 & 4624 - Gasoline storage & transport	0.9	1.9	12/20/07	74 FR 33397 (7/13/09)
Long-term measures	5			See notes below
VOC totals	**33.3**	**33.3**		

Source: 2008 Clarifications, page 5-6 (Table 1).

Notes: This rule has been adopted and submitted. EPA is currently reviewing the rule for SIP action. Numbers may not add to totals because of rounding. The District committed to achieve an additional 5 tpd NOx and 5 tpd of VOC reductions from unidentified long-term measures and has fulfilled this commitment through achieving greater emissions reductions from adopted rules than originally expected.

Table 2
Summary of Emission Reductions in the 2004 SIP
(tons per summer day)

	VOC	NOx
2000 baseyear emissions	443.5	556.8
2010 baseline emissions	365.1	396.8
2010 Attainment emissions target	314.4	343.5
Reductions needed for attainment	129.1	213.3
Baseline Measures		
SJVAPCD	-8.5[6]	18.9
State	79.3	97.2
Federal	7.6	43.9
Total	78.4	160
Percent from Baseline Measures	61%	75%
Interim Measures		
SJVAPCD adopted rules	2.4	12.2
Percent from Interim Measures	2%	6%
Control Strategy Measures		
SJVAPCD (includes long-term measures)	33.3	21.1
State	15	20
Total	48.3	41.1
Percent from Control Strategy Measures	38%	19%

Source: ARB Staff Report, table III-6. Percentage may not sum to 100% because of rounding.

B. The Transition to the 8-Hour Ozone Standard and Revocation of the 1-Hour Ozone Standard

In 1979, we set the health-based national ambient air quality standard (NAAQS or standard) for ozone at 0.12 parts per million (ppm) averaged over one hour. See 44 FR 8220 (February 9, 1979).

In 1997, we replaced the 1-hour ozone standard with an ozone standard set at 0.08 ppm averaged over eight hours.[7] See 62 FR 38856 (July 18, 1997). At the time we established the 8-hour standard, we considered and rejected retaining a 1-hour ozone standard:

[6] The negative number here indicates that emissions increased in the source categories under the District's authority to control. The increase is mainly from growth in livestock operations. ARB Staff report, table III-6.

[7] References to the 8-hour standard in this document are to the standard as established in 1997. In 2008, EPA lowered the 8-hour ozone standard to 0.075 ppm. See 73 FR 16436 (March 27, 2008). On September 16, 2009, EPA announced that it will reconsider the 2008 8-hour ozone standard to "ensure they are scientifically sound

> For the reasons discussed above..., the Administrator finds that replacing the current 1-hour standard with an 8-hour standard, in combination with the decisions on level and form described below, is appropriate to provide adequate and more uniform protection of public health from both short-term (1 to 3 hours) and prolonged (6 to 8 hours) exposures to [ozone] in the ambient air.

62 FR 38856, 38863 (July 18, 1997)

In 2004, EPA designated and classified most areas of the country under the 8-hour ozone standard. 69 FR 23858 (April 30, 2004). At the same time, we issued the "Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard--Phase 1" (Phase 1 rule or 8-hour implementation rule). 69 FR 23951 (April 30, 2004). Among other matters, the Phase 1 rule revoked the 1-hour ozone standard in the SJV area (as well as in most other areas of the country), effective June 15, 2005. See 40 CFR 50.9(b); 69 FR at 23996 and 70 FR 44470 (August 3, 2005). The Phase 1 rule also set forth anti-backsliding principles to ensure continued progress toward attainment of the 8-hour ozone standard by identifying which 1-hour ozone standard requirements remain applicable in an area after revocation of that standard. 40 CFR 51.900(f).[8] In revoking the 1-hour standard, EPA stated:

> We believe the strong anti-backsliding provisions in [40 CFR 51.905] will ensure that not only will controls already adopted under the 1-hour [ozone standard] continue to be implemented until an area attains the 8-hour [ozone standard], but also that there will be no or minimal delay in obtaining additional emissions reductions comparable to those that would have been required had the 1-hour [ozone standard] remained in place. Although attainment of the 1-hour [ozone standard] would no longer be a goal, the provisions of section 51.905 would retain the ROP obligations that would have been required under the 1-hour [ozone standard]. Furthermore, the provisions of section 51.905 also would retain an area's obligation to either expeditiously complete the 1-hour attainment demonstration or obtain emissions reductions toward meeting the 8-hour [ozone standard] that substitute for those that would have been required had an area completed its attainment demonstration on a schedule more expeditious than that

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and protective of human health." See press release, "EPA Announces it Will Reconsider National Smog Standards," September 16, 2009.

[8] The Phase 1 rule also identified several CAA requirements, such as contingency measures in CAA sections 172(c)(9) and 182(c)(9), that would not continue to apply after revocation. See § 51.905(e). The U.S. Court of Appeals for the District of Columbia Circuit subsequently vacated the provisions of the Phase 1 rule that waived the requirements under the revoked 1-hour ozone standard for, among other things, contingency measures for failure to attain or to make reasonable further progress toward attainment of the 1-hour ozone standard. See *South Coast Air Quality Management District, et al., v. EPA*, 472 F.3d 882 (D.C. Cir. 2006), rehearing denied 489 F.3d 1245 (2007) (clarifying that the vacatur was limited to the issues on which the court granted the petitions for review) (collectively referred to below as *South Coast*). On January 16, 2009, EPA proposed to remove the contingency measure exemption in 40 CFR 51.905(e) for these requirements and to list contingency measures as applicable requirements under § 51.900(f). 74 FR 2936.

> required solely for the 8-hour [ozone standard]. Thus, retaining the 1-hour [ozone standard] itself would become largely superfluous from the standpoint of obtaining timely emissions reductions.

60 FR 23951, 29970 (April 30, 2004).

The San Joaquin Valley is designated nonattainment for both the 1997 8-hour ozone standard and the 1997 annual PM2.5 standard and 2008 24-hour PM2.5 standards. See 40 CFR 81.305. The 2004 1-hour ozone plan that EPA is acting on here was developed to address the now-revoked 1-hour ozone standard, and we have found that it meets all the applicable statutory and regulatory requirements. The plan is not intended to address either the 8-hour ozone or PM2.5 standards. It will, however, contribute towards their attainment. We note that SJVAPCD and the State have developed and submitted plans to address the now-applicable 1997 8-hour ozone as well as the 1997 PM2.5 standards[9] and that these plans are based on the State's latest on-road mobile source emissions model, EMFAC2007. In addition, the SJV has recently been designated nonattainment for the 2007 PM2.5 24-hour standard and and will be developing additional plans to address both this PM2.5 standards and and a revision to the 8-ozone standard expected next year. [10]

II. Air Quality Modeling

A. Introduction

This section provides a discussion of the modeling analysis provided in the San Joaquin Valley Air Pollution Control District's Extreme Ozone Attainment Demonstration Plan, October 8, 2004. It discusses the adequacy of the analysis, and how the analysis meets EPA's modeling requirements and performance goals. The ozone air quality modeling in the plan provides the basis for the attainment demonstration. To be approved, the State submission must show that plan demonstrates attainment of the 1-hour ozone standard as expeditiously as practicable, but not later than 2010.

B. Evaluation of the Modeling Demonstration

As required by the Clean Air Act, California has used photochemical grid modeling in its demonstration that the control strategy for the San Joaquin Valley ozone nonattainment area will achieve attainment of the 1-hour ozone standard by 2010.

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[9] SJVAPCD, "2007 Ozone Plan," April 30, 2007; SJVAPCD, "2008 PM2.5 Plan," April 30, 2008; and ARB, "Proposed State Strategy for California's 2007 State Implementation Plan," adopted September 27, 2007.

[10] The SJV has recently been designated nonattainment for the revised 24-hour PM2.5 standard and now has 3 years to produce a plan addressing that standard. See 74 FR 58688 (November 13, 2009). In addition, the District will need to prepare a new ozone plan to address the revised 8-hour ozone standard. This plan will likely be due in 2013. See Fact Sheet "EPA to Reconsider Ozone Pollution Standards," September 16, 2009 available at htttp://www.epa.gov/air/ozonepollution/pdfs/O3_Reconsideration_FACT%20SHEET_091609.pdf.

The modeling analysis performed by CARB, and included in the plan, simulates the ozone air quality levels that result from the emissions that occur in the San Joaquin Valley. This modeling analysis is used as a basis for determining the level of routine emissions that can be allowed in the area and provide for attainment of the ozone one hour standard.

The modeling analysis included the plan is based on a multi-stage process. First, appropriate episode days that represent days conducive to ozone formation in the San Joaquin Valley are selected. Second, a modeling platform, including photochemical model, domain, number of vertical layers, grid resolution, initial and boundary conditions, and other factors most appropriate for the San Joaquin Valley area are selected. Third, the air quality, including ozone levels, on the selected episode days are simulated, using the appropriate day specific emissions. Finally, the simulated ozone levels are compared to measured ozone values, and the performance of the selected modeling platform on each of the modeled episode days is determined and compared to EPA performance criteria. When the modeling analysis is acceptable, it then forms the basis for the attainment demonstration.

The state's analysis is provided in the plan in Chapter 5: Future Ozone Air Quality, and in Appendix D: Modeling and Attainment Demonstration. These documents provide the basis for the modeling that was reviewed by EPA and compared to EPA guidance.[11]

1. Episode Characterization

EPA's Guideline sets forth a recommended procedure for selecting ozone exceedance episodes appropriate for conducting a modeling demonstration.

EPA guidance recommends that "a minimum of 3 primary days should be simulated." EPA guidance also recommends that "In addition to considering the magnitude of the highest observed daily maximum concentration in making this choice, data availability and quality, model performance, availability of regional modeling analysis, pervasiveness, frequency with which observed meteorological conditions coincide with exceedances, and duration of observations greater than 0.12 ppm may be considered."

In the selection of the appropriate episodes, the state focused primarily on episodes which occurred during the time period of the year 2000 Central California Ozone Study (CCOS) because of the enhanced data availability and quality. The CCOS study had extensive measurements of ozone, hydrocarbons, oxides of nitrogen, and other chemical species. The data obtained during this study provided a wealth of detailed, high sensitivity information about the San Joaquin Valley area's atmospheric chemistry with data on ozone, carbon monoxide, NO, and

[11] "Guideline for Regulatory Application of the Urban Airshed Model," EPA-450/4-91-013 (July 1991); "Guidance on Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS," EPA-454/B-95-007 (June 1996); "Guidance for the 1-hour Ozone Nonattainment Areas that Rely on Weight-of-Evidence for Attainment Demonstrations, Mid-Course Review Guidance," March 28, 2002; and "Guidance for Improving Weight-of-Evidence Through Identification of Additional Emission Reduction Not Modeled," November 1999.

NO2. More specific information regarding the CCOS field study is available in Appendix D: Modeling and Attainment Demonstration, of the plan.

Five candidate episodes for the SIP modeling analysis were considered for this modeling exercise. Three episodes that occurred during the time period of intensive measurement during the 2000 Central California Ozone Study (CCOS) were considered: June 17-18, July 31-August 2, and September 17-21. In addition, two episodes that occurred outside the CCOS time period were considered: July 11-12, 1999; and August 6-16, 2002.

Each of the three primary CCOS episodes was initially modeled by one the participating CCOS agencies or their contractors. Of the three CCOS episodes, the July 31- August 2, 2000 episode was considered to be the most representative of the transport and formation of ozone in the San Joaquin Valley. The September 17-21 episode was also considered, but the model performance did not meet the performance criteria, so further analysis of the episode was not pursued.

Two episodes that occurred outside the CCOS time period were also considered: July 11-12, 1999 and August 6-16, 2002. However, because the CCOS episodes had superior data availability and quality, the July 30-August 2, 2000 was determined to be a better candidate for the modeling exercise

EPA believes that the extended episode from July 30-August 2, 2000 is an acceptable episode for development of the 1-hour ozone standard attainment plan. The episode encompasses 4 exceedance days for the study area (San Joaquin Valley, Sacramento and the San Francisco Bay Area) and 2 exceedance days in the San Joaquin Valley. It also has the advantage of being during the CCOS study's intensive data collection period.

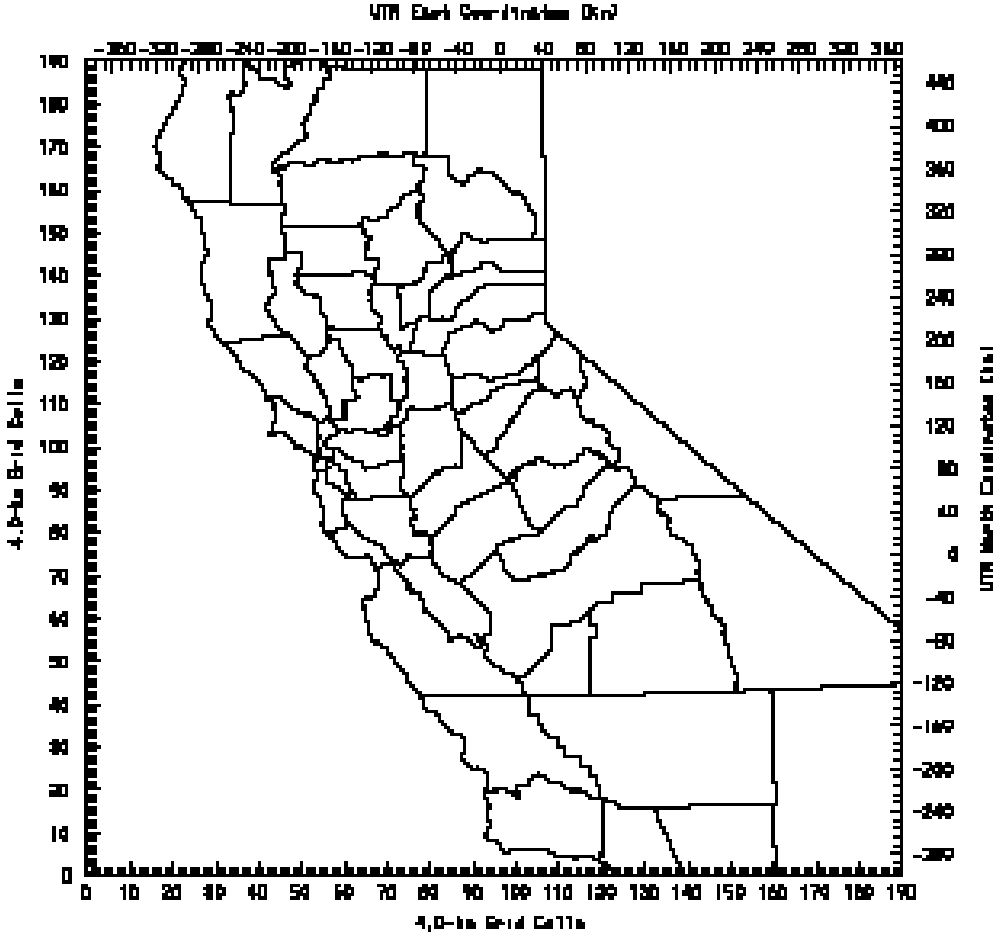
2. Photochemical Modeling

CARB used the Comprehensive Air Quality Model with Extensions (CAMx) photochemical grid model, which is based on well established treatments of advection, diffusion, deposition, and chemistry similar to the Urban Airshed photochemical grid Model(i.e., UAM), for the attainment demonstration. EPA believes that this model is an appropriate model for use to develop the SJV SIP attainment demonstration.

3. Modeling Domain

The modeling domain for modeling for the SJV one hour ozone plan extends from the Los Angeles County in the south to the California/Oregon border in the north, and from the Pacific Ocean into Nevada in the east and is shown in Figure D-6 (p. D-41) Appendix D: Modeling and Attainment Demonstration in the plan, and Figure 1: Air Quality Modeling Domain for the CCOS July-August episode, below.

Figure 1: Air Quality Modeling Domain for the CCOS July-August episode.



EPA guidance states that:

> It is recommended that the domain's downwind boundary be sufficiently far from the CMSA/MSA that is the principal focus of the modeling study to ensure that emissions from the CMSA/MSA occurring on the primary day for each selected episode remain within the domain until 8:00 pm on that day. The extent of upwind boundaries will depend on the proximity of large upwind source areas and the adequacy of techniques used to characterize incoming precursor concentrations. Large upwind emission source areas should be included in the modeling domain to the extent practicable. Also, if large uncertainty is anticipated for the domain boundary conditions, the upwind boundaries should be located at a distance sufficient to minimize boundary effects on the model predictions in the center of the domain.

EPA believes that the domain selected for the modeling exercise is sufficiently large to characterize incoming precursors and minimize boundary effects for the San Joaquin Valley.

4. Horizontal Grid Cell Size

The horizontal Grid cell size used for the photochemical modeling exercise in the plan is 4 kilometers (km) by 4km.

EPA recommends that the size of the horizontal grid cells should not be greater than 5km by 5 km, and grid cell sizes smaller than 2km by 2 km are not recommended because of potential model formation inconsistencies for those grid sizes. The grid cells should be small enough to reflect emission gradients and densities in urban areas, particularly those resulting from large point sources and major terrain or water features that may affect air flow.

EPA believes that the 4km by 4 km grid cell size is appropriate for this modeling application.

5. Vertical Structure

The vertical structure for the San Joaquin Valley modeling exercise consists of 16 layers, and is shown in Table 1: Vertical Structure, shown below.

Table 1
Vertical Structure of the Air Quality Modeling Domain
for the July/August 2000 Episode Based on the MM5 and CALMET Meteorological Models

Layer Number	MM5		CALMET	
	Thickness (meters)	Height (meters above ground level)	Thickness (meters)	Height (meters above ground level)
1	24	24	20	20
2	26	50	40	60
3	56	106	40	100
4	66	172	100	200
5	74	246	100	300
6	133	379	100	400
7	161	540	200	600
8	182	722	200	800
9	205	927	200	1000
10	232	1159	500	1500
11	265	1424	500	2000
12	356	1780	500	2500
13	488	2268	500	3000
14	666	2934	500	3500
15	926	3860	500	4000
16	1140	5000	1000	5000

EPA guidance recommends that a minimum of five vertical layers be used in the modeling study, with at least three layers above the morning mixing height. EPA encourages greater detail in the grid cell size particularly in modeling domains containing complex terrain or land/water interfaces.

EPA believes that the 16 layer vertical structure for the SJV modeling exercise meets EPA criteria and is of sufficient resolution for the San Joaquin Valley domain.

6. Initial and Boundary Conditions

The initial and boundary concentrations for the San Joaquin Valley modeling exercise were based on a combination of USEPA default values, South Coast Air Quality Management District (SCAQMD) default values, and measurements taken during the CCOS study. EPA Guidance states that:

To develop initial and boundary conditions, it is recommended that one or more monitoring stations be sited upwind of the central urban area along the prevailing wind trajectories that give rise to the exceedance.

The sampling and analysis program should provide data to calculate hourly values for ozone, NO, NO2 and speculated hydrocarbons.

At the inflow boundaries, air quality data at the surface and aloft should be used whenever available to specify the boundary conditions.

The enhanced data base for the CCOS study provided information to develop initial and boundary conditions for ozone, NO, NO2 and speciated hydrocarbons.

The top boundary concentrations developed for the domain were based on the clean profile defined by EPA guidance, with the exception of the ozone concentration of 70 ppb, which was based on ozonesonde measurements collected at Granite Bay and Parlier during the CCOS study.

Table 2
Initial and Boundary Conditions for the CCOS Domain

Compound	Initial Conditions		Boundary Conditions		
	Non-SJV	SJV	Top	Pacific (West and part of southern)	Overland Boundary
Reactive Hydrocarbons	60.7 ppbC	121.4 ppbC	22 pbbc	22ppbc	60.7 ppbC
Carbon Monoxide	200 ppm	200 ppm	350 ppm	350 ppm	200 ppm
Oxides of Nitrogen	2.0 ppb	2.0 ppb	2.0 ppb	0 ppb (NO)	2.0 ppb
Ozone	40 ppb	40 ppb	70 ppb	40 ppb	40 ppb

EPA believes that the EPA guidance criteria was met in developing initial and boundary conditions using data from the CCOS field study measurements, use of EPA default values, and SCAQMD default values.

7. Model Performance Evaluation Data

EPA guidance recommends that the data base used in the attainment demonstration modeling meet the requirements for the enhanced ozone monitoring system promulgated by EPA.

EPA believes that the CCOS study, described above, meets the objectives of the EPA enhanced ozone monitoring system.

8. Base year Model Performance Evaluation

Model performance was evaluated for nine sub-regions of the modeling domain, including the Fresno and Bakersfield areas in the San Joaquin Valley, and well as for the Sacramento Delta and San Francisco Bay Areas.

EPA guidance recommends the following mathematical formulations be applied as measures for model performance evaluation:

Unpaired highest prediction accuracy – The measure quantifies the difference between the highest observed value and highest predicted value over all hours and monitoring stations.

Normalized bias test – This test measures the models ability to replicate observed patterns during the times of day when available monitoring and modeled data re most likely to represent similar spatial scales.

Gross error of all pairs above 60 ppb- In conjunction with bias measurements, this metric provides an overall assessment of base case performance and can be used as a reference to other modeling applications. Gross error can be interpreted as precision.

EPA guidance recommends that the statistical performance be compared with the following ranges:

Unpaired highest prediction accuracy, +/- 15-20% (0.8 -1.2),
Normalized bias test, +/5-15%, and
Gross error of all pairs above 60 ppb, 30-35%

The model performance for each of these criteria is shown for Fresno and Bakersfield, below, for the CAMx/CB4 and CAMx/SAPRC99f.

Model performance with CAMx /CB4 is shown for Fresno in Table 3: Fresno Model Performance, below, and Bakersfield in Table 4: Bakersfield Model Performance. EPA performance criteria are met for Unpaired Peak ratio, Normalized Bias and Gross Error for each of the episode days.

Table 3
Fresno Model Performance – CAMX /CB4

Day	Observed peak	Simulated Peak	Unpaired Peak Ratio	Normalized Bias %	Gross Error %
EPA Guideline Performance Goals			0.8-1.2	+/- 15%	35
July 29, 2000	129	130	1.01	-08	18
July 30, 2000	118	128	1.09	+03	17
August 1, 2000	118	124	1.05	-09	20
August 2, 2000	131	127	0.97	-10	22

Table 4
Bakersfield Model Performance – CAMX /CB4

Day	Observed peak	Simulated Peak	Unpaired Peak Ratio	Normalized Bias %	Gross Error %
EPA Guideline Performance Goals			0.8-1.2	+/- 15%	35
July 29,200	128	123	0.96	-12	20
July 30,2000	115	119	1.04	-12	18
August 1, 2000	116	114	0.98	-15	19
August 2, 2000	151	129	0.85	-13	21

Model performance with CAMx / SAPRC99f is shown for Fresno in Table 5: Fresno Model Performance – CAMx /SAPRC99f, below, and Bakersfield in Table 6: Bakersfield Model Performance – CAMx /SAPRC99f. EPA performance criteria are met for Unpaired Peak ratio, Normalized Bias and Gross Error for each of the episode days. The CAMX/ SAPRC99f simulated peaks are higher on most days than the CAMx/CB4, so therefore, the normalized bias is smaller.

Table 5
Fresno Model Performance – CAMx /SAPRC99f

Day	Observed peak	Simulated Peak	Unpaired Peak Ratio	Normalized Bias %	Gross Error %
EPA Guideline Performance Goals			0.8-1.2	+/- 15%	35
July 29, 2000	129	144	1.12	-03	17
July 30, 2000	118	138	1.17	+06	18
August 1, 2000	118	132	1.12	-05	21
August 2, 2000	131	137	1.04	-02	22

Table 6
Bakersfield Model Performance – CAMx /SAPRC99f

Day	Observed peak	Simulated Peak	Unpaired Peak Ratio	Normalized Bias %	Gross Error %
EPA Guideline Performance Goals			0.8-1.2	+/- 15%	35
July 29, 2000	128	149	1.16	-02	25
July 30, 2000	115	132	1.15	-07	20
August 1, 2000	116	120	1.04	-10	19
August 2, 2000	151	140	0.92	-07	20

EPA believes that the model performance meets the performance criteria for the one hour ozone standard, and is acceptable.

9. Base Case Sensitivity to Natural Sources

Several simulations were conducted to determine the sensitivity of the modeling analysis to variations in natural source emission estimations. To assess the sensitivity of the model to biogenic emissions, two emission scenarios were evaluated; one scenario setting the biogenic emissions to zero, and one scenario increasing the biogenic emission estimations by 25%. The sensitivity of the 1-hour ozone values to these changes is shown for the modeling results in Bakersfield in Table 7: Sensitivity of ozone values to Natural Sources in Bakersfield, below.

An additional simulation was conducted to determine the sensitivity of ozone levels predicted by the model to wildfire emissions. The ozone levels which result from the modeling scenario with wildfire emissions removed from the emission inventory are shown below in Table 7. The peak one hour ozone levels for this simulation are up to 7% less in the Bakersfield area, compared to ozone levels in the base case, indicating a fairly substantial wildfire impact on ozone levels during the July - August 2000 episode.

Table 7
Sensitivity to Natural Sources in Bakersfield

Day	Base case	No Fires		+ 25% Biogenics		No Biogenics	
	Ppb	ppb	% Change	Ppb	% Change	Ppb	% Change
July 31	129	0	0	2	2	-8	-6
August 1	119	-2	-2	1	1	-8	-7
August 2	135	-9	-7	1	1	-10	-7

C. Conclusion

EPA believes that each of the components in the modeling analysis is acceptable. The appropriate episode days that represent day conducive to ozone formation in the San Joaquin Valley were selected. The modeling platform, including photochemical model, domain, number of vertical layers, and initial and boundary conditions most appropriate for the San Joaquin Valley area, meet EPA criteria and are appropriate. Finally, the performance of the selected modeling platform on each of the modeled episode days meets the performance criteria specified in EPA guidance. EPA believes that the modeling analysis in the plan is acceptable, and that it, therefore, forms an appropriate basis for the attainment demonstration in the plan.

References for Section II

Guideline for Regulatory Application of the Urban Airshed Model, EPA-450/4-91-013 (July 1991); "Guidance on Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS," EPA-454/B-95-007 (June 1996).

Guidance for the 1-hour Ozone Nonattainment Areas that Rely on Weight-of-Evidence for Attainment Demonstrations, Mid-Course Review Guidance (March 28, 2002);

Guidance for Improving Weight-of-Evidence Through Identification of Additional Emission Reduction Not Modeled (November 1999).

"Guideline for Regulatory Application of the Urban Airshed Model," EPA-450/4-91-013 (July 1991).

III. District Measures

As described in the proposal, we have divided the control measures in the 2004 SIP's attainment demonstration among three categories: baseline measures, interim measures, and control strategy measures. As the term is used here and in the proposal, baseline measures are rules and regulations adopted prior to September, 2002 (i.e., prior to 2004 SIP's development) that provide continuing reductions through 2010. We have defined interim measures as those rules adopted between September, 2002 and the 2004 SIP's adoption date in October, 2004. See Table III-7 in the ARB staff report (insert fuller cite). Finally, control strategy measures are the new rules, rule revisions, and commitments that provide the additional increment of emission reductions needed beyond the baseline and interim measures to demonstrate attainment of the 1-hour ozone standard in the SJV. See Tables III-6 and III-8 in the ARB staff report.

We have listed SJVAPCD's VOC and NOx rules in Table 8. We have also provided information on each rule's most recent adoption/revision date, its approval date and cite and the adoption/revision date of the approved rule, and whether the measure is a baseline, interim, or control strategy measure.

As can be seen from the Table 8, we have approved or proposed for approval the latest revision of all baseline and interim rules or, if not the revision, the last revision of the rule adopted prior to October 2004.

Table 8
Status and Allocation of San Joaquin Valley Rules
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Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Submitted	Date of Most Recent Rule Approved	Federal Register Cite	Pre-2002 Baseline	2002-2004 Interim	1-Hr VOC	1-Hr NOX	Comments
4103	Open Burning	5/17/2007	5/17/2007	5/17/2007	74 FR 57907 (11/10/09)	x		x	x	
4104	Reduction of Animal Matter	12/17/1992	12/17/1992	12/17/1992	73 FR 48 (1/02/08)	x				
4106	Prescribed Burning	6/21/2001	6/21/2001	6/21/2001	67 FR 8894 (2/27/02)	x				
4301	Fuel Burning Equipment	5/21/1992	5/21/1992	5/21/1992	64 FR 26876 (5/18/1999)	x				
4302	Incinerator Burning	12/16/1993	12/16/1993	12/16/1993	64 FR 45170 (8/19/1999)	x				
4303	Orchard Heaters	12/16/1993	12/16/1993	12/16/1993	64 FR 45170 (8/19/1999)	x				
4304	Equipment Turning Procedures for Boilers, Steam Generators, and Process Heaters	10/19/1995	10/19/1995	10/19/1995	66 FR 57666 (11/16/01)	x				No VOC or NOx limits.
4305	Boilers, Steam Generators, and Process Heaters - Phase 2	8/21/2003	8/21/2003	8/21/2003	69 FR 28061 (5/18/04)		x			Rule superseded by Rules 4306, 4307, and 4308
4306	Boilers, Steam Generators, and Process Heaters - Phase 3	10/16/2008	10/16/2008	9/18/2003 10/16/2008	69 FR 28061 (5/18/04) NPR: 74 FR 41104 (9/14/09)		x			

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4307	Boilers, Steam Generators, and Process Heaters - 2.0 MM BTU/hr to 5.0 MMBTU/hr	10/16/2008	10/16/2008	4/20/2006 10/16/2008 (proposal)	72 FR 29887 (5/30/07) NPR: 74 FR 41104 (9/14/09)			x		4/20/06 revision credited in attainment demonstration.
4308	Boilers, Steam Generators, and Process Heaters - 0.75 MM BTU/hr to 2.0 MMBTU/hr	10/20/2005	10/20/2005	10/20/2005	72 FR 29886 (5/30/07)			x		
4309	Dryers, Dehydrators and Ovens	12/15/2005	12/15/2005	12/15/2005	72 FR 29886 (5/30/07)			x		
4311	Flares	6/15/2006	6/15/2006	6/20/2002 6/15/2006 (proposal)	68 FR 8835 (2/26/03) NPR: 72 FR 65283 (11/20/07)	x				No emission reductions from 6/15/06 rule credited in attainment demonstration.
4313	Lime Kilns	3/27/2003	3/27/2003	3/27/2003	68 FR 52510 (9/4/2003)		x			
4320	Advanced Emission Reduction Option for Boilers	10/16/2008	N/A	N/A	N/A					
4351	Boilers, Steam Generators, and Process Heaters - RACT	8/21/2003	8/21/2003	8/21/2003	69 FR 28061 (5/18/04)	x				Rule superseded by Rules 4306, 4307, and 4308

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Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Submitted	Date of Most Recent Rule Approved	Federal Register Cite	Pre-2002 Baseline	2002-2004 Interim	1-Hr VOC	1-Hr NOX	Comments
4352	Solid Fuel Fired Boilers, Steam Generators, and Process Heaters	5/18/2006	5/18/2006	5/18/2006 (proposed)	NPR: 74 FR 65042 (12/9/2009)			x		No emission reductions from this rule credited in attainment demonstration.
4354	Glass Melting Furnaces	10/16/2008	8/17/2006	8/17/2006	72 FR 41894 (8/01/07)					
4401	Steam-Enhanced Crude Oil Production Wells	12/14/2006	12/14/2006	12/14/2006	NFR signed (12/11/09)	x		x		NFR is a limited approval/limited disapproval
4402	Crude Oil Production Sumps	12/17/1992	12/17/1992	12/17/1992	73 FR 48 (1/02/08)	x				
4403	Components Serving Light Crude Oil or Gases at Light Crude Oil and Gas Production	4/20/2005	4/20/2005	4/20/2005	71 FR 14652 (3/23/06)					Superseded by Rule 4409
4404	Heavy Oil Test Station -- Kern	12/17/1992	12/17/1992	12/17/1992	73 FR 48 (1/02/08)	x				
4405	Oxides of Nitrogen Emissions from Existing Steam Generators (Central and Western Kern County)	1992	not submitted	not submitted	N/A					Superseded by Rule 4306
4407	In-situ Combustion Well Vents	5/19/1994	5/19/1994	5/19/1994	60 FR 12121 (3/6/95)	x				

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4408	Glycol Dehydration Systems	12/19/2002	12/19/2002	12/19/2002	68 FR 51187 (8/26/03)		x			
4409	Components at Light Crude Oil or Gases at Light Crude Oil and Gas Production	4/20/2005	4/20/2005	4/20/2005	71 FR 14653 (3/23/06)			x		
4451	Valves, Pressure Relief Valves, Flanges, Threaded Connections and Process Drains at Petroleum Refineries and Chemical Plants	4/20/2005	4/20/2005	4/20/2005	71 FR 14652 (3/23/06)					Rule superseded by Rule 4455
4452	Pump and Compressor Seals at Petroleum Refiners	4/20/2005	4/20/2005	4/20/2005	71 FR 14653 (3/23/06)	expired 4/20/06 reduction incorporated into Rule 4455				
4453	Refinery Vacuum Producing Devices or Systems	12/17/1992	12/17/1992	12/17/1992	73 FR 48 (1/02/08)	x				
4454	Refinery Process Turnaround	12/17/1992	12/17/1992	12/17/1992	73 FR 48 (1/02/08)	x				
4455	Components at Refineries	4/20/2005	4/20/2005	4/20/2005	71 FR 14652 (3/23/06)			x		
4501	Alternate Compliance for BARCT	1999	1999	N/A	no action					
4550	Conservation Management Practices	8/19/2004	8/19/2004	8/19/2004	71 FR 7683 (2/14/06)					

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4565	Biosolids, Animal Manure, and Poultry Litter Operations	3/15/2007	3/15/2007	N/A				x		No emission reductions from this rule credited in attainment demonstration.
4570	Confined Animal Facilities	6/15/2006	6/15/2006	6/15/2006 (proposed)	NFR signed: 12/11/09			x		NFR is a limited approval/limited disapproval
4601	Architectural Coatings	10/31/2001	10/31/2001	10/31/2001	69 FR 34 (1/02/04)	x				
4602	Motor Vehicle and Mobile Equipment Coating Operations	9/21/2006	12/20/2001	12/20/2001	67 FR 42999 (6/26/02)	expired 12/31/08 - replaced by Rule 4612				
4603	Surface Coating of Metal Parts and Products	10/16/2008 (2007)	10/16/2008	10/16/2008	NFR signed: 12/3/09	x		x		
4604	Can and Coil Coating Operations	9/20/2007	9/20/2007	9/20/07	NFR signed: 12/3/09		x	x		
4605	Aerospace Assembly and Component Coating	9/20/2007	9/20/2007	9/20/2007	NFR signed: 12/11/09	x		x		NFR is a limited approval/limited disapproval
4606	Wood Products Coating Operations	10/16/2008 (2007)	10/16/2008	10/16/2008	74 FR 52894 (10/15/09)	x		x		
4607	Graphic Arts	10/16/2008	10/16/2008	10/16/2008	74 FR 52894 (10/15/09)	x		x		

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4610	Glass Coating Operations	4/17/2003	4/17/2003	4/17/2003	69 FR 60962 (10/14/04)		x			
4612	Motor Vehicle and Mobile Equipment Coating Operations -- Phase 2	9/20/2007	9/20/2007	9/20/2007	NFR signed: 12/3/09			x		
4621	Gasoline Transfer into Stationary Storage Containers	12/20/2007	12/20/2007	12/20/2007	74 FR 33397 (7/13/09)	x		x		
4622	Gasoline Transfer into Motor Vehicles	12/20/2007	12/20/2007	12/20/2007	74 FR 33397 (7/13/09)	x				
4623	Storage of Organic Liquids	5/19/2005	5/19/2005	5/19/2005	70 FR 53937 (9/13/05)	x				
4624	Transfer of Organic Liquids	12/20/2007	12/20/2007	12/20/2007	74 FR 52894 (10/15/09)			x		
4625	Wastewater Separators	12/17/1992	12/17/1992	12/17/1992	73 FR 49 (1/2/08)	x				
4641	Cutback, Slow Cure, and Emulsified Asphalt Paving and Maintenance Operations	12/17/1992	12/17/1992	12/17/1992	73 FR 49 (1/2/08)	x				
4642	Solid Waste Disposal Site	4/16/1998	4/16/1998	4/16/1998	66 FR 38939 (7/26/01)	x				

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Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Submitted	Date of Most Recent Rule Approved	Federal Register Cite	Pre-2002 Baseline	2002-2004 Interim	1-Hr VOC	1-Hr NOX	Comments
4651	Soil Decontamination Operations	9/20/2007	9/20/2007	9/20/2007	74 FR 52894 (10/15/09)	x		x		
4652	Coatings and Ink Manufacturing	1992	not submitted	N/A	N/A					
4653	Adhesives	9/20/2007	9/20/2007	9/20/2007	74 FR 52894 (10/15/09)	x		x		
4661	Organic Solvents	9/20/2007	9/20/2007	5/16/2002	68 FR 54167 (9/16/03)	x				
4662	Organic Solvent Degreasing Operations	9/20/2007	9/20/2007	9/20/2007	74 FR 37948 (7/30/09)	x		x		
4663	Organic Solvent Cleaning, Storage, and Disposal	9/20/2007	9/20/2007	9/20/2007	74 FR 37948 (7/30/09)	x		x		
4672	Petroleum Solvent Dry Cleaning Operations	12/17/1992	12/17/1992	12/17/1992	73 FR 48 (1/2/08)	x				
4681	Rubber Tire Manufacturing	12/16/1993	12/16/1993	12/16/1993	63 FR 43881 (8/17/98)	x				
4682	Polystyrene, Polyethylene, and Polypropylene Products Manufacturing	9/20/2007	9/20/2007	6/16/1994	60 FR 31086 (6/13/95)	x		x		No emission reductions from the 9/20/07 rule assumed in attainment demonstration.

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Status and Allocation of San Joaquin Valley Rules
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Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Submitted	Date of Most Recent Rule Approved	Federal Register Cite	Pre-2002 Baseline	2002-2004 Interim	1-Hr VOC	1-Hr NOX	Comments
4684	Polyester Resin Operations	9/20/2007	9/20/2007	9/20/07	NFR signed 12/11/09	x		x		NFR is a limited approval/limited disapproval.
4691 (461.02)	Vegetable Oil Processing Operations	4/11/1991	4/11/1991	4/11/1991	59 FR 2535 (1/18/94)	x				
4692	Commercial Charbroiling	3/21/2002	3/21/2002	3/21/2002	68 FR 33005 (6/03/03)	x				
4693	Bakery Ovens	5/16/2002	5/16/2002	5/16/2002	69 FR 22441 (4/26/04)	x				
4694	Wine Fermentation and Storage Tanks	12/15/2005	12/15/2005	N/A	no action			x		No emission reductions from this rule assumed in attainment demonstration.
4695	Brandy and Wine Aging	2009	N/A	N/A	N/A					
4701	I/C Engines - Phase 1	8/21/2003	8/21/2003	8/21/2003	69 FR 28061 (5/18/04)					
4702	I/C Engines - Phase 2	1/18/2007	1/18/2007	1/18/2007	73 FR 1819 (1/10/08)				x	
4703	Stationary Gas Turbines	9/20/2007	9/20/2007	9/20/2007	74 FR 53888 (10/21/09)	x			x	
4902	Residential Water Heaters	6/17/1993	6/17/1993	6/17/1993	69 FR 7370 (2/17/04)	x				
4905	Natural Gas-fired, fan-type, residential central furnaces	10/20/2005	10/20/2005	10/20/2005	72 FR 29886 (5/30/07)					

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Status and Allocation of San Joaquin Valley Rules
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Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Submitted	Date of Most Recent Rule Approved	Federal Register Cite	Pre-2002 Baseline	2002-2004 Interim	1-Hr VOC	1-Hr NOX	Comments
3170	Federally-Mandate Ozone Nonattainment Fees	5/16/02	5/16/02	5/16/02	NFR signed 121/1/09					NFR is a limited approval/limited disapproval
9310	School Bus	9/21/2006	9/21/2006	9/21/2006	NFR signed 12/11/09				x	
9510	Indirect Source Review	12/15/2005	12/15/2005	N/A	N/A				x	No emission reductions from this rule credited in attainment demonstration.

IV. State Measures

A. ARB Rulemaking Actions 1989 to 2008

Table 9 is a list of all measures adopted by ARB from late 1989 until end of 2008. This period covers the 15 years prior to the submittal of the 2004 SIP in November 2004 and should includes any substantive rule that would still be generating emission reductions in the San Joaquin Valley in the attainment year of 2010.

This list does not include limits on pesticide emissions adopted by the California Department of Pesticide Regulation (DPR). The 2004 Plan does not rely on reductions from the DPR rule. The list also does not include the State's inspection and maintenance program adopted by the California Bureau of Automotive Repair (BAR).

Table 9
Measures Adopted by the California Air Resource Board
November 1989 to 2008

Measure	Hearing Date	Category
Antiperspirant/Deodorants. T 17, CCR, 94500-94506	11/09/89	Consumer products
Transported Pollutants (Ozone). T 17, CCR, 70500	12/04/89	Not applicable
Emission Control System Warranty. T 13, CCR, 2035-2041, 1977	12/14/89	On-road
Non-vehicular Test Methods. T 17, CCR, 94002, 94003 17, &26, 94146-94149, 94132, 94135, 94139, 94140	01/11/90	Not applicable
Certification Procedure for Aftermarket Parts. VC 27156 & 38391	02/08/90	On-road
Airborne Toxic Control Measure for Asbestos in Surfacing Applications. T 17, & 26, CCR, 93106	04/12/90	Not applicable
Test Method for Asbestos in Serpentine Aggregate. T 17, & 26, CCR, 94147, Method 435	04/12/90	Not applicable
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90700-90704, 93300-93347	05/10/90	Not applicable
Airborne Air Toxic Measure for Ethylene Oxide from Sterilizers & Aerators. T 17, CCR, 93108	05/10/90	Not applicable
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.1, 90800, 90802-90803	05/10/90	Not applicable
Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines. T 17, & 26, CCR, 93300-93347	06/14/90	Not applicable
Consumer Products Regulations for the BAAQMD. T 17, CCR, 94520-94526	06/14/90	Consumer products

Table 9
Measures Adopted by the California Air Resource Board
November 1989 to 2008

Measure	Hearing Date	Category
Criteria for Area Designations for the State Ambient Air Quality Standard. T 17, CCR, 70303 & 70304	06/14/90	Not applicable
Emission Standards for Medium Duty Vehicles. T 13, CCR, 1900, 1956.8, 1960.1, 1968.1, 2061, 2112, 2139	06/14/90	On-road
Wintertime Limits for Sulfur in Diesel Fuel. T 13, CCR, 2255	06/21/90	Fuels
Dioxins Airborne Toxic Control Measure for Medical Waste Incinerators. T 17, CCR, 93104	07/12/90	Not applicable
Emission Reduction Accounting Procedures for California Clean Air Act. T 17, CCR, 70700-70704	07/12/90	Not applicable
Identification of Inorganic Arsenic as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	07/12/90	Not applicable
Evaporative Emission Standards. T 13, CCR, 1976	08/09/90	On-road
Transport Mitigation Regulations. T 17, CCR, 70600-70601	08/09/90	Not applicable
Air Toxic Fee Schedule & Emission Inventory Criteria and Guidelines. T 17, & 26, CCR, 90700-90704, 93300-93347	09/13/90	Not applicable
California Reformulated Gasoline (CaRFG), Phase I. T 13, CCR, 2251.5	09/27/90	Fuels
Low Emission Vehicles and Clean Fuels. T 13, CCR, 1900, 1904, 1956.8, 1960.1, 1960.1.5, 1960.5 and 2111, 2112, 2125, and 2139, 2061.	09/28/90	On-road
Identification of Trichloroethylene as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	10/11/90	Not applicable
Phase I - Consumer Products. T 17, CCR, 94507-94517	10/11/90	Consumer products
Controls for Abrasive Blasting. T 17, CCR, 92000, 92200, 92400, 98500, 98510, 92520, 92530	11/08/90	Not applicable
Heavy Duty Diesel Smoke Emission Testing. T 13, CCR, 2180-2187	11/08/90	On-road
Revision to Designation Criteria. T 17, CCR, 60200-60204, 60208	11/08/90	Not applicable
Identification of Vinyl Chloride as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	11/13/90	Not applicable
Conflict of Interest Code. T 17, CCR, 95001, et. seq.	12/13/90	Not applicable

Table 9
Measures Adopted by the California Air Resource Board
November 1989 to 2008

Measure	Hearing Date	Category
Emission Standards for Utility and Lawn and Garden Engines. T 17, CCR, 2400 et. seq.	12/13/90	Off-road
Identification of Chloroform as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	12/13/90	Not applicable
Limit on Aromatic Content of Diesel Fuel. T 13, CCR, 2256	12/13/90	Fuels
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.2, 90801, 90803	02/24/91	Not applicable
Acid Deposition Fee Regulations. T 17, CCR, 90621.2, 90620, 90622	04/11/91	Not applicable
Non - Vehicular Test Methods. T 17, CCR, 94131, 94132, 94142	04/11/91	Not applicable
Administrative Hearing Procedures. T 17, CCR, 60075.1, 60075.47	05/09/91	Not applicable
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90700 - 90705	06/13/91	Not applicable
Agricultural Burning Guidelines. T 17, 80130, 80150, 80250, 80260, 80290	07/11/91	Not applicable
Identification of Metallic & Inorganic Nickel Compounds as a Toxic Air Contaminant. T 17, & 26, 93000	08/08/91	Not applicable
Onboard Diagnostics for Light-Duty Trucks and Light & Medium-Duty Motor Vehicles. T 13, CCR, 1977, 1968.1	09/12/91	On-road
Identification of Perchloroethylene as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	10/10/91	Not applicable
State Ambient Air Quality Standard for SO2. T 17, CCR, 70100, 70200, 70201	10/10/91	Not applicable
Onboard Diagnostic, Phase II. T 13, CCR, 1968.1, 1977	11/12/91	On-road
Area Designations. T 17, CCR, 60200, 60209	11/14/91	Not applicable
Low Emission Vehicles amendments revising reactivity adjustment factor (RAF) provisions and adopting a RAF for M85 transitional low emission vehicles. T 13, CCR, 1960.1	11/14/91	On-road
California Reformulated Gasoline, Phase II. T 13, CCR, 2250, 2255.1, 2252, 2260 - 2272, 2295	11/21/91	Fuels
Wintertime Gasoline Program. T 13, CCR, 2258, 2298, 2251.5, 2296	11/21/91	Fuels
Specifications for Alternative Motor Vehicle Fuel. T 13, & 26, CCR, 2290, 2291, 2292.1, 2292.2, 2292.3, 2292.5, 2292.6, 2292.7, 1960.1(k), 1956.8(b), 1956.8(d)	12/12/91	Fuels

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Measure	Hearing Date	Category
Heavy Duty Diesel Cycle Engines. T 13, CCR, 2420-2427	01/09/92	Off-road
Phase II - Consumer Products. T 17, CCR, 94501, 94502, 94505, 94514, 94503.5, 94506, 94507 - 94513, 94515	01/09/92	Consumer products
Identification of Formaldehyde as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	03/12/92	Not applicable
Specifications for Alternative Motor Vehicle Fuels. T 13, & 26, CCR, 2290-2292.7, 1960.1(k), 1956.8(b), 1956.8(d)	03/12/92	Fuels
Substitute Fuel or Clean Fuel Incorporated Test Procedures. T 13, CCR, 1960.1(k), 2317	03/12/92	On-road
Atmospheric Acidity Protection Fees. T 17, CCR, 90621.3	04/09/92	Not applicable
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.3, 90803	04/09/92	Not applicable
Criteria for Area Designations. T 17, CCR, 70303, 70304	05/14/92	Not applicable
Standards and Test Procedures for Alternative Fuel Retrofit Systems. T 13, CCR, 2030, 2031	05/14/92	On-road
Transported Air Pollutants. T 17, CCR, 70500	05/28/92	Not applicable
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90701, 90704, 90705	07/09/92	Not applicable
Identification of 1.3 Butadiene as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	07/09/92	Not applicable
Phase 2 RFG certification fuel specifications. T 13, CCR, 1960.1, 1956.8(d)	08/13/92	Fuels
CFC Refrigerants in Air Conditioning Systems. T 13, CCR, 2500	09/10/92	Not applicable
Notice of General Public Interest for Consumer Products. T 17, CCR, 94507 - 94517	11/30/92	Consumer products
Airborne Toxic Control Measure for Emission of Toxic Metals from Non-Ferrous Metal Melting. T 17, & 26, CCR, 93107	12/10/92	Not applicable
Criteria for Area Designations. T 17, CCR, 70303.5, 60200-60203, 60205, 70303	12/10/92	Not applicable
Smoke Self Inspection Program for Heavy Duty Diesel & Gasoline Engines. T 13, CCR, 2190-2194, 2180-2187, 1956.8(b)	12/10/92	On-road
Certification Requirements for Low Emission Passenger Cars, Light-Duty Trucks & Medium Duty Vehicles. T 13, CCR, 1960.1, 1976, 2061, 1900	01/14/93	On-road

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Measure	Hearing Date	Category
Transport Mitigation Regulations. T 17, CCR, 70600, 70601	03/11/93	Not applicable
1-year Implementation Delay in Emission Standards for Utility Engines. T 13, CCR, 2400, 2403-2407	04/08/93	Off-road
Acid Deposition Fee Regulations. T 17, CCR, 90622, 90621.4	04/08/93	Not applicable
Identification of Federal Hazardous Air Pollutants as Toxic Air Contaminants. T 17, & 26, CCR, 93001, 39665, 39666	04/08/93	Not applicable
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.4, 90803	04/08/93	Not applicable
Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines. T 17, & 26, CCR, 93300-93347	06/10/93	Not applicable
Urban Transit Buses. T 13, CCR, 1956.8, 1965, 2112	06/10/93	On-road
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90700-90705	07/08/93	Not applicable
Onboard Diagnostic, Phase II. T 13, CCR, 1968.1	07/09/93	On-road
Mitigation Transport Pollutants. T 17, CCR, 70500, 70600	08/12/93	Not applicable
Wintertime Oxygenate Program. T 13, CCR, 2258, 2251.5, 2263(b), 2267, 2298, 2259, 2283, 2293.5	09/09/93	Fuels
Airborne Toxic Control Measure for Perchloroethylene Dry Cleaning. T 17, & 26, CCR, 93109, 93110	10/14/93	Not applicable
Diesel Fuel Regulations - Emergency. T 13, CCR, 2281(h), 2282(1)	10/15/93	Fuels
Conflict of Interest. T 17, CCR, 90500	11/18/93	Not applicable
Criteria for Area Designations. T 17, CCR, 60200-60202, 60204, 60206, 60208, 70300-70306	11/18/93	Not applicable
Off-Highway Recreational Vehicles. T 13, CCR, 2410-2414, 2111-2140	01/03/94	Off-road
Evaporative Emission Standards and Test Procedures. T 13, CCR, 1976	02/10/94	On-road
SCAQMD's Reclaim Consideration	03/10/94	Not applicable
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.5, 90803	04/14/94	Not applicable

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Measure	Hearing Date	Category
Predictive Model for Phase II CaRFG. T 13, CCR, 2261, 2262-2270	06/09/94	Fuels
Small Refiner Diesel. T 13, CCR, 2282(e)(1)	07/24/94	Fuels
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90700-90705	07/28/94	Not applicable
Utility and Lawn and Garden Equipment Engines. T 13, CCR, 2403(c), 11(a)(1)(I)(ii), 4(a)(1)(I)(ii)	07/28/94	Off-road
Alternative Control Plan for Consumer Products. T 17, CCR, 94540-94555	09/22/94	Consumer products
Diesel Fuel Certification. T 13, CCR, 1956.8(b)&(d), 1960.1(k), 2292.6	09/22/94	Fuels
Area Designations. T 17, CCR, 60201, 60204	11/09/94	Not applicable
Self Inspection Program for Heavy Duty Diesel & Gasoline Engines. T 13, CCR, 2190-2194, 2180-2187, 1956.8(b)	11/09/94	On-road
Onboard Diagnostics, Phase II. T 13, CCR,1963.1, & Certification Procedures	12/08/94	On-road
Periodic Smoke Inspection Program. T 13, CCR, 2190	12/08/94	On-road
Specification for Alternative Motor Vehicle Fuels (M100). T 13 CCR, 2292.1	12/08/94	Fuels
Aerosol Coating Products and Alternative Control Plan. T 17, CCR, 94520-94528, 94540-94543, 94547...	03/23/95	Consumer products
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.6, 90803	04/27/95	Not applicable
Employee-Based Trip Reductions Emission Formula. T 13, CCR, 2330, 2331, 2332	06/29/95	Not applicable
Gasoline Vapor Recovery Systems. T 17, CCR, 94010-94015, 94150-94160, 94000-94004, 94007.	06/29/95	Vapor Recovery
Heavy Duty Vehicle Exhaust Emission Standards. T 13, CCR, 1956.8 and incorporate test procedures.	06/29/95	On-road
Onboard Refueling Vapor Recovery Standards. T 13, CCR, 1976, 1978 and incorporate test procedures	06/29/95	On-road
Test Method for Oxygen in Gasoline. T 13, CCR, 2251.5(c), 2258(c), 2263(b)	06/29/95	Fuels
Retrofit Emission Standards. T 13, CCR, 1956.9, 2030, 2031, and incorporate test procedures	07/27/95	On-road

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Measure	Hearing Date	Category
Antiperspirants and Deodorants, Consumer Products, and Aerosol Coating Products. T 17, CCR, 94500-94506, 94508, 94521	09/28/95	Consumer products
Low Emission Vehicle Standards 3 (LEV 3). T 13, CCR, 1956.8, 1960.1, 1965, 2101, 2061, 2062, and incorporate test procedures	09/28/95	On-road
Test Methods for CaRFG 13, CCR, 2263(b)	10/26/95	Fuels
Required Additives in Gasoline (Deposit Control Additives). T 13, CCR, 2257 and incorporates testing procedures.	11/16/95	Fuels
CaRFG Housekeeping & CARBOB. T 13, CCR, 2263.7, 2266.5, 2260, 2262.5, 2264, 2265, 2272	12/14/95	Fuels
Exemption of Military Tactical Vehicles. T 13, CCR, 1905, 2400, 2420	12/14/95	On Road/Off Road
Air Toxics "Hot Spots" Fee Regulation. T 17, CCR, 90700-90705 and Appendix A	01/25/96	Not applicable
CaRFG Variance Requirements. T 13, CCR, 2271 (Emergency)	01/25/96	Fuels
Relaxation of Carbon Monoxide Emission Standards for Utility Engines. T 13, CCR, 2403 and incorporating test procedures	01/25/96	Off-road
Postpone Zero Emission Vehicle Requirements. T 13, CCR, 1900, 1960.1, 1976	03/28/96	On-road
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90803, 90800.7	04/25/96	Not applicable
Basin Boundaries for Agricultural Burning (Mojave Desert, South Coast & Salton Sea). T 17, CCR, 60104, 60109, 60114, 80280, 80311	05/30/96	Not applicable
Regulation Improvement and Repeal. T 17, CCR, 93301-93355, Appendix A-E (emission inventory)	05/30/96	Not applicable
Regulation Improvements and Repeals (fuel additives). T 13, CCR, 2201, 2202	05/30/96	Fuels
Emissions Inventory Criteria & Guideline Report. T 17, CCR, 93300.5	07/25/96	Not applicable
Air Toxics "Hot Spots" Fee Regulation. T 17, CCR, 90701-90705 Appendix A to §§ 90700-90705	09/26/96	Not applicable
Stationary Source Test Methods. T 17, CCR, 94105, 94107, 94114, 94135, 94141, 94143, 94161	09/26/96	Not applicable
Wintertime Requirements for Utility Engines & Off-Highway Vehicles. T 13, CCR, 2403	09/26/96	Off-road

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Measure	Hearing Date	Category
Diesel Fuel Certification Test Methods . T 13, CCR, 1956.8(b), 1960.1(k), 2281(c), 2282(b), (c) and (g)	10/24/96	Fuels
Diesel Fuel Test Methods. T 13, CCR, 1956.8(b), 1960.1(k), 2281(c), 2282(b), (c) and (g)	10/24/96	Fuels
Antiperspirants and Deodorants, Consumer Products, Aerosol Coating Products (ARB Test Method 310). T 17, CCR, 94506(a), 94515(a), 94526	11/21/96	Consumer products
Area Designations. T 17, CCR, 60201-60209	11/21/96	Not applicable
Consumer Products and Aerosol Coating Products Amendments. T 17, CCR, 94508-94515, 99517, 94321	11/21/96	Consumer products
Transport Pollutants. T 17, CCR, 70500, 70600	11/21/96	Not applicable
Onboard Diagnostics, Phase II, Technical Status. T 13, CCR, 1968.1, 2030, 2031	12/12/96	On-road
Consumer Products (Hair Spray) Amendments. T 17, CCR, 94509, 94513, 94514	03/27/97	Consumer products
Liquefied Petroleum Gas Propane Limit Specification Delay. T 13, CCR, 2292.6	03/27/97	Fuels
Portable Equipment Registration Program. T 13, CCR, 2450-2465	03/27/97	Off-road
Identification of Inorganic Lead as Toxic Air Contaminant (TAC). T 17, CCR, 93000	04/24/97	Not applicable
Interchangeable Emission Reduction Credits. T 17, CCR, 91500	05/22/97	Not applicable
Postpone Enhanced Evaporative Emission Requirements for Ultra-Small Volume Vehicle Manufacturers. T 13, CCR, 1976 and incorporate test procedures	05/22/97	On-road
Consumer Products (Mid-Term Measures) Amendments. T 17, CCR, 94508, 94509, 94513	07/24/97	Consumer products
Off-Cycle Emissions Supplemental Federal Test Procedures (SFTPs). T 13, CCR, 1960.1, 2101 and incorporate test procedures	07/24/97	On-road
Air Toxics "Hot Spots" Fee Regulation. T 17, CCR 90701-90705 and Appendix A	11/13/97	Not applicable
Area Designations. T 17, CCR, 60201 & 60205	11/13/97	Not applicable
Consumer Products (Hairspray Credit Program). T 17, CCR, 94502, 94509, 94522, & 94548	11/13/97	Consumer products

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Measure	Hearing Date	Category
Heavy Duty Vehicle Smoke Inspection Program/Periodic Smoke Inspection Program. T 13, CCR, 2180-2188 and 2190-2194	12/11/97	On-road
Permit Fee Regulations for Non-vehicular Sources. T 17,CCR 90800....	01/29/98	Not applicable
Small Off-Road Engines (SORE). T 13, CCR, 2400,2410-2414	03/26/98	Off-road
Classifying Minor Violations. T 17, CCR, 60090-60095	04/23/98	Not applicable
Heavy Duty Vehicle Regulations: 2004 Standards. T 13, CCR, 1956.8, 1965, 2036, 2112 and test procedures	04/23/98	On-road
Airborne Toxic Control Measure for Chrome Plating. T 17, CCR, 93102	05/21/98	Not applicable
Cleaner Burning Gasoline Model Flexibility. T 13, CCR, Sections 2260, 2262.1, 2262.3, 2262.4, 2262.5, 2262.6, 2262.7 and 2265	08/27/98	Fuels
Gasoline Vapor Recovery Systems. T 17, CCR, 94010-94015 and 94150, 94156, 94157, 94158, 94159, 94160, 94162	08/27/98	Vapor Recovery
Identification of Diesel Exhaust as a Toxic Air Contaminant. T 17, CCR, 93000	08/27/98	Not applicable
Gasoline Deposit Control Additive Regulation. T 13, CCR, 2257, and incorporating test procedures	09/24/98	Fuels
Air Toxics “Hot Spots” Fee Regulations. T 17, CCR, 90701-90705 and Appendix A	10/22/98	Not applicable
Area Designations and Criteria for the National and State Ambient Air Quality Standards for Ozone. T 17, CCR, 60301, 60202, 60205, 60206, 70300-70306, 70303.1	10/22/98	Not applicable
Large Off-Road Spark-Ignition Engine Regulations. T 13, CCR, 2430 et seq., and 2411-2414	10/22/98	Off-road
Stationary Source Test Methods. T 17, CCR, 94101 - 94104, 94106, 94108 - 94113, 941T 17 - 94124, 94137 and revision of Method 12.	10/22/98	Not applicable
Low Emission Vehicles Standards (LEV 2) and Compliance Assurance Program (CAP 2000). T 13, CCR,1961 & 1962 (both new); 1900, 1960.1, 1965, 1968.1, 1976, 1978, 2037, 2038, 2062, 2101, 2106, 2107, 2110, 2112, 2114, 2119, 2130, 2137-2140, 2143-2148	11/05/98	On-road

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Measure	Hearing Date	Category
Aftermarket Parts for Off-Road Engines. T 13, CCR, 2470-2476	11/19/98	Off-road
Consumer Products - LVP-VOC Definitions And Test Methods. T 17, CCR, 94506, 94506.5, 94508(a)(78), 94515 and 94526, and the amendment of ARB Method 310	11/19/98	Consumer products
Consumer Products, Aerosol Coatings & Antiperspirants and Deodorants. T 17, CCR, 94501, 94508, 94521, 94522, and 94524	11/19/98	Consumer products
1997 & Later Model Off-Highway Recreational Vehicles and Engines. T 13, CCR, 2410-2414, 2415	12/10/98	Off-road
Emission Standards and Test Procedures for 2001 Marine Engines. T 13, CCR, 2440 et seq	12/10/98	Off-road
Exhaust Standards for (On-Road) Motorcycles. T 13, CCR, 1958	12/10/98	On-road
Revisions to Statewide Portable Equipment Registration Program. T 13, CCR, 2450-2463	12/10/98	Off-road
Voluntary Accelerated Light Duty Vehicle Retirement Regulations. T 13, CCR, 2600-2610	12/10/98	On-road
Cleaner Burning Gasoline (Increasing the Oxygen Content). T 13, CCR, sections 2262.5(b) and 2265(a)(2)	12/11/98	Fuels
Specifications for Liquid Petroleum Gas Used as a Motor Vehicle Fuel. T 13, CCR, 2292.6	12/11/98	Fuels
Cleaner Burning Gasoline, Oxygen Requirement for Wintertime In Lake Tahoe Area/Gas Pump Labeling for MTBE. T 13, CCR, 2262.5, and 2273	06/24/99	Fuels
Gasoline Vapor Recovery Systems. T 17, CCR, 94011, 94153, 94155, and incorporated test procedures, CP-201, TP- 201.4, and TP-201.6	06/24/99	Vapor Recovery
Clean Fuels Regulation Requirements. T 13, CCR, sections 2300-2317, and 2303.5, 2311.5	07/22/99	On-road
Portable Container Spillage Control Measure. T 13, CCR, 2470-2478	09/23/99	Off-road
Administrative Hearing Procedures. T 17, CCR, 60040 and 60075.1-60075.45	10/22/99	Not applicable
California Consumer Products Regulation Mid-Term Measures II. T 17, CCR, 94508, 94509, and 94513	10/28/99	Consumer products
Area Designations for State Ambient Air Quality Standards. T 17, CCR, 60201	11/18/99	Not applicable

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Measure	Hearing Date	Category
CaRFG Phase 3 Amendments (Phase out of MTBE, standards, predictive model). T 13, CCR, 2260, 2261, 2262.1, 2262.5, 2263, 2264, 2264.2, 2265, 2266 etc…	12/09/99	Fuels
Off-Road Compression Ignition Engines. T 13, CCR, 2111, 2112, 2137, 2139, 2140, 2141, 2144, 2400, 2401, 2403, 2420, 2421, 2423-2427, & appendix A to article 2.1.	01/27/00	Off-road
Transit Bus Standards. T 13, CCR, 1956.1, 1956.2, 1956.3, 1956.4, 1956.8, 1965	02/24/00	On-road
Agricultural Burning Guidelines. T 17 Amendments 80145, 80T 179, 80100-80102, 80110, 80120, 80130, 80140, 80150, 80155, 80160, 80T 170, 80180, 80200, 80210, 80230, 80240, 80250, 80260, 80270, 80280, 80290, 80300, 80310, 80311, 80320, 80330	03/23/00	Not applicable
Enhanced Gasoline Vapor Recovery Systems (Emergency Filing CP-201, section 18). T 17, CCR, 94011	03/23/00	Vapor Recovery
Enhanced Gasoline Vapor Recovery Systems (In Station Diagnostics and Onboard Refueling Vapor Recovery). T 17, CCR, 94011	03/23/00	Vapor Recovery
Air Toxic Control Measure for Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Facilities. T 17, CCR, 93111	04/27/00	Other
Consumer Products Aerosol Adhesives Control Measure. T 17, CCR, 94508, 94509, 94512, 94513	05/25/00	Consumer products
Aerosol (Paint) Coatings Products. T 17, CCR, 94700, 94701, 94521-94524, 94526	06/22/00	Consumer products
Air Toxic Control Measure for Asbestos Containing Serpentine. T 17, CCR, 93106	07/20/00	Not applicable
Conflict of Interest Code. T 17, CCR, 95001, 95002, 95005, and subchapter 9	09/28/00	Not applicable
Rice Straw Conditional Burn Permit Program. T 17, CCR, 80101, 80156-80158	09/28/00	Not applicable
Air Toxics "Hot Spots" Fee Regulations. T 17, CCR, 90705 tables 1, 2, 3a, 3b, 3c, and 4	10/26/00	Not applicable
Antiperspirant and Deodorant Regulations. T 17, CCR, 94502, 94504	10/26/00	Consumer products
Area Designations for the State Ambient Air Quality Standard for Ozone. T 17, CCR, 60201	11/16/00	Not applicable

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Measure	Hearing Date	Category
CaRFG Phase 3 Follow-up Amendments. T 13, CCR, sections 2260, 2261, 2262.3, 2262.5, 2263, 2264, 2265, 2266, 2266.5, 2270, 2272, 2273, 2282, 2296, 2297, 2262.9 and incorporated test procedures	11/16/00	Fuels
CaRFG Phase 3 Test Methods. T 13, CCR, sections 2263(b)	11/16/00	Fuels
Heavy Duty Diesel Engines "Not-to-Exceed (NTE)" Test Procedures. T 13 CCR, 1956.8, 2065	12/07/00	On-road
Light-and Medium Duty Low Emission Vehicle Alignment with Federal Standards. Exhaust Emission Standards for Heavy Duty Gas Engines. T 13, CCR, 1956.8 &1961	12/07/00	On-road
Zero Emission Vehicle Regulation Update. T 13, CCR, 1900, 1960.1(k), 1961, 1962 & incorporated Test Procedure	01/25/01	On-road
Ozone Transport Assessment. T 17, CCR, 70500 & 70600	04/26/01	Not applicable
Zero Emission Vehicle Infrastructure and Standardization of Electric Vehicle Charging Equipment. T 13, CCR, 1900(b), 1962(b) 1962.1	06/28/01	On-road
Airborne Toxic Control Measure for Asbestos from Construction, Grading, Quarrying, and Surface Mining. T 17, CCR, 93105	07/26/01	Not applicable
Marine Inboard Engines. T 13, CCR, 2111, 2112, 2139, 2140, 2147, 2440-2442, 2443.1-2443.3, 2444, 2445.1, 2445.2, 2446, 2444.2 and incorporation of documents by reference	07/26/01	Off-road
Air Toxic Control Measures for Auto and Mobile Equip Refinishing Coatings containing Hexavalent Chromium and Cadmium Compounds. T 17, CCR, 93112	09/20/01	Not applicable
Air Toxics "Hot Spots" Fee Regulation. T 17, CCR, 90700-90705	10/25/01	Not applicable
Gasoline Vapor Recovery Systems Test Methods and Compliance Procedures. T 17, CCR, 94010, 94011, 94153, 94155, 94163, 94164, 94165 & incorporated procedures	10/25/01	Vapor Recovery
Heavy Duty Diesel Engine Standards for 2007 and Later. T 13, CCR, 1956.8 and incorporated test procedures	10/25/01	On-road
Distributed Generation Guidelines and Regulations. T 17, CCR, 94200-94214	11/15/01	Other

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Measure	Hearing Date	Category
Gasoline Vapor Recovery Systems Defects. T 17, CCR, 94006 and incorporated document.	11/15/01	Vapor Recovery
Low Emission Vehicle Regulations. T 13, CCR, 1960.1,1960.5, 1961, 1962 and incorporate test procedures and guidelines	11/15/01	On-road
California Motor Vehicle Service Information Rule. T 13&17, CCR, 1969 & 60060.1 - 60060.7	12/13/01	On-road
Airborne Toxic Control Measure for Outdoor Residential Waste Burning. T 17, CCR, 93113	02/21/02	Other
Voluntary Accelerated Light Duty Vehicle Retirement Regulations. T 13, CCR, 2601-2605, 2606 & appendices C & D, and 2607-2610	02/21/02	On-road
On-Board Diagnostic II Review Amendments. T 13, CCR, 1968.1, 1968.2, 1968.5	04/25/02	On-road
Diesel Retrofit Verification Procedure, Warranty and In-Use Compliance Requirements. T 13, CCR, 2700-2710	05/16/02	On-road
Review of California Ambient Air Quality Standards for Particulate Matter and Sulfates. T 17, CCR, 70100,70200, and 70100.1	06/20/02	Not applicable
CaRFG Phase 3 Amendments. T 13, CCR, 2261, 2262, 2262.4, 2262.5, 2262.6, 2262.9, 2266.5, 2269, 2271, 2272, 2265, and 2296	07/25/02	Fuels
Revision to Transit Bus Regulations Amendments. T 13, CCR, 1956.1, 1956.2, 1956.4,1956.8, and 2112, & documents incorporated by reference	10/24/02	On-road
Administrative Civil Penalties Program. T 17, CCR, 60065.1 - 60065.45 and 60075.1 - 60075.45	12/12/02	Not applicable
Airborne Toxic Control Measure for Diesel Particulate from School Bus Idling. T13, CCR, 2480	12/12/02	On-road
CaRFG Phase 3 Amendments (specifications for De Minimus Levels of Oxygenates and MTBE Phase Out Issues). T 13, CCR, 2261, 2262.6, 2263, 2266.5, 2272, 2273, 2260, 2273.5	12/12/02	Fuels
Gasoline Vapor Recovery Systems Test Procedures. T 17, CCR, 94010, 94011, 94163, 94164, and 94165 and procedures incorporated by reference, and 94166, 94167, and incorporation by reference.	12/12/02	Vapor Recovery

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Measure	Hearing Date	Category
Low Emission Vehicles II. Align Heavy Duty Gas Engine Standards with Federal Standards; minor administrative changes. T 13, CCR, 1961, 1965, 1956.8, 1956.1, 1978, 2065 and documents incorporated by reference	12/12/02	On-road
Zero Emission Vehicle Amendments for 2003. T 13, CCR, 1960.1(k), 1961(a) and (d), 1900, 1962, and documents incorporated by reference	03/25/03	On-road
Ozone Transport Mitigation Regulations. T 17, CCR, 70600 and 70601	05/22/03	Not applicable
Off-Highway Recreation Vehicles. T13, CCR, 2415	07/24/03	Off-road
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.75, 90800.9, 90804, 90800.8, 90801, 90802, and 90803	07/24/03	Not applicable
Specifications for Motor Vehicle Diesel Fuel. T 13 & T 17, CCR, 1961, 2281, 2282, 2701, 2284, 2285, 93114, and incorporated test procedure	07/24/03	Fuels
Solid Waste Collection Vehicles. T 13, CCR, 2020, 2021, 2021.1, 2021.2	09/24/03	On-road
Small Off-Road Engines (SORE). T 13, CCR, 2400-2409, 2405.1, 2405.2, 2405.3, 2750-2754, 2754.1, 2754.2, 2755-2767, 2767.1, 2768-2773 and the documents incorporated by reference	09/25/03	Off-road
Revised Tables of Maximum Incremental Reactivity Values. T 1, CCR, 94700.	12/03/03	Consumer products
Airborne Toxic Control Measure for Diesel Particulate for Transport Refrigeration Units. T 13, CCR, 2022 & 2477	12/11/03	On-road
Airborne Toxic Control Measure for Stationary Compression Ignition Engines. T 17, CCR 93115 & documents incorporate by reference	12/11/03	Other
Diesel Retrofit Verification Procedure, Warranty and In-Use Compliance Requirements (Amendments). T 13, CCR, 2701-2707 & 2709	12/11/03	On-road
Area Designation Criteria and Area Designations for State PM2.5 and Ozone Ambient Air Quality Standards. T 17, CCR, 60201, 60202, 60205, 60210	01/22/04	Not applicable
CA Motor Vehicle Service Information Rule. T 13, CCR, 1969	01/22/04	On-road

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Measure	Hearing Date	Category
Airborne Toxic Control Measure for Diesel-Fueled Portable Engines. T 17, CCR,93116, 93116.1, 93116.2, 93116.3, 93116.4, and 93116.5	02/26/04	Off-road
Modifications to the Statewide Portable Equipment Registration Program (PERP) Regulations . T 13, CCR Amendments to 2450-2465, and repeal of 2466	02/26/04	Off-road
Heavy Duty Diesel Engine-Chip Reflash. T 13, CCR, 2011, 2180.1, 2181, 2184, 2185, 2186, 2192, and 2194	03/27/04	On-road
Engine Manufacturer Diagnostic System Requirements for 2007 and Subsequent Model Heavy Duty Engines. T 13, CCR, 1971	05/20/04	On-road
Consumer Products & Methods 310/ATCM for Para-Dicholorobenzene. T 17, CCR, 94501, 94506, 94507, 94508, 94509, 94510, 94512, 94513, 94515, and 94526, and ARB Method 310, which is incorporated by reference	06/24/04	Consumer products
Urban Bus Engines/Fleet Rule for Transit Agencies. T 13, CCR, 1956.1, 1956.2, 1956.3, and 1956.4,	06/24/04	On-road
Airborne Toxic Control Measure for Diesel Particulate from Diesel Fueled Commercial Vehicle Idling. T 13, CCR, 2485	07/22/04	On-road
Gasoline Vapor Recovery Systems at Dispensing Facilities. Emergency Filing. T 17, CCR, 94011	07/22/04	Vapor Recovery
Unihose Gasoline Vapor Recovery Systems. T17, CCR, 94011	07/22/04	Vapor Recovery
Gasoline Vapor Recovery System Equipment Defects List. T 17, CCR, 94006(b) & incorporated document	08/24/04	Vapor Recovery
Greenhouse Gas. T 13, CCR, 1961.1, 1900, 1961 and Incorporated Test Procedures	09/23/04	On-road
California Reformulated Gasoline, Phase 3. T 13, CCR, 2260, 2262, 2262.4, 2262.5, 2262.6, 2262.9, 2263, 2265 (and the incorporated "California Procedures"), and 2266.5	11/18/04	Fuels
Diesel Fuel Standards for Harborcraft & Locomotives. T 13, CCR, 2299, 2281, 2282, and 2284, and T 17, CCR, 93117	11/18/04	Fuels

Table 9
Measures Adopted by the California Air Resource Board
November 1989 to 2008

Measure	Hearing Date	Category
Enhanced Gasoline Vapor Recovery Systems Extension. T 17, CCR, 94011 and certification procedure	11/18/04	Vapor Recovery
Permit Fee Regulations for Non-vehicular Sources. T17, CCR 90805 and 90806; and 90800.8 and 90803	11/18/04	Not applicable
Emergency Regulation for Temporary Delay of Diesel Fuel Lubricity Standard. T 13, CCR, 2284	11/24/04	Fuels
Airborne Toxic Control Measure for Hexavalent Chromium and Nickel from Thermal Spraying. T 17, CCR, 93102.5	12/09/04	Not applicable
Off-Road Compression Ignition Engines. T 13, CCR, 2420, 2421, 2423, 2424, 2425, 2427	12/09/04	Off-road
Area Designations. T 17, CCR, 60201, 60202, 60205, 60210	01/20/05	Not applicable
Transit Fleet Rule. T 13, CCR, 2023, 2023.1, 2023.2, 2023.3, 2023.4, 1956.1, 2020, 2021, repeal 1956.2, 1956.3, 1956.4	02/24/05	On-road
State Ambient Air Quality Standard for Ozone. T 17, CCR, 70100, 70100.1, and 70200	04/28/05	Not applicable
Airborne Toxic Control Measure for Stationary Compression Ignition Engines (amendments). T 17, CCR, 93115	05/26/05	Other
Definition of Large Confined Animal Facility. T 17, CCR 86500 and 86501	06/23/05	Not applicable
On-Board Diagnostic System Requirements for 2010 and Subsequent Model-Year Heavy-Duty Engines (HD OBD). T 13, CCR, 1971.1	07/21/05	On-road
Reid Vapor Pressure Limit. Emergency Rule. T 13, CCR, 2262 and 2262.4	08/08/05	Fuels
2007-2009 Model-Year Heavy Duty Urban Bus Engines and the Fleet Rule for Transit Agencies. T 13, CCR, 1956.1, 1956.2, and 1956.8	09/15/05	On-road
Portable Fuel Containers (PFC) [Part 2 of 2]. T 13, CCR 2467.2, 2467.3, 2467.4, 2467.5, 2467.6, 2467.7; repeal of 2467.8, and adoption of new 2467.8 and 2467.9.	09/15/05	Off road
Portable Fuel Containers (PFC) [Part 1 of 2]. T 13, CCR, 2467 and 2467.1	09/15/05	Off road
Requirements to Reduce Idling Emissions from New and In-Use Trucks, Beginning in 2008. T 13, CCR section1956.8 and the incorporated document	10/20/05	On-road

Table 9
Measures Adopted by the California Air Resource Board
November 1989 to 2008

Measure	Hearing Date	Category
Airborne Toxic Control Measure for Cruise Ships Onboard Incineration. T 17, CCR, 93119	11/17/05	Off road
Marine Inboard Sterndrive Engines. T 13 CCR 2111, 2112, 2441, 2442, 2444.2, 2445.1, 2446, 2447, and incorporated document	11/17/05	Off-road
Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline. T 13, CCR, 2299.1 and T 17, CCR, 93118	12/08/05	Off-road
Diesel Particulate Matter Control Measure for On-Road Heavy-Duty Diesel-Fueled Vehicles Owned or Operated by Public Agencies and Utilities. T 13, CCR, 2022 and 2022.1	12/08/05	On-road
Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards. T 13, CCR, 2479	12/08/05	Off-road
AB1009 Heavy-Duty Vehicle Smoke Inspection Program. T 13, CCR, 2180, 2180.1, 2181, 2182, 2183, 2184, 2185, 2186, 2187, and 2188, 2189	01/26/06	On-road
Identification of Tobacco Smoke as a Toxic Air Contaminant. T 17, CCR, 93000	01/26/06	Not applicable
Diesel Verification Procedure, Warranty & In-Use. T 13, CCR, 2702, 2703, 2704, 2706, 2707, and 2709.	03/23/06	On-road
Technical Amendments to Evaporative Exhaust and Evaporative Emissions Test Procedures. T 13, CCR, 1961,1976 and 1978.	05/25/06	On-road
Fork Lifts and Other Industrial Equipment. (Large Off-Road Spark Ignition Engines > 1 liter) T 13, CCR 2430, 2433, 2434. Adopt 2775, 2775.1, 2775.2, 2780, 2781, 2783, 2784, 2785, 2786, 2787, 2788, and 2789.	05/26/06	Off-road
California Motor Vehicle Service Information Rule. T 13, CCR, 1969 and incorporated documents	06/22/06	On-road
Gasoline Vapor Recovery Systems. T 17 CCR 94011 and incorporated certification	06/22/06	Vapor Recovery
Portable Equipment Registration Program. T 13, CCR, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, and 2465	06/22/06	Off-road
Off-Highway Recreational Vehicles and Engines. T 13, CCR, 2411-2413, 2415 & documents incorporated by reference	07/20/06	Off-road

Table 9
Measures Adopted by the California Air Resource Board
November 1989 to 2008

Measure	Hearing Date	Category
Heavy-Duty In-Use Compliance Regulation. T 13, CCR, 1956.1, 1956.8, and documents incorporated by reference	09/28/06	On-road
On-Board Diagnostic II. T 13, CCR, 1968.2, 1968.5, 2035, 2037 and 2038	09/28/06	On-road
Distributed Generation Guidelines and Regulations. T 17, CCR, 94201, 94201.1, 94203, 94204, & 94207-942142	10/19/06	Other
Zero Emission Bus Regulation. T13, CCR, 2023.1, 2023.3, & 2023.4	10/19/06	On-road
Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines. T 17, CCR, 93300.5 and document incorporated by reference	11/16/06	Not applicable
Airborne Toxic Control Measure for Cruise Ships and Ocean-Going Ships Onboard Incineration (amendments). T 17, CCR, 93119	11/16/06	Off-road
Airborne Toxic Control Measure for Stationary Compression Ignition Engines (amendments, Agricultural Eng. Exemption removal). T 17, CCR, 93115.1-93115.15.t.	11/16/06	Other
Area Designations for State Ambient Air Quality Standards. T 17, CCR, 60201, 60202, 60205, & 60210	11/16/06	Not applicable
Consumer Products. T 17, CCR, 94508, 94509, 94510, 94513 & 94523	11/17/06	Consumer products
Emergency Regulation for Portable Equipment Registration Program, Airborne Toxic Control Measures and Portable and Stationary diesel-Fueled Engines. T 13, CCR, 2452, 2455, 2456, 2461; T17 CCR 93115, 93116.2, 93116.3	12/06/06	Off-road
Airborne Toxic Control Measure for Chrome Plating and Chromic Acid Anodizing Operations. T 17, CCR, 93102.1-93102.16	12/07/06	Not applicable
Voluntary Accelerated Retirement Regulation. T 13, CCR, 2601-2610 and appendices A-D	12/07/06	On-road
Airborne Toxic Control Measure for Dry Cleaning Perchloroethylene. T 17, CCR, 93109, 93109.1 and 93109.2	01/25/07	Not applicable
State Ambient Air Quality Standard for Nitrogen Dioxide. T 17, CCR, 70100.1 and 70200	02/22/07	Not applicable
Emission Warranty Information Reporting & Recall Regulation. T 13, CCR, 1958, 2111, 2122, 2136, 2141, and documents incorporated therein	03/22/07	On-road

Table 9
Measures Adopted by the California Air Resource Board
November 1989 to 2008

Measure	Hearing Date	Category
Portable Equipment Registration Program and Airborne Toxic Control Measure for Diesel-Fueled Portable Engines. T 13, CCR, 2451, 2452, 2456, 2458, 2459, 2460, 2461, and 2462, T 17, CCR, 93116.1, 93116.2, 93116.3 , 93116.3.1	03/22/07	Off-road
Formaldehyde Emissions from Composite Wood Products. T 17, CCR, 93120 and 93120.1 to 93120.12	04/26/07	Other
CaRFG Phase 3 Amendments. T 13, CCR, 2261, 2262, 2262.3, 2262.4, 2262.5, 2262.9, 2263, 2263.7, 2264.2, 2265 (and the incorporated docs), 2266, 2266.5, 2270, 2271, 2273, 2260(a)(0.5), (0.7), (7.5), (8.5), (10.5), (10.7), (19.7), (23.5), (23.7), 2262.3(d), 2264.2(a)(3), (b)(5), (d), 2265(c)(4), 2265.1, 2265.5, 2266(b)(3), (4), and (5)	06/14/07	Fuels
Emission Control and Smog Index Labels Regulations. T 13, CCR, 1965 and incorporated documents	06/21/07	On-road
Vapor Recovery Aboveground Storage Tanks (AST) T 17, CCR**,** 94010 and 94011, 94016 and 94168 and incorporated documents	06/21/07	Vapor Recovery
In-Use Off-Road Diesel Vehicles. T 13, CCR, 2449	07/26/07	Off-road
Indoor Air Cleaning Devices. T 17, CCR, 94800-94810	09/27/07	Not applicable
Aftermarket Catalyst Regulations. T 13, CCR, 2299.5 and T17, CCR 93118.5 and documents incorporated by reference	10/25/07	On-road
Commercial Harbor Craft. T 13, CCR, 2222 and incorporated "California Evaluation Procedures for New Aftermarket Catalytic Converters"	11/15/07	Off-road
Gaseous Pollutant Measurement Allowances for Heavy-Duty Diesel In-Use Compliance. T 13, CCR, 1956.8 and the documents incorporated by reference	12/06/07	On-road
Greenhouse Gas Mandatory Emission Reporting. T 17, CCR, 95100 to 95133	12/06/07	Not applicable
In-Use Heavy Duty Diesel Drayage Trucks at Ports and Intermodel Railyards. T 13, CCR, 2027	12/06/07	

Table 9
Measures Adopted by the California Air Resource Board
November 1989 to 2008

Measure	Hearing Date	Category
Ocean-Going Vessels At Berth (Shore Power). T 13, CCR, 2299.3 and T 17, CCR, 93118.3 and documents incorporated by reference	12/06/07	Off-road
Verification Procedures, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines. T 13, CCR, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2708, 2709, 2710.	01/24/08	Off-road
Zero Emission Vehicle Standards. T 13, CCR, 1900, 1961, 1962, and 1962.1 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2005 and Subsequent Model ZEVs, and 2001 and Subsequent Model Hybrid EVs, in the Passenger Car, Light-Duty Truck, and Medium-Duty Vehicle Classes." T 13, CCR, 1962.1 and the incorporated "CA Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model ZEVs"	03/27/08	On-road
Consumer Products Regulation. T 17, CCR, 94500-94506.5; 94507-94517, 94520-94528; and 94700-94701	06/26/08	Consumer products
Cleaner Fuels in Ocean-Going Vessel Main Engines and Auxiliary Boiler. T 13, CCR, 2299.2 and T 17, CCR, section 93118.2	07/24/08	Fuels
Spark-Ignition Marine Engines and Boat Regulations. T 13, CCR, 2111, 2112, 2139, 2147, 2440, 2441, 2442, 2443.1, 2443.2, 2443.3, 2444.1, 2444.2, and 2445, and Repeal 2448 and the documents incorporated by reference	07/24/08	Off-road
Portable Outboard Marine Tanks and Components. T 13, CCR, 2468, 2468.1, 2468.2, 2468.3, 2468.4, 2468.5, 2468.6, 2468.7, 2468.8, 2468.9 and 2468.10	09/24/08	Off-road
AB 118 Air Quality Guidelines. T 13, CCR, 2340, 2341, 2342, 2343, 2344, 2345	09/28/08	Not applicable
Large Spark Ignition Engines < 1 liter. T 13, CCR, 2433	11/20/08	Off-road
Small Off-Road Engines. T 13, CCR, 2403, 2405, 2406, 2408, and 2409	11/20/08	Off-road
SmartWay Truck Efficiency. T 17, CCR, 95300, 95301, 95302, 95303, 95304, 95305, 95306, 95307, 95308, 95309, 95310, 95311, and 95312.	12/11/08	On-road
Truck / Bus Regulation 2008	12/11/08	On-road

Table 9 Measures Adopted by the California Air Resource Board November 1989 to 2008		
Measure	**Hearing Date**	**Category**
Gasoline Vapor Recovery System Equipment Defects List. T 17, CCR, 94006	N/A	Vapor Recovery

B. State Rules that Do Not Address Ozone in the San Joaquin Valley

A substantial number of the measures adopted by ARB since late 1989 do not affect ozone-precursor emissions in the San Joaquin Valley. These types of measures include fee rules, identification of toxic air contaminants, area boundary designations, and controls for pollutants other than VOC or NOx (e.g., chromium). Table 10 provides a list of these measures.

Table 10 Measures Adopted by the California Air Resources Board That Do Not Address Ozone in the San Joaquin Valley November 1989 to 2008		
Measure	**Hearing Date**	**Comments**
Transported Pollutants (Ozone). T 17, CCR, 70500	12/04/89	Not an emission reduction measures
Non-vehicular Test Methods. T 17, CCR, 94002, 94003 17, &26, 94146-94149, 94132, 94135, 94139, 94140	01/11/90	Not an emission reduction measures
Test Method for Asbestos in Serpentine Aggregate. T 17, & 26, CCR, 94147, Method 435	04/12/90	Not an ozone control measure
Airborne Toxic Control Measure for Asbestos in Surfacing Applications. T 17, & 26, CCR, 93106	04/12/90	Not an ozone control measure
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.1, 90800, 90802-90803	05/10/90	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90700-90704, 93300-93347	05/10/90	Not an emission reduction measure
Dioxins Airborne Toxic Control Measure for Medical Waste Incinerators. T 17, CCR, 93104	07/12/90	Not an ozone control measure
Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines. T 17, & 26, CCR, 93300-93347	06/14/90	Not an emission reduction measure
Criteria for Area Designations for the State Ambient Air Quality Standard. T 17, CCR, 70303 & 70304	06/14/90	Not an emission reduction measure
Emission Reduction Accounting Procedures for California Clean Air Act. T 17, CCR, 70700-70704	07/12/90	Not an emission reduction measure
Identification of Inorganic Arsenic as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	07/12/90	Not an emission reduction measure
Transport Mitigation Regulations. T 17, CCR, 70600-70601	08/09/90	Not an emission reduction measure

Table 10
Measures Adopted by the California Air Resources Board
That Do Not Address Ozone in the San Joaquin Valley
November 1989 to 2008

Measure	Hearing Date	Comments
Air Toxic Fee Schedule & Emission Inventory Criteria and Guidelines. T 17, & 26, CCR, 90700-90704, 93300-93347	09/13/90	Not an emission reduction measure
Identification of Trichloroethylene as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	10/11/90	Not an emission reduction measure
Revision to Designation Criteria. T 17, CCR, 60200-60204, 60208	11/08/90	Not an emission reduction measure
Controls for Abrasive Blasting. T 17, CCR, 92000, 92200, 92400, 98500, 98510, 92520, 92530	11/08/90	Not an ozone control measure
Identification of Vinyl Chloride as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	11/13/90	Not an emission reduction measure
Identification of Chloroform as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	12/13/90	Not an emission reduction measure
Conflict of Interest Code. T 17, CCR, 95001, et. seq.	12/13/90	Not an emission reduction measure
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.2, 90801, 90803	02/24/91	Not an emission reduction measure
Non - Vehicular Test Methods. T 17, CCR, 94131, 94132, 94142	04/11/91	Not an emission reduction measure.
Acid Deposition Fee Regulations. T 17, CCR, 90621.2, 90620, 90622	04/11/91	Not an emission reduction measure. Obsolete.
Administrative Hearing Procedures. T 17, CCR, 60075.1, 60075.47	05/09/91	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90700 - 90705	06/13/91	Not an emission reduction measure
Agricultural Burning Guidelines. T 17, 80130, 80150, 80250, 80260, 80290	07/11/91	Not an emission reduction measure
Identification of Metallic & Inorganic Nickel Compounds as a Toxic Air Contaminant. T 17, & 26, 93000	08/08/91	Not an emission reduction measure
State Ambient Air Quality Standard for SO2. T 17, CCR, 70100, 70200, 70201	10/10/91	Not an emission reduction measure
Identification of Perchloroethylene as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	10/10/91	Not an ozone control measure
Area Designations. T 17, CCR, 60200, 60209	11/14/91	Not an emission reduction measure
Identification of Formaldehyde as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	03/12/92	Not an ozone control measure
Atmospheric Acidity Protection Fees. T 17, CCR, 90621.3	04/09/92	Not an emission reduction measure
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.3, 90803	04/09/92	Not an emission reduction measure

Table 10
Measures Adopted by the California Air Resources Board
That Do Not Address Ozone in the San Joaquin Valley
November 1989 to 2008

Measure	Hearing Date	Comments
Criteria for Area Designations. T 17, CCR, 70303, 70304	05/14/92	Not an emission reduction measure
Transported Air Pollutants. T 17, CCR, 70500	05/28/92	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90701, 90704, 90705	07/09/92	Not an emission reduction measure
Identification of 1.3 Butadiene as a Toxic Air Contaminant. T 17, & 26, CCR, 93000	07/09/92	Not an emission reduction measure
CFC Refrigerants in Air Conditioning Systems. T 13, CCR, 2500	09/10/92	Not an ozone control measure
Airborne Toxic Control Measure for Emission of Toxic Metals from Non-Ferrous Metal Melting. T 17, & 26, CCR, 93107	12/10/92	Not an ozone control measure
Criteria for Area Designations. T 17, CCR, 70303.5, 60200-60203, 60205, 70303	12/10/92	Not an ozone control measure
Transport Mitigation Regulations. T 17, CCR, 70600, 70601	03/11/93	Not an emission reduction measure
Identification of Federal Hazardous Air Pollutants as Toxic Air Contaminants. T 17, & 26, CCR, 93001, 39665, 39666	04/08/93	Not an emission reduction measure
Acid Deposition Fee Regulations. T 17, CCR, 90622, 90621.4	04/08/93	Not an emission reduction measure
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.4, 90803	04/08/93	Not an emission reduction measure
Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines. T 17, & 26, CCR, 93300-93347	06/10/93	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90700-90705	07/08/93	Not an emission reduction measure
Mitigation Transport Pollutants. T 17, CCR, 70500, 70600	08/12/93	Not an emission reduction measure
Airborne Toxic Control Measure for Perchloroethylene Dry Cleaning. T 17, & 26, CCR, 93109, 93110	10/14/93	Not an ozone control measure
Conflict of Interest. T 17, CCR, 90500	11/18/93	Not an ozone control measure
Criteria for Area Designations. T 17, CCR, 60200-60202, 60204, 60206, 60208, 70300-70306	11/18/93	Not an emission reduction measure
SCAQMD's Reclaim Consideration	03/10/94	Not a SJV control measure
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.5, 90803	04/14/94	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulation. T 17, & 26, CCR, 90700-90705	07/28/94	Not an emission reduction measure
Area Designations. T 17, CCR, 60201, 60204	11/09/94	Not an emission reduction measure

Table 10
Measures Adopted by the California Air Resources Board
That Do Not Address Ozone in the San Joaquin Valley
November 1989 to 2008

Measure	Hearing Date	Comments
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.6, 90803	04/27/95	Not an emission reduction measure
Employee-Based Trip Reductions Emission Formula. T 13, CCR, 2330, 2331, 2332	06/29/95	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulation. T 17, CCR, 90700-90705 and Appendix A	01/25/96	Not an emission reduction measure
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90803, 90800.7	04/25/96	Not an emission reduction measure
Basin Boundaries for Agricultural Burning (Mojave Desert, South Coast & Salton Sea). T 17, CCR, 60104, 60109, 60114, 80280, 80311	05/30/96	Not an emission reduction measure. Not applicable to SJV
Regulation Improvement and Repeal. T 17, CCR, 93301-93355, Appendix A-E (emission inventory)	05/30/96	Not an emission reduction measure
Emissions Inventory Criteria & Guideline Report. T 17, CCR, 93300.5	07/25/96	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulation. T 17, CCR, 90701-90705 Appendix A to §§ 90700-90705	09/26/96	Not an emission reduction measure
Stationary Source Test Methods. T 17, CCR, 94105, 94107, 94114, 94135, 94141, 94143, 94161	09/26/96	Not an emission reduction measure
Area Designations. T 17, CCR, 60201-60209	11/21/96	Not an emission reduction measure
Transport Pollutants. T 17, CCR, 70500, 70600	11/21/96	Not an emission reduction measure
Identification of Inorganic Lead as Toxic Air Contaminant (TAC). T 17, CCR, 93000	04/24/97	Not an emission reduction measure
Interchangeable Emission Reduction Credits. T 17, CCR, 91500	05/22/97	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulation. T 17, CCR 90701-90705 and Appendix A §§ 90700-90705	11/13/97	Not an emission reduction measure
Area Designations '97 . T 17, CCR, §§ 60201 & 60205	11/13/97	Not an emission reduction measure
Permit Fee Regulations for Non-vehicular Sources. T 17,CCR 90800....	01/29/98	Not an emission reduction measure
Classifying Minor Violations. T 17, CCR, 60090-60095	04/23/98	Not an emission reduction measure
Airborne Toxic Control Measure for Chrome Plating. T 17, CCR, 93102	05/21/98	Not an ozone control measure
Identification of Diesel Exhaust as a Toxic Air Contaminant. T 17, CCR, 93000	08/27/98	Not a control measure
Stationary Source Test Methods. T 17, CCR, 94101 - 94104, 94106, 94108 - 94113, 941T 17 - 94124, 94137 and revision of Method 12.	10/22/98	Not an emission reduction measure

Table 10
Measures Adopted by the California Air Resources Board
That Do Not Address Ozone in the San Joaquin Valley
November 1989 to 2008

Measure	Hearing Date	Comments
Administrative Hearing Procedures. T 17, CCR, 60040 and 60075.1-60075.45	10/22/99	Not an emission reduction measure
Area Designations and Criteria for the National and State Ambient Air Quality Standards for Ozone. T 17, CCR, 60301, 60202, 60205, 60206, 70300-70306, 70303.1	10/22/98	Not an emission reduction measure
Air Toxics "Hot Spots" Fee Regulations. T 17, CCR, 90701-90705 and Appendix A	10/22/98	Not an emission reduction measure
Area Designations for State Ambient Air Quality Standards. T 17, CCR, 60201	11/18/99	Not an emission reduction measure
Agricultural Burning Guidelines. T 17 Amendments 80145, 80T 179, 80100-80102, 80110, 80120, 80130, 80140, 80150, 80155, 80160, 80T 170, 80180, 80200, 80210, 80230, 80240, 80250, 80260, 80270, 80280, 80290, 80300, 80310, 80311, 80320, 80330	03/23/00	Not an emission reduction measure
Air Toxic Control Measure for Asbestos Containing Serpentine. T 17, CCR, 93106	07/20/00	Not an ozone control measure
Conflict of Interest Code. T 17, CCR, 95001, 95002, 95005, and subchapter 9	09/28/00	Not a control measure
Rice Straw Conditional Burn Permit Program. T 17, CCR, 80101, 80156-80158	09/28/00	Not a SJV control measure
Air Toxics "Hot Spots" Fee Regulations. T 17, CCR, 90705 tables 1, 2, 3a, 3b, 3c, and 4	10/26/00	Not an emission reduction measure
Area Designations for the State Ambient Air Quality Standard for Ozone. T 17, CCR, 60201	11/16/00	Not an emission reduction measure
Ozone Transport Assessment. T 17, CCR, 70500 & 70600	04/26/01	Not an emission reduction measure
Airborne Toxic Control Measure for Asbestos from Construction, Grading, Quarrying, and Surface Mining. T 17, CCR, 93105	07/26/01	Not an ozone control measure
Air Toxic Control Measures for Auto and Mobile Equip Refinishing Coatings containing Hexavalent Chromium and Cadmium Compounds. T 17, CCR, 93112	09/20/01	Not an ozone control measure
Air Toxics "Hot Spots" Fee Regulation. T 17, CCR, 90700-90705	10/25/01	Not an emission reduction measure

Table 10
Measures Adopted by the California Air Resources Board
That Do Not Address Ozone in the San Joaquin Valley
November 1989 to 2008

Measure	Hearing Date	Comments
Review of California Ambient Air Quality Standards for Particulate Matter and Sulfates. T 17, CCR, 70100,70200, and 70100.1	06/20/02	Not an emission reduction measure
Administrative Civil Penalties Program. T 17, CCR, 60065.1 - 60065.45 and 60075.1 - 60075.45	12/12/02	Not an emission reduction measure
Ozone Transport Mitigation Regulations. T 17, CCR, 70600 and 70601	05/22/03	Not an emission reduction measure
Permit Fee Regulations for Non-vehicular Sources. T 17, CCR, 90800.75, 90800.9, 90804, 90800.8, 90801, 90802, and 90803	07/24/03	Not an emission reduction measure
Area Designation Criteria and Area Designations for State PM2.5 and Ozone Ambient Air Quality Standards. T 17, CCR, 60201, 60202, 60205, 60210	01/22/04	Not an emission reduction measure
Permit Fee Regulations for Non-vehicular Sources. T17, CCR 90805 and 90806; and 90800.8 and 90803	11/18/04	Not an emission reduction measure
Airborne Toxic Control Measure for Hexavalent Chromium and Nickel from Thermal Spraying. T 17, CCR, 93102.5	12/09/04	Not an ozone control measures
Area Designations. T 17, CCR, 60201, 60202, 60205, 60210	01/20/05	Not an emission reduction measure
State Ambient Air Quality Standard for Ozone. T 17, CCR, 70100, 70100.1, and 70200	04/28/05	Not an emission reduction measure
Definition of Large Confined Animal Facility. T 17, CCR 86500 and 86501	06/23/05	Not an emission reduction measure
Identification of Tobacco Smoke as a Toxic Air Contaminant. T 17, CCR, 93000	01/26/06	Not an emission reduction measure
Airborne Toxic Control Measure for Chrome Plating and Chromic Acid Anodizing Operations. T 17, CCR, 93102.1-93102.16	12/07/06	Not an ozone control measure
Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines. T 17, CCR, 93300.5 and document incorporated by reference	11/16/06	No an emission reduction measure
Area Designations for State Ambient Air Quality Standards. T 17, CCR, 60201, 60202, 60205, & 60210	11/16/06	Not an emission reduction measure
Airborne Toxic Control Measure for Dry Cleaning Perchloroethylene. T 17, CCR, 93109, 93109.1 and 93109.2	01/25/07	Not an ozone control measure
State Ambient Air Quality Standard for Nitrogen Dioxide. T 17, CCR, 70100.1 and 70200	02/22/07	Not an emission reduction measure

Table 10
Measures Adopted by the California Air Resources Board
That Do Not Address Ozone in the San Joaquin Valley
November 1989 to 2008

Measure	Hearing Date	Comments
Indoor Air Cleaning Devices. T 17, CCR, 94800-94810	09/27/07	Addresses indoor air quality.
Greenhouse Gas Mandatory Emission Reporting. T 17, CCR, 95100 to 95133	12/06/07	Not an emission reduction measure
AB 118 Air Quality Guidelines. T 13, CCR, 2340, 2341, 2342, 2343, 2344, 2345	09/28/08	Not an emission reduction measure

C. State Fuel Measures

ARB has adopted a number of revisions to its reformulated gasoline program and clean diesel program since 1990, as well as measures addressing other motor vehicle fuels and fuel standards for off-road sources. Table 11 is a list of these revisions.

Table 11
Fuel Measures Adopted by the California Air Resources Board
November 1989 to 2008

Measure	Hearing Date	Comments
Wintertime Limits for Sulfur in Diesel Fuel. T 13, CCR, 2255	06/21/90	Not an ozone control measure. Approved 60 FR 43379 (8/21/95)
Limit on Aromatic Content of Diesel Fuel. T 13, CCR, 2256	12/13/90	Renumbered to section 2282. Approved 60 FR 43379 (8/21/95) (listed as 4/15/01 adoption in FR)
Diesel Fuel Regulations - Emergency. T 13, CCR, 2281(h), 2282(1)	10/15/93	Approved 60 FR 43379 (8/21/95)
Small Refiner Diesel. T 13, CCR, 2282(e)(1)	07/24/94	Approved 60 FR 43379 (8/21/95)
Diesel Fuel Test Methods. T 13, CCR, 1956.8(b), 1960.1(k), 2281(c), 2282(b), (c) and (g)	10/24/96	Proposed for approval, NPR signed 6/30/09
Specifications for Motor Vehicle Diesel Fuel. T 13 & T 17, CCR, 1961, 2281, 2282, 2701, 2284, 2285, 93114, and incorporated test procedure	07/24/03	Proposed for approval, NPR signed 6/30/09
Emergency Regulation for Temporary Delay of Diesel Fuel Lubricity Standard. T 13, CCR, 2284	11/24/04	Temporary delay of standard. Expired

Table 11
Fuel Measures Adopted by the California Air Resources Board
November 1989 to 2008

Measure	Hearing Date	Comments
Diesel Fuel Standards for Harborcraft & Locomotives. T 13, CCR, 2299, 2281, 2282, and 2284, and T 17, CCR, 93117	11/18/04	NOx reductions estimated at 0.1 tpd. Part of ARB commitment. See ARB 6/29/09 Letter
California Reformulated Gasoline (CaRFG), Phase I. T 13, CCR, 2251.5	09/27/90	RVP standard for period between 1992 and 1996. Obsolete.
California Reformulated Gasoline, Phase II. T 13, CCR, 2250, 2255.1, 2252, 2260 - 2272, 2295	11/21/91	Approved 60 FR 43379 (8/21/95)
Wintertime Gasoline Program. T 13, CCR, 2258, 2298, 2251.5, 2296	11/21/91	Not an ozone control measure
Predictive Model for Phase II CaRFG. T 13, CCR, 2261, 2262-2270	06/09/94	Superseded by 11/18/04 & 6/14/07 rules
Test Method for Oxygen in Gasoline. T 13, CCR, 2251.5(c), 2258(c), 2263(b)	06/29/95	Section 2251.5 - obsolete; section 2258 wintertime; section 2263, superseded
Wintertime Oxygenate Program. T 13, CCR, 2258, 2251.5, 2263(b), 2267, 2298, 2259, 2283, 2293.5	09/09/93	Not an ozone control measure
Test Methods for CaRFG 13, CCR, 2263(b)	10/26/95	Superseded by 11/18/04 & 6/14/07 rules
Required Additives in Gasoline (Deposit Control Additives). T 13, CCR, 2257 and incorporates testing procedures.	11/16/95	Superseded by 11/18/04 & 6/14/07 rules
CaRFG Housekeeping & CARBOB. T 13, CCR, 2263.7, 2266.5, 2260, 2262.5, 2264, 2265, 2272	12/14/95	Superseded by 11/18/04 & 6/14/07 rules
CaRFG Variance Requirements. T 13, CCR, 2271 (Emergency)	01/25/96	Superseded by 11/18/04 & 6/14/07 rules
Regulation Improvements and Repeals (fuel additives). T 13, CCR, 2201, 2202	05/30/96	repealed sections
Cleaner Burning Gasoline Model Flexibility. T 13, CCR, Sections 2260, 2262.1, 2262.3, 2262.4, 2262.5, 2262.6, 2262.7 and 2265	08/27/98	Superseded by 11/18/04 & 6/14/07 rules
Gasoline Deposit Control Additive Regulation. T 13, CCR, 2257, and incorporating test procedures	09/24/98	Superseded by 11/18/04 & 6/14/07 rules
Cleaner Burning Gasoline (Increasing the Oxygen Content). T 13, CCR, sections 2262.5(b) and 2265(a)(2)	12/11/98	Wintertime gasoline for South Coast and Imperial County. Not applicable to the SJV area.
Cleaner Burning Gasoline, Oxygen Requirement for Wintertime In Lake Tahoe Area/Gas Pump Labeling for MTBE. T 13, CCR, 2262.5, and 2273	06/24/99	Not applicable to the SJV area/Obsolete

Table 11
Fuel Measures Adopted by the California Air Resources Board
November 1989 to 2008

Measure	Hearing Date	Comments
CaRFG Phase 3 Amendments (Phase out of MTBE, standards, predictive model). T 13, CCR, 2260, 2261, 2262.1, 2262.5, 2263, 2264, 2264.2, 2265, 2266 etc…	12/09/99	2262.1 renumber to 2262.4; 2264 (designation of alternative limits) not approved; otherwise superseded by 11/18/04 and 6/14/07 rules
CaRFG Phase 3 Test Methods. T 13, CCR, sections 2263(b)	11/16/00	Superseded by 11/18/04 & 6/14/07 rules
CaRFG Phase 3 Follow-up Amendments. T 13, CCR, sections 2260, 2261, 2262.3, 2262.5, 2263, 2264, 2265, 2266, 2266.5, 2270, 2272, 2273, 2282, 2296, 2297, 2262.9 and incorporated test procedures	11/16/00	Superseded by 11/18/04 & 6/14/07 rules
CaRFG Phase 3 Amendments. T 13, CCR, 2261, 2262, 2262.4, 2262.5, 2262.6, 2262.9, 2266.5, 2269, 2271, 2272, 2265, and 2296	07/25/02	Superseded by 11/18/04 & 6/14/07 rules
CaRFG Phase 3 Amendments (specifications for De Minimus Levels of Oxygenates and MTBE Phase Out Issues). T 13, CCR, 2261, 2262.6, 2263, 2266.5, 2272, 2273, 2260, 2273.5	12/12/02	Superseded by 11/18/04 & 6/14/07 rule, proposed for approval (except for section 2272 (CARFG3 standards for small refineries) and 2273.5 (requirement to identify gasoline containing ethanol when delivered to retail station))
California Reformulated Gasoline, Phase 3. T 13, CCR, 2260, 2262, 2262.4, 2262.5, 2262.6, 2262.9, 2263, 2265 (and the incorporated "California Procedures"), and 2266.5	11/18/04	Proposed for approval, NPR signed 6/30/09
Reid Vapor Pressure Limit. Emergency Rule. T 13, CCR, 2262 and 2262.4	08/08/05	Operative for September and October 2005 only. Obsolete.
CaRFG Phase 3 Amendments. T 13, CCR, 2261, 2262, 2262.3, 2262.4, 2262.5, 2262.9, 2263, 2263.7, 2264.2, 2265 (and the incorporated docs), 2266, 2266.5, 2270, 2271, 2273, 2260(a)(0.5), (0.7), (7.5), (8.5), (10.5), (10.7), (19.7), (23.5), (23.7), 2262.3(d), 2264.2(a)(3), (b)(5), (d), 2265(c)(4), 2265.1, 2265.5, 2266(b)(3), (4), and (5)	06/14/07	Proposed for approval, NPR signed 6/30/09
Specifications for Alternative Motor Vehicle Fuel. T 13, & 26, CCR, 2290, 2291, 2292.1, 2292.2, 2292.3, 2292.5, 2292.6, 2292.7, 1960.1(k), 1956.8(b), 1956.8(d)	12/12/91	No identifiable emission reductions
Specifications for Alternative Motor Vehicle Fuels. T 13, & 26, CCR, 2290-2292.7, 1960.1(k), 1956.8(b), 1956.8(d)	03/12/92	No identifiable emission reductions

Table 11
Fuel Measures Adopted by the California Air Resources Board
November 1989 to 2008

Measure	Hearing Date	Comments
Specification for Alternative Motor Vehicle Fuels (M100). T 13 CCR, 2292.1	12/08/94	No identifiable emission reductions
Specifications for Liquid Petroleum Gas Used as a Motor Vehicle Fuel. T 13, CCR, 2292.6	12/11/98	No identifiable emission reductions
Liquefied Petroleum Gas Propane Limit Specification Delay. T 13, CCR, 2292.6	03/27/97	Expired

D. State Consumer Product Measures

California has been regulating the VOC content of consumer products for 20 years and continues to tighten standards and regulate more products. Table 12 is a list of ARB's rulemaking actions on consumer products since 1989.

. **Table 12**
Consumer Products Measures Adopted by the California Air Resources Board
November 1989 to 2008

Measure	Hearing Date	Comments
Antiperspirant/Deodorants. T 17, CCR, 94500-94506	11/09/89	Approved 8/21/95 (60 FR 43379)
Consumer Products BAAQMD. T 17, CCR, 94520-94526	06/14/90	Not applicable to the SJV area
Phase I - Consumer Products. T 17, CCR, 94507-94517	10/11/90	Approved 8/21/95 (60 FR 43379)
Phase II - Consumer Products. T 17, CCR, 94501, 94502, 94505, 94514, 94503.5, 94506, 94507 - 94513, 94515	01/09/92	Approved 8/21/95 (60 FR 43379)
Notice of General Public Interest for Consumer Products. T 17, CCR, 94507 - 94517	11/30/92	Not a control measure
Alternative Control Plan for Consumer Products. T 17, CCR, 94540-94555	09/22/94	Voluntary compliance option. No action.
Aerosol Coating Products and Alternative Control Plan. T 17, CCR, 94520-94528, 94540-94543, 94547.	03/23/95	Superseded by 6/22/00 rule.
Antiperspirants and Deodorants, Consumer Products, and Aerosol Coating Products. T 17, CCR, 94500-94506, 94508, 94521	09/28/95	Superseded by 6/24/04 rule for antiperspirants and deodorants; superseded by 11/17/06 rule for consumer products; superseded by 11/17/06 rule for aerosol coating products.

. **Table 12**
Consumer Products Measures Adopted by the California Air Resources Board
November 1989 to 2008

Measure	Hearing Date	Comments
Antiperspirants and Deodorants, Consumer Products, Aerosol Coating Products (ARB Test Method 310). T 17, CCR, 94506(a), 94515(a), 94526	11/21/96	Superseded by 6/24/04 rule for antiperspirants and deodorants; superseded by 11/17/16 rule for consumer products; superseded by 11/17/06 rule for aerosol coating products.
Consumer Products and Aerosol Coating Products Amendments. T 17, CCR, 94508-94515, 99517, 94321	11/21/96	Superseded by 11/17/06 rule
Consumer Products (Hair Spray) Amendments. T 17, CCR, 94509, 94513, 94514	03/27/97	Voluntary compliance option. No action.
Consumer Products (Mid-Term Measures) Amendments. T 17, CCR, 94508, 94509, 94513	07/24/97	Superseded by 11/17/06 rule
Consumer Products (Hairspray Credit Program). T 17, CCR, 94502, 94509, 94522, & 94548	11/13/97	Voluntary compliance option. No action.
Consumer Products, Aerosol Coatings & Antiperspirants and Deodorants. T 17, CCR, 94501, 94508, 94521, 94522, and 94524	11/19/98	Superseded by 11/17/06 rule
Consumer Products - LVP-VOC Definitions And Test Methods. T 17, CCR, 94506, 94506.5, 94508(a)(78), 94515 and 94526, and the amendment of ARB Method 310	11/19/98	Superseded by 6/24/04 rule for test method 310 and 11/17/06 rule for rest.
California Consumer Products Regulation Mid-Term Measures II. T 17, CCR, 94508, 94509, and 94513	10/28/99	Superseded by 11/17/06 rule
Consumer Products Aerosol Adhesives Control Measure. T 17, CCR, 94508, 94509, 94512, 94513	05/25/00	Superseded by 11/17/06 rule
Aerosol (Paint) Coatings Products. T 17, CCR, 94700, 94701, 94521-94524, 94526	06/22/00	Approved 9/13/05 70 FR 53920; superseded by 11/17/06 rule
Antiperspirant and Deodorant Regulations. T 17, CCR, 94502, 94504	10/26/00	Superseded by 6/24/04 rule
Revised Tables of Maximum Incremental Reactivity Values. T 1, CCR, 94700.	12/03/03	Approved 9/13/05 70 FR 53920; superseded by 11/17/06 rule

. Table 12 Consumer Products Measures Adopted by the California Air Resources Board November 1989 to 2008		
Measure	**Hearing Date**	**Comments**
Consumer Products & Methods 310/ATCM for Para-Dicholorobenzene. T 17, CCR, 94501, 94506, 94507, 94508, 94509, 94510, 94512, 94513, 94515, and 94526, and ARB Method 310, which is incorporated by reference	06/24/04	Proposed for approval 74 FR 30481 (June 26, 2009) (EO order date of 5/6/05)
Consumer Products. T 17, CCR, 94508, 94509, 94510, 94513 & 94523	11/17/06	Proposed for approval 74 FR 30481 (June 26, 2009) (EO order date 9/16/07)
Consumer Products Regulation. T 17, CCR, 94500-94506.5; 94507-94517, 94520-94528; and 94700-94701	06/26/08	Pending approval by Office of Administrative Law. Not submitted to EPA.

E. State Vapor Recovery Measures

Under California State law (Health and Safety Code Sections 41954), ARB 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 ARB, in cooperation with districts, to certify vapor recovery systems, identify defective equipment, and develop test methods. The installation and operation of ARB-certified vapor recovery equipment is required and enforced by SJVAPCD Rules 4621 and 4622. Table 13 is a list of rulemaking actions taken by ARB since 1989 that address vapor recovery equipment certification, defects, and/or test methods.

Table 13 Gasoline Vapor Recovery Measures Adopted by the California Air Resources Board November 1989 to 2009		
Measure	**Hearing Date**	**Comments**
Gasoline Vapor Recovery Systems. T 17, CCR, 94010-94015, 94150-94160, 94000-94004, 94007.	06/29/95	ARB sets requirements for and certifies vapor recovery equipment. District rules establish requirements for the installation of ARB-certified equipment. See SJVAPCD Rules 4621 & 4622
Gasoline Vapor Recovery Systems. T 17, CCR, 94010-94015 and 94150, 94156, 94157, 94158, 94159, 94160, 94162	08/27/98	
Gasoline Vapor Recovery Systems. T 17, CCR, 94011, 94153, 94155, and incorporated test procedures, CP-201, TP- 201.4, and TP-201.6	06/24/99	

Table 13
Gasoline Vapor Recovery Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Enhanced Gasoline Vapor Recovery Systems (In Station Diagnostics and Onboard Refueling Vapor Recovery). T 17, CCR, 94011	03/23/00	
Enhanced Gasoline Vapor Recovery Systems (Emergency Filing CP-201, section 18). T 17, CCR, 94011	03/23/00	
Gasoline Vapor Recovery Systems Test Methods and Compliance Procedures. T 17, CCR, 94010, 94011, 94153, 94155, 94163, 94164, 94165 & incorporated procedures	10/25/01	
Gasoline Vapor Recovery Systems Defects. T 17, CCR, 94006 and incorporated document.	11/15/01	
Gasoline Vapor Recovery Systems Test Procedures. T 17, CCR, 94010, 94011, 94163, 94164, and 94165 and procedures incorporated by reference, and 94166, 94167, and incorporation by reference.	12/12/02	
Unihose Gasoline Vapor Recovery Systems. T17, CCR, 94011	07/22/04	
Gasoline Vapor Recovery Systems at Dispensing Facilities. Emergency Filing. T 17, CCR, 94011	07/22/04	
Gasoline Vapor Recovery System Equipment Defects List. T 17, CCR, 94006(b) & incorporated document	08/24/04	
Enhanced Gasoline Vapor Recovery Systems Extension. T 17, CCR, 94011 and certification procedure	11/18/04	
Gasoline Vapor Recovery Systems. T 17 CCR 94011 and incorporated certification	06/22/06	
Vapor Recovery Aboveground Storage Tanks (AST). T 17, CCR, 94010, 94011, 94016 and 94168 and incorporated documents	06/21/07	
Gasoline Vapor Recovery System Equipment Defects List. T 17, CCR, 94006	N/A	

F. State Waiver and Related Measures

Table 14 & Table 15 list measures for on-road and off-road sources adopted by ARB since 1989.

Table 14
On-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Emission Control System Warranty. T 13, CCR, 2035-2041, 1977	12/14/89	Found within the scope 8/14/92 & 4/6/98 (57 FR 38502 (8/25/92) & 63 FR 18406 (4/15/98))
Certification Procedure for Aftermarket Parts. VC 27156 & 38391	02/08/90	Compliance provisions.
Emission Standards for Medium Duty Vehicles. T 13, CCR, 1900, 1956.8, 1960.1, 1968.1, 2061, 2112, 2139	06/14/90	Waiver granted 8/26/94 (59 FR 48625 (9/22/94))
Evaporative Emission Standards. T 13, CCR, 1976	08/09/90	Waiver granted 8/25/94 (59 FR 46979 (9/13/94))
Low Emission Vehicles and Clean Fuels. T 13, CCR, 1900, 1904, 1956.8, 1960.1, 1960.1.5, 1960.5 and 2111, 2112, 2125, and 2139, 2061.	09/28/90	Waivers granted 1/7/93 & 4/6/98 (58 FR 4166 (1/13/93) & 63 FR 18403 (4/15/98))
Heavy Duty Diesel Smoke Emission Testing. T 13, CCR, 2180-2187	11/08/90	Primarily PM control measure
Onboard Diagnostics for Light-Duty Trucks and Light & Medium-Duty Motor Vehicles. T 13, CCR, 1977, 1968.1	09/12/91	Waiver granted 10/2/96 (61 FR 53371 (10/11/96))
Onboard Diagnostic, Phase II. T 13, CCR, 1968.1, 1977	11/12/91	
Low Emission Vehicles amendments revising reactivity adjustment factor (RAF) provisions and adopting a RAF for M85 transitional low emission vehicles. T 13, CCR, 1960.1	11/14/91	Confirm within the scope finding requested
Standards and Test Procedures for Alternative Fuel Retrofit Systems. T 13, CCR, 2030, 2031	05/14/92	Compliance provisions

Table 14
On-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Phase 2 RFG certification fuel specifications. T 13, CCR, 1960.1, 1956.8(d)	08/13/92	Confirm within the scope finding requested
Substitute Fuel or Clean Fuel Incorporated Test Procedures. T 13, CCR, 1960.1(k), 2317	03/12/92	Confirm within the scope finding requested
Smoke Self Inspection Program for Heavy Duty Diesel & Gasoline Engines. T 13, CCR, 2190-2194, 2180-2187, 1956.8(b)	12/10/92	Primarily PM control measure
Certification Requirements for Low Emission Passenger Cars, Light-Duty Trucks & Medium Duty Vehicles. T 13, CCR, 1960.1, 1976, 2061, 1900	01/14/93	Confirm within the scope finding requested
Onboard Diagnostic, Phase II. T 13, CCR, 1968.1	07/09/93	Waiver granted 10/2/96 (61 FR 53371 (10/11/96))
Urban Transit Buses. T 13, CCR, 1956.8, 1965, 2112	06/10/93	Found within the scope. 69 FR 59920 (October 6, 2004)
Evaporative Emission Standards and Test Procedures. T 13, CCR, 1976	02/10/94	Waiver granted 7/28/99 (64 FR 42689 (8/5/99))
Diesel Fuel Certification. T 13, CCR, 1956.8(b)&(d), 1960.1(k), 2292.6	09/22/94	Confirm within the scope finding requested
Self Inspection Program for Heavy Duty Diesel Engines. T 13, CCR, 2190-2194, 2180-2187, 1956.8(b)	11/09/94	Primarily PM control measure
Onboard Diagnostics, Phase II. T 13, CCR,1963.1, & Certification Procedures	12/08/94	Waiver granted 10/2/96 (61 FR 53371 (10/11/96))
Periodic Smoke Inspection Program. T 13, CCR, 2190	12/08/94	Primarily PM control measure
Heavy Duty Vehicle Exhaust Emission Standards. T 13, CCR, 1956.8 and incorporate test procedures.	06/29/95	Found within the scope 9/28/04 (69 FR 59920 (10/6/04))
Onboard Refueling Vapor Recovery Standards. T 13, CCR, 1976, 1978 and incorporate test procedures	06/29/95	Waiver granted 8/13/02 (67 FR 54180 (8/21/02))

Table 14
On-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Retrofit Emission Standards. T 13, CCR, 1956.9, 2030, 2031, and incorporate test procedures	07/27/95	Compliance provision
Low Emission Vehicle Standards 3 (LEV 3). T 13, CCR, 1956.8, 1960.1, 1965, 2101, 2061, 2062, and incorporate test procedures	09/28/95	Confirm within the scope finding requested
Exemption of Military Tactical Vehicles. T 13, CCR, 1905, 2400, 2420	12/14/95	Confirm within the scope
Postpone Zero Emission Vehicle Requirements. T 13, CCR, 1900, 1960.1, 1976	03/28/96	Found within the scope 1/18/01 (66 FR 7751 (1/25/01))
Diesel Fuel Certification Test Methods . T 13, CCR, 1956.8(b), 1960.1(k), 2281(c), 2282(b), (c) and (g)	10/24/96	Confirm within the scope finding requested
Onboard Diagnostics, Phase II, Technical Status. T 13, CCR, 1968.1, 2030, 2031	12/12/96	Confirm within the scope finding requested
Postpone Enhanced Evaporative Emission Requirements for Ultra-Small Volume Vehicle Manufacturers. T 13, CCR, 1976 and incorporate test procedures	05/22/97	Found within the scope 7/28/99 (64 FR 42689 (8/5/99))
Off-Cycle Emissions Supplemental Federal Test Procedures (SFTPs). T 13, CCR, 1960.1, 2101 and incorporate test procedures	07/24/97	Waiver granted 9/30/98 (69 FR 60996 (10/14/04))
Heavy Duty Vehicle Smoke Inspection Program/Periodic Smoke Inspection Program. T 13, CCR, 2180-2188 and 2190-2194	12/11/97	Primarily PM control measure
Heavy Duty Vehicle Regulations: 2004 Standards. T 13, CCR, 1956.8, 1965, 2036, 2112 and test procedures	04/23/98	Confirm within the scope finding requested
Low Emission Vehicles Standards (LEV 2) and Compliance Assurance Program (CAP 2000). T 13, CCR,1961 & 1962 (both new); 1900, 1960.1, 1965, 1968.1, 1976, 1978, 2037, 2038, 2062, 2101, 2106, 2107, 2110, 2112, 2114, 2119, 2130, 2137-2140, 2143-2148	11/05/98	Waiver granted 4/11/03 (68 FR 19811 (4/22/03))/found within the scope 12/21/06 (71 FR 78190 (12/28/06))
Exhaust Standards for (On-Road) Motorcycles. T 13, CCR, 1958	12/10/98	Waiver granted 7/27/06 (71 FR 44027 (8/3/06))

Table 14
On-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Voluntary Accelerated Light Duty Vehicle Retirement Regulations. T 13, CCR, 2600-2610	12/10/98	Revised 12/7/06
Clean Fuels Regulation Requirements. T 13, CCR, sections 2300-2317, and 2303.5, 2311.5	07/22/99	Removal of obsolete provisions, streamlining and other minor changes to 9/1990 rule.
Transit Bus Standards. T 13, CCR, 1956.1, 1956.2, 1956.3, 1956.4, 1956.8, 1965	02/24/00	Combination of fleet requirements, emission standards, and zero-emission bus standards. Fleet requirements achieve approximately 2 tpd NOx reductions statewide, so minimal effect in SJV. Federal & state emission standards are the same for 2010 MY buses. ZEB requirements were revised in 2006 to be delayed until after 2010.
Light-and Medium Duty Low Emission Vehicle Alignment with Federal Standards. Exhaust Emission Standards for Heavy Duty Gas Engines. T 13, CCR, 1956.8 &1961	12/07/00	Waiver granted LDV & HDV 4/11/03 (68 FR 19811 (4/22/03)) Confirm within scope for HDGE.
Heavy Duty Diesel Engines "Not-to-Exceed (NTE)" Test Procedures. T 13 CCR, 1956.8, 2065	12/07/00	Confirm within the scope finding requested
Zero Emission Vehicle Regulation Update. T 13, CCR, 1900, 1960.1(k), 1961, 1962 & incorporated Test Procedure	01/25/01	Found within the scope 12/21/06 (71 FR 78190 (12/28/06))
Zero Emission Vehicle Infrastructure and Standardization of Electric Vehicle Charging Equipment. T 13, CCR, 1900(b), 1962(b) 1962.1	06/28/01	Found within the scope 12/21/06 (71 FR 78190 (12/28/06))
Heavy Duty Diesel Engine Standards for 2007 and Later. T 13, CCR, 1956.8 and incorporate test procedures	10/25/01	Waiver granted 8/19/05 (70 FR 50322 (8/26/05))
Low Emission Vehicle Regulations. T 13, CCR, 1960.1,1960.5, 1961, 1962 and incorporate test procedures and guidelines	11/15/01	Found within the scope 4/21/05 (70 FR 22034 (4/28/05))
California Motor Vehicle Service Information Rule. T 13&17, CCR, 1969 & 60060.1 - 60060.7	12/13/01	Compliance provision. Very similar to EPA regulations at 40 CFR 86.1808.01

Table 14
On-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Voluntary Accelerated Light Duty Vehicle Retirement Regulations. T 13, CCR, 2601-2605, 2606 & appendices C & D, and 2607-2610	02/21/02	Revised 12/7/06
On-Board Diagnostic II Review Amendments. T 13, CCR, 1968.1, 1968.2, 1968.5	04/25/02	Confirm within the scope
Diesel Retrofit Verification Procedure, Warranty and In-Use Compliance Requirements. T 13, CCR, 2700-2710	05/16/02	Procedures to verify diesel retrofit technology.
Revision to Transit Bus Regulations Amendments. T 13, CCR, 1956.1, 1956.2, 1956.4,1956.8, and 2112, & documents incorporated by reference	10/24/02	Slight relaxation in requirements over 2000 rule, PM only.
Low Emission Vehicles II. Align Heavy Duty Gas Engine Standards with Federal Standards; minor administrative changes. T 13, CCR, 1961, 1965, 1956.8, 1956.1, 1978, 2065 and documents incorporated by reference	12/12/02	Confirm within the scope for HDGE standards. Waiver granted 8/19/05 (70 FR 50322 (8/26/05)) for rest.
Airborne Toxic Control Measure for Diesel Particulate from School Bus Idling. T13, CCR, 2480	12/12/02	No emission reductions claimed.
Zero Emission Vehicle Amendments for 2003. T 13, CCR, 1960.1(k), 1961(a) and (d), 1900, 1962, and documents incorporated by reference	03/25/03	Found within the scope 12/21/06 (71 FR 78190 (12/28/06))
Solid Waste Collection Vehicles. T 13, CCR, 2020, 2021, 2021.1, 2021.2	09/24/03	Part of ARB's commitment. Estimated emission reductions 0.26 tpd VOC/0.54 tpd NOx. ARB letter, 6/29/09[12]
Airborne Toxic Control Measure for Diesel Particulate from Transport Refrigeration Units. T 13, CCR, 2022 and 2477	12/11/03	Waiver granted (non-road) 1/9/09 (74 FR 3030 (1/16/2009))
Diesel Retrofit Verification Procedure, Warranty and In-Use Compliance Requirements (Amendments). T 13, CCR, 2701-2707 & 2709	12/11/03	Procedures to verify diesel retrofit technology.

[12] Letter, James N. Goldstene, ARB to Laura Yoshii, EPA, June 29, 2009.

Table 14
On-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
CA Motor Vehicle Service Information Rule. T 13, CCR, 1969	01/22/04	Compliance provision. Very similar to EPA regulations at 40 CFR 86.1808.01
Heavy Duty Diesel Engine-Chip Reflash. T 13, CCR, 2011, 2180.1, 2181, 2184, 2185, 2186, 2192, and 2194	03/27/04	Compliance provision. Part of ARB's commitment. Estimated emission reduction 2.89 tpd NOx. ARB letter, 6/29/09
Engine Manufacturer Diagnostic System Requirements for 2007 and Subsequent Model Heavy Duty Engines. T 13, CCR, 1971	05/20/04	Waiver granted 12/22/05 (71 FR 335 (1/4/06))
Urban Bus Engines/Fleet Rule for Transit Agencies. T 13, CCR, 1956.1, 1956.2, 1956.3, and 1956.4,	06/24/04	Slight relaxation in requirements over 2000 rule, NOx and PM.
Airborne Toxic Control Measure for Diesel Particulate from Diesel Fueled Commercial Vehicle Idling. T 13, CCR, 2485	07/22/04	Part of ARB commitment. Estimated emission reduction 1.34 tpd NOx. ARB letter, 6/29/09
Greenhouse Gas. T 13, CCR, 1961.1, 1900, 1961 and Incorporated Test Procedures	09/23/04	Waiver granted 6/30/09.
Transit Fleet Rule. T 13, CCR, 2023, 2023.1, 2023.2, 2023.3, 2023.4, 1956.1, 2020, 2021, repeal 1956.2, 1956.3, 1956.4	02/24/05	Estimated emission reduction less than 0.1 tpd. ARB letter, 6/29/09
On-Board Diagnostic System Requirements for 2010 and Subsequent Model-Year Heavy-Duty Engines (HD OBD). T 13, CCR, 1971.1	07/21/05	Waiver granted 8/13/08 (73 FR 52042 (9/8/08))
2007-2009 Model-Year Heavy Duty Urban Bus Engines and the Fleet Rule for Transit Agencies. T 13, CCR, 1956.1, 1956.2, and 1956.8	09/15/05	Aligns State emission standards with federal emission standards. Requires transit agencies to mitigate slight NOx increase (max 1.6 tpd statewide, minimal impact in SJV area).
Requirements to Reduce Idling Emissions from New and In-Use Trucks, Beginning in 2008. T 13, CCR section 1956.8 and the incorporated document	10/20/05	Confirm not pre-empted or within the scope finding requested.

Table 14
On-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Diesel Particulate Matter Control Measure for On-Road Heavy-Duty Diesel-Fueled Vehicles Owned or Operated by Public Agencies and Utilities. T 13, CCR, 2022 and 2022.1	12/08/05	Confirm within the scope finding requested. Reductions from measure in 2010 are 0.1 tpd. ARB Letter, 6/29/09.
AB1009 Heavy-Duty Vehicle Smoke Inspection Program. T 13, CCR, 2180, 2180.1, 2181, 2182, 2183, 2184, 2185, 2186, 2187, and 2188, 2189	01/26/06	Requires trucks have emission control labels. Estimated emission reductions in 2010 are 0.15 tpd NOx. ARB letter, 6/29/09.
Diesel Verification Procedure, Warranty & In-Use. T 13, CCR, 2702, 2703, 2704, 2706, 2707, and 2709.	03/23/06	Procedures to verify diesel retrofit technology, supporting rule for in-use control measures.
Technical Amendments to Evaporative Exhaust and Evaporative Emissions Test Procedures. T 13, CCR, 1961,1976 and 1978.	05/25/06	Compliance provisions, adopted to harmonize with EPA requirements.
California Motor Vehicle Service Information Rule. T 13, CCR, 1969 and incorporated documents	06/22/06	Compliance provision. Very similar to EPA regulations at 40 CFR 86.1808.01
On-Board Diagnostic II. T 13, CCR, 1968.2, 1968.5, 2035, 2037 and 2038	09/28/06	Changes to sections with previous waivers.
Heavy-Duty In-Use Compliance Regulation. T 13, CCR, 1956.1, 1956.8, and documents incorporated by reference	09/28/06	Related to enforcement of heavy duty diesel engine standards. Compliance program "essentially identical to EPA's." See Updated Information Digest for the Rule.
Zero Emission Bus Regulation. T13, CCR, 2023.1, 2023.3, & 2023.4	10/19/06	Delays ZEB requirements until after 2010.
Voluntary Accelerated Retirement Regulation. T 13, CCR, 2601-2610 and appendices A-D	12/07/06	Establishes standards for a voluntary accelerated retirement program.
Emission Warranty Information Reporting & Recall Regulation. T 13, CCR, 1958, 2111, 2122, 2136, 2141, and documents incorporated therein	03/22/07	Compliance provisions for waived emission standards.
Emission Control and Smog Index Labels Regulations. T 13, CCR, 1965 and incorporated documents	06/21/07	Labeling requirement to provide consumers better information on GHG and smog impacts of new cars.

Table 14
On-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Aftermarket Catalyst Regulations. T 13, CCR, 2299.5 and T17, CCR 93118.5 and documents incorporated by reference	10/25/07	Compliance provision. Estimated emission reductions 1.10 tpd NOx. ARB letter, 2009.
In-Use Heavy Duty Diesel Drayage Trucks at Ports and Intermodel Railyards. T 13, CCR, 2027	12/06/07	Estimated increase in NOx emission in 2010 with decrease only after. See ISOR, p. 15.
Gaseous Pollutant Measurement Allowances for Heavy-Duty Diesel In-Use Compliance. T 13, CCR, 1956.8 and the documents incorporated by reference	12/06/07	Identical to EPA's requirements. See Updated Information Digest for the Rule
Verification Procedures, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines. T 13, CCR, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2708, 2709, 2710. T 13, CCR	01/24/08	Procedures to verify diesel retrofit technology, supporting rule for in-use control measures.
Zero Emission Vehicle Standards. T 13, CCR, 1900, 1961, 1962, and 1962.1 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2005 and Subsequent Model ZEVs, and 2001 and Subsequent Model Hybrid EVs, in the Passenger Car, Light-Duty Truck, and Medium-Duty Vehicle Classes." T 13, CCR, 1962.1 and the incorporated "CA Exhaust Emission Standards and Test Procedures for 2009 and Subsequent Model ZEVs"	03/27/08	Changes to sections with previous waivers.
Truck / Bus Regulation 2008	12/11/08	No emission reduction credit claimed in 1-hour plan.
SmartWay Truck Efficiency. T 17, CCR, 95300, 95301, 95302, 95303, 95304, 95305, 95306, 95307, 95308, 95309, 95310, 95311, and 95312.	12/11/08	Pending Office of Administrative Law approval. No emission reduction credit claimed in 1-hour plan.

Table 15
Off-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Emission Standards for Utility and Lawn and Garden Engines. T 17, CCR, 2400 et. seq.	12/13/90	Waiver granted 60 FR 48981 (9/21/95)
1-year Implementation Delay in Emission Standards for Utility Engines. T 13, CCR, 2400, 2403-2407	04/08/93	Obsolete
Utility and Lawn and Garden Equipment Engines. T 13, CCR, 2403(c), 11(a)(1)(I)(ii), 4(a)(1)(I)(ii)	07/28/94	Unknown effect.
Relaxation of Carbon Monoxide Emission Standards for Utility Engines. T 13, CCR, 2403 and incorporating test procedures	01/25/96	Tier II standards. Superseded.
Wintertime Requirements for Utility Engines & Off-Highway Vehicles. T 13, CCR, 2403	09/26/96	Relaxation of standards applicable to winter only equipment
Small Off-Road Engines (SORE). T 13, CCR, 2400,2410-2414	03/26/98	Waiver granted/found within the scope, 11/10/03 (71 FR 75536 (12/15/06)).
Small Off-Road Engines (SORE). T 13, CCR, 2400-2409, 2405.1, 2405.2, 2405.3, 2750-2754, 2754.1, 2754.2, 2755-2767, 2767.1, 2768-2773 and the documents incorporated by reference	09/25/03	Waiver granted for MY 2007 engines, 12/11/06 (71 FR 75536 (12/15/2006))
Small Off-Road Engines. T 13, CCR, 2403, 2405, 2406, 2408, and 2409	11/20/08	Pending Office of Administrative Law approval.
Off-Highway Recreational Vehicles. T 13, CCR, 2410-2414, 2111-2140	01/03/94	Waiver granted 12/23/96 (61 FR 69093 (12/31/1996))
1997 & Later Model Off-Highway Recreational Vehicles and Engines. T 13, CCR, 2410-2414, 2415	12/10/98	Allows limited use of non-compliant OHRV in certain area during certain seasons. Not an ozone control measure.
Off-Highway Recreation Vehicles. T13, CCR, 2415	07/24/03	Makes chances to riding season restrictions. No effect on ozone.
Off-Highway Recreational Vehicles and Engines. T 13, CCR, 2411-2413, 2415 & documents incorporated by reference	07/20/06	Revised riding seasons and adopted evaporative emission standards identical to EPA's. See Updated Information Digest for the Rule.
Heavy Duty Diesel Cycle Engines. T 13, CCR, 2420-2427	01/09/92	Waiver granted, 5/15/95 (60 FR 48981 (9/21/1995))
Exemption of Military Tactical Vehicles. T 13, CCR, 1905, 2400, 2420	12/14/95	Confirm within the scope finding requested

Table 15
Off-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Off-Road Compression Ignition Engines. T 13, CCR, 2111, 2112, 2137, 2139, 2140, 2141, 2144, 2400, 2401, 2403, 2420, 2421, 2423-2427, & appendix A to article 2.1.	01/27/00	Similar to or same as EPA's emission standards. See Updated Information Digest for the Rule. Notice of opportunity for public hearing and comment (on waiver), 73 FR 58583 (10/7/2008)
Off-Road Compression Ignition Engines. T 13, CCR, 2420, 2421, 2423, 2424, 2425, 2427	12/09/04	Harmonizes to EPA's Tier 4 standards. See Updated Information Digest for the Rule. Notice of opportunity for public hearing and comment (on waiver), 73 FR 58583 (10/7/2008)
Large Off-Road Spark-Ignition Engine Regulations. T 13, CCR, 2430 et seq., and 2411-2414	10/22/98	Waiver granted 5/15/06 (71 FR 29623 (5/23/2006))
Fork Lifts and Other Industrial Equipment. (Large Off-Road Spark Ignition Engines > 1 liter) T 13, CCR 2430, 2433, 2434. Adopt 2775, 2775.1, 2775.2, 2780, 2781, 2783, 2784, 2785, 2786, 2787, 2788, and 2789.	05/26/06	Adopts EPA's Standards for 2007; Adopts more stringent standards for 2010. Waiver requested.
Large Spark Ignition Engines < 1 liter. T 13, CCR, 2433	11/20/08	Pending approval by Office of Administrative Law. New standards start in 2011
Emission Standards and Test Procedures for 2001 Marine Engines. T 13, CCR, 2440 et seq	12/10/98	Waiver granted March 22, 2007 (59 FR 14546 (March 28, 2007))
Marine Inboard Engines. T 13, CCR, 2111, 2112, 2139, 2140, 2147, 2440-2442, 2443.1-2443.3, 2444, 2445.1, 2445.2, 2446, 2444.2 and incorporation of documents by reference	07/26/01	Waiver granted in part March 22, 2007 (59 FR 14546 (March 28, 2007)) 2007 standards not waived pending additional testing
Marine Inboard Sterndrive Engines. T 13 CCR 2111, 2112, 2441, 2442, 2444.2, 2445.1, 2446, 2447, and incorporated document	11/17/05	Revision to year 2007 standards in 7/26/01 marine inboard engine standards. Waiver requested.
In-Use Off-Road Diesel Vehicles. T 13, CCR, 2449	07/26/07	Notice of opportunity for public hearing and comment (on waiver), 73 FR 58585 (10/7/2008). Rule modified in January 2009. Estimated NOx reductions statewide in 2010 are 13 tpd.

Table 15
Off-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Portable Outboard Marine Tanks and Components. T 13, CCR, 2468, 2468.1, 2468.2, 2468.3, 2468.4, 2468.5, 2468.6, 2468.7, 2468.8, 2468.9 and 2468.10	09/24/08	Comparable EPA standards (see 40 CFR part 1060). Pending Office of Administrative Law approval. No emission reductions claimed.
Spark-Ignition Marine Engines and Boat Regulations. T 13, CCR, 2111, 2112, 2139, 2147, 2440, 2441, 2442, 2443.1, 2443.2, 2443.3, 2444.1, 2444.2, and 2445, and Repeal 2448 and the documents incorporated by reference	07/24/08	Rule not finalized. Public comment period closed May 30, 2009.
Portable Equipment Registration Program. T 13, CCR, 2450-2465	03/27/97	Waiver requested 12/5/2008.
Revisions to Statewide Portable Equipment Registration Program. T 13, CCR, 2450-2463	12/10/98	Waiver requested 12/5/2008.
Modifications to the Statewide Portable Equipment Registration Program (PERP) Regulations . T 13, CCR Amendments to 2450-2465, and repeal of 2466	02/26/04	Waiver requested 12/5/2008.
Airborne Toxic Control Measure for Diesel-Fueled Portable Engines. T 17, CCR,93116, 93116.1, 93116.2, 93116.3, 93116.4, and 93116.5	02/26/04	Waiver requested 12/5/06.
Portable Equipment Registration Program. T 13, CCR, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, and 2465	06/22/06	Waiver requested 12/5/2008.
Emergency Regulation for Portable Equipment Registration Program Airborne Toxic Control Measures and Portable and Stationary diesel-Fueled Engines. T 13, CCR, 2452, 2455, 2456, 2461; T17 CCR 93115, 93116.2, 93116.3	12/06/06	Allows registration of Tier 1 and 2 standard engines, increased fees on such engines. Waiver requested 12/5/2008.
Portable Equipment Registration Program and Airborne Toxic Control Measure for Diesel-Fueled Portable Engines. T 13, CCR, 2451, 2452, 2456, 2458, 2459, 2460, 2461, and 2462, T 17, CCR, 93116.1, 93116.2, 93116.3 , 93116.3.1	03/22/07	Made permanent emergency regulations. Waiver requested 12/5/2008.
Aftermarket Parts for Off-Road Engines. T 13, CCR, 2470-2476	11/19/98	Reductions not estimated. Compliance measure
Portable Container Spillage Control Measure. T 13, CCR, 2470-2478	09/23/99	Similar federal regulation. 40

Table 15
Off-Road Mobile Source Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Portable Fuel Containers (PFC) [Part 1 of 2]. T 13, CCR, 2467 and 2467.1	09/15/05	CFR part 59, subpart F.
Portable Fuel Containers (PFC) [Part 2 of 2]. T 13, CCR 2467.2, 2467.3, 2467.4, 2467.5, 2467.6, 2467.7; repeal of 2467.8, and adoption of new 2467.8 and 2467.9.	09/15/05	
Airborne Toxic Control Measure for Diesel Particulate for Transport Refrigeration Units. T 13, CCR, 2022 & 2477	12/11/03	Waiver granted (non-road) 1/9/09 (74 FR 3030 (1/16/2009))
Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards. T 13, CCR, 2479	12/08/05	Waiver requested 1/12/07
Airborne Toxic Control Measure for Cruise Ships Onboard Incineration. T 17, CCR, 93119	11/17/05	No emission reductions. No cruise ships subject to rule call at SJV ports. See Initial Statement of Reasons for Rule, p. II-1.
Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline. T 13, CCR, 2299.1 and T 17, CCR, 93118	12/08/05	No emission reductions claimed.
Airborne Toxic Control Measure for Cruise Ships and Ocean-Going Ships Onboard Incineration (amendments). T 17, CCR, 93119	11/16/06	No emission reductions claimed.
Ocean-Going Vessels At Berth (Shore Power). T 13, CCR, 2299.3 and T 17, CCR, 93118.3 and documents incorporated by reference	12/06/07	No emission reductions claimed
Commercial Harbor Craft. T 13, CCR, 2222 and incorporated "California Evaluation Procedures for New Aftermarket Catalytic Converters"	11/15/07	No emission reductions claimed
Cleaner Fuels in Ocean-Going Vessel Main Engines and Auxiliary Boiler. T 13, CCR, 2299.2 and T 17, CCR, section 93118.2	07/24/08	No emission reductions claimed

G. Other State Measures

A number of ARB measures do not fall into one of the categories of measures listed on Table 8 through 15. These measures are listed below in Table 16.

Table 15
Other Not Previously Listed Measures Adopted
by the California Air Resources Board
November 1989 to 2009

Measure	Hearing Date	Comments
Airborne Air Toxic Measure for Ethylene Oxide from Sterilizers & Aerators. T 17, CCR, 93108	05/10/90	Covered by District Rule 7021 emissions in category are less than 0.01 tpd
Air Toxic Control Measure for Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Facilities. T 17, CCR, 93111	04/27/00	VOC emissions less than 0.01 tpd
Distributed Generation Guidelines and Regulations. T 17, CCR, 94200-94214	11/15/01	Minimal impact, few units certified. See ISOR for 9/28/06 rule amendment
Airborne Toxic Control Measure for Outdoor Residential Waste Burning. T 17, CCR, 93113	02/21/02	Regulated by Rules 4103 & 4106. Rule 4103 (revised 5/19/05), approved 70 FR 18216 (4/11/06), revised 5/17/07, proposed for approval 74 FR 30485 (6/26/09). Rule 4106 (revised 6/21/01), approved 67 FR 8894 (2/27/02).
Airborne Toxic Control Measure for Stationary Compression Ignition Engines. T 17, CCR 93115 & documents incorporate by reference	12/11/03	PM control measure. NOx regulated by Rule 4702. (approved 73 FR 1819 (1/10/08))
Airborne Toxic Control Measure for Stationary Compression Ignition Engines (amendments). T 17, CCR, 93115	05/26/05	Changed PM standards for stationary agricultural pumps.
Airborne Toxic Control Measure for Stationary Compression Ignition Engines (amendments, Agricultural Eng. Exemption removal). T 17, CCR, 93115.1-93115.15.t.	11/16/06	PM control measure. NOx regulated by Rule 4702. (approved 73 FR 1819 (1/10/08)) Compliance dates are after 2010.
Distributed Generation Guidelines and Regulations. T 17, CCR, 94201, 94201.1, 94203, 94204, & 94207-942142	10/19/06	Addition of standards that apply in 2013.
Formaldehyde Emissions from Composite Wood Products. T 17, CCR, 93120 and 93120.1 to 93120.12	04/26/07	Emission reductions not relied on in attainment demonstration

V. RACM Analysis

A. The RACM Requirement and the RACM Analysis in the 2004 SIP

CAA section 172(c)(1) requires nonattainment area plans to provide for the implementation of all reasonably available control measures (RACM) including reasonably available control technology (RACT). RACM is not listed in 40 CFR 51.900(f) as an applicable requirement following revocation of the 1-hour ozone standard; however, EPA interprets the RACM requirement to be a component of an area's attainment demonstration. See General Preamble at 13560.

EPA has previously provided guidance interpreting the RACM requirement in the General Preamble at 13560 and a memorandum entitled "Guidance on the Reasonably Available Control Measure Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas," John Seitz, Director, OAQPS to Regional Air Directors, November 30, 1999 (Seitz memo). In summary, EPA guidance provides that states, in addressing the RACM requirement, should consider all potential measures for source categories in the nonattainment area to determine whether they are reasonably available for implementation in that area and whether they would advance the area's attainment date by one year.

Under the CAA, RACT is required for major VOC sources and for all VOC source categories for which EPA has issued Control Techniques Guideline (CTG) documents. In addition, EPA has issued Alternative Control Techniques (ACT) documents to help states in making RACT determinations. CAA sections 172(c)(1), 182(a)(2)(A), 182(b)(2), and 183(a) and (b). CAA section 182(f) requires that RACT also apply to major stationary sources of NOx. In extreme areas, a major source is a stationary source that emits or has the potential to emit 10 tons of VOC or NOx per year. CAA section 182(e). The RACT requirement in 182(b)(2), the major source threshold in section 182(e) as it applies to RACT, and the application of RACT to major sources of NOx are applicable requirements under the Phase 1 rule. ' 51.905(a)(1)(i) and ' 51.900(f)(1), (3) and (12).

To determine which measures would be feasible for the SJV, the District looked at measures implemented in other areas (including the South Coast Air Basin, the San Francisco Bay Area, and the Houston-Galveston area), documents produced by ARB, as well as measures suggested by the public at local workshops. The District then screened the identified measures and rejected those that affected few or no sources in the SJV, had already been adopted as rules, or were in the process of being adopted. The remaining measures were evaluated using baseline inventories, available control technologies, and potential emission reductions as well as whether the measure could be implemented on a schedule that would contribute to attainment of the 1-hour ozone standard by the 2010 deadline. 2004 SIP, section 4.2.1.

Based on this evaluation, the District developed an expeditious rule adoption schedule listing 21 measures involving adoption of eight new rules and revisions to over 20 existing rules. 2004 SIP, Table 4-1. Since submittal of the SIP in 2004, the District has completed action on these rules and submitted them to EPA for approval. 2008 Clarifications, Table 1 and Table 2 below.

In addition to the District's efforts, the eight San Joaquin Valley Regional Transportation Planning Agencies (RPTAs) also conducted a RACM evaluation for transportation sources. This evaluation, described in section 4.6.3. of the 2004 SIP, resulted in extensive local government

commitments to implement programs to reduce auto travel and improve traffic flow. 2004 SIP, section 4.6 and Appendix C. The local governments also provide reasoned justifications for any measures that they did not adopt. See 2004 SIP, Appendix C.

The 2004 SIP relies on the 2003 State Strategy to address mobile and area source categories not under the District's jurisdiction. 2004 SIP, section 4.7. Table I-1 in the 2003 State Strategy shows the impressive list of both mobile and area source measures that have been adopted by California between 1994 and 2003, along with the mobile source rules that have been adopted by EPA during this period. Table I-2 lists proposed new State measures, most of which have already been adopted.[13] This list of new State measures was developed through a public process intended to identify and refine new emission reductions strategies for California. 2003 State Strategy, page ES-5.

The 2004 SIP includes a brief section 4.2.5 discussing the RACT obligation and specific source categories where further analysis and potential future controls may be required in order to ensure that RACT levels of control are applied to sources down to the 10 tons per year (tpy) level. The District concluded that only a few categories would need additional work, since the District's existing rules already applied a stringent degree of control to sources with relatively low levels of emissions.

The State has since formally withdrawn the RACT portion of the 2004 SIP, specifically section 4.2.5. See 2008 Clarifications, page 3. On January 21, 2009, we made a finding that California has failed to submit the required RACT demonstration for the 1-hour ozone standard and initiated sanction and federal implementation plan (FIP) clocks under CAA sections 179(a) and 110(c). 74 FR 3442.

On June 17, 2009, California submitted a revised 8-hour RACT demonstration adopted by the District on April 16, 2009.[14] The State's intent is that this submittal address not only the failure to submit finding for the 1-hour ozone RACT demonstration but also to address issues raised by EPA regarding 2006 RACT SIP and to assure that the rules cover sources in the SJV down to the extreme area major source threshold of 10 tpy. See letter from Andrew Steckel, EPA, to George Heinen, SJVAPCD, May 6, 2008. We are currently reviewing the revised RACT plan.

B. RACM for Non-RACT Source Categories

The District's, RPTAs', and State's efforts to evaluate potential controls for the 2004 SIP was thorough and meet our guidance for RACM analyses. We, therefore propose to find that the

[13] See chapter 3 (page 38) of the "Air Resources Board's Proposed State Strategy for California's 2007 State Implementation Plan," Revised Draft (Release date: April 26, 2007) (2007 State Strategy) and "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," ARB, April 24, 2009.

[14] California submitted SJVAPCD's initial RACT demonstration plan (adopted August 17, 2006) to EPA on January 31, 2007.

2004 SIP, the 2003 State Strategy, and the District's and California's adopted rules and commitments to adopt and implement controls provide for RACM on source not subject to the CAA sections 182(b)(2) RACT requirement.

C. Reductions Need to Advance Attainment by One Year

Because we have yet to find that the District has implemented RACT, we must first look to see if the implementation of RACT would advance attainment before we can fully conclude that the 2004 SIP meets the CAA section 172(c)(1) RACM requirement.

"To advance attainment one year" for the purposes of the 2004 SIP means to implement sufficient measures to reduce emission levels to the level needed for attainment in 2009 rather than 2010. In order to do this, there must be sufficient reasonably available control measure to compensate for the increment of additional reductions generated by baseline measures between 2009 and 2010, plus any increment of reductions generated by new measures that rely on fleet turn over or other accumulation-over-time emission reduction strategy (e.g., incentive programs).

To calculate this level of emission reductions, we looked to the baseline emission inventory in the 2004 SIP for 2008 and 2010 (2004 SIP, Table 3-1), calculated the difference between these two years and divided this number by two to determine the annual rate of inventory change between 2008 and 2010. This calculation gives us the low end of the range of emission reductions needed to advance attainment by one year. The high end of the range is calculated by assuming that ARB will fulfill its commitment to 15 tpd VOC and 20 tpd NOx by adopting engine emission standards or retrofit requirements that would accumulate reductions steadily over the 6 years between November 15, 2004 (submittal date of the 2004 SIP) and November 15, 2010 (attainment date). We summarize these calculations in Table 10.

Table 17
Reductions Need to Advance Attainment One Year
Tons per Summer Day

	VOC	NOx
2008 baseline inventory	374.9	429.1
2010 baseline inventory	367.6	401.7
Baseline reduction between 2008 and 2010	7.3	27.4
Baseline per year reduction (low end)	3.7	13.7
ARB Commitment	15	20
ARB commitment per year (1/6)	2.5	3.3

Table 17 Reductions Need to Advance Attainment One Year Tons per Summer Day		
	VOC	**NOx**
Baseline reduction + ARB commitment (high end)	6.2	17.0

D. Preliminary RACT Analysis

Because we have proposed to concluded that the SJV 1-hour plan has addressed RACM for all non-RACT emission categories, we now look to see if application of RACT to major sources and other source categories that require RACT would provide the additional reductions needed to advance attainment.

In order to advance attainment, substantial reductions are needed from both VOC *and* NOx sources. Hence, if sufficient reductions from additional RACT-level controls cannot be identified for one of these pollutants, then we can conclude that attainment cannot be advanced and do not need to evaluate potential emission reductions from measures for the other pollutant.

Because there are fewer NOx rules than VOC rules, we will look first at potential emission reductions from imposing more stringent controls on major sources of NOx in the Valley as well as on other NOx sources. **Please note that this analysis is not a determination of what constitutes RACT for specific source categories in the SJV nor that the District has implemented RACT**. Rather it is a very rough estimate of the potential for additional NOx reductions and is intended solely to determine if it is possible to advance attainment of the 1-hour ozone standard in SJV.

Table 18 is a list of all SJVAPCD's rules that control NOx emissions. For each rule, we have indicated whether or not EPA has determined that the latest version of the rule meets RACT and, if not, the potential additional reductions from further strengthening the rule. The estimates for additional reductions come, for the most part, from the SJV's 2007 Plan for Attaining the 8-hour Ozone Standard.

As can be seen from Table 18, we estimate that at most an additional 2.8 tpd of NOx reductions can be achieved from further tightening of the District's NOx rules given existing information. If we combine this number with the 4 tpd NOx reduction from the District's Indirect Source Review Rule (Rule 9150) which we are currently not crediting in the attainment demonstration, we estimate that at most, there is an additional 6.8 tpd of NOx available to expedite attainment. This level of reductions is well short of the low end estimate of 13.7 tpd of NOx needed to advance attainment in the SJV from 2010 to 2009.

Because the requisite level of NOx reductions to expedite attainment are not available, we do not need to evaluate the potential additional VOC reductions that may be achieved from

the District rules assuming the current rules do not meet RACT. We can, however, conclude that there are not reasonably available control measures, including RACT, that can advance attainment of the 1-hour ozone standard in the San Joaquin Valley.

Table 18
Preliminary Analysis of Additional NOx Reductions from Potential RACT Measures

Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Approved	Federal Register Cite	Potential Additional Reductions in 2010	Comments
4103	Open Burning	5/17/2007	5/17/2007	74 FR 57907 (11/10/2009)	1.30	Not a RACT source. Additional reductions from expected 2010 revisions to rule are 1.3 tpd in 2011.
4301	Fuel Burning Equipment	5/21/1992	5/21/1992	64 FR 26876 (5/18/1999)	0.00	NOx limits for these sources set by other rules.
4302	Incinerator Burning	12/16/1993	12/16/1993	64 FR 45170 (8/19/1999)	0.05	Total inventory from non-flare incinerators is 0.05 tpd in 2010. Reductions assume elimination of the source category. This is a conservative assumption and not an indication that EPA believes that RACT for this source category is elimination of the source.
4303	Orchard Heaters	12/16/1993	12/16/1993	64 FR 45170 (8/19/1999)	0.00	Not an ozone season requirement.
4304	Equipment Turning Procedures for Boilers, Steam Generators, and Process Heaters	10/19/1995	10/19/1995	66 FR 57666 (11/16/01)	0.00	No NOx limits.
4305	Boilers, Steam Generators, and Process Heaters - Phase 2	8/21/2003	8/21/2003	69 FR 28061 (5/18/04)	0.00	Rule superseded by Rules 4306, 4307 and 4308.

Table 18
Preliminary Analysis of Additional NOx Reductions from Potential RACT Measures

Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Approved	Federal Register Cite	Potential Additional Reductions in 2010	Comments
4306	Boilers, Steam Generators, and Process Heaters - Phase 3	10/16/2008	9/18/2003	69 FR 28061 (5/18/04)	0.00	Found to be RACT. Estimated reductions from 2008 revisions are 0.0 tpd prior to 2011. 8-hour SIP Table 6-1.
4307	Boilers, Steam Generators, and Process Heaters - 2.0 MM BTU/hr to 5.0 MMBTU/hr	10/16/2008	4/20/2006	72 FR 29887 (5/30/07)	0.00	Found to be RACT. Estimated reductions from 2008 revisions are 0.0 tpd prior to 2012.
4308	Boilers, Steam Generators, and Process Heaters - 0.75 MM BTU/hr to 2.0 MMBTU/hr	10/20/2005	10/20/2005	72 FR 29886 (5/30/07)	0.00	Found to be RACT
4309	Dryers, Dehydrators and Ovens	12/15/2005	12/15/2005	72 FR 29886 (5/30/07)	0.00	Found to be RACT
4311	Flares	6/15/2006	6/20/2002 6/15/2006	68 FR 8835 (2/26/03) NPR - 72 FR 65283 (11/20/07)	0.08	Proposed to be RACT. District is scheduled to adopt revision to rule in 2nd Q/09 with no additional reductions. (See 8-hour SIP, table 6-1). Total emission in this category are 0.08 tpd. 2009 RACT SIP, p. 4-56.
4313	Lime Kilns	3/27/2003	3/27/2003	68 FR 52510 (9/4/2003)	0.00	Found to be RACT. Emissions in this category are less than 0.005 tpd. See 2009 RACT SIP, p. 59
4320	Advanced Emission Reduction	10/16/2008	N/A	N/A		Not applicable - incentive program for control levels beyond RACT.

Table 18
Preliminary Analysis of Additional NOx Reductions from Potential RACT Measures

Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Approved	Federal Register Cite	Potential Additional Reductions in 2010	Comments
	Option for Boilers					
4351	Boilers, Steam Generators, and Process Heaters	8/21/2003	8/21/2003	69 FR 28061 (5/18/04)		Superseded by Rules 4306, 4307, 4308.
4352	Solid Fuel Fired Boilers, Steam Generators, and Process Heaters	5/18/2006	(proposed) 5/18/2006	NPR 74 FR 65042 (12/11/2009)	0.00	Most limits are proposed to be RACT
4354	Glass Melting Furnaces	10/16/2008	8/17/2006	72 FR 41894 (8/01/07)	1.20	Approved revision found to be RACT. Reductions from 10/16/08 revision are estimated at 1.2 tpd NOx.
4405	Oxides of Nitrogen Emissions from Existing Steam Generators (Central and Western Kern County)	1992	not submitted	N/A	0.00	Superseded by Rule 4306.
4701	I/C Engines - Phase 1	8/21/2003	8/21/2003	69 FR 28061 (5/18/04)	0.00	Rule superseded by Rule 4702.
4702	I/C Engines - Phase 2	1/18/2007	1/18/2007	73 FR 1819 (1/10/08)	0.00	Found to be at least RACT.
4703	Stationary Gas Turbines	9/20/2007	9/20/2007	74 FR 53888 (10/21/2009)	0.00	Found to be RACT

Table 18
Preliminary Analysis of Additional NOx Reductions from Potential RACT Measures

Rule No.	Rule	Date of Most Recent Rule Adopted/ Revised	Date of Most Recent Rule Approved	Federal Register Cite	Potential Additional Reductions in 2010	Comments
4902	Residential Water Heaters	6/17/1993	6/17/1993	69 FR 7370 (2/17/04)	0.20	Not a RACT source category. District adopt tighter limits on 3/19/09. Estimated reductions are 0.2 tpd in 2011. (8-hour Plan, Table 6-1.)
4905	Natural Gas-fired, fan-type, residential central furnaces	10/20/2005	10/20/2005	72 FR 29886 (5/30/07)	0.00	Found to be RACT.
Total potential additional reductions:					2.83	

VI. Response to Comments Received on the Proposed Actions

List of Comment Letters Received

We received six comment letters in response to our July 14, 2009 proposal (74 FR 33933) and two comments letters in response to our October 2, 2009, supplemental proposal (74 FR 50936) on contingency measures. Commenters were:

1. [CRPE or the Center] Brent Newell, Legal Director, Center on Race, Poverty & the Environment, August 31, 2009, "Comments on Approval and Promulgation of Implementation Plans: 1-Hour Ozone Extreme Area Plan for San Joaquin Valley, CA (Docket No. EPA-R09-OAR-2008-0693)." These comments were joined by Tom Frantz, President, Association of Irritated Residents; Sal Partida, Co- Chair, Committee for a Better Arvin; Adriano Martinez, Natural Resources Defense Council; Gary Rodriguez, South Shafter Project Committee; Jesus Jaime, President, Shafter Chapter League of United Latin American Citizens; Renee Nelson, President, Clean Water and Air Matter; Francisco Martines, Comité Unido de Plainview; Guadalupe Nunez; La Voz de Tonyville; Irma Medellin, El Quinto Sol de America; Saul Morales, La Neuva Esperanza de Alpaugh; Lucy Hernandez, Comité West Goshen; Eunice Martinez, United for a Change in Tooleville; Lisa Kayser-Grant, Moms Clean Air Network; Maria Covarruvias, Secretary Treasurer, Comité Residentes Organizados al Servicio del Ambiente Sano; and Sarah Sharpe, Environmental Health Director, Fresno Metro Ministries.

2. [CRPE or the Center] Johannes Epke, Legal Intern, Center on Race, Poverty & the Environment, August 31, 2009, "Comments on Revisions to the California State Implementation Plan, San Joaquin Valley Air Pollution Control District (Docket No. EPA-R09-OAR-2009-0492); Comments on Approval and Promulgation of Implementation Plans: 1-Hour Ozone Extreme Area Plan for San Joaquin Valley, CA (Docket No. EPA-R09-OAR-2008-0693)." These comments were joined by Brent Newell, Legal Director, Center for Race, Poverty & the Environment; Sal Partida, Co-Chair, Committee for a Better Arvin; Tom Frantz, President, Association of Irritated Residents; Gary Rodriguez, South Shafter Project Committee; Jesus Jaime, President, Shafter Chapter League of United Latin American Citizens; Francisco Martines, Comité Unido de Plainview; Guadalupe Nunez; La Voz de Tonyville; Irma Medellin, El Quinto Sol de America; Saul Morales, La Neuva Esperanza de Alpaugh; Lucy Hernandez, Comité West Goshen; Eunice Martinez, United for a Change in Tooleville; Maria Covarruvias, Secretary Treasurer, Comité Residentes Organizados al Servicio del Ambiente Sano; and Sarah Sharpe, Environmental Health Director, Fresno Metro Ministries.

3. [CRPE or the Center] Johannes Epke, Legal Intern, Center on Race, Poverty & the Environment, August 31, 2009, "Comments on EPA Proposed Approval of California RFG and Diesel Fuel Regulations (Docket No. EPA-R09-OAR-2009-0344); Comments on Approval and Promulgation of Implementation Plans: 1-Hour Ozone Extreme Area Plan for San Joaquin Valley, CA (Docket No. EPA–R09–OAR–2008–0693)." These comments were joined by Brent Newell, Legal Director, Center for Race, Poverty & the Environment; Sal Partida, Co-Chair, Committee for a Better Arvin; Tom Frantz, President, Association of Irritated Residents; Gary Rodriguez, South Shafter Project Committee; Jesus Jaime, President, Shafter Chapter League of

United Latin American Citizens; Francisco Martines, Comité Unido de Plainview; Guadalupe Nunez; La Voz de Tonyville; Irma Medellin, El Quinto Sol de America; Saul Morales, La Neuva Esperanza de Alpaugh; Lucy Hernandez, Comité West Goshen; Eunice Martinez, United for a Change in Tooleville; and Maria Covarruvias, Secretary Treasurer, Comité Residentes Organizados al Servicio del Ambiente Sano.

4. [Earthjustice]. Paul Cort, Staff Attorney, and Sarah Jackson, Research Associate, Earthjustice, August 31, 2009, "Proposed Approval of the 1-Hour Ozone Extreme Area Plan for the San Joaquin Valley. 74 Fed. Reg. 33933 (July 14, 2009) (Docket # EPA-R09-OAR-2008-0693)." Comments are submitted on behalf of Medical Advocates for Healthy Air, Fresno Metro Ministries, and the Coalition for Clean Air.

5. [SJVAPCD]. Seyed Sadredin, Executive Director/Air Pollution Control Officer, August 27, 2009, "Comments on Docket Numbers EPA-R09-OAR-2009-0492, EPA-R09-OAR-2008-0693, and EPA-R09-OAR-2008-0475"

6. [ARB]. James N. Goldstene, Executive Officer, Air Resources Board, August 28, 2009.

7. [CRPE or the Center] Brent Newell, Legal Director, Center on Race, Poverty & the Environment, November 2, 2009, Comments on Approval and Promulgation of Implementation Plans: 1-Hour Ozone Attainment Contingency Measures for the San Joaquin Valley, CA (Docket No. EPA–R09–OAR–2008–0693)." These comments were joined by Tom Frantz, President, Association of Irritated Residents; Sal Partida, Co- Chair, Committee for a Better Arvin; Adriano Martinez, Natural Resources Defense Council; Gary Rodriguez, South Shafter Project Committee; Jesus Jaime, President, Shafter Chapter League of United Latin American Citizens; Renee Nelson, President, Clean Water and Air Matter; Francisco Martines, Comité Unido de Plainview; Guadalupe Nunez; La Voz de Tonyville; Irma Medellin, El Quinto Sol de America; Saul Morales, La Neuva Esperanza de Alpaugh; Lucy Hernandez, Comité West Goshen; Eunice Martinez, United for a Change in Tooleville; Lisa Kayser-Grant, Moms Clean Air Network and Maria Covarruvias, Secretary Treasurer, Comité Residentes Organizados al Servicio del Ambiente Sano.

8. [Earthjustice] Paul Cort, Staff Attorney, and Sarah Jackson, Research Associate, Earthjustice, November 2, 2009, "Proposed Approval of 1-Hour Ozone Contingency Measures for the San Joaquin Valley. 74 Fed. Reg. 50936 (Oct. 2, 2009) (Docket ID # EPA-R09-OAR-2008-0693)." Comments are submitted on behalf of Fresno Metro Ministries.

A. Emissions Inventory

Comment: Earthjustice comments on the importance of emission inventories, noting that CAA section 172(c)(3) requires that nonattainment plans "shall include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area."

Response: EPA does not dispute the importance of emission inventories. We evaluated the emission inventories in the 2004 SIP to determine if they are consistent with EPA guidance (General Preamble at 13502[15]) and adequate to support that plan's rate-of-progress (ROP) and attainment demonstrations. We determined that the plan's 2000 base year emission inventory was comprehensive, accurate, and current at the time it was submitted on November 15, 2004 and that this inventory, as well as the 2008 and 2010 projected inventories used in the ROP and attainment demonstrations, were prepared in a manner consistent with EPA guidance. Accordingly, we proposed to find that these inventories provide an appropriate basis for the ROP and attainment demonstrations in the 2004 SIP. See 74 FR at 33940.

Comment: Earthjustice comments that ARB submitted to EPA new emissions inventories for ozone precursors in the San Joaquin Valley as part of the 2007 Ozone Plan[16] for the 8-hour ozone standard and that these updated inventories are "significantly different" than the inventories in the 2004 SIP. It further comments that the increase in emissions comes mainly from changes to the way the State's on-road mobile source model, EMFAC, determines the distribution of vehicle miles traveled by heavy heavy-duty diesel trucks (HHDDT) throughout the State. Finally, it argues that these improvements to EMFAC, and therefore, to the SJV emissions inventory overall, make the 2007 Ozone Plan inventory the most comprehensive, accurate, current inventory of actual emissions from all sources affecting the Valley's air quality and EPA cannot refuse to consider it.

Response: ARB used its mobile source emissions model EMFAC2002 to generate the on-road mobile source inventory in the 2004 SJV 1-hour ozone plan. ARB released EMFAC2002 in October, 2002 and EPA approved it for use in SIPs and conformity determinations on April 1, 2003 (62 FR 15720). At the time the 2004 SIP was being developed (2003-2004) and when it was subsequently adopted by SJVAPCD and submitted by ARB to EPA, EMFAC2002 was the most current mobile source model available for inventory purposes. 74 FR at 33940.

It has been EPA's consistent policy that States must use the most current mobile source model available at the time it is developing its SIP. See General Preamble at 13503 (requiring the use of MOBILE4.1[17] for November, 1992 submittal of base year inventories); Office of Mobile Sources, EPA, "Procedures for Emissions Inventory Preparation, Volume IV: Mobile Source," June, 1992, page 5 (allowing states to use MOBILE4.1 for the base year inventories due November 1992, but requiring MOBILE5, then scheduled for release in December 1992, for the ROP and attainment demonstrations due November 1993); *Memorandum*, Philip A. Lorang, Director, Assessment and Modeling Division, Office of Mobile Sources, "Release of MOBILE5a Emission Factor Model," March 29, 1993 (allowing the use of MOBILE5 in updated base year inventories but requiring the use of MOBILE5a, released March 1993, for the ROP and

[15] The General Preamble is the "General Preamble for Implementation of Title I of the Clean Air Act Amendments of 1990." 57 FR 13498, 13502 (April 16, 1992).

[16] SJVAPCD, "2007 Ozone Plan," April 30, 2007.

[17] MOBILE is EPA's model for estimating pollution from highway vehicles in all states except California where EMFAC is used. For a brief history of the MOBILE model, see http://www.epa.gov/otaq/models/mob_hist.txt.

attainment demonstrations due November 1993) ; and *Memorandum*, John Seitz, Office of Air Quality Planning and Standards (OAQPS) and Margo Oge, Office of Transportation and Air Quality, "Policy Guidance on the Use of MOBILE6 for SIP Development and Transportation Conformity," January 18, 2002 (Seitz Memo).

The Seitz Memo specifically addresses the issue of how the release of the new model, MOBILE6, would affect SIPs that were already submitted and/or approved or SIPs that were then under development. Citing CAA section 172(c)(3) and 40 CFR 51.112(a)(1), EPA stated in the Seitz Memo that, "while [i]n general, EPA believes that MOBILE6 should be used in SIP development as expeditiously as possible….[t]he Clean Air Act requires that SIP inventories and control measures be based on the most current information and applicable models that are available when a SIP is developed. As a result, the release of MOBILE6 in most areas would not require a SIP revision based on the new model." The Seitz Memo further states that:

> EPA believes that the Clean Air Act would not require states that have already submitted SIPs or will submit SIPs shortly after MOBILE6's release to revise these SIPs simply because a new motor vehicle emissions model is now available. EPA believes that this is supported by existing EPA policies and case law [*Delaney v. EPA*, 898 F.2d 687 (9th Cir. 1990)]…. EPA does not believe that the State's use of MOBILE5 should be an obstacle to EPA approval for reasonable further progress, attainment, or maintenance SIPs that have been or will soon be submitted based on MOBILE5, assuming that such SIPs are otherwise approvable and significant SIP work has already occurred (e.g., attainment modeling for an attainment SIP has already been completed with MOBILE5). It would be unreasonable to require the States to revise these SIPs with MOBILE6 since significant work has already occurred, and EPA intends to act on these SIPs in a timely manner.

EPA has also consistently applied this policy in approving SIPs. See, for example, 67 FR 30574, 30582 (May 7, 2002), approval of 1-hour ozone standard attainment demonstration for Atlanta, Georgia and 68 FR 19106, 19118 and 19120 (April 17, 2003), approval of the Washington, D.C. area's severe area 1-hour attainment demonstration. The latter action was upheld in *Sierra Club v. EPA*, 356 F.3d 296 (D.C. Cir. 2004). In *Sierra Club* at 308, the court cites the Seitz Memo and concludes that "[t]o require states to revise completed plans every time a new model is announced would lead to significant costs and potentially endless delays in the approval processes. EPA's decision to reject that course, and to accept the use of MOBILE5 in this case, was neither arbitrary nor capricious."

EPA follows a comparable policy when it comes to other changes to the inventory. See General Preamble at 13508:

> Emission Factor Adjustments. Emission factors, as well as inventory calculation methodologies are continually being improved. If emission factors or methodologies change significantly, EPA may advise the State to correct the base year emissions inventory to reflect such changes. If significant changes occur in

> emission factors or methodologies between [November 15, 1990] and November 15, 1993 (due date for the 15 percent demonstration), EPA may require States to make corrections to the base year emission inventory, as well as to the adjusted baseline and the 1996 target level of emissions. If, however, changes occur after the 15 percent demonstration is submitted but before November 15, 1996, then the States would not have to make corrections for purposes of reconciling attainment of the 15 percent milestone.

See also, General Preamble at 13517; 66 FR 586, 614 (January 3, 2001), approval of the Washington, D.C. area's 1-hour attainment demonstration; 66 FR 63922, 63933 (December 11, 2001), approval of Connecticut's 1-hour ozone attainment plan; 67 FR 5152, 5166 (February 4, 2002), approval of New Jersey's 1-hour ozone attainment plan; and 70 FR 25688, 25707 (May 13, 2005); "EPA's Policy on Changes in Inventory Methods" in the approval of the Washington, D.C. area's severe area 1-hour attainment demonstration.

In keeping with the above policy, ARB and the District used the most current version of EMFAC, EMFAC2007, to prepare the most recent ozone plan for the Valley, the 2007 Ozone Plan (which addresses the 8-hour ozone standard). See 2007 Ozone Plan at p. B-1. EPA will review the inventory in this plan for compliance with CAA and EPA requirements at the time it acts on the plan.

Comment: Earthjustice asserts that EPA also considers the improvements to EMFAC2007 to better reflect the air quality reality in California, quoting our January 18, 2008 notice approving the use of the EMFAC2007.

Response: ARB did not release EMFAC2007 for use until November 2006, more than 2 years after the 2004 SIP was submitted in November 2004 and more than 3 years after the District "froze" the inventory in April 2003 so it could complete work on the 2004 SIP. See 2004 SIP at p. 3-25. We believe that disapproving a plan because it is not based on an emissions model that was not available for use until well after the plan was prepared would be inconsistent with EPA's long-held policy that SIPs be based on the most current mobile source model available at the time the plan is being prepared. The State and District appropriately relied on this policy in developing, adopting and submitting the 2004 SIP.

Comment: Earthjustice comments that EPA cannot claim it may approve the submissions because the emissions inventory data were valid when they were submitted in 2004 because this is not the legal test. It asserts that neither the Clean Air Act nor the Administrative Procedure Act allows EPA to ignore data before the Agency that undermine the validity of previously submitted data. It also asserts that the record for review did not close with the submittal of the 2004 1-hour ozone plan and that EPA must consider all of the information before it. Finally, the commenter claims that in this case the District and State have found that the emissions inventories submitted in 2004 were not accurate and significantly underestimated the NOx emissions from mobile sources in the Valley and EPA cannot approve this 1-hour ozone strategy based on inventories that are no longer current or accurate.

Response: We disagree with Earthjustice regarding the legal test that applies under the Clean Air Act. As articulated in the Seitz Memo, the legal test under the CAA is that "SIP inventories…be based on the most current information and applicable models that are available when a SIP is developed." See also *Sierra Club* at 308. The fact that the State subsequently submitted another plan based on updated inventories in the period between the submittal of and EPA's action on the 2004 SIP does not affect the approvability of the 2004 SIP. Updates and changes to the inventory that were made after submittal of the plan were appropriately incorporated into development of the 2007 Ozone Plan; however, they do not render the 2004 SIP insufficient or unapprovable.

Because the commenter's reference to the Administrative Procedures Act is without any specificity, we cannot respond to this portion of its comment.

Comment: Earthjustice comments that EPA cannot claim, as an excuse for failing to address these revised inventories, that emission inventories change and create a moving target, making it unfair to require plans to change with new information. It then asserts that emissions inventories do not change constantly and that the emissions inventory EPA seeks to rely upon in the 2004 SIP is over five years old and has not been the subject of constant revision. It then notes that the newer inventory is only the result of new planning efforts for the 8-hour ozone standard that the District and State updated the inventories and models in 2007. Finally, Earthjustice asserts that had EPA acted in a timely fashion on the 2004 1-hour ozone plan, there would have been no issue here.

Response: EPA did not claim in its proposed approval of the 2004 SIP that emission inventories change constantly. It is, however, a fact that inventories will change over time due to better information and improved methodologies. This is a good thing. Air quality agencies are continually collecting inventory data, updating methodologies, improving emission factors, and otherwise striving to increase the accuracy of and decrease the uncertainties in their emission inventories. As the District wrote in the 2004 SIP (p. 3-25):

> This [plan] uses the most accurate and up to date emission inventories possible within the time allowed to meet Federal Clean Air Act requirements. Many emission categories within the inventories were updated to reflect current data and emission factors. While changes and improvements to the SJVAB's inventories are ongoing, at some point in time the planning and modeling inventories must be "frozen" to allow plan development to proceed (i.e., the inventory must be frozen so that potential future emission control measures can be evaluated for their effectiveness in attaining the federal 1-hour ozone standard). Many emissions inventory improvement projects are in process or are planned, and the results of these and other studies will be reflected in the inventories used in future SIPs.

The District notes this again in the 2007 Ozone Plan in a section entitled "Emissions Inventory Updates" (Appendix B, page 11):

> The District, in cooperation with ARB, is committed to continually updating the emissions inventory as research, emission factor updates, and other information become available. When emissions data change dramatically, the District is committed to revising the inventory and ensuring that any impact is reflected in the control strategy and the attainment demonstration.
>
> The District re-evaluates the emissions inventory on a regular basis to ensure that the inventory is accurate and current. Major point sources are typically re-evaluated every year. Area sources are scheduled to be re-evaluated every one to five years. Seventy-five area source categories were updated during the period from 2003 to 2006.
>
> The District updates emissions growth estimates on a periodic basis. Ten source categories are being examined in 2006 to reevaluate growth trends. The District also revises emissions estimates based on the effects of District prohibitory rules on an emissions source category. Approximately sixty-eight District prohibitory rules will be examined in 2006 to evaluate emissions controls and the effect of the rule requirements on the emissions inventory.[18]

When we approved EMFAC2007, we noted that ARB was already planning to update the model in 2010: "[In its April 18, 2007 letter submitting EMFAC2007 to EPA for approval the] State reaffirmed their commitment to keeping the latest planning assumptions included in EMFAC updated on a three year cycle…. The next update to the planning assumptions in EMFAC is expected in 2010, which would most likely also include updates to the emissions factors of the model as well." 68 FR 3464, 3467 (January 18, 2008).

Updated inventories are also required regularly by EPA regulations at 40 CFR part 51, subpart A. Section 51.30 requires States to annually update and submit the inventory for their major stationary sources and triennially update and submit the entire inventory. However, as the District noted, in order to submit a plan on time, inventories must be frozen at some point in the plan's development, even if further inventory improvements are on the horizon. As discussed above, EPA addresses this reality by requiring plans to be based on the most current information available at the time the plan is being developed and submitted.

As we have also discussed previously, the District and the State did use the most current information then available to them to develop the 2004 SIP as required by the CAA and EPA policy. Any delay in EPA's approval does not change this fact. We do not believe, as the commenter is suggesting, that new, unanticipated information that may arise after a plan has been adopted and submitted but before EPA acts on it should affect the plan's approvability. Again we note that California has submitted a new plan for attaining the 8-hour ozone standard

[18] For example, since submitting the 2007 Ozone Plan, the District has revised its methodology for determining NOx emissions from natural gas combustion from manufacturing and industrial sources. This revised methodology has reduced NOx emissions from this category by 31.3 tpd in 2006 and 34.3 tpd in 2012. See ARB, "Accelerating San Joaquin Valley Air Quality Progress, ARB Staff Report to the Air Resources Board," released November 6, 2007, p. 6.

in the SJV and that it is based on EMFAC2007.

Comment: Earthjustice comments that EPA should not suggest that the new inventories would not make a difference in EPA's approval of the plan, asserting that EPA has no basis in the record for making such a claim.

Response: EPA has not made and is not making such a suggestion. Any evaluation of the impact of the revised inventories on the approvability of 2004 1-hour ozone plan would be at best theoretical and at worst speculative.[19] Rather EPA is stating that the State and District appropriately relied on the then-existing information to develop the 2004 SIP. See our responses to comments above.

In its comments, Earthjustice consistently attempts to conflate the 2004 1-hour ozone standard and 2007 8-hour ozone standard plans. Following Earthjustice's logic would effectively result in the 1-hour ozone plan being completely revised to become the 8-hour ozone plan. This is because an evaluation of the effect of emissions inventory changes on the plan could not be limited to just those changes resulting from the move to EMFAC2007. All factors, from revised growth projections and changes to other emissions inventory categories to the impact of new controls, would need to be taken into account before we could determine whether the plan is or is not approvable. In other words, an entire new plan would need to be developed. The District and State have already prepared a new plan that addresses the applicable 8-hour ozone standard and that is based on EMFAC2007 as well as other updated information. EPA will evaluate the revised inventories in connection with its action on that plan.

Comment: Earthjustice asserts that the evidence on record suggests that the new inventories do make a difference in the strategy that must be pursued to reduce ozone concentrations. It goes on to say that modeling predicts that the strategy must get significantly more NOx emission reductions in order to make a difference in ozone concentrations. As its evidence, Earthjustice includes two carrying capacity isopleth diagrams, one from the 2004 SIP and one from the 2007 Ozone Plan, which they claim demonstrate a "radical" change in the predicted relationship between NOx and VOC reductions and the resulting ozone concentrations from the 2004 SIP to the 2007 Ozone Plan. Finally, Earthjustice provides a quote from the 2007 Ozone Plan that attainment at Arvin can only be achieved through reductions in NOx reductions and that VOC reductions do not help and concludes with given this new understanding of the relationship between NOx and VOC reductions in addressing ozone, the emission reduction targets of the 1-

[19] Ozone is formed in the atmosphere a through complex series of photochemical reactions between VOC and NOx. In these reactions, NOx plays a role both in creating and destroying ozone. See Seinfeld, *Atmospheric Chemistry and Physics,* 2006 p. 209. Because of this dual role, increased NOx emissions do not always lead to increased ozone levels and decreased NOx emissions do not always lead to decreased ozone levels. Under some conditions, decreased NOx emissions may increase ozone concentrations. This information demonstrates that we cannot simply presume that higher NOx emissions levels adversely affect the attainment demonstration in the 2004 1-hour ozone plan and disapprove it on that basis. We note that District and the State have performed air quality modeling to evaluate the revised inventory's effect on ozone levels in the Valley and this modeling forms the basis of the attainment demonstration for the applicable 8-hour ozone standard in the 2007 Ozone Plan. See 2007 Ozone Plan, Chapter 3 and Appendix F.

hour ozone plan would be different.

Response: As stated previously, the 2007 Ozone Plan is not the subject of this rulemaking. Assuming a change in the predicted relationship between NOx and VOC reductions and resulting ozone concentrations exists, as Earthjustice suggests, EPA will evaluate in the context of a rulemaking on the 2007 plan.

Nonetheless, EPA notes that the two diagrams the commenter compares in support of its contentions are not comparable. The first diagram comes from the 2004 SIP and shows the carrying capacity for the 1-hour ozone standard at Bakersfield in 2010. This diagram has isopleths in 5 ppb increments from 95 ppb to 130 ppb (the 1-hour ozone standard is at 124 ppb). The second diagram comes from the 2007 Ozone Plan and shows the carrying capacity for the 8-hour ozone standard at Arvin in 2020. This diagram has isopleths in 1 ppb increments from 80 to 97 ppb (the 8-hour ozone standard is at 85 ppb). However there is little overlap between the two diagrams. The Bakersfield diagram has only one complete isopleth (95 ppb) that is also on the Arvin diagram.[20] Finally, the quote which the commenter provides describes the required strategy for attaining the more stringent 8-hour ozone standard and not the revoked 1-hour ozone standard.

Comment: Earthjustice comments that EPA cannot use as a reason to approve the 2004 SIP that redoing the inventories would delay approval and that this cannot be the basis for approving a plan that Earthjustice asserts does not meet the requirements of the Act and will not work. Stating that the objective of the Clean Air Act is to protect public health by ensuring that polluted areas have a strategy that will attain the national ambient air quality standards, the commenter argues that this purpose is not served by approving a plan that does not lead to attainment of the standards and doing so would only result in more delay. Finally, the commenter argues that EPA should not wait until the plan fails to achieve attainment to require a new plan because it would be "faster for EPA to get this plan fixed now, rather than waiting for it to fail before taking the needed steps to address its defects."

Response: EPA has not argued that redoing the inventory would delay approval of the 2004 1-hour ozone plan. We have found that the plan is approvable with the existing inventory and thus it and the plan that it is a part of do not need to be redone. As we discuss below in our responses to comments on the attainment demonstration, it is premature to conclude that the 2004 1-hour ozone plan has failed and that the area will inevitably not attain the revoked 1-hour ozone standard by its ultimate applicable attainment date.

Comment: CRPE comments that EPA has not quantified the emission reductions from California mobile source rules that are subject to CAA section 209 waivers ("waiver measures")

[20] We also note that the inventory underlying the Arvin diagram is less than one underlying the Bakersfield diagram and that it has the more VOC emissions than NOx emissions. The Arvin diagram is based on an inventory of 308 tpd VOC and 302 tpd of NOx. 2007 Ozone Plan, p. 3-8. The Bakersfield diagram is based on an inventory of approximately 370 tpd VOC and 400 tpd NOx. 2004 SIP, p. 5-11.

waiver measures used in the attainment demonstration, rate of progress demonstration, or contingency measures.

Response: In the 2004 1-hour ozone plan, all emission reductions from waiver measures are in the baseline inventory. This baseline inventory is the projected level of emissions that will occur in the SJV area assuming only growth and the effect of controls that were adopted prior to September, 2002. 2004 SIP, p. 3-11. Because plans are focused on future controls and not already adopted controls, reductions from each individual control measure in the baseline are not usually identified. As discussed above, we believe that reductions from waiver measures, just as those from SIP-approved rules, are fully creditable in attainment demonstrations, rate of progress demonstrations and may be used for contingency measures. We, therefore, do not need to separately account for their emission reductions.

Comment: CRPE comments that because the 2004 SIP includes reductions from waiver measures that occurred before 2000 as part of the 2000 base year inventory, EPA's proposed approval of the inventory violates CAA sections 172(c)(3) and 182(a)(1) because EPA has failed to find that the reductions from the waiver measures have occurred, are enforceable, or are otherwise consistent with the Act, EPA's implementing regulations, and the General Preamble.

Response: We evaluated the emission inventories in the 2004 SIP to determine if they were consistent with EPA guidance (General Preamble at 13502) and adequate to support that plan's ROP and attainment demonstrations. 74 FR at 33940. Based on this evaluation, we proposed to find that the base year inventory (and the projected baseline inventories derived from it) provided an appropriate basis for the ROP and attainment demonstrations in the 2004 SIP. 74 FR at 33940.

We also reviewed the District and State rules that were relied on for emissions reductions in the 2004 SIP's base year and baseline inventories. We determined that all these rules were creditable under the CAA and our policies. See Sections III and IV of this TSD. For the reasons given in the proposal at 33938-33939 and discussed in our responses to comments on waiver measures, we believe that California's mobile source measures are fully creditable for SIP purposes.

As to emission reductions from waiver measures actually occurring, we assume that sources comply with applicable emission limitations and the agencies responsible for ensuring compliance with them are exercising appropriate oversight, absent information to the contrary. The commenter provides no information indicating either of these is not happening.

B. Reasonably Available Control Measures (RACM) and Reasonably Available Control Technology (RACT)

Introduction

CAA section 172(c)(1) requires nonattainment area plans to "provide for the implementation of all reasonably available control measures [RACM] (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 [RACT]) and shall provide for attainment of the national primary ambient air quality standards." Under our 8-hour ozone implementation rule, RACM is not listed separately in 40 CFR 51.900(f) as an applicable requirement following revocation of the 1-hour ozone standard; however, EPA interprets the RACM requirement to be a component of an area's attainment demonstration and thus it continues to apply. See General Preamble at 13560.

For 30 years, EPA has consistently interpreted the Act's RACM provision in section 172(c)(1) to require only those feasible measures necessary for expeditious attainment.[21] Under EPA's interpretation, if an otherwise feasible measure, alone or in combination with other measures, cannot expedite attainment then it is not considered to be reasonably available. Thus, to show that it had implemented RACM, a state needs to show that it considered a wide range of potential measures and found none that were feasible for the area and that would, alone or in combination with other feasible measures, advance attainment. See 1999 RACM Guidance. Based on the form of the 1-hour ozone standard and the Act's specific language on RACM, the appropriate standard for advancing attainment is, at a minimum, one year from the predicted attainment date in the attainment plan.[22] This approach to RACM has been applied in numerous rulemakings. See, for example, 56 FR 5458 (February 11, 1991), promulgation of a federal implementation plan for Phoenix, Arizona; 66 FR 586, 607, 610 (January 3, 2001), approval of the Washington, D.C. area's 1-hour attainment demonstration; 66 FR 63921, 63930 (December 11, 2001), approval of Connecticut's 1-hour ozone attainment demonstration; 67 FR 30574, 30583 (May 7, 2002), approval of Atlanta's 1-hour ozone attainment demonstration; and 66 FR 57160 (November 14, 2001), approval of the Houston/Galveston 1-hour ozone attainment demonstration. It has also been upheld by the United States Court of Appeals for the Fifth Circuit (*Sierra Club* v. *EPA*, 314 F. 3d 735, 743–745 (5th Cir. 2002)) and by the United States Court of Appeals for the D.C. Circuit (*Sierra Club* v. *EPA*, 294 F. 3d 155, 162–163 (D.C. Cir. 2002)).

CAA Section 182(b)(2) requires states to adopt RACT for major VOC sources and for all VOC source categories for which EPA has issued Control Techniques Guideline (CTG)

[21] We initially stated our interpretation of the RACM requirement in our 1979 nonattainment area plan guidance where we indicated that if a measure which might be available for implementation could not be implemented on a schedule that would advance the date for attainment in the area, we would not consider it reasonably available. See 44 FR 20372, 20375 (April 4, 1979). We affirmed this interpretation in the 1992 General Preamble at 13560; in *Memorandum*, John Seitz, Director, OAQPS, "Guidance on the Reasonably Available Control Measure Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas," November 30, 1999 (1999 RACM Guidance); in the 2005 8-hour implementation rule (70 FR 71612, 71659 (November 29, 2005) and § 51.912(d)); and in the 2007 PM2.5 implementation rule (72 FR 20586, 20612 (April 25, 2007) and § 51.1010.

[22] Attainment of the 1-hour standard is based on the average of the most recent three calendar years of data: "The [1-hour ozone] standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 parts per million [ ] is equal to or less than 1." 40 CFR 50.9(a). Because of this, attainment of the 1-hour ozone standard can only be advanced by intervals of one full year. Section 172(c)(1) requires RACM sufficient to provide for expeditious *attainment;* thus, what constitutes RACM for the 1-hour ozone standard must be determined based on what reductions are needed to advance attainment by one year.

documents. CAA section 182(f) requires that RACT also apply to major stationary sources of NOx. In extreme areas, a major source is a stationary source that emits or has the potential to emit 10 tons of VOC or NOx per year. CAA section 182(e). The RACT requirement in section 182(b)(2), the major source threshold in section 182(e) as it applies to RACT, and the application of RACT to major sources of NOx as they apply for the 1-hour standard were retained as "applicable requirements" under the Phase 1 rule. §51.905(a)(1)(i) and §51.900(f)(1), (3) and (12).

We described the RACM analysis in the 2004 SIP in the proposal (74 FR at 33935). We also discussed the section 182(b)(2) RACT provision in the 2004 SIP, stating that the State had formally withdrawn it and that we had subsequently made a finding of failure to submit the RACT demonstration for the 1-hour ozone standard and initiated sanction and federal implementation plan (FIP) clocks under CAA sections 179(a) and 110(c). See 74 FR at 33935 and 74 FR 3442 (January 21, 2009). Finally, we noted that California had recently submitted the District's revised 8-hour ozone standard RACT plan (adopted April 16, 2009) (8-hour RACT SIP), that the plan is intended in part to correct the failure to submit finding for the 1-hour ozone standard RACT requirement as well, and that we are currently reviewing the revised RACT plan for action in a subsequent rulemaking. See 74 FR at 33935.

Based on our review of the RACM analyses in the 2004 SIP as well as an evaluation of the impact of applying RACT to sources for which we had not already approved a RACT rule, we proposed to find that there are no additional reasonably available measures that would advance attainment of the 1-hour ozone standard in the SJV area. As a consequence of this proposed finding, we also proposed to find that the 2004 1-hour ozone plan provides for the implementation of RACM as required by CAA section 172(c)(1).

We estimated that it would take an additional reduction of from 3.7 to 6.4 tpd VOC *and* 13.7 to 17.4 tpd NOx to advance attainment by one year (i.e., to 2009) from the 2004 SIP's projected attainment date of 2010.[23] See 74 FR at 33938. We determined that no reasonably available unadopted measures identified in 2004 SIP, 2003 State Strategy, and 8-hour ozone RACT plan, either individually or collectively, could deliver this level of emissions reductions. Our analysis supporting this determination was provided in Section V of this TSD for the proposal. We also noted that the proposed finding on RACM did not affect the District's continuing obligation under the CAA to implement RACT pursuant to CAA section 182(b)(2) and 40 CFR 50.905(a)(1)(ii). See 74 FR at 33938.

As discussed below, we received several comments on our RACM finding objecting in general to our methodology, our criteria, and our interpretation of the RACM requirement. We did not, however, receive any comments on our analysis.

[23] The 2004 SIP as submitted demonstrated that the most expeditious attainment date practicable would be 2010. Given this as a starting point, we needed to determine if the plan failed to contain any reasonable measures that would advance that date by at least one year or in this case to 2009.

Comment: Earthjustice asserts that deferring action on the RACT demonstration is illegal and arbitrary. It further asserts that EPA cannot find that the plan as submitted will provide for attainment "as expeditiously as practicable" without first demonstrating that all of the required controls, such as RACT, will be implemented. Finally, Earthjustice comments that EPA cannot treat RACM and RACT as discrete requirements that can be acted on separately because the statute clearly states that RACM includes RACT. It also comments that EPA cannot determine that all reasonable measures are in place in the Valley without first evaluating RACT for all SJV area sources.

Response: We did not defer action under CAA section 110(k) on the RACT demonstration in the 2004 SIP because, as a result of the State's withdrawal of this component of the plan, there was no such demonstration on which the Agency could act. Instead, we took the appropriate action under the CAA which was, as stated above, to make a finding of failure to submit a required plan element which started sanctions and FIP clocks. 74 FR 3442.

We have determined that the 2004 SIP contains all reasonably available measures needed for expeditious attainment. While any evaluation of a RACM demonstration needs to consider the potential effect of subpart 2 RACT on expeditious attainment, it does not require that there first be an approved subpart 2 RACT demonstration. For this action, we evaluated the potential effect of applying RACT to those source categories in the SJV area for which we had not already approved a RACT rule. We provide this evaluation in Section V of this TSD. This evaluation shows that there were no outstanding RACT measures that, either individually or in combination with other potential measures, would advance attainment of the 1-hour ozone standard in the SJV area. See Section V of this TSD and 74 FR 33938.

We agree that SJVAPCD must, adopt and implement the specific subpart 2 control requirements of the Act, but we do not agree that the withdrawal of the RACT demonstration in the 2004 SIP precludes us from approving the plan's RACM and attainment demonstrations when it has been shown that the RACT measures would not contribute to more expeditious attainment.

Comment: Earthjustice alleges that the 8-hour ozone RACT plan recently submitted by the District suffers from significant defects and provides examples of these alleged defects.

Response: We did not propose any action on the 8-hour ozone RACT plan in our July 2009 proposal on the 2004 SJV 1-hour ozone plan. Because Earthjustice's comments here address the specifics of a plan that is not the subject of this rulemaking, we need not respond to them.

Comment: Earthjustice asserts that EPA needs to reassess those measures identified in the 2004 Plan, the 2003 State Strategy, and the District's and State's adopted rules and commitments for sources not subject to RACT to ensure that they are still adequate to meet RACM given that the original demonstration was done five years previously.

Response: Based on our review of the 2004 1-hour plan, we concluded that it demonstrates attainment as expeditiously as practicable. As stated above, for this action, we evaluated the

potential effect of applying RACT to those source categories in the SJV area for which we had not already approved a RACT rule. Our evaluation is located in section V of this TSD.

Furthermore, in this situation, even if we were to use current information to evaluate the RACM demonstration in the 2004 SJV 1-hour plan, it would make no difference to our determination that the 2004 SIP provides for RACM. A fundamental criterion used to determine if a measure is RACM is whether the measure can be implemented in time to advance the attainment date from the plan's predicted 2010 date to 2009. Therefore, if we were to use current information today, i.e., at the end of 2009, the answer to that question would be no for all potential measures.

Comment: Earthjustice argues that EPA's test of whether implementation of additional measures would advance attainment from 2010 to 2009 is arbitrary and "absurd" given that it believes the area will fail to attain by 2010. It further argues that it is "disingenuous for EPA to use this impossible test" to justify the missing RACT analysis and approve the plan as meeting the RACM requirement and EPA should instead require a new plan based on current, accurate information and a new attainment date and then evaluate whether RACM has been met.

Response: We have not used the "advance attainment test" to justify the missing RACT analysis. As stated previously, we took the appropriate statutory course of action for dealing with the withdrawn RACT demonstration: a finding of failure to submit and the starting of sanctions and FIP clocks. 74 FR 3442. We also described above the process that we used to determine if the 2004 SJV 1-hour ozone plan provided for the implementation of all RACM needed for expeditious attainment. This process included evaluating the potential impact of RACT on source categories for which we have not previously approved a RACT rule. See Section V of this TSD. We determined that there were no outstanding measures, including potential RACT measures, that could provide for more expeditious attainment of the 1-hour ozone standard in the SJV area.

As we discuss below in the Attainment Demonstration section, we disagree with the commenter that the plan does not demonstrate attainment of the revoked 1-hour ozone standard by the 2010 attainment date.

C. Treatment of Waiver Measures

Comment: Earthjustice and CRPE object to our proposal to grant emissions reduction credit to California's mobile source control measures that have received a waiver of preemption under CAA section 209 without first approving them into the SIP. Both commenters argue that our reliance for this proposal on the general savings clause in CAA section 193 is inappropriate for several reasons.

First, the commenters assert that CAA section 193 only saves those "formal rules, notices, or guidance documents" that are not inconsistent with the CAA. They argue that both the CAA and EPA's long-standing policies and regulations require SIPs to contain the state and local emission limitations and control measures that are necessary for attainment and RFP and to

meet other CAA requirements. They assert that our position on the treatment of California's waived measures is inconsistent with this requirement. Earthjustice also argues that only SIP approval provides for the CAA's enforcement oversight (CAA sections 179 and 304) and anti-backsliding (CAA section 110(l) and 193) safeguards.

Second, the commenters argue that we cannot claim that our position was ratified by Congress because section 193 saves only regulations, standards, rules notices, orders and guidance "promulgated or issued" by the Administrator and we have not identified documents promulgated or issued by EPA that establish our position here. Earthjustice further asserts that our interpretation has not been expressed through any affirmative statements and the only statements of relevant statutory interpretations are contrary to our position on California's waived measures.

Third, Earthjustice argues that there is no automatic presumption that Congress is aware of an agency's interpretations and we have not provided any evidence that Congress was aware of our interpretation regarding the SIP treatment of California's mobile source control measures. Similarly, CRPE argues that our positions that Congress must expressly disapprove of EPA's long-standing interpretation and Congressional silence equates to a ratification of EPA's interpretation are incorrect.

Finally, Earthjustice argues EPA's position is inconsistent because we do require other state measures, e.g., the consumer products rules and fuel standards, to be submitted and approved into SIPs before their emission reductions can be credited.

Response: We continue to believe that credit for emissions reductions from implementation of California mobile source rules that are subject to CAA section 209 waivers ("waiver measures") is appropriate notwithstanding the fact that such rules are not approved as part of the California SIP. In our July 14, 2009 proposed rule, we explained why we believe such credit is appropriate. See pages 33938 and 33939 of the proposed rule. Historically, EPA has granted credit for the waiver measures because of special Congressional recognition, in establishing the waiver process in the first place, of the pioneering California motor vehicle control program and because amendments to the CAA (in 1977) expanded the flexibility granted to California in order "to afford California the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare," (H.R. Rep. No. 294, 95th Congr., 1st Sess. 301-2 (1977). In allowing California to take credit for the waiver measures notwithstanding the fact that the underlying rules are not part of the California SIP, EPA treated the waiver measures similarly to the Federal motor vehicle control requirements, which EPA has always allowed States to credit in their SIPs without submitting the program as a SIP revision.

EPA's historical practice has been to give SIP credit for waiver measures by allowing California to include motor vehicle emissions estimates made by using California's EMFAC motor vehicle emissions factor model as part of the baseline emissions inventory. EMFAC was also used to prepare baseline inventory projections into the future, and thus the plans typically showed a decrease in motor vehicle emissions due to the gradual replacement of more polluting vehicles with vehicles manufactured to meet newer, more stringent California vehicle standards.

The EMFAC model is based on the motor vehicle emissions standards for which California has received waivers from EPA but accounts for vehicle deterioration and many other factors. The motor vehicle emissions estimates themselves combine EMFAC results with vehicle activity estimates, among other considerations. See the 1982 Bay Area Air Quality Plan, and the related EPA rulemakings approving the plan (see 48 FR 5074 (February 3, 1983) for the proposed rule and 48 FR 57130 (December 28, 1983) for the final rule) as an example of how the waiver measures have been treated historically by EPA in California SIP actions.[24]

In our proposed rule, we indicated that we believe that section 193 of the CAA, the general savings clause added by Congress in 1990, effectively ratified our long-standing practice of granting credit for the California waiver rules because Congress did not insert any language into the statute rendering EPA's treatment of California's motor vehicle standards inconsistent with the Act. Rather, Congress extended the California waiver provisions to most types of nonroad vehicle and engines, once again, reflecting Congressional intent to provide California with the broadest possible discretion in selecting the best means to protect the health of its citizens and the public welfare. Requiring the waiver measures to undergo SIP review in addition to the statutory waiver process is not consistent with providing California with the broadest possible discretion as to on-road and nonroad vehicle and engine standards, but rather, would add to the regulatory burden California faces in establishing and modifying such standards, and thus would not be consistent with Congressional intent. In short, we believe that Congress intended California's mobile source rules to undergo only one EPA review process (i.e., the waiver process), not two.

EPA's waiver review and approval process is analogous to the SIP approval process. First, CARB adopts its emissions standards following notice and comment procedures at the state level, and then submits the rules to EPA as part of its waiver request. When EPA receives new waiver requests from CARB, EPA publishes a notice of opportunity for public hearing and comment and then publishes a decision in the Federal Register following the public comment period. Once again, in substance, the process is similar to that for SIP approval and supports the argument that one hurdle (the waiver process) is all Congress intended for California standards,

[24] EPA's historical practice in allowing California credit for waiver measures notwithstanding the absence of the underlying rules in the SIP is further documented by reference to EPA's review and approval of a May 1979 revision to the California SIP entitled, "Chapter 4, California Air Quality Control Strategies." In our proposed approval of the 1979 revision (44 FR 60758, October 22, 1979), we describe the SIP revision as outlining California's overall control strategy, which the State had divided into "vehicular sources" and "non-vehicular (stationary source) controls." As to the former, the SIP revision discusses vehicular control measures as including "technical control measures" and "transportation control measures." The former refers to the types of measures we refer to herein as waiver measures, as well as fuel content limitations, and a vehicle inspection and maintenance program. The 1979 SIP revision included several appendices, including appendix 4-E, which refers to "ARB vehicle emission controls included in title 13, California Administrative Code, chapter 3 …," including the types of vehicle emission standards we refer to herein as waiver measures; however, California did not submit the related portions of the California Administrative Code (CAC) to EPA as part of the 1979 SIP revision submittal. With respect to the CAC, the 1979 SIP revision states: "The following appendices are portions of the California Administrative Code. Persons interested in these appendices should refer directly to the code." Thus, the State was clearly signaling its intention to rely on the California motor vehicle control program but not to submit the underlying rules to EPA as part of the SIP. In 1980, we finalized our approval as proposed. See 45 FR 63843 (September 28, 1980).

not two (waiver process plus SIP approval process). Moreover, just as SIP revisions are not effective until approved by EPA, changes to CARB's rules (for which a waiver has been granted) are not effective until EPA grants a new waiver, unless the changes are "within the scope" of a prior waiver and no new waiver is needed.

Moreover, to maintain a waiver, CARB's rules can be relaxed only to a level of aggregate equivalence to the Federal Motor Vehicle Control Program (FMVCP) [see section 209(b)(1)]. In this respect, the FMVCP acts as a partial backstop to California's on-road waiver measures (i.e., absent a waiver, the FMVCP would apply in California). Likewise, Federal nonroad vehicle and engine standards act as a backstop where there is a corresponding California nonroad waiver measure. The constraints of the waiver process thus serve to limit the extent to which CARB can relax the waiver measures for which there are corresponding EPA standards, and thereby serve an anti-backsliding function similar in substance to those established for SIP revisions in CAA sections 110(l) and 193. Meanwhile, the growing convergence between California and EPA mobile source standards diminishes the difference in the emissions reductions reasonably attributed to the two programs and strengthens the role of the Federal program in serving as an effective backstop to the State program. In other words, with the harmonization of EPA mobile source standards with the corresponding State standards, the Federal program is becoming essentially a full backstop to the California program.

In addition, the commenters' concerns over the potential for relaxation by the State of the waiver measures because the underlying regulations are not subject to EPA review and approval as a SIP revision are not a practical concern for this particular plan given that the plan's horizon is very short term (next couple of years), and the on-road and nonroad vehicles that in part will determine whether the area attains the standard are already in operation or in dealer showrooms. There is no practical means for the State to relax the standards of vehicles already manufactured, even if the State wanted to relax the standards.

As to the concerns raised by the commenters on enforceability, we note that CARB has as long a history of enforcement of vehicle/engine emissions standards as EPA, and CARB's enforcement program is equally as rigorous as the corresponding EPA program. The history and rigor of CARB's enforcement program lends assurance to California SIP revisions that rely on the emissions reductions from CARB's rules in the same manner as EPA's mobile source enforcement program lends assurance to other State's SIPs in their reliance on emissions reductions from the FMVCP.

In summary, we disagree that our interpretation of CAA section 193 is fundamentally flawed. EPA has historically given SIP credit for waiver measures in our approval of attainment demonstrations and other planning requirements such as reasonable further progress and contingency measures submitted by California. We continue to believe that section 193 ratifies our long-standing practice of allowing credit for California's waiver measures notwithstanding the fact they are not approved into the SIP, and correctly reflects Congressional intent to provide

California with the broadest possible discretion in the development and promulgation of on-road and nonroad vehicle and engine standards.[25]

Comment: CRPE comments that EPA has not approved any state-adopted regulations as part of the SIP since 1997 and has only approved the inspection and maintenance program, and three other measures from the California's 1994 Ozone SIP: ARB's antiperspirant and deodorant regulations, diesel fuel regulations, and reformulated gasoline regulations.

Response: EPA approved the State's Phase II consumer product regulations on August 21, 1995 (60 FR 43379), aerosol coating regulations on September 13, 2005 (70 FR 53920), and 2005 and 2007 consumer product regulation revisions on November 4, 2009 (74 FR 57054). We have also recently approved California's most current reformulated gasoline and diesel fuel regulations and inspection and maintenance program regulations. See "Approval and Promulgation of Air Quality Implementation Plans; California," Final Rule (California Fuels), signed December 11, 2009 and See "Approval and Promulgation of Air Quality Implementation Plans; California," Final Rule (SmogCheck), signed December 11, 2009. The State submitted on October 12, 2009 the revised pesticide regulation and commitment adopted by the California Department of Pesticide Regulations and withdrew the November 17, 2007 submittal of the same. See California Air Resources Board Executive Order S-09-005 "Relating to Approval of Amendments to the 2007 Ozone Plan for San Joaquin Valley to Achieve Pesticide Emission Reductions," October 12, 2009. Except for the recently submitted revised pesticide rule, EPA has now acted on all State regulations submitted for SIP approval.

California has submitted the majority of its mobile source regulations to EPA requesting waiver of pre-emption under CAA section 209. EPA has approved many of these waiver requests. See Tables 14 and 15 of this TSD.

D. ARB Commitments

*Comment***:** Earthjustice asserts that ARB's commitments to reduce emissions in the SJV area by 15 tpd VOC and 20 tpd NOx by 2010 do not satisfy the first factor in EPA's three-factor test for the approval of enforceable commitments. The commenter argues that the commitments do not meet the first factor, that commitments provide only a limited portion of the needed reductions, for several reasons. The first reason is that the commitment is not for 6.3 percent of the needed NOx reductions and 11.6 percent of the needed VOC reductions, the numbers EPA gave in the proposal, but rather 19.2 percent for NOx (41.1 tpd) and 37.7 percent for VOC (48.7 tpd) because these were the emissions reductions in commitment form at the time the 2004 SIP was submitted. The second reason is that the 11.6 percent commitment level for VOC is not minimal. The final reason is that the "unenforceable" commitments now constitute 100 percent

[25] In this regard, we disagree that we are treating the waiver measures inconsistently with other California control measures, such as consumer products and fuels rules, for the simple reason that, unlike the waiver measures, there is no history of past practice or legislative history supporting treatment of other California measures, such as consumer products rules and fuels rules, in any manner differently than is required as a general rule under CAA section 110(a)(2)(A), i.e., state and local measures that are relied upon for SIP purposes must be approved into the SIP.

of the remaining emission reductions needed. The commenter concludes that these levels are not the limited or minimal role of commitments envisioned in the decision in *BCCA Appeal Group v. EPA*, 355 F.3d 817 (5th Cir. 2003).

Response: We did not propose to approve commitments of 41.1 tpd NOx and 48.7 tpd VOC, rather we proposed to approve and are taking final action to approve commitments of 20 tpd NOx and 15 tpd VOC. Because the District has adopted and submitted and EPA has approved rules achieving reductions of 21.1 tpd NOx and 33.3 tpd VOC, the portion of the original commitments relating to those reductions are now obsolete and approving them would serve no purpose.

The State of Texas' enforceable commitment for the Houston/Galveston area, the approval of which was upheld by the 5th Circuit in *BCCA*, represented 6 percent of the reductions needed for attainment in the area. We note that the court in *BCCA* did not conclude that any amount greater than 6 percent of the reductions needed would be unreasonable. We believe that the 6.3 percent reduction of NOx and the 11.6 percent reduction of VOC, as stated in our proposal, also fit within the parameters of a "limited" amount of the reductions needed for attainment and nothing in the *BCCA* decision contravenes that.[26] See 74 FR at 33940.

The commenter's final point merely describes the nature of all emissions reductions commitments submitted in support of an attainment demonstration, i.e., that they are intended to fill the gap between the level of reductions achieved from adopted rules and the level of reductions needed for attainment. In other words, their purpose is to provide 100 percent of the remaining reductions needed for attainment. As we explain elsewhere, ARB's commitments are not unenforceable.

*Comment***:** Earthjustice also argues that ARB's commitments to reduce emissions in the SJV area by 15 tpd VOC and 20 tpd NOx by 2010 do not satisfy EPA's second factor for the approval of enforceable commitments, that the State is capable of meeting its commitment. It first notes that the Goldstene letter[27] shows that rules adopted through 2007 have achieved all of the remaining NOx reductions needed for attainment and 3.3 tpd of the remaining 15 tpd of needed VOC reductions. The commenter then states, based on its review of the measures listed by EPA in its proposed approval as potential sources of VOC emission reductions (e.g., the pesticide emission limits adopted by the California Department of Pesticide Regulations) and ARB's 2009 rulemaking schedule, that there are no State measures that can be adopted and implemented in time to provide the remaining 11.7 tpd in VOC reductions by 2010.

Response: In the Goldstene letter, ARB submitted a summary of the emissions reductions expected from a number of adopted State rules in the SJV area by 2010. This summary is preliminary and is not intended to be a final statement of ARB's compliance with its emissions

[26] Texas' emission reduction commitment for Houston was 56 tpd NOx, a far greater emissions reduction than we are approving here. See 66 FR 57160, 57161 (November 14, 2001).

[27] Letter, James Goldstene, Executive Office, ARB, to Laura Yoshii, Acting Regional Administrator, EPA, June 29, 2009 (Goldstene letter).

reductions commitments. As a preliminary analysis, it cannot be used to determine whether the State has not or will not meet its commitments.

The commenter assumes that the only path now open to the State to fulfill its commitments is the adoption of new measures. We disagree. The list of measures provided by ARB in the Goldstene letter represents a fraction of the rules and programs adopted and implemented by the State. See Table 9 of this TSD. ARB has not provided, nor has it been required to provide, an evaluation of the effectiveness of its entire control program in reducing emissions in the SJV area. Given that the State has preliminarily demonstrated, based on a limited set of measures, that all NOx reductions and 90 percent of the VOC reductions needed for attainment of the revoked 1-hour standard in the SJV area have been achieved, we believe it is reasonable to assume that the balance of the reductions can also be achieved by the beginning of the 2010 ozone season.

Comment: Earthjustice argues that ARB's commitments to reduce emissions in the SJV area by 15 tpd VOC and 20 tpd NOx by 2010 do not satisfy EPA's third and final factor for the approval of enforceable commitments, that the commitment is for a reasonable and appropriate period of time. It asserts that the State has less than a year to adopt and make effective controls to achieve 13.3 tpd VOC by 2010 and it is not reasonable to assume that it will able to achieve these reductions.

Response: ARB's commitments, made in 2004, are to reduce emissions in the SJV area by 20 tpd NOx and 15 tpd VOC within 6 years, i.e., by 2010. It is not, as the commenter asserts, to reduce VOC emissions by 13.3 tpd between 2009 and 2010. The commenter's argument again rests on the assumption that the only path now open to the State to meet its VOC commitment is to adopt new measures. As we discuss above, we do not believe this assumption is accurate. See also 74 FR at 39940.

Comment: Earthjustice comments that EPA's recitation of its three-factor test to assess whether an enforceable commitment is approvable skips over the initial determination of whether the commitments are in fact enforceable. In this regard, Earthjustice cites *Bayview Hunters Point Community Advocates v. Metropolitan Transportation Commission*, 366 F.3d 692 (9th Cir. 2004) and *Citizens for a Better Environment v. Metropolitan Transportation Commission*, 746 F.Supp. 746, 701 (N.D. Cal. 1990), [known as *CBE II*], to support its contention that ARB's commitment is an unenforceable "aspirational goal." In addition, Earthjustice singles out *El Comite Para El Bienestar de Earlimart v. Warmerdam*, 539 F.3d 1062 (9th Cir. 2008), stating that in *El Comite* the court explained that because an inventory in a SIP is not a "standard or limitation" as defined by the CAA, it was not an independently enforceable aspect of the SIP. Thus, Earthjustice reasons, in order to be enforceable, not only must a state's commitment to adopt additional measures to attain emission standards be specific and announced in plain language, but any data or rubric that will be used to determine when and how the state will adopt those measures must be enforceable. Earthjustice further claims that EPA's approval here allows for the same unenforceable situation that occurred in Ventura where the State can claim, even erroneously, that changes to the inventory can substitute for its commitment to reduce emissions, and EPA and the public would be powerless to object.

Similarly, CRPE characterizes the 2003 State Strategy's commitments to achieve aggregate emission reductions by the attainment year as "global tonnage" commitments that could be interpreted as goals unenforceable by citizens under Ninth Circuit precedent, citing *Bayview*.

Response: Under CAA section 110(a)(2) (A), SIPs must include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the Act, as well as timetables for compliance. Similarly, section 172(c)(6) provides that nonattainment area SIPs must include enforceable emission limitations and such other control measures, means or techniques "as may be necessary or appropriate to provide for attainment" of the NAAQS by the applicable attainment date.

Control measures, including commitments in SIPs, are enforced through CAA section 304(a) which provides for citizen suits to be brought against any person who is alleged "to be in violation of … an emission standard or limitation…." "Emission standard or limitation" is defined in subsection (f) of section 304.[28] As observed in *Conservation Law Foundation, Inc. v. James Busey et al*., 79 F.3d 1250, 1258 (1st Cir. 1996):

> Courts interpreting citizen suit jurisdiction have largely focused on whether the particular standard or requirement plaintiffs sought to enforce was sufficiently specific. Thus, interpreting citizen suit jurisdiction as limited to claims "for violations of specific provisions of the act or specific provisions of an applicable implementation plan," the Second Circuit held that suits can be brought to enforce specific measures, strategies, or commitments designed to ensure compliance with the NAAQS, but not to enforce the NAAQS directly. See, e.g., *Wilder, 854 F.2d at 613-14*. Courts have repeatedly applied this test as the linchpin of citizen suit jurisdiction. See, e.g., *Coalition Against Columbus Ctr. v. City of New York, 967 F.2d 764, 769-71 (2d Cir. 1992)*; *Cate v. Transcontinental Gas Pipe Line Corp., 904 F. Supp. 526, 530-32 (W.D. Va. 1995)*; *Citizens for a Better Env't v. Deukmejian, 731 F. Supp. 1448, 1454-59* (N.D. Cal.), modified, *746 F. Supp. 976 (1990)*.

Thus courts have found that the citizen suit provision cannot be used to enforce the aspirational goal of attaining the NAAQS, but can be used to enforce specific strategies to achieve that goal.

We describe ARB's commitments in the 2004 SIP and the 2003 State Strategy in detail in the proposal (74 FR at 33938). In short, the State commits to achieve 20 tpd NOx and 15 tpd VOC in the SJV area by the 2010 ozone season. While the State identifies possible control measures that it might adopt to achieve these emission reductions, it does not commit to adopt any specific measures. The language used in the 2004 SIP and the 2003 State Strategy to describe ARB's commitments is consistently mandatory and unequivocal in nature, e.g.:

[28] EPA can also enforce SIP commitments pursuant to CAA section 113.

> ARB *commits to adopt and implement measures to achieve, at a minimum, 15 tpd ROG and 20 tpd NOx emission reductions* in the San Joaquin Valley Air Basin by the 2010 ozone season. ARB *will adopt measures* to achieve these reductions between 2002-2009. ARB may meet this commitment by adopting one or more of the control measures in Table 4-3, by adopting one or more alternative control measures, or by implementing incentive program(s), *so long as the aggregate emission reduction commitment is achieved.*

(Emphasis added). 2004 SIP at section 4.7.3. See also ARB Staff Report at 29; ARB Resolution 04-29 at 5 ("The State's contribution includes…a previously approved commitment for 10 tpd new NOx emissions as part of the Valley 2003 particulate matter SIP, and new commitments for additional reductions of 15 tpd VOC and 10 tpd NOx from new defined State measures in the Valley in 2010"); and 2003 State Strategy at I-16, Table I-10 ("Total Emission Reduction Commitment from New State Measures" listed in the table as 10 tpd NOx with action dates 2002-2008). Thus, ARB's commitments are clearly distinguishable from the aspirational goals, i.e., the SIP's overall objectives, identified by the *Bayview* court and cited by the commenter. ARB's commitments here are to adopt and implement measures that will achieve specific reductions of NOx and VOC emissions. . As such, as will be seen below, they are specific strategies designed to achieve the SIP's overall objectives.

Both Earthjustice and CRPE cite *Bayview* as support for their contention that ARB's commitments are unenforceable aspirational goals. *Bayview* does not, however, provide any such support. That case involved a provision of the 1982 Bay Area 1-hour ozone SIP, known as TCM 2, which states in pertinent part:

> Support post-1983 improvements identified in transit operator's 5-year plans, after consultation with the operators adopt ridership increase target for 1983-1987.
>
> EMISSION REDUCTION ESTIMATES: These emission reduction estimates are predicated on a 15% ridership increase. The actual target would be determined after consultation with the transit operators.

Following a table listing these estimates, TCM 2 provided that "[r]idership increases would come from productivity improvements…."

Ultimately the 15% ridership estimate was adopted by the Metropolitan Transportation Commission (MTC), the implementing agency, as the actual target. Plaintiffs subsequently attempted to enforce the 15% ridership increase. The court found that the 15% ridership increase was an unenforceable estimate or goal. In reaching that conclusion, the court considered multiple factors, including the plain language of TCM 2 (e.g., "[a]greeing to establish a ridership 'target' is simply not the same as promising to attain that target," *Bayview* at 698); the logic of TCM 2, i.e., the drafters of TCM 2 were careful not to characterize any given increase as an obligation because the TCM was contingent on a number of factors beyond MTC's control, *id*. at 699; and the fact that TCM 2 was an extension of TCM 1 that had as an enforceable strategy the improvement of transit services, specifically through productivity improvements in transit

operators' five-year plans, *id*. at 701. As a result of all of these factors, the Ninth Circuit found that TCM 2 clearly designated the productivity improvements as the only enforceable strategy. *Id*. at 703.

The commitments in the 2004 SIP and 2003 State Strategy are in stark contrast to the ridership target that was deemed unenforceable in *Bayview*. The language in ARB's commitments, as stated multiple times in multiple documents, is specific and unequivocal; the intent of the commitments is clear; and the strategy of adopting measures to achieve the required reductions is completely within ARB's control. Furthermore, as stated previously, ARB identifies specific emission reductions that it will achieve and specifies that this will be done through the adoption and implementation of measures and also specifies the time by which these reductions will be achieved, i.e., the beginning of the 2010 ozone season.

Earthjustice also cites *CBE II* at 701 for the proposition that courts can only enforce "express" or "specific" strategies. However, as discussed below, there is nothing in the *CBE* cases that supports the commenter's view that ARB's commitments are neither express nor specific. In fact, these cases support our interpretation of ARB's commitments.

Citizens for a Better Environment v. Deukmejian, 731 F.Supp.1448 (N.D. Cal. 1990), known as *CBE I*, concerned in part contingency measures for the transportation sector in the 1982 Bay Area 1-hour ozone SIP. The provision states: "If a determination is made that RFP is not being met for the transportation sector, MTC will adopt additional TCMs within 6 months of the determination. These TCMs will be designed to bring the region back within the RFP line." The court found that "[o]n its face, this language is both specific and mandatory." *Id*. at 1458. In *CBE I*, ARB and MTC argued that TCM 2 could not constitute an enforceable strategy because the provision fails to specify exactly what TCMs must be adopted. The court rejected this argument, finding that "[w]e discern no principled basis, consistent with the Clean Air Act, for disregarding this unequivocal commitment simply because the particulars of the contingency measures are not provided. Thus we hold that that the basic commitment to adopt and implement additional measures, should the identified conditions occur, constitutes a specific strategy, fully enforceable in a citizens action, although the exact contours of those measures are not spelled out." *Id*. at 1457.[29] In concluding that the transportation and stationary source contingency provisions were enforceable, the court stated: "Thus, while this Court is not empowered to enforce the Plan's overall objectives [footnote omitted; attainment of the NAAQS]--or NAAQS--directly, it can and indeed, must, enforce specific strategies committed to in the Plan." *Id*. at 1454.

Earthjustice's reliance on *CBE II* is misplaced. It also involves in part the contingency measures in the 1982 Bay Area Plan. In *CBE II*, defendants argued that RFP and the NAAQS are coincident because, had the plan's projections been accurate, then achieving RFP would have resulted in attainment of the NAAQS. The court rejected this argument, stating that:

[29] In this passage, the court was referring specifically to the stationary source contingency measures in the Bay Area plan which contained a commitment to adopt such measures if emission targets were not met. The Plan identified a number of potential stationary sources but did not commit to any particular one. In discussing the transportation contingency measures, the court applied this same reasoning. *Id*. at 1456-1457.

> the Court would be enforcing the *contingency plan*, an express strategy for attaining NAAQS. Although enforcement of this strategy might possibly result in attainment, it is distinct from simply ordering that NAAQS be achieved without anchoring that order on any specified strategy. Plainly, the fact that a specified strategy might be successful and lead to attainment does not render that strategy unenforceable.

(Emphasis in original). *CBE II* at 980.

ARB's commitments here are analogous to the terms of the contingency measures in the *CBE* cases. ARB commits to adopt measures, which are not specifically identified, to achieve a specific tonnage of emission reductions. Thus, the commitment to a specific tonnage reduction is comparable to a commitment to achieve RFP. Similarly, a commitment to achieve a specific amount of emission reductions through adoption and implementation of unidentified measures is comparable to the commitments to adopt unspecified TCMs and stationary source measures. The key is that commitment must be clear in terms of what is required, e.g., a specified amount of emission reductions or the achievement of a specified amount of progress (i.e., RFP). ARB's commitments are thus clearly a specific enforceable strategy rather than an unenforceable aspirational goal.

Earthjustice's reliance on *El Comite* is also misplaced. The plaintiffs in the district court attempted to enforce a provision of the 1994 California 1-hour ozone SIP known as the Pesticide Element. The Pesticide Element relied on an inventory of pesticide VOC emissions to provide the basis to determine whether additional regulatory measures would be needed to meet the SIP's pesticides emissions target. To this end, the Pesticide Element provided that "ARB will develop a baseline inventory of estimated 1990 pesticidal VOC emissions based on 1991 pesticide use data…." *El Comite Para El Bienestar de Earlimart v. Helliker*, 416 F. Supp. 2d 912, 925 (E.D. Cal. 2006). ARB subsequently employed a different methodology which it deemed more accurate to calculate the baseline inventory. The plaintiffs sought to enforce the commitment to use the original methodology, claiming that the calculation of the baseline inventory constitutes an "emission standard or limitation." The district court disagreed:

> By its own terms, the baseline identifies emission sources and then quantifies the amount of emissions attributed to those sources. As defendants argue, once the sources of air pollution are identified, control strategies can then be formulated to control emissions entering the air from those sources. From all the above, I must conclude that the baseline is not an emission "standard" or "limitation" within the meaning of *42 U.S.C. § 7604 (f)(1)-(4)*.

Id. at 928. In its opinion, the court distinguished *Bayview* and *CBE I*, pointing out that in those cases "the measures at issue were designed to reduce emissions." *Id*.

On appeal, the plaintiffs shifted their argument to claim that the baseline inventory and the calculation methodology were necessary elements of the overall enforceable commitment to reduce emissions in nonattainment areas. The Ninth Circuit agreed with the district court's

conclusion that the baseline inventory was not an emission standard or limitation and rejected plaintiffs' arguments attempting "to transform the baseline inventory into an enforceable emission standard or limitation by bootstrapping it to the commitment to decide to adopt regulations, if necessary." *Id*. at 1073.

While Earthjustice cites the Ninth Circuit's *El Comite* opinion, its utility in analyzing ARB's commitments here is limited to that court's agreement with the district court's conclusion that neither the baseline nor the methodology qualifies as an independently enforceable aspect of the SIP. Rather, it is the district court's opinion, in distinguishing the commitments in *CBE* and *Bayview*, that provides insight into the situation at issue in our action. As the court recognized, a baseline inventory or the methodology used to calculate it, is not a measure to reduce emissions. It instead "identifies emission sources and then quantifies the amount of emissions attributed to those sources." In contrast, as stated previously, in the 2004 SIP and 2003 State Strategy, ARB commits to adopt and implement measures sufficient to achieve specified emission reductions by a date certain. As described above, a number of courts have found commitments substantially similar to ARB's here to be enforceable under CAA section 304(a).

Finally, EPA is not responding to Earthjustice's comment regarding Ventura because the comment is without sufficient specificity for us to know to what the comment refers. Nevertheless, we note that nothing precludes the State from submitting a SIP revision to alter the commitments approved by EPA, just as the State may choose to submit a revision to any provision of an approved SIP. If the State does so, commenters would have an opportunity to object to such a revision at the State and local levels during the notice-and-hearing processes for SIP adoption and would again have an opportunity to raise concerns during EPA's review process. However, unless and until such time as the State submits and EPA approves a revision to the commitments approved in this action, those commitments remain enforceable.

Comment: Earthjustice states that the 2004 SIP suggests that the State "*may* meet its commitment by adopting one or more of the control measures in Table 4-3...one or more alternative measures, or...incentive programs, so long as the aggregate emission reduction commitment is achieved." 2004 Plan at 4-55. Earthjustice claims that these commitments are so vague that they cannot possibly be enforced against the State; because there is no requirement that the State take *any* specific actions, its commitments cannot be considered enforceable under Ninth Circuit case law. This is because they are not specific strategies based on emissions standards or limitations.

Response: We disagree. As stated in responses to previous comments, EPA believes that ARB's commitments to adopt and implement control measures to achieve the specified aggregate tonnage by the beginning of the 2010 ozone season are enforceable as an emission standard or limitation under CAA section 304. The fact that the State may meet its SIP obligation by adopting measures that are not specifically identified in the SIP, or through one of several available techniques, does not render the requirement to achieve the aggregate emission reductions unenforceable.

Comment: Earthjustice states CAA sections 110(a) and 172(c)(6) require SIPs to contain "enforceable emission limitations…as may be necessary or appropriate" to achieve attainment. Earthjustice further states that, while CAA section 110(k)(4) allows EPA to grant "conditional approval" of a SIP lacking certain statutory elements "based on a commitment of the state to adopt *specific* enforceable measures" by a date certain, the statute provides that the conditional approval automatically becomes a disapproval if the state fails to comply with the commitment within one year. Earthjustice then claims that EPA here appears to be trying to avoid this limitation by treating open-ended promises of the State to reduce emissions as enforceable commitments even though the State has never specified exactly what it commits to do. Earthjustice states that courts have rejected similar attempts to circumvent the statute's limitations on conditional approvals. To support this contention, Earthjustice cites *Sierra Club v. EPA*, 356 F.3d 295, 298 (D.C. Cir. 2004) as overturning EPA's conditional approval of SIPs based in part on the fact that the commitments identified no specific measures that the state would implement.

Response: As pertinent to the comment, *Sierra Club* involved EPA's conditional approval under section 110(k)(4) of SIPs lacking in their entirety RACM and ROP demonstrations and contingency measures based on letters submitted by states that committed to cure these deficiencies. The court rejected EPA's construction of section 110(k)(4) as contrary to the unambiguous statutory language requiring the state to commit to adopt *specific* enforceable measures. *Sierra Club* at 302. The court found that EPA's construction turned the section 110(k)(4) conditional approval into a means of circumventing SIP deadlines. *Id*. at 303.

EPA does not dispute the holding of *Sierra Club*. However that case is not germane to EPA's approval of ARB's commitments here because the Agency is not approving those commitment under section 110(k)(4). The relevant precedent is instead *BCCA.* The facts in *BCCA* were very similar to those presented here. In *BCCA*, EPA approved an enforceable commitment in the Houston ozone SIP to adopt and implement unspecified NOx controls on a fixed schedule to achieve aggregate emission reductions. Petitioners claimed that EPA lacked authority under the CAA to approve a SIP containing an enforceable commitment to adopt unspecified control measures in the future. The court disagreed and found that section 110(k)(4) conditional approvals do not supplant EPA's practice of fully approving enforceable commitments:

> Nothing in the CAA speaks directly to enforceable commitments. The CAA does, however, provide EPA with great flexibility in approving SIPs. A SIP may contain "enforceable emission limitations and other control measures, means, or techniques . . . as well as schedules and timetables for compliance, as may be necessary or appropriate" to meet the CAA's requirements…. Thus, according to the plain language of the statute, SIPs may contain "means," "techniques" and/or "schedules and timetables for compliance" that the EPA considers "appropriate" for attainment so long as they are "enforceable." See *id. § 7410(a)(2)(A)*. "Schedules and timetables" is broadly defined as "a schedule of required measures including an enforceable sequence of actions or operations leading to compliance with an emission limitation, prohibition or standard." *42 U.S.C. § 7602(p)*. The

> remaining terms are not defined by the Act. Because the statute is silent on the issue of whether enforceable commitments are appropriate means, techniques, or schedules for attainment, EPA's interpretation allowing limited use of an enforceable commitment in the Houston SIP must be upheld if reasonable.

BCCA at 839-840. The court upheld EPA's approval of the commitment, finding that "EPA reasonably concluded that an enforceable commitment to adopt additional control measures on a fixed schedule was an 'appropriate' means, technique, or schedule or timetable for compliance" under sections 110(a)(2)(A) and 172(c)(6). *Id*. at 841. Thus the court recognized that sections 110(a)(2)(A) and 172(c)(6) provide a basis for EPA to approve enforceable commitments as distinct from the commitments contemplated by section 110(k)(4). See also *Environmental Defense v. EPA*, 369 F.3d 193, 209-210 (2nd Cir. 2004). As a result, contrary to Earthjustice's contention, section 110(k)(4) is not a bar to EPA's approval of ARB's enforceable commitments and that approval under section 110(k)(3) is permissible as an appropriate means, technique or schedule or timetable for compliance under sections 110(a)(2)(A) and 172(c)(6).

Comment: CRPE contends that the State's aggregate tonnage commitment is unenforceable as a practical matter. CRPE then states that enforcement of such a global commitment to adopt unidentified measures (e.g., State Strategy at II-A-13, 15, 16 and II-B-15, 23) to be implemented in the Valley by 2010 is extremely difficult given the open-ended commitment to adopt unspecified strategies. CRPE states that citizens cannot enforce vague control measures that do not commit ARB to any particular regulations by 2008 and citizens are left with enforcing the global tonnage amounts after 2010.

Response: CRPE does not explain why it believes that ARB's commitments are unenforceable. CRPE implies that it would be easier and/or more convenient for citizens to enforce a different type of commitment. Even assuming CRPE is correct, this does not equate to unenforceablity. Moreover, as seen above, the commitment in TCM 2, which the court found to be enforceable in *Bayview,* is directly analogous to ARB's commitments in the 2004 SIP and 2003 State Strategy. Thus, we do not agree that the commitments are unenforceable.

Comment: CRPE claims that all of the commitments in the 2003 State Strategy are unenforceable because they include promises by ARB staff to bring an unidentified measure to the ARB Board (State Strategy at II-A-13, 15, 16 and II-B-15, 23) and there is no commitment by the Board itself to adopt a particular strategy to achieve specific reductions by a specific implementation date. CRPE believes that the act of proposing a strategy to the Board is not a commitment to adopt a strategy and, citing 74 FR at 33938, that EPA recognizes this fundamental defect.

Response: The enforceable commitments in the 2004 SIP and the 2003 Strategy at issue here, as described above and in the proposal at 33938, do not refer to action by ARB staff to take certain measures to the Board. Rather, as described in detail above, the enforceable commitments at issue refer to "ARB" and/or "the State" and require it to adopt and implement measures to achieve specific reductions in NOx and VOC emissions by the beginning of the 2010 ozone

season. By adopting both the 2004 Plan and 2003 State Strategy, the Board endorsed the content of these documents and committed the Board to take the actions mandated in them.

Comment: CRPE comments that EPA has rejected the kind of flexibility that ARB seeks now to adopt measures to achieve aggregate tonnages, quoting from our approval of the 1994 California Ozone SIP at 62 FR 1150, 1158 (January 8, 1997):

> The California Environmental Protection Agency (CEPA) commented that, as EPA recognized in the proposed approval, some of California's specific strategies may require adjustment as actual rules are developed. CEPA state that 'we will retain the flexibility to revise the SIP as long as the emission reductions continue to provide for attainment.'
>
> As stated in the [notice of proposed rulemaking], EPA supports the State's flexibility to revise the SIP, but cautions that EPA must review SIP revisions for approvability under [CAA] Sections 110(l) and 193.

Response: EPA's response to CEPA's comment on the 1994 California ozone SIP dealt with the State's ability to revise its commitments *after* those commitments have been approved into the SIP. As with any approved SIP provision whether commitment or rule, a state may propose to revise it, but EPA may approve that revision only if the revision complies with all applicable CAA requirements. Those requirements include section 110(l) which provides that EPA cannot approve the revision if it interferes with any applicable requirement concerning attainment and reasonable further progress, or any other applicable requirement of the CAA. See also CAA sections 110(k)(3) and 193. These same limitations will apply to ARB's commitments in the SJV 2004 1-hour plan because those commitments are approved into the SIP by this action.

Comment: Earthjustice claims that the 2004 Plan simply states that ARB "estimates" that measures in the 2003 State Strategy will achieve 15 tpd VOC and 20 tpd NOx reductions, noting that the Strategy was adopted before the Plan and therefore doesn't mention the quantitative commitments (State Strategy at ES-12, 1-7 through 1-9, 1-23 through 1-26). Earthjustice concludes that this estimate was clearly wrong, as the State admits it is coming up short.

Response: The 2004 Plan at section 4.7.1 states that "ARB staff estimates that the near-term measures in the Statewide Strategy will provide 15 tpd ROG and 20 tpd NOx in the San Joaquin Valley in 2010." The near-term measures in the 2003 State Strategy are reproduced as Table 4-3 in the 2004 Plan. Because the State's enforceable commitments are to achieve, independent of any estimates in the plan, aggregate emission reductions from one or more of the control measures in Table 4-3, by adopting one or more alternative control measures, or by implementing incentive programs, it was not necessary for the State to quantify the measures in Table 4-3

To the extent that Earthjustice in this comment intends to argue that the 5 tpd VOC and 20 tpd NOx in ARB's commitments are merely estimates and therefore do not constitute enforceable obligations, we disagree for the reasons stated in our responses to comments above.

E. Rate of Progress Demonstration

Comment: Earthjustice comments that an outdated inventory adversely affects the rate of progress (ROP) demonstrations in the 2004 SIP because it underestimates total NOx emissions in the Valley and thus the tons of reductions required to satisfy ROP are also underestimated. Earthjustice argues that EPA must reevaluate whether the 2004 SIP satisfies the ROP requirement based on the revised inventories.

Response: As discussed above, EPA's long-established and consistent policy does not require states to revise their already-submitted SIPs when a new mobile source emission model is released. This policy also means that EPA will not evaluate these SIPs based on the new model. Again, we note that EMFAC2007 was released in November 2006 and was not approved by EPA until January 2008. 68 FR 3464 (January 18, 2008), two years after the SIP was submitted and more than two-thirds of the way through the first ROP period in the plan (i.e., 2006-2008)

Comment: Earthjustice asserts that the method used in the 2004 SIP to demonstrate ROP is not allowed by CAA section 182(c)(2)(B) because the plan allows for the averaging of reductions over more than 3 years while the CAA allows averaging over 3-year periods only. It also argues that the State's demonstration relies on carrying forward excess emissions reductions from previous milestone years and that this is also inconsistent with the CAA because it again allows emissions reductions to be averaged over longer periods than the 3-year period expressly allowed. Finally, Earthjustice claims that without carrying forward the excess emissions reductions from previous milestones, it does not appear that the District has continued to make the required reasonable further progress in reducing VOC emissions.

Response: The post-1996 ROP requirement in CAA section 182(c)(2)(B), while simple in concept, is among the most complex of the Act's nonattainment area plan requirements to apply in practice. See, for example, the General Preamble's discussion at 13516 on how to calculate a post-1996 ROP target. To respond to these comments, several points need to be understood about the ROP demonstration requirement:

1. A state demonstrates that it meets the required ROP by showing that total emissions in its area will be at or below a target level of emissions for a specified year.[30] This target level of emissions, referred to as the ROP milestone, is calculated for each of the area's milestone dates (e.g., 1996, 1999, 2002, etc.) according to CAA requirements and the procedures in the General Preamble. Each successive milestone reflects the accumulated ROP from the preceding milestone periods (e.g., 1990-1996, 1997-1999, etc.). States often convert this target level of

[30] From the General Preamble at 13508: "Once the 1996 target level of emissions is calculated, States must develop whatever control strategies are needed to meet that target.... The assessment of whether an area has met the RFP requirement in 1996 will be based on whether the area is at or below the 1996 target level of emissions and not whether the area has achieved a certain actual reduction relative to having maintained the current control strategy."

emissions into the emissions reductions needed to show ROP by subtracting it from its baseline inventory for that milestone year.[31]

Plotted on a graph where the x-axis is the milestone years between 1990 and an area's attainment date and the y-axis is milestone target level, the ROP milestones would produce a slightly concave downward line. This line establishes the maximum level of allowable emissions for the area to meet the ROP requirement. The CAA's "averaged over three years" requirement means that the total emissions level in the area can rise above the line during that 3-year period between milestones dates provided it is below the line by the milestone date. An example of an ROP graph can be found at 66 FR 42480, 42843 (August 13, 2001), proposed approval of New York's 2002, 2005, and 2007 ROP plans.

EPA has consistently treated ROP milestones as target levels of emissions. See for example, 61 FR 10921 (March 18, 1996), proposed approval of California's ROP and attainment plans for 7 nonattainment areas; 62 FR 37175, 37177 (July 11, 1997), proposed approval of Texas's 15 percent ROP plans for Dallas, El Paso and Houston; 65 FR 11525, 11530 (March 3, 2000), proposed approval of Illinois' post-1996 ROP plan for Chicago; and 70 FR 2085, 2088 (January 12, 2005), proposed approval of the Washington, D.C. area's post-96 and post-99 ROP plans. Thus, understood as an emissions level target, it is clear that so long as a state can demonstrate that total emissions levels in its area are below each ROP milestone, it does not need to show an actual 9 percent emission reduction in each 3-year period. Therefore, the comment that the manner in which California demonstrated ROP is not in compliance with the Act is unfounded.

2. The commenter is incorrect that the CAA forbids carrying forward of excess emissions reductions.[32] In fact, section 182(c)(2)(C) specifically provides that emission reductions beyond the 15percent required under section 182(b)(1) for the period 1990-1996 are creditable toward the ROP requirement in section 182(c)(2): "The reductions creditable for the period beginning 6 years after November 15, 1996 *shall* include reductions that occurred before such period, computed in accordance with [section 182(b)(1)], that exceed the 15 percent amount of reductions required under [section 182 subsection (b)(1)]). (Emphasis added). While this sentence refers explicitly only to carrying forward excess reductions into the 1997-1999 period, we do not believe that Congress intended to prohibit carrying forward of excess emissions reductions into other ROP periods. Congress was interested in both expediting emissions reductions and reducing the costs of air pollution controls. The first would be served by rewarding States for early implementation by allowing the carryover of credit and the latter by

[31] Also from the General Preamble at 13508: "[s]ome air planning agencies may be used to thinking in terms of the emissions reduction required relative to a current control strategy projection..., rather than a target level of emissions. Projections of 1996 emission would be used to calculate the required emissions reduction expressed on such a basis by simply taking the difference between the 1996 projection inventory (without controls applied) and the 1996 target level of emissions."

[32] That excess emissions can be carried forward is also clear when it is understood that a ROP milestone is a total emissions level target and not an emissions reduction target.

not ignoring otherwise creditable emissions reductions that had already occurred. See *Ass'n of Irritated Residents v. EPA*, 423 F.3d 989, 996 (In the context of allowing credit for past emission reductions under CAA section 189(d) for PM-10 plans: "[b]y allowing such crediting, the EPA provides a material incentive for implementing the most effective measures as quickly as possible.").

3. States are allowed to substitute NOx reductions for VOC reductions in any post-1996 ROP demonstration (see CAA section 182(c)(2)(C)) and may use NOx reductions exclusively for post-1996 ROP demonstrations. See 70 FR 25688, 25697 (May 13, 2005); approval of the Washington, D.C. area's 1-hour ozone attainment demonstration; and 68 FR 7476, 7486 (February 14, 2003), approval of Rhode Island's 1-hour ozone attainment demonstration. SJV has an approved 15 percent ROP demonstration and thus has already met its minimum VOC ROP obligation. See 62 FR 1150, 1172 (January 8, 1997). It may, therefore, rely exclusively on NOx reductions to meet its 2008 and 2010 ROP requirements and the commenter's contention that the District has not met its required VOC ROP requirement is baseless.

Comment: CRPE asserts that we erroneously claimed that the ROP demonstration does not depend on reductions from State waiver measures or on reductions from any measures that are not creditable under the terms of section 182(b)(1).

Response: We did not claim that the ROP demonstration was not dependent on reductions from waiver measures. Neither did we claim that the ROP was dependent on reductions from any measures that are not creditable under the terms of section 182(b)(1). As stated in the proposal:

> The [ROP] demonstration does not depend on reductions from any measures that are not either federal, SIP-approved, proposed for approval or State waiver measures or on reductions from any measures that are not creditable under the terms of section 182(b)(1).

74 FR at 33942. On the same page, we also noted in a footnote:

> The ROP demonstration relies on "the emission control program as it existed when the Valley's 2004 SIP was submitted...." 2008 Clarification at 6. As discussed in section III.C.2.c.i. [of the proposal], all baseline measures are either federal, SIP-approved, proposed for approval, or otherwise creditable in ROP demonstrations.

"Otherwise creditable" includes waiver measures. See 74 FR at 33938.

Comment: CRPE argues that the CAA requires that states only take credit for reductions from SIP-approved measures in ROP demonstrations, citing CAA section 182(b)(1)(D). CRPE also argues that EPA's longstanding interpretation of the ROP provision also limits credit to SIP-approved measures, citing our proposed approval of the ROP demonstration in the 1999 amendment to the 1997 1-hour ozone standard plan for the South Coast Air Basin (SCAB) (65 FR 6091, 6098 (February 8, 2000)) which cites the General Preamble at 13517.

Response: CAA section 182(b)(1)(C) does not limit emissions reductions creditable in ROP demonstrations to just those reductions from SIP-approved rules:

> Except as provided under subparagraph (D), emissions reductions are creditable toward the 15 percent required under subparagraph (A) to the extent they have actually occurred, as of 6 years after [November 15, 1990], from the implementation of measures required under the applicable implementation plan, *rules promulgated by the Administrator, or a title V permit.*

(Emphasis added).

Neither federal measures nor title V permits are in the SIP.[33] EPA has approved numerous ROP demonstrations that rely on reductions from federal measures. See, for example, 61 FR 11735 (March 22, 1996), approval of Wisconsin's 15% ROP plan and contingency measures; 66 FR 586 (January 3, 2001) approval of the Washington, D.C. area's attainment and post-96 ROP plans; and 66 FR 54143 (October 26, 2001), approval of Pennsylvania's post-96 ROP plan for the Philadelphia area. As discussed in the proposal, we have historically treated California's waiver measures similarly to the Federal motor vehicle control requirements. 74 FR at 33939.

In the February 2000 proposed action cited by the commenter, EPA proposed to approve the ROP demonstration for the SCAB. This demonstration relied explicitly on reductions from SIP-approved District rules and SIP-approved commitments from the District and State; therefore, we limited our description of the ROP requirement to those ROP provisions that were applicable to our action. By doing so, we did not rewrite the Act or the General Preamble to limit creditable reductions in ROP demonstrations to SIP-approved measures only. We note that although the ROP demonstration in the South Coast plan relied explicitly only on reductions from SIP-approved rules and commitments, it relied implicitly on ARB's adopted and implemented mobile source program, reductions from which are incorporated into the South Coast plan's baseline inventory, to generate the majority of emissions reductions needed for ROP.

Comment: CRPE comments that EPA's decision to find that the 2004 SIP demonstrates ROP has no factual basis because the 2004 SJV 1-hour ozone plan does not distinguish between reductions from SIP-approved regulations and from waiver measures.

Response: EPA believes that reductions from SIP-approved regulations, federal rules, and waiver measures are equally creditable in ROP; therefore, there is no need to distinguish the reductions from each type.

E. Attainment Demonstration

[33] CAA title V requires all states to issue operating permits to their major stationary sources. EPA approves state title V programs under CAA section 502(d) and not under the SIP provisions in section 110(k)(3).

Comment: Earthjustice comments that SJV will not attain the 1-hour ozone standard by 2010 because there have been too many exceedances of the standard in 2008 and 2009 and that this shows that the attainment demonstration is not working and is not approvable. It also comments that EPA has made clear that attainment by the deadline requires that the three years leading up to that deadline must be clean. In support of its position, the commenter cites EPA's PM2.5 implementation rule at 40 CFR § 51.1000; the preamble to the PM2.5 implementation rule at 72 FR 20586, 20600 (April 25, 2007); and EPA's "Response to Comments Document, Finalizing Approval of the PM-10 State Implementation Plan for the Clark County Serious PM-10 Nonattainment Area Annual and 24-Hour PM-10 Standards" at page 41 (April 23, 2004).

Response: Consistent with the CAA and EPA regulations and policy, the 2004 SJV 1-hour ozone plan demonstrates that the emissions reductions needed to prevent future violations of the 1-hour ozone standard would be in place by the beginning of the 2010 ozone season rather than by the beginning of the 2008 ozone season. See 2004 SIP, p. 5-5.

The three cites in the commenter's letter are all to descriptions of attainment *determinations*. The determination of attainment required by CAA section 181(b)(2), which is made by reviewing ambient air quality monitoring data after the attainment date, is distinctly different from the demonstration of attainment required by CAA section 182(c)(2), which is based on projections of future air quality levels and submitted before the attainment date. For the 1-hour ozone standard, an attainment determination is based on monitored air quality levels in the three years preceding the attainment date. General Preamble at 13506. In acting on the 2004 SJV 1-hour ozone plan under CAA section 110(k), we are not making an attainment determination.

An attainment demonstration is based on air quality modeling showing that projected emissions in the attainment year will be at or below the level needed to prevent violations of the relevant ambient air quality standard. For ozone, the attainment year is defined as the calendar year that includes the last full ozone season prior to the statutory attainment date. 40 CFR 51.900(g). More simply, ozone attainment demonstrations show that the air quality will be at or below the level of the standard no later than the beginning of the ozone season immediately prior to the attainment date. EPA has never interpreted the Act to require that the demonstration show that air quality levels will be at or below the level of the standard for each of the three ozone seasons prior to the attainment date.

We believe this position is consistent with the ozone attainment provisions in subpart 2 of title 1, part D of the CAA. The program Congress crafted here for ozone attainment does not require that all measures needed to attain the standard be implemented three years prior to the area's attainment date. For example, moderate areas were required by section 182(b)(1) to provide for VOC emissions reductions of 15 percent reduction by November 15, 1996 which was also the attainment date for these areas. For areas classified serious and above, CAA section 182(c)(2)(B) requires that ROP of 3 percent per year averaged over 3 years "until the attainment date" (a total of 9 percent reduction in emissions in the 3 years leading up to an area's attainment

date).[34] EPA does not believe that Congress intended these mandatory reductions to be in excess of what is needed to attain.

This position is also consistent with the attainment date extension provisions in CAA section 181(a)(5). Under this section, an area that does not have three-years of data meeting the ozone standard by its attainment date but has complied with all requirements and commitments pertaining to the area in the applicable implementation plan and has no more than one exceedance of the standard in the attainment year, may receive a one-year extension of its attainment date. Assuming these conditions are again met the following year, the area may receive an additional one-year extension. If the area has no more than one exceedance in this final extension year, then it will have three years of data indicating that it has attained the ozone standard.

EPA has consistently taken this position in guidance and in our approval of 1-hour ozone attainment demonstrations. Our ozone modeling guidance, which was issued less than a year after the 1990 CAA Amendments were enacted, requires States to model the ozone season before the attainment date and not the third ozone season before the attainment date. The following excerpt is from Chapter 6 "Attainment Demonstrations" of that guidance, *Guideline for Regulatory Application of the Urban Air Shed Model* (July 1991, OAQPS, EPA):

> The primary reason for conducting photochemical modeling is to demonstrate the effectiveness of alternative control strategies in attaining the NAAQS for ozone throughout the modeling domain. This demonstration consists of four main parts: (1) developing attainment-year modeling emission inventories, (2) developing alternative-control strategy emission inventories, (3) performing model simulations for the attainment year with and without alternative control strategies, and (4) comparing attainment year and control strategy simulation results with the ozone [standard].

where

> The attainment year is determined by the nonattainment area designation and the attainment dates specified in the 1990 CAA [Amendments].

The ozone attainment demonstrations that EPA has approved since the CAA Amendments of 1990 have been based on this modeling guidance and show that there will be no violations in the attainment year. See, for example, 61 FR 10921 (March 18, 1996) and 62 FR 1150 (January 8, 1997), proposed and final approval of California's attainment plans for 7 nonattainment areas; 66 FR 54143 (October 25, 2001), approval of Pennsylvania's 1-hour ozone attainment plan for the Philadelphia area; 67 FR 30574 (May 7, 2002), and approval of Georgia's 1-hour ozone attainment plan for Atlanta.

[34] This would represent a substantial level of extra emissions reductions. For example, the 2004 SIP showed that a combined VOC + NOx reduction of only 34 percent from 2000 base year levels was needed for attainment. See 74 FR at 33943.

We took the same position on attainment demonstrations for the 8-hour ozone standard promulgated in 1997 when we promulgated regulations specifying the deadline for implementing emissions reductions for purposes of attainment of that standard. Specifically, 40 CFR 51.908(d) provides: "For each nonattainment area, the State must provide for implementation of all control measures needed for attainment no later than the beginning of the attainment year ozone season." "Attainment year ozone season" is defined as "the ozone season immediately preceding a nonattainment area's attainment date." 40 CFR 51.900(g). The preamble to the rule promulgating section 51.908(d) further provides:

> We will generally review the [attainment] demonstrations for technical merit using EPA's most recent modeling guidance at the time the attainment demonstration is performed. This guidance will generally have the State provide (1) technical analyses to locate and identify sources of emissions that are causing violations of the 8-hour [ozone standard] within nonattainment areas, (2) adopted measures…appropriate for attainment, with implementation no later than the beginning of the attainment year ozone season.

70 FR 71612, 71627 (November 29, 2005).

This position is perhaps mostly clearly articulated (as is the distinction between attainment determinations and attainment demonstrations) in "Guidance for Determining the 'Attainment Year' for Transportation Conformity in New 8-Hour Ozone and PM2.5 Nonattainment Areas," EPA420-B-05-002, Office of Transportation and Air Quality, EPA, March 2005, page 1:

> The CAA requires areas to attain the relevant standards by the area's maximum attainment date. For purposes of the 8-hour ozone standard and the PM2.5 standard, a determination of attainment after the attainment date has passed is based on the most recent three complete years of data prior to the area's attainment date. Thus, where an area has a maximum attainment date in April (for PM2.5) or June (for 8-hour ozone), the most recent three years of data will be from the three preceding calendar years. For example, if an area's maximum attainment date is April or June of 2010, then air quality monitoring data from 2007, 2008 and 2009 would be considered for the purpose of determining whether the area has met its attainment date. Moreover, for purposes of predicting attainment of the standard through a modeling demonstration, states would need to predict that air quality in the last ozone or PM2.5 "season" (i.e., 2009) would meet the standard. For that reason, EPA's implementation rule for the 8-hour ozone standard requires areas to implement all the measures necessary to demonstrate attainment as expeditiously as practicable, but no later than the start of the final complete ozone season preceding the area's attainment date (40 CFR §51.908). We anticipate that the implementation rule for the PM2.5 standard will

have a similar requirement.[35]

Comment: Earthjustice argues that the plan has already failed because ambient air quality data for 2008 shows too many exceedances of the 1-hour ozone standard to attain by 2010 under EPA's definition of that standard. It comments that the modeling in the 2004 SIP's prediction of attainment by 2010 confirms the "garbage in, garbage out" maxim in modeling; that strategies being implemented by the State and District are not working; and that the 2004 SIP's demonstration of attainment by 2010 is "clearly fiction." It asserts that EPA cannot approve the 2004 SIP and must instead focus on developing a new, meaningful plan that demonstrates attainment as expeditiously as practicable.

Response: We do not agree that the 2004 1-hour ozone plan has already failed. As discussed in above, the plan did not demonstrate that there would be no violations of the revoked 1-hour ozone standard in 2008 or 2009. Rather it demonstrates that clean air would *begin* with the 2010 ozone season. Because we are still months away from the start of the 2010 ozone season and air quality trends show a decreasing number of days over the standard, we believe it is premature to say the 2004 1-hour ozone plan will not result in attainment by the SJV area's ultimate applicable attainment date.[36]

G. Contingency Measures

Comment: Earthjustice states that the purpose of contingency measures following an area's failure to attain is to provide extra emissions reductions that are needed to attain. It then asserts that EPA's approach of allowing areas to credit emissions reductions from measures that are already in place that are not needed for attainment is arbitrary and illegal because, if the area does fail to attain, the reductions from these measures are not surplus and more are needed. It argues further that EPA's policy allows plans to be approved without the "safety net that Congress envisioned," so that when the SJV area fails to attain in 2010 there is nothing in the plan that can take immediate effect without further action by the State or the District to address such a failure.

Response: We did not propose to credit "extra" or "surplus" reductions in the attainment demonstration as contingency measures in our proposed approval of the attainment contingency provisions in the 2004 SJV 1-hour ozone plan.[37] In our July 14, 2009 proposal and again in our

[35] This guidance was issued prior to the PM2.5 implementation rule's publication on April 25, 2007. The PM2.5 rule does contain similar requirements to the 8-hour ozone implementation rule. See § 51.1007(b). See also section III.E.6., *What future years should be modeled?*, in the preamble to the PM2.5 implementation rule at 72 FR 20586, 20609.

[36] While attainment of air quality standards is the primary purpose of SIPs, they are also, along the way, expected to reduce the number and severity of violations of the standards. See section 176(c)(1)(A). In this respect, the 2004 1-hour ozone plan has been successful.

[37] By "surplus" and "extra" emissions reductions, the commenter is referring to emissions reductions that are realized in the attainment year that are more than the emissions reductions needed to demonstrate attainment. We refer to these additional reductions as "excess reductions in the attainment demonstration."

October 2, 2009 supplementary proposal, we made it clear that there were no excess emissions reductions from adopted measures in the attainment demonstration. See 74 FR at 33944 and 74 FR 50936, 50937. Nevertheless, the commenter seems to believe that the reductions the State credits as its attainment contingency measures will already be in place by the SJV area's attainment year, 2010, and thus will already be contributing to reduced ozone levels in that year. If that were the case, should the area fail to attain, there would be no additional reductions available beyond those that were realized in 2010 that could be triggered to further improve air quality. This is not correct.

The measures relied on for attainment contingency measures in the 2004 SJV 1-hour ozone plan are existing State and federal on- and off-road new engine standards.[38] Emissions reductions from these types of measures accumulate year to year as the engine fleet turns over, resulting in increasing benefits over time. All of the reductions from these measures that are used by the State to show compliance with the attainment contingency measures requirement occur in 2011, the year *after* the SJV area's attainment date. It is this additional benefit, i.e., an additional 15.7 tpd NOx and 8.6 tpd VOC in reductions beyond the reductions from these measures in 2010, that will be realized in the SJV area in 2011, that the State uses to meet the contingency measures requirement. 74 FR 50936, 50938 (Table 1). Thus these reductions will not be reflected in 2010 ambient air quality levels but will provide air quality benefits in 2011. In this respect, the emission reductions from the State and federal on- and off-road new engine standards that serve as contingency measures in the SJV area are virtually identical in operation to the type of contingency measure that the commenter appears to advocate, e.g., a control measure adopted by the State or District that would remain unimplemented, and thus yielding no emission reductions until triggered by a failure of the area to attain the standard.

In *LEAN v. EPA*, 382 F.3d 575 (5th Cir. 2004), the court upheld EPA's approval of contingency measures that relied on reductions that occurred one year prior to the Baton Rouge area's failure to attain but that continued on an annual basis thereafter and were, among other things, surplus. *Id*. at 583. In other words, as the court framed it, "the effects continue to manifest an effect after the plan fails." *Id.* The court found that "[t]he setting aside of a continuing, surplus emissions reduction fits neatly within the CAA's requirement that a necessary element of a contingency measure is that it must 'take effect without further action by the State or [EPA]'" *Id*. at 584. In *LEAN*, in contrast to the situation here, the air quality benefits from the contingency measures occurred prior to a potential plan failure and the emission reductions from these measures did not increase thereafter, but continued at the same rate. Thus the contingency measures in the 2004 SJV 1-hour ozone plan, to a greater extent than in *LEAN*,

[38] EPA has long allowed states to use already implemented measures to meet the CAA sections 172(c)(9) and 182(c)(9) contingency measures requirement, provided that the reductions from these measures were not also relied on for attainment and/or ROP, i.e., in excess to the attainment demonstration or ROP. See 62 FR 15844 (April 3, 1997); 62 FR 66279 (December 18, 1997); 66 FR 30811 (June 8, 2001); 66 FR 586 and 66 FR 634 (January 3, 2001). In these rulemakings, however, unlike the situation here, the reductions used for contingency measures were realized in the attainment year, i.e., they were excess reductions in the attainment demonstration, and continued without increasing into following years.

fulfill the purpose of such measures "to provide a cushion while the plan is being revised to meet the missed milestone." 72 FR 20586, 20642.

Comment: Earthjustice comments that off-road emissions reduction benefits projected for 2011 do not appear to reflect ARB's recent amendments to its in-use off-road diesel mobile source rules that have delayed reductions from this rule originally expected in 2011 and 2012 and that this means that a significant portion of the NOx reductions counted on to fulfill the contingency measure requirement will not in fact be available in 2011.

Response: This comment was submitted in response to our July 14, 2009 proposal on the 2004 1-hour plan. See 74 FR at 33944. In that proposal, reductions for contingency measures came solely from on-road mobile sources, so any delays in the implementation of the off-road program would not affect these reductions. See 74 FR at 33944 (...there are 10 tpd NOx and 5 tpd VOC in reductions in 2011 from adopted on-road mobile source measures that could serve to fulfill a portion of the attainment contingency measures requirement.").

Subsequent to our July 14, 2009 proposal, ARB submitted additional information during that proposals comment period which provided NOx and VOC reductions from off-road mobile source control measures in 2011. See letter, James N. Goldstene, Executive Officer, Air Resources Board, August 28, 2009 ("ARB comment letter"). We used this additional information in our October 2, 2009 supplementary proposal to approve the contingency measures. In that proposal, we noted that "[t]he reductions in the off-road engine category were taken from baseline emission inventories developed as inputs to the air quality modeling supporting the attainment demonstration in the 2004 SIP. These baseline emission inventories include reductions only from measures adopted prior to September 2002; therefore, the estimate of emissions reductions from the off-road engines category reflects only these measures." See 74 FR 52936, 52938 (October 2, 2009). ARB adopted its initial in-use off-road diesel rule in July 2007. Because the in-use off-road diesel rule was not relied upon to meet the attainment contingency measure provision, any delay in its implementation does not affect the reduction estimates.

Comment: Earthjustice comments that the problems it has noted with the inventory (that it is not based on the latest California mobile source model, EMFAC2007, and as a result underestimates NOx emissions from mobile sources) mean that the baseline inventory for 2010 is inaccurate, and therefore, the emissions reductions needed to meet the contingency measures requirement (3 percent of the 2010 baseline) and the emissions reductions estimates from certain mobile source measures are also inaccurate.

Response: As we have discussed above in the Emissions Inventory section, EPA's long-established and consistent policy is that SIPs are to use the most current information available at the time they are developed and that states are not required to revise SIPs should new information arise after their submittal. At the time the 2004 SIP was developed, EMFAC2002 was the most current California mobile source model available and the State correctly used it to develop the plan. Thus, the 2010 baseline inventory, the emissions reductions needed to meet

the contingency measures requirement, and the emissions reductions estimates from mobile source measures are all calculated according to EPA's guidance.

Comment: With regard to EPA's October 2, 2009 supplementary proposal to approve the contingency measures, Earthjustice agrees that it is appropriate to consider the new information provided in the ARB comment letter but objects to EPA's attempt to pick and choose what current information it will consider in approving the elements of the 1-hour ozone plan.

Response: Contrary to Earthjustice's contention, EPA is not selectively making use of current inventory data in considering ARB's additional information. ARB did not submit any information based on emissions inventories developed subsequent its plan submittal. Instead, it extracted and summarized data that had already been submitted as part of the 2004 SIP. The data that ARB provided was taken from the emissions inventory that was completed in 2003 to support the air quality modeling in the 2004 SIP. See email, Jeff Lindberg, ARB, to Frances Wicher, EPA, "2011 Off-Road Emission Estimates for the San Joaquin Valley's 1-hour Ozone Plan," September 10, 2009. These data are unlike the information which the commenter has urged EPA to consider in approving the 2004 SIP, e.g., EMFAC2007. That information was developed well after the submittal of the 2004 SIP and could not have been considered in development of it.

Comment: Earthjustice notes that EPA's proposal to approve the updated contingency measure demonstration rests on crediting emissions reductions from State programs that are not enforceable components of the plan. It asserts that the CAA requires that all State and local control measures relied upon to satisfy the planning requirements of the Act be included in the implementation plan, citing the language in CAA sections 172(c)(9) and 182(c)(9) and that it is not sufficient to simply identify measures because they could be revised or revoked without EPA approval under section 110(l), or would be unenforceable under the CAA if the State were to decide not to implement them.

Response: In this particular case, all measures credited as contingency measures are State and federal on- or off-road mobile source controls adopted prior to September 2002. These controls include waiver measures which EPA believes may be used to meet the CAA's contingency measures requirement. In our response to comments on the treatment of waiver measures above, we address at length our view that such measures can be relied on to meet the CAA's planning requirements without being approved by EPA into the SIP. We also address in that section the commenter's concerns regarding enforceability and antibacksliding.

We note further that since the State has been implementing these emission standards since 2002, the likelihood that the State will, at this late date, suddenly decide to stop implementing them is negligible. Moreover, engines complying with these standards are already being sold and therefore the technology required to meet them has been demonstrated, making it even less likely that the State would stop implementing them. However, in the unlikely event that the State should relax or revoke a measure that is relied on for contingency, EPA has mechanisms other than section 110(l) to assure adequate contingency measures, including finding the SIP inadequate under section 110(k)(5).

We note also that since 2002, in part to fulfill its emissions reductions commitment, the State has adopted other control measures that reduce emissions from on- and off-road vehicles which are not considered in calculating the post-2010 emissions reductions for contingency measures. See Goldstene letter. We also note that the State and District have submitted the 2007 8-hour ozone plan that includes additional post-2010 emissions reductions.

Comment: Earthjustice claims that our proposal on the appropriate treatment of emissions reductions from waiver measures makes no mention of contingency measures or the specific statutory language in sections 172(c)(9) or 182(c)(9) which provide that "[s]uch measures shall be included in the plan revision…." It then asserts that the extension of our policy on waiver measures to contingency measures ignores the plain language of sections 172(c)(9) and 182(c)(9) and that EPA has not shown that it has allowed the use of measures that are not in the SIP for contingency measures. Finally, the commenter states that EPA cannot claim that Congress in the 1990 Amendments ratified the practice of allowing waiver measures as contingency measures because EPA has never before adopted it.

Response: Our discussion in the proposal regarding the SIP crediting of emissions reductions from waiver measures does not address the SIP purposes for which these reductions would be used. Our discussion presumed that waiver measures could be credited for any SIP purpose for which similar federal measures can be used: "EPA treated [the waiver] rules similarly to the federal motor vehicle control requirements, which EPA has always allowed states to credit in their SIPs without submitting the program as a SIP revision." 74 FR at 33939. While there was no explicit statutory requirement for contingency measures prior to the 1990 CAA Amendments, there is no reason to believe that Congress would make a distinction between measures creditable in attainment and ROP demonstrations and those creditable for contingency measures.

EPA has long allowed States to use federal measures as contingency measures. See 62 FR 15844, 15847 (April 3, 1997), approval of Indiana's 15 percent ROP plan for the Chicago-Gary-Lake County 1-hour ozone nonattainment area; 62 FR 66279 (December 18, 1997), approval of Illinois' 15 percent ROP plans for the Chicago-Gary-Lake County 1-hour ozone nonattainment area and East St. Louis 1-hour ozone nonattainment area; 66 FR 30811 (June 8, 2001), approval of Rhode Island's post-96 ROP plan; 55 FR 33996, 33999 (June 26, 2001), approval of St. Louis's 1-hour ozone attainment plan; 66 FR 40802, 40824 (August 3, 2001) finalized at 66 FR 56944 (November 13, 2001), approval of Indiana's attainment and ROP demonstrations and related contingency measures for the Chicago-Gary-Lake County 1-hour ozone nonattainment area; 66 FR 56904, 56905 (November 13, 2001) approval of Illinois's attainment and ROP demonstrations and related contingency measures for the Chicago-Gary-Lake County 1-hour ozone nonattainment area.

We have also discussed the potential use of federal measures as contingency measures. See, for example, 66 FR 586, 600 and 615-616 (January 3, 2001), approval of the Washington, D.C. area's 1-hour attainment demonstration; and 66 FR 634 (January 3, 2001), approval of Connecticut's attainment demonstration.

Finally, we allow the use of federal measures as contingency measures for 8-hour ozone plans. See 68 FR 32802, 32837 (June 2, 2003), proposed 8-hour ozone implementation rule and 70 FR 71612, 71651 (November 29, 2005), phase 2 8-hour ozone implementation rule.

Comment: CRPE argues against the use of waiver measures and on-road fleet turnover as contingency measures because waiver measures are not in the SIP and there are no control measures that require fleet turnover. It argues that reductions from fleet turnover are derived from assumptions based on voluntary future activity that fail to meet the Act's requirements for enforceable measures.

Response: As discussed previously, we believe that reductions from waiver measures can be used to meet the CAA's contingency measure requirement even though they are not in the SIP.

The measures relied on for attainment contingency measure emission reductions are the State and federal on- and off-road new engines standards and not fleet turnover. Fleet turnover is the process of new, cleaner engines replacing old, dirtier engines through normal attrition. It is the mechanism by which all new engine standards are implemented, and it is how these standards actually result in emissions reductions in an area.

Our intention in discussing fleet turnover in our proposals was to highlight that already-adopted on- and off-road new engines standards would produce substantial additional emissions reductions in 2011 over 2010. These emissions reductions, however, did not assume any additional programs (e.g., incentive funding) to increase the rate of fleet turnover over the rate that was expected when the new engines standards were adopted.

Comment: CRPE argues that it is arbitrary and capricious and a violation of the CAA for EPA to approve 2008 and 2010 ROP contingency measure demonstrations or to provide credit to the attainment year contingency demonstration when EPA has made no finding that such fleet turnover reductions have actually occurred.

Response: To show that the plan included contingency measures for the 2008 and 2010 ROP demonstrations, the state showed that baseline mobile, stationary and area source measures collectively assured that the area's emission levels were at least 3 percent below the level needed to show ROP. See 74 FR at 33941. As we have discussed previously, absent information to the contrary, we assume that sources comply with applicable emission limitations and the agencies responsible for ensuring compliance with them are exercising appropriate oversight. We also assume that engines are being replaced on the schedule expected when the new engine standard was adopted.

The attainment contingency measures in the 2004 SJV 1-hour ozone plan rely on prospective new emissions reductions that will result from the anticipated fleet turnover in 2011. We have determined that the mobile source measures relied on for these contingency measures are adopted and are being implemented and will continue to generate emissions reductions in 2011. We cannot, however, determine whether the anticipated fleet turnover in 2011 has actually occurred until after 2011.

Comment: SJVAPCD encouraged EPA not to disapprove the attainment contingency measures in the 2004 1-hour ozone plan because the CAA does not specify that a minimum reduction of 3 percent is required for contingency measures and ARB has informed the District that it would be submitting additional information demonstrating that there are sufficient additional emissions reductions from creditable measures to meet the 3 percent requirement.

Response: Subsequent to the District submitting this comment, ARB submitted additional information and, based on that information, we proposed to approve the attainment contingency measures in the 2004 1-hour ozone plan and to withdraw our proposed disapproval. See 74 FR 50936 (October 2, 2009). We are approving these measures in this final action.

Comment: ARB submitted additional information from the modeling inventories in the 2004 SIP that shows on- and off-road mobile source measures adopted prior to September 2002 provide emissions reductions in 2011of 4.2 percent of the adjusted 2010 baseline.

Response: On October 2, 2009 we proposed to approve the attainment contingency measures in the SJV 1-hour ozone plan based on this additional information provided by ARB and to withdraw our July 14, 2009 proposed disapproval. See 74 FR 50936. We are approving the attainment contingency measures in this final action.

H. VMT Offset Requirement

Comments: CRPE alleges that the 2004 SIP fails to include transportation control measures (TCM) as required by CAA section 182(d)(1)(A), asserting that the plain language, legislative history, and the structure of the CAA require TCMs when vehicle miles traveled (VMT) increase in a region. In support of its position, the Center quotes a statement from the legislative history of the 1990 CAA Amendments: "[t]he baseline for determining whether there has been growth in emissions due to increased VMT is the level of vehicle emissions that would occur if VMT held constant in the area." 2 S. Comm. on Environment & Public Works, 103rd Cong., A Legislative History of the Clean Air Act Amendments of 1990 (Comm. Print 1993) at 3266 (H.R. Rep. No. 101-490 (1990)).

Response: CAA section 182(d)(1)(A) requires a state to submit a SIP revision, for severe and extreme nonattainment areas such as the SJV area, that identifies and adopts specific enforceable transportation control strategies and TCMs to offset any growth in emissions from growth in VMT or numbers of vehicle trips in such areas. Since the statutory language plainly requires that growth in emissions be offset, we interpret this provision to require TCMs only when there is growth in emissions due to growth in VMT or vehicle trips and not when there is simply growth in VMT or vehicle trips without a consequential growth in emissions. Because the 2004 1-hour ozone plan shows that through the attainment year there will be no increase in motor vehicle emissions caused by increased VMT or numbers of vehicle trips, the statutory duty to adopt and submit TCMs to offset emissions growth has not been triggered. See 2008 Clarifications, page 9, (Table 3) and 74 FR at 33945 (Table 6).

We discuss CAA section 182(d)(1)(A), as well as the excerpt from the legislative history of the 1990 CAA Amendments cited by the commenter, in the General Preamble:

> The EPA has received comment indicating that section 182(d)(1)(A) should be interpreted to require areas to offset any growth in VMT above 1990 levels, rather than offsetting VMT growth only when such growth leads to actual emissions increases. Under this approach, areas would have to offset VMT growth even while vehicle emissions are declining. Proponents of this interpretation cite language in the House Committee Report which appears to support the interpretation. The report states that '(t)he baseline for determining whether there has been growth in emissions due to increased VMT is the level of vehicle emissions that would occur if VMT held constant in the area.' (H.R. No. 101–490, part 1, 101st Cong. 2nd Sess., at 242).
>
> Although the statutory language could be read to require offsetting of any VMT growth, EPA believes that the language can also be read so that only actual emissions increases resulting from VMT growth need to be offset. The statute by its own terms requires offsetting of 'any growth in emissions from growth in VMT.' It is reasonable to interpret this language as requiring that VMT growth must be offset only where such growth results in emissions increases from the motor vehicle fleet in the area.
>
> While it is true that the language of the H.R. 101–490 appears to support the alternative interpretation of the statutory language, such an alternative interpretation would have drastic implications for many of the areas subject to this provision. Since VMT is growing at rates as high as 4 percent per year in some cities such as Los Angeles, these cities would have to impose draconian TCM's such as mandatory no-drive restrictions, to fully offset the effects of increasing VMT if the areas where [sic] forced to ignore the beneficial impacts of all vehicle tailpipe and alternative fuel controls.
>
> Although the original authors of the provision and H.R. 101–490 may in fact have intended this result, EPA does not believe the Congress as a whole, or even the full House of Representatives, believed at the time it voted to pass the CAAA that the words of this provision would impose such severe restrictions. There is no further legislative history on this aspect of the provision; it was not discussed at all by any member of the Congress during subsequent legislative debate and adoption.
>
> Given the susceptibility of the statutory language to these two alternative interpretations, EPA believes that it is the Agency's role in administering the statute to take the interpretation most reasonable in light of the practical implications of such interpretation, taking into consideration the purposes and intent of the statutory scheme as a whole. In the context of the intricate planning requirements Congress established in title I to bring areas towards attainment of

> the ozone standard, and in light of the absence of any discussion of this aspect of the VMT offset provision by the Congress as a whole (either in floor debate or in Conference Report), EPA concludes that the appropriate interpretation of section 182(d)(1)(A) requires offsetting VMT growth only when such growth would result in actual emissions increases."

57 FR 13498, 13522–13523.

We have consistently applied this interpretation in our previous approvals of other SIPs implementing the provision. See, for example, 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 the 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, D.C. area's 1-hour attainment demonstration and related provisions; and 70 FR 34358 (June 14, 2005), approval of Atlanta's VMT plan.

We also applied this interpretation in our March 10, 2009 final action on the 2004 1-hour ozone plan for the South Coast Air Basin (SCAB). In comments on the proposal for this action, CRPE made the same arguments as it does here. See 74 FR 10176, 10179, and letter, Brent Newell, Legal Director, Center on Race, Poverty & the Environment, November 17, 2009, "Comments on Approval and Promulgation of Implementation Plans: 1-Hour Ozone Extreme Area Plan for San Joaquin Valley, CA (Docket No. EPA-R09-OAR-2008-0693); Comments on Implementation Plans; State of California; 2003 State Strategy and 2003 South Coast Plan for One-Hour Ozone and Nitrogen Dioxide (Docket No. EPA-R09-2008-0677)."

CRPE has also petitioned the 9th Circuit Court of Appeals to review our March 2009 final action including our determination that the plan met CAA section 182(d)(1). See Petitioners' Joint Opening Brief, *Association of Irritated Residents, Et Al. v. EPA*, and *Natural Resources Defense Council, Inc. v. EPA*, Nos. 09-71383 & 09-71404, 9th Circuit Court of Appeals. We incorporate by reference our response brief at pages 47-61. See Brief for the Respondents, *Association of Irritated Residents, Et Al. v. EPA*, and *Natural Resources Defense Council, Inc. v. EPA*, Nos. 09-71383 & 09-71404, 9th Circuit Court of Appeals.

Comments: CRPE asserts that VMT has increased within the San Joaquin Valley and that vehicle emissions are higher than they would be if VMT held constant in the area, so EPA's failure to require TCMs violates the Act.

Response: For the reasons discussed in response to the previous comment, we believe that section 182(d)(1)(A) only requires the offset of any growth in emissions due to VMT growth and not the offset of any growth in VMT in the absence of consequential growth of motor vehicle emissions. Consistent with our guidance in the General Preamble, the 2004 1-hour plan

demonstrates that there is no year-to-year growth in motor vehicle emissions due to VMT growth over the life of the plan. See 2008 Clarifications, p. 9. Therefore, no additional TCMs are required under section 182(d)(1)(A), and EPA may approve the 2004 SIP as meeting the CAA section 182(d)(1). See discussion at 74 FR at 33944.

Comment: Earthjustice first notes that EPA proposes to find that the 2004 1-hour plan satisfies the CAA section 182(d)(1)(A) requirement based on inventory data showing that NOx and VOC emissions from motor vehicles decline every year from 2000 through 2011 and then argues that the demonstration is insufficient to reasonably demonstrate compliance with this requirement because the inventories are not based on the latest EMFAC model. It also argues that while it is possible that the new EMFAC2007 model will show a steady decline in motor vehicle emissions, that outcome is not obvious or certain because the revisions increased NOx emission levels from trucks. Finally, it asserts that EPA must use the current EMFAC2007 and related inventories to assess whether control measures are in fact required under section 182(d)(1)(A).

Response: For the reasons discussed above in our responses to comments on the emission inventory, we do not believe California is required to update the 2004 1-hour ozone plan with EMFAC2007. The CAA section 182(d)(1)(A) requirement only applies to offsetting growth in VOC emissions and does not require offsetting growth in NOx emissions, thus the comment on increases in NOx emissions is not germane.[39] We note again that California has submitted a new ozone plan based on EMFAC2007 to address CAA requirements for the 8-hour ozone standard.

Comment: Earthjustice argues that because EPA and ARB no longer allow EMFAC2002 (but rather require EMFAC2007) to be used for transportation conformity determinations, it is arbitrary for EPA to continue to rely on it in the 2004 SIP to demonstrate compliance with section 182(d)(1)(A).

Response: The commenter does not explain the connection it finds between the current requirement to use EMFAC2007 in transportation conformity determinations and the use of EMFAC2002 in the demonstration of compliance with section 182(d)(1) in the 2004 1-hour ozone plan. Currently transportation conformity in the SJV is done using motor vehicle emissions budgets (MVEB) from the 8-hour ozone plan and these MVEBs were developed using EMFAC2007. See 2007 Ozone Plan, Appendix C. The MVEB from the 1-hour ozone plan can no longer be used in conformity determinations in the Valley.

The 2004 SIP addresses the now revoked 1-hour ozone standard. As a result of our 1-hour ozone standard revocation, transportation conformity determinations are no longer required for that standard. See 69 FR 40004 (July 1, 2004). Under our transportation conformity regulations, 8-hour ozone MVEBs replace existing 1-hour ozone MVEBs once the 8-hour ozone

[39] While this is not clear from the language in section 182(d)(1) itself, it is made clear in the similar requirement for carbon monoxide (CO) plans in section 187(b)(2): "the State shall submit a revision that includes the transportation control measures as required in section 182(d)(1) …except that such revision shall be for the purpose of reducing [CO] emissions rather than volatile organic compound emissions." See also, General Preamble at 13521.

budgets are found adequate or are approved. See 40 CFR 93.109(e)(1) and (2). The MVEB budgets from the 2004 SIP were used in initial conformity determinations in the SJV area under the 1997 8-hour ozone standard. They were replaced, however, when we found the 8-hour ozone budgets from the 20007 SIP to be adequate on January 8, 2009.[40] Thus, the 1-hour budgets in the 2004 SIP are now obsolete, and for this reason we proposed no action on them. See 74 FR at 33946, ftn 28. We received no comments on this point.

I. Clean Fuels/Technology for Boilers

Comment: Earthjustice notes EPA's statements that the District's two rules governing gas- and liquid-fired boilers, Rules 4306 and 4307, require advanced NOx controls and have been approved as RACT and that the District's rule covering solid-fuel-fired boilers, Rule 4352, also requires advanced NOx control. It then asserts that EPA has no rational basis for these claims and EPA has not identified what kinds of advanced controls are in place at sources covered by these rules. The commenter included several permits for solid-fuel boilers that operate in the SJV, asserting that permits do not require catalytic control technology or comparably effective methods to reduce NOx emissions.

Response: Section 182(e)(3) of the Act requires that SIPs for extreme ozone nonattainment areas contain provisions requiring that each new, modified, and existing electric utility and industrial and commercial boiler that emits more than 25 tpy of NOx either: (1) burn as its primary fuel a clean fuel (natural gas, methanol, or ethanol, or a comparably low-polluting fuel), or (2) use advanced control technology (such as catalytic control technology or other comparably effective control methods) to reduce NOx emissions. We believe the term "catalytic control technology" was intended generally to refer to selective catalytic reduction (SCR).

SJVAPCD Rule 4306-Boilers, Steam Generators and Process Heaters - Phase 3; Rule 4307-Boilers, Steam Generators, and Process Heaters - 2.0 MMBtu/hr To 5.0 MMBtu/hr; and Rule 4309-Boilers, Steam Generators, and Process Heaters - 0.075 MMBtu/hr To 2.0 MMBtu/hr apply to gas- and liquid-fueled boilers.[41] Because of the fuel-input rate limits (5.0 MMBtu/hr and 2.0 MMBTU/hr) in Rules 4307 and 4308, as approved in the SIP, boilers subject to these rules are too small to be subject to CAA section 182(e)(3) (i.e., these boilers do not emit greater than 25 tpy of NOx).[42] We discussed in the proposal that boilers subject to Rule 4306 could only

[40] See Letter, Deborah Jordan, EPA to James Goldstene, ARB, "Adequacy Status of San Joaquin Valley 8-hour Ozone Rate of Progress and Attainment Plan Motor Vehicle Emissions Budgets" and 74 FR 4032 (January 22, 2009).

[41] EPA approved Rule 4306 as amended September 18, 2003 at 69 FR 28061 (May18, 2004); Rule 4307 as amended on April 20, 2006 at 72 FR 29887 (May 30, 2007); and Rule 4308 as adopted October 20, 2005 at 72 FR 29887 (May 30, 2007). These are the versions of the rules credited in the 2004 SIP. See 74 FR at 33937 (Table 2).

[42] An uncontrolled 5.0 MMBtu gas- or liquid-fuel boiler would need to emit at a rate of 1.14 lbs of NOx per MMBtu burned to emit 25 tpy of NOx (25 tpy x 2000 lb/ton divided by 365 days per year x 24 hours per day x 5 MMBTU/hr). According to Table 4-7 in the 1994 ACT, uncontrolled NOx emissions rates for gas and liquid fuel boilers range from 0.06 lb/MMBtu to 0.79 MMBtu. The 1994 ACT is the "Alternative Control Techniques Document--NOx Emissions from Industrial/Commercial/Institutional (ICI) Boilers," Emissions Standards Division, EPA, March 1994.

comply with the limits in that rule through the use of advanced control technologies. See 74 FR at 33945. SJVAPCD Rule 4352-Solid Fuel Fired Boilers, Steam Generators, and Process Heater (amended May 18, 2006) applies to boilers that burn a variety of solid fuels. We discuss Rule 4352 further below.

The State submitted the 2004 SIP on November 15, 2004. As of that date, the last full year of inventory data available to the District to determine if boilers in the SJV area met the section 182(e)(3) requirement was 2003. Inventory data available from the ARB's emissions inventory database (http://www.arb.ca.gov/ei/emissiondata.htm) show that, in 2003, all boilers that emitted 25 tpy NOx were either fired on natural gas or solid fuel.

SJVAPCD Rule 4352- Solid Fuel Fired Boilers, Steam Generators, and Process Heater (amended May 18, 2006) applies to commercial and industrial boilers (in addition to other types of emission units) at facilities that potentially emit 10 tpy or more of NOx, which includes all boilers at such facilities that emit more than 25 tpy of NOx. All of the NOx emission limits in the current rule effectively require operation of Selective Noncatalytic Reduction (SNCR) control systems. As discussed below, we believe SNCR is "comparably effective" to SCR for the affected sources, and thus fulfills CAA section 182(e)(3) requirements for these affected sources. SNCR also appears to achieve NOx emissions reductions comparable to combustion of clean fuels at these types of boilers.[43]

According to information in EPA's RACT/BACT/LAER Clearinghouse (http://cfpub.epa.gov/rblc/htm/bl02.cfm), recent Prevention of Significant Deterioration (PSD) permits contain emission limits for coal-fired boilers ranging from 0.067 lbs/million Btu (MMBtu) (for large coal-fired boilers with SCR and low-NOx burner technology) to 0.1 lbs/MMBtu (for medium-sized coal-fired boilers with SNCR). These limits reflect Best Available Control Technology (BACT) determinations under the PSD program. See RACT/BACT/LAER Clearinghouse. According to the 1994 ACT for industrial/commercial/ institutional boilers (Table 2-6), wood-fired watertube boilers with SCR can achieve NOx emissions of 0.22 lb/MMBtu. The 1994 ACT does not contain emission levels for wood-fired fluid bed combustion boilers with SCR but states that this type of unit with SNCR can achieve NOx emission limits ranging from 0.03 to 0.20 lb/MMBtu.

Our review of these emission ranges indicates that although emission rates can vary according to fuel type and boiler size, generally SNCR controls are comparably effective to SCR for boilers firing wood (biomass), municipal solid waste, and many other types of solid fuels. As a general matter, SNCR is also comparably effective to SCR control for circulating fluidized bed coal-fired boilers of less than 50 MW electric generation capacity. For coal-fired boilers, we

[43] We proposed to approve Rule 4352 as meeting the CAA section 182(b)(1) RACT requirement on May 30, 2007 at 72 FR 29901. Concurrent with this May 30, 2007 proposal, we also approved Rule 4352 in a direct final action. See 72 FR 29887. Because we received adverse comments on this direct final action, we withdrew it on July 30, 2007 (72 FR 41450). On December 9, 2009 we reproposed to approve Rule 4352 into the SIP but to disapprove the District's demonstration that the rule met the RACT requirement. See 74 FR 65042.

have focused our review on circulating fluidized bed boilers of less than 50 MW electric generation capacity because all existing coal-fired boilers in the SJV are of this type and below this size. See SJVAPCD, "District Permitted Solid Fuel Boilers," found in the docket for this rulemaking. The emission levels achieved by SNCR control systems are also generally comparable to the uncontrolled NOx emissions from boilers firing clean fuels such as natural gas, which may range from 0.07 to 0.45 lb/MMBtu (Table 2-2 in the 1994 ACT for ICI boilers). SNCR control systems consistently achieve up to 80 percent NOx emissions reductions and are compatible with almost all solid fuel-fired boiler operations, while other controls may in some cases be sensitive to catalyst poisoning and other technical constraints.

As to boilers that emit above 25 tpy of NOx, we note that, as a practical matter, only existing boilers in the SJV are likely to be constrained by the NOx emission limits in Rule 4352, as all new boilers that potentially emit above 25 tpy and all major modifications at existing boilers will also be subject to the more stringent control technology requirements of the Nonattainment New Source Review (NSR) or PSD permit programs. The requirements of Rule 4352 are generally applicable to this source category and do not supplant any more stringent control requirements that apply on a case-by-case basis under the NSR or PSD permit programs.

Additionally, according to a list of permitted facilities in the SJV provided by the District, all permitted units subject to Rule 4352 are equipped with SNCR.[44] This list may be found in the docket for this rule. The permits attached by the commenter all state that the units involved have ammonia injection, another name for SNCR.

K. Other Comments

1. Pesticide Measure

Comment: CRPE provided extensive comments on the alleged unenforceability of the pesticide element in the 2003 State Strategy and argued that EPA should disapprove it.

Response: CRPE's comments on the pesticide element are not germane to the action we are taking here nor are they timely and we will not address their specifics. EPA proposed no action on the pesticide element in the 2003 State Strategy as part of its action on the 2004 SJV 1-hour ozone plan. As we noted in the proposal and acknowledged by the commenter, the plan does not rely on emissions reductions from the pesticide element to demonstrate attainment or ROP. See 74 FR at 39936, ftn. 7.

In our July 14, 2009 notice, we proposed to approve only those provisions of the 2003 State Strategy that relate to the aggregate emissions reduction commitment for the San Joaquin Valley. See 74 FR at 33947. We did not propose to approve any of the individual measures in the Strategy because these measures, including the pesticide element, had previously been approved in our rulemaking on the 2004 South Coast ozone plan. See 74 FR 10177, 10181

[44] SJVAPCD permits all boilers except for those that exclusively use natural gas or liquefied petroleum gas and have a heat input of less than 5 MMBtu/hr. See SJVAPCD Rule 2010 and 2020. Thus, "all permitted units subject to Rule 4352" covers all solid-fuel boilers potentially subject to CAA section 182(e)(3).

(March 10, 2009). In that action, we note that the pesticide element in the 2003 State Strategy is simply a continuation of the existing pesticide program, a program EPA initially approved in 1997. See 74 FR 10177, 10180. CRPE timely raised its issues related to the alleged unenforceability of the pesticide in association with the South Coast ozone plan rulemaking and has raised issues again in litigation. See also, Brief for the Respondents, *Association of Irritated Residents, Et Al. v. EPA*, and *Natural Resources Defense Council, Inc. v. EPA*, Nos. 09-71383 & 09-71404, 9th Circuit Court of Appeals, pages 16-17 and 45-47.

2. Emissions Reduction Credit for SJVAPCD Rule 4570, Confined Animal Facilities

In our July 14, 2009 proposed action on the 2004 SJV 1-hour ozone plan, the only proposal related to Rule 4570, Confined Animal Facilities (CAF) is a specific emissions reductions credit for the rule. See 74 FR at 33937 (Table 2). In a separate proposal published on the same day as the notice on the 1-hour plan, we proposed a limited approval/limited disapproval of Rule 4570. 74 FR 33948 (July 14, 2009). CRPE submitted comment letters on both the proposed action on the 2004 1-hour ozone plan and the proposed action on Rule 4570. In both letters, it commented on the appropriate emissions reductions credit to give the rule . We respond to the comments on this issue below. CRPE also commented extensively on other aspects of rule and our proposal on it. We have responded to these other comments in our final action on that rule. See "Revisions to the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District" Final Rule (Rule 4570), as signed December 11, 2009.

Comment: CRPE comments that EPA should not allow emissions reduction credit for SJVAPCD Rule 4570 because we have proposed to disapprove the rule for not meeting the CAA's requirement for RACT.

Response: On July 14, 2009, EPA proposed a limited approval/limited disapproval of Rule 4570. First we proposed to approve the rule into the California SIP under CAA section 110(k) as SIP strengthening. Second, we proposed to disapprove the District's demonstration that the rule meets the RACT provisions of CAA section 182(b)(2). See 74 FR 33948. The limited approval means that the rule is an enforceable part of the SIP. The limited disapproval requires the District to provide additional documentation and/or rule revisions to assure that the rule is RACT in order to avoid the imposition of sanctions under CAA section 179 and the promulgation of a FIP under CAA section 110(c). EPA uses this approach when a rule is not sufficient to meet the CAA requirement for which it has been submitted but approval of the rule into the SIP will nevertheless strengthen the SIP. We are finalizing our action on Rule 4570 concurrent with this action on the 2004 1-hour ozone plan. Because Rule 4570 is now approved into the SIP, emissions reductions from it can be credited in the plan's attainment demonstration and for other CAA requirements.

Comment: CRPE comments that allowing emissions reduction credit for compliance with menu option A.1 in Rule 4570 (feed according to National Research Council (NRC) Guidelines) for dairy, beef feedlot, and other cattle facilities is arbitrary and capricious and an abuse of discretion because these reductions are already reflected in the baseline emissions factor used to

calculate total emissions from dairies and other cattle related operations. It then claims that if the 10 percent emissions reduction credit for option A.1. was eliminated, then emissions reductions from Rule 4570 would drop from 7,563 tons per year (21 tons per day) to 5,632 tons per year (15.5 tons per day). The Center included a number of documents in support of its comments on the emissions reductions.

Response: In the 2004 SIP, reductions from Rule 4570 are estimated to be 17.7 tpd or 28 percent of the baseline inventory for confined animal facilities. See 2008 Clarifications at 7 and 74 FR at 33937 (Table 2). In determining the emissions reductions from the rule, SJVAPCD conservatively estimated that compliance with menu option A.1. would reduce emissions by 10 percent over the baseline.

The District initially adopted Rule 4570 in June 2006 after conducting public workshops and providing a public review and comment period on both the draft rule and its estimate of the Rule's potential emissions reductions. See Final Draft Staff Report for Rule 4570, p. 50. [45] During this public process, the Center submitted comments similar to the ones it makes here. In response to these comments, the District noted that its emissions reductions estimate was based on a number of research studies showing that changes in animals' diets would result in VOC emissions reductions and that the 10 percent reduction it was using was at the low end of the range of effectiveness seen in this research. It also noted that the information available in the studies used to establish the baseline emission factor were not conclusive on whether the animals in those studies were fed according to the NRC guidelines and thus the baseline did not necessarily include reductions associated with a NRC diet. See Final Draft Staff Report for Rule 4570, Appendix A, p. 12.

The District based its estimated emissions reductions for Rule 4570 on a careful consideration of the information then available and used conservative (i.e., low) estimates of the potential emissions reductions. We have reviewed the District's analysis and find it reasonable. Final Draft Staff Report for Rule 4570, p. 24. More specifically, we do not believe that it overestimates the reductions from menu option A.1. as alleged by the commenter.

We note that the Center raised this specific issue in State court litigation on Rule 4570. The courts found for the District on this issue. See *Association of Irritated Residents v. SJVAPCD* (2008), 168 Cal. App. 4th 535, 553-554.

Comment: CRPE argues that Rule 4570 codifies existing practices and, therefore, will not generate emissions reductions. Citing the District's Staff Report for Rule 4570, it claims that the District admits that many of the control measures are currently being implemented and that the District defends its rule as an anti-backsliding measure that will ensure that current voluntary practices are not abandoned. CRPE then asserts that the approach that the District has taken violates the statutory requirement that rules must reduce emissions.

[45] SJVAPCD, "Final Draft Staff Report Proposed Rule 4570 (Confined Animal Facilities)," June 15, 2006.

Response: The District believes and we concur that Rule 4570 will generate significant emission reductions. Simply because a practice is an existing industry practice does not mean that every facility uses it or uses it consistently.

The commenter does not cite the provision in the CAA that it believes requires, as condition of approval, that SIP rules must reduce emissions. EPA finds nothing in the CAA that requires that rules approved into the SIP by EPA result in direct and quantifiable emission reductions. We frequently approve rules and rule revisions that merely clarify existing requirements and are not expected to reduce emissions demonstratively. EPA can not provide SIP credit for measures that are not enforceable, so even if measures are being implemented making them mandatory under the SIP allows credit for such reductions in the SIP, which would not otherwise be available.

A similar argument was raised in response to our 2005 proposal to approve SJVAPCD Rule 4550, Conservation Management Practices (CMP) for agricultural sources of PM-10. The commenter claimed that the emission reductions estimated to be achieved by the rule were inaccurate and inflated because the estimate double-counted emission reductions already being achieved from practices already in common use by growers. In our response to this argument we stated that "it was understood that some agricultural sites may have been employing practices not required by regulation at that time, and that these existing practices may not have been accounted for in the emission inventory. Rule 4550 makes these practices mandatory and federally enforceable, allowing the District to take credit for the emission reductions…." 71 FR 7683 (February 14, 2006)

Comment: CRPE claims that the District guessed or applied a default emissions reduction estimate to come up with a 36 percent reduction of VOC emissions from dairy operations for Rule 4570. It then asserts that approval of the rule with "fictitious" reductions based on commonly-used industry practices would be arbitrary and capricious because the majority of controls have no factual support whatsoever.

Response: The District used the best information available at the time it adopted Rule 4570 and applied that information reasonably to determine the emissions reductions estimates for the rule. See Rule 4570 Staff Report, p. 22. As noted above, simply because a practice is commonly used in an industry does not mean that it is used by every facility or used consistently by every facility in that industry. We note that the Center also raised this specific issue in State court litigation on Rule 4570. The courts found for the District on this issue. See *Association of Irritated Residents v. SJVAPCD* (2008), 168 Cal. App. 4th 535, 553-554.

3. Emissions Reduction Credit for ARB's Reformulated Gasoline and Diesel Fuel Rule

Comment: CRPE comments that EPA should not allow emissions reduction credit from ARB's reformulated gasoline and diesel fuel rule in the 2004 SIP for the reasons explained in its comment letter on EPA's proposed approval on that rule.

Response: EPA proposed to approval ARB's fuel regulations on July 10, 2009 at 74 FR 33196. In its comment letter on the fuel proposal, CRPE argued that the ARB's fuel rules were not enforceable for various reasons. EPA has reviewed CRPE's comments and determined nothing in them changed our determination that the fuels rules are enforceable and thus fully creditable. We have provided responses to CRPE's comments in our final rule approving ARB's reformulated gasoline and diesel fuel rules. See "Approval and Promulgation of Air Quality Implementation Plans; California," Final Rule (California Fuels), signed December 11, 2009.

4. Monitoring Procedures for Waiver Measures

Comment: CRPE comments that the 2004 SIP and the 2003 Final State Strategy fail to demonstrate a monitoring program for waiver measures, stating EPA regulations specifically require each plan to make this demonstration, citing 40 CFR 51.111.
Response: EPA's regulation at 40 CFR 51.111 requires a description of enforcement methods including, but not limited to, procedures for monitoring compliance with each of the selected control measures and procedures for handling violations. These requirements apply to the control measures that are in the SIP. For the reasons discussed previously, we do not believe that California's mobile source measures that receive waivers under CAA section 209 need to be submitted for inclusion into the SIP; therefore, California need not include a description of the enforcement and or monitoring program for these measures in the SIP. As we noted in the proposal, ARB's source monitoring and enforcement programs including its procedures for handling violations, are described at http://www.arb.ca.gov/enf/enf.htm. See 74 FR at 33945.

5. New Source Review

Comment: Earthjustice comments that EPA's proposed approval does not discuss how extreme area new source review requirements have been met in the Valley. It then asserts that the District's NSR Rule 2201 does not meet the CAA NSR requirements for areas classified as extreme and that the District has not been implementing 40 CFR part 51, Appendix S as required since being bumped up to extreme on April 16, 2004. Finally, it argues that EPA should ensure that these permitting requirements are in place and being implemented and without them the plan does not provide for expeditious attainment.

Response: SJVAPCD did not rely on its extreme NSR program for demonstrating attainment and provides a sufficient growth allowance to assure new sources subject to the NSR program will not interfere with the attainment and RFP demonstrations. See 2004 SIP at 3-22. Therefore, comments on them are not germane to this action. Because of this, we did not address any aspects of the program in our proposed action on the 1-hour ozone attainment demonstration. We note that on December 18, 2008, SJVAPCD adopted revisions to the NSR rule to address the extreme area requirements and California submitted the revisions on March 17, 2009.

6. Miscellaneous Comments

Comment: In a November 17, 2008 letter, attached to the comments submitted on this rulemaking action, Earthjustice comments that EPA should act on the 2003 Final State Strategy

as it was originally submitted by ARB. It argues that ARB's February 13, 2008 letter from Executive Officer James Goldstene withdrawing portions of the Strategy is not legal.

Response: Our proposal on the 2003 Final State Strategy was limited to those portions of the Strategy that related to ozone attainment in the San Joaquin Valley, specifically the State's emissions reductions commitments. The portions of the State Strategy withdrawn by California in the ARB's February 13, 2008 letter related only to the South Coast. ARB makes this clear in the enclosure to the letter:

> ARB is withdrawing the outdated elements of the 2003 State Strategy that were submitted as part of the 2003 State Implementation Plan for the South Coast Air Basin.... ARB is not withdrawing the emissions reduction commitment of the 2003 State Strategy as it applies to the San Joaquin Valley Air Basin.

"California Air Resources Board, Elements withdrawn from 2003 Submittal to U.S. EPA of the California South Coast Air Quality," enclosure to letter, James Goldstene, ARB to Wayne Nastri, February 13 2008.

With regard to the legal authority of James Goldstene to withdraw a portion of the submission and whether we have the authority to act on portions of a submission that have been withdrawn, we refer the commenter to our responses to a nearly identical comment in the final action on the 2003 South Coast SIP and 2003 State Strategy as it relates to the South Coast. 74 FR 10176, 10177 (March 10, 2009).

Comment: In its November 17, 2008 letter, Earthjustice comments that EPA cannot approve the motor vehicle emission budgets (MVEB) in the 2004 SIP because the attainment demonstration is not approvable.

Response: We did not act on the MVEB in the 2004 SIP because they became obsolete when we found the MVEB in area's 8-hour ozone standard plan (the 2007 Ozone Plan) adequate on January 22, 2009. [46] Under our transportation conformity regulations, 8-hour ozone MVEBs replace existing 1-hour ozone MVEBs once the 8-hour ozone budgets are found adequate or are approved. See 40 CFR 93.109(e)(1) and (2). See 74 FR at 33946, ftn. 28. See also, 69 FR 40004 (July 1, 2004) and *memorandum* from Robert J. Meyers, Acting Assistant Administrator, Office of Air and Radiation to Regional Administrators, "Decision of the U.S. Court of Appeals for the District of Columbia Circuit on our Petition for Rehearing of the Phase 1 Rule to Implement the 8-Hour Ozone NAAQS," June 15, 2007.

Comment: Earthjustice argues that EPA has "opportunity to be proactive in developing a plan that addresses the impending failure [of the SJV area] to attain" and should immediately start working on a federal implementation plan that includes not only elements missing from the

[46] See Letter, Deborah Jordan, EPA to James Goldstene, ARB, "Adequacy Status of San Joaquin Valley 8-hour Ozone Rate of Progress and Attainment Plan Motor Vehicle Emissions Budgets" and 74 FR 4032 (January 22, 2009).

SJVAPCD's extreme area plan but also any additional measures that will be required upon a failure to attain such as the CAA section 185 fee requirement. It asserts that the current version of the District's CAA section 185 fee rule is not adequate for EPA to implement because it requires the District to update and provide a corrected inventory for the attainment year. Earthjustice also states that EPA should initiate sanction clocks.

Response: CAA section 179(a) provides that sanction clocks are started under these four circumstances: 1) EPA has made a finding of failure to submit for a CAA-required element, 2) EPA has made an incompleteness finding on a submittal of a CAA-required element, 3) EPA has disapproved a CAA-required element, or EPA has found that a SIP is not being implemented. CAA section 110(c) authorizes EPA to promulgate a FIP for a CAA-required element under the first three circumstances when EPA has not approved a State-submitted correction.

EPA has not disapproved any required element of the SJV 1-hour ozone attainment demonstration or has found that the State has failed to submit or submitted an incomplete 1-hour ozone attainment demonstration. Therefore, no sanctions or FIP clock has been triggered.

We note that we have several sanctions and FIP clocks running for the SJV, resulting from the disapprovals of RACT demonstrations for Rule 4570 – Confined Animal Facilities, Rule 4605 – Aerospace Assembly and Component Manufacturing Operations, and others and for our partial disapproval of Rule 3170 – Federally Mandate Ozone Nonattainment Fee. See "Revisions to the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District" Final Rule (Rule 4570), as signed December 11, 2009; "Revisions to the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District" Final Rule (Rule 3170), as signed December 11, 2009; and "Revisions to the California State Implementation Plan, San Joaquin Valley Air Pollution Control District," Final Rule (Rules 4401, 4605, 4684) as signed December 3, 2009.

Because our proposal on the 2004 1-hour ozone plan did not address SJVAPCD's section 185 rule, the comments on its adequacy are not germane. In a separate action, we approved in part and disapproved in part SJVAPCD's section 185 rule. See "Revisions to the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District" Final Rule (Rule 3170), as signed December 11, 2009. We proposed this action at 74 FR 33950 (July 14, 2009). We note that should EPA be required to implement a section 185 program in the place of the District, EPA would do so pursuant to a federal program and not the District's program.

Comment: Earthjustice states that failure of the SJV nonattainment area to attain 1-hour ozone standard will trigger the consequences outlined in section 179(d), including the requirement to revise the SIP to include all measures that can feasibly be implemented.

Response: EPA's proposal did not address, either directly or indirectly, the potential consequences of the SJV nonattainment area's failure to attain the 1-hour ozone standard by its applicable deadline. None of EPA's conclusions regarding the approvability of the 2004 SJV 1-hour ozone plan rely upon or are affected in anyway by the potential consequences of the SJV

failing to attain the revoked 1-hour ozone standard by its applicable deadline. Therefore, this comment is not germane and no EPA response is required on the alleged consequences of any such future failure.