Adequacy Status of 8-hour Ozone and $PM_{2.5}$ Motor Vehicle Emissions Budgets in 2007 South Coast State Implementation Plan

We have found adequate for transportation conformity purposes certain 8-hour ozone and $PM_{2.5}$ motor vehicle emissions budgets in the 2007 South Coast State Implementation Plan (2007 South Coast SIP), as amended on April 30, 2008. As a result of our adequacy findings, the Southern California Association of Governments (SCAG) and the U.S. Department of Transportation must use the adequate budgets in future transportation conformity determinations once the findings become effective.

By letter dated November 28, 2007, the California Air Resources Board (CARB) submitted the 2007 South Coast SIP to EPA as revisions to the California State Implementation Plan. On February 1, 2008, CARB submitted supplemental technical information related to RFP for the 8-hour ozone NAAQS. On February 12, 2008, we announced receipt of the plans on the Internet and requested public comment by March 13, 2008. We received one set of public comments from Coalition for Clean Air, Earthjustice, and Natural Resources Defense Council. Our responses to these comments are contained in an attachment to this letter.

On March 25, 2008, CARB proposed revisions to the 8hour ozone and PM2.5 motor vehicle emissions budgets in the 2007 South Coast SIP and posted these revised budgets on its website. In its March 26, 2008 letter to EPA, CARB indicated that the proposed motor vehicle emissions budgets would replace the motor vehicle emissions budgets in the 2007 South Coast SIP and requested that EPA parallel process its adequacy review of the revised motor vehicle emissions budgets. On March 27, 2008, we announced our adequacy review of the revised budgets and requested public comment by April 28, 2008. CARB adopted the budgets as proposed, and submitted them to EPA on April 30, 2008. We received one set of comments during the second comment period from Robert E. Yuhnke, Adrian Martinez, and Michael Replogle (representing the Coalition for Clean Air, Coalition for a Safe Environment, Endangered Habitats League, Environmental Defense Fund, East Yard Communities for Environmental Justice, and the Natural Resources

Defense Council). Our responses to these comments are contained in the enclosure.

Through its April 30, 2008 submittal, CARB has replaced the original set of motor vehicle emissions budgets in the 2007 South Coast SIP with two sets of motor vehicle emissions budgets, referred to as "SIP-based" budgets and "baseline" budgets. CARB states that the "SIPbased" budgets are consistent with the 8-hour ozone and PM_{2.5} attainment and reasonable further progress demonstrations submitted to EPA on November 28, 2007, but are not identical to the original motor vehicle emissions budgets in the 2007 South Coast SIP. The "SIP-based" motor vehicle emissions budgets differ from the original budgets in two ways. First, emissions reductions attributable to the State's strategy have been removed from the 2008 8-hour SIP's ozone motor vehicle emissions budgets and the 2009 PM_{2.5} SIP's motor vehicle emissions budgets. Second, the budgets, originally calculated using the South Coast Air Ouality Management District's CEPA emission factor model, were re-calculated using EMFAC2007. EPA approved the EMFAC2007 model for SIP and conformity purposes on January 18, 2008 (73 FR 3464); EPA has not approved CEPA for SIP development or transportation conformity analyses.

The "baseline" motor vehicle emissions budgets reflect emissions reductions from rules that were adopted as of October 2006 but, in contrast to the "SIP-based" budgets, do not include new emissions reductions from the State's strategy as reflected in the 2007 South Coast SIP. The "baseline" motor vehicle emissions budgets are also based on EMFAC2007.

The State requests that EPA gives primary consideration to the "SIP-based" budgets in its adequacy review, and only find the "baseline" budgets to be adequate if EPA cannot find the "SIP-based" budgets adequate in their entirety. Both sets of motor vehicle emissions budgets, as submitted on April 30, 2008, are shown in the following tables:

| <u>"Baseline" 8-</u> | hour Ozone Motor Vehi | cle Emissions Budgets |
|----------------------|-----------------------|----------------------------------|
| Budget Year | | er average tons per day (tpd) |
| | ROG | NOx |

| <u>"Baseline" 8-</u> | hour Ozone Motor Vehi | cle Emissions Budgets |
|----------------------|-----------------------|-----------------------|
| 2008 | 215 | 427 |
| 2011 | 176 | 354 |
| 2014 | 150 | 287 |
| 2017 | 131 | 232 |
| 2020 | 116 | 190 |

| Baselin | "Baseline" PM _{2.5} Motor Vehicle Emissions Budgets | | | | |
|-------------|--|-------------------|--------------------------|--|--|
| Budget Year | <u>PM_{2.5} – ani</u> | nual average tons | s per day (tpd) | | |
| | ROG | NOx | <u>PM</u> _{2.5} | | |
| 2009 | 196 | 413 | 38 | | |
| 2012 | 163 | 337 | 38 | | |

| "SIP-based" 8 | -hour Ozone Motor Vehi | icle Emissions Budgets | |
|---------------|------------------------|-------------------------|--|
| Budget Year | - | er average tons per day | |
| | | <u>(tpd)</u> | |
| | ROG | <u>NOx</u> | |
| 2008 | 215 | 427 | |
| 2011 | 162 | 320 | |
| 2014 | 125 | 196 | |
| 2017 | 111 | 167 | |
| 2020 | 101 145 | | |
| 2023 | 93 | 128 | |

| <u>"SIP-base</u> | "SIP-based" PM _{2.5} Motor Vehicle Emissions Budgets | | | | |
|------------------|---|-----|--------------------------|--|--|
| Budget Year | ${ m PM}_{2.5}$ - annual average tons per day (tpd) | | | | |
| | <u>ROG</u> <u>NOx</u> <u>PM</u> _{2.5} | | <u>PM</u> _{2.5} | | |
| 2009 | 196 | 413 | 38 | | |
| 2012 | 139 | 276 | 37 | | |
| 2014 | 122 | 201 | 33 | | |
| 2023 | 89 | 131 | 37 | | |
| 2030 | 75 | 121 | 39 | | |

This transmits our decision that the 8-hour ozone and $PM_{2.5}$ reasonable further progress "baseline" motor vehicle emissions budgets in the 2007 South Coast SIP, as amended on April 30, 2008, are adequate for transportation conformity purposes. These "baseline" budgets are consistent with the State's reasonable further progress demonstrations for 8-hour ozone and $PM_{2.5}$, and these budgets are based adopted control measures that have already been implemented. The budgets also meet the other adequacy criteria, including being precisely quantified and clearly related to the overall SIP. Therefore, these budgets meet the transportation conformity adequacy criteria found in 40 CFR 93.118(e)(4).

This also transmits our finding that the 8-hour ozone and $PM_{2.5}$ "SIP-based" motor vehicle emissions budgets in the 2007 South Coast SIP are inadequate for transportation conformity purposes. The "SIP-based" budgets include estimated emission reductions associated with a number of commitments for future rule adoption that lack specificity. As such, SCAG will not be able to accurately quantify future emission reductions associated with the commitments. Without additional specificity, it is also unclear how the "SIP-based" budgets are precisely quantified or related to the overall emissions inventory and other measures. Therefore, these "SIP-based" budgets do not meet the adequacy criteria found in 40 CFR 93.118(e)(4).

We have detailed our findings in additional enclosure. A copy of the transmittal letter, this, and the transmittal letter's other enclosures will soon be posted on the Internet at

http://www.epa.gov/otaq/stateresources/transconf/adequacy.h tm. We will also announce the findings of adequacy and inadequacy in the <u>Federal Register</u>. The findings will become effective 15 days after the <u>Federal Register</u> announcement pursuant to 40 CFR 93.118(f).

Enclosure 1

Transportation Conformity Adequacy Review 2007 South Coast SIP [Reasonable Further Progress (RFP) and Attainment Demonstrations for 8-Hour Ozone and $PM_{2.5}$]

Adopted September 27, 2007 (2007 South Coast SIP), November 15, 2007 (original motor vehicle budgets), April 24, 2008 (revised motor vehicle budgets); Submitted November 28, 2007 (2007 South Coast SIP, including original budgets), February 1, 2008 (supplemental material related to eight-hour ozone RFP), April 30, 2008 (revised motor vehicle budgets).

| Adequacy Review Criteria | | Is | Reference in SIP document/comments |
|--------------------------|----------------------|------------|---|
| (40 CFR part 93) | | Criterion | |
| | | Satisfied? | |
| Sec. | The plan was | Y | The November 28, 2007 transmittal letter submitting the 2007 South Coast SIP with the |
| 93.118(e) | endorsed by the | | original budgets was sent by CARB's Executive Officer, James Goldstene, the governor's |
| (4)(i) | Governor (or | | designee. CARB held a public hearing on September 27, 2007 on the plans and on November |
| | designee) and was | | 15, 2007 on the original motor vehicle emissions budgets. The April 30, 2008 transmittal letter |
| | subject to a public | | submitting the revised motor vehicle emissions budgets was sent by CARB's Executive |
| | hearing by the | | Officer, James Goldstene, the governor's designee. CARB held a public hearing on April 24, |
| | State. | | 2008 on the revised motor vehicle emissions budgets. |
| Sec. | The plan was | Y | Documentation accompanying the plan describes a public and agency outreach effort. See, |
| 93.118(e) | developed through | | e.g., the SCAQMD's Response to Comments on the Draft 2007 Air Quality Management Plan |
| (4)(ii) | consultation with | | (February 2007), submitted by CARB on November 28, 2007 as enclosure I-E, describing nine |
| | federal, state and | | regional workshops held from October 24 through December 6, 2006 to discuss the draft 2007 |
| | local agencies; full | | Air Quality Management Plan (AQMP) released on October 10, 2006. The sequence of public |
| | implementation | | meetings held to discuss the elements of the draft State Strategy for California's 2007 SIP |
| | plan | | (State Strategy) is described in the CARB staff report developed for the CARB Board's |
| | documentation was | | consideration prior to adoption of the State Strategy. The State Strategy, adopted by CARB on |
| | provided to EPA | | September 27, 2007, and submitted to EPA on November 28, 2007, is relied upon by the 2007 |
| | and | | South Coast SIP. EPA received a copy of the draft 2007 AQMP and draft State Strategy, and |
| | EPA's stated | | EPA's comments were addressed. The revised motor vehicle emissions budgets adopted by |

| | concerns, if any, were addressed. | | CARB on April 24, 2008, and submitted to EPA on April 30, 2008, included an interagency consultation process, in which EPA's comments on the draft revised motor vehicle emissions budgets were addressed. |
|-------------------------------|---|-----|--|
| Sec. 93.118(e) (4)(iii) | The motor vehicle emission budgets are clearly identified and precisely quantified. | Y/N | Both the "SIP-based" and "baseline" budgets are clearly identified. The budgets are found at the following website: http://www.arb.ca.gov/planning/sip/sip.htm , and are located half way down the page at the section titled "2007 South Coast and Coachella Valley 8-hour Ozone and PM _{2.5} Plans" (Attachments 1 and 2). The "SIP-based" budgets are not precisely quantified because the new emission reductions do not result from adequately specified control measures. In contrast, the "baseline" budgets reflect control measures that are already implemented and do not include new emission reductions attributed to general commitments; therefore, these budgets are precisely quantified. |
| Sec. 93.118(e) (4)(iv) | The motor vehicle emissions budgets, when considered together with all other emission sources, are consistent with applicable requirements for reasonable further progress, attainment, or maintenance (whichever is relevant to the given plan). | Y/N | EPA has preliminarily concluded that the "baseline" budgets, when considered together with all other emission sources, are consistent with the requirement to demonstrate reasonable further progress for eight-hour ozone (years 2008, 2011, 2014, 2017, and 2020) and PM _{2.5} (years 2009 and 2012). With respect to ozone, this finding is based on review of the plan's ozone RFP demonstration, as supplemented on February 1, 2008, that reasonably demonstrates the required 3% annual rate of progress (averaged over each three year period) called for in EPA's eight-hour ozone implementation rule. With respect to PM _{2.5} , this finding is based on review of the State's RFP modeled demonstration that reasonably identifies PM _{2.5} precursor attainment targets and thus establishes approximate levels of emissions reductions necessary to achieve generally linear progress for the 2009 and 2012 PM _{2.5} RFP milestones, as required by EPA's PM _{2.5} Implementation Rule. EPA cannot determine that the "SIP-based" motor vehicle emissions budgets are consistent with the requirement to demonstrate attainment. The "SIP-based" motor vehicle emissions budgets incorporate new emission reductions that do not result from specified control measures that have been drafted or adopted in regulatory form (or have been adequately supported as a voluntary measure). |
| Sec. 93.118(e) (4)(v) | The plan shows a clear relationship between the emissions budgets, | Y/N | The emission inventories for all point, area, and mobile sources for 2002, 2014, 2020, and 2023 are contained in Chapter 3 of SCAQMD's Final 2007 Air Quality Management Plan (AQMP). The control strategy that is relied upon for the "SIP-based" budgets is set out in Chapter 4 of SCAQMD's Final 2007 AQMP and Appendix IV-A, and in CARB's Staff report |

| | control measures | | (http://www.arb.ca.gov/planning/sip/2007sip/southcoast/scstaffreport.pdf) and appendices. |
|-----------|---------------------|---|---|
| | and the total | | The tables on pages ES-3 and ES-4 of the CARB Staff Report provides the on-road mobile |
| | emissions | | source emission reductions for PM _{2.5} and 8-hour ozone, respectively. On February 1, 2008, |
| | inventory. | | CARB submitted supplemental information concerning 8-hour ozone RFP. The plan, as |
| | - | | supplemented on February 1, 2008, shows a clear relationship between the "baseline" budgets |
| | | | and the emissions inventory, but does not show a clear relationship between the "SIP-based" |
| | | | emissions budgets, control measures, and the total emissions inventory. The submittal dated |
| | | | April 30, 2008 made changes to the budgets to reflect the use of EMFAC2007, but the changes |
| | | | (relative to those calculated using SCAQMD's CEPA model) are minor and the emissions |
| | | | estimates remain consistent with the RFP demonstrations for 8-hour ozone or PM _{2.5} in the |
| | | | 2007 South Coast SIP, as supplemented for 8-hour ozone RFP on February 1, 2008. The "off- |
| | | | model" adjustments to the baseline inventory, as referenced in the footnote to the motor |
| | | | vehicle emissions budgets, for the motor vehicle emission budgets, are available on pages 73 |
| | | | (NOx), 76 (ROG) and 79 (PM _{2.5}) of Appendix A, the Emission Inventory Output Tables, of |
| | | | the May 7, 2007 update to the Revised Statewide Strategy for California's 2007 SIP. A link to |
| | | | the document can be found at: |
| | | | http://www.arb.ca.gov/planning/sip/2007sip/2007sip.htm The document is available at: |
| | | | http://www.arb.ca.gov/planning/sip/2007sip/apr07draft/revdrftappa.pdf. The reductions are |
| | | | associated with the following rules adopted through December 31, 2006: Reflash, Public |
| | | | Fleets, Idling, AB1493, and the Carl Moyer Program. The emissions reductions associated |
| | | | with the Carl Moyer Program have been adjusted by 47% to reflect only the on-road |
| | | | reductions from Moyer programs. As stated elsewhere, the "SIP-based" motor vehicle |
| | | | emissions budgets incorporate new emission reductions from the State's strategy that do not |
| | | | result from specified control measures that have been drafted or_adopted in regulatory form (or |
| | | | have been adequately supported as a voluntary measure). |
| Sec. | Revisions to | Y | The budgets found adequate in this action constitute a revision to budgets previously submitted |
| 93.118(e) | previously | | on November 28, 2007. The revision, submitted on April 30, 2008, explains and documents all |
| (4)(vi) | submitted | | changes to previously submitted budgets. |
| | control strategy or | | |
| | maintenance plans | | |
| | explain and | | |

| | document any | | |
|-----------|----------------------|---|---|
| | changes to any | | |
| | previous submitted | | |
| | budgets and control | | |
| | measures; impacts | | |
| | on point and area | | |
| | source emissions; | | |
| | any changes to | | |
| | established safety | | |
| | margins (see 93.101 | | |
| | for definition), and | | |
| | reasons for the | | |
| | changes (including | | |
| | the basis for any | | |
| | changes to emission | | |
| | factors or estimates | | |
| | of vehicle miles | | |
| | traveled). | | |
| Sec. | EPA has reviewed | Y | SCAQMD compiled public comments submitted during the June 1, 2007 public hearing and |
| 93.118(e) | the State's | | during the public comment periods. These comments and the responses are included in the |
| (5) | compilation of | | February 2007 "Response to Comments" |
| | public comments | | (http://www.aqmd.gov/aqmp/07aqmp/modified/Response_to_Comments.pdf). ARB compiled |
| | and response to | | public comments submitted during the September 27, 2007, November 15, 2007, and the April |
| | comments that are | | 24, 2008 public hearings and during the public comment periods. These comments and the |
| | required to be | | responses are included in adoption hearing transcripts |
| | submitted with any | | (http://www.arb.ca.gov/board/meetings.htm). We have reviewed the compilation of comments |
| | implementation | | and responses and find SCAQMD's and CARB's responses to be acceptable. No issues that |
| | plan. | | might have affected our adequacy findings remain unanswered. |
| Reviewer: | Rebecca Rosen | | Date of Review: May 6, 2008 |

Enclosure 2

Response to Comments

Response to Comments from Coalition for Clean Air, Earth

Justice, and Natural Resources Defense Council (Received: March

13, 2008)

Comment 1: The commenter requests that EPA deny approval of the budgets on the basis that the emissions budgets are built on the foundation of an unapprovable SIP. The commenter further notes that their comments on the deficiencies in the budgets also highlight several areas where California's 2007 State Implementation Plan (SIP) does not comply with the minimum requirements of the Clean Air Act.

Response 1: EPA appreciates the above comments and will consider all comments relevant to SIP approvability at the time of its comprehensive review of the SIP. EPA has considered all issues in the SIP that are relevant to its budget adequacy decision, and has determined the "SIP-based" budgets (except for the 2008 8-hour ozone and the 2009 $PM_{2.5}$ budgets) to be inadequate pursuant to 40 CFR 93.118(e). In contrast, the "baseline" budgets are consistent with the State's reasonable further progress demonstrations for 8-hour ozone and $PM_{2.5}$, and these budgets are based on adopted control measures that have already been implemented. The budgets also meet the other adequacy criteria, including being precisely quantified and clearly related to the overall SIP. Therefore, these budgets meet the transportation conformity adequacy criteria found in 40 CFR 93.118(e)(4).

Comment 2: The commenter asserts that the budgets must be adjusted to exclude benefits of the federal motor vehicle control program. The commenter notes that the revised reasonable further progress (RFP) demonstration submitted by the SCAQMD purports to include some credit for the federal program, but that the budgets have not been, and must be, revised to reflect these changes to the RFP demonstration.

Response 2: EPA understands this comment to pertain only to 8-hour ozone Reasonable Further Progress. Additional information provided by the state demonstrates that RFP for South Coast is met after adjusting for the non-creditable emission reductions from the pre-1990 California Motor Vehicle Control Program (MVCP) as required under section 182(b)(2)(D). The MVCP benefits are deducted from the total baseline emission inventory

and not the conformity budgets themselves. The additional information was provided to EPA by the State on February 1, 2008 and made available to the public through EPA's adequacy posting on March 27, 2008. EPA has made a preliminary review of this information to support its adequacy finding today. Further details regarding the specifics of the RFP demonstration are outside the scope of the adequacy process, and would be considered during EPA's SIP review.

Comment 3: The commenter asserts that the budgets should be adjusted to reflect the unenforceability of marine vessel controls given that the Pacific Merchant Shipping Association succeeded in PMSA v. Goldstene, No. 07-16695 (9th Cir. 2008) challenging CARB's Auxiliary Engine Rule and thereby undermining the basis for the associated SOx emissions reductions included in the emissions budgets for the South Coast. The commenter also has concerns about certain emissions reductions claimed in the plan, including the 10 tpd of NOx emissions reductions in 2014 from EPA controls on locomotives. If the Federal emissions reductions are uncertain, then the commenter believes that the budgets cannot assume them.

Response 3: The first part of the comment is outside the scope of EPA's adequacy review. The State did not establish SO_2 motor vehicle emissions budgets in its $PM_{2.5}$ SIP, since on-road SO_2 emissions are not a significant source of emissions for the $PM_{2.5}$ attainment demonstration. Therefore, the comment related to the 9^{th} Circuit court decision on marine vessel control measures is not relevant to EPA's adequacy review. EPA will consider this comment, as appropriate, during its review of the State's $PM_{2.5}$ attainment demonstration.

Second, EPA is finding the 2014 $PM_{2.5}$ motor vehicle emissions budget inadequate for transportation conformity purposes, in part because CARB relies on additional locomotive NOx reductions from federal rules to demonstrate $PM_{2.5}$ attainment in 2014. On March 13, 2008, the EPA adopted standards to reduce emissions of diesel particulate matter and NOx from locomotives and marine diesel engines. Although EPA's 2008 final rule establishes new emissions standards for locomotives and marine diesel emissions that will require aftertreatment devices for marine vessels, the final rule does not require that the implementation of these controls occur in the timeframe necessary to meet the 10 tpd of NOx emissions reductions assumed by CARB in the South Coast $PM_{2.5}$ attainment demonstration for the year 2014.

Comment 4: The commenter is also concerned about the inclusion of emissions reductions for the Refinery Pilot Program.

Response 4: This comment is outside the scope of EPA's adequacy review. We appreciate the comments relating to the pilot program and we will examine, when we take rulemaking action on the plan, issues relating to the assignment of emission reductions to this measure. However, we believe that neither the RFP provisions nor the motor vehicle emissions budgets that we are finding adequate depend upon emissions reductions from the pilot program.

Comment 5: The commenter asserts that California's proposed use of "black box" measures in the 2007 SIP fails to meet the requirements and intent of the Clean Air Act. The commenter identifies three fundamental problems with the way California is using this allowance in the Clean Air Act: the magnitude of the black box (approximately 280 tons per day or 55% of the reductions needed from measures that still need to be adopted to attain federal air quality standards), the misuse of the "black box" to delay implementation of necessary and available measures needed from vehicle retirement, and the vaqueness of the black box measures. In addition, the commenter believes that EPA should take into account the expected failure to attain the 1hour ozone standard by applicable attainment date of 2010 and the purported lack of success by the State with respect to "black box" measures in previously-approved 1-hour ozone plans in reviewing the "black box" commitments in the current plan submittal. In sum, the commenter believes that EPA must direct CARB to extract from the black box needed reductions they know will not come from future technologies, reduce the overall size of the black box to a reasonable level, and better define where the remaining black box reductions are expected to come from.

Response 5: This comment is outside the scope of EPA's adequacy review. EPA will consider these comments and the issues they raise when we take rulemaking action on the 8-hour ozone attainment demonstration for 2023. The question of whether the "black box" portion of the plan is approvable affects only the adequacy of the attainment year budgets, since the plan does not rely on "black box" measure reductions for RFP. As discussed elsewhere, we are determining that the 8-hour ozone attainment year budgets in the "SIP-based" budgets are inadequate for reasons documented elsewhere in EPA's adequacy finding. Please refer to other parts of today's finding for further information.

Comment 6: The commenter asserts that the control measures in the plan fail to satisfy the minimum CAA requirements. Commenter asserts that many of the control measures in California's SIP submittal must, but fail to, include the following elements, which commenter has compiled citing various EPA documents:

- (1) evidence of adoption of the measures in legally enforceable form or a binding schedule for adoption;
- (2) a description of each measure with "detail and clarity," identifying which entity is responsible for implementation and what "actions are to be taken;"
- (3) a "thorough demonstrate[ion] that the measures are capable of achieving the estimated emission reduction benefits;"
- (4) an emission reduction estimate for each measure;
- (5) provisions for monitoring and reporting on implementation and effectiveness; and
- (6) an "identification of and commitment to the financial and manpower resources necessary to carry out the plan."

Response 6: EPA has found the motor vehicle emissions budgets that include new emissions reductions from the general commitments submitted in the 8-hour ozone and $PM_{2.5}$ SIP to be inadequate for transportation conformity purposes. EPA has determined that these budgets are inadequate because these motor vehicle emissions budgets do not meet the adequacy criteria in 40 CFR 93.118(e)(4)(iii), (iv) and (v), as described elsewhere in today's finding. EPA will consider the comments on the control measures at the time that we review the SIP's attainment demonstration for $PM_{2.5}$ nonattainment areas and 8-hour ozone extreme areas.

Comment 7: The commenter states that EPA must require CARB and the SCAQMD to include new measures and strengthen existing measures to achieve additional reductions. The commenter asserts that the 2007 SIP does not include all feasible measures, and that several of the measures in the plan must be strengthened to achieve additional emissions reductions. Moreover, the commenter asserts that CARB continues to rely on more polluting diesel technologies rather than requiring the use of cleaner technologies and fuels to reach attainment sooner.

The commenter lists and describes nine new or revised measures that EPA should require CARB to pursue, including:

- (1) cleaner in-use off-road equipment;
- (2) cleaner in-use heavy duty truck rule;

- (3) smog check improvements, particularly related to accurate SIP accounting for the failure rates for vehicles shortly after being repaired for emissions problems and/or passing smog check, accelerating the use of remote monitoring of OBD systems to ensure that vehicle owners fix faulty emissions systems, and expanding the testing program to include PM;
- (4) commitment to developing an in-use monitoring emissions standard for PM for heavy-duty vehicles;
- (5) expanded proposal related to passenger vehicle retirement above and beyond natural fleet turnover;
- (6) improved measure related to consumer products in relation to magnitude, specificity, and apparent reliance on a relative reactivity approach;
- (7) expanded commitment to create emission standards for recreational boats to include lower limits for ROG and NOx, a tighter implementation schedule, and inclusion of evaporative emission limits;
- (8) better use of the SIP development and approval process to achieve synergies with State programs related to climate, lower carbon fuels, and advanced clean vehicles to achieve the greatest pollution reductions; and
- (9) improved commitment for off-road mobile agricultural equipment to address enforceability concerns.

With respect to the South Coast AQMD, the commenter lists and describes five new or revised measures, including:

- (1) certification and emission reductions from use of consumer products at institutional and commercial facilities, including such elements as tracking largevolume use of VOC emitting consumer products, developing and publicizing an inventory of the least VOC-forming cleaning products available in the market, and greatly accelerating the evaluation and certification of low- and non-polluting alternatives;
- (2) extended exchange program, including specific provisions as they relate to recreational boats within the SORE exchange program.
- (3) backstop measure for indirect source of emissions from ports and port-related facilities;
- (4) strengthened AB 923 light- and medium-duty vehicle highemitter identification programs to include heavier vehicles, address particulate emissions, prioritize assistance to lower income participants, and increase public disclosure of the programs performance; and
- (5) tighter, and better defined, timeline for to achieve further SOx reductions for RECLAIM.

Response 7: EPA appreciates the commenters' thorough comments on specific control measures included in the SIP by CARB and SCAQMD, and will further consider these comments during its SIP review. EPA has considered whether the SIP demonstrates attainment for $PM_{2.5}$ or 8-hour ozone for purposes of its adequacy review of the SIP-based budgets. In taking action on the plan, EPA will consider whether any additional commitments would expedite attainment for these pollutants as well as other details related to the new commitments in the SIP (other than on-road mobile commitments). The budgets that we are finding adequate at this time are only those associated with the baseline emissions for RFP milestones, and neither the RFP provisions nor these motor vehicle emissions budgets depend upon new emissions reductions from the stationary, non-road, or area source commitments described in the above comment.

EPA will further consider the above comments when we act on the 8-hour ozone and $PM_{2.5}$ SIPs. As noted elsewhere, EPA's adequacy review process is separate from EPA's completeness review or any future SIP approvability actions.

EPA's adequacy process involves a cursory review of the SIP's motor vehicle emissions budgets according to the adequacy criteria at 40 CFR 93.118(e)(4). As described elsewhere in today's finding, EPA believes that the State's "baseline" budgets meet this adequacy criteria, including that budgets are precisely quantified and consistent with and clearly related to control measures (40 CFR 93.118(e)(4)(iii) and (v)). EPA has determined for its adequacy review that the Smog Check reductions in the "baseline" budgets are consistent with the Inspection and Maintenance (I/M) reductions included in the EMFAC2007 emissions factor model, which EPA approved this model for SIP development purposes on January 18, 2008 (73 FR 3464).

The technical support documents to EMFAC2007 reflect the most current information used to assess the effectiveness of the Smog Check program.

EPA notes that CARB uses the EMFAC motor vehicle emissions model to estimate emission reductions for the Smog Check program. The EMFAC model uses emission regimes to define the emission level for each vehicle. Vehicles that fail Smog Check and then get repaired are redistributed among the emission regimes according to an after-repair move matrix. The after-repair move matrices used in EMFAC are based on data collected by ARB during in-use vehicle studies. As part of the 2004 Smog Check Program

evaluation, Sierra Research analyzed data collected from roadside testing of vehicles. EPA will consider any results from this and other documentation in its future SIP action on the South Coast SIP.

Further, the commenters do not provide any quantification of the impact of these issues on the motor vehicle emissions budgets, nor do we have any other information regarding the magnitude of any potential miscalculation. Without this evidence, we are unable to consider the comment in our adequacy finding.

Comment 8: The commenter asserts that EPA should require CARB to achieve greater emissions reductions from the use of retrofits, especially tailpipe (after treatment) retrofits as has been mentioned in the International Sustainable Systems Research Center's report, and from requirements to use cleaner alternative fuels in the heavy-duty or light-duty vehicle sector.

Response 8: This comment is outside the scope of EPA's adequacy review. We appreciate the comments relating to retrofits and the use of cleaner alternative fuels and we will examine, when we take rulemaking action on the plan, whether the SIP sufficiently demonstrates attainment for $PM_{2.5}$ or 8-hour ozone. In this future rulemaking action, we will consider whether any additional measures will be needed to meet attainment for these pollutants. As documented elsewhere in this letter, EPA has found the 8-hour ozone and $PM_{2.5}$ attainment budgets to be inadequate for transportation conformity purposes.

Comment 9: The commenter asserts that EPA cannot allow the SCAQMD to assume a 100% rule effectiveness rate for its control measures and cites various EPA documents for support for this assertion.

Response 9: The comment primarily addresses SCAQMD's calculation of stationary and area source emissions, rather than the State's estimation of motor vehicle emissions. As such, this comment is not relevant to EPA's adequacy review of the motor vehicle emissions budgets. We intend to examine the issue raised by the commenters regarding the compliance rate assumptions in the plan as we undertake our rulemaking action on the SIP.

Comment 10: The commenter concludes that the contingency measures in the plan are based on an erroneous interpretation of the law, and asserts that EPA must require that California include legally adequate contingency measures.

Response 10: This issue is outside the scope of EPA's adequacy review of the budgets, which is separate from EPA's completeness and approval reviews. We will review the approvability of the contingency provisions when we undertake rulemaking on the plan.

Comment 11: Citing EPA's failure to adopt and implement necessary pollution reduction measures as an ongoing problem with the SIP process, the commenter states that EPA must contribute more pollution reductions and include those reductions in California's SIP. The commenter observes that EPA has authority to regulate certain sources of pollution that neither CARB nor the Air Districts have and that attainment of the NAAQS, EPA must exercise the authority it has or must delegate more authority to air quality agencies in California.

Response 11: This comment is outside the scope of today's decisions regarding the adequacy of the submitted motor vehicle emissions budgets. However, EPA notes the commenter's concerns regarding EPA's responsibility and authority to regulate certain sources of pollution. EPA has adopted several national regulations that will result in significant emissions reductions benefits in the South Coast Air Basin, including the Clean Air Nonroad Diesel Rule (69 FR 38957, June 29, 2004) and the Heavy Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (66 FR 5002, Jan. 18, 2001). Most recently, on March 13, 2008, the EPA adopted standards to reduce emissions of diesel particulate matter and NOx from locomotives and marine diesel engines.

Comment 12: The commenter concludes that EPA cannot reasonably deem the emissions budgets adequate at this time, in light of the specific defects in the emissions budgets, as well as the many defects in the currently-submitted SIP, that have been identified by the commenter, and must therefore find the submitted budgets inadequate.

Response 12: As stated above, EPA has found the motor vehicle emissions budgets that include new emissions reductions from general commitments submitted in the 8-hour ozone and $PM_{2.5}$ SIP to be inadequate for transportation conformity purposes. EPA has determined that these budgets are inadequate because they do not meet the transportation conformity adequacy criteria found at 40 CFR 93.118(e)(4)(iii), (iv) and (v). The budgets that we are finding adequate at this time are only those associated with the baseline emissions for RFP milestones and control measures that are already being implemented ("baseline" budgets).

Response to Comments from Coalition for Clean Air, Coalition for a Safe Environment, Endangered Habitats League, Environmental Defense Fund, East Yard Communities for Environmental Justice, and the Natural Resources Defense Council (Received: April 28, 2008)

Comment 1: The commenter objects to the submitted interim budgets for $PM_{2.5}$ based on two broad concerns. First, the commenter finds that the attainment demonstration fails to identify the elevated concentrations of $PM_{2.5}$ in the near-highway environment, to estimate the emissions reductions needed to attain the NAAQS in the near-highway environment, and to include a control strategy designed to reduce these elevated near-highway concentrations to the level of the NAAQS. Second, the commenter objects to the plan's reliance on measures that may not be implemented in the relevant horizon year (or at all), for the purposes of demonstrating attainment and RFP, citing several source categories for which assumed emissions reductions may not occur due to legal challenges, outlying implementation dates, or reliance upon voluntary compliance.

Response 1: EPA believes that these comments are outside of the scope of its adequacy action on the motor vehicle emissions budgets. EPA will consider these comments on the $PM_{2.5}$ attainment demonstration and near-roadway particulate matter emissions when it takes rulemaking action on the 8-hour ozone and $PM_{2.5}$ 2007 South Coast SIP.

Although EPA believes that these comments are outside of the scope of its adequacy action on the motor vehicle emissions budgets, EPA is concerned about the particulate matter exposure that is described by the commenters. EPA Region 9, CARB, and SCAQMD are currently undertaking both area-specific and more general monitoring and analytical projects to improve our understanding of the location, amount, and causes of elevated near-roadway ambient concentrations. For example, the SCAQMD has initiated a monitoring study to measure air pollutants generated by the freeway traffic and to determine the impacts on adjacent residential communities along the I-710 corridor. The study will compare pollutant levels measured at monitors located adjacent to the freeway to pollutant levels at distances representative of community exposure located further downwind (100-300 meters).

First, EPA is only taking action on the 2009 and 2012 $PM_{2.5}$ RFP budgets, which do not rely on the new emission reductions about which commenters expressed concern. These "baseline" budgets are consistent with the State's reasonable further progress

demonstrations for 8-hour ozone and PM2 5 as well as adopted control measures that have already been implemented. Today, we have also concluded for purposes of motor vehicle emissions budget adequacy that the budgets, when considered together with all other emissions sources, are consistent with the requirement to achieve reasonable further progress pursuant to 40 CFR 93.118(e)(4)(iv). This finding is based EPA's cursory review of the State's RFP modeled demonstration that reasonably identifies PM_{2.5} precursor attainment targets for the South Coast Air Basin. Thus, this demonstration establishes approximate levels of emissions reductions necessary to achieve generally linear progress for the 2009 and 2012 $PM_{2.5}$ Reasonable Further Progress milestones, as required by EPA's $PM_{2.5}$ Implementation Rule. The "baseline" budgets also meet the other adequacy criteria, including being precisely quantified and clearly related to the overall SIP, as described elsewhere in today's finding.

In addition, we are not finding adequate the motor vehicle emissions budgets associated with the attainment year because of our conclusion that new emissions reductions upon which the $PM_{2.5}$ attainment demonstration rests do not comply with the transportation conformity adequacy criteria in 40 CFR 93.118(e)(4) that relate to having specified control measures. EPA will consider these concerns when we take action on the $PM_{2.5}$ SIP's modeled attainment demonstration, reasonable further progress demonstration, and control strategies.

Finally, EPA believes that the commenters' request to conduct additional procedures for adequacy review is outside the scope of today's adequacy review on the South Coast SIP budgets. In its July 1, 2004 final "Transportation Conformity Rule Amendments for the New 8-hour Ozone and PM_{2.5} National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas" (69 FR 40041), EPA held that adequacy findings do not need to be made through APA notice and comment rulemaking. Today's action followed the EPA's established adequacy process under 40 CFR 93.118(f), providing a 30-day public comment period and the findings will be published in the Federal Register before becoming effective. EPA has sent its response to comments received on the adequacy of the submitted SIP budgets to the State along with its adequacy finding letter. EPA will also send our letter, response to comments, and Federal Register notice to individuals who request a copy of these documents. EPA will also post its adequacy finding and FR notice on its adequacy website, as required by the transportation conformity rule. Please see the preamble to the July 2004 final rule for further information regarding EPA's adequacy process (40 CFR 40038-40047).