

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street

San Francisco, CA 94105-3901

Richard Corey
Executive Officer
California Air Resources Board
1001 I Street
Post Office Box 2815
Sacramento, California 95812

Re: Adequacy Status of the San Joaquin Valley 1997 Annual PM<sub>2.5</sub> Attainment Plan Motor Vehicle Emissions Budgets

### Executive Officer Corey:

We have found adequate for transportation conformity purposes the motor vehicle emissions budgets ("budgets") in the San Joaquin Valley "Attainment Plan Revision for the 1997 Annual PM2.5 Standard" ("15  $\mu$ g/m³ SIP Revision" or "Plan"), as these budgets pertain to the Plan's reasonable further progress (RFP) and attainment demonstrations. As a result of our finding, the San Joaquin Valley metropolitan planning organizations (MPOs) and the U.S. Department of Transportation (USDOT) must use the adequate budgets in future transportation conformity analyses once the finding becomes effective.

On November 8, 2021, the California Air Resources Board submitted the 15  $\mu g/m^3$  SIP Revision to the U.S. Environmental Protection Agency (EPA) as an amendment to the "2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards" ("2018 PM<sub>2.5</sub> Plan"). The 15  $\mu g/m^3$  SIP Revision was developed in response to the EPA's proposed partial disapproval of the 2018 PM<sub>2.5</sub> Plan with respect to the 1997 annual PM<sub>2.5</sub> standards.<sup>1</sup> The 15  $\mu g/m^3$  SIP Revision includes demonstrations of RFP and attainment for the 1997 annual fine particulate matter (PM<sub>2.5</sub>) national ambient air quality standards (NAAQS). The Plan identifies budgets for nitrogen oxides and direct PM<sub>2.5</sub> for the milestone years that apply to Serious areas subject to the requirements of Clean Air Act section 189(d) for RFP and for the attainment year for the 1997 annual PM<sub>2.5</sub> NAAQS. The budgets were derived based on the emissions inventories, air quality analyses, and modeling from the 2018 PM<sub>2.5</sub> Plan. We announced availability of the 15  $\mu g/m^3$  SIP Revision and related budgets on the Internet on November 15, 2021, and requested public comment by December 15, 2021. We received no comments on the budgets and Plan during the comment period.

This letter transmits our decision that the 2020 RFP and 2023 attainment year budgets contained in the 15  $\mu$ g/m<sup>3</sup> SIP Revision are adequate for transportation conformity decisions. These

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<sup>&</sup>lt;sup>1</sup> 86 FR 38652 (July 22, 2021) (proposed disapproval of RFP and attainment demonstrations, among other plan elements, in the 2018 PM<sub>2.5</sub> Plan for the 1997 annual PM<sub>2.5</sub> NAAQS). The EPA finalized the partial disapproval, as proposed on November 26, 2021 (86 FR 67329).

budgets are consistent with the Plan's RFP and attainment demonstrations for applicable milestone years, and these budgets are based on control measures that have already been adopted and implemented. The budgets also meet the other adequacy criteria; therefore, these budgets meet the transportation conformity adequacy criteria found in 40 CFR 93.118(e)(4). The adequate budgets are as follows:

San Joaquin Valley Motor Vehicle Emissions Budgets for the 1997 Annual PM <sub>2.5</sub> NAAQS (annual average, tons per day)					
County	2020 (RFP Year)		2023 (Attainment Year)		
	$PM_{2.5}$	$NO_X$	PM <sub>2.5</sub>	$NO_X$	
Fresno	0.9	25.3	0.8	15.1	
Kern (San Joaquin Valley portion)	0.8	23.3	0.7	13.3	
Kings	0.2	4.8	0.2	2.8	
Madera	0.2	4.2	0.2	2.5	
Merced	0.3	8.9	0.3	5.3	
San Joaquin	0.6	11.9	0.6	7.6	
Stanislaus	0.4	9.6	0.4	6.1	
Tulare	0.4	8.5	0.4	5.2	

The budgets for 2020 and 2023 meet the adequacy criteria found in 40 CFR 93.118(e)(4)(iii), (iv), and (v). Once effective, these budgets must be used to demonstrate transportation conformity for the 1997 annual PM<sub>2.5</sub> NAAQS. The 2018 PM<sub>2.5</sub> Plan, as amended by the 15 μg/m<sup>3</sup> SIP Revision, provides a trading mechanism for the budgets for the 1997 annual PM<sub>2.5</sub> NAAQS, but the trading mechanism will not be available for use by the MPOs or USDOT for conformity determinations with respect to the budgets for the 1997 annual PM<sub>2.5</sub> NAAQS unless and until the EPA approves it as part of our action on the Plan.<sup>2</sup>

Pursuant to 40 CFR 93.104(e), within two years of the effective date of the adequacy finding, San Joaquin Valley MPOs and the USDOT will need to demonstrate conformity to the new budgets if the demonstration has not already been made. For demonstrating conformity to the budgets in this Plan, the motor vehicle emissions from implementation of the transportation plan should be projected consistently with the budgets in this Plan, i.e., by taking each pollutant's annual average day emissions results from EMFAC and then rounding emissions up to the nearest tenth of a ton.

We have detailed our adequacy finding in the enclosure. A copy of this letter and its enclosure will soon be posted on the Internet at: <a href="https://www.epa.gov/state-and-local-transportation/adequacy-review-state-implementation-plan-sip-submissions-conformity">https://www.epa.gov/state-and-local-transportation/adequacy-review-state-implementation-plan-sip-submissions-conformity</a>. We will also announce the adequacy finding in the *Federal Register*. The finding will become effective 15 days after the date of publication in the *Federal Register* pursuant to 40 CFR 93.118(f). Upon the effective date of the notice of adequacy, the San Joaquin Valley MPOs will be able to use the new budgets to demonstrate conformity to this Plan thereby ending the conformity freeze that

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 $<sup>^2</sup>$  Previous EPA approvals of trading mechanisms for the budgets for the other PM<sub>2.5</sub> NAAQS in San Joaquin Valley are unaffected by this adequacy determination.

took effect on December 27, 2021, under 40 CFR 93.120 of the transportation conformity rule.<sup>3</sup>

If you have any questions regarding this adequacy finding, please contact me at (415) 317-3744 or have your staff contact Anita Lee at (415) 972-3958 or Ashley Graham at (415) 972-3877.

Sincerely,

Matthew Lakin Acting Director Air and Radiation Division

#### Enclosure

cc via email:

Samir Sheikh, Executive Director/Air Pollution Control Officer, San Joaquin Valley Unified Air Pollution Control District

Sheraz Gill, Deputy Air Pollution Control Officer, San Joaquin Valley Unified Air Pollution Control District

Edie Chang, Deputy Executive Officer, California Air Resources Board

Michael Benjamin, Division Chief, Air Quality Planning and Science Division, California Air Resources Board

Rodney Tavitas, Caltrans

Antonio Johnson, Planning Team Leader, Federal Highway Administration

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Administration

Ahron Hakimi, Executive Director, Kern Council of Governments

Diane Nguyen, San Joaquin Council of Governments

Patricia Taylor, Madera County Transportation Commission

Rosa Park, Stanislaus Council of Governments

Stacie Guzman, Merced County Association of Governments

Ted Smalley, Tulare Council of Governments

Terri King, Kings County Association of Governments

Tony Boren, Fresno Council of Governments

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<sup>&</sup>lt;sup>3</sup> Upon the effective date of our November 26, 2021 final rule (i.e., December 27, 2021), the San Joaquin Valley area became subject to a conformity freeze under 40 CFR 93.120(a)(2) of the transportation conformity rule.

## **ENCLOSURE**

## **Transportation Conformity Adequacy Review**

Control Strategy State Implementation Plan (SIP) Under Review: "Attainment Plan Revision for the 1997 Annual PM2.5 Standard" ("15 µg/m³ SIP Revision" or "Plan")			Date of SIP Revision Receipt by EPA: November 8, 2021
Reviewers: Ashley Graham and Karina O'Connor Date: 1/19/2022		Date: 1/19/2022	
Adequacy Review Criteria Is Criterion (40 CFR part 93) Satisfied?			Reference in SIP Document/Comments
Sec. 93.118(e)(4)(i)	The plan was endorsed by the Governor (or designee) and was subject to a public hearing.	Y	On November 8, 2021, the Governor's designee, California Air Resources Board's (CARB) Executive Officer, Richard Corey, submitted to the EPA the "Attainment Plan Revision for the 1997 Annual PM2.5 Standard (August 19, 2021)" ("15 μg/m³ SIP Revision" or "Plan"), via the EPA's State Planning Electronic Collaboration System (SPeCS) for SIPs. The transmittal letter, dated November 8, 2021, indicates that CARB formally adopted the 15 μg/m³ SIP Revision on September 23, 2021, through a Board Resolution (Resolution 21-21), following a CARB public hearing on September 23, 2021.  The San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD or "District") issued public notice of the 15 μg/m³ SIP Revision on July 20, 2021, requesting public comments at or before the District Board hearing held on August 19, 2021. The District Board adopted the plan following the public hearing on August 19, 2021.  CARB issued the public notice on August 13, 2021 and requested public comments at or before the public hearing held on September 23, 2021. The CARB notice is available at: https://ww2.arb.ca.gov/sites/default/files/2021-09/sjvpm2.5siprevisionnotice.pdf.
Sec. 93.118(e)(4)(ii)	The plan was developed through consultation with federal, state and local agencies; full implementation plan documentation was provided and EPA's stated concerns, if any, were addressed.	Y	Consultation with federal, State, and local agencies was undertaken. Consultation on the draft 2018 PM <sub>2.5</sub> Plan on which the underlying technical information in the 15 μg/m³ SIP Revision is based, including the conformity budgets therein, occurred throughout August 2018 via the San Joaquin Valley Council of Government Directors Association Interagency Consultation Group meeting on August 7, 2018 and via emails between EPA, CARB, SJVUAPCD, and MPO representatives. The EPA received a copy of the draft 2018 PM <sub>2.5</sub> Plan and the EPA's comments were addressed. Consultation on the conformity budgets in the draft 15 μg/m³ SIP Revision occurred via emails between EPA, CARB, SJVUAPCD, and MPO representatives during June 2021.

Sec. 93.118(e)(4)(iii)	The motor vehicle emission budget(s) is clearly identified and precisely quantified.	Y	The motor vehicle emission budgets for the years 2020 and 2023 are clearly identified and precisely quantified in Table 18 and on pages D-129 to D-130 of Appendix D. Budgets in the Plan were derived from modeled projections of mobile source emissions. The Plan establishes separate direct PM <sub>2.5</sub> and NO <sub>X</sub> subarea budgets for each county and partial county (for Kern County) in the San Joaquin Valley. CARB calculated the budgets for the 15 μg/m³ SIP Revision using EMFAC2014, the latest version of the EMFAC model for estimating emissions from on-road vehicles operating in California that was available at the time that the emissions inventories and other underlying technical information in the 2018 PM <sub>2.5</sub> Plan was developed, and the latest modeled vehicle miles traveled and speed distributions from the most recently amended 2017 Federal Statewide Transportation Improvement Program (FSTIP) for each MPO as of January 2018.
Sec. 93.118(e)(4)(iv)	The motor vehicle emissions budget(s), when considered together with all other emission sources, is consistent with applicable requirements for reasonable further progress, attainment, or maintenance (whichever is relevant to the given plan).	Y	The EPA has preliminarily concluded that the budgets, when considered with all other emission sources, are consistent with the requirement to demonstrate reasonable further progress (RFP) and attainment for the 1997 annual PM <sub>2.5</sub> NAAQS. This finding is based on our preliminary review of the RFP demonstration in Appendix H (specifically, tables H-5 to H-8) and the attainment demonstration in Chapter 5.
Sec. 93.118(e)(4)(v)	The plan shows a clear relationship among the emissions budget(s), control measures and the total emissions inventory.	Y	The Plan shows a clear relationship among the budgets, the control measures, and total emissions inventories in those RFP milestone and attainment years. The baseline emissions inventories for all stationary, area, on-road mobile, and nonroad mobile sources for direct PM <sub>2.5</sub> and NO <sub>X</sub> are shown in Appendix B in tables B-1 and B-2, respectively. Direct PM <sub>2.5</sub> and NO <sub>X</sub> emissions reductions from control measures and 2023 attainment year emissions are shown in Appendix K in tables 32 and 31, respectively. The motor vehicle emissions budgets are shown in Table 18 in Appendix D and are consistent with the on-road emissions estimates.
Sec. 93.118(e)(4)(vi)	Revisions to previously submitted 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	Y	The most recent conformity budgets approved by the EPA for the 1997 annual PM <sub>2.5</sub> standards were approved on November 9, 2011 (76 FR 69896) and were submitted as part of CARB's "8-Hour Ozone State Implementation Plan Revisions and Technical Revisions to the PM <sub>2.5</sub> State Implementation Plan Transportation Conformity Budgets for the South Coast and San Joaquin Valley Air Basins." Those budgets, submitted on July 29, 2011, were for the years 2012 and 2014. The budgets under consideration do not replace those budgets because these budgets are for different years.  The budgets in the 15 μg/m³ SIP Revision for the 1997 annual PM <sub>2.5</sub> NAAQS are based on the same set of inventories (reflecting the same version of EMFAC, the same motor vehicle activity estimates, the same rounding convention, etc.) as those that are included in the 2018 PM <sub>2.5</sub> Plan and that the EPA disapproved in our November 26, 2021 partial disapproval action. The only difference is that, consistent with the new RFP and

	or estimates of vehicle miles traveled).		attainment demonstrations, the 15 $\mu$ g/m³ SIP Revision identifies budgets for 2020 as RFP budgets rather than as attainment year budgets and budgets for 2023 as attainment year budgets rather than as post-attainment RFP budgets. EPA's disapproval of the budgets from the 2018 PM <sub>2.5</sub> Plan was not based on deficiencies in the budgets per se but rather on their relationship to disapproved elements of the plan, such as the RFP and attainment demonstrations.
Sec. 93.118(e)(5)	EPA has reviewed the State's compilation of public comments and response to comments that are required to be submitted with any implementation plan.	Y	No public comments were received in advance of the August 19, 2021 District public hearing on the 15 µg/m³ SIP Revision. No public comments were received during the 30-day written comment period provided by CARB prior to the public hearing. Late comments received prior to and during the CARB public hearing and related responses were submitted to the EPA in the September 23, 2021 CARB board hearing transcript and written comments were provided in the CARB comment log.
			We have reviewed the compilation of comments provided by CARB. Commenters raised concerns about the reliance on emissions inventories developed using EMFAC2014 given that a revised version of the EMFAC model, EMFAC2017, is now available (see CARB Comment Log). The EPA has considered these comments and finds that EMFAC2014 was the latest version of the EMFAC model for estimating emissions from on-road vehicles operating in California that was available at the time that the emissions inventories and other underlying technical information in the 2018 PM <sub>2.5</sub> Plan was developed. Preliminarily, we find that reliance on EMFAC2014 in the 15 μg/m³ SIP Revision is appropriate for the purpose of maintaining consistency with the earlier plan that it amends. We have also considered information regarding the differences between the EMFAC2014 and EMFAC2017 emissions estimates included in CARB's "Staff Report, Proposed SIP Revision for the 15 μg/m³ Annual PM <sub>2.5</sub> Standard for the San Joaquin Valley" ("CARB Staff Report") that was included in the submittal package for 15 μg/m³ SIP Revision. The CARB Staff Report includes a comparison of estimated annual-average daily NO <sub>X</sub> and PM <sub>2.5</sub> emissions from on-road motor vehicles in the San Joaquin Valley in the 2013 base year. <sup>4</sup> The differences in the emissions estimates made using the different versions of EMFAC correspond to an increase of 0.6%, and a decrease of 4%, of the regional emissions inventories for PM <sub>2.5</sub> and NO <sub>X</sub> , respectively, for year 2013. As such, we preliminarily find that the differences in 2013 base year emissions derived using EMFAC2014 and EMFAC2017 are not significant enough to affect the modeled attainment demonstration for the 1997 annual PM <sub>2.5</sub> NAAQS in the 15 μg/m³ SIP Revision, and that the motor vehicle emissions budgets for 2020 and 2023 meet the transportation conformity adequacy criteria found in 40 CFR 93.118(e)(4).

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 $<sup>^4 \</sup> Available \ at \ \textit{https://ww2.arb.ca.gov/sites/default/files/2021-08/SJV\%2015\%20ug\%20SIP\%20Revision\%20Staff\%20Report\%20FINAL.pdf.$