# Staff Report CARB Review of the South Coast PM10 Maintenance Plan SIP Revision

Release Date: May 14, 2021 Hearing Date: June 24, 2021



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CARB staff has prepared a written report reviewing the District Plan. Copies of the report may be obtained from CARB's website at https://ww2.arb.ca.gov/ourwork/programs/california-state-implementation-plans/nonattainment-area-plans/south-coastair, on May 14, 2021. However, because of current travel, facility, and staffing restrictions, CARB's office may have limited access. Please contact Chris Hopkins, Regulations Coordinator, at chris.hopkins@arb.ca.gov or (916) 445-9564 if you need physical copies of the documents.

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## **Executive Summary**

The federal Clean Air Act (Act) establishes planning requirements for areas that exceed the health-based national ambient air quality standards (standards). These areas, known as nonattainment areas, must develop and implement a State Implementation Plan (SIP) that demonstrates how they will attain the standard by specified dates. In 1987, the United States Environmental Protection Agency (U.S. EPA) adopted the 24-hour particulate matter (PM10) standard of 150 micrograms per cubic meter (PM10 standard). In 1990, the South Coast Air Basin (South Coast) was designated nonattainment for the PM10 standard. After the South Coast met the PM10 standard, the South Coast Air Quality Management District (District) adopted *PM10 Redesignation Request And Maintenance Plan For The South Coast AIR Basin*<sup>1</sup> (2009 PM10 Maintenance Plan). CARB submitted the 2009 PM10 Maintenance Plan to U.S EPA along with a request to designate the South Coast as attainment of the PM10 standard. On July 26, 2013, U.S. EPA approved the 2009 PM10 Maintenance Plan and designated the South Coast as attainment for the PM10 standard. The maintenance demonstration in the 2009 PM10 Maintenance Plan showed the area would maintain the PM10 standard for at least ten years, until 2023.

Section 175(A)(b) of the Clean Air Act (Act) requires that areas redesignated to attainment must submit a SIP revision demonstrating the area will remain in attainment for an additional ten years after the initial 10-year maintenance period, in this case until at least July 2033. The second maintenance demonstration is due to U.S. EPA 8 years after the area is redesignated to attainment, in this case by July 26, 2021.

On June 4, 2021, the District will consider approval of the second maintenance plan for the PM10 standard, the *2021 PM10 Maintenance Plan for the South Coast Air Basin* (2021 PM10 Plan)<sup>2</sup>. The 2021 PM10 Plan demonstrates that emissions responsible for PM10 pollution will continue to remain below the emission levels in the 2018 base year throughout the duration of the maintenance period. The year 2018 was chosen as the base year for the 2021 PM10 Plan because it is part of the most recent three-year design value in which attainment of the PM10 Standard was monitored. The 2021 PM10 Plan covers a 12-year period beginning in 2023, the end of the period covered by the first maintenance plan, through July 2035. The 2021 PM10 Plan includes a maintenance demonstration, a commitment to operating the monitoring network in the future, a verification of continued attainment, and a contingency plan that can promptly correct any violation of the PM10 standard that occurs through the maintenance period. The CARB staff report also includes transportation conformity emission budgets for PM10, oxides of nitrogen (NOx), and reactive organic gases (ROG) for the years relevant to the 2021 PM10 Plan: 2023, 2031 and 2035.

<sup>&</sup>lt;sup>1</sup> http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/pm10\_redesignation\_request\_scab.pdf <sup>2</sup> http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-qualitymanagement-plan/draft-pm10-maintenance-plan-for-the-south-coast-air-basin.pdf?sfvrsn=8

## Background

On July 1, 1987, U.S. EPA adopted the *PM10 standard*<sup>3</sup>. PM10 is defined as particles that are less than ten microns in diameter, approximately 1/7 the diameter of a human hair. PM10 is generated at industrial sites and along roadways and is generally comprised of various materials including soil, dust, metals, acids (nitrates and sulfates) or organic chemicals. Inhalation of PM10 can exacerbate respiratory diseases, including asthma and chronic obstructive *pulmonary disease*<sup>4</sup>. U.S. EPA set the PM10 standard to provide health protection against particulate matter induced respiratory disease and premature mortality.

On November 15, 1990, the South Coast was designated nonattainment for the PM10 standard, and on July 26, 2013, U.S. EPA approved *California's request* that the South Coast be designated to attainment for the PM10 standard<sup>5</sup>.

#### Improvement in PM10 Air Quality

In the early 1990s, the *South Coast exceeded the PM10 standard approximately 15 days* every year<sup>6</sup>. Since that time, the District and CARB have developed and implemented air pollution control programs that have reduced PM10 in the South Coast. As a result, the South Coast met the PM10 standard in 2010.

An area attains the PM10 standard when the expected number of days per calendar year with a 24-hour concentration in excess of the standard (referred to as an exceedance), is equal to or less than one day averaged over a three-year period. The South Coast initially met the PM10 standard based on monitored air quality data in the years 2008, 2009 and 2010.

Since 2012, PM10 levels in the South Coast have increased slightly, primarily due to exceptional events resulting from wind-blown dust events and wildfires. Exceptional events are unusual or naturally occurring events that can affect air quality but are not reasonably controllable. The District is preparing exceptional event demonstrations for the exceedances that would affect the PM10 standard attainment status of the South Coast. Since these events are not controllable, the days affected by the exceptional events are not included when evaluating if an area meets the PM10 standard. After removing the suspected exceptional events, PM10 levels in the South Coast have continued to remain below the

<sup>&</sup>lt;sup>3</sup> https://www3.epa.gov/ttn/naaqs/standards/pm/previous/pm-1987-final-52fr24634.pdf

<sup>&</sup>lt;sup>4</sup> https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health#:~:text=Short-

term%20exposures%20to%20PM10%20have%20been%20associated%20primarily,%28COPD%29%2C%20leading%20to%20hospitalization%20and%20emergency%20department%20visits.

<sup>&</sup>lt;sup>5</sup> https://www.federalregister.gov/documents/2013/06/26/2013-15145/approval-and-promulgation-ofimplementation-plans-designation-of-areas-for-air-quality-planning

<sup>&</sup>lt;sup>6</sup> https://www.arb.ca.gov/adam/index.html

PM10 standard through 2020. For a detailed explanation of the PM10 exceptional events in the 2010 to 2020 period, see the District's 2021 PM10 Plan.

#### **Clean Air Act Requirements for Redesignation and Maintenance**

On July 26, 2013, U.S. EPA designated the South Coast as attainment for the PM10 standard. To redesignate an area to attainment for the PM10 standard, section 107(d)(3)(E) of the Act requires that five criteria are met. In 2009, the 2009 PM10 Maintenance Plan demonstrated the criteria was met to be designated to attainment<sup>7</sup>. The five criteria required to be demonstrated for redesignation are as follows:

- 1) PM10 standard was met;
- 2) relevant portions of the SIP were approved;
- 3) improvement in air quality was due to permanent and enforceable reductions in emissions;
- 4) all requirements applicable to the nonattainment area with respect to section 110 and part D of the Act were met; and
- 5) maintenance plan was approved meeting the requirements of section 175(A) of the Act.

Section 175(A) of the act sets the general framework for maintenance plans. A PM10 maintenance plan must provide for continued maintenance of the PM10 standard for ten years after redesignation and includes the following components: a maintenance demonstration; a commitment to operating the monitoring network in the future; a verification of continued attainment; and a contingency plan that can promptly correct any violation of the PM10 standard that occurs after the area has been designated attainment.

Section 175(A)(b) of the Act also requires that areas designated to attainment must, after 8 years from designation to attainment, submit a revision to the SIP that demonstrates the area will remain in attainment for an additional 10 years after the initial 10-year maintenance period.

Since the effective date of designation to attainment for the South Coast was July 26, 2013, the second maintenance demonstration is due to U.S. EPA by July 26, 2021. The District will consider approval of the 2021 PM10 Plan on June 4, 2021.

## PM10 Maintenance Plan

The 2021 PM10 Plan covers the period from July 2023 to July 2035, two extra years beyond the required maintenance period, and addresses all Section 175(A) of the Act requirements for a maintenance plan. A State can demonstrate maintenance of a standard by either showing that future emissions of a pollutant or its precursors will not exceed the level of the

<sup>&</sup>lt;sup>7</sup> http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/pm10\_redesignation\_request\_scab.pdf

attainment inventory, or by modeling to show that the future anticipated mix of sources and emission rates will not cause a violation of the standard. The 2009 PM10 Maintenance Plan relied on emissions inventory and photochemical transport modeling to demonstrate continued maintenance of the PM10 standard. However, considering that South Coast has maintained the attainment status since the submittal of the 2009 PM10 Maintenance Plan and that the new emissions inventory for PM10 and its precursors are substantially lower than in the attainment inventory approved by U.S. EPA, the continued maintenance of the PM10 standard is demonstrated only based on the new emissions inventory in the 2021 PM10 Plan.

U.S. EPA published guidance on the development of SIP revisions to attain and maintain the PM10 standard in April 1993, titled *PM-10 Guideline Document*<sup>8</sup>. Since U.S. EPA's guidance requires that the base year emission inventory used in the maintenance demonstration reflects emissions from a year the area had monitored data showing attainment, the 2021 PM10 Plan uses a 2018 base year. Continued maintenance of the PM10 standard through 2035 is demonstrated in the 2021 PM10 Plan based on levels in the latest emissions inventory, which reflects already-adopted and implemented regulations. The 2021 PM10 Plan also demonstrates maintenance in the interim years of 2023 and 2031. Besides a maintenance demonstration, the 2021 PM10 Plan includes a commitment to operate a future monitoring network, a verification of continued attainment, and a contingency plan.

## **Emissions Inventory**

The emissions inventory methodologies used in the 2021 PM10 Plan are consistent with those used in the District's 2020 South Coast PM2.5 Plan for the 2006 24-hour PM2.5 Standard<sup>9</sup> (2020 PM2.5 Plan) with minor updates. The primary change to the 2021 PM10 Plan emissions inventory compared to the 2020 PM2.5 Plan is updates to travel activity data. The previous plans use travel activity data from the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS)<sup>10</sup>, while this Plan relies on updated estimation from the 2020 RTP/SCS<sup>11</sup>.

The 2021 PM10 Plan uses 2035 as the maintenance horizon and includes 2023 and 2031 as interim years to demonstrate the continued maintenance through July 2035. Emissions inventory values by summary category can be seen in Figure 1 which demonstrates that total NOx emissions will decrease from 2018 to 2035 by 36 percent. ROG reductions between 2018 and 2035 will decrease by 8 percent, and direct PM10 emissions will increase by

<sup>&</sup>lt;sup>8</sup> https://archive.epa.gov/ttn/pm/web/pdf/pm10guidelinedocumentapril1993.pdf

 <sup>&</sup>lt;sup>9</sup> www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/draft-final-south-coast-air-basin-pm2-5-plan-110320.pdf?sfvrsn=6
<sup>10</sup> https://scag.ca.gov/resources-prior-plans

<sup>&</sup>lt;sup>11</sup> https://scag.ca.gov/read-plan-adopted-final-plan

9 percent in the South Coast. Detailed emissions inventories can be found in Chapter 3 of the 2021 PM10 Plan.



Figure 1 – NOx, PM10, and ROG Emissions in the South Coast from 2018 to 2035

The expected increase in PM10, due to the future growth in population and the economy, is not expected to cause the South Coast to exceed the PM10 standard due to the significant NOx and ROG reductions. And while PM10 emissions are expected to increase somewhat in the future, the current inventory values out to 2035 in the 2021 PM10 Plan are significantly lower for PM10 and its precursor emissions than the 2010 attainment emissions inventory included in the 2009 PM10 Maintenance Plan approved by U.S. EPA, as can be seen in Table 1.

Table 1	- Approved 2010	Attainment Inventory	Compared to 202	21 PM10 Plan Inventory
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Total Emissions (tons per day)	2009 PM10 Plan 2010	2021 PM10 Plan 2018	2021 PM10 Plan 2023	2021 PM10 Plan 2031	2021 PM10 Plan 2035
NOx	774.7	363.6	269.6	240.2	231.2
PM10	280.9	167.9	171.5	176.5	182.6
ROG	572.4	366.6	342.8	330.1	340.2

Further, it is also important to note that the 2009 PM10 Maintenance *Plan approved by U.S. EPA* included a 10 percent increase in PM10 emissions from the 2010 base year to 2023<sup>12</sup>, Table 2. This increase is comparable to the 9 percent increase in PM10 emissions from 2018 to 2035 in the 2021 PM10 Plan. The NOx and ROG emission reductions in the 2009 PM10 Maintenance Plan were also comparable to those in the 2021 PM10 Plan, with NOx emissions decreasing 35 percent from 2010 to 2023 and ROG emissions decreasing 13 percent over that time. Similar, the 2021 PM10 Plan demonstrated that NOx will decrease by 36 percent and ROG by 8 percent from 2018 to 2035.

Emissions	2009 PM10 Plan 2010 to 2023 Percent Change	<b>2021 PM10 Plan</b> 2018 to 2035 Percent Change			
PM10	10%	9%			
NOx	-35%	-36%			
ROG	-13%	-8%			

Table 2 - Emissions Changes from the Base Year in both the 2009 and 2021 PM10 Maintenance Plans

#### **Maintenance Demonstration**

As stated above, U.S. EPA PM10 guidelines<sup>13</sup> provides that States can demonstrate maintenance of a standard by showing that future emissions of a pollutant or its precursors will not exceed the emissions in a year with monitored data showing attainment for that standard. Areas can also demonstrate maintenance by modeling to show that the future mix of sources and emission rates will not cause a violation of the standard. The 2009 PM10 Maintenance Plan relied on both emissions inventory and photochemical modeling to demonstrate continued maintenance of the PM10 standard.

The 2021 PM10 Plan demonstrates maintenance by showing that future emissions will remain below emissions levels in the 2010 attainment inventory from the 2009 Maintenance Plan. The analysis in the 2021 PM10 Plan concludes that the NOx and ROG reductions are sufficient to maintain attainment of the PM10 standard, despite the projected increase in direct PM10 emissions. The 2021 PM10 Plan provides further support for maintenance in 2035 by showing that the South Coast PM10 design values in the years 2012 to 2020 were approximately 50 percent lower than the PM10 standard, when exceptional events are excluded.

<sup>&</sup>lt;sup>12</sup> Federal Register :: Approval and Promulgation of Implementation Plans; Designation of Areas for Air Quality Planning Purposes; State of California; PM10

<sup>&</sup>lt;sup>13</sup> https://archive.epa.gov/ttn/pm/web/pdf/pm10guidelinedocumentapril1993.pdf

#### PM10 Monitoring Network

U.S. EPA guidance states that in areas redesignated to attainment, an air quality monitoring network must continue to operate in order to verify continued attainment in accordance with 40 Code of Federal Regulations Part 58. To meet this requirement for the PM10 standard, the District operates PM10 Federal Reference Method monitors at 19 air quality monitoring stations, in addition to quality control collocated monitors, and continuous PM10 monitors at 11 sampling sites. With this network, the District exceeds all minimum monitoring requirements for PM10 network design and operation.

## **Verification of Continued Attainment**

U.S. EPA guidance requires states to indicate how they will track the progress of their maintenance plans over time to ensure continued attainment. U.S. EPA provides two options to track progress: 1) using periodic updates to the emissions inventory, or 2) periodic review of the inputs and assumptions used for the emission inventory. If the review of the inputs or assumptions determines they have significantly changed, an update to the inventory would be required. This guidance further requires air districts to monitor any triggers included in the contingency measures in the plan so that the implementation of contingency measures occur in a timely manner.

The regulatory emissions inventory is updated periodically by the District and CARB. The District maintains reported emissions data from major facilities through the Annual Emissions Reporting program and submits the data to CARB every year. Traffic activity data, which is an essential input to estimate on-road mobile emissions, is updated every 4 years when SCAG develops a new regional transportation plan. CARB's on-road motor vehicle emissions model, EMFAC, provides the emissions data for the on-road mobile sources and is updated approximately every 3 years. Finally, the District regularly incorporates emissions reductions resulting from regulations and programs impacting various stationary point and area sources and mobile sources into the inventory. In collaboration with CARB and SCAG, the methodologies, input data, and assumptions used to develop the emissions inventory are reviewed and updated as new data and/or methods become available.

Since the inventory is regularly reviewed, the District includes in the 2021 PM10 Plan a commitment to the second of the two options to verify continued attainment. The District will review the inputs and assumptions used for the emission inventory when new information becomes available. If the District finds that these inputs have changed significantly, the existing inventory will be updated in coordination with CARB, and evaluated for potential impacts to the 2021 PM10 Plan.

#### **Contingency Plan**

Section 175A(d) of the Act requires maintenance plans to include a contingency plan to address an exceedance of the PM10 standard and ensure maintenance. The contingency plan should identify actions to be implemented, a schedule and procedures for implementation of such actions, and a time limit for the contingency actions. In addition, the contingency plan should identify triggers for the contingency action.

In the 2021 PM10 Plan, the District defines the trigger for the contingency plan such that the contingency action is triggered if the number of PM10 standard exceedances recorded at a monitor averaged over three consecutive years exceeds the level of the PM10 standard, excluding exceptional events. The contingency actions in the 2021 PM10 Plan include a review of available data to determine the causes of the PM10 standard exceedance and then to take appropriate action. Additional potential contingency actions are listed in the 2021 PM10 Plan.

#### Transportation Conformity for the South Coast PM10 Maintenance Plan

#### Introduction

CARB has prepared the motor vehicle emissions budget (MVEB)<sup>14</sup> for the PM10 standard. Transportation conformity is the federal regulatory procedure for linking and coordinating the transportation and air quality planning processes. Under section 176(c) of the Act, federal agencies may not approve or fund transportation plans and projects unless they are consistent with SIPs. Conformity with the SIP requires that transportation activities (1) not cause or contribute new air quality violations, (2) increase the frequency or severity of any existing violation, or (3) delay timely attainment of a standard. The quantification and comparison of on-road motor vehicle emissions are elements for determining transportation conformity between air quality and transportation planning.

The transportation conformity budgets are set for each criteria pollutant or its precursors for each milestone year and the last year of the maintenance plan. Subsequent transportation plans and programs produced by transportation planning agencies are required to conform to the SIP by demonstrating that the emissions from the proposed plan, program, or project do not exceed the transportation conformity budget levels established in the applicable SIP. The budgets established in this plan apply as a "ceiling" or limit on transportation emissions in the South Coast for the years which they are defined and for all subsequent years until another year for which a different budget is specified (or until a SIP revision modifies the

<sup>&</sup>lt;sup>14</sup> Federal transportation conformity regulations are found in 40 CFR Part 51, subpart T – Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 U.S.C. of the Federal Transit Laws. Part 93, subpart A of this chapter was revised by the EPA in the August 15, 1997 Federal Register.

budget). For the 2021 PM10 Plan, the milestone years and last year of the maintenance plan (also referred to as the plan analysis years) are 2023, 2031, and 2035 respectively. As the MVEBs were going through the required interagency consultation process and were not available for inclusion in the 2021 PM10 Plan, they are being included in entirety here.

#### Methodology

The transportation conformity budgets for 2021 PM10 Plan are established based on the guidance from U.S. EPA on the motor vehicle emission categories and precursors that must be considered in transportation conformity determinations as found in the transportation conformity regulation and final rules implementing amendments to the regulation as described below.

#### **Direct PM10 Emissions**

Section 93.102(b)(1) of the Conformity Regulation indicates that directly emitted PM10 motor vehicle emissions from the tailpipe, brake wear, and tire wear must be considered in conformity determinations.

#### **Re-Entrained Paved and Unpaved Road Dust PM10 Emissions**

The Transportation Conformity Final Rule amending (on March 10, 2006) the transportation conformity regulation to establish criteria for project-level PM2.5 and PM10 conformity determinations (71 FR 12498)<sup>15</sup> indicates road dust must be included in regional conformity determinations: "EPA has intended for road dust emissions to be included in all conformity analyses of direct PM10 emissions."

#### **Transportation-Related Construction Dust PM10 Emissions**

Section 93.122(f) of the Conformity Regulation requires regional conformity determinations to include fugitive dust PM10 emissions from highway and transit construction activities if these sources are deemed significant contributors to the PM10 problem.

The 2021 PM10 Plan establishes budgets for primary emissions of PM10 from motor vehicle exhaust, tire and brake wear, and the precursors of ROG and NOx. In addition, re-entrained road dust from paved and unpaved road travel and road construction dust is included. The direct PM10 emissions budgets presented below use emission rates from California's motor vehicle emission model, EMFAC2017 (V.1.0.3)<sup>16</sup>, with the Southern California Association of Governments' (SCAG) activity data (VMT and speed distributions) from their 2020-2045

<sup>&</sup>lt;sup>15</sup> Including emissions from road construction if found significant (§ 93.122(e)(2))

<sup>&</sup>lt;sup>16</sup> More information on data sources can be found in the EMFAC technical support documentation at: https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-road-documentation

Regional Transportation Plan (also known as Connect SoCal, adopted by the SCAG Board on September 3, 2020)<sup>17</sup>.

On August 15, 2019, the U.S. EPA approved EMFAC2017 for use in SIPs and to demonstrate transportation conformity<sup>18</sup>. The EMFAC model estimates emissions from two combustion processes (running and start exhaust) and four evaporative processes (hot soak, running losses, diurnal, and resting losses). In addition, The Safer Affordable Fuel-Efficient (SAFE)<sup>19</sup> Vehicles Rule impacts some of the underlying assumptions in the EMFAC2017 model for model years 2021-2026 passenger cars and light trucks. Hence, the emissions output from the EMFAC2017 model was adjusted to account for the impacts of this rule<sup>20</sup>. Further, the estimated emissions were adjusted for the Advanced Clean Trucks (ACT)<sup>21</sup> and Heavy-Duty Engine and Vehicle Omnibus Regulations<sup>22</sup>. Emissions for re-entrained paved road dust, re-entrained unpaved road dust, and road construction dust are based on California Emissions Projection Analysis Model (CEPAM)<sup>23</sup>.

The transportation conformity budgets are established for the first year (2023), interim year (2031), and the last year (2035) of the 2021 PM10 Plan and reflect the limit of allowable emissions in the year they are defined and all subsequent years until a budget for a new year is established. The conformity rule states that "emissions in years for which no motor vehicle emissions budgets are specifically established must be equal to the motor vehicle emission budget(s) established for the most recent prior year" (40 CFR 93.118(b)(1)(ii)). As such, emission budgets established for 2023 will be applied for conformity analysis before 2031, and budgets established in 2031 will be used for conformity analysis before 2035, and budgets established for 2035 will be applied for conformity analysis for 2035 and all future years.

The transportation conformity budgets use emissions for an average annual day, consistent with the on-road emissions inventory<sup>24</sup> and maintenance demonstration, using the following method:

<sup>&</sup>lt;sup>17</sup> https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan\_0.pdf?1606001176

<sup>&</sup>lt;sup>18</sup> U.S. EPA approval of EMFAC2017 can be found at 84 FR 41717 *https://www.federalregister.gov/d/2019-*17476

<sup>&</sup>lt;sup>19</sup> Safer Affordable Fuel-Efficient Vehicle Rule for Model Years 2021-2026 Passenger Cars and Light Trucks; https://www.regulations.gov/document/NHTSA-2018-0067-2151

<sup>&</sup>lt;sup>20</sup> EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One, https://ww3.arb.ca.gov/msei/emfac\_off\_model\_adjustment\_factors\_final\_draft.pdf

<sup>&</sup>lt;sup>21</sup> Advanced Clean Trucks, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks

<sup>&</sup>lt;sup>22</sup> Heavy-Duty Engine and Vehicle Omnibus Regulations,

https://ww2.arb.ca.gov/rulemaking/2020/hdomnibuslownox

<sup>&</sup>lt;sup>23</sup> CEPAM: 2022 SIP Baseline Emission Projections v1.00

<sup>&</sup>lt;sup>24</sup> More information about the emissions inventory can be found in Chapter 3 of the plan,

http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/draft-final-pm10-maintenance-plan-for-the-south-coast-air-basin.pdf?sfvrsn=8

- 1) Calculate the on-road motor vehicle emissions totals for the appropriate pollutants (ROG, NOx, and PM2.5) from EMFAC2017 and apply adjustments to account for SAFE vehicle rule, ACT, and Omnibus regulations.
- Combine on-road vehicle emissions with re-entrained paved road dust, re-entrained unpaved road dust, and road construction dust emissions from CEPAM 2022 version 1.00 and round each total up to the nearest ton.

#### **Transportation Conformity Budgets**

The transportation conformity budgets in Table 3 are established in accordance with the methodology outlined above and in consultation<sup>25</sup> with SCAG, the District, and U.S. EPA. The transportation conformity budgets are consistent with the 2021 PM10 Plan's emission inventories. These budgets will be effective once U.S. EPA determines they are adequate. SCAG will then be required to use these budgets in their subsequent transportation plans and programs.

South Coast Emissions (Tons per Day)	2023 ROG	2023 NOx	2023 PM10	2031 ROG	2031 NOx	2031 PM10	2035 ROG	2035 NOx	2035 PM10
Vehicular Exhaustª, (Includes Tire, and Brake Wear for PM10)	55.74	93.43	22.7	40.8	71.9	22.7	36.5	66.2	22.8
Re-Entrained Paved Road Dust (Total)	N/A	N/A	58.0	N/A	N/A	59.9	N/A	N/A	61.1
Re-Entrained Unpaved Road Dust (City and County Roads)	N/A	N/A	16.7	N/A	N/A	16.7	N/A	N/A	16.7
Road Construction Dust	N/A	N/A	2.5	N/A	N/A	2.7	N/A	N/A	2.8
Total <sup>b</sup>	55.74	93.43	100.02	40.84	71.94	101.99	36.52	66.23	103.38
Motor Vehicle Emission Budget <sup>c</sup>	56	93	100	41	72	102	37	66	103

Table 3 - Motor Vehicle Emissions Budgets for PM10 Maintenance Plan (Annual Season)

<sup>a</sup>This reflects the adjustment factor for SAFE Vehicle Rule, Heavy-Duty Engine and Vehicle Omnibus Regulation, and Advanced Clean Truck Regulation using CEPAM2022 v1.00

<sup>b</sup>Values from CEPAM2022 v1.00 may not add up due to rounding

<sup>c</sup>Motor Vehicle Emission Budgets calculated are rounded up to the nearest ton Source: CEPAM2022 v1.00

<sup>&</sup>lt;sup>25</sup> To satisfy the requirements established in 40 CFR Part 93, Section 118(e)(4)(ii).

# **California Environmental Quality Act**

The California Environmental Quality Act (CEQA) requires that State and local agency projects be assessed for potential environmental impacts. An air quality plan may be a "project" that is potentially subject to CEQA requirements. The District found that the 2021 PM10 Plan as proposed will not result in any potentially significant adverse effects on the environment and is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) and 15308. The District will file a Notice of Exemption upon approval of the 2021 PM10 Plan by its Governing Board at its public hearing on June 4, 2021.

CARB has determined that the proposed 2021 PM10 Plan is a ministerial activity by CARB for purposes of CEQA (14 CCR § 15268). A "ministerial" decision is one that involves fixed standards or objective measurements, and the agency has no discretion to shape the activity in response to environmental concerns (14 CCR § 15369; *San Diego Navy Broadway Complex Coalition v. City of San Diego* (2010) 185 Cal.App.4th 924, 934). Because CARB lacks authority to modify a SIP submittal that fully complies with Act requirements, its action here is ministerial.

Furthermore, CARB has determined that the proposed 2021 PM10 Plan is not a "project" subject to CEQA because CARB's approval simply acknowledges requirements that are already binding and enforceable. CARB's approval and submission of these requirements to the U.S. EPA does not repeal or revise these requirements, and would thus not cause a substantial change to the environment requiring additional environmental review. (See *Sherwin-Williams Co. v SCAQMD* (2001) 86 Cal.App.4th 1258, 1286.)

## **Conclusion and Staff Recommendations**

CARB staff has reviewed the 2021 PM10 Plan along with transportation conformity emission budgets and has concluded that it meets the applicable requirements in the Act.

CARB staff recommends that the Board:

- 1. Adopt the 2021 PM10 Plan and the transportation conformity emission budgets included in this Staff Report for the South Coast; and
- 2. Direct the Executive Officer to submit the 2021 PM10 Plan to U.S. EPA as a revision to the California SIP.