



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SUBJECT: NOTICE OF PREPARATION OF A DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT, INITIAL STUDY, AND OPPORTUNITY FOR PUBLIC COMMENT

PROJECT TITLE: 2022 AIR QUALITY MANAGEMENT PLAN (AQMP)

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Preparation (NOP) and Initial Study (IS) for the proposed project identified above. The NOP/IS serves the following purposes: 1) to notify the public that the South Coast AQMD is preparing a Program Environmental Impact Report (Program EIR) which will assess the potential adverse environmental impacts that may result from implementing the proposed project; and 2) to provide information on the proposed project and allow public agencies and the public (collectively referred to as the public) the opportunity to review and comment on the scope of the environmental analysis.

This letter and the NOP/IS are not South Coast AQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the proposed project. **No action on your part is necessary if the proposed project has no bearing on you or your organization.** Three Regional Public Workshops/CEQA Scoping Meetings will be held for the proposed project. The attached NOP provides information on how to obtain the IS and other relevant documents as well as details on how the public may attend and participate at these meetings. Attendees will have the opportunity to provide public comments.

The NOP has been filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino Counties. The NOP/IS has also been electronically filed with the State Clearinghouse of the Governor's Office of Planning and Research to be posted on their CEQAnet Web Portal which, upon posting, may be accessed via the following weblink: <https://ceqanet.opr.ca.gov/search/recent>. In addition, the NOP/IS and other relevant documents have been electronically posted on the South Coast AQMD's webpage which can be accessed via the following weblink: <http://www.aqmd.gov/home/research/documents-reports/lead-agency-scaqmd-projects>.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or other issues relative to the environmental analysis for the proposed project will be accepted during a 32-day public review and comment period beginning May 13, 2022, and ending June 14, 2022 at 5:00 p.m. **Please send any comments relative to the CEQA analysis in the NOP/IS to Kevin Ni via email to kni@aqmd.gov, via facsimile to (909) 396-3982, or by mail (c/o PRDI/CEQA) to the address shown above.** Please include the name, phone number, and email address of the contact person, and the organization name, if applicable. Questions on the 2022 AQMP should be directed to Sang-Mi Lee via email to AQMPteam@aqmd.gov or by calling (909) 396-3169.

The proposed project will be considered at the Governing Board Meeting (Public Hearing) on October 7, 2022 at 9:00 a.m. (subject to change). The Governing Board Meeting agenda with details on how the public can participate will be posted at least 72 hours prior to the meeting on South Coast AQMD's website at: <http://www.aqmd.gov/home/news-events/meeting-agendas-minutes>.

**NOTICE OF PREPARATION (NOP) OF A DRAFT PROGRAM ENVIRONMENTAL IMPACT
REPORT (EIR), INITIAL STUDY (IS), AND OPPORTUNITY FOR PUBLIC COMMENT**

To: County Clerks for the Counties of Los Angeles, Orange, Riverside and San Bernardino; and Governor's Office of Planning and Research - State Clearinghouse	From: South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765
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Project Title: 2022 Air Quality Management Plan (AQMP)

Project Location: The proposed project is located in the South Coast Air Quality Management District's (South Coast AQMD) jurisdiction, which includes the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties), and the Riverside County portion of the Salton Sea Air Basin and the non-Palo Verde, Riverside County portion of the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project: In accordance with the United States Environmental Protection Agency strengthening the National Ambient Air Quality Standard (NAAQS) for ground-level 8-hour ozone in 2015, by lowering the primary and secondary 8-hour ozone standard to 70 parts per billion (ppb), the 2022 AQMP identifies control measures and strategies which have been developed to bring the region into attainment with this standard by 2037 for the South Coast Air Basin and the Coachella Valley. The 2022 AQMP control measures and strategies were developed to achieve this NAAQS by focusing on reducing emissions of nitrogen oxides (NOx), which are precursors to form ozone, and other air pollutants. The 2022 AQMP is comprised of the following control measures which address stationary point and area and mobile sources: 1) the South Coast AQMD's Stationary and Mobile Source Control Measures; 2) control measures identified in the 2022 State Strategy for the State Implementation Plan by the California Air Resources Board; and 3) approved Regional Transportation Plan/Sustainable Communities Strategy and Transportation Control Measures provided by the Southern California Association of Governments. The 2022 AQMP also includes emission inventories, the most current air quality setting, updated growth projections, new up-to-date modeling techniques, demonstrations of compliance with state and federal Clean Air Act requirements, and an adoption and implementation schedule for the proposed control strategies. The 2022 AQMP is designed to protect and improve public health for those living, working and visiting the region within South Coast AQMD's jurisdiction. However, the NOP/IS identified potentially significant adverse impacts to the following environmental topic areas: air quality and greenhouse gas emissions, energy, hazards and hazardous materials, hydrology and water quality, noise, and solid and hazardous waste, which will be analyzed in the Draft Program EIR. Some facilities affected by the 2022 AQMP may be identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5. However, the implementation of the 2022 AQMP will not alter the status of the facilities on the lists.

Lead Agency: South Coast Air Quality Management District	Division: Planning, Rule Development, and Implementation
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The NOP/IS and all supporting documentation are available for public review from:

- South Coast AQMD's website:
<http://www.aqmd.gov/home/research/documents-reports/lead-agency-scaqmd-projects>
- South Coast AQMD Public Information Center: by email at PICrequests@aqmd.gov and by phone at: (909) 396-2039
- Governor's Office of Planning and Research - State Clearinghouse website at:
<https://ceqanet.opr.ca.gov/search/recent>

The 2022 AQMP and all supporting documentation are available from South Coast AQMD's website at: <http://www.aqmd.gov/2022aqmp>

The NOP/IS is provided to the public through the following:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Los Angeles Times (May 13, 2022) | <input checked="" type="checkbox"/> South Coast AQMD Mailing List & Interested Parties |
| <input checked="" type="checkbox"/> Orange County Register (May 13, 2022) | <input checked="" type="checkbox"/> South Coast AQMD Public Information Center |
| <input checked="" type="checkbox"/> Riverside Press Enterprise (May 13, 2022) | <input checked="" type="checkbox"/> South Coast AQMD Website |
| <input checked="" type="checkbox"/> San Bernardino Sun (May 13, 2022) | <input checked="" type="checkbox"/> Governor's Office of Planning and Research – State Clearinghouse Website |
-

NOP/IS Review Period (32 days): May 13, 2022 to June 14, 2022

NOP OF A DRAFT PROGRAM EIR, IS, AND OPPORTUNITY FOR PUBLIC COMMENT (concluded)

Scheduled Public Meeting Date(s) (subject to change): The proposed project may have statewide, regional, or areawide significance; therefore, a CEQA scoping meeting is required pursuant to Public Resources Code Section 21083.9(a)(2) and CEQA Guidelines Section 15162(d). The public is invited to attend and provide public comments at the following meetings:

Date/Time	Draft 2022 AQMP Regional Public Workshops and CEQA Scoping Meetings	Locations
May 25, 2022 1:00 p.m.	Meeting #1 for entire South Coast AQMD Jurisdiction – <i>Hybrid Format</i>	Remotely via Zoom videoconference and by telephone: https://scaqmd.zoom.us/j/91200605609 Zoom Webinar ID: 912 0060 5609 Teleconference Dial In +1 669 900 6833 In-person at South Coast AQMD Headquarters: Dr. William A. Burke Auditorium 21865 Copley Drive Diamond Bar, CA 91765
May 25, 2022 6:00 p.m.	Meeting #2 for entire South Coast AQMD Jurisdiction – <i>Remote Only Format</i>	Remotely via Zoom videoconference and by telephone: https://scaqmd.zoom.us/j/91200605609 Zoom Webinar ID: 912 0060 5609 Teleconference Dial In +1 669 900 6833
May 26, 2022 6:00 p.m.	Meeting for Coachella Valley – <i>Hybrid Format</i>	Remotely via Zoom videoconference and by telephone: https://scaqmd.zoom.us/j/95634334998 Zoom Webinar ID: 956 3433 4998 Teleconference Dial In +1 669 900 6833 In-person at California State University San Bernardino - Palm Desert Campus: Oliphant Auditorium 37500 Cook Street Palm Desert, CA 92211

The proposed project will be considered at the Governing Board Meeting (Public Hearing) on October 7, 2022 at 9:00 a.m. (subject to change).

Send CEQA Comments to:	Phone:	Email:	Fax:
Kevin Ni	(909) 396-2462	kni@aqmd.gov	(909) 396-3982
Direct Questions on the 2022 AQMP to:	Phone:	Email:	Fax:
Sang-Mi Lee	(909) 396-3169	AQMPteam@aqmd.gov	(909) 396-3982

Date: May 12, 2022

Signature:



Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development, and
Implementation

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Initial Study: 2022 Air Quality Management Plan

May 2022

State Clearinghouse No. TBD
South Coast AQMD No. 05122022KN

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
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County of San Bernardino

EXECUTIVE OFFICER:
WAYNE NASTRI

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ACRONYMS

AAQS	Ambient air quality standards
AB	Assembly Bill
AIR	Association of Irrigated Residents
AQMP	Air Quality Management Plan
ALUC	Airport Land Use Commission
ARA	Air Resource Advisors
BACT	Best Available Control Measure
BARCT	Best Available Reasonable Control Measure
Basin	South Coast Air Basin
bhp	brake horsepower
BIO	Biological Sources
BMPs	Best management practices
BTU	British Thermal Units
BTU/hr	British Thermal Units per hour
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standard
CARB	California Air Resources Board
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CBC	California Building Code
CCAA	California Clean Air Act
CCP	Clean Construction Policy
CEQA	California Environmental Quality Act
CFC	California Fire Code

CGP	Construction General Permit
CMB	Combustion Sources
CO	Carbon monoxide
CO ₂	Carbon dioxide
CPUC	California Public Utilities Commission
CTS	Coatings and Solvents
CWA	Clean Water Act
dBA	Decibel
ECC	Energy and Climate Change Programs
EGM	Emission Growth Management
EIR	Environmental Impact Report
FCEV	Fuel Cell Electric Vehicle
FLX	Compliance Flexibility Programs
FR	Federal Register
FUG	Fugitive VOC Emissions
FTIP	Federal Transportation Implementation Plan
GHG	Greenhouse gas
GSAs	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plan
GVWR	gross vehicle weight rating
HOV	High Occupancy Vehicles
IS	Initial Study
lbs/day	pounds per day
LDAR	leak detection and reporting
LNB	low NO _x burner
LPG	liquid petroleum gas

LRA	Local responsibility areas
MCS	Multiple Component Sources
MDAB	Mojave Desert Air Basin
MMBTU/hr	million British Thermal Units per hour
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSERC	mobile source emission reduction credit
MT	Metric tons
MT/yr	Metric tons per year
MY	model year
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NPDES	National Pollution Discharge Elimination System
NO ₂	Nitrogen dioxide
NOP	Notice of Preparation
NO _x	Oxides of nitrogen
NSR	New Source Review
O ₃	Ozone
OGI	optical gas imaging
OGV	ocean-going vessel
OVA	organic vapor analyzer
OSHA	Occupational Safety and Health Administration
PAR	Proposed Amended Rule
PCBTF	parachlorobenzotrifluoride
PM	Particulate matter
PM _{2.5}	Particulate matter with an aerodynamic diameter of 2.5 microns or less

PM10	Particulate matter with an aerodynamic diameter of 10 microns or less
ppb	parts per billion
ppm	parts per million
ppmv	parts per million by volume
PR	Proposed Rule
RACM	Reasonably Available Control Measure
RACT	Reasonably Available Control Technology
RCRA	Resource Conservation and Recovery Act
RECLAIM	Regional Clean Air Incentives Market
RFP	Reasonable Further Progress
RPS	Renewables Portfolio Standard
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCR	Selective Catalytic Reduction
SIP	State Implementation Plan
SGMA	Sustainable Groundwater Management Act
South Coast AQMD	South Coast Air Quality Management District
SO _x	Oxides of sulfur
SRA	State responsibility area
SSAB	Salton Sea Air Basin
SWPPP	Stormwater Pollution Prevention Plan
TAC	Toxic air contaminant
TCM	Transportation control measure
tBAc	tert butyl acetate

TBD	to be determined
TDM	Transportation design measure
tpd	tons per day
TSM	Transportation System Management
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
ULNB	ultra low NOx burner
U.S. EPA	United States Environmental Protection Agency
UST	Underground storage tank
VMT	Vehicle miles traveled
VOC	Volatile organic compounds
WFAQRP	Wildland Fire Air Quality Response Program

CHAPTER 1

PROJECT DESCRIPTION

Introduction

California Environmental Quality Act

Project Location

Project Background and Overall Attainment Strategy

Project Description

INTRODUCTION

The California Legislature created the South Coast AQMD in 1977¹ as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). By statute, the South Coast AQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the areas under the jurisdiction of the South Coast AQMD². Furthermore, the South Coast AQMD must adopt rules and regulations that carry out the AQMP³. The AQMP is a regional blueprint for how the South Coast AQMD will achieve air quality standards and healthful air; it contains multiple goals promoting reductions of criteria air pollutants including nitrogen oxides (NOx) and volatile organic compounds (VOC), as well as co-benefits of reducing greenhouse gases (GHGs) and toxic air contaminants (TACs).

In 1977, amendments to the Federal Clean Air Act (CAA) included requirements for submitting State Implementation Plans (SIPs) for nonattainment areas that failed to meet all federal ambient air quality standards (CAA Section 172), and similar requirements exist in state law (Health and Safety Code Section 40462). The Federal CAA was amended in 1990 to specify attainment dates and SIP requirements for ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), and particulate matter (PM) with an aerodynamic diameter of less than 10 microns (PM₁₀). In 1997, the United States Environmental Protection Agency (U.S. EPA) promulgated ambient air quality standards for PM with an aerodynamic diameter less than 2.5 microns (PM_{2.5} or fine particulate matter). U.S. EPA is required to periodically update the national ambient air quality standards (NAAQS).

In addition, the California Clean Air Act (CCAA), which was adopted in 1988, requires the South Coast AQMD to achieve and maintain state ambient air quality standards for ozone, CO, sulfur dioxide (SO₂), and NO₂ by the earliest practicable date.⁴ The CCAA requires air districts, including South Coast AQMD, to achieve and maintain state standards by the earliest practicable date and for extreme nonattainment areas, to include all feasible measures pursuant to Health and Safety Code Sections 40913, 40914, and 40920.5. While not defined in these sections of the Health and Safety Code, the term “feasible” is defined in the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21061.1 and CEQA Guidelines⁵ Section 15364, as a measure capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

In 2015, the U.S. EPA lowered the primary and secondary 8-hour ozone standard to 70 parts per billion (ppb) for ground-level ozone. As such, the South Coast AQMD developed the 2022 AQMP (referred to herein as the proposed project) which contains a variety of control measures designed to bring the region into attainment with this standard by 2037 for Basin and the Coachella Valley and comply with the federal and state ambient air quality standards for ozone. NOx emissions are a precursor to the formation of ozone and reductions in NOx remain key to attain the 2015 ozone standard. The proposed control measures in the 2022 AQMP therefore primarily focus on reducing NOx emissions from existing emission sources and promoting the use of the cleanest available

¹ The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., Ch. 324 (codified at Health and Safety Code Section 40400-40540).

² Health and Safety Code Sections 40460(a); 40001

³ Health and Safety Code Section 40440(a).

⁴ Health and Safety Code Section 40910

⁵ The CEQA Guidelines are codified at Title 14 California Code of Regulations Section 15000 *et seq.*

new emission sources. Specifically, the proposed control measures focus on maximizing the implementation of existing zero, low or ultra-low NOx technologies in combination with the potential for the ongoing development of additional zero emission and low NOx technologies.

Implementation of the proposed control measures which comprise the 2022 AQMP may affect existing and new development as well as stationary and mobile sources within South Coast AQMD's jurisdiction and may result in emission reductions, an environmental benefit, but may also cause potential secondary environmental impacts which are required to be evaluated pursuant to CEQA. As such, the South Coast AQMD has prepared a Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (Draft Program EIR) and Initial Study (IS).

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) is comprised of Public Resources Code Section 21000 *et seq.* and CEQA Guidelines which are codified at Title 14 California Code of Regulations, Section 15000 *et seq.* CEQA requires all potential adverse environmental impacts of proposed projects be evaluated and methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented, if feasible. [Public Resources Code Section 21061.1 and CEQA Guidelines Section 15364]. The purpose of the CEQA process is to inform decision makers, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing a proposed project and to identify feasible mitigation measures or alternatives, when an impact is significant.

The proposed adoption of the 2022 AQMP is a discretionary action subject to South Coast AQMD Governing Board consideration, which has the potential for resulting in direct or indirect change to the environment and, therefore, is considered a “project” as defined by CEQA. [CEQA Guidelines Section 15378]. The lead agency is the “public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment.” [Public Resources Code Section 21067]. Since the South Coast AQMD Governing Board has the primary responsibility for approving the entire project as a whole, the South Coast AQMD is the most appropriate public agency to act as lead agency for the proposed project. [CEQA Guidelines Section 15051(b)].

A Program Environmental Impact Report (Program EIR) for the 2022 AQMP is considered to be the appropriate document pursuant to CEQA Guidelines Section 15168(a)(3), because the 2022 AQMP constitutes a series of actions that can be characterized as one large project in connection with the issuance of rules, regulations, plans, or other general criteria required to govern the conduct of a continuing program. The use of a Program EIR provides several advantages including:

- Providing an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
- Ensuring a consideration of cumulative impacts that might be slighted in a case-by-case analysis;
- Avoiding duplicative reconsideration of basic policy considerations;
- Allowing consideration of broad policy alternatives and program wide mitigation measures at an early time when the Lead Agency has greater flexibility to deal with basic problems of cumulative impacts; and

- Allowing its use with a later activity if the later activity is within the scope of the project analyzed in the Program EIR without requiring further environmental documents.

The first step of the Program EIR process is to prepare a NOP with an IS that includes an Environmental Checklist and project description. The Environmental Checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. The NOP/IS is also intended to provide information about the proposed project to other public agencies and interested parties prior to the release of the Draft Program EIR for public review and comment.

Implementation of the 2022 AQMP is anticipated to reduce NO_x, VOC, toxics, and GHG emissions through control measures primarily designed to accelerate a transition to vehicles and equipment with low NO_x and zero emissions. However, it is not possible to quantify the magnitude of emissions benefits at this preliminary stage. While implementation is expected to result in NO_x, VOC, toxic and GHG emission reductions in order to assist in meeting federal air quality standards for ozone (an environmental benefit), the proposed project also has the potential to generate potentially significant adverse environmental impacts to the environmental topic areas of air quality and GHG emissions, energy, hazards and hazardous materials, hydrology and water quality, noise, and solid and hazardous waste. Thus, in accordance with CEQA Guidelines Section 15063, this IS identifies these potential adverse effects.

As the lead agency for the proposed project, South Coast AQMD has prepared this NOP/IS for the 2022 AQMP. The NOP/IS is being released for a 32-day public review and comment period from May 13, 2022 to June 14, 2022. Written comments received during the public comment period on the scope of the environmental analysis presented in the NOP/IS will be considered when preparing the Draft Program EIR and included in an appendix of the Draft Program EIR.

Because the proposed project may have statewide, regional, or areawide significance, a CEQA scoping meeting is required pursuant to Public Resources Code Section 21083.9(a)(2) and CEQA Guidelines Section 15162(d). The public is invited to attend and provide public comments at the following meetings:

Date/ Time	Draft 2022 AQMP Regional Public Workshops and CEQA Scoping Meetings	Location
May 25, 2022 1:00 p.m.	Meeting #1 for entire South Coast AQMD Jurisdiction – <i>Hybrid Format</i>	Remotely via Zoom videoconference and by telephone: https://scaqmd.zoom.us/j/91200605609 Zoom Webinar ID: 912 0060 5609 Teleconference Dial In +1 669 900 6833 In-person at South Coast AQMD Headquarters: Dr. William A. Burke Auditorium 21865 Copley Drive Diamond Bar, CA 91765
May 25, 2022 6:00 p.m.	Meeting #2 for entire South Coast AQMD Jurisdiction – <i>Remote Only Format</i>	Remotely via Zoom videoconference and by telephone: https://scaqmd.zoom.us/j/91200605609 Zoom Webinar ID: 912 0060 5609 Teleconference Dial In +1 669 900 6833
May 26, 2022 6:00 p.m.	Meeting For Coachella Valley – <i>Hybrid Format</i>	Remotely via Zoom videoconference and by telephone: https://scaqmd.zoom.us/j/95634334998 Zoom Webinar ID: 956 3433 4998 Teleconference Dial In +1 669 900 6833 In-person at California State University, San Bernardino Palm Desert Campus: Oliphant Auditorium 37500 Cook St, Palm Desert, CA 92211

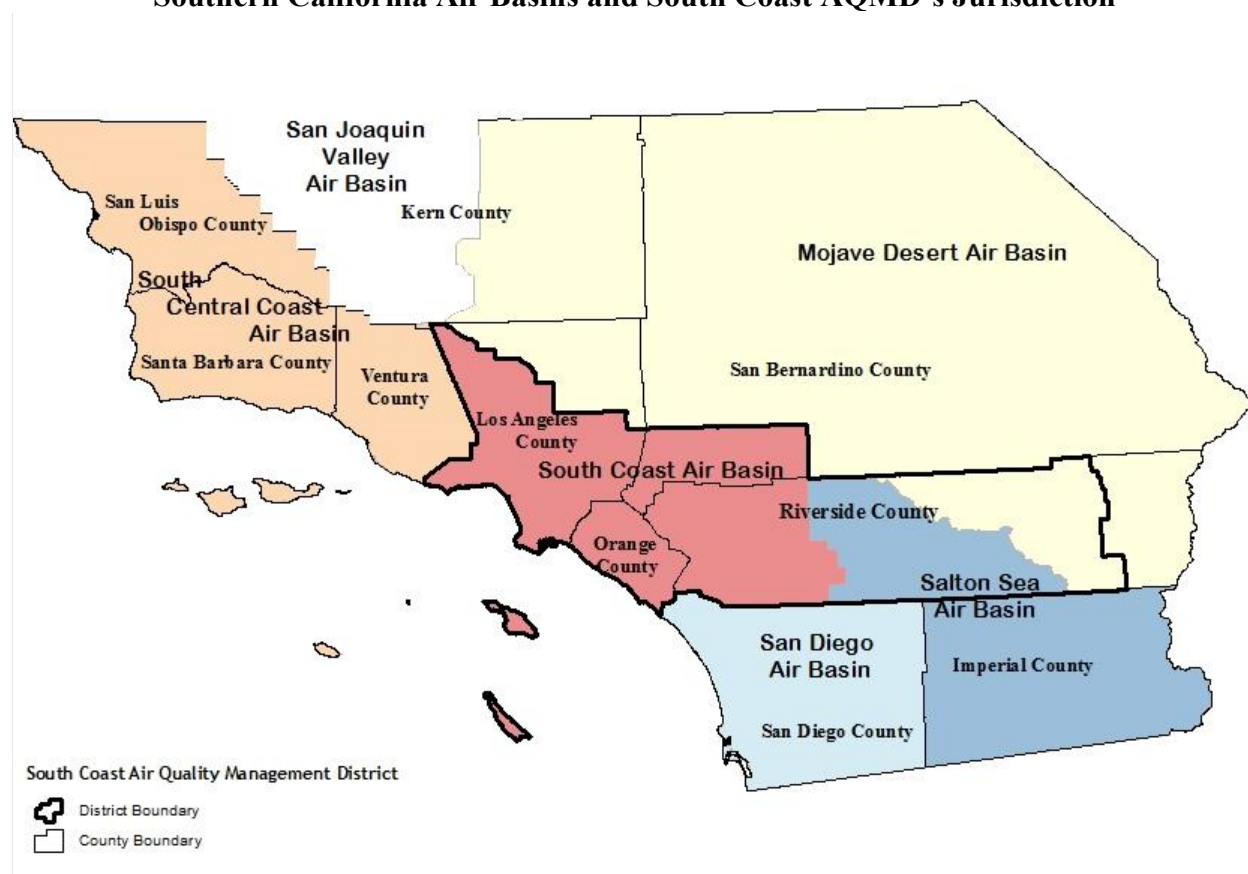
Any CEQA-related comments made at the Regional Public Workshops/CEQA scoping meetings relative to the proposed project will be considered during the preparation of the Draft Program EIR and responses to the CEQA-related comments will be included in an appendix of the Draft Program EIR. Further, pursuant to CEQA Guidelines Section 15252, since significant adverse impacts have been identified in the NOP/IS for the proposed project, an alternatives analysis along with mitigation measures are required and will also be included in the Draft Program EIR upon its release.

Prior to making a decision on the adoption of the proposed project, the South Coast AQMD Governing Board must review and certify the Final Program EIR, including responses to comments, as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting the proposed project.

PROJECT LOCATION

The proposed project is located within South Coast AQMD's jurisdiction, which covers an area of approximately 10,743 square miles, and includes the four-county Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portion of the SSAB and the non-Palo Verde, Riverside County portion of the MDAB. The Basin is a subarea of South Coast AQMD's jurisdiction, it is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The Riverside County portion of the SSAB, which is a federal nonattainment area known as the Coachella Valley Planning Area, is bounded by the San Jacinto Mountains to the west and spans the eastern boundary of the Coachella Valley up to the Palo Verde Valley (see Figure 1-1).

Figure 1-1
Southern California Air Basins and South Coast AQMD's Jurisdiction



PROJECT BACKGROUND AND OVERALL ATTAINMENT STRATEGY

The Federal CAA requires areas that do not meet the health-based NAAQS to develop and implement an emission reduction strategy to attain healthful levels of air quality in a timely manner. The State of California also requires areas that do not meet the California ambient air quality standards (CAAQS or State standards) to take all feasible measures towards achieving the CAAQS at the earliest practicable date. AQMPs provide the strategy and the underlying technical analysis for how the region will meet federal standards by the required dates and continue progress to achieve the State standards. As the U.S. EPA is required by law to review the NAAQS every five years, an AQMP is usually developed every four to six years to address requirements of a new NAAQS.

TIMELINE OF PREVIOUS AQMPs AND AQMP-RELATED ACTIVITIES

The South Coast AQMD Governing Board adopted the first AQMP in 1979 and the 2022 AQMP will be the twelfth plan prepared by the South Coast AQMD. In between the adoption and amendment of the various AQMPs over the years, other AQMP-related actions were taken to modify the SIP for specific pollutants, e.g., PM₁₀ for the Coachella Valley and for the Basin, CO, and lead for Los Angeles County. The following bullets provide a historical summary of the main components of the AQMP development activities, including updates and revisions, that have occurred over the years:

- The 1982 AQMP was developed to reflect better data and modeling tools. However, in 1987, a federal court ordered the U.S. EPA to disapprove the 1982 AQMP because it did not demonstrate attainment of all NAAQS by 1987 as required by the Federal CAA. This, in part, led to the preparation of the 1989 AQMP.
- The 1989 AQMP was specifically designed to attain all NAAQS and included three “tiers” of control measures needed to attain all standards by relying on significant future technology advancement to attain these standards.
- The 1991 AQMP was developed to comply with the CCAA. Shortly after its adoption, the 1991 AQMP was amended to add a control measure containing market incentive programs which was subsequently adopted as South Coast AQMD’s Regulation XX - Regional Clean Air Incentives Market (RECLAIM).
- The 1994 AQMP was developed to comply with the CCAA three-year update requirement and to meet the Federal CAA requirement for an ozone SIP, and included the following:
 - All geographical areas under the jurisdiction of the South Coast AQMD, compared to just the Basin;
 - The basic control strategies remained the same although the three-tiered structure of control measures was replaced and measures previously referred to as Tiers I, II or III were replaced with short-/intermediate-term or long-term control measures;
 - Updated and refined control measures carried over from the 1991 AQMP;
 - Best Available Control Measure PM₁₀ Plan;
 - The Ozone Attainment Demonstration Plan;
 - Amendments to the federal Reactive Organic Compound Rate-of-Progress Plan (also referred to as the VOC Rate-of-Progress Plan); and
 - Attainment Demonstration Plans for the federal PM₁₀, NO₂, and CO air quality standards.
- The 1997 AQMP was designed to comply with the three-year update requirements specified in the CCAA as well as to include an attainment demonstration for PM₁₀ as required by the Federal CAA. When compared to the 1994 AQMP relative to ozone, the 1997 AQMP contained the following changes to the control strategies:
 - Less reliance on transportation control measures (TCMs);
 - Less reliance on long-term control measures that rely on future technologies as allowed under Federal CAA Section 182(e)(5); and
 - Removal of other infeasible control measures and indirect source measures that had been substantially impacted by the State legislature in enacting new provisions in the Health and Safety Code.

- The 1999 Amendment to the 1997 AQMP revised the ozone portion of plan in response to U.S. EPA's partial disapproval, a settlement of litigation by environmental groups challenging the 1997 AQMP, and to address the State's requirements for a triennial plan update. The 1999 amendment was approved by U.S. EPA in 2000 and provided the following:
 - Greater emission reductions in the near-term than would occur under the 1997 AQMP;
 - Early adoption of the measures that would otherwise be contained in the next three-year update of the AQMP; and
 - Additional flexibility relative to substituting new measures for infeasible measures and recognition of the relevance of cost effectiveness in determining feasibility.
- The 2003 AQMP was approved and adopted by the South Coast AQMD Governing Board but was never fully approved by the U.S. EPA as part of the SIP. Instead, the 2003 AQMP was partially approved and partially disapproved by U.S. EPA, based on CARB's withdrawal of mobile source measures after the 1-hour ozone standard was revoked. The 2003 AQMP addressed the following control strategies:
 - Attaining the federal PM₁₀ ambient air quality standard for the Basin and Coachella Valley and these portions were initially approved by the U.S. EPA but then the attainment demonstration was disapproved for both areas after the California Air Resources Board (CARB) withdrew its measures;
 - Attaining the federal 1-hour ozone standard;
 - Control measures from the 1997 AQMP and 1999 AQMP that were not yet implemented;
 - Revisions to the Post-1996 VOC Rate-of-Progress Plan and SIP for CO; and
 - Initial analysis of emission reductions necessary to attain the PM_{2.5} and 8-hour ozone standards.
- The 2007 AQMP focused on reducing ozone and PM₁₀. When CARB adopted their State Strategy for the 2007 SIP, they also adopted the 2007 AQMP as part of the SIP which was forwarded to U.S. EPA for approval. The following summarizes the major components of the 2007 AQMP:
 - The most current air quality setting at the time (i.e., 2005 data);
 - Updated emission inventories using 2002 as the base year, which also incorporated measures adopted since adopting the 2003 AQMP;
 - Updated emission inventories of stationary and mobile on-road and off-road sources;
 - 2003 AQMP control measures not yet implemented (eight of the control measures originally contained in the 2003 AQMP were updated or revised for inclusion into the 2007 AQMP);
 - 24 new measures were incorporated into the 2007 AQMP based on replacing the South Coast AQMD's long-term control measures from the 2003 AQMP with more defined or new control measures and control measure adoption and implementation schedules;
 - South Coast AQMD's recommended control measures to reduce emissions from sources that are primarily under State and federal jurisdiction, including on-road and off-road mobile sources, and consumer products;
 - Southern California Association of Governments' (SCAG) regional transportation strategy and control measures; and
 - Analysis of emission reductions necessary and attainment demonstrations to achieve the federal 8-hour ozone and PM_{2.5} air quality standards.

- The March 2011 Revisions to the 2007 PM_{2.5} and Ozone SIP for the Basin and Coachella Valley were adopted which consisted of the following:
 - Updated implementation status of South Coast AQMD control measures necessary to meet the 2015 PM_{2.5} attainment date;
 - Revised the control measure adoption schedule;
 - Changed the emission inventory resulting from CARB's December 2010 revisions to the on-road truck and off-road equipment rules; and
 - A South Coast AQMD commitment to its "fair share" of additional NO_x emission reductions, if needed, in the event U.S. EPA does not voluntarily accept the "federal assignment."
- The October 2011 Further Revisions to the PM_{2.5} and Ozone SIP for the Basin and Coachella Valley followed a three-prong approach for identifying contingency measures which:
 - Identified equivalent emission reductions achieved through improvements in air quality;
 - Relied on committed emissions reductions for the 2007 ozone plan; and
 - Quantified excess emissions reductions achieved by existing rules and programs that were not originally included in the 2007 PM_{2.5} SIP.
- The 2012 AQMP was primarily designed to meet all requirements to demonstrate attainment of the 2006 24-hour PM_{2.5} standard of 35 micrograms per cubic meter (μg/m³). In 2013, Control Measure IND-01 – Backstop Measure for Indirect Sources of Emissions from Ports and Port-Related Facilities, was incorporated into the Final 2012 AQMP which:
 - Incorporated the most current science and analytical tools;
 - Contained a comprehensive strategy aimed at controlling pollution from stationary (point) sources, on-road and off-road mobile sources and area sources;
 - Demonstrated attainment with the federal 24-hour PM_{2.5} standard by 2014 in the Basin through adoption of control measures;
 - Updated the U.S. EPA approved 8-hour ozone control plan with new measures designed to reduce reliance on Federal CAA Section 182 (e)(5) long-term measures for achieving NO_x and VOC reductions;
 - Addressed several state and federal planning requirements by incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models;
 - Updated the air quality status of the SSAB in the Coachella Valley;
 - Discussed the emerging issues of ultrafine particles and near-roadway exposures;
 - Analyzed the energy supply and demand issues that face the Basin and their relationship to air quality;
 - Demonstrated attainment with the 1-hour ozone standard and vehicle miles travelled (VMT) emission offsets, per U.S. EPA requirements based on the court case of Association of Irrigated Residents (AIR) vs. U.S. EPA (2012); and
 - Specified measures to further implement the ozone strategy in the 2007 AQMP.
- The 2015 Supplement to the 24-Hour PM_{2.5} (35 μg/m³) SIP demonstrated attainment with the 2006 24-hour PM_{2.5} NAAQS by 2015 pursuant to the Federal CAA (Title 1, Part D, Subpart 4) by including a discussion of the effects of the drought on the attainment date, in

response to a court case. The 2015 Supplement also included new transportation conformity budgets for 2015.

- In January 2016, the South Coast AQMD requested and received from the U.S. EPA a redesignation of the 24-hour PM_{2.5} standard to serious nonattainment area with a new attainment deadline of 2019.
- The 2016 AQMP was developed to demonstrate attainment of the 1-hour and 8-hour ozone NAAQS, as well as the latest 24-hour and annual PM_{2.5} standards. The following summarizes the major components of the 2016 AQMP:
 - Promoted emission reductions in criteria pollutant, GHG and toxic air contaminants to improve human health in the region;
 - Recognized the importance of reducing emissions from mobile sources and worked closely with CARB and the U.S. EPA to reduce mobile source emissions, especially along transportation corridors and related to goods movement;
 - Encouraged transition of vehicles, building, and industrial facilities to cleaner technologies; and
 - Included transportation control measures developed by SCAG from the 2016 RTP/SCS.
- The 2018 Update to the 1-hour Ozone Standard Attainment Demonstration from the 2016 AQMP included: 1) a revised emission inventory; 2) revised air quality modeling; and 3) an updated attainment strategy to be consistent with the final emissions inventory in the 2016 AQMP that was used for the 8-hour ozone and PM_{2.5} standards attainment demonstrations.
- The November 2019 Contingency Measure Plan addressed the contingency measure requirements for the 1997 8-hour ozone NAAQS for the Basin so as to achieve the 108 tons per day (tpd) of NO_x reductions allocated to Federal CAA Section 182(e)(5) measures needed to attain the 1997 8-hour ozone standard in 2023 and includes: 1) newly identified emission reduction strategies; 2) additional incentive funding to further accelerate the transition to the cleanest available technologies; and 3) federal measures and/or significant level of funding to achieve the required reductions from sources under federal responsibility.
- The 2019 Reclassification of the Coachella Valley from a Severe nonattainment area to an Extreme nonattainment area for the 1997 8-hour ozone standard extended the attainment date to June 15, 2024 from June 15, 2019.
- The June 2020 the Reasonably Available Control Technology (RACT) Demonstration and Emissions Statement Certification for 2015 8-Hour Ozone Standard was developed to be consistent with the Federal CAA and the U.S. EPA's guidelines, and are required as part of the 2022 AQMP.
- The December 2020 the Coachella Valley Extreme Area Plan was developed to demonstrate attainment of the 1997 8-hour ozone standard before the required deadline of June 15, 2024 and to address the new Federal CAA requirements for the Extreme nonattainment areas. In addition, the December 2020 Attainment Plan for the 2006 24-hour PM_{2.5} Standard for the Basin was developed to demonstrate attainment of the 2006 24-

hour PM_{2.5} standard by 2023 and to address other federal Clean Air Act requirements through the continued implementation of existing regulations and programs.

- In June 2021, the 2021 PM₁₀ Maintenance Plan for the Basin was developed because the Basin was redesignated in 2013 as attainment for the 24-hour average PM₁₀ NAAQS and the Federal CAA requires the State to submit a subsequent maintenance plan eight years after an attainment redesignation to provide for maintenance of the NAAQS for the next 10 years after the period covered by the first maintenance plan (2023-2033). The 2021 PM₁₀ Maintenance Plan included a maintenance demonstration that the Basin will continue to attain the standard, verification of continued attainment, a commitment to a future monitoring network, a contingency plan, and provisions for contingency plan implementation.
- In November 2021, the 2021 Redesignation Request and Maintenance Plan for the 2006 and 1997 PM_{2.5} Standards for the Basin sought to redesignate the Basin as attainment, and included the following: 1) a maintenance demonstration that the Basin will maintain attainment through 2035; 2) a mechanism to verify continued attainment; 3) a commitment to continue monitoring PM_{2.5}; 4) a contingency plan in case the standard is violated in the future; and 5) provisions for contingency plan implementation.

DEVELOPMENT OF 2022 AQMP AND OVERALL ATTAINMENT STRATEGY

In 2015, the U.S. EPA strengthened the 8-hour NAAQS for ground-level ozone by lowering the primary and secondary ozone standard levels to 70 ppb. The Basin is classified as an “extreme” nonattainment area and the Coachella Valley is classified as a “severe-15” nonattainment area for the 2015 ozone NAAQS. The 2022 AQMP focuses on attaining the 2015 8-hour ozone NAAQS by 2037, and addressing the state Clean Air Act requirements.

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures in the 2022 AQMP focus on maximizing the implementation of existing zero emission and low NO_x technologies. It also recognizes that new low NO_x and zero emitting technologies and ultra-low NO_x technologies may still need to be invented or may not yet be commercially available to achieve the necessary reductions in order to achieve the ambient air quality standards for ozone (e.g., 70 ppb for both the federal and State standards). Because NO_x emissions are a precursor to the formation of ozone and a key component to reduce ozone levels low enough to meet the standard, the 2022 AQMP primarily focuses on achieving NO_x emission reductions in order to attain the ozone standard. Preliminary analyses indicate that in order to achieve the ozone standards by 2037, approximately 71 percent of additional NO_x emission reductions will be needed, above and beyond the previously adopted measures in the 2016 AQMP.

VOC emissions are also a precursor to the formation of ozone such that achieving emission reductions of VOCs can help contribute to the overall goal of attaining the ozone standard and reduce exposure to harmful air pollutants. As such, some of the proposed control measures in the 2022 AQMP focus on achieving VOC emission reductions. However, VOC emission reductions are much less effective at reducing ozone at the low NO_x levels needed for attainment.

Traditional air quality planning relies on a combination of controlling emissions at the tailpipe or exhaust stack, new engine technologies, and improvements to existing fuels. These traditional

approaches are effective to an extent but since most affected sources are already equipped with NOx control equipment, traditional approaches are not expected to be able to achieve the additional reduction of 71 percent needed to achieve the ozone standard. Under the 2022 AQMP, the proposed control measures would:

- accelerate the replacement of high-emitting mobile sources with zero emission or low NOx technologies;
- encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments;
- develop incentives to remove/replace higher-emitting equipment;
- establish greater control of industrial stationary sources; control indirect sources of emissions; improve detection and procedures; and
- establish educational and outreach programs.

In order to attain the ozone standards, the majority of NOx emission reductions must come from mobile sources, including ships, aircraft, and locomotive engines, all of which are primarily regulated by federal and international laws, depending on the applicable jurisdiction, with limited authority by CARB at the State level and the South Coast AQMD at the local level. Attainment is not possible without significant reductions from these sources. The South Coast AQMD will continue to work closely with CARB in their efforts to further control mobile source emissions where federal or State actions do not meet regional needs.

PROJECT DESCRIPTION

The 2022 AQMP contains:

- Stationary and mobile source control measures that would be implemented by the South Coast AQMD;
- CARB-developed control measures and strategies from CARB’s 2022 Strategy for the State Implementation Plan which includes State and Federal Mobile Source Control Measures; and
- SCAG-developed transportation control measures from SCAG’s 2020 RTP/SCS.

The 2022 AQMP control measures primarily rely on the acceleration of zero emission and low NOx technologies, incentive programs, and advanced technologies. A summary of the proposed control measures is provided in the following subsections. The following bullet points summarize the major components of the 2022 AQMP:

- The air pollutant emissions baseline (e.g., 2018 data);
- Updated emission inventories using 2018 as the baseline year and reflecting control measures that have been implemented since the 2016 AQMP;
- New South Coast AQMD measures for stationary and mobile sources to be incorporated into the 2022 AQMP;
- SCAG’s 2020 RTP/SCS based on Final 2020-2045 RTP/SCS, and related transportation control measures;

- CARB’s 2022 State SIP Strategy;
- Analysis of emission reductions necessary to achieve the federal 8-hour ozone air quality standard;
- Overview of state and federal planning requirements; and,
- Implementation schedule for adoption of the proposed control measures.

South Coast AQMD Control Measures for Stationary and Mobile Sources

A control measure is a set of specific technologies and methods identified for potential implementation to achieve reductions in air pollutant emissions to attain an air quality standard. The proposed stationary source ozone measures are designed to assist to attain the 2015 8-hour ozone standard (70 ppb) via reductions in emissions of NO_x and VOC. Since NO_x and VOC are primary precursor pollutants to form ground-level ozone, the stationary source ozone measures are identified by the primary pollutant targeted to achieve emission reductions (e.g., primarily NO_x but some focus on VOC) group. These measures target a number of source categories, including Combustion Sources (CMB), Energy and Climate Change Programs (ECC), Petroleum Operations and Fugitive VOC Emissions (FUG), Coatings and Solvents (CTS), Compliance Flexibility Programs and Public Outreach (FLX), Multiple Component Sources (MCS), and Biogenic Sources (BIO). Combustion Sources are further divided into Residential Combustion Sources (R-CMB), Commercial Combustion Sources (C-CMB), and Large Combustion Sources (L-CMB). Each control measure may rely on several control methods. For the 2022 AQMP, the South Coast AQMD proposed a total of 48 control measures. Out of the 48 proposed control measures, 30 target reductions from stationary sources with the majority anticipated to be developed in the next several years and implemented prior to 2037. Table 1-1 provides a list of the South Coast AQMD proposed ozone measures for stationary sources along with the proposed adoption date, proposed implementation timeframe, and emission reductions in 2032 and 2037.

Table 1-1
South Coast AQMD Proposed Stationary Source 8-Hour Ozone Control Measures

Control Measure Number	Title	Proposed Adoption Date	Proposed Implementation Timeframe	Emission Reductions (tpd) (2032/2037)
R-CMB-01	Emission Reductions from Replacement with Zero Emission or Low NO _x Appliances - Residential Water Heating [NO _x]	2024	2029	0.48 / 1.29
R-CMB-02	Emission Reductions from Replacement with Zero Emission or Low NO _x Appliances – Residential Space Heating	2024	2029	0.45 / 1.20
R-CMB-03	Emission Reductions from Residential Cooking	2024	2029	0.30 / 0.81
R-CMB-04	Emission Reductions from Replacement with Zero Emission or Low NO _x Appliances – Residential Other Combustion Sources	2024	2029	1.17 / 3.13

Table 1-1 (continued)
South Coast AQMD Proposed Stationary Source 8-Hour Ozone Control Measures

Control Measure Number	Title	Proposed Adoption Date	Proposed Implementation Timeframe	Emission Reductions (tpd) (2032/2037)
C-CMB-01	Emission Reductions from Replacement with Zero Emission or Low NOx Appliances - Commercial Water Heating [NOx]	2025	2031	0.04 / 0.25
C-CMB-02	Emission Reductions from Replacement with Zero Emission or Low NOx Appliances - Commercial Space Heating [NOx]	2025	2031	0.04 / 0.21
C-CMB-03	Emission Reductions from Commercial Cooking Devices [NOx]	2025	2031	0.21 / 0.62
C-CMB-04	Emission Reductions from Small Internal Combustion Engines [NOx]	2025	2026	0 / 2.1
C-CMB-05	NOx Reductions from Small Miscellaneous Commercial Combustion Equipment (Non-Permitted) [NOx]	2027	2037	0 / 4.24
L-CMB-01	NOx Reductions from RECLAIM Facilities [NOx]	2022	2025	0 / 0.28
L-CMB-02	Reductions from Boilers and Process Heaters (Permitted) [NOx]	2027	2037	0 / 0.5
L-CMB-03	NOx Emission Reductions from Permitted Non-Emergency Internal Combustion Engines [NOx]	2026	2031	0 / 0.31
L-CMB-04	Emission Reductions from Emergency Standby Engines (Permitted) [NOx, VOC]	2025	2031	0.0 / 2.0
L-CMB-05	NOx Emission Reductions from Large Turbines [NOx]	2027	2037	0 / 0.06
L-CMB-06	NOx Emission Reductions from Electric Generating Facilities [NOx]	2027	2037	0.09 / 0.62
L-CMB-07	Emission Reductions from Petroleum Refineries [NOx]	2027	2037	0 / 0.77
L-CMB-08	NOx Emission Reductions from Combustion Equipment at Landfills and Publicly Owned Treatment Works [NOx]	2025	2037	0 / 0.33
L-CMB-09	NOx Reductions from Incinerators [NOx]	2024	2029	0 / 0.89
L-CMB-10	NOx Reductions from Miscellaneous Permitted Equipment [NOx]	2027	2037	0 / 1.16
ECC-01	Co-Benefits from Existing and Future Greenhouse Gas Programs, Policies, and Incentives [NOx]	2023	2023	TBD / TBD ^b
ECC-02	Co-Benefits from Existing and Future Residential and Commercial Building Energy Efficiency Measures [NOx, VOC]	2024	2024	TBD / TBD
ECC-03	Additional Enhancements in Reducing Existing Residential Building Energy Use [NOx, VOC]	2025	2029	TBD / TBD

Table 1-1 (concluded)
South Coast AQMD Proposed Stationary Source 8-Hour Ozone Control Measures

Control Measure Number	Title	Proposed Adoption Date	Proposed Implementation Timeframe	Emission Reductions (tpd) (2032/2037)
FUG-01	Improved Leak Detection and Repair [VOC]	2023	2028	0.6 / 0.6
FUG-02	Emission Reductions from Industrial Cooling Towers [VOC]	2026	2031	TBD / TBD
CTS-01	Further Emission Reductions from Coatings, Solvents, Adhesives, and Lubricants [VOC]	2023	2031	0.5 / 0.5
FLX-02	Stationary Source VOC Incentives [VOC]	2024	2025	TBD / TBD
BIO-01	Assessing Emissions from Urban Vegetation [VOC]	2025	2025	TBD / TBD
MCS-01	Application of All Feasible Measures [All Pollutants]	2023	2037	TBD / TBD
MCS-02	Wildfire Prevention [NO _x , PM]	2026	2031	N/A / N/A
FLX-01	Improved Education and Public Outreach [All Pollutants]	2023	2023	N/A / N/A

Key: tpd = tons per day; TBD = to be determined; N/A = not applicable

The following text provides a brief description of the proposed control measures presented in Table 1-1. Details of the following control measures are in Appendix IV-A⁶ of the Draft 2022 AQMP.

R-CMB-01: Emission Reductions from Replacement with Zero Emission or Low NO_x Appliances – Residential Water Heating: This control measure seeks to reduce NO_x emissions from residential building water heating sources that are subject to Rule 1121 – Control of Oxides of Nitrogen (NO_x) from Residential Type, Natural Gas-Fired Water Heaters. The measure proposes to: 1) develop a rule to require zero emission water heating units for installations in both new and existing residences; and 2) allow low NO_x technologies as a transitional alternative when installing a zero emission unit is determined to be infeasible (e.g., colder climate zones, or architecture design obstacles). This control measure would include incentive funds to facilitate the transition to zero emission technologies and promote further emission reductions earlier than required. A primary zero emission residential water heating technology is currently available with the all-electric heat pump water heater.

R-CMB-02: Emission Reductions from Replacement with Zero Emission or Low NO_x Appliances – Residential Space Heating: This control measure seeks to reduce NO_x emissions from residential space heating sources regulated by Rule 1111 – Reduction of NO_x Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces (Rule 1111). The measure proposes to: 1) develop a rule to require zero emission space heating units for installations in both new and existing residences; and 2) allowing low NO_x technologies as a transitional alternative when installing a zero emission unit is determined to be infeasible. This control measure would also provide

⁶ Draft 2022 AQMP Appendix IV-A: South Coast AQMD's Stationary and Mobile Source Control Measures. <http://www.aqmd.gov/2022aqmp>.

incentive funds to facilitate adoption of zero emission technologies that would promote further emission reductions earlier than required.

R-CMB-03: Emissions Reductions from Residential Cooking Devices: This control measure seeks to reduce NOx emissions from residential cooking devices including stoves, ovens, griddles, broilers, and others in new and existing buildings. Replacing gas burners with electric cooking devices, induction cooktops, or low NOx gas burner technologies will reduce NOx emissions. NOx reductions will be pursued through a combination of regulatory approaches and incentive programs. Proposed method of control consists of two steps: step one includes a technology assessment of emissions testing of various cooking devices to establish emissions rates. Once emissions rates are defined, step two supports future rule development and incentive programs. The rule would apply to manufacturers, distributors, and installers establishing emission limits. The incentive programs would provide funds to encourage and promote adoption of zero and low NOx emission technologies.

R-CMB-04: Emission Reductions from Replacement with Zero Emission or Low NOx Appliances – Residential Other Combustion Sources: This control measure seeks to reduce NOx emissions from residential combustion sources that are not water heating (see R-CMB-01), space heating (see R-CMB-02) and cooking equipment (see R-CMB-03). R-CMB-04 sources are miscellaneous, but primarily comprised of natural gas and liquified petroleum gas (LPG) fired swimming pool heaters, laundry dryers, and barbecue grills. The measure proposes to: 1) develop a rule to require zero emission technologies for some emission sources in both new and existing residences; and 2) allow low NOx technologies as an alternative for the rest of emission sources. Mitigation fees may be required for certain lower NOx technology applications which will be evaluated during the future rulemaking process. During the rulemaking, staff will assess the universe of equipment. Incentive funds will be considered to facilitate adoption of zero emission technologies that would promote further emission reductions earlier than required.

C-CMB-01: Emission Reductions from Replacement with Zero Emission or Low NOx Appliances – Commercial Water Heating: This control measure seeks to reduce NOx emissions from commercial building water heating sources that are subject to Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters (Rule 1146.2). The measure proposes to: 1) develop a rule to require zero emission commercial water heating units for installations in both new and existing buildings; and 2) allow low NOx technologies as a transitional alternative when installing a zero emission unit is determined to be infeasible. This control measure would also provide incentive funds to facilitate adoption of zero emission technologies that would promote further emission reductions earlier than required.

C-CMB-02: Emission Reductions from Replacement with Zero Emission or Low NOx Appliances – Commercial Space Heating: This control measure seeks to reduce NOx emissions from commercial building space heating sources. (i.e., forced air furnaces) with a rated heat input capacity between 175,000 and 2,000,000 British Thermal Units per hour (BTU/hr). Those sources are currently not subject to the South Coast AQMD NOx rules. The measure proposes to: 1) develop rules to require zero emission commercial space heating units for installations in both new and existing buildings; and 2) allow low NOx technologies as a transitional alternative when installing a zero emission unit is determined to be infeasible. This control measure would also provide incentive funds to facilitate adoption of zero emission technologies that would promote

further emission reductions earlier than required. Heat pumps have been broadly applied in commercial applications as the primary zero emission technology.

C-CMB-03: Emission Reductions from Commercial Cooking Devices: This control measure seeks to reduce NO_x emissions from commercial cooking devices including stoves, ovens, griddles, broilers, and others in new and existing buildings. Replacing gas burners with electric cooking devices, induction cooktops, or low NO_x gas burner technologies will reduce NO_x emissions. NO_x reductions will be pursued through a combination of regulatory approaches and incentive programs. Proposed method of control consists of two steps: step one includes a technology assessment of emissions testing of various cooking devices to establish emissions rates. Once emissions rates are defined, step two supports future rule development and incentive programs. The rule will apply to manufacturers, distributors, and installers establishing emission limits. The incentive programs would provide funds to encourage and promote adoption of zero and low NO_x emission technologies.

C-CMB-04: Emission Reductions from Small Internal Combustion Engines: This control measure seeks to reduce NO_x emissions from non-permitted engines rated 50 brake horsepower (bhp) or less. Such engines may be used in generators, pumps, or air compressors. Operators of these engines can include private residences or business and governmental entities. Because these small engines are not subject to South Coast AQMD regulations, approaches to reducing emissions will focus on education and outreach and incentive programs to encourage consumers to purchase zero emission technologies. Improved technologies and resulting cost reductions are anticipated to ease the transition towards zero emission alternative technologies.

C-CMB-05: NO_x Reductions from Small Miscellaneous Commercial Combustion Equipment (Non-Permitted): This control measure seeks to reduce NO_x emissions by replacing combustion with zero and low NO_x emission technologies on miscellaneous unpermitted combustion equipment. Such equipment includes ovens, furnaces, dryers, and other fuel combustion equipment too small to require a permit. Zero emission technologies, including electrification will be used where and when technically feasible and cost-effective. This control measure will develop rules to require zero and low NO_x emission technologies at point-of-sale, establish incentive programs to facilitate adoption of cleaner technologies, and reassess permit and source specific exemption thresholds.

L-CMB-01: NO_x Reductions for RECLAIM Facilities: This control measure reduces NO_x emissions by transitioning NO_x RECLAIM facilities to a command-and-control regulatory structure requiring BARCT level controls. Source categories covered by this control measure include metal melting and heating furnaces, food ovens, and nitric acid tanks. The following rules would implement this control measure: Proposed Amended Rule 1147.2 – NO_x Reductions from Metal Melting and Heating Furnaces (PAR 1147.2); Proposed Amended Rule 1153.1 – Emissions of Oxides of Nitrogen from Commercial Food Ovens (PAR 1153.1); and Proposed Rule 1159.1 – Control of NO_x Emissions from Nitric Acid Tanks (PR 1159.1). Staff is proposing to evaluate a variety of different NO_x control technologies depending on the type of NO_x source.

L-CMB-02: Reductions from Boilers and Process Heaters (Permitted): This control measure reduces NO_x emissions by replacing or retrofitting boilers and process heaters used in industrial, institutional, and commercial operations with zero and low NO_x emission technologies. It would apply to units with a rated heat input greater than or equal to 2 MMBTU/hr. Boilers and process heaters used in industrial, institutional, and commercial operations with a rated heat input greater

than or equal to 2 MMBTU/hr are currently regulated under Rules 1146 and 1146.1. This control measure will establish rules to set standards for new equipment, replacements, or retrofits of boilers and process heaters.

L-CMB-03: NO_x Emission Reductions from Permitted Non-Emergency Internal Combustion Engines: This control measure targets emission reductions from permitted non-emergency internal combustion engines rated over 50 bhp regulated by Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines (Rule 1110.2). It proposes to transition, older, higher-emitting engines in the RECLAIM program to newer technology that can meet the NO_x emission limits set forth in Rule 1110.2. Low NO_x and zero emission technologies may be available in the future and will be evaluated to determine feasibility of implementation.

L-CMB-04: Emission Reductions from Emergency Standby Engines (Permitted): This control measure seeks reductions of NO_x emissions from emergency standby engines rated over 50 bhp. Over 12,000 internal combustion engines are permitted for emergency standby power in the South Coast AQMD, however due to the essential nature, limited operations of these engines, and high replacement costs, multiple approaches are proposed to reduce emissions from this source category. The approaches involve an education and outreach program to encourage the transition to zero-emission technologies. Regulatory strategies include replacing older, higher emitting engines with cleaner engines or with alternative technologies, requiring the use of lower emission fuels, and a future prohibition of the use of Internal Combustion Engines for emergency backup power. As alternative technologies mature and new technologies emerge, the South Coast AQMD will undertake rulemaking to maximize emission reductions utilizing zero emission equipment where cost-effective and feasible and low NO_x emission equipment in all other applications.

L-CMB-05: NO_x Emission Reductions from Large Turbines: This control measure aims to reduce NO_x from turbines in the South Coast AQMD subject to Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines (Rule 1134). Fuel cells and electrification are ways to shift away from combustion sources generating NO_x emissions wherever feasible. As older higher emitting turbines reach the end of their equipment life it is expected that some facilities will opt to replace turbines with fuel cells or electrify facility operations.

L-CMB-06: NO_x Emission Reductions from Electricity Generating Facilities: This control measure reduces NO_x emissions from electric generating units regulated by Rule 1135 – Emissions of Oxides of Nitrogen from Electricity Generating Facilities (Rule 1135). This measure proposes to develop a rule to implement low NO_x and zero emission technologies at electricity generating facilities. The target of this approach is to replace boiler units with lower-emitting turbines, implement zero emission technologies such as fuel cells or electrification for 10 percent of gas-fired sources and other lower NO_x emission technologies for the rest of gas-fired sources, and require stricter emission requirements from diesel internal combustion engines.

L-CMB-07: Emission Reductions from Petroleum Refineries: The goal of this measure is to assess and identify potential actions to further reduce NO_x emissions by 20 percent for large refinery heaters and boilers with a maximum rated heat input of 40 MMBTU/hour. This would be accomplished by developing a rule requiring a lower NO_x concentration limit of 2 parts per million (ppm). South Coast AQMD staff identified three potential technological approaches to further reduce emissions for the large heaters and boilers category. The three approaches include next-generation ultra-low NO_x burners, advanced SCR, and transition to zero emission technology.

L-CMB-08: NO_x Emission Reductions from Combustion Equipment at Landfills and Publicly Owned Treatment Works: This control measure aims to reduce NO_x emissions through a regulatory approach. The source categories for this control measure are biogas fueled combustion equipment, specifically boilers, turbines, and engines, which are regulated by Rule 1150.3 – Emissions of Oxides of Nitrogen from Combustion Equipment at Landfills (Rule 1150.3) and Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities (Rule 1179.1).

L-CMB-09: NO_x Reductions from Incinerators: This control measure seeks emission reductions of NO_x by replacing or retrofitting incinerators and other combustion equipment associated with incinerators with zero and low NO_x emission technologies. Incinerators are used to burn waste material at high temperatures until reduced to ash. This control measure will achieve reductions by developing a rule, and implementation of low NO_x burner systems or ultra-low NO_x burner systems.

L-CMB-10: NO_x Reductions from Miscellaneous Permitted Equipment: The goal of this measure is to assess and identify potential actions to further reduce NO_x emissions associated with miscellaneous permitted equipment located in the South Coast AQMD jurisdiction. South Coast AQMD staff will convene a stakeholder working group to discuss and identify actions or approaches to further reduce NO_x emissions from these sources. Miscellaneous permitted equipment is regulated under Rule 1147 – NO_x Reductions from Miscellaneous Sources (Rule 1147) with NO_x emission limits depending on equipment category.

ECC-01: Co-Benefits from Existing and Future Greenhouse Gas Programs, Policies, and Incentives: This control measure seeks to quantify and take credit for the criteria pollutant co-benefits associated with programs to reduce GHG emissions. The processes that emit criteria pollutants and their precursors also typically emit GHGs. Mandates and programs that reduce GHG emissions will therefore also reduce criteria pollutant emissions. Significant efforts are currently being planned and implemented to reduce GHG emissions under State programs such as California Governor Executive Order B-55-18 and Senate Bill (SB) 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases), which established reduction goals for 2030, 2045, and 2050.

ECC-02: Co-Benefits from Existing and Future Residential and Commercial Building Energy Efficiency Measures: This control measure seeks to quantify and take credit for criteria pollutant co-benefits resulting from the implementation of energy efficiency mandates such as California's Title 24 program. In addition, there are multiple programs that provide incentives, rebates, and loans for residential and commercial building efficiency projects. Improvements in weatherization and other efficiency measures provide emission reductions through reduced energy use for heating, cooling, lighting, cooking, and other needs. South Coast AQMD staff will work with agencies, utilities, and other stakeholders to implement innovative measures that provide energy savings along with emission reductions.

ECC-03: Additional Enhancements in Reducing Existing Residential Building Energy Use: This control measure seeks to provide incentive funding to enhance the objectives of ECC-02. Incentives will be used to further promote programs reducing energy use associated with space heating, water heating, and other large residential energy sources, achieving emission reductions beyond the levels expected from program mandates. Residential incentive programs would be developed to facilitate weatherization, replace older appliances with highly efficient technologies

and encourage renewable energy adoption. Incorporating efficient appliance technologies, improving weatherization, and encouraging renewables such as solar thermal and photovoltaics will reduce energy demand and provide additional emission reductions within the residential sector. The South Coast AQMD will collaborate with utilities, agencies, and organizations to help leverage funding and coordinate incentives with existing programs.

FUG-01: Improved Leak Detection and Repair: This proposed control measure seeks to reduce emissions of VOCs from fugitive leaks from process and storage equipment located at a variety of sources including, but not limited to, oil and gas production, petroleum refining, chemical products processing, storage and transfer, marine terminals, and other. Some of these facilities are subject to leak detection and repair (LDAR) requirements established by the South Coast AQMD and the U.S. EPA that include periodic VOC concentration measurements using an approved portable organic vapor analyzer (OVA) to identify leaks. This measure would implement the use of advanced leak detection technologies including optical gas imaging devices (OGI), open path detection devices, and gas sensors for earlier detection of VOC emissions from leaks.

FUG-02: Emission Reductions from Industrial Cooling Towers: This proposed control measure seeks to reduce VOC emissions from industrial cooling towers through enhanced leak identification and repair requirements. Industrial cooling towers remove heat absorbed in the circulating cooling water systems at power plants, petroleum refineries, petrochemical plants, natural gas processing plants, and a wide variety of industrial operations. This control measure proposes to first assess the need for additional monitoring and practices to reduce industrial cooling tower VOC emissions. The assessment will include a review of the emissions inventory, costs for monitoring equipment, and the control requirements established by other governmental agencies. Findings from this assessment will be the basis of potential future rulemaking activities.

CTS-01: Further Emission Reductions from Coatings, Solvents, Adhesives, and Lubricants: This proposed control measure seeks VOC emission reductions by focusing on select coating, adhesive, solvent and sealant categories by further limiting the allowable VOC content in formulations or incentivizing the use of super-compliant technologies. Categories to be considered include but are not limited to, metal part and product coatings, automotive refinishing coatings, adhesives, and sealants. Use of super-compliant zero and low VOC materials, such as powder coating, aqueous coatings, and some ultraviolet light, electron beam, and light emitting diode cured coatings, eliminate or substantially reduce emissions compared to similar products that are not zero or low VOC products. There are several product categories where these materials perform as well as traditional products and are widely available in the market. The proposal is anticipated to be accomplished with a multi-phase adoption and implementation schedule. Tightening regulatory exemptions that may be used as loopholes and enhanced enforcement can also lead to reduced emissions.

FLX-02: Stationary Source VOC Incentives: This control measure seeks to provide incentive funding to facilitate the adoption of clean, low VOC emission technologies from stationary sources. Facilities would be able to qualify for incentive funding if they use equipment or accept permit conditions which result in cost-effective emission reductions that are beyond existing requirements. The program would establish procedures for quantifying emission benefits from clean technology implementation and develop cost-effectiveness thresholds for funding eligibility. Mechanisms will be explored to incentivize businesses to choose the cleanest technologies as they replace equipment and upgrade facilities, and to provide incentives to encourage businesses to move into these technologies sooner. Potential incentive concepts include incentive funding,

permitting and fee incentives and enhancements, New Source Review (NSR) incentives and enhancements, branding incentives, and recordkeeping and reporting incentives.

BIO-01: Assessing Emissions from Urban Vegetation: This control measure seeks to improve the understanding of VOCs emitted by trees and vegetation (biogenic sources) and their contribution to PM and ozone formation. Certain VOCs emitted by biogenic sources are highly reactive and potent ozone precursors. A recent analysis of municipal tree inventories across the Basin demonstrated that many recently planted species are either high emitters (e.g., *Quercus ilex*, *Quercus agrifolia*, *Platanus* species) or are trees for which emission factors are unknown or highly uncertain (e.g., *Koeleruteria bipinnata*, *Cercis canadensis*, *Pistacia chinensis*, *Podocarpus gracilor*, *Hymenosporum flavum*). High resolution data combined with accurate emissions factor measurements of common tree species will be used to improve the biogenic VOC emissions inventory. Based on these findings, the South Coast AQMD will explore the need for tree planting programs that promote the planting of low VOC emitting tree species.

MCS-01: Application of All Feasible Measures: This control measure is to address the State's requirement to take all feasible measures to reduce ozone. Existing rules and regulations for pollutants including VOC and NO_x reflect current Best Available Retrofit Control Technology (BARCT). However, BARCT continually evolves as new technology becomes available that is feasible and cost-effective. South Coast AQMD staff will continue to review new emission limits or controls introduced through federal, State or local regulations to determine if South Coast AQMD regulations remain equivalent or more stringent than rules in other regions. If not, a rulemaking process will be initiated to perform a BARCT analysis and potential rule amendments if deemed feasible. In addition, the South Coast AQMD will consider adopting and implementing new retrofit technology control standards, based on research and development and other information, that are feasible and cost-effective.

MCS-02: Wildfire Prevention: This proposed control measure will seek to reduce the impacts of wildfires on PM and ozone levels from efforts to reduce wildfire fuel. Fuel reduction efforts include hand-thinning, mechanical thinning, and the use of chipping equipment (chipping) to mitigate excess fuels at properties located in the residential urban-wild-interface (UWI) areas of the San Bernardino National Forest (SBNF). To support efforts of wildfire prevention and aid compliance with Zone 0 defensible space requirements of California Assembly Bill (AB) 3074, incentive funding will be provided for a pilot project of approximately 1,400 acres. The South Coast AQMD will identify and coordinate implementation of the pilot project with established organizations and their contractors such as the Inland Empire Fire Safe Alliance, Mountain Rim Fire Safe Council, and Big Bear Fire Authority to provide fuel load reducing curbside chipping services to residents of these UWI areas.

FLX-01: Improved Education and Public Outreach: This control measure seeks to provide education, outreach, and incentives for consumers, business owners, and residences to contribute to clean air efforts. Examples include informing consumer choices such as the use of energy efficient products and appliances, new lighting technology, "super-compliant" coatings, and planting low VOC emitting trees. In addition, this measure intends to increase the effectiveness of energy conservation programs through public education and awareness as to the environmental and economic benefits of conservation. Educational and incentive tools to be used include social comparison applications such as comparing your personal environmental impacts with other individuals, social media, and public/private partnerships. These efforts will be complemented with currently available incentive programs.

South Coast AQMD Mobile Source Control Measures

The proposed South Coast AQMD mobile source measures are based on a variety of control technologies that are commercially available and/or technologically feasible to implement prior to the attainment year of 2037. The focus of these measures includes accelerated retrofits or replacement of existing vehicles or equipment, acceleration of vehicle turnover through voluntary vehicle retirement programs, and greater use of cleaner fuels in the near-term. The measures will encourage greater deployment of low NO_x and zero emission vehicle and equipment technologies to the maximum extent feasible as such technologies are commercialized and available everywhere else. In the longer-term, there is a need to significantly increase the penetration and deployment of low NO_x and zero emission vehicles, greater use of cleaner technologies, and substantial emission reductions from federal and international sources such as locomotives, ocean-going vessels (OGVs), and aircraft. While shifting to zero emission is necessary where feasible and available, low NO_x and ultra-low NO_x technology are inevitable for sectors where zero emission technologies are not available or mature commercially.

A total of 18 measures are proposed as actions to reduce mobile source emissions (see Table 1-2). Three emission growth management measures (EGM-01 to EGM-03) are proposed to identify actions to help mitigate and potentially provide emission reductions due to new development and redevelopment projects, projects subject to general conformity requirements, and clean construction policy. Four facility-based mobile source measures (FBMSMs) (MOB-01 to MOB-04) seek to identify actions that will result in additional emission reductions at commercial marine ports, rail yards and intermodal facilities, warehouse distribution centers, and commercial airports. FBMSMs for marine ports and intermodal rail yards are currently undergoing an Indirect Source Rule development process. Six on-road and off-road mobile measures focus on on-road light/medium/heavy-duty vehicles, international shipping vessels, passenger locomotives and small off-road engines. Additionally, incentive-based measures such as MOB-11 will use established protocols such as Carl Moyer Program guideline and report to the Governing Board periodically. MOB-12, Pacific Rim Initiative for Maritime Emission Reductions seeks NO_x emission reductions from partnership with local, State, federal and international entities. Three other measures (MOB-13 to MOB-15) focus on fugitive VOC emissions from tanker vessels, fleet vehicles mitigation options, and the development of a work plan to support and accelerate the deployment of zero emission infrastructure needed for the widespread adoption of zero emission vehicles and equipment that is described in more detail in Appendix IV-A⁷ of the Draft 2022 AQMP. A summary of the mobile source control measures to be implemented as part of the 2022 AQMP is provided in Table 1-2.

⁷ Draft 2022 AQMP Appendix IV-A: South Coast AQMD's Stationary and Mobile Source Control Measures. <http://www.aqmd.gov/2022aqmp>.

Table 1-2
South Coast AQMD Proposed Mobile Source 8-Hour Ozone Control Measures

Control Measure Number	Title	Proposed Adoption Date	Proposed Implementation Timeframe	Emission Reductions (tpd) (2032/2037)
EGM-01	Emission Reductions from New Development and Redevelopment [All Pollutants]	2025	2026-2037	TBD / TBD
EGM-02	Emission Reductions from Projects Subject to General Conformity Requirements [All Pollutants]	2026	2026-2037	TBD / TBD
EGM-03	Emission Reductions from Clean Construction Policy [All Pollutants]	2025	2025-2037	TBD / TBD
MOB-01	Emission Reductions at Commercial Marine Ports [NO _x]	2023	2023-2037	
MOB-02A	Emission Reductions at New Rail Yards and Intermodal Facilities [NO _x , PM]	2022-2024	2023-2037	TBD / TBD
MOB-02B	Emission Reductions at Existing Rail Yards and Intermodal Facilities [NO _x , PM]	2022-2024	2023-2037	TBD / TBD
MOB-03	Emission Reductions at Warehouse Distribution Centers [NO _x]	Adopted 2021 (Reassess every 3 years)	2022-2037	TBD / TBD
MOB-04	Emission Reductions at Commercial Airports [All Pollutants]	Approved 2019 (Reassess in 2027)	2020-2037	TBD / TBD
MOB-05	Accelerated Retirement of Older Light-Duty and Medium-Duty Vehicles [VOC, NO _x , CO]	N/A	Ongoing	0.21 / 0.14 [NO _x]
MOB-06	Accelerated Retirement of Older On-Road Heavy-Duty Vehicles [NO _x , PM]	N/A	Ongoing	TBD / TBD
MOB-07	On-Road Mobile Source Emission Reduction Credit Generating Program [NO _x , PM]	TBD	TBD	TBD / TBD
MOB-08	Small Off-Road Engine Equipment Exchange Program [VOC, NO _x , PM]	N/A	Ongoing	TBD / TBD
MOB-09	Further Emission Reductions from Passenger Locomotives [NO _x , PM]	N/A	Ongoing	TBD / TBD
MOB-10	Off-Road Mobile Source Emission Reduction Credit Generation Program [NO _x , PM]	TBD	TBD	TBD / TBD
MOB-11	Emission Reductions from Incentive Programs [NO _x , PM]	N/A	Ongoing	10.72 / 9.88 [NO _x]
MOB-12	Pacific Rim Initiative for Maritime Emission Reductions	N/A	Ongoing	TBD / TBD
MOB-13	Fugitive VOC Emissions from Tanker Vessels [VOC]	2024	2024-2037	TBD / TBD

Table 1-2 (concluded)
South Coast AQMD Proposed Mobile Source 8-Hour Ozone Control Measures

Control Measure Number	Title	Proposed Adoption Date	Proposed Implementation Timeframe	Emission Reductions (tpd) (2032/2037)
MOB-14	Rule 2202 – On-Road Motor Vehicle Mitigation Options [VOC, NO _x , CO]	2023	2023-2037	TBD / TBD
MOB-15	Zero-Emission Infrastructure for Mobile Sources [All Pollutants]	N/A	Ongoing	TBD / TBD

Key: tpd = tons per day; TBD = to be determined

The following text provides a brief description of the proposed mobile source control measures presented in Table 1-2. Details of the measures are in Appendix IV-A⁸ of the Draft 2022 AQMP.

EGM-01: Emission Reductions from New Development and Redevelopment: The goal of this measure is to identify emission reduction opportunities and to mitigate and, where appropriate, reduce emissions from new development or redevelopment projects such as residential, commercial, and industrial projects that are otherwise not included in other FBMSMs identified in the 2022 AQMP. Based on Governing Board direction, South Coast AQMD staff has held three Working Group meetings for the development of EGM-01 and released a Request for Proposal in 2019 to profile the universe of off-road construction equipment available in the South Coast Air Basin and identify the incremental cost to upgrade existing off-road construction equipment to Tier 4 standards; no proposals were received on the Request for Proposal. South Coast AQMD staff will re-convene the Working Group to continue the information gathering process and work towards the development of a method of control for EGM-01. The amount emission reductions that can be achieved and their SIP creditability will be determined dependent on the final method of control to be implemented.

EGM-02: Emission Reductions from Projects Subject to General Conformity Requirements: General conformity is a process intended to prevent the air quality impacts of a proposed federal project from causing or contributing to new violations of the air quality standards, exacerbating existing violations, or interfering with the purpose of the applicable implementation plan. The 2016 AQMP established a SIP set-aside account, with an initial balance of 2.0 tons per day of NO_x and 0.5 ton per day of VOC each year from 2017 to 2030, and 0.5 ton per day of NO_x and 0.2 ton per day of VOC in 2031, to accommodate projects with a positive conformity determination (i.e., emissions that exceed the de minimis threshold). This measure seeks to undertake a rulemaking process in order to accommodate general conformity determination using mechanisms other than the current set-aside account. Mitigation or offset mechanisms including those adopted by other air districts in California will be explored during the rulemaking process. Such mechanisms may include the imposition of fees to fund air quality improvement programs or a requirement to purchase surplus emission reduction credits.

EGM-03: Emission Reductions from Clean Construction Policy: The purpose of this control measure is to identify potential approaches to mitigate and control emissions from construction activities in the South Coast Air Basin. This control measure will seek to develop a Clean Construction Policy (CCP) which can be utilized for reference and voluntary implementation by

⁸ Draft 2022 AQMP Appendix IV-A: South Coast AQMD's Stationary and Mobile Source Control Measures. <http://www.aqmd.gov/2022aqmp>.

local municipalities and public agencies. The South Coast AQMD will work in collaboration with local municipalities and agencies, construction industry, and other affected stakeholders to develop such a policy and will consider existing control measures and best management practices that are currently being implemented by entities throughout California.

MOB-01: Emission Reductions at Commercial Marine Ports: This measure seeks to reduce NO_x, VOC, and PM emissions related to on-road heavy-duty vehicles, ocean going vessels, cargo handling equipment, locomotives, and harbor craft that go to and from the Ports of Los Angeles and Long Beach (Ports). As a follow up to implementation of MOB-01 from the 2016 AQMP, the South Coast AQMD is working on an indirect source rule (Proposed Rule 2304) to address emissions from marine ports. Through a public rulemaking process, rule concepts will be proposed to address emissions from these sources. Rule development will continue to focus on deploying the cleanest technologies possible and supporting zero emissions fueling charging infrastructure as quickly as feasible. Incentive funding that supports the transition to cleaner technologies will also continue to be pursued to assist in implementing this measure.

MOB-02A: Emission Reductions at New Rail Yards and Intermodal Facilities: This measure seeks to reduce NO_x and PM emissions related to on-road heavy-duty vehicles, off-road equipment, and locomotives at new rail yards and intermodal facilities. Through the public process, the South Coast AQMD will assess and identify potential actions that limit additional emissions created by the new operations. To implement this measure, staff will continue rule development for Proposed Rule 2306 for new railyards. Rule development will continue to focus on implementation of cleanest locomotives, switchers, on-road heavy-duty trucks, cargo-handling equipment, transportation refrigeration units available and requiring necessary infrastructure to support zero and low NO_x emission technologies.

MOB-02B: Emission Reductions at Existing Rail Yards and Intermodal Facilities: The goal of this measure is to reduce NO_x and PM emissions related to on-road heavy-duty vehicles, off-road equipment, and locomotives located at existing rail yards and intermodal facilities. Through a public rulemaking process, rule concepts will be proposed to address emissions from these sources. Rule development will focus on transitioning locomotives, switchers, on-road heavy-duty trucks, cargo-handling equipment, transportation refrigeration units to zero and low NO_x emission technologies. The rule development will include necessary infrastructure measures to support the transition.

MOB-03: Emission Reductions at Warehouse Distribution Centers: The goal of this measure to reduce NO_x and PM emissions related to mobile sources and other equipment associated with warehouses. The strategy utilizes a menu-based point system in Rule 2305 – Warehouse Indirect Source Rule - Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program, adopted in May 2021 to implement MOB-03 from the 2016 AQMP (Rule 2305) where warehouses subject to the rule must annually earn points based on the amount of truck traffic at their facility. The menu includes actions that warehouse operators can take to reduce emissions, or to facilitate emission reductions from their operations. Required actions result in emission reductions when compared to conventional diesel technology, assist in implementation of other related measures, promote the demand for zero emission and low NO_x technology, foster early action of compliance, and infrastructure installation to support new or emerging zero emission technologies. Implementation of this measure will include ensuring that applicable warehouses comply with Rule 2305, quantifying the air quality benefits of Rule 2305 as they occur and seeking to incorporate those benefits as SIP-creditable emission reductions, and evaluating the state of

technology every three years to identify if Rule 2305 should potentially be amended to increase the air quality benefits.

MOB-04: Emission Reductions at Commercial Airports: The Facility-Based Mobile Source Measure for Commercial Airports, which controls non-aircraft mobile sources at commercial airports, was adopted by the South Coast AQMD on December 6, 2019. The measure consists of MOUs between the South Coast AQMD and five commercial airports in the Basin to develop and implement air quality improvement plans. The MOUs were executed with Los Angeles International Airport, John Wayne Orange County Airport, Hollywood Burbank Airport, Ontario International Airport, and Long Beach Airport. Each MOU contains performance targets for cleaner ground support equipment, airport shuttle buses, and heavy-duty trucks. Based on the measures in the MOUs, the South Coast AQMD committed to achieve 0.52 and 0.37 ton per day NO_x reductions in 2023 and 2031, respectively. This measure seeks to estimate emission reductions through 2037, beyond the term of the MOUs, based on continued implementation of the airports' Air Quality Improvement Plans/Measures. Opportunities for additional feasible emission reductions will be explored through the Airport MOU Working Group.

MOB-05: Accelerated Retirement of Older Light-Duty and Medium-Duty Vehicles: The purpose of this control measure is to achieve emission reductions by accelerating retirement of older gasoline- and diesel-powered vehicles with up to 8,500 lbs. gross vehicle weight rating (GVWR). These vehicles include passenger cars, sports utility vehicles, vans, and light-duty pickup trucks. The South Coast AQMD has been implementing the Replace Your Ride Program (RYP) since 2015 which provides a rebate to low- and moderate-income applicants for replacing their existing cars with newer, cleaner conventionally powered vehicles, plug-in hybrid electric vehicles or dedicated zero emission vehicles. This measure seeks to retire up to 2,000 light- and medium-duty vehicles annually through continued implementation of the Replace Your Ride Program with incentives up to \$9,500 provided which includes \$5,000 for residents in a Disadvantaged Community (DAC) zip code. For plug-in hybrid and battery electric vehicles, an additional incentive of up to \$2,000 is also provided for the installation of electric vehicle charging equipment. As an alternative, the RYP program also offers a voucher of up to \$7,500 for other clean modes of transportation, such as car-sharing, public transportation or e-bikes, in exchange for the retirement of an old vehicle.

MOB-06: Accelerated Retirement of Older On-Road Heavy-Duty Vehicles: This proposed control measure seeks additional emission reductions from existing heavy-duty vehicles with GVWR greater than 8,500 lbs through an accelerated vehicle replacement program with zero emission or low NO_x vehicles. A new pilot program, the Trade Up Program for On-Road Heavy-Duty Vehicles, is proposed to achieve enforceable emission reductions by replacing old, high-polluting vehicles with a new, low-NO_x CNG powered vehicles through a three-way exchange approach. Under this pilot program, qualified participants can trade in their MY 2014 or newer heavy-duty diesel truck to a South Coast AQMD-approved dealership and receive an incentive toward the purchase of a new low NO_x emission (0.02 gram NO_x) natural gas-powered truck. The dealer then sells the trade-in diesel truck to an owner or fleet with a MY 2009 or older truck that will be scrapped by an approved dismantler to ensure permanent and enforceable reductions. The objective of this pilot program is to accelerate the turnover of 2009 and older heavy-duty diesel trucks while also increasing the deployment of low NO_x natural gas-powered heavy-duty trucks and maximizing emission reductions. If proven successful, this program can be further expanded to include other alternative-fuel vehicles including battery electric and fuel cell trucks.

MOB-07: On-Road Mobile Source Emission Reduction Credit Generating Program: This proposed measure seeks to accelerate the early deployment of low NOx and zero emission on-road heavy-duty trucks through the generation of mobile source emission reduction credits (MSERCs) which can be used as an alternative means of compliance with certain South Coast AQMD regulations. These MSERCs will be used only by entities affected by the 2022 AQMP control measures MOB-01 through MOB-04, EGM-01, and EGM-03. The need for MOB-07 will be evaluated as these other control measures are implemented. South Coast AQMD staff will develop amendments to Rule 1612 – Credits for Clean On-Road Vehicles (Rule 1612) and Rule 1612.1 – Mobile Source Credit Generation Pilot Program (Rule 1612.1) to reflect the latest advanced low NOx and zero emission technologies and quantification methodologies. MSERCs generated will be discounted to provide additional benefits to the environment and to help meet air quality standards.

MOB-08: Small Off-Road Engine Equipment Exchange Program: This measure seeks to reduce NOx emissions by promoting and expanding the accelerated turn-over of in-use small off-road engines and other engines, through expanded voluntary exchange programs. Examples of these types of engines include those used in larger diesel-powered lawn and garden equipment. Since 2003, the South Coast AQMD has sponsored lawn mower buyback programs for residential users of old lawn mowers. This program has resulted in over 57,000 high polluting gasoline-powered lawn mowers taken out of service from 2003 to the present. The South Coast AQMD also launched the Commercial Electric Lawn and Garden Equipment Incentive and Exchange Program (Commercial L&G Equipment Program) in 2018 to accelerate the replacement of old gasoline- or diesel-powered commercial lawn and garden equipment with zero emission, battery electric technology. This program provides a point-of-sale discount of up to 75 percent off the purchase price of a variety of new electric equipment. More recently, the South Coast AQMD has also started a new battery rebate program for commercial lawn and garden equipment that funds up to 75 percent of the rechargeable battery cost with a maximum limit of three batteries per equipment. Moving forward, the South Coast AQMD will increase the number of outreach and exchange events as well as continue to seek additional funding opportunities and resources to expand the scope and types of equipment and engines that can be funded by these programs.

MOB-09: Further Emission Reductions from Passenger Locomotives: This measure seeks to promote voluntary replacement or upgrade of existing passenger locomotives with Tier 4 or cleaner locomotives including zero emission locomotives. The South Coast AQMD continues to work collaboratively with technology providers and other stakeholders to explore the feasibility of zero and low NOx emission locomotive technologies such as battery electric or fuel cell engine-driven systems. For example, since 2018, the South Coast AQMD has been actively participating in the development and demonstration of zero emission battery-operated switcher locomotives in CARB-funded projects in the San Pedro Bay Ports. Through this measure, the South Coast AQMD will continue to promote accelerated replacement or upgrade of existing passenger trains with Tier 4 locomotives and support the development and adoption of zero emission or low NOx technologies.

MOB-10: Off-Road Mobile Source Emission Reduction Credit Generation Program: This measure seeks to develop mechanisms to incentivize the early deployment of Tier 4, low NOx, and zero off-road equipment, where applicable, through the generation of mobile source emission reduction credits (MSERCs). These MSERCs will be used only by entities affected by the 2022 AQMP control measures MOB-01 through MOB-04, EGM-01, and EGM-03; and cannot be used to offset emissions from stationary sources. These MSERCs will be discounted to provide

additional emission reductions to help meet air quality standards. South Coast AQMD staff will develop amendments to Rule 1620 – Credits for Clean Off-Road Mobile Equipment (Rule 1620) to reflect the latest advanced low NO_x and zero emission technologies and revise the quantification methodologies in Rule 1620.

MOB-11: Emission Reductions from Incentive Programs: This control measure seeks to quantify and take credit for the emission reductions achieved through the implementation of South Coast AQMD-administered incentive programs for SIP purposes. The South Coast AQMD has been implementing a variety of incentive programs including, but not limited to, Carl Moyer Memorial Air Quality Standards Attainment Program, Proposition 1B, Lower Emission School Bus, Community Air Protection Program, and Volkswagen Environmental Mitigation Trust. Examples of projects funded by these programs include heavy-duty vehicle/equipment replacements, installation of retrofit units, and engine repowers. The emission reductions from these incentive programs are calculated in two parts. First, the actual emission reductions associated with existing projects that will have remaining useful life in 2031, 2032 and 2037 are quantified. Second, potential reductions that are projected from the implementation of future projects are quantified. These reductions are estimated based on the projected level of funding for these incentive programs and average emission reductions from existing projects, discounted by control factors for future years. These incentive programs result in substantial emission reductions that are typically not eligible for credit in plans to attain ozone standards because they are not required by regulation. However, actual emission reductions that are realized and quantified may qualify for credit.

MOB-12: Pacific Rim Initiative for Maritime Emission Reductions: This measure seeks to reduce emissions from OGV through an incentive-based program to encourage the deployment of cleaner OGV to the Ports. This approach includes collaborating with international port authorities and shipping lines to establish common goals to reduce criteria pollutants from OGV. Incentives could be monetary (e.g., a per-visit payment for cleaner ships) or non-monetary (e.g., preferred berthing for cleaner ships). The cleanest commercially available OGV currently meet Tier III emission standards, however this class of vessels is not expected to be widely deployed for many years, in part due to the high cost of constructing new vessels and the difficulty in retrofitting existing vessels to Tier III standards. This measure would quicken the return on investment for these cleaner vessels by ensuring that shipping lines receive a benefit for every clean ship visit to a port with an incentive program. Clean ships could include Tier III vessels, retrofitted vessels that surpass Tier II standards, and eventually zero emissions shipping when it becomes available.

MOB-13: Fugitive VOC Emissions from Tanker Vessels: The goal of this measure is to quantify fugitive VOC emissions from petroleum tanker vessels during venting events and from other leaks and to better control these VOC emissions through enhanced monitoring and reporting, and inspections as well as changes to vessel operating procedures. Ocean-going petroleum tankers and barges transport approximately 400 million barrels per year of crude oil, refined petroleum products and unfinished petroleum products through the Ports. While these tanker vessels are in transit and at anchorage, temperature variations from day to night and other operational factors can cause pressure fluctuations in the vessels' cargo storage tanks. Vessels that transport volatile products such as crude oil and gasoline are most susceptible to pressure increases and these vessels must vent to the atmosphere to control cargo tank pressure that may result in the release of several tons of VOCs in a 15-to-30-minute period. The South Coast AQMD will collaborate with industry representatives, P/V valve manufacturers, environmental/community organizations and other

stakeholders to develop control strategies and best management practices to control these VOC emissions.

MOB-14: Rule 2202 – On-Road Motor Vehicle Mitigation Options: This control measure proposes to reduce emissions by evaluating potential amendments to Rule 2202. Rule 2202 has been developed to reduce emissions associated with work commute trips. Specifically, larger employers in the region with more than 250 employees are required to mitigate employee commute trips into the worksite. Rule 2202 provides employers with a menu of options to select from to implement a combination of emission reduction strategies in order to meet the emission reduction target (ERT) for their worksite. During the Coronavirus Disease 2019 (COVID-19) pandemic in 2020 and 2021, many Rule 2202 regulated employers (where applicable) incorporated widespread telecommuting practices which can further reduce emissions by reducing commute trips into the worksite. While Rule 2202 currently provide credit for telecommuting, future rule amendments may include a larger focus on telecommuting strategies and provide additional incentives for regulated employers to adopt telecommuting policies. Other future rule amendments may include enhancements on current basic support and direct strategies, as well as streamlined compliance and reporting options. Options for gaining credit for emission reductions associated with Rule 2202 for the purposes of plans to meet ozone standards will also be explored.

MOB-15: Zero Emission Infrastructure for Mobile Sources: This control measure proposes to develop a work plan to support and accelerate the deployment of zero emission infrastructure needed for the widespread adoption of zero emission vehicles and equipment. The work plan will, in conjunction with the California Energy Commission, the California Public Utilities Commission, and other partner agencies, assess the present and future zero emission infrastructure needs of the air basin and use information gathered to support market acceptance of zero emission vehicles and equipment. The work plan will further investigate the basin-wide costs of the infrastructure needed to support a widespread adoption of zero emission vehicles and equipment, including on-road, off-road and stationary applications. The work plan is anticipated to require coordination with all stakeholders and identify informational gaps and challenges in the planning and development of zero emission infrastructure. This plan will also aim to support the State's goals and requirements for zero emission vehicles and equipment. Information gathered can then be used to create or support policies and incentives that will ease this transition. AB 2127 estimated that the State will need 157,000 electric vehicle charging stations for medium and heavy-duty vehicles by 2030. AB 8 assessed the fueling needs for hydrogen fuel cell vehicles and found that 1,700 hydrogen stations will be needed to support 1.8 million FCEVs statewide by 2035. The proposed measure seeks to address these concerns and identify the unique challenges and opportunities for zero emission infrastructure development in the South Coast Air Basin, particularly as it relates to zero emission medium and heavy vehicle deployments.

Federal, State and Regional Mobile Source Control Measures

As previously discussed, in order to attain the 8-hour ozone standard, the majority of NO_x emission reductions must come from mobile sources, including ships, aircraft, and locomotive engines, that are primarily regulated under federal and international jurisdiction, with limited authority for CARB and the South Coast AQMD. Attainment is not possible without significant reductions from these sources. For California to achieve the ambient air quality standards, it is imperative that the federal government act to reduce emissions from regulated sources of air pollution which are primarily regulated at the federal level. Absent federal action, in 2020, NO_x emissions from primarily federally-regulated sources exceeded emissions from California-regulated mobile

sources statewide and by 2030, NO_x emissions from primarily federally-regulated sources will be double California-regulated mobile sources.

CARB has prepared the Draft 2022 State Strategy for the State Implementation Plan (Draft 2022 State SIP Strategy) which describes the State’s strategy and commitments to reduce emissions from State-regulated sources needed to support attainment of the 70 ppb 8-hour ozone standard.⁹ With the Draft 2022 State SIP Strategy CARB is exploring and proposing an unprecedented variety of new measures to reduce emissions from sources under their authority using all mechanisms available. Since mobile sources account for about two-thirds of the NO_x emissions statewide, significant mobile source emission reductions are needed to meet the 70 ppb ozone standard. While the 2022 State SIP Strategy is being developed primarily as a roadmap for attaining the 70 ppb ozone standard, the emissions reductions will also support attainment of other ozone and fine particulate matter national air quality standards and make progress towards the State air quality standards.

The Draft 2022 State SIP Strategy effort builds on the measures and commitments already made in the 2016 State SIP Strategy and expands on the scenarios and concepts included in the 2020 Mobile Source Strategy, CARB’s multi-pollutant planning effort that identifies the pathways forward to achieve the State’s air quality, climate, and community risk reduction goals. CARB finalized the 2020 Mobile Source Strategy in October 2021, as a conceptual road map for potential future measures. The measure concepts in the 2020 Mobile Source Strategy form the basis for the measures in the Draft 2022 State SIP Strategy. CARB estimates that the mobile source control measures will achieve almost 50 percent reduction in total NO_x emissions needed to attain the standard in 2037. Those reductions include variety of on-road mobile, off-road mobile and other sources. This reductions reflect CARB’s commitment identified in the 2016 and 2022 State SIP Strategy. However, more NO_x emission reductions from sources under local, state, and federal jurisdiction will be needed to attain the 8-hour ozone standard. The proposed Draft 2022 State SIP Strategy measures are summarized below.

- On-Road Vehicles including, advanced clean fleets regulation, zero emission trucks, on-road motorcycle standards; and clean miles standard.
- Off-Road Vehicles and Equipment including Tier 5 off-road new compression-ignition engine standards, amendments to the in-use off-road diesel-fueled fleets regulation, transportation refrigeration unit regulation, commercial harbor craft amendments, cargo handling equipment amendments, off-road zero emission targeted manufacturer rule, clean off-road fleet recognition program, and spark-ignition marine engine standards.
- Off-Road Primarily-Federally and Internationally Regulated Sources including in-use locomotive regulation, future measures for aviation emission reductions, and future measures for OGV emission reductions.
- Other categories including consumer products regulation, zero emission standards for space and water heaters, and enhanced regional emission analysis in State Implementation Plans.

Table 1-3 summarizes the Draft 2022 State SIP Strategy measures and the expected emission reductions.

⁹ Draft 2022 State Strategy for the State Implementation Plan, January 31, 2022. Available at: <https://ww2.arb.ca.gov/resources/documents/2022-state-strategy-state-implementation-plan-2022-state-sip-strategy>.

Table 1-3
Draft 2022 State SIP Strategy Measures and Estimated Emission Reductions

CARB Proposed Measures	2037 Estimated Emission Reductions (tpd)	
	NOx	VOC
On-Road Heavy-Duty		
Advanced Clean Fleets Regulation	5.3	0.5
Zero Emissions Trucks Measure	NYQ	NYQ
On-Road Light-Duty		
On-Road Motorcycle New Emissions Standards	0.9	2.1
Clean Miles Standard	<0.1	<0.1
Off-Road Equipment		
Tier 5 Off-road Vehicles and Equipment	1.8	NYQ
Amendments to the In-Use Off-road Diesel-Fueled Fleets Regulation	1.3	0.1
Transport Refrigeration Unit Regulation	4.6	NYQ
Commercial Harbor Craft Amendments	2.6	0.2
Cargo Handling Equipment Amendments	1.2	0.3
Off-Road Zero Emission Targeted Manufacturer Rule	1.1	NYQ
Clean off-Road Fleet Recognition Program	NYQ	NYQ
Spark-Ignition Marine Engine Standards	0.3	1.2
Other Categories		
Consumer Products Standards	NYQ	8.0
Zero-Emission Standard for Space and Water Heaters	5.8	0.8
Enhanced Regional Emission Analysis in SIP	NYQ	NYQ
Primarily-Federally and Internationally Regulated Sources – CARB Measures		
In-Use Locomotive Regulation	12.7	0.3
Future Measures for Aviation Emission Reductions	NYQ	NYQ
Future Measures for OGV Emission Reductions	NYQ	NYQ
Primarily-Federally and Internationally Regulated Sources – Federal Action Needed		
On-Road Heavy-Duty Vehicle Low-NOx Engine Standards	10.2	NYQ
On-Road Heavy-Duty Vehicle Zero-Emission Requirements	NYQ	NYQ
Off-Road Equipment Tier 5 Standard for Preempted Engines	2.0	NYQ
Off-Road Equipment Zero Emission Standards Where Feasible	1.2	NYQ
More Stringent Aviation Engine Standards	NYQ	NYQ
Cleaner Fuel and Visit Requirements for Aviation	NYQ	NYQ
Zero-Emission On-Ground Operation Requirements at Airports	NYQ	NYQ
More Stringent National Locomotive Emission Standards	NYQ	NYQ
Zero-Emission Standards for Switch Locomotives	NYQ	NYQ
Address Locomotives Remanufacturing Loophole	NYQ	NYQ
More Stringent NOx and PM Standards for OGVs	0.8	NYQ
Cleaner Fuel and Vessel Requirements for OGVs	21.1	NYQ
AGGREGATE EMISSION REDUCTIONS:	72.9	13.5

Key: tpd = tons per day; NYQ = not yet quantified

SCAG’s Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and Transportation Control Measures (TCMs)

SCAG, the Metropolitan Planning Organization (MPO) for the Southern California region, is mandated to comply with federal and state transportation and air quality regulations. In consultation with federal, state and local transportation and air quality planning agencies and other stakeholders, SCAG developed the Final 2020–2045 2020 RTP/SCS, also known as Connect SoCal, and the 2021 Federal Transportation Improvement Program (FTIP), with TCMs to address the 2015 8-hour ozone standards in the Basin and these are included in three Sections of Appendix IV-C of the Draft 2022 AQMP¹⁰ as follows:

Section I. Introduction

As required by federal and state laws, SCAG is responsible for ensuring that the regional transportation plan, program, and projects are supportive of the goals and objectives of applicable AQMPs and State Implementation Plans (AQMPs/SIPs). SCAG is also required to develop demographic projections and regional transportation strategy and control measures for the South Coast AQMD’s AQMP/SIP.

SCAG is obligated to develop an RTP/SCS every four years. The RTP/SCS is a long-range regional transportation plan that provides for the development and integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG region (which includes all of the South Coast AQMD jurisdiction and the non-South Coast AQMD-jurisdiction portions of Los Angeles and San Bernardino counties, and all of Ventura and Imperial counties). The RTP/SCS also outlines certain land use growth strategies that provide for more integrated land use and transportation planning, and enhances transportation investments. The RTP/SCS is required by federal laws to demonstrate transportation conformity and also to achieve regional GHG reduction targets set by the CARB pursuant to SB 375. Pursuant to the California Health and Safety Code, the RTP/SCS constitutes the Regional Transportation Plan/Sustainable Communities and Transportation Control Measures of the South Coast AQMD’s AQMPs.

In addition, SCAG biennially develops the FTIP which contains a list of multimodal capital improvement projects to be implemented over a six-year period. The FTIP implements the programs and projects in the RTP/SCS.

Section II. Regional Transportation Plan/Sustainable Communities Strategy and Transportation Control Measures (TCMs)

Connect SoCal was developed to provide a blueprint to integrate land use and transportation strategies to help achieve a coordinated and balanced regional transportation system. Connect SoCal was adopted by SCAG’s governing board, the Regional Council, on May 7, 2020 for transportation conformity purposes only and on September 3, 2020 for all purposes.

Connect SoCal includes a Core Vision that centers on maintaining and better managing the transportation network for moving people and goods, while expanding mobility choices by locating housing, jobs and transit closer together and increasing investment in transit and complete streets; five Key Connections that augment the Core Vision to address trends and emerging challenges while closing the gap between what can be accomplished through intensification of core planning strategies alone and what must be done to meet increasingly aggressive greenhouse

¹⁰ Draft 2022 AQMP Appendix IV-C: South Coast AQMD’s Stationary and Mobile Source Control Measures. <http://www.aqmd.gov/2022aqmp>.

gas reduction goals; as well as action-oriented transportation strategies and Sustainable Communities Strategy.

Core Vision

- Sustainable Development
- System Preservation and Resilience
- Demand and System Management
- Transit Backbone
- Complete Streets
- Goods Movement

Key Connections

- Smart Cities and Job Centers
- Housing Supportive Infrastructure
- Go Zones
- Accelerated Electrification
- Shared Mobility and Mobility as a Service

Transportation Strategies

- Preserve and Optimize Our Current System
 - Congestion Management
 - Congestion Pricing
 - Transportation Demand Management (TDM)
 - Transportation System Management (TSM)
- Completing Our Transportation System
 - Transit
 - Passenger Rail
 - Active Transportation
 - Transportation Safety
 - Highway and Arterial Network
 - Regional Express Lane Network
 - Goods Movement
 - Aviation
 - Technological Innovations and Emerging Technology

Sustainable Communities Strategy

- Focus Growth Near Destinations & Mobility Options
- Promote Diverse Housing Choices
- Leverage Technology Innovations
- Support Implementation of Sustainability Policies
- Promote a Green Region

Transportation Control Measures (TCMs)

Connect SoCal includes, as a subset of transportation strategies, SIP-committed transportation programs and projects that reduce vehicle use or change traffic flow or congestion conditions for the purposes of reducing emissions from transportation sources and improving air quality, better known as Transportation Control Measures or “TCMs.” In the Basin, TCMs include the following three main categories of transportation improvement projects and programs that have funding programmed for right-of-way and/or construction in the first two years of the 2021 FTIP:

1. Transit and non-motorized modes;
2. High Occupancy Vehicle (HOV) Lanes and their pricing alternatives; and
3. Information-based strategies (e.g., traffic signal synchronization).

Attachment A of Appendix IV-C of the Draft 2022 AQMP contains a list of transportation control measure projects that are from SCAG’s 2021 FTIP and specifically identified and committed to in the 2022 AQMP. Per the Federal CAA, these committed TCMs are required to receive funding priority and be implemented in a timely manner. In the event that a committed TCM cannot be delivered or will be significantly delayed, there must be a substitution for the TCM. It is important to note that as the SCAG’s FTIP is updated every two years, new committed TCMs are automatically added to the applicable SIP from the previous FTIP.

Plan Emissions Reduction Benefits

Connect SoCal is estimated to yield a reduction in NO_x emissions by about 1.5 tons per day (tpd) in 2025, 4.1 tpd in 2035, and 6.8 tpd in 2045 compared with their respective baselines without Connect SoCal. However, if accounting for mandated future improvement in vehicle fleet mix and emission factors, the estimated NO_x emission reduction from Connect SoCal is reduced by 60 to 73 percent, because the vehicles as a whole are becoming much cleaner and reduction of every vehicle mile traveled from Connect SoCal yields less reduction in NO_x emissions.

Plan Investment

The total expenditure for the various strategies in Connect SoCal is forecasted to be \$638.9 billion for the entire six-county SCAG region. Connect SoCal has identified the same amount of total revenues from both existing and several new funding sources that are reasonably expected to be available.

Cost-Benefit Analysis

To demonstrate how effective Connect SoCal would be toward achieving regional goals, SCAG conducted a Connect SoCal vs. Connect SoCal Baseline cost-benefit analysis utilizing the Cal-B/C Model to calculate regional network benefits by essentially comparing how the region would perform with and without implementation of the Connect SoCal. Compared with the alternative without the Plan, Connect SoCal would result in significant benefits to the SCAG region, not only with respect to mobility and accessibility, but also in the areas of air quality, economic growth and job creation, sustainability and environmental justice.

Section III. TCM Reasonably Available Control Measure Analysis

As required by the Federal CAA, a Reasonably Available Control Measure (RACM) analysis must be included as part of the overall control strategy in the ozone SIP to ensure that all potential control measures are evaluated for implementation and that justification is provided for those measures that are not implemented. Appendix IV-C of the Draft 2022 AQMP contains the TCM

RACM component for the South Coast ozone control strategy. In accordance with the U.S. EPA procedures, this analysis considers TCMs in Connect SoCal, measures identified by the Federal CAA, and relevant measures adopted in other ozone nonattainment areas of the country. Based on this comprehensive review, it is determined that the TCMs being implemented in the Basin are inclusive of all TCM RACM.

South Coast AQMD Proposed Contingency Measures

Pursuant to Federal CAA Section 172(c)(9), contingency measures are emission reduction measures that are to be automatically triggered and implemented if an area fails to attain the national ambient air quality standard by the applicable attainment date, or fails to make reasonable further progress (RFP) toward attainment. For the 2022 AQMP, attainment contingency measures rely on Federal CAA Section 182(e)(5) and will be developed three years prior to attainment. RFP contingency measures will be addressed separately in a parallel process. Chapter 4 of the Draft 2022 AQMP discusses in detail how the contingency measure requirements are addressed for the 8-hour ozone NAAQS.

CHAPTER 2

ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's potential adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	2022 Air Quality Management Plan
Lead Agency Name:	South Coast AQMD
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Kevin Ni, (909) 396-2462, kni@aqmd.gov
Plan Contact Person:	Sang Mi Lee, (909) 396-3169, AQMPteam@aqmd.gov
Project Sponsor's Name:	South Coast AQMD
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	In accordance with the United States Environmental Protection Agency strengthening the NAAQS for ground-level 8-hour ozone in 2015, by lowering the primary and secondary 8-hour ozone standard to 70 ppb, the 2022 AQMP identifies control measures and strategies which have been developed to bring the region into attainment with this standard by 2037 for the Basin and the Coachella Valley. The 2022 AQMP control measures and strategies were developed to achieve this NAAQS by focusing on reducing emissions of NO _x , which are precursors to form ozone, and other air pollutants. The 2022 AQMP is comprised of the following control measures which address stationary point and area and mobile sources: 1) the South Coast AQMD's Stationary and Mobile Source Control Measures; 2) control measures identified in the 2022 State Strategy for the SIP by CARB; and 3) approved RTP/SCS and TCMs provided by SCAG. The 2022 AQMP also includes emission inventories, the most current air quality setting, updated growth projections, new up-to-date modeling techniques, demonstrations of compliance with state and federal Clean Air Act requirements, and an adoption and implementation schedule for the proposed

control strategies. The 2022 AQMP is designed to protect and improve public health for those living, working and visiting the region within South Coast AQMD's jurisdiction. However, the NOP/IS identified potentially significant adverse impacts to the following environmental topic areas: air quality and greenhouse gas emissions, energy, hazards and hazardous materials, hydrology and water quality, noise, and solid and hazardous waste, which will be analyzed in the Draft Program EIR. Some facilities affected by the 2022 AQMP may be identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5. However, the implementation of the 2022 AQMP will not alter the status of the facilities on the lists.

Surrounding Land Uses and Setting:

All land uses including industrial, commercial, and residential.

Other Public Agencies Whose Approval is Required:

CARB and U.S. EPA

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with a "☐" involve at least one impact that is a "Potentially Significant Impact". An explanation relative to the determination of impacts can be found following the checklist for each area.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Geology and Soils	<input type="checkbox"/> Population and Housing
<input type="checkbox"/> Agriculture and Forestry Resources	<input checked="" type="checkbox"/> Hazards and Hazardous Materials	<input type="checkbox"/> Public Services
<input checked="" type="checkbox"/> Air Quality and Greenhouse Gas Emissions	<input checked="" type="checkbox"/> Hydrology and Water Quality	<input type="checkbox"/> Recreation
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Land Use and Planning	<input checked="" type="checkbox"/> Solid and Hazardous Waste
<input type="checkbox"/> Cultural and Tribal Cultural Resources	<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Transportation
<input checked="" type="checkbox"/> Energy	<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Wildfire
<input checked="" type="checkbox"/> Mandatory Findings of Significance		

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find the proposed project, in accordance with those findings made pursuant to CEQA Guidelines Section 15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts has been prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- ☒ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.
- ☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and, 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: 1) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards; and, 2) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: May 12, 2022

Signature:



Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development, and
Implementation

ENVIRONMENTAL CHECKLIST AND DISCUSSION

The 2022 AQMP could result in the implementation of a number of control measures. Those control measures are summarized in Chapter 1 and the potential environmental impacts associated with those control measures are summarized in Appendix A.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point(s).) If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block public views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of public views of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with

low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on aesthetic resources from implementing the proposed project.

I. a), b) & c) Less Than Significant Impact. For the purpose of determining significance under CEQA, a scenic vista is generally considered a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Some scenic vistas are officially designated by public agencies, or informally designated by tourist guides. Vistas provide visual access or panoramic views to a large geographic area and are generally located at a point where surrounding views are greater than one mile away. Panoramic views are usually associated with vantage points over a section of urban or natural areas that provide a geographic orientation not commonly available. Examples of panoramic views might include an urban skyline, valley, mountain range, a large open space area, the ocean, or other water bodies. A substantial adverse effect to a scenic vista is one that degrades the view from such a designated view spot.

A scenic highway is generally considered a stretch of public roadway that is designated as a scenic corridor by a federal, state, or local agency. The California Department of Transportation (Caltrans) defines a scenic highway as any freeway, highway, road, or other public right of way, that traverses an area of exceptional scenic quality.

The majority of control measures implemented within South Coast AQMD's jurisdiction would typically affect industrial, institutional, or commercial facilities located in appropriately zoned areas (e.g., industrial and commercial areas) that are not usually associated with scenic resources. Further, modifications would typically occur inside the buildings or within the confines of the affected facilities, or because of the nature of the business (e.g., commercial or industrial) can easily blend with the facilities with little or no noticeable effect on adjacent areas. In addition, the Draft 2022 AQMP contains some proposed control measures which focus on certain residential sources of air pollution (e.g., water heaters, space heaters, cooking devices and other combustion source), and any modifications needed would occur inside the buildings or in the case of energy efficiency improvements such as installing solar, on the roofs of residential buildings. Finally, because the purpose of implementing the 2022 AQMP control measures is to reduce emissions and improve air quality to attain state and federal ambient air quality standards, improved air quality would provide benefits to scenic vistas and resources in South Coast AQMD's jurisdiction.

Mobile control measures would accelerate replacement of high emitting on-road and off-road mobile sources with lower emitting mobile sources. Accelerating the penetration of lower emitting mobile sources would not be expected to adversely affect scenic resources because these strategies do not require construction or disturbance to such resources.

Control Measures EGM-01, MOB-02A, MOB-02B, MOB-06 and MOB-07 could potentially encourage the use overhead power lines (catenary lines) to provide electricity. The areas affected by the proposed zero emission and low NOx control measures that could result in the installation of catenary lines are expected to be located in commercial, industrial areas, and along existing

truck and rail transportation corridors. The truck and rail corridors likely to be involved are primarily associated with rail yards and intermodal facilities in industrial zones within Southern California. Examples of these areas include, but are not limited to, the Port of Los Angeles, Port of Long Beach, and industrial areas in and around container transfer facilities near the Terminal Island Freeway, along the Alameda Corridor, as well as inland rail yards near downtown Los Angeles. The nearest scenic highway to either of the Ports, the cargo transfer facilities serving the Ports, along the Alameda Corridor, or the inland rail yards, would be Route 2 (Angeles Crest Scenic Byway) near La Canada/Flintridge, in the northeastern portion of Los Angeles County. It is approximately 14 miles from the northern terminus of the Alameda Corridor and the rail yards downtown to the most southern portion of Route 2. The Ports, the Alameda Corridor and downtown rail yards are not visible from Route 2 due to the distance, presence of numerous large buildings of downtown Los Angeles, and the intervening topography (hills and mountains) between downtown Los Angeles and the beginning of Route 2 near La Canada/Flintridge. The nearest roadway eligible for State scenic highway designation, to either of the Ports, the cargo transfer facilities serving the ports, along the Alameda Corridor, or the downtown rail yards, would be Route 1 (Pacific Coast Highway at State Route 19 – Lakewood Boulevard, in Long Beach) in the southernmost portion of Los Angeles County. It is approximately five miles from the cargo transfer facilities serving the Ports to the intersection of State Route 19 and Route 1 where it becomes eligible to become a State scenic highway. The potential locations for catenary overhead power lines (near the Ports' facilities, transportation corridors and rail yards) would not be visible to Route 1 at State Route 19 due to the numerous structures and topography between the two locations.

There are no officially designated scenic highways or highways eligible for State scenic highway designation in areas affected by construction of zero emission or low NOx equipment associated with the 2022 AQMP, therefore construction impacts on aesthetic impacts are considered to be less than significant.

I. d) Less Than Significant Impact. Implementation of the proposed control measures is not expected to create additional demand for new lighting or exposed combustion sources (e.g., flares) that could create glare, adversely affecting day or nighttime views in any areas. Implementation of the proposed control measures may affect operations at industrial or commercial facilities, but is not expected to affect hours of operation. Further, many types of industrial or commercial facilities are already lighted at night for safety and security reasons. As noted in Section I. a) through c), facilities affected by the proposed control measures typically make modifications in the interior of an affected facility so any new light sources would typically be inside a building or not noticeable because of the presence of existing outdoor light sources.

Conclusion

Based upon these considerations, significant adverse aesthetics impacts are not expected from implementing the 2022 AQMP. Since no significant aesthetics impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).

- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on agricultural resources from implementing the proposed project.

II. a), b), c), d) & e) No Impact. Pursuant to the California Land Conservation Act of 1965, a Williamson Act contract enables private landowners to voluntarily enter into contracts with local governments for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive lower property tax assessments based upon farming and open space uses as opposed to full market value.

Implementation of the proposed control measures is not expected to generate any new construction of buildings or other structures that would require conversion of farmland to non-agricultural use or conflict with zoning for agricultural uses or a Williamson Act contract. Further, proposed control measures would typically affect existing facilities that are located in appropriately zoned areas. Any new facilities that may be affected by the proposed control measures would be constructed and operated for reasons other than complying with the control measures. Improvements would continue to be subject to project-level review, including review of agricultural impacts under CEQA, as applicable. Therefore, implementation of the proposed project would not affect Prime Farmland, Unique Farmland, or Farmland of Statewide Importance or conflict with a Williamson Act contract, if implemented.

Physical changes associated with the 2022 AQMP is expected to be at previously developed sites and would not warrant construction in undeveloped areas where agricultural and forest resources are more likely to occur. AQMP control measures, including control measures related to mobile sources, would have no direct or indirect effects on agricultural or forest land resources because these types of control measures would typically reduce emissions by increasing the penetration of low NOx and zero-emission mobile sources. The 2022 AQMP could provide benefits to agricultural and forest land resources by improving air quality in the region, thus, reducing the adverse oxidation impacts of ozone on plants and animals.

Therefore, the 2022 AQMP would not conflict with existing zoning for, or cause rezoning of, forest land or timberland zoned Timberland Production. Additionally, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use.

Conclusion

Based upon these considerations, significant adverse agricultural and forest resources impacts are not expected from implementing the proposed project. Since no significant agriculture and forest resources impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

To determine whether or not air quality and greenhouse gas impacts from implementing the proposed project are significant, impacts will be evaluated and compared to the criteria in Table 2-1. The proposed project will be considered to have significant adverse impacts if any one of the thresholds in Table 2-1 are equaled or exceeded.

Table 2-1
South Coast AQMD Air Quality Significance Thresholds

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402	
GHG	10,000 MT/yr CO ₂ eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants ^d		
NO ₂ 1-hour average annual arithmetic mean	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM ₁₀ 24-hour average annual average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation) 1.0 µg/m ³	
PM _{2.5} 24-hour average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation)	
SO ₂ 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m ³ (state)	
CO 1-hour average 8-hour average	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day Average Rolling 3-month average	1.5 µg/m ³ (state) 0.15 µg/m ³ (federal)	

^a Source: South Coast AQMD CEQA Handbook (South Coast AQMD, 1993)

^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

^d Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.

^e Ambient air quality threshold based on South Coast AQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million $\mu\text{g}/\text{m}^3$ = microgram per cubic meter \geq = greater than or equal to
 MT/yr CO₂eq = metric tons per year of CO₂ equivalents $>$ = greater than

Revision: April 2019

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NO_x technologies, recognizing that new zero emissions and ultra-low NO_x technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NO_x and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on air quality resources from implementing the proposed project.

III. a) No Impact. Pursuant to the provisions of both the Federal CAA and CCAA, the South Coast AQMD is required to attain the NAAQS and CAAQS for all criteria pollutants. To this end, the South Coast AQMD is required by law to prepare a comprehensive AQMP which includes strategies (e.g., control measures) to reduce emission levels to achieve and maintain state and federal ambient air quality standards, to ensure that new sources of emissions are planned and operated to be consistent with the South Coast AQMD's air quality goals, and to protect sensitive receptors and the public in general from the adverse effects of pollutants which are known to have adverse human health effects. The AQMP's air pollution reduction strategies include control measures that target stationary, mobile and indirect sources. These control measures are based on feasible methods of attaining the AAQS.

The proposed project would be a 2022 update to the South Coast AQMD's 2016 AQMP, as required pursuant to state law. By revising and updating emission inventories and control strategies, the South Coast AQMD is complying with state law, and furthering development of new AQMP control measures, which would be expected to reduce emissions and make progress towards attaining and maintaining NAAQS and CAAQS in South Coast AQMD's jurisdiction. The 2022 AQMP is required by law and would not obstruct the implementation of the local air quality plan but would update the local air quality plan. Therefore, this impact will not be evaluated further in the Draft Program EIR.

III. b), c) f), and g) Potentially Significant Impact. The following describes impacts from short-term construction activities and long-term operation of the proposed project.

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources and the proposed control measures would apply to both stationary and mobile sources. Although the proposed control measures are designed to improve overall air quality, implementation of some control measures may have the potential of generating secondary air quality impacts, these secondary impacts will be analyzed in the Draft Program EIR. The following are examples of potential secondary impacts:

- Impacts Associated with Construction – Implementing some of the proposed control measures may involve retrofitting, replacing, or installing new air pollution control

equipment, and may require physical modifications at affected facilities (e.g., C-CMB-01 through C-CMB-05, and L-CMB-01 through L-CMB-10). Physical modifications may involve the use of construction equipment for demolition, site preparation, site grading, and construction. Exhaust emissions from on-road and off-road equipment during construction activities may be substantial depending on the number, types, and activity levels of the construction equipment used. Similarly, if large areas need to be graded to install equipment foundations or construct buildings, fugitive dust emissions may also be substantial.

- **Impacts Associated with Use of Control Equipment** - Implementing some of the proposed control measures may require the use of additional air pollution control equipment (e.g., L-CMB-01, L-CMB-02, L-CMB-03, L-CMB-06, L-CMB-07, L-CMB-08, L-CMB-10, and MCS-01). Although the primary purpose of air pollution control equipment is to reduce emissions of a particular pollutant, some air pollution control equipment may have the potential to create secondary adverse air quality impacts. For example, control measures intended to reduce NO_x emissions from stationary or mobile sources, such as selective catalytic reduction (SCR), may use ammonia as part of the control process. Ammonia use may result in increased ammonia emissions and, since ammonia is a precursor to particulate formation, increased particulate emissions. In addition, in the event of an accidental release of ammonia, sensitive receptors in the vicinity of the release may be exposed to harmful concentrations of ammonia vapor.
- **Impacts Associated with Electrification** – Implementing some of the proposed control measures, although expected to improve overall air quality, may serve to increase electricity demand and potentially result in the construction and operation of new infrastructure including fueling/powering stations, additional electrical power plants, and increased emissions from power plants (e.g., R-CMB-01 through R-CMB-04, C-CMB-01 through C-CMB-05, MOB-04, MOB-05, MOB-06, MOB-07, MOB-08, MOB-09, and MOB-10).
- **Impacts Associated with Product Reformulation and Alternative Fuels** – Implementing some of the proposed control measures may potentially increase air toxic emissions due to reformulation of coatings or solvents (e.g., CTS-01). Low-VOC coating and solvent formulations may contain toxic compounds, such as formaldehyde or glycol ethers, or compounds that have a higher flammability rating. As a result, material replacement or reformulation to reduce the use of high-VOC materials has the potential to result in health risks associated with exposure to both carcinogenic and non-carcinogenic toxic air contaminants. Similarly, alternative or reformulated fuels may require the construction and operation of infrastructure to produce additional quantities of alternatives fuels e.g., hydrogen. Examples of these types of control measures include L-CMB-05, L-CMB-06, EGM-01, and MOB-01 through MOB-10.

Although the proposed control measures are designed to reduce criteria pollutant emissions, some may have the potential to generate combustion emissions that could increase GHG emissions. For example, implementation of some of the control measures propose to accelerate low NO_x and zero-emission technologies which may rely on electricity, thereby causing a potential increase in electrical demand and increased electricity generation with subsequently increased GHG emissions associated with combustion and power plants. Potential GHG emission increases and their potential to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the GHG emission impacts will be analyzed in the Draft Program EIR.

Secondary air quality impacts associated with some of the proposed control measures may generate increased emissions. Because the proposed control measures may result in significant adverse secondary air quality effects, the proposed project's incremental contribution to a cumulative effect may also be cumulatively considerable. Cumulative air quality impacts will be evaluated in the Draft Program EIR.

III. d) Less Than Significant Impact. The threshold for an odor impact is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402 – Nuisance, which states: “A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”

Emissions from construction equipment, such as diesel exhaust and volatile organic compounds, might generate odors. However, these odors would be low in concentration, temporary, and are not expected to affect a substantial number of people. Any odors produced during the construction phase are not expected to be significant or highly objectionable and would be in compliance with Rule 402. Diesel fueled construction equipment would also comply with South Coast AQMD Rule 431.2 – Sulfur Content of Liquid Fuels, which is expected to minimize odor. The operation of construction equipment will occur within the confines of existing affected facilities. Dispersion of diesel emissions over distance generally occurs so that odors associated with diesel emissions may not be discernable to offsite receptors, depending on the location of the equipment and its distance relative to the nearest offsite receptor. Further, the diesel trucks that will be operated onsite will not be allowed to idle longer than five minutes per any one location in accordance with the CARB idling regulation, so odors from these vehicles would not be expected for a prolonged period of time. Therefore, the addition of several pieces of construction equipment and trucks that will operate intermittently, over a relatively short period of time, are not expected to generate diesel exhaust odor substantially greater than what is already typically present at the affected facilities. In the long term, the 2022 AQMP includes control measures that are expected to reduce the use of diesel-fueled mobile sources (e.g., EGM-01, EGM-03, and MOB-10), thereby reducing the potential for odors from these sources.

The 2022 AQMP seeks to accelerate the deployment of low NO_x and zero-emission sources, which would be expected to reduce the use of fossil fuels, and minimize the potential for odors in the long-term. Therefore, impacts would be less than significant, no mitigation measures are necessary, and this will not be discussed further in the Draft Program EIR.

III. e) Less than Significant Impact. Promulgating AQMP control measures, such as control requirements for stationary sources, mobile sources, incentive programs, etc., into rules or regulations typically would serve to strengthen an existing rule or regulation. Similarly, an AQMP control measure may be promulgated as a new rule or regulation, which would serve to control emissions from an unregulated or minimally regulated source. As a result, the proposed project would be expected to strengthen air quality rules, and not diminish any existing air quality rule. Therefore, this impact will not be analyzed further in the Draft Program EIR.

Conclusion

Based upon these considerations, potentially significant construction related air quality and GHG emissions impacts may occur from the implementation of some of the control measures. These impacts will be further analyzed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on biological resources from implementing the proposed project.

IV. a), b), c), d), e) & f) No Impact. Implementation of the proposed control measures is not expected to result in habitat modification, adversely affect any riparian habitat or interfere with the movement of any native resident or migratory fish or wildlife species. Facilities affected by the proposed control measures have already been disturbed and typically do not contain open space, water features, or natural vegetation. Sites might contain landscaping that consists of ornamental trees, vegetation, and turf. The sites of the affected facilities that would be subject to the majority of the proposed control measures are not expected to support riparian habitat, federally protected wetlands, or migratory corridors because they are existing developed and established industrial and commercial facilities. Similarly, for the proposed control measures that will affect residential land uses, any modifications needed would occur inside the buildings or in the case of energy efficiency improvements such as installing solar, on the roofs of residential buildings, and would not be expected to create any greater impact than the residential developments themselves. Additionally, special status plants, animals, or natural communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service are not expected to be found on or in close proximity to the affected facilities. Construction projects that impact affected species are not reasonably foreseeable as part of implementation of the 2022 AQMP. Any new development potentially affecting biological resources would not be as a result of the 2022 AQMP control measures and approval of those projects, including evaluation of their environmental impacts, would occur regardless of the 2022 AQMP.

Furthermore, the proposed control measures would not include provisions that would allow affected facility operators to violate existing zoning ordinances or regional plans, policies, or

regulations. The proposed control measures would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan, and would not create divisions in any existing communities because onsite activities associated with complying with the proposed control measures would occur at existing facilities in previously disturbed areas which are not typically subject to Habitat or Natural Community Conservation Plans. The 2022 AQMP aims to control emissions from mobile sources but is not expected to require the construction of new transportation facilities or corridors. Any control measure that would electrify a railroad or truck route (e.g., EGM-01, MOB-02A, MOB-02B, MOB-06, and MOB-07) would be expected to occur within existing transportation corridors. Construction of new electricity or hydrogen infrastructure would be expected to occur in areas where they would be compatible with the land uses, i.e., primarily industrial or commercial areas, and not in sensitive habitat areas. Activities resulting from the compliance with control measures would be subject to project-level review, including review of biological impacts under CEQA, as applicable.

The 2022 AQMP includes Control Measure BIO-01 which would assess the inventory of trees that are potential ozone precursors to determine whether tree planting programs to promote the planting of low VOC-emitting trees would be effective. These tree planting programs are expected to be limited to landscape vegetation and would not replace or remove native vegetation. Finally, improving air quality is expected to provide health benefits to plant and animal species in South Coast AQMD's jurisdiction.

Conclusion

Based upon these considerations, significant adverse biological resources are not expected from implementing the proposed project. Since no significant biological resources impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
V. CULTURAL AND TRIBAL CULTURAL RESOURCES.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074, as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is either:				
• Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c)? (In applying the criteria set forth in Public Resources Code Section 5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on cultural and tribal cultural resources from implementing the proposed project.

V. a) No Impact. Existing laws are in place to protect and mitigate potential impacts to cultural resources. For example, the CEQA Guidelines state that generally, a resource shall be considered “historically significant” if the resource meets the criteria for listing in the California Register of Historical Resources, which include the following:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded or may be likely to yield information important in prehistory or history (CEQA Guidelines Section 15064.5).

Buildings, structures, and other potential culturally significant resources that are less than 50 years old are generally excluded from listing in the National Register of Historic Places, unless they are shown to be exceptionally important. Any of the buildings or structures that may be affected by the proposed control measures that are older than 50 years are buildings that are industrial or commercial facilities and would generally not be considered historically significant since they would not have any of the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possesses high artistic values. Further, historic resources generally consist of buildings, structures, improvements, and remnants associated with a significant historic event or person(s) and/or have a historically

significant style, design, or achievement. Damaging or demolition of historic resources is typically considered to be a significant impact. Impacts to historic resources can occur through direct impacts, such as destruction or removal, and indirect impacts, such as a change in the setting of a historic resource. Industrial and commercial properties are generally not historic resources, are not located in historic districts, and do not typically meet the criteria identified in CEQA Guidelines Section 15064.5(a)(3). Additionally, the proposed control measures are not expected to result in demolition of existing structures. Any construction activities pursuant to the 2022 AQMP would need to obtain city or county planning department approvals prior to commencement of any construction activities and would be subject to project-level review, including review of historic impacts under CEQA, if applicable. Therefore, the 2022 AQMP is not expected to cause any impacts to significant historic cultural resources.

V. b) & c) Less Than Significant Impact. Although most facilities affected by 2022 AQMP control measures would be located on previously disturbed sites where there is little likelihood of remaining identifiable artifacts, it is possible, that cultural or archaeological resources or human remains may nevertheless be discovered. While the likelihood of encountering cultural resources or human remains is low, there is still a potential that additional buried archaeological resources may exist. Any such impact would be eliminated by using standard construction practices and complying with state law including Public Resources Code Section 21083.2 and CEQA Guidelines Section 15064.5, which require the following, in the event that unexpected sub-surface resources were encountered:

- Conduct a cultural resources orientation for construction workers involved in excavation activities. This orientation will show the workers how to identify the kinds of cultural resources that might be encountered, and what steps to take if this occurred;
- Monitoring of subsurface earth disturbance by a professional archaeologist and a representative of the tribe with tribal cultural resources in the area, if cultural resources are exposed during construction;
- Provide the archaeological monitor with the authority to temporarily halt or redirect earth disturbance work in the vicinity of cultural resources exposed during construction, so the find can be evaluated and mitigated as appropriate; and,
- As required by State law in Public Resources Code Sections 5097.94 and 5097.98, prevent further disturbance if human remains are unearthed, until the County Coroner has made the necessary findings with respect to origin and disposition, and the Native American Heritage Commission has been notified if the remains are determined to be of Native American descent.

Construction-related activities are expected to be confined to the existing footprint of the affected facilities and developed areas that have already been fully developed and paved. Therefore, implementation of the 2022 AQMP control measures is not expected to require physical changes to the environment which may disturb paleontological or archaeological resources. Activities that result from compliance with the proposed control measures would be subject to project-level review, including review of cultural resources impacts under CEQA, as applicable.

As such, the proposed project will not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or disturb any human remains, including those interred outside of formal cemeteries. Impacts would be less than significant.

V. d) Less Than Significant Impact. Regarding historical resources, refer to Section V. a). Commercial and industrial areas are generally not located in historic districts and implementation of the proposed control measures is not expected to cause a substantial adverse change in the significance of a historical resource. As part of releasing this CEQA document for public review and comment, the South Coast AQMD also provided a formal notice of the proposed project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code Section 21080.3.1(b)(1). The NAHC notification list provides a 30-day period during which a Tribe may respond to the formal notice, in writing, requesting consultation on the proposed project.

In the event that a Tribe submits a written request for consultation during this 30-day period, the South Coast AQMD will initiate a consultation with the Tribe within 30 days of receiving the request in accordance with Public Resources Code Section 21080.3.1(b). Consultation ends when either: 1) both parties agree to measures to avoid or mitigate a significant effect on a Tribal Cultural Resource and agreed upon mitigation measures shall be recommended for inclusion in the environmental document [see Public Resources Code Section 21082.3(a)]; or, 2) either party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. [Public Resources Code Section 21080.3.2(b)(1)-(2) and Section 21080.3.1(b)(1)].

Furthermore, the provisions of CEQA, Public Resources Code Section 21080.3.1 et seq. (also known as AB 52), requires meaningful consultation with California Native American Tribes on potential impacts to tribal cultural resources, as defined in Public Resources Code Section 21074. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources. As part of the AB 52 process, Native American tribes must submit a written request to the relevant lead agency if it wishes to be notified of projects that require CEQA public noticing and are within its traditionally and culturally affiliated geographical area.

Construction resulting from implementation of the control measures would need to obtain city or county planning department approvals prior to commencement of any construction activities and would be subject to project-level review, including separate tribal consultation pursuant to AB 52, as applicable, to address site-specific requests identified by the tribes. Therefore, impacts to tribal cultural resources are less than significant.

Conclusion

Based upon these considerations, significant adverse cultural or tribal cultural resources impacts are not expected from implementing the proposed project. Since no significant cultural and tribal cultural resources impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Conflict with or obstruct adopted energy conservation plans, a state or local plan for renewable energy, or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses energy resources in a wasteful and/or inefficient manner.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NO_x technologies, recognizing that new zero emissions and ultra-low NO_x technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NO_x and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on energy from implementing the proposed project.

VI. a), e), & f) Less than Significant Impact. The 2022 AQMP includes control measures that would promote energy efficiency and conservation (e.g., ECC-02, ECC-03, and EGM-01), thereby providing potential energy conservation benefits. The proposed control measures do not require any action which would result in any conflict with an adopted energy conservation or efficiency plan or result in potentially significant environmental impacts due to wasteful energy use. Any existing or future facilities that implement the requirements of the proposed control measures would be expected to continue implementing any existing energy conservation plans that are currently in place regardless of whether the proposed project is implemented.

Additionally, the 2022 AQMP does not require any measures which would conflict with a state or local plan for renewable energy. Renewable energy sources include wind, small hydropower, solar, geothermal, biomass, and biogas. California's Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078 and was amended in 2006 and 2011. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. Executive Order S-14-08, signed in November 2008, expanded the RPS to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). SB 350 was signed into law September 2015 and establishes tiered increases to the RPS. SB 350 requires renewable energy resources of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. On September 10, 2018, Governor Brown signed SB 100, which raised California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also established a state policy requiring eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under SB 100, California cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target. Electricity production from renewable sources is generally considered carbon neutral. Therefore, the control measures in the 2022 AQMP would not obstruct a state or local plan for renewable energy.

VI. b), c), d) & g) Potentially Significant Impact. Construction and operational activities associated with implementation of the 2022 AQMP will require additional energy sources, as explained in the following discussion.

Construction

Construction activities to implement the 2022 AQMP would consume energy, in the short term, due to gasoline and/or diesel fuel and electricity consumed by construction vehicles and equipment. Construction activities may require the use of energy-consuming construction equipment for grading, hauling, and building activity. Electricity use during construction activities is expected to vary depending on which phase of construction is occurring—with the majority of construction-related energy consumption resulting from fossil fuel use such as gasoline or diesel fuel occurring during activities such as grading and the majority of electricity use occurring during the later construction phases which may require more electric powered equipment. The use of electricity during construction would be temporary and would fluctuate according to the phase of construction.

Construction transportation energy use depends on the type of vehicle, number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction activities is derived from the use of gasoline and diesel fuel consumption required to operate vendor trucks that provide deliveries of equipment and building materials, as well as worker vehicles as they commute to construction sites. Construction transportation energy could be potentially significant and will be discussed further in the Draft Program EIR.

Operation

Implementation of some proposed control measures may potentially increase energy demand in the region, as follows:

- Control measures that promote stationary source controls may increase electrical demand (e.g., R-CMB-01, R-CMB-02, R-CMB-03, R-CMB-04, C-CMB-01, C-CMB-02, C-CMB-03, C-CMB-04, C-CMB-05, L-CMB-01 through L-CMB-07, and L-CMB-10). These control measures may promote the use of low NO_x and zero-emission sources and would increase the demand for electricity.
- Control measures that accelerate the penetration of low NO_x and zero-emission vehicles may result in increased electrical and natural gas demand (e.g., FLX-02, MCS-01, EGM-01, EGM-03, MOB-02A, MOB-02B, MOB-04, MOB-05, MOB-06, MOB-07, MOB-08, MOB-09, and MOB-10).

The proposed control measures could result in an increase in electricity, hydrogen, and/or natural gas consumption during the operational phase. Electricity, hydrogen, and natural gas would be used to charge and fuel stationary and mobile sources. If the net effect of implementing AQMP control measures would be an increase in regional energy demand, in spite of implementing energy efficiency and energy conservation measures, the 2022 AQMP may result in the need for new or substantially altered power or natural gas utility systems, create significant effects on peak and base period demands for electricity and other forms of energy, and create significant effects on peak and base period demands for electricity and other forms of energy.

Conclusion

Based upon these considerations, significant impacts from energy use for construction related activities may occur. Significant operational energy impacts may also arise from using on-road and off-road mobile sources and well as stationary sources of low NOx and zero emission technologies. These impacts will be further analyzed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.
- Unique paleontological resources or sites or unique geologic features are present that could be directly or indirectly destroyed by the proposed project.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NO_x technologies, recognizing that new zero emissions and ultra-low NO_x technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NO_x and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on geology and soils resources from implementing the proposed project.

VII. a) Less Than Significant Impact. The proposed control measures would not directly or indirectly expose people or structures to earthquake faults, seismic shaking, seismic-related ground failure including liquefaction, lateral spreading, landslides, mudslides or substantial soil erosion. AQMP control measures affecting mobile sources, such as those that would accelerate the penetration of zero or low emission vehicles into fleets in the South Coast AQMD's jurisdiction, would not affect geology or soils because on-road vehicles would continue to operate on existing roadways. Although some AQMP control measures would accelerate the penetration of zero emission or low NO_x off-road equipment, replacing one type of off-road engine with a lower emitting off-road engine would not be expected to affect construction activities as construction activities would occur for reasons other than complying with AQMP control measures.

Proposed control measures that promote implementation of rules or regulations for stationary sources would neither directly nor indirectly promote new land use projects that could be located on earthquake faults, seismic zones, etc. Seismic-related activities, in areas where facilities affected by the proposed control measures are located, would be part of the existing setting. Some minor structural modifications, however, at existing affected facilities may occur as a result of

installing control equipment or making process modifications. Such modifications would not likely require large heavy-duty construction equipment or substantial site modifications, as they would be expected to occur in existing industrial/commercial areas. In addition, affected facilities or modifications to affected facilities, including the construction of new electricity or hydrogen infrastructure, would be required to comply with relevant California Building Code requirements in effect at the time of initial construction or modification of a structure.

Southern California is an area of known seismic activity. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. Surface rupture is the most easily avoided seismic hazard. Fault rupture generally occurs within 50 feet of an active fault line and is limited to the immediate area of the fault zone where the fault breaks along the surface. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent construction of buildings used for human occupancy on the surface of active faults, in order to minimize the hazard of surface rupture of a fault to people and habitable buildings. Before cities and counties can permit development within Alquist-Priolo Earthquake Fault Zones, geologic investigations are required to show that a proposed development site is not threatened by surface rupture from future earthquakes. Therefore, any future project development would not subject people or structures to hazards arising from surface rupture of a known active fault.

The most significant geologic hazard is the potential for moderate to strong ground shaking resulting from earthquakes generated on the faults in seismically active southern California. It is anticipated that future projects would likely be subject to strong ground shaking due to earthquakes on nearby faults. The intensity of ground shaking would depend on the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the project sites.

The California Building Code (CBC) as promulgated in the CCR, Title 24, Part 2, contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The CBC contains provisions for earthquake safety based on factors including the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site. The CBC requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the CBC seismic design require a determination of the seismic zone and site coefficient, which represent the foundation conditions at the site. Additionally, CBC Section 1803.2 requires a geotechnical investigation that must evaluate soil classification, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness, as necessary. The geotechnical investigation must be prepared by registered professionals (i.e., California Registered Civil Engineer or Certified Engineering Geologist). Recommendations of the report pertaining to structural design and construction recommendations for earthwork, grading, slopes, foundations, pavements, and other necessary geologic and seismic considerations must be incorporated into the design and construction of a new project. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce hazards from strong seismic ground shaking to less than significant.

Liquefaction is a phenomenon that occurs when soil undergoes a transformation from a solid state to a liquified condition. It refers to loose, saturated sand or silt deposits that behave as a liquid and lose their load-supporting capability when strongly shaken. Loose granular soils and silts that are

saturated by relatively shallow groundwater are susceptible to liquefaction. When subjected to seismic ground shaking, affected soils lose strength during liquefaction and foundation failure can occur. Landslides are the downslope movement of geologic materials. Slope failures in the form of landslides are common during strong seismic shaking in areas of steep hills.

Any potentially affected facilities that are located in areas where there has been historic occurrence of liquefaction, e.g., coastal zones, or existing conditions indicate a potential for liquefaction, including expansive or unconsolidated granular soils and a high water table, may have the potential for liquefaction-induced impacts at the project sites. The CBC requirements consider liquefaction potential and establish more stringent requirements for building foundations in areas potentially subject to liquefaction. Compliance with the CBC requirements is expected to minimize the potential impacts associated with liquefaction. The issuance of building permits from the local cities or counties will assure compliance with the California Building Code requirements. Finally, no control measures would require the location of new, or relocation of existing facilities in areas prone to liquefaction. Land use decisions are under the authority of the local jurisdictions, typically cities or counties. The South Coast AQMD has no authority over land use decisions except to impose specific air pollution control requirements, which do not drive the land use approval process, and CEQA does not grant an agency new powers independent of the powers granted to the agency by other laws. [CEQA Guidelines Section 15040(b)]. Therefore, no significant impacts from liquefaction are expected and this potential impact will not be considered further.

VII. b) Less Than Significant Impact. Erosion is the movement of rock and soil from place to place and is a natural process. Common agents of erosion include wind and flowing water. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. Erosion can be increased greatly by earthmoving activities if erosion-control measures are not used.

Soil erosion at construction sites could be caused by water, wind, or vehicles tracking soil offsite. However, projects that occur as a result of the 2022 AQMP are largely expected to occur at commercial and industrial areas and have a small construction footprint. Construction activities would be subject to local, regional, and state codes and requirements for erosion control and grading during construction. Projects would be subject to the National Pollution Discharge Elimination System (NPDES) permitting regulations, including the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) as applicable. Construction contractors would be required to prepare and implement a SWPPP and associated Best Management Practices (BMPs) in compliance with the Construction General Permit (CGP) during grading and construction of any site that disturbs more than one acre of land. Adherence to the BMPs in the SWPPP and adherence with local, regional, and state codes and requirements for erosion control and grading during construction would reduce, prevent, or minimize soil erosion from grading and construction activities. Therefore, soil erosion impacts would be less than significant.

VII. c) & d) Less Than Significant Impact. Hazards from liquefaction and lateral spreading are addressed in Section VII. a). As concluded in that section, impacts would be less than significant, and no mitigation measures are necessary. Following is a discussion of the potential impacts resulting from other geologic and soil conditions.

Lateral Spreading

Lateral spreading is a phenomenon that occurs in association with liquefaction and includes the movement of non-liquefied soil materials.

Subsidence

The major cause of ground subsidence is the excessive withdrawal of groundwater. Soils with high silt or clay content are particularly susceptible to subsidence.

Expansive Soils

Expansive soils shrink or swell as the moisture content decreases or increases; the shrinking or swelling can shift, crack, or break structures built on such soils.

Geotechnical investigations, as required by the CBC, evaluate the potential for adverse impacts from lateral spreading, subsidence, and expansive soils and propose appropriate site design measures. Any grading, design, and construction work that may be associated with the proposed control measures would conform with the recommended design parameters of a geotechnical investigation. Cities and Counties would impose the recommended design parameters as a condition of any required planning approval, and compliance would be ensured through plan checks and development review processes. Compliance with the requirements of the CBC would reduce hazards to less than significant.

VII. e) No Impact. Septic tanks or other similar alternative wastewater disposal systems are typically associated with small residential projects in remote areas. The 2022 AQMP does not contain control measures that would promote the construction of new residential or other types of land use projects in remote areas. The South Coast AQMD has no land use approval authority. Consequently, construction of land uses that use septic systems would occur for reasons other than complying with AQMP control measures. Furthermore, AQMP control measures typically affect existing industrial or commercial facilities that already have appropriate sewerage facility connections and are subject to wastewater control requirements, typically through NPDES permits. Based on these considerations, the use of septic tanks or other alternative wastewater disposal systems will not be further evaluated in the Draft Program EIR.

VII. f) Less Than Significant Impact. Paleontological resources, commonly known as fossils, are the recognizable physical remains or evidence of past life forms found on earth in past geological periods — and can include bones, shells, leaves, tracks, burrows, and impressions. Ground-disturbing activities such as grading, or excavation have the potential to unearth paleontological resources. Most facilities affected by 2022 AQMP control measures would be located on previously disturbed industrial and commercial sites where there is little likelihood of identifiable artifacts, it is possible, that cultural or archaeological resources or human remains may nevertheless be discovered. New control equipment or infrastructure for zero emission and low NOx equipment are unlikely to require substantial soil excavation and would be located on already disturbed and developed industrial land uses. Therefore, no significant impact would occur. Further, projects implemented as a result of the 2022 AQMP would be subject to project-level review, including review of paleontological impacts under CEQA, as applicable. Therefore, implementation of the 2022 AQMP is not expected to directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

Conclusion

Based upon these considerations, significant adverse geology and soils impacts are not expected from the implementation of control measures in the 2022 AQMP. Since no significant geology and soils impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Significantly increased fire hazard in areas with flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

Discussion

The term “hazardous material” can be defined in different ways. For purposes of this environmental document, the definition of “hazardous material” is the one outlined in the Health and Safety Code Section 25501:

Hazardous materials include materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that would be injurious to the health and safety of persons or harmful to the environment if released.

“Hazardous waste” is a subset of hazardous materials, and the definition is essentially the same as in the Health and Safety Code Section 25117, and in the California Code of Regulations, Title 22, Section 66261.2:

Hazardous wastes are those that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Exposure of the public or the environment to hazardous materials could occur through but not limited to the following means: improper handling or use of hazardous materials or waste, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; and/or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NO_x technologies, recognizing that new zero emissions and ultra-low NO_x technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NO_x and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on hazard and hazardous materials from implementing the proposed project.

VIII. a), b) & c) Potentially Significant Impact. The 2022 AQMP has the potential to create direct or indirect hazard impacts as follows:

- Control measures that promote the use of SCR control equipment (e.g., L-CMB-01, L-CMB-02, L-CMB-03, L-CMB-06, L-CMB-07, L-CMB-08, and MCS-01) may result in the increased use of ammonia and related hazards associated with ammonia use, as well as generate additional hazardous waste.
- Control measures that increase the penetration of low NO_x and zero-emission sources (e.g., L-CMB-04, L-CMB-05, L-CMB-06, CMB-10, EGM-01, EGM-03, MOB-04, MOB-05, MOB-06, MOB-07, MOB-09, and MOB-10) could increase the use and production of electricity and alternative fuels, requiring the use of natural gas and hydrogen, which are hazardous materials and could result in additional hazards impacts in the event of an accidental release of these materials into the environment. Some of these control measures could involve the use and disposal of batteries associated with zero emission cars and trucks, as well as filters.
- Control measures that promote the reformulation of coatings with lower-VOC content (CTS-01) may result in reformulated products with hazardous physical or chemical properties (e.g., highly flammable or acutely hazardous), which could create hazard impacts through the routine transport or disposal of these materials or through upset conditions involving the accidental release of these materials into the environment.

For these reasons, the potential hazard impacts will be further evaluated in the Draft Program EIR.

VIII. d) Less Than Significant Impact. Government Code Section 65962.5 typically refers to a list of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits or site cleanup activities. RCRA facilities affected by the proposed control measures would be required to continue managing hazardous materials in accordance with federal, state and local regulations. Implementation of the proposed control measures is not expected to interfere with site cleanup activities due to historic operations or create additional site contamination. Numerous rules and regulations are in place to regulate the use of hazardous materials and require the clean-up of existing contaminated sites, including the following:

- **Transportation of Hazardous Waste.** Hazardous materials and hazardous wastes will be transported to and/or from the sites are required to comply with the U.S. Department of Transportation regulations listed in the Code of Federal Regulations (Title 49, Hazardous Materials Transportation Act); Caltrans standards; and the California Occupational Safety and Health Administration standards.
- **Resource Conservation and Recovery Act.** Hazardous waste generation, transportation, treatment, storage, and disposal will be conducted in compliance with the Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Code of Federal Regulations, Title 40, Part 263), including the management of nonhazardous solid wastes and underground tanks storing petroleum and other hazardous substances. Designated Certified Unified Program Agencies would implement state and federal regulations for the following programs: 1) Hazardous Materials Release Response Plans and Inventory Program; 2) California

Accidental Release Prevention Program; 3) Aboveground Petroleum Storage Act Program; and 4) Underground Storage Tank Program; 5) Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs; and 6) Hazardous Materials Management Plan and Hazardous Material Inventory Statement Program.

- **California UST Regulations.** Underground storage tank (UST) repairs and/or removals will be conducted in accordance with the California UST Regulations (Title 23, Chapter 16 of the California Code of Regulations). Any unauthorized release of hazardous materials will require release reporting, initial abatement, and corrective actions that will be completed with oversight from the Regional Water Quality Control Board, Department of Toxic Substances Control, Fire Protection Districts, South Coast AQMD, and/or other regulatory agencies, as necessary.
- **Volatile Organic Compound Emissions.** South Coast AQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil, establishes requirements to control VOC emissions from excavating, grading, handling, and treating soil contaminated from leakage, spillage, or other means of VOC deposition. Rule 1166 stipulates that any parties planning on excavating, grading, handling, transporting, or treating soils contaminated with VOCs must first apply for and obtain, and operate pursuant to, a mitigation plan prior to commencement of operation. BACT is required during all phases of remediation of soil contaminated with VOCs. Rule 1166 also sets forth testing, record keeping and reporting procedures that must be followed at all times. Non-compliance with Rule 1166 can result in the revocation of the approved mitigation plan, the owner and/or the operator being served with a Notice of Violation for creating a public nuisance, or an order to halt the offending operation until the public nuisance is mitigated.
- **Earth Moving Activities of Soils Contaminated by Toxic Air Contaminants.** South Coast AQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants, applies to any owner or operator conducting earth-moving activities of soil with applicable toxic air contaminant(s) that have been identified as contaminant(s) of concern at a site. The provisions in Rule 1466 include ambient PM10 monitoring, dust control measures, notification, signage, and recordkeeping requirements. The rule does not apply to earth-moving activities of soil with applicable toxic air contaminant(s) of less than 50 cubic yards.

Excavation activities that may occur are expected to be minimal as it would be confined to existing industrial and commercial facilities that have been previously developed. Installation of equipment such as air pollution control equipment is not expected to require substantial ground disturbance to create compliant foundations. Projects that would require a grading permit prior construction infrastructure would be subject to local regulations. Activities resulting from implementation of the proposed control measures would also be subject to project-level review, including review of hazard impacts under CEQA, as applicable. Therefore, significant hazards from sites that might be included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would be less than significant. Therefore, this topic will not be further evaluated in the Draft Program EIR.

VIII. e) No Impact. The State Aeronautics Act of the California Public Utilities Code establishes statewide requirements for the airport land use compatibility planning and requires nearly every county to create an Airport Land Use Commission or an alternative process with a designated responsible agency or agencies. The main goal of the Airport Land Use Commission (ALUC) or

designated responsible agency is to protect the public health, safety and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to extensive noise and safety hazards within areas around airports. Compatibility issues are identified and analyzed in Airport Land Use Compatibility Plans for each airport, as applicable, and implementation of these plans promotes compatible development around the airports. ALUCs and/or designated responsible agencies would review land use compatibility issues for any projects that may occur due to the implementation of the proposed control measures that are within airport safety zones including safety, noise, overflight and airspace protection.

Furthermore, Federal Aviation Administration regulation, 14 CFR Part 77 – Safe, Efficient Use and Preservation of the Navigable Airspace, provides information regarding the types of projects that may affect navigable airspace. Projects may adversely affect navigable airspace if they involve construction or alteration of structures greater than 200 feet above ground level within a specified distance from the nearest runway or objects within 20,000 feet of an airport or seaplane base with at least one runway more than 3,200 feet in length and the object would exceed a slope of 100:1 horizontally (100 feet horizontally for each one foot vertically from the nearest point of the runway). As such, the installation of air pollution control equipment or measures within industrial and commercial areas is not expected to involve construction or alteration of structures greater than 200 feet or affect navigable airspace. Therefore, projects located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would not result in a safety hazard for people residing or working in the project area.

VIII. f) No Impact. Local emergency management plans, evacuation plans, and/or safety elements included in General Plans typically include emergency evacuation route maps that help residents evacuate during emergencies while simultaneously allowing first responders' access into a disaster area without congestion and gridlock. Identified routes consist mostly of interstate freeways and state highways. The maps are intended to support pre-emergency identification of options for ingress and egress. The specific emergency routes employed in the case of an actual emergency are usually designated by evacuation authorities based on emergency conditions and are communicated to residents at the time of the emergency.

Local emergency management plans or hazard mitigation plans address how counties and cities should respond to extraordinary events or disasters (e.g., aviation accidents, civil unrest and disobedience/riot, dam and reservoir failure, disease, earthquake, flood, etc.), from the preparedness phase through recovery. County or city fire and law enforcement departments are responsible for coordinating all emergency management activities and implementing local emergency management or hazard mitigation plans.

Implementing certain control measures may result in the need for additional storage of hazardous materials (e.g., ammonia) at industrial facilities. Such modifications may require revisions to the emergency response plans at these facilities if new hazardous materials are introduced to a facility. However, these facility modifications would not be expected to interfere with emergency response procedures. For the proposed control measures that will affect residential land uses, any modifications needed involving the replacement of water heaters, space heaters, cooling devices, and other combustion sources would occur inside the buildings or in the case of energy efficiency improvements such as installing solar, on the roofs of residential buildings and would not require the use of hazardous materials and would also not be expected to interfere with emergency response procedures. Further, the 2022 AQMP is not expected to cause physical changes to roadways or alter traffic patterns on highways and freeways. Any construction activities associated

with the proposed project would occur within the boundaries of industrial/commercial facilities and/or residential land uses and would not occur on any major arterials or highways that may be used during potential emergency situations. Activities resulting from the compliance of the proposed project would also be required to provide adequate access for emergency vehicles per the California Fire Code. Any short-term temporary impacts on adjacent roadways would be temporary and limited to the construction period. Therefore, the 2022 AQMP is not expected to impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

VIII. g) Less than Significant Impact. The California Fire Code and CBC set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations. Further, businesses are required to report increases in the storage or use of flammable and otherwise hazardous materials to local fire departments. Local fire departments ensure that adequate permit conditions are in place to protect against the potential risk of upset. In addition, the National Fire Protection Association has special designations for deflagrations (e.g., explosion prevention) when using materials that may be explosive. Therefore, impacts associated with the 2022 AQMP on fire hazards would be less than significant.

Conclusion

Based upon these considerations, potentially significant adverse hazards and hazardous materials impacts could occur due to the increased use of hazardous materials, including ammonia, natural gas and alternative fuels. Impacts associated with being located on a site listed pursuant to Government Code Section 65962.5, being located within an airport land use plan or two miles from an airport, interference with an emergency response plan or the use of flammable materials are not expected from implementing the proposed project. The impacts of the project on hazards and hazardous materials will be addressed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or ground water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
• Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, facilities or new storm water drainage facilities, the construction or relocation of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Demand

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

Water Quality

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NO_x technologies, recognizing that new zero emissions and ultra-low NO_x technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NO_x and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on hydrology and water quality from implementing the proposed project.

IX. a) and h) Potentially Significant Impact. Implementation of the proposed control measures may result in increased or altered wastewater streams, as follows:

- Control measures that promote reformulation of coatings, solvents, adhesives or lubricants (CTS-01). It is not expected that there would be a substantial increase in the volume of wastewater generated by facilities affected by the control measures, but there may be a change in the nature and toxicity of wastewater effluent.
- Control measures that may result in an increase in steam and potential increase in water use if new steam turbines are installed (e.g., L-CMB-05, and L-CMB-06).
- Control measures that promote the use of alternative fuels may have the potential to create water quality impacts in the event of accidental releases of alternative fuels during transport, storage or handling (e.g., MOB-05, MOB-06, MOB-07, and MOB-08).
- Control measures that result in additional water use from composting handling (e.g., MCS-02).

Implementation of the proposed control measures may result in the increased use of water. In addition, some of the proposed control measures may result in the generation of increased volumes of wastewater that could adversely affect water quality standards or waste discharge requirements resulting in the need for new or increased wastewater treatment capacity. Therefore, these topics will be evaluated further in the Draft Program EIR.

IX. b) and e) Less Than Significant Impact. Implementation of the proposed control measures may result in an increased demand for water. However, because of existing state regulations and requirements, the impact on ground water supplies is expected to be less than significant.

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act (SGMA). The SGMA sets a framework for sustainable, groundwater management. SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. SGMA empowers local agencies to form Groundwater Sustainability

Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California. Activities undertaken to comply with the 2022 AQMP would be located in areas that are governed under a GSP. However, activities that result from compliance with the proposed project would still be required to comply with applicable groundwater quality standards and will be expected to comply with the applicable GSPs, and would not be expected to substantially interfere with implementation of any GSP. Therefore, the 2022 AQMP would not conflict with or obstruct the implementation of a groundwater management plan and impacts would be less than significant.

IX. c) No Impact. Implementation of the proposed control measures would not be expected to generate construction of new structures that could alter existing drainage patterns by altering the course of a river or stream that would result in substantial erosion, siltation, or flooding on or offsite, increase the rate or amount of surface runoff that would exceed the capacity of existing or planned stormwater drainage systems, etc. Although minor modifications might occur at commercial or industrial facilities affected by the proposed control measures, these facilities have, typically, already been graded and the areas surrounding them have likely already been paved over or landscaped. New structures would be expected to occur in industrial or commercial areas (e.g., alternative fuel stations) and would not be developed in streams, rivers, or other drainage systems. As a result, further modifications at affected facilities that may occur as a result of implementing the proposed control measures are not expected to alter existing drainage patterns or stormwater runoff. Since this potential adverse impact is not considered to be significant, it will not be further evaluated in the Draft Program EIR.

IX. d) No Impact. Implementation of the proposed control measures would not include the construction of new or relocation of new structures or facilities and, as such, would not require the placement of new structures within a tsunami or seiche zones area.

A seiche is an oscillating surface wave in a restricted or enclosed body of water, generated by ground motion, usually during an earthquake. Seiches are of concern for water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. Activities undertaken to comply with control measures that are developed as part of the 2022 AQMP may be at risk of inundation due to seiches however any flood event of this nature would be part of the existing setting that is present for reasons unrelated to implementation of the 2022 AQMP.

Tsunamis are a type of earthquake-induced flooding produced by large-scale sudden disturbances of the sea floor. Tsunami waves interact with the shallow sea floor when approaching a landmass, resulting in an increase in wave height and a destructive wave surge into low-lying coastal areas. Activities undertaken to comply with control measures that are part of the 2022 AQMP may be at risk of inundation due to tsunamis if they occur at existing locations which are at risk for tsunamis. However, any tsunami hazard would be part of the existing setting and unrelated to implementation of the 2022 AQMP.

It should be noted that activities undertaken to comply with control measures in the 2022 AQMP would be subject to project-level review, including the review of impacts due to inundation under CEQA, as applicable. Furthermore, the storage of hazardous materials onsite would be governed by existing regulations of several agencies, including the U.S. EPA, U.S. Department of Transportation, the California RWQCB, California Division of Occupational Safety and Health, and local or regional environmental health departments and fire departments. Strict adherence to

all local and regional emergency response plan requirements would also be required. In addition, implementing the proposed control measures in the 2022 AQMP would not be expected to violate any regulatory requirements in regard to storage of hazardous materials onsite. Based on the preceding discussion, activities that result from compliance with the proposed project would not release pollutants as the result of floods, tsunamis, or seiche. Therefore, no impact would occur and no mitigation measures are necessary.

IX. f) and g) Potentially Significant Impact. As indicated in Section IX. a), implementation of the proposed control measures may result in the generation of increased volumes of wastewater that could adversely affect water quality standards or waste discharge requirements resulting in the need for new or increased wastewater treatment capacity. Implementation of the proposed control measures may result in an increased demand for water, as follows:

- Control measures that promote reformulation of coatings, solvents, adhesives or lubricants (CTS-01). It is not expected that there would be a substantial increase in the volume of wastewater generated by facilities affected by the control measures, but there may be a change in the nature and toxicity of wastewater effluent.
- Control measures that may result in an increase in steam and potential increase in water use if new steam turbines are installed (e.g., L-CMB-05, and L-CMB-06).
- Control measures that promote the use of alternative fuels may have the potential to create water quality impacts in the event of accidental releases of alternative fuels during transport, storage or handling (e.g., MOB-05, MOB-06, MOB-07, and MOB-08).
- Control measures that result in additional water use from composting handling (e.g., MCS-02).

These proposed control measures may require additional water, may require expansion of existing water supply facilities or require new water supply facilities. Therefore, this topic is potentially significant and will be evaluated further in the Draft Program EIR.

Conclusion

Based upon these considerations, significant hydrology and water quality impacts may occur due to the increase in water demand and wastewater discharge due to implementation of some of the 2022 AQMP control measures. These impacts will be further analyzed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING.				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause an environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NO_x technologies, recognizing that new zero emissions and ultra-low NO_x technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NO_x and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on land use from implementing the proposed project.

X. a) No Impact. Implementation of the proposed control measures that promote the installation of stationary source control equipment at existing commercial or industrial facilities would not create land use impacts because construction of major new developments (e.g., new neighborhoods) affecting land use planning would occur for reasons other than implementation of the proposed control measures and could occur regardless of the 2022 AQMP. Facilities required to support the 2022 AQMP control measures would be expected to occur in industrial and commercial areas that would be compatible with such development. Similarly, for the proposed control measures that will affect residential land uses, any modifications needed would occur inside the buildings or in the case of energy efficiency improvements such as installing solar, on the roofs of residential buildings, and would not be expected to require new residential developments. Furthermore, the South Coast AQMD has no land use approval authority except to impose air pollution control requirements, which do not drive the land use approval process; this

authority lies within the jurisdiction of public agencies with general government authority such as cities or counties. Since the 2022 AQMP does not require construction of major new land use developments in any areas of the South Coast AQMD's jurisdiction, it is not expected to physically divide any established communities within this region.

EGM-01 would affect new or redevelopment projects but would not affect the land use or zoning aspects of projects. EGM-01 would minimize air quality impacts but would not impact planning decisions made by local jurisdictions so no impacts on land use would be expected. Implementation of the proposed control measures that accelerate the use of zero emission or low NOx mobile sources or the use of alternative clean fuels would not create land use impacts because on-road vehicles would continue to operate on existing roadways and would not require construction of new roadways that could physically divide communities.

Potential land use impacts associated with the 2022 AQMP could be associated with the construction of support systems (e.g., catenary overhead electrical lines or magnetic infrastructure related to operation of zero- and low NOx transport systems). For purposes of evaluating potential land use impacts, it has been assumed herein that no new rail or truck traffic routes would be constructed, but rather that existing truck and rail routes/corridors would be modified. The truck and rail corridors likely to be involved are primarily associated with rail yards and intermodal facilities in industrial zones within the Southern California area. Examples of these areas include, but are not limited to, the Port of Los Angeles, Port of Long Beach, and industrial areas in and around container transfer facilities near the Terminal Island Freeway, along the Alameda Corridor, as well as inland rail yards near downtown Los Angeles. Since only existing transportation routes would likely be modified (e.g., electric lines installed) and no new transportation routes are anticipated, no land use conflicts, or inconsistencies with any general plan, specific plan, local coastal program, or zoning ordinance are expected.

Construction activities would be required to install these systems and would require the use of heavy construction equipment, e.g., backhoes, cranes, front end loaders, and other types of equipment, for installation. These construction activities are expected to occur along heavily travelled roadways near the existing ports and rail yards. While these projects would require local approvals, they are not expected to result in significant land use impacts as they would occur within or adjacent to existing transportation corridors.

It is possible that construction activities could temporarily disrupt or divide a community. However, because construction of new traffic routes/corridors or widening of existing routes/corridors are not expected to be required as part of the proposed project, once construction activities are finished and the physical barriers removed, no long-term land use impacts are anticipated. The installation of electric and/or magnetic infrastructure is only expected to occur along existing roadways/freeways and transportation corridors, which are already heavily traveled and in many cases, may already divide existing communities. The installation of the electric and/or magnetic infrastructure is not expected to create any new barriers or further physically divide an established community, following the completion of construction.

Activities that result from compliance with the proposed project would be subject to project-level review that would assess consistency with these adopted land use regulations, including review of impacts to land use and planning under CEQA, as applicable. Any proposed modification to an existing rail or truck traffic route/corridor will require a separate CEQA evaluation. No significant land use impacts were identified because the proposed control measures would be expected to

comply with, and not interfere with, applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plans, specific plans, local coastal programs or zoning ordinances).

No provisions of the proposed project would directly affect applicable land use plans, policies or regulations. The South Coast AQMD is specifically excluded from infringing on existing city or county land use authority. [Health and Safety Code Section 40414]. Land use and other planning considerations are determined by local governments and no present or planned land uses in the region or planning requirements will be altered by the proposed project. There are existing links between population growth, land development, housing, traffic and air quality. SCAG's 2020 RTP/SCS (SCAG, 2020) accounts for these links when designing ways to improve air quality, transportation systems, land use, compatibility and housing opportunities in the region. Land use planning is handled at the local level and contributes to development of the 2022 AQMP's growth projections. The 2022 AQMP does not affect local government land use planning decisions; instead, it incorporates local land use planning decisions and population growth. The proposed control measures in the 2022 AQMP complement SCAG's Regional Comprehensive Plan. Therefore, the proposed project is not expected to result in significant land use impacts.

Conclusion

Based upon these considerations, significant land use and planning impacts are not expected from implementing the proposed project. Since no significant land use and planning impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on mineral resources from implementing the proposed project.

XI. a) & b) No Impact. There are no provisions in the 2022 AQMP that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Some examples of mineral resources are gravel, asphalt, bauxite, and gypsum, which are commonly used for construction activities or industrial processes. The 2022 AQMP provides incentives for the penetration of low NOx and zero emission technologies which

are not expected to result in an increase in the use of mineral resources. The proposed project is not expected to require substantial construction activities and would not have any significant effects on the use of important minerals, such as those described above (with the exception of the use of a minimal amount of gravel and asphalt for limited paving activities), nor would the project result in covering over or otherwise making mineral resources unrecoverable. Therefore, no new demand for mineral resources is expected to occur and no significant adverse mineral resources impacts from implementing the proposed project are anticipated.

Conclusion

Based upon these considerations, significant adverse mineral resource impacts are not expected from implementing the proposed project. Since no significant mineral resource impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Noise impact will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on noise from implementing the proposed project.

XII. a) Potentially Significant Impact. Implementation of the proposed control measures would promote installation of control equipment or modification of operational practices at existing commercial or industrial facilities, typically located in appropriately zoned industrial or commercial areas. Although installation of some control equipment may generate noise impacts, control equipment would typically be installed within the boundaries of industrial and commercial facilities. However, once construction is complete, air pollution control equipment does not typically generate high noise levels. Similarly, for the proposed control measures that will affect residential land uses, any modifications needed involving the replacement of water heaters, space heaters, cooling devices, and other combustion sources would occur inside the buildings or in the case of energy efficiency improvements such as installing solar, on the roofs of residential buildings. Although installation of these equipment may generate noise impacts, once construction is complete, operation of the new equipment does not typically generate high noise levels.

Ambient noise levels associated with commercial and industrial areas are typically driven by noise from freeway and/or highway traffic in the area and heavy-duty equipment used for materials manufacturing or processing at nearby facilities. It is not expected that installation of air pollution control equipment would substantially increase ambient [operational] noise levels in an area, either permanently or intermittently, or expose people to excessive noise levels that would be noticeable above and beyond existing ambient levels. The proposed measures that could increase the use of alternative fuels could result in the construction of new industrial facilities, such as hydrogen plants, which are sources of industrial noise. Commercial and industrial facilities are typically located in areas with high levels of local ambient noise, building walls promote noise dampening, and noise levels attenuate with separation distance. Affected facilities would be required to comply with local noise ordinances, which may require construction of noise barriers or other noise control devices. Noise associated with potential construction activities is potentially significant and will be evaluated in the Draft Program EIR.

Implementation of 2022 AQMP control measures that could result in the construction of electric or magnetic infrastructure (e.g., EGM-01, MOB-02A, MOB-02B, MOB-06 and MOB-07) could increase noise by concentrating traffic along specific corridors. Construction activities would be required to install these systems and would require the use of heavy equipment to install the electric or magnetic systems. Heavy construction equipment such as backhoes, cranes, aerial lifts, front end loaders, and other types of equipment would be required for installation. The electrical or magnetic systems would be installed within or adjacent to existing roadways. These construction activities are expected to occur along heavily travelled roadways (e.g., roads near the ports and near intermodal train yards). Construction activities are expected to generate noise due to the presence of heavy construction equipment. Some of the construction activities could occur near residential areas, e.g., communities adjacent to the ports and Alameda Corridor. Therefore, noise impacts associated with the construction activities are potentially significant and will be evaluated in the Draft Program EIR.

Implementation of the proposed control measures that promote the acceleration of zero emission electric vehicle technologies would result in noise reductions. Electric vehicles generate less noise than diesel or gasoline engines because the electric engines have substantially fewer moving parts than conventional engines. Therefore, increasing the fleet of electric vehicles while removing

diesel or gasoline engines from the fleet is expected to result in a reduction in noise from on-road vehicles.

XII. b) Potentially Significant. Operation of the proposed project would not generate substantial levels of vibration because there are no notable sources of vibrational energy associated with the proposed project. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero emission mobile sources; establish greater control of industrial stationary sources; control indirect sources of emissions; develop incentives to remove/replace higher emitting equipment; improve detection and procedures; and establish educational and outreach programs. Implementation of the proposed control measures would not result in an increase in groundborne vibration levels because air pollution control equipment is not typically vibration intensive equipment. As noted above, early penetration of zero emission electric vehicles would also not generate groundborne vibration impacts because such vehicles have fewer moving parts that could generate vibrations compared to gasoline or diesel vehicles. The proposed project would control emissions from mobile sources, but would not be expected to result in an increase in mobile sources (e.g., trains or trucks) that produce significant groundborne vibration impacts. Consequently, the proposed control measures would not cause substantial noise or excessive groundborne vibration impacts. Operational noise impacts, therefore, will not be further evaluated in the Draft Program EIR.

Construction activities generate varying degrees of ground vibration, depending on the construction procedures, construction equipment used, and proximity to vibration-sensitive uses. The generation of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels. Vibration associated with ground-borne sources is generally not a common environmental problem. However, construction activities such as blasting, pile driving, and heavy earthmoving equipment are potential sources of vibration during construction activities. In general, demolition of structures during construction generates the highest levels of vibration. The proposed project could result in vibration associated with construction activities including pile driving in areas where the geological conditions require piles for stable foundations for new infrastructure, and potential demolition activities. Although these activities are limited to the construction phase of projects, vibration is potentially significant and will be evaluated in the Draft Program EIR.

XII. c) Less Than Significant Impact. Although some of the facilities affected by the proposed project may be located at sites within an airport land use plan, or within two miles of a public airport or private airstrip, the addition of new or modification of existing control equipment would not expose people residing or working in the project area to appreciably greater noise levels. All noise producing equipment must comply with local noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements. Therefore, less than significant noise impacts are expected to occur at sites located within an airport land use plan, or within two miles of an airport or airstrip.

Conclusion

Based upon the above considerations, significant adverse project-specific noise impacts could occur during construction activities associated with implementation of the 2022 AQMP control measures and, therefore, will be further evaluated in the Draft Program EIR. Operational noise impacts are expected to be less than significant and will not be further evaluated.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING.				
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on population and housing from implementing the proposed project.

XIII. a) & b) No Impact. The proposed project is not anticipated to generate any significant effects, either direct or indirect, on the population or population distribution of people living in the South Coast AQMD's jurisdiction as no additional workers are anticipated to be required to comply with the implementations of the proposed control measures. As published in the Connect

SoCal (the 2020 – 2045 RTP/SCS), the population in the SCAG region (which includes all of the South Coast AQMD jurisdiction and the non-South Coast AQMD-jurisdiction portions of Los Angeles and San Bernardino counties, and all of Ventura and Imperial counties) is expected to grow by 3.7 million people by 2045 (SCAG, 2020). Population growth within South Coast AQMD’s jurisdiction is projected to increase regardless of the implementation of proposed control measures.

Consistent with past experience, it is expected that the existing labor pool within the southern California area would accommodate the labor requirements for any modifications requiring construction at affected facilities.

It is expected that few or no new employees would need to be hired at affected facilities to operate and maintain new control equipment because air pollution control equipment is typically not labor intensive equipment. In the event that new employees are hired, it is expected that the existing local labor pool in the South Coast AQMD jurisdiction can accommodate the increase in worker demand that might occur as a result of implementation the proposed control measures. Based on the above, it is not expected that the implementation of the proposed control measures would induce population growth resulting in the need for new housing, roads or other infrastructure. As such, implementation of the proposed control measures is not expected to result in changes in population densities or induce significant growth in population. The population is expected to grow regardless of implementing the proposed control measures. Implementation of proposed mobile source control measures, such as those that would accelerate the penetration of zero emission or low NOx vehicles within the South Coast AQMD jurisdiction, would not induce population growth because there is a finite number of drivers in the region at any one time; drivers who purchase low or zero emission vehicles would not be driving the old high emitting vehicles at the same time they are driving the new low emitting vehicles. Although projected increases in population in the region may result in the continued use of the replaced high emitting vehicles, as already noted, future population growth in the region would occur for reasons other than complying with the proposed control measures.

Additionally, the proposed control measures contain no provisions that would cause displacement of substantial numbers of people or housing necessitating construction of replacement housing elsewhere. As noted in the discussions under “Land Use and Planning,” the proposed 2022 AQMP contains control measures that may result in installing control equipment on stationary sources at existing commercial or industrial facilities and accelerating the penetration of zero emission or low NOx mobile sources. Construction of new structures affecting land use planning would occur for reasons other than complying with the proposed control measures. The installation of electric and/or alternative fuel infrastructure is expected to occur along existing roadways/freeways and transportation corridors. These roads and freeways already exist and are heavily traveled. The installation of electric and/or alternative fuel infrastructure is not expected to displace existing housing. As a result, the 2022 AQMP would not be expected to affect the location of people or housing in any areas of the South Coast AQMD jurisdiction.

Conclusion

Based upon these considerations, no population and housing impacts are not expected from the implementation of the proposed 2020 AQMP control measures. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required and, therefore, population and housing impacts will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on public services from implementing the proposed project.

XIV. a) Less Than Significant Impact. Fire protection and emergency medical services would be provided to affected facilities and residential developments by local county and city fire departments. Although the implementation of the proposed control measures would use alternative fuels (e.g., hydrogen), alternative fuels would displace gasoline and diesel fuels. As first responders to emergency situations, fire departments are trained to respond to a variety of situations related to hazardous materials. Large industrial facilities (e.g., electric generating plants and refineries) have on-site fire response personnel and the local fire departments provide assistance to the on-site personnel. Therefore, no increase in calls for fire protection, and emergency medical service would be expected from implementation of the proposed control measures. New residential development would be required to comply with the proposed control measures (e.g., R-CMB-01, R-CMB-02, R-CMP-03, and R-CMB-04) and would be subject to project-level review, including review of fire protection impacts under CEQA, as applicable.

Furthermore, all activities undertaken as a result of implementing the proposed control measures would be required to comply with fire-related safety features in accordance with the applicable provisions of the adopted California Fire Code and any county or city ordinances, and standard regarding fire prevention and suppression measures related to water improvement plans, fire hydrants, fire access, and water availability.

Based on the preceding, implementation of the proposed control measures would not adversely affect the ability of local fire protection to provide adequate service and impacts would be less than significant and no mitigation measures are necessary.

XIV. b), c) d) & e) No Impact. Implementation of the proposed control measures would not result in an increase in calls for police protection. Implementation of the proposed control measures occur at existing facilities or transition to cleaner emitting equipment at new developments but would not facilitate the construction of new developments. At industrial facilities, on-site security is in place and would continue to provide security for existing facilities with the same demand for police department support as is currently needed. In addition, new residential development would be required to comply with the proposed control measures (e.g., R-CMB-01, R-CMB-02, R-CMP-03, and R-CMB-04) and would be subject to project-level review, including review of police protection impacts under CEQA, as applicable.

The need for new or the expansion of existing schools, parks, or library services and facilities is tied to population growth. As indicated in Section XIII. Population and Housing, implementation of the proposed control measures would not induce population growth either directly or indirectly. Therefore, with no increase in local population, there would be no additional demand for new or expanded schools, parks, and libraries and no impacts are expected.

Conclusion

Based upon these considerations, significant adverse public services impacts are not expected from implementing the proposed control measures. Since no significant public services impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XV. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on recreation from implementing the proposed project.

XV. a) & b) No Impact. Demand for parks and recreational facilities in an area is usually determined by the area's population. As discussed in XIII Population and Housing, the implementation of the proposed control measures does not include the development of new homes, which would lead to an increase in population and thereby, the need for additional park and recreation facilities. Therefore, the implementation of the proposed control measures would not increase the use of existing neighborhood and regional parks or other recreational facilities, nor

would it require construction of new or expanded parks or recreational facilities. No impact to park and recreational facilities would occur and no mitigation measures are necessary.

Furthermore, the implementation of the proposed control measures does not include the development of recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Conclusion

Based upon these considerations, significant adverse recreation impacts are not expected from the implementation of the proposed control measures. Since no significant recreation impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVI. SOLID AND HAZARDOUS WASTE. Would the project:				
a) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Comply with federal, state, and local management and reduction statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

The proposed project impacts on solid and hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NO_x technologies, recognizing that new zero emissions and ultra-low NO_x technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NO_x and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on solid and hazardous waste from implementing the proposed project.

XVI. a) Potentially Significant Impact.

Construction

To accommodate the electrification of equipment and vehicles, it is expected that installation of zero emission and low NO_x charging/fueling infrastructure would result in minor construction activities that may result in the generation of some construction waste that may need to be disposed in a landfill. The proposed control measures do not contain any requirements that would cause

existing practices for disposing of solid and hazardous waste to change. For this reason, facilities which currently comply with all applicable local, state, or federal waste disposal regulations would not be expected to change their current practices due to implementation of the proposed control measures. If a facility requires construction such as onsite fueling, charging infrastructure, or air pollution control equipment, there is a possibility that small amounts of waste will be generated from replacement of parts during routine servicing and maintenance of the onsite improvements. The amount of waste generated would be negligible when considering the existing regular waste generation from ordinary facility operations. Further, all construction activities associated with implementation of the proposed control measures should abide by the requirements of CALGreen Section 5.408 - Construction Waste Reduction, Disposal and Recycling, as applicable. As currently codified, these regulatory sections require diversion of 65 percent of nonhazardous construction and demolition waste through recycling, reuse, and diversion programs.

Operation

The implementation of the proposed control measures would potentially increase solid and hazardous waste disposal due to accelerated replacement of equipment to convert to electrified equipment and additional use of pollution controls. Electrification of equipment may increase the generation of solid waste by replacement of combustion devices with electric equipment and increase the generation of spent batteries. Additional pollution control may increase the frequency of catalyst replacements, which would generate additional hazardous waste.

Numerous control measures in the 2022 AQMP are aimed at accelerating the penetration of zero emission and low NOx mobile sources, including L-CMB-01 through L-CMB-10, MSC-01, EGM-01, MOB-02A, MOB-02B, MOB-04, MOB-05, MOB-06, MOB-07, MOB-08, MOB-09, and MOB-10. Some of these measures may increase the use of lithium ion (Li-ion) batteries and nickel-metal hydride batteries. While these batteries are generally recyclable, improper disposal of batteries poses potential environmental hazards and impacts. The potential increased use of catalyst associated with the manufacture of alternative fuels could also generate increased amounts of solid and hazardous waste. Based on the preceding discussion, impacts on the generation of solid and hazardous waste are potentially significant and will be analyzed in the Draft Program EIR.

XVI. b) No Impact. The following federal, state, and local laws and regulations govern solid and hazardous waste disposal:

- AB 598 established the California Hazardous Waste Control Act of 1972 which established state hazardous waste management and disposal requirements.
- U.S. EPA's Resource Conservation and Recovery Act (RCRA) of 1976 which contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. RCRA also regulates the management and disposal of solid hazardous waste.
- AB 341 (Chapter 476, Statutes of 2011) which increases the statewide waste diversion goal to 75 percent by 2020.
- AB 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code Section 40050 et seq.) which requires every California city and county to divert 50 percent of its waste from landfills by the year 2000 by such means as recycling, source reduction, and composting. In addition, AB 939 requires each county to prepare a countywide siting

element specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the county that cannot be reduced or recycled for a 15-year period.

Any project-related construction and operation resulting from implementation of the proposed control measures would be implemented in accordance with all applicable federal, state, and local laws and regulations governing solid waste disposal. Therefore, no impact would occur, and no mitigation measures are necessary.

Conclusion

Based upon these considerations, potential significant adverse solid and hazardous waste impacts may occur due to implementing some of the proposed control measures. Since potentially significant solid and hazardous waste impacts were identified related to landfill capacity, solid and hazardous waste impacts will be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION.				
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on transportation will be considered significant if any of the following criteria apply:

- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation or contributes to changes in overall vehicle miles traveled.
- There is an increase in vehicle miles traveled that is substantial in relation to the existing travel activity.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees.
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day.
- Increase customer traffic by more than 700 visits per day.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels;

affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on transportation from implementing the proposed project.

XVII. a) No Impact. The 2022 AQMP would affect existing commercial/industrial facilities and residential developments; accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; establish greater control of industrial stationary sources; control indirect sources of emissions; develop incentives to remove/replace higher emitting equipment; establish specifications for fuels and mobile source exhaust emissions; improve detection and procedures; and establish educational and outreach programs. Implementation of the proposed control measures is not expected to substantially alter vehicle mileage or transportation routes. The 2022 AQMP builds upon transportation and related TCMs developed by SCAG and included in the SCAG RTP/SCS. Therefore, the proposed control measures would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

The 2022 AQMP would revise the previous motor vehicle emissions budgets with new emission calculations using the latest motor vehicle emission factors and planning assumptions. The U.S. EPA's Transportation Conformity Rule requires that transportation plans and projects must not exceed SIP motor vehicle emission budgets for attaining and maintaining health-based air quality standards or a conformity lapse would occur (preventing further funding of transportation projects). By avoiding a conformity lapse, the region would continue to receive federal funding for future transportation projects, which would generally improve traffic flow, thus, providing a beneficial traffic impact.

XVII. b) Less Than Significant Impact. Implementation of the proposed control measures has the potential to result in an increase in transportation related to construction of new or modified air pollution control equipment. Construction trips and vehicle miles traveled (VMT) are associated with contractors and vendors delivering and installing equipment at affected facilities. Construction activity impacts are temporary in nature and will vary depending on the number and location of facilities and the size of the construction workforce needed.

The CARB Technical Advisory on Evaluating Transportation Impacts in CEQA to comply with CEQA Guidelines Section 15064.3 focuses on permanent new employee vehicle miles traveled (California Office of Planning and Research, 2018). Because of the temporary nature of construction activities, any increase in VMT related to construction activities would occur on a short-term basis at each location. In general, temporary construction-related increases in VMT are not considered to be a transportation impact or inconsistent with CEQA Guidelines Section 15064.3. These construction projects would not have a substantial, permanent effect on regional VMT, including commute VMT, in the SCAG region (which includes all of the South Coast AQMD jurisdiction and the non-South Coast AQMD-jurisdiction portions of Los Angeles and San Bernardino counties, and all of Ventura and Imperial counties). Additionally, discretionary projects at affected facilities could be subject to project-level review under CEQA. As a result, construction projects would not have a permanent effect on regional VMT. Therefore, temporary

effects of construction-related vehicles would not conflict with the state’s GHG reduction and associated VMT goals for the transportation sector.

Operational transportation impacts associated with the implementation of the proposed control measures focus on replacement. In particular, Control Measures L-CMB-01, L-CMB-03, L-CMB-07, CMB-10, ECC-02, and MOB-07 have the potential to affect transportation by potentially increasing the amount of ammonia and or catalyst needed to operate SCR units. These deliveries are expected to be accomplished using heavy-duty trucks and occur periodically (i.e., conservatively estimated to be no more than one truck per week per affected facility but could be less frequent).

One of the primary goals of the 2022 AQMP is the replacement of high-emitting mobile sources with low NO_x and zero emission mobile sources. Control measures aimed at mobile sources are not expected to result in an increase in mobile sources (e.g., an increase in automobiles or trucks) but would instead replace the higher emission vehicles with lower emitting mobile sources. Therefore, these types of control measures would not result in an increase in VMT, but would instead encourage the use of lower-emitting mobile sources.

CEQA Guidelines Section 15064.3(a) clarifies that the primary consideration in evaluating a project’s transportation impacts for CEQA purposes is the amount and distance that a project might cause people to drive. This captures two measures of transportation impacts: number of automobile trips generated and VMT. Additional permanent employees are not expected to be required to operate equipment that may require additional air pollution control equipment, due to implementation of the 2022 AQMP. As discussed in Section XIII. Population and Housing, implementation of the 2022 AQMP is not expected to generate additional employee or population increases. Therefore, no increase in vehicle trips or VMT is expected.

As noted earlier, CEQA Guidelines Section 15064.3(a) pertains to automobile travel attributable to a project.¹¹ It does not require any analysis of increased VMT from heavy-duty truck trips. In fact, in CARB’s 2017 Scoping Plan, the state’s strategy for the goods-movement sector does not focus on reducing VMT but rather, on advances in technology zero-emissions and near-zero-emissions control strategies (CARB, 2017).¹² Therefore, less than significant impacts from the implementation of the proposed control measures is expected to occur.

XVII. c) No Impact. Implementation of the proposed control measures does not involve or require the construction of new roadways, alter existing roadways, or introduce incompatible uses to existing roadways. However, some of the proposed control measures could result in the construction of catenary overhead electrical lines or magnetic infrastructure to operate zero- and low NO_x transport systems (e.g., EGM-01, MOB-02A, MOB-02B, MOB-06, and MOB-07). No new rail or truck traffic routes are expected to be constructed, but rather existing truck and rail routes/corridors would be modified. The truck and rail corridors likely to be involved are primarily associated with rail yards and intermodal facilities in industrial zones within the Southern California area. Examples of these areas include, but are not limited to, the Ports and other

¹¹ South Coast AQMD staff conducted extensive research on the state’s guidance for how to analyze truck VMT under SB 743 in CEQA documents. Searches included reviews of OPR’s December 2018 Technical Advisory, CARB’s 2017 Scoping Plan Update, the California Natural Resources Agency’s rulemaking documents for the Updates to the 2019 CEQA Guidelines, which includes the incorporation of SB 743 requirements, and consultation with SCAG staff.

¹² California Air Resources Board, 2017, California’s 2017 Climate Change Scoping Plan: The Strategy for Achieving California’s 2030 Greenhouse Gas Target, https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf, accessed on March 18, 2019.

industrial areas located in and around container transfer facilities near the Terminal Island Freeway, along the Alameda Corridor, as well as inland rail yards near downtown Los Angeles. Since only existing transportation routes would likely be modified (e.g., electric lines installed) and no new transportation routes are anticipated, and no increase in traffic hazards are expected.

XVII. d) No Impact. Implementation of the proposed control measures primarily requires replacement or additional control of existing equipment. No changes are expected to emergency access at or in the vicinity of the affected facilities. Further, implementation of the proposed control measures do not contain any requirements specific to emergency access points and each facility would be expected to continue to maintain their existing emergency access. Based on the preceding discussion, no impact to emergency access would occur.

Conclusion

Based upon these considerations, significant transportation during construction or operation are not expected to occur due to implementation of the proposed control measures as the proposed project is not expected to result in an increase in VMT. Since no significant transportation impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVIII. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildfires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

A project's ability to contribute to a wildfire will be considered significant if the project is located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and any of the following conditions are met:

- The project would substantially impair an adopted emergency response plan or emergency evacuation plan.
- The project may exacerbate wildfire risks by exposing the project's occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors.
- The project may exacerbate wildfire risks or may result in temporary or ongoing impacts to the environment because the installation or maintenance of associated infrastructure

(such as roads, fuel breaks, emergency water sources, power lines, or other utilities) are required.

- The project would expose people or structures to significant risks such as downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.
- The project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildfires.

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on wildfire from implementing the proposed project.

XVIII. a) No Impact. As explained in Section VIII. f), activities that result from implementation of the proposed control measures would not block or otherwise interfere with the use of evacuation routes nor would they interfere with operations of emergency response agencies or with coordination and cooperation between such agencies. Therefore, there would be no impacts.

XVIII. b) No Impact. Wildland fire protection in California is the responsibility of either the local government, state, or the federal government. State Responsibility Areas (SRA) are the areas in the state where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires.¹³ Local responsibility areas (LRA) include incorporated cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by California Department of Forestry and Fire Protection (CAL FIRE) under contract to local government. CAL FIRE uses an extension of the SRA Fire Hazard Severity Zone model as the basis for evaluating fire hazard in LRAs. The local responsibility area hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area. Fire hazard severity zones are identified by Moderate, High and Very High in an SRA, and Very High in an LRA.

Implementation of the proposed control measures would affect existing commercial/industrial facilities and residential developments; accelerate the replacement of high-emitting mobile sources with low NOx and zero emission mobile sources; establish greater control of industrial stationary

¹³ California Department of Forestry and Fire Prevention's Fire and Resource Assessment Program. 2022. Wildfire Hazard Real Estate Disclosure. <https://frap.fire.ca.gov/frap-projects/wildfire-hazard-real-estate-disclosure/>.

sources; control indirect sources of emissions; develop incentives to remove/replace higher emitting equipment; establish specifications for fuels and mobile source exhaust emissions; improve detection and procedures; and establish educational and outreach programs in appropriately zoned areas. Since commercial and industrial areas are not typically located near wildland or forested areas, implementation of the proposed control measures is not expected to increase the risk of wildland fires. Further, site preparation of industrial facilities often includes the removal of vegetation for fire safety. Therefore, affected industrial facilities are expected to be devoid of plant life (except landscape vegetation), especially native vegetation. The 2022 AQMP is comprised of proposed control measures which primarily focus on accelerating the penetration of low NO_x and zero-emission technologies which are not expected to result in an impact on wildfires.

Similarly, for the proposed control measures that will affect residential land uses, any modifications needed would occur inside the buildings or in the case of energy efficiency improvements such as installing solar, on the roofs of residential buildings, and would not be expected to create any greater risk of wildland fires than the existing residential developments themselves. Moreover, the proposed residential control measures may involve replacing gas-fired water heaters, space heaters, cooling devices, and other combustion sources with electric devices whereby reducing the use of fuel and the potential to cause wildland fires.

Any structures subject to the implementation of proposed control measures that would be located in fire hazard severity zones are required to be designed, built, and operated in accordance with state regulations specifying building materials and structural designs for structures in such zones, including CBC Chapter 7A and California Fire Code Chapter 49; regulatory requirements for defensible space including Public Resources Code Section 4291 et seq.; and subject to project-level CEQA review, including review of wildfire impacts, as applicable. Furthermore, structures subject to the implementation of proposed control measures located in SRA areas will implement the Wildfire SRA Fire Safe Regulations' basic wildland fire protection standards. Electric utilities are required to abide by the requirements of the California Public Utilities Commission (CPUC) Fire Safety Regulations as they relate to utility poles and wires, and vegetation management.

Additional measures are in place to sidestep the impacts of pollutant concentrations from wildfire ash. Recognition of the growing threat that wildfire smoke poses to public health and safety has resulted in a response led by the U.S. Forest Service and enhanced through partnership with many other agencies, such as the National Park Service. The Wildland Fire Air Quality Response Program (WFAQRP) was created to directly assess, communicate, and address risks posed by wildfire smoke to the public as well as fire personnel. The program depends on four primary components: 1) specially trained personnel called Air Resource Advisors (ARAs); 2) air quality monitoring; 3) smoke concentration and dispersion modeling, and 4) coordination and cooperation with agency partners. ARAs are technical specialists who are trained to work on smoke issues from wildland fires and they are deployed nationwide during large smoke events. ARAs are dispatched to an incident to assist with understanding and predicting smoke impacts on the public and fire personnel. They analyze, summarize, and communicate these impacts to incident teams, air quality regulators, and the public.¹⁴ South Coast AQMD also issues air quality alerts, advisories, and forecasts by email through AirAlerts.org. South Coast AQMD also maintains an

¹⁴ US Forest Service, Wildland Fire Air Quality Response Program. United States Department of Agriculture, <https://www.wildlandfiresmoke.net/>, accessed February 15, 2022.

interactive online map to view current air quality conditions in the region.¹⁵ Therefore, the proposed control measures in the 2022 AQMP are not expected to result in structures being built within or adjacent to wildfire areas or result in an increased risk of wildfire.

XVIII. c) No Impact. Implementation of proposed control measures would not add new structures that might need to be supported by expanded infrastructure and associated maintenance, including new roads, fuel breaks, emergency water sources, power lines and other utilities. However, structures subject to the implementation of proposed control measures that are developed in fire hazard safety zones are required to comply with regulations governing development in such zones, including CBC Chapter 7A, California Fire Code Chapter 49; Public Resources Code Section 4291 et seq.; and, subject to project-level CEQA review, including review of wildfire impacts, as applicable. Any new powerlines associated with new structures would be required to comply with fire safety regulations pertaining to electric utilities including California Code of Regulations, Title 14, Section 1250 et seq., CPUC fire safety regulations, and subject to project-level CEQA review, including review of wildfire impacts, as applicable.

Implementation of the proposed control measures in the 2022 AQMP could result in the construction of catenary overhead electrical lines or magnetic infrastructure to operate zero- and low NOx transport systems (e.g., Control Measures EGM-01, MOB-01, MOB-06, and MOB-07). No new rail or truck traffic routes are expected to be constructed, but rather existing truck and rail routes/corridors would be modified. The truck and rail corridors likely to be involved are primarily associated with rail yards and intermodal facilities in industrial zones within the Southern California area. Examples of these areas include, but are not limited to, the Ports, and other industrial areas located in and around container transfer facilities near the Terminal Island Freeway, along the Alameda Corridor, as well as inland rail yards near downtown Los Angeles. Since existing transportation routes are located in heavily populated and urbanized areas, these proposed control measures would not result in new power lines in high risk wildfire areas. Therefore, the installation or maintenance of infrastructure, such as roads, fuel breaks, emergency water sources, power lines or other utilities in wildfire areas are not expected to be required as part of the 2022 AQMP.

XVIII. d) No Impact. Catastrophic wildfire can create favorable conditions for other hazards, such as flooding and landslides during the rainy season. However, since commercial and industrial areas are not typically located near wildland or forested areas, implementing the 2022 AQMP control measures would not expose people or structures to post-fire hazards such as flooding, landslides, slope instability, or drainage changes. Any new structures subject to the implementation of proposed control measures (e.g., new residential developments) that would be located in fire hazard severity zones would be subject to project-level CEQA review, including review of wildfire impacts, as applicable. Control measures applicable to reducing emissions from residential developments (e.g., R-CMB-01 through R-CMB-04) do not affect the siting of residential developments. Therefore, there would be no impacts or increase fire risks to people or structures associated with implementation of the 2022 AQMP.

XVIII. e) No Impact. Any new development or redevelopment in fire hazard safety zones are required to comply with regulations governing development in such zones, including CBC Chapter 7A, California Fire Code Chapter 49, and California Public Resources Code Section 4291 et seq.,

¹⁵ South Coast AQMD, Wildfire Smoke & Ash Health & Safety Tips, <http://www.aqmd.gov/home/air-quality/wildfire-health-info-smoke-tips>, accessed February 15, 2022.

and subject to project-level CEQA review, including review of wildfire impacts, as applicable. Therefore, there would be no impacts or increased risk of loss of structures or human life due to wildlife.

Conclusion

Based upon these considerations, significant adverse wildfire impacts are not expected from implementation of proposed control measures. Since no significant wildfire impacts were identified, no mitigation measures are necessary or required and therefore will not be further discussed in the Draft Program EIR.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The 2022 AQMP is designed to reduce emissions from existing emission sources and promote the use of the cleanest available new emission sources. The proposed control measures focus on maximizing the implementation of existing zero emission and low NOx technologies, recognizing that new zero emissions and ultra-low NOx technologies may still need to be invented or made commercially available to achieve the necessary reductions required to attain the 70 ppb ozone standard. The 2022 AQMP would accelerate the replacement of high-emitting mobile sources with low NOx and zero-emission mobile sources; encourage the use of lower-emitting alternative fuels; affect stationary sources at existing commercial/industrial facilities and residential developments; develop incentives to remove/replace higher emitting equipment; establish greater control of industrial stationary sources; control indirect sources of emissions; improve energy efficiency; improve detection and procedures; and establish educational and outreach programs.

Appendix A lists all the 2022 AQMP control measures and identifies those control measures that have the potential to generate significant adverse impacts. The discussion in this section identifies the net effect on wildfire from implementing the proposed project.

XIX. a) Less than Significant Impact. As explained in Section IV. Biological Resources, the 2022 AQMP is not expected to significantly adversely affect any biological resources including wildlife and the resources on which it relies. Activities resulting from implementing the proposed control measures in the 2022 AQMP are expected to be located near industrial, commercial, or urbanized areas. Such project sites would not typically include appropriate habitat for fish or wildlife species or rare, endangered species of plant or animal. Overall improvements in air quality are, ultimately, expected to provide substantial benefits to local biological resources in South Coast AQMD's jurisdiction.

Further, construction activities resulting from implementing the proposed control measures in the 2022 AQMP are expected to be confined to the existing footprint of the affected facilities, which have been developed and paved. In addition, tribal and other cultural resources are generally limited at such sites. Therefore, implementation of the 2022 AQMP is not expected to require physical changes to the environment which may disturb paleontological, archaeological, or tribal cultural resources.

Additionally, the proposed control measures are not expected to result in demolition of existing structures. Furthermore, individual development projects would be subject to project-level review under CEQA, as applicable. Thus, impacts to biological and cultural resources, including historic resources, would be less than significant.

XIX. b) Potentially Significant Impact. The 2022 AQMP may have the potential to generate significant adverse project-specific environmental impacts in several environmental areas. If project-specific impacts are deemed cumulatively considerable, the 2022 AQMP may have the potential to create significant adverse cumulative impacts. Significant adverse cumulative impacts will be further analyzed in the Draft Program EIR if impacts to any of the following project-specific environmental topic areas are deemed significant: air quality and GHGs, energy, hazards and hazardous materials impacts, hydrology and water resources, noise, and solid and hazardous waste.

In addition, SCAG is periodically required to prepare a RTP/SCS, which contains TCMs, pursuant to Health and Safety Code Section 65080. SCAG is responsible for preparing and approving the portions of the plan relating to regional demographic projections and integrated regional land use, housing, employment and transportation programs, measures and strategies, and is required to analyze and provide emissions data related to its planning responsibilities to appropriate local agencies such as South Coast AQMD, pursuant to Health and Safety Code Section 40460(b).

On September 3, 2020, the 2020-2045 RTP/SCS was adopted and the Final Program EIR was certified by SCAG (SCAG, 2020). Thus, SCAG's 2020 RTP/SCS and associated TCMs will be implemented regardless of the 2022 AQMP. However, the TCMs will become part of the SIP. Since the environmental impacts from the 2020 RTP/SCS and associated TCMs were analyzed in the Final Program EIR, the Draft 2022 AQMP Program EIR will evaluate potential cumulative impacts from implementing the 2022 AQMP and the TCMs evaluated in SCAG's Final Program EIR for the 2020 RTP/SCS.

In addition, CARB is developing the 2022 State SIP Strategy which describes the measures that CARB proposes to implement to reduce emissions needed to support attainment of the 70 ppb 8-hour ozone standard from State-regulated sources. These measures are focused on mobile sources, including on-road vehicles and off-road vehicles and equipment over which CARB has jurisdiction. The cumulative impact of CARB's SIP measures will also be evaluated in the Draft Program EIR.

XIX. c) Potentially Significant Impact. The 2022 AQMP may have the potential to create significant adverse impacts to human beings because it may create potentially significant adverse impacts in the following areas: air quality and GHGs, energy, hazards and hazardous materials impacts, hydrology and water resources, noise, and solid and hazardous waste, as well as cumulative impacts. Significant adverse impacts to any of these areas may have the potential to adversely affect public health. Potentially significant adverse environmental impacts that could cause substantial adverse effects on human beings, either directly or indirectly will be evaluated in the Draft Program EIR. If any impacts are concluded to be significant, evaluation of feasible mitigation measures and alternatives to the project will be included in the Draft Program EIR.

Conclusion

As previously discussed in Sections I. through XIX., the proposed project has the potential to cause significant adverse environmental effects to the environmental topics of air quality and GHGs, energy, hazards and hazardous materials impacts, hydrology and water resources, noise, and solid and hazardous waste, as well as cumulative impacts. Impacts for these environmental topic areas will be analyzed in further detail in the Draft Program EIR.

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APPENDIX A

SUMMARY OF PROPOSED CONTROL MEASURES IN DRAFT 2022 AQMP AND POTENTIAL IMPACTS

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Control Measure Number	Title	Pollutant	Effect of Implementation and Nature of Potential Impact(s)	Potential Adverse Impact(s)						
				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
R-CMB-01	Emission Reduction from Replacement with Zero Emission or Low NOx Appliances – Residential Water Heating	NOx	Installation of zero emission water heaters and low NOx technologies (when zero emission is infeasible) in new and existing residences may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity; 2) energy due to a potential increased demand for electricity which may be produced from natural gas; and 3) noise and solid waste during minor construction activities.		X	X			X	X
R-CMB-02	Emission Reduction from Replacement with Zero Emission or Low NOx Appliances – Residential Space Heating	NOx	Installation of zero emission space heaters and low NOx technologies (when zero emission is infeasible) in new and existing residences may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity; 2) energy due to a potential increased demand for electricity which may be produced from natural gas; and 3) noise and solid waste during minor construction activities.		X	X			X	X
R-CMB-03	Emission Reductions from Residential Cooking Devices	NOx	Installation of electric cooking devices, induction cooktops, or low-NOx burners in new and existing residences may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity; 2) energy due to a potential increased demand for electricity which may be produced from natural gas; and 3) noise and solid waste during minor construction activities.		X	X			X	X
R-CMB-04	Emission Reductions from Replacement with Zero Emission or Low NOx Appliances – Residential Other Combustion Sources	NOx	Installation of zero emission or low NOx technologies in new and existing residences to replace equipment such as pool heaters, dryers, grills, etc. may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity; 2) energy due to a potential increased demand for electricity which may be produced by natural gas; and 3) noise and solid waste during minor construction activities.		X	X			X	X

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Control Measure Number	Title	Pollutant	Effect of Implementation and Nature of Potential Impact(s)	Potential Adverse Impact(s)						
				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
C-CMB-01	Emission Reductions from Replacement with Zero Emission or Low NOx Appliances – Commercial Water Heating	NOx	Installation of zero emission water heaters and low NOx technologies (when zero emission is infeasible) in commercial buildings may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity; 2) energy due to a potential increased demand for electricity which may be produced from natural gas; and 3) noise and solid waste during minor construction activities.		X	X			X	X
C-CMB-02	Emission Reductions from Replacement with Zero Emission or Low NOx Appliances – Commercial Space Heating	NOx	Installation of zero emission space heaters and low NOx technologies (when zero emission is infeasible) in commercial buildings may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity; 2) energy due to a potential increased demand for electricity which may be produced by natural gas; and 3) noise and solid waste during minor construction activities.		X	X			X	X
C-CMB-03	Emission Reductions from Commercial Cooking Devices	NOx	Replacing gas burners with zero emission and low NOx technologies (e.g., electric cooking devices, induction cooktops, or low-NOx gas burner technologies) may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity; 2) energy due to a potential increased demand for electricity which may be produced by natural gas; and 3) noise and solid waste during minor construction activities.		X	X			X	X
C-CMB-04	Emission Reductions from Small Internal Combustion Engines	NOx	Incentivizing consumers to purchase zero emission ICEs may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity and increased use of hydrogen and natural gas; 2) energy due to a potential increased demand for electricity and hydrogen and natural gas; 3) hazards due to increase in hydrogen production; and 4) noise and solid waste during minor construction activities.		X	X	X		X	X

APPENDIX A: SUMMARY OF PROPOSED CONTROL MEASURES IN DRAFT 2022 AQMP AND POTENTIAL IMPACTS

Control Measure Number	Title	Pollutant	Effect of Implementation and Nature of Potential Impact(s)	Potential Adverse Impact(s)						
				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
C-CMB-05	NOx Reductions from Small Miscellaneous Commercial Combustion Equipment (Non-Permitted)	NOx	Incentivizing feasible zero emission and low NOx technologies for small combustion equipment may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity; 2) energy due to a potential increased demand for electricity; and 3) noise and solid waste during minor construction activities.		X	X			X	X
L-CMB-01	NOx Reductions for RECLAIM Facilities	NOx	Installation of NOx pollution control equipment including SCRs and low NOx burners may cause impacts to: 1) air quality and GHGs during construction and due to the potential use of ammonia during operation of SCR equipment, if installed, and the periodic replacement of catalyst; 2) energy due to a potential increased demand in electricity to operate new equipment; 3) hazards and hazardous materials due to the potential use of ammonia during operation of SCR equipment, if installed; 4) noise during construction; and 5) solid and hazardous waste due to potential replacement of burners during construction and spent SCR catalyst during operation.		X	X	X		X	X
L-CMB-02	Reductions from Boilers and Process Heaters (Permitted)	NOx	Installation of zero emission and low NOx technologies for boilers and heaters may cause impacts to: 1) air quality and GHGs during construction and due to the potential use of ammonia during operation of SCR equipment, if installed, and the periodic replacement of catalyst; 2) energy due to a potential increased demand in electricity which may be produced by natural gas; 3) hazards and hazardous materials due to the potential use of ammonia during operation of SCR equipment, if installed; 4) noise during construction; and 5) solid and hazardous waste due to disposal of replaced equipment and spent SCR catalyst during operation.		X	X	X		X	X

APPENDIX A: SUMMARY OF PROPOSED CONTROL MEASURES IN DRAFT 2022 AQMP AND POTENTIAL IMPACTS

				Potential Adverse Impact(s)						
Control Measure Number	Title	Pollutant	Effect of Implementation and Nature of Potential Impact(s)	No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
L-CMB-03	NOx Reductions from Permitted Non-Emergency Internal Combustion Engines (ICEs)	NOx	Installation of zero emission and low NOx technologies for non-emergency ICEs could result in the installation and operation of additional NOx pollution control equipment, including SCRs, and may cause impacts to: 1) air quality and GHGs during construction and due to the potential use of ammonia during operation of SCR equipment, if installed, and the periodic replacement of catalyst; 2) energy due to a potential increased demand in electricity to operate new equipment; 3) hazards and hazardous materials due to the potential use of ammonia during operation of SCR equipment, if installed; 4) noise during construction; and 5) solid and hazardous waste due to potential replacement of burners or equipment during construction and spent SCR catalyst during operation.		X	X	X		X	X
L-CMB-04	Emission Reductions from Emergency Standby Engines (Permitted)	NOx, VOC	Installation of zero emission and low NOx technology alternatives to emergency ICEs may cause impacts to: 1) air quality and GHGs during minor construction, and from utilities producing more electricity and hydrogen; 2) energy due to a potential increased demand for electricity and hydrogen which may be produced by natural gas and natural gas to operate new equipment; 3) hazards associated with the increased production of hydrogen; and 4) noise and solid waste during minor construction activities.		X	X	X		X	X
L-CMB-05	NOx Emission Reductions from Large Turbines	NOx	Installation of zero emission and low NOx emissions technologies for electric generating units such as fuel cells may cause impacts to: 1) air quality and GHGs during construction and from utilities producing more electricity and hydrogen; 2) energy impacts due to a potential increased demand for electricity and hydrogen; 3) hazards associated with increase hydrogen production; 4) hydrology and water quality if existing steam turbines are modified or replaced; 5) noise during construction; and 6) solid waste due to disposal of replaced equipment.		X	X	X	X	X	X

APPENDIX A: SUMMARY OF PROPOSED CONTROL MEASURES IN DRAFT 2022 AQMP AND POTENTIAL IMPACTS

Control Measure Number	Title	Pollutant	Effect of Implementation and Nature of Potential Impact(s)	Potential Adverse Impact(s)						
				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
L-CMB-06	NOx Emission Reductions from Electricity Generating Facilities	NOx	Replacement of boilers with lower-emitting turbines, installation of zero emission and low NOx emissions technologies, and the application of stricter emission requirements for diesel internal combustion engines may result in the installation and operation of additional NOx pollution control equipment, including SCRs which may cause impacts to: 1) air quality and GHGs during construction, due to the potential use of ammonia during operation of SCR equipment, if installed, and the periodic replacement of catalyst and from utilities producing more electricity and hydrogen; 2) energy due to a potential increased demand for electricity which may be produced by natural gas and hydrogen and natural gas to operate new equipment; 3) hazards and hazardous materials due to the potential use of ammonia during operation of SCR equipment, if installed, and increased hydrogen production; 4) hydrology and water quality if new steam turbines are installed; 5) noise during construction; and 6) solid waste due to disposal of replaced equipment and spent SCR catalyst during operation.		X	X	X	X	X	X
L-CMB-07	Emission Reductions from Petroleum Refineries	NOx	Installation of NOx pollution control equipment including Advanced SCRs and Ultra low-NOx burners, and electrification of certain refinery boilers or process heaters or steam-driven equipment such as pumps or blowers, may cause impacts to: 1) air quality and GHGs during construction and due to the potential use of ammonia during operation of SCR equipment, if installed, and the periodic replacement of catalyst; 2) energy due to a potential increased demand in electricity to operate new equipment; 3) hazards and hazardous materials due to the potential use of ammonia during operation of SCR equipment, if installed; 4) noise during construction; and 5) solid waste due to potential replacement of equipment/burners during construction and spent SCR catalyst during operation.		X	X	X		X	X

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
L-CMB-08	NOx Emission Reductions from Combustion Equipment at Landfills and Publicly Owned Treatment Works	NOx	Installation of lean pre-mixed combustion turbines, NOx pollution control equipment including SCRs and low-NOx burners on biogas fueled combustion equipment and/or routing landfill produced biogas to existing natural gas pipelines may cause impacts to: 1) air quality and GHGs during construction and due to the potential use of ammonia during operation of SCR equipment, if installed, and the periodic replacement of catalyst; 2) energy due to a potential increased demand in electricity to operate new equipment; 3) hazards and hazardous materials due to the potential use of ammonia during operation of SCR equipment, if installed; 4) noise during construction; and 5) solid waste due to potential replacement of equipment/burners during construction and spent SCR catalyst during operation.		X	X	X		X	X
L-CMB-09	NOx Reductions from Incinerators	NOx	Installation of low NOx and ultra low NOx burners for incinerators and other associated equipment may cause impacts to: 1) air quality and GHGs during minor construction activities; and 2) noise and solid waste during minor construction activities.		X				X	X
L-CMB-10	NOx Reductions from Miscellaneous Permitted Equipment	NOx	Replacement of existing equipment with zero emission technology and installation of NOx pollution control equipment including SCRs and low NOx/Ultra low NOx burners may cause impacts to: 1) air quality and GHGs during construction, from installing electricity charging infrastructure and due to the potential use of ammonia during operation of SCR equipment, if installed, the periodic replacement of catalyst, and from utilities producing more electricity; 2) energy due to a potential increased demand in electricity to operate new equipment which may be produced from natural gas; 3) hazards and hazardous materials due to the potential use of ammonia during operation of SCR equipment, if installed; 4) noise during construction; and 5) solid waste due to potential replacement of equipment/burners during construction and spent SCR catalyst during operation.		X	X	X		X	X

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
ECC-01	Co-Benefit from Existing and Future Greenhouse Gas Programs, Policies, and Incentives	NOx	Evaluating renewable energy targets with existing and further GHG emission reduction mechanisms, including market, incentive and rebate programs, and promoting the implementation and development of new technologies, which may involve the use of electricity in order to reduce emissions of criteria air pollutants and GHGs, may cause impacts to energy due to potential increased demand for electricity.			X				
ECC-02	Co-Benefits from Existing and Future Residential and Commercial Building Energy Efficiency Measures	NOx, VOC	Quantifying the criteria air pollutant and GHG emission reduction benefits from existing and future energy efficiency programs adopted by other regulatory authorities (e.g., improving weatherization and energy efficiency) is an administrative exercise with no impacts.	X						
ECC-03	Additional Enhancements in Reducing Existing Residential Building Energy Use	NOx, VOC	Incentivizing additional reductions in energy use associated with space heating, water heating, and other large residential energy sources through facilitating weatherization, replacing older appliances with highly efficient technologies and encouraging renewable energy adoption such as solar thermal and photovoltaics may reduce emissions of criteria air pollutants and GHGs but may also cause impacts to air quality and GHGs, noise, and solid waste during construction.		X				X	X
FUG-01	Improved Leak Detection and Repair	VOC	Implementation of advanced leak detection technologies including optical gas imaging devices (OGI), open path detection devices, and gas sensors for earlier detection of VOC emissions from leaks may cause impacts to air quality and GHGs during minor construction activities.		X					

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				Potential Adverse Impact(s)						
Control Measure Number	Title	Pollutant	Effect of Implementation and Nature of Potential Impact(s)	No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
FUG-02	Emission Reductions from Industrial Cooling Towers	VOC	Assessing the need for additional monitoring and practices to reduce industrial cooling tower VOC emissions by conducting a review of the emission inventory, costs for monitoring equipment, and identifying the control requirements established by other governmental agencies, is an administrative exercise with no impacts.	X						
CTS-01	Further Emission Reduction from Coatings, Solvents, Adhesives, and Lubricants	VOC	Revising the VOC content for select product categories and incentivizing the use of super-compliant zero emission and low NOx VOC materials and technologies and removing the VOC exemption status for parachlorobenzotrifluoride (PCBTF) and tert-butyl acetate (tBAc) to address toxicity concerns may result in reformulated products which may cause impacts to: 1) air quality (increased VOC emissions) and GHGs associated with the removal of the exemption for PCBTF and tBAc; 2) hazards and hazardous materials due to the potential use of more flammable materials; and 3) hydrology and water quality due to increase in water-based formulations.		X		X	X		
FLX-02	Stationary Source VOC Incentives	VOC	Installation of newer, lower-emitting equipment to replace older, higher-emitting equipment for area and stationary sources as a result of incentives may cause impacts to: 1) air quality and GHGs during minor construction activities; 2) energy due to a potential increased demand for electricity; and 3) noise and solid waste during minor construction activities.		X	X			X	X
BIO-01	Assessing Emissions from Urban Vegetation	VOC	Assessing the inventory of trees that are highly reactive and potent ozone precursors in order to determine whether tree planting programs would be necessary to promote the planting of low VOC emitting tree species is not expected to cause significant potential adverse environmental impacts.	X						

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
MCS-01	Application of All Feasible Measures	All Pollutants	Retrofitting existing equipment and installation of newer, lower-emitting equipment to replace older, higher-emitting equipment for sources as a result of new emission limits introduced through federal, state, or local regulations may cause impacts to: 1) air quality and GHGs during construction and due to the potential use of ammonia during operation of SCR equipment, if installed, and the periodic replacement of catalyst; 2) energy due to a potential increased demand in electricity to operate new equipment; 3) hazards and hazardous materials due to the potential use of ammonia during operation of SCR equipment, if installed; 4) noise during construction; and 5) solid and hazardous waste due to potential replacement of burners during construction and spent SCR catalyst during operation.		X	X	X		X	X
MCS-02	Wildfire Prevention	NOx, PM	Mechanical thinning and chipping activities during fuel reduction and removal efforts may cause impacts to: 1) air quality and GHGs associated with decomposition of greenwaste/woodwaste; 2) hazards (potential fire hazard during chipping and grinding activities); 3) hydrology (increased water use for composting); 4) noise due to chipping and grinding; and 5) solid waste (collected greenwaste/woodwaste).		X		X	X	X	X

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
FLX-01	Improved Education and Public Outreach	All Pollutants	Educating consumers about the effectiveness of energy conservation programs may influence consumer choices to select energy efficient products and appliances, install new lighting technology, apply “super-compliant” coatings, and plant low VOC-emitting trees but these activities may cause impacts associated with installing new appliances and lighting prior to the end of their useful lives, and planting trees to: 1) air quality and GHGs due to minor construction associated with installing new appliances and lighting prior to the end of their useful lives, and planting trees; 2) hazards and hazardous materials from installing new lighting prior to the end of their useful lives; 3) hydrology (water demand) due to an increased need for water from planting trees; 4) noise during construction associated with installing new appliances and lighting prior to the end of their useful lives, and planting trees; and 5) solid and hazardous waste from installing new appliances and lighting prior to the end of their useful lives, and planting trees.		X		X	X	X	X
EGM-01	Emission Reductions from New Development and Redevelopment (NOTE: Potential Indirect Source Rule and ports affected).	All Pollutants	Replacing or upgrading off-road construction equipment as part of development/redevelopment efforts may result in the use of zero-emission technologies in construction, the installation of charging and alternative fueling infrastructure, the use of alternative fuels; and the use construction equipment with low-emitting engines fitted with diesel PM filters, may cause impacts to: 1) air quality and GHGs during construction and the periodic replacement of diesel PM filters; 2) energy due to a potential increased demand in electricity to operate vehicles, rail, or new equipment; 3) hazards associated with the increased alternative fuels production (e.g., hydrogen); 4) noise during construction; and 5) solid waste due to potential replacement of diesel PM filters.		X	X	X		X	X

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
EGM-02	Emission Reductions from Projects Subject to General Conformity Requirements	All Pollutants	Impacts from seeking emission reductions by eliminating the SIP set-aside account for general conformity purposes and setting up a new mechanism to offset emission increases, via Voluntary Emission Reduction Agreements, or the purchase of ERCs are speculative because projects that would implement voluntary emission reductions and the method of achieving the desired reductions are unknown.	X						
EGM-03	Emission Reductions from Clean Construction Policy	All Pollutants	Incentivizing the use of zero emission and low NOx equipment by adopting a voluntary measure for municipalities and public agencies to reduce emissions generated by construction activities may include use of zero emission and low NOx construction equipment, dust control, alternative fuels, diesel PM filtration, low-emitting engines, and low VOC materials. Implementation of this control measure may cause impacts to: 1) air quality and GHGs from installing electricity charging infrastructure and utilities producing more electricity; 2) energy due to a potential increased demand for electricity which may be produced from natural gas; and 3) noise and solid waste during minor construction activities.		X	X	X		X	X
MOB-01	Emission Reductions at Commercial Marine Ports	NOx	Infrastructure development required to achieve emission reductions at commercial marine ports from on-road heavy-duty vehicles, ocean-going vessels, cargo handling equipment, locomotives, and harbor craft may cause impacts to: 1) air quality and GHGs from construction activities and the combustion of alternative fuels; 2) energy due to increased demand for electricity (for vehicles, rail, and equipment) and natural gas; 3) hazards and hazardous materials associated with engine replacements; 4) noise during construction; and 5) solid and hazardous waste associated with engine replacements.		X	X	X		X	X

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
MOB-02A	Emission Reductions at New Rail Yards and Intermodal Facilities	NOx, PM	Infrastructure development required to achieve emission reductions at new rail yards and intermodal facilities from on-road heavy-duty vehicles, off-road equipment, and locomotives may cause impacts to: 1) air quality and GHGs from construction activities and the combustion of alternative fuels; 2) energy due to increased demand for electricity (for vehicles, rail, and equipment) and natural gas; 3) hazards and hazardous materials associated with engine replacements; 4) noise during construction; and 5) solid and hazardous waste associated with engine replacements.		X	X	X		X	X
MOB-02B	Emission Reductions at Existing Rail Yards and Intermodal Facilities	NOx, PM	Infrastructure development required to achieve emission reductions at existing rail yards and intermodal facilities from on-road heavy-duty vehicles, off-road equipment, and locomotives may cause impacts to: 1) air quality and GHGs from construction activities and the combustion of alternative fuels; 2) energy due to increased demand for electricity (for vehicles, rail, and equipment) and natural gas; 3) hazards and hazardous materials associated with engine replacements; 4) noise during construction; and 5) solid and hazardous waste associated with engine replacements.		X	X	X		X	X
MOB-03	Emission Reductions at Warehouse Distribution Centers	NOx	Reducing emissions and exposure of mobile sources associated with warehouse distribution centers by requiring actions or investments to offset the emissions of the mobile sources (trucks) attracted to the warehouses has been executed in Rule 2305 which was adopted by the South Coast AQMD Governing Board on May 7, 2021. The environmental effects from implementing Rule 2305 were previously analyzed in the certified Final Environmental Assessment. Since this control measure does not propose any additional elements for achieving emission reductions at warehouse distribution centers, no new impact areas have been identified.	X						

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
MOB-04	Emission Reductions at Commercial Airports	All Pollutants	Deploying additional cleaner technologies, such as increasing efficiencies, implementing air quality improvement options or by deploying zero emission and low NOx technologies, alternative fuels, diesel PM filters, and low-emitting engines for additional equipment beyond the commitments made in the existing Memoranda of Understanding with the commercial airports may cause impacts to: 1) air quality and GHGs during minor construction activities and from utilities producing more electricity and hydrogen; 2) energy due to a potential increased demand for electricity and hydrogen; 3) hazards and hazardous materials associated with increased production of alternative fuels (e.g., hydrogen); and 4) noise and solid waste during construction.		X	X	X		X	X
MOB-05	Accelerated Retirement of Older Light-Duty and Medium-duty Vehicles	VOC, NOx, CO	Accelerating the retirement of up to 2,000 light- and medium-duty vehicles per year through the Replace Your Ride Program and accelerating the penetration of zero and near-zero emission vehicles may cause impacts to: 1) air quality and GHGs during construction of infrastructure, from scrapping retired vehicles, and from utilities producing more electricity and refineries manufacturing more hydrogen; 2) energy due to potential increased demand for electricity produced by, natural gas, and hydrogen; 3) hazards and hazardous materials from the use of alternative fuels and fuel additives and scrapping retired vehicles; 4) hydrology and water quality(surface and ground water) from accidental spills; 5) noise during construction; and 6) solid and hazardous waste from scrapping retired vehicles and disposal of batteries and fluids.		X	X	X	X	X	X

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
MOB-06	Accelerated Retirement of Older On-Road Heavy-duty Vehicles	NOx, PM	Retiring older, heavy-duty vehicles and replacing them with low-NOx vehicles fueled with CNG or other alternative fuels (e.g., battery electric and hydrogen fuel cells) may cause impacts to: 1) air quality and GHGs from construction activities associated with installing electric charging infrastructure, scrapping retired vehicles, combusting alternative fuels, and refineries manufacturing more hydrogen and other alternative fuels; 2) energy due to potential increased demand for electricity produced from, natural gas, and hydrogen; 3) hazards and hazardous materials from scrapping retired vehicles and disposal of batteries and fluids and increased production of alternative fuels; 4) hydrology and water quality (surface and ground water) from disposal of batteries and fluids and accidental spills; 5) noise during construction; and 6) solid and hazardous waste from scrapping retired vehicles and disposal of batteries and fluids.		X	X	X	X	X	X
MOB-07	On-Road Mobile Source Emission Reduction Credit Generating Program	NOx, PM	Incentivizing the early deployment of zero emission and low NOx emission heavy-duty trucks through the generation of mobile source emission credits may cause impacts to: 1) air quality and GHGs from construction activities associated with installing electric charging infrastructure, scrapping retired vehicles, combusting alternative fuels, and refineries manufacturing more hydrogen and other alternative fuels; and 2) energy due to potential increased demand for electricity, natural gas and hydrogen; 3) hazards and hazardous materials from scrapping retired vehicles and disposal of batteries and fluids and increased production of alternative fuels (e.g., hydrogen); 4) hydrology and water quality (surface and ground water) from disposal of batteries and fluids and accidental spills; 5) noise during construction ; and 6) solid and hazardous waste from scrapping retired vehicles and disposal of batteries and fluids.		X	X	X	X	X	X

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
MOB-08	Small Off-Road Engine Equipment Exchange Program	VOC, NOx, CO	Promoting the accelerated turn-over of in-use small off-road engines and other engines, such as gasoline- and diesel-powered commercial lawn and garden equipment through expanded voluntary exchange programs will contribute to the retirement of older off-road engines which may cause impacts to: 1) air quality and GHGs from scrapping retired equipment; 2) energy due to potential increased demand for electricity; 3) hazards and hazardous materials from scrapping retired equipment and disposal of batteries and fluids; 4) hydrology and water quality (surface and ground water) from disposal of batteries and fluids and accidental spills; and 5) solid and hazardous waste from scrapping retired equipment and disposal of batteries and fluids.		X	X	X	X		X
MOB-09	Further Emission Reductions from Passenger Locomotives	NOx, PM	Promoting earlier and cleaner replacement or upgrade of existing passenger locomotives capable of achieving Tier 4 emission standards and supporting the development of zero emission or low NOx technologies (e.g., battery electric and hydrogen fuel cells) may cause impacts to: 1) air quality and GHGs from construction activities installing electric charging infrastructure and the combustion of alternative fuels, and refineries manufacturing more hydrogen and other alternative fuels; 2) energy due to potential increased demand for electricity produced from natural gas, and hydrogen; 3) hazards and hazardous materials from scrapping retired locomotives and increased production and use of alternative fuels; 4) noise during construction; and 5) solid and hazardous waste from scrapping retired locomotives.		X	X	X		X	X

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				No Impact	Air Quality/ GHG	Energy	Hazards/ Hazardous Materials	Hydrology/ Water Quality	Noise	Solid/ Hazardous Waste
MOB-10	Off-Road Mobile Source Emission Reduction Credit Generation Program	NOx, PM	Accelerating the deployment of zero (e.g. battery-electric or fuel cell powered equipment) and low NOx emission off-road mobile equipment (e.g., 90 percent cleaner than Tier 5) that do not receive public funding may cause impacts to: 1) air quality and GHGs from construction activities installing electric charging infrastructure and the combustion of alternative fuels, and refineries manufacturing more hydrogen and other alternative fuels; 2) energy due to potential increased demand for electricity, produced from natural gas, and hydrogen; 3) hazards and hazardous materials associated with the increased production and use of alternative fuels and fuel additives; 4) noise during construction; and 5) solid and hazardous waste from scrapping retired equipment.		X	X	X		X	X
MOB-11	Emission Reductions from Incentive Programs	NOx, PM	Allowing the South Coast AQMD to take credit for emission reductions for SIP purposes achieved through past and future projects (e.g., replacing heavy-duty vehicle/equipment, installing retrofit units, and repowering engines for marine vessels, locomotives, trucks, school buses, agricultural equipment, construction equipment, commercial harbor craft, airport support equipment, and oil drilling equipment) is an administrative exercise which is not expected to cause any environmental impacts.	X						
MOB-12	Pacific Rim Initiative for Maritime Emission Reductions		This measure seeks to recognize ocean-going vessel emission reductions that are the result of voluntary actions and may be considered surplus to the emission reduction commitments of the State SIP Strategy "Federal Action: Cleaner fuel and Vessel Requirements for Ocean-Gong-Vessels." Allowing the South Coast AQMD to take credit for emission reductions achieved through this SIP measure is an administrative exercise which is not expected to cause any environmental impacts.	X						

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MOB-13	Fugitive VOC Emissions from Tanker Vessels	VOC	Installing electronic monitors for pressure/vacuum valves, and inspecting for leaks using analyzers or imaging camera when entering South Coast AQMD waters will increase ongoing monitoring, inspection, and repair activities without causing any adverse environmental impacts.	X						
MOB-14	Rule 2202 – On-Road Motor Vehicle Mitigation Options	VOC, NOx, CO	Amending Rule 2202 to take into account emission reductions due to telecommuting strategies such as allowing employees to work from home is expected to provide a benefit to air quality and GHGs without causing any adverse environmental impacts.	X						
MOB-15	Zero-Emission Infrastructure for Mobile Sources	All Pollutants	Developing a work plan to support and accelerate the deployment of zero emissions infrastructure needed to implement the other control measures/strategies which promote the widespread adoption of zero-emission vehicles and equipment is not expected to cause any additional impacts to areas that were previously identified for the individual control measures which target zero emissions technology.	X						