Proposed

State of California
Air Resources Board

Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate

Resolution 22-5

February 24, 2022

Agenda Item No.: 22-3-3

Whereas, sections 39600 and 39601 of the Health and Safety Code authorize the California Air Resources Board (CARB or Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

Whereas, section 39618 of the Health and Safety Code classifies refrigerated trailers as off-road mobile sources to be regulated by CARB on a statewide basis;

Whereas, sections 39658, 39659, 39666, and 39667 of the Health and Safety Code authorize the Board to establish airborne toxic control measures for substances identified as toxic air contaminants;

Whereas, sections 43013 and 43018 of the Health and Safety Code authorize the Board to adopt standards and regulations for the control of air contaminants and sources of air pollution from off-road or nonvehicle engine categories, including TRUs, to the extent permitted by federal law, to attain State air quality standards by the earliest practicable date;

Whereas, section 43019.1 of the Health and Safety Code authorizes CARB to adopt a schedule of fees to cover its reasonable costs associated with the certification, audit, and compliance of off-road or nonvehicular engines and equipment, aftermarket parts, and emissions control components sold in the State;

Whereas, on February 26, 2004, CARB adopted the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate (TRU ATCM; title 13, California Code of Regulations, section 2477);

Whereas, the California and federal off-road particle matter (PM) emission standard for engines less than 25 horsepower is 15 times higher (i.e., less stringent) than the standard for engines greater than 25 horsepower while sales of trailer TRUs, domestic shipping container

TRUs, railcar TRUs, and TRU generator sets equipped with less than 25 horsepower engines have substantially increased since 2004;

Whereas, the Legislature enacted Assembly Bill (AB) 32 (Nuñez, Chapter 488, Statutes of 2006), which declares that global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California, and requires a comprehensive multi-year program to reduce California's greenhouse gas (GHG) emissions to 1990 levels by 2020, and to maintain the emission levels and continue reductions thereafter;

Whereas, the Legislature enacted Senate Bill (SB) 32 (Pavley, Chapter 249, Statutes of 2016), to expand upon AB 32 to reduce GHG emissions to 40 percent below the 1990 level by 2030;

Whereas, in December 2017, the Board adopted California's 2017 Climate Change Scoping Plan, which recommends the transition to zero-emission technology in the transportation sector as a measure to meet the State's air quality and GHG emissions goals and enable long-term de-carbonization of the transportation sector;

Whereas, the Legislature enacted SB 350 (De León, Chapter 547, Statutes of 2015), directing the California Public Utilities Commission to take actions to support widespread transportation electrification;

Whereas, the California Public Utilities Commission unanimously approved three transportation electrification programs to support the electrification of the medium-and heavy-duty sectors, including TRUs. Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric have been authorized to spend $266 million, $360 million, and $155 million, respectively over a five-year period;

Whereas, the 2016 Sustainable Freight Action Plan establishes clear targets to improve freight efficiency, transition to zero-emission technologies, and increase competitiveness of California's freight system;

Whereas, the Legislature enacted SB 1383 (Lara, Chapter 395, Statutes of 2016), requiring California to reduce emissions of hydrofluorocarbons (HFC) to 40 percent below 2013 levels by 2030, and requiring and further authorizing CARB to approve and implement the Short-Lived Climate Pollutant Strategy (SLCP Strategy);

Whereas, CARB adopted the SLCP Strategy in March 2017, which identified reducing HFCs as an important part of SLCP reduction efforts and calls for a reduction in HFCs by 2030;

Whereas, TRUs produce HFC emissions when refrigerant leaks from the unit due to normal wear and fatigue of refrigerant fittings;

Whereas, there are currently no restrictions on high-global warming potential refrigerants in transport refrigeration applications in California, but alternative refrigerants with lower-global warming potential values are technically feasible and commercially-available;

Whereas, in March 2017, the Board adopted the State Strategy for the State Implementation Plan, which includes a measure to require the use of cleaner near-zero and zero-emission technologies for TRUs to achieve established near and long-term air quality and climate mitigation targets;

Whereas, challenges remain in meeting the federal ambient air quality standards for ozone and fine particulate matter (PM2.5) in several areas of the State, including the South Coast Air Basin and San Joaquin Valley;

Whereas, the near-term targets for these areas are a 2023 deadline for attainment of the 80 parts per billion (ppb) 8-hour ozone standard, 2024 for the 35 microgram per cubic meter (µg/m3) 24-hour PM2.5 standard, and 2025 for the 12 µg/m3 annual PM2.5 standard. There are also mid-term attainment years of 2031 and 2037 for the more recent 8-hour ozone standards of 75 ppb and 70 ppb, respectively;

Whereas, the Legislature enacted AB 617 (C. Garcia, Chapter 136, Statutes of 2017), which highlights the need for further emission reductions in communities with high exposure burdens, such as those located near facilities where TRUs operate;

Whereas, the October 2018 Community Air Protection Blueprint (Blueprint) adopted by the Board to implement AB 617 (C. Garcia, Stats. 2017) identifies the transition of diesel-powered TRUs to zero-emission operation as a near-term action to reduce emissions and exposure in disproportionately burdened communities throughout the State;

Whereas, pursuant to AB 617 and consistent with the Blueprint, multiple community emissions reduction programs adopted by air districts and approved by the Board for high emissions exposure burdened communities selected by the Board to develop such programs, include specific measures to reduce emissions and exposures from TRU's and warehouse operations;

Whereas, many of the communities near facilities where TRUs operate bear a disproportionate health burden due to their close proximity to emissions from the diesel engines that power TRUs. Cumulative health effects occur when multiple facilities are within a short distance of one another;

Whereas, Executive Order N-79-20 set a goal for 100 percent zero-emission from off-road vehicles and equipment by 2035 where feasible to put the State on the path to carbon neutrality;

Whereas, CARB's Revised Draft 2020 Mobile Source Strategy identifies the level of cleaner technologies needed for the State to meet its various clean air goals and includes a rapid electrification scenario for TRUs, increasing 10 percent each year beginning in 2024, and highlighting the need to transition diesel-powered TRUs to zero-emission technology;

Whereas, truck TRUs are generally used for local and regional delivery and return to a home base facility each night, and are well-suited for zero-emission technology because, based on the operating range of currently available zero-emission truck TRU technology, they would not require additional refueling or recharging infrastructure outside their home terminals or distribution centers before dispatch;

Whereas, staff proposed amendments to the TRU ATCM (Proposed Amendments), as set forth in Appendix A to the Initial Statement of Reasons (ISOR) released to the public on July 27, 2021;

Whereas, the ISOR presents, among other things, the rationale and basis for the Proposed Amendments, as set forth in Appendix A to the ISOR released to the public on July 27, 2021, and identifies the data, reports, and information relied upon for the Proposed Amendments;

Whereas, the Proposed Amendments would achieve additional emission and health risk reductions by requiring the transition of diesel-powered truck TRUs to zero-emission; a PM standard for newly-manufactured trailer TRUs, domestic shipping container TRUs, railcar TRUs, and TRU generator set engines; and the use of lower-global warming potential refrigerant;

Whereas, the Proposed Amendments aim to improve compliance and enforceability of the TRU ATCM by adding new requirements for owners and operators of applicable facilities where TRUs operate, expanded TRU reporting for all TRUs that operate in California (including out-of-state based TRUs), vehicle owners and drivers, and compliance labels;

Whereas, the Proposed Amendments include TRU operating fees and applicable facility registration fees to cover CARB's reasonable costs associated with the certification, audit, and compliance of TRUs, as allowed by section 43019.1 of the Health and Safety Code;

Whereas, staff estimate that, between 2022 to 2034, the Proposed Amendments would reduce statewide TRU emissions by approximately 1,258 tons of PM2.5, 3,515 tons of oxides of nitrogen (NOx), and 1.42 million metric tons of GHG;

Whereas, staff estimate that the PM2.5 and NOx emission reductions as a result of the Proposed Amendments would provide a benefit of $1.75 billion in avoided premature death and health costs from 2022 to 2034;

Whereas, staff performed a health risk assessment to evaluate the benefits of the Proposed Amendments regarding potential cancer risk resulting from direct exposure to diesel PM from TRUs operating at cold storage warehouses and grocery stores;

Whereas, staff estimate that the Proposed Amendments would reduce potential individual residential cancer risk from TRU operations at cold storage warehouses by approximately 12 percent in 2024 and 58 percent after full implementation in 2030;

Whereas, staff estimate that the Proposed Amendments would reduce potential individual residential cancer risk from TRU operations at grocery stores (with 7 daily trucks, 2 daily trailers, and 1 seasonal trailer) by approximately 13 percent in 2024 and 72 percent after full implementation in 2030;

Whereas, staff estimate that the total benefits in avoided damages caused by GHG emissions as a result of the Proposed Amendments range from $29 million to $134 million from 2022 to 2034, using the Social Cost of Carbon developed by the United States Government (Interagency Working Group on the Social Cost of Carbon);

Whereas, the Board has considered the analysis of economic impact of the Proposed Amendments, which is estimated to be $850.2 million from 2022 to 2034;

Whereas, staff met and worked with members of impacted communities, environmental justice advocates, local air districts, TRU owners and operators, trade associations, TRU manufacturers, TRU dealers and service centers, truck and trailer dealers, truck and trailer leasing companies, freight brokers, forwarders, shippers, receivers, freight facility owners and operators, and the public in developing the Proposed Amendments;

Whereas, staff held eight public workshops, three work group meetings, and over 160 meetings and calls with stakeholders during the regulatory development process; and

mailed over 40,000 postcards to facilities with refrigerated operations potentially affected by the Proposed Amendments;

Whereas, a public hearing and other administrative proceedings have been held according to the provisions of the Administrative Procedures Act, Chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

Whereas, CARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary for Natural Resources under Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA; California Code of Regulations, title 14, section 15251(d)), and CARB conducts its CEQA review according to this certified program (California Code of Regulations, title 17, sections 60000-60007);

Whereas, CARB prepared a draft environmental analysis under its certified regulatory program for the Proposed Amendments entitled *Draft Supplemental Environmental Analysis Prepared for the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate* (Draft Supplemental EA), and circulated it as Appendix D to the Staff Report for more than 45 days from July 27, 2021 through September 19, 2021;

Whereas, the Draft Supplemental EA concluded that implementation of the Proposed Amendments has the potential to result in: beneficial impacts to air quality (long-term or operational related), energy demand (long-term or operational related), GHG emissions and climate change; less than significant impacts, or no impacts, to energy demand (short-term or construction related), hazards and hazardous materials (long-term or operational related), land use and planning, mineral resources (short-term or construction related), population and housing, public services, recreation, and wildfire; and potentially significant impacts to aesthetics, agriculture and forest resources, air quality (long-term or operational related), biological resources, cultural and tribal resources, geology and soils, hazards and hazardous materials (short-term or construction related), hydrology and water quality, mineral resources (long-term or operational related), noise, transportation, and utilities and service systems;

Whereas, on September 23, 2021, the Board conducted a public hearing on the Proposed Amendments and the Draft Supplemental EA prepared for the proposal;

Whereas, following the public hearing, the Board adopted Resolution 21-18 directing the Executive Officer to make any additional appropriate conforming modifications, available for public comment, with any additional supporting documents and information, for a period of at least 15 days. The Executive Officer was further directed to consider written comments submitted during the public review period and make any additional appropriate conforming modifications available for public comment for at least 15 days, evaluate all comments received during the public comment periods, including comments on the Draft Supplemental EA, and prepare written responses to EA comments as required by CARB's certified regulations at California Code of Regulations, title 17, sections 60000-60007 and Government Code section 11346.9(a). The Executive Officer was directed to present to the Board, at a subsequently scheduled public hearing, staff's written responses to any comments on the Draft Supplemental EA, along with the Final Supplemental EA, for consideration for approval, and the finalized amendments for consideration for adoption;

Whereas, following the Board hearing, the modified regulatory language and supporting documentation were circulated for a 15-day public comment period, with the changes to the originally proposed text clearly indicated, according to provisions of California Code of Regulations, title 1, section 44 and Government Code section 11340.85, from December 22, 2021 through January 6, 2022;

Whereas, staff reviewed written comments received on the Draft Supplemental EA and prepared written responses to those comments in a document entitled *Response to Comments on the Draft Supplemental Environmental Analysis Prepared for the Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate* (Response to EA Comments);

Whereas, on February 18, 2022, staff posted on the rulemaking page the Final Supplemental EA and the Response to EA Comments;

Whereas, prior to the duly noticed public hearing held on February 24, 2022, staff presented the Final Supplemental EA and the Response to EA Comments, as released to the public on February 18, 2022, to the Board for consideration;

Whereas, a public hearing and other administrative proceedings have been held according to the provisions of Chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code; and

Whereas, in consideration of the ISOR, written comments, and public testimony, the Board finds that:

The Proposed Amendments meet the statutory requirements to establish airborne toxic control measures for substances identified as toxic air contaminants as identified in sections 39658, 39659, 39666, and 39667 of the Health and Safety Code;

The Proposed Amendments meet the statutory requirements to adopt standards and regulations for the control of air contaminants and sources of air pollution from off-road or nonvehicle engine categories, including TRUs, to the extent permitted by federal law, to attain State air quality standards by the earliest practicable date, as identified in sections 43013 and 43018 of the Health and Safety Code;

The Proposed Amendments are expected to reduce statewide TRU emissions by approximately 1,258 tons of PM2.5, 3,515 tons of oxides of nitrogen, and 1.42 million metric tons of GHGs from 2022 to 2034;

The Proposed Amendments are estimated to result in a total net cost of $850.2 million compared to an estimated benefit of $1.75 billion in avoided premature death and health costs from 2022 to 2034;

The Proposed Amendments are expected to reduce potential individual residential cancer risk from TRU operations at cold storage warehouses by approximately 12 percent in 2024 and 58 percent after full implementation in 2030;

The Proposed Amendments are expected to reduce potential individual residential cancer risk from TRU operations at grocery stores (with 7 daily trucks, 2 daily trailers, and 1 seasonal trailer) by approximately 13 percent in 2024 and 72 percent after full implementation in 2030;

The Proposed Amendments are expected to provide an estimated benefit in avoided damages caused by GHG emissions of between $29 million and $134 million from 2022 to 2034, using the Social Cost of Carbon;

The Proposed Amendments were developed in an open public process, in consultation with affected parties, through numerous public workshops, individual meetings, and other outreach efforts, and these efforts are expected to continue;

No reasonable alternatives to the Proposed Amendments considered to date, or that have otherwise been identified and brought to the attention of CARB, would be more effective at carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected entities than the Proposed Amendments; and

The Proposed Amendments are consistent with CARB's environmental justice policies and do not disproportionately impact people of any race, culture, or income.

Now, therefore, be it resolved that the Board hereby certifies that the Final Supplemental EA, as released to the public February 18, 2022, was completed in compliance with CARB's certified regulatory program to meet the requirements of CEQA, reflects the agency's independent judgment and analysis, and was presented to the Board whose members reviewed and considered the information therein before taking action to approve the Proposed Amendments.

Be it further resolved that the Board approves the Response to EA Comments as released to the public on February 18, 2022.

Be it further resolved that in consideration of the Final Supplemental EA, the Response to EA Comments, and the entirety of the record, the Board adopts the Findings and Statement of Overriding Considerations set forth in Attachment A to this resolution.

Be it further resolved that the Board hereby adopts amendments to sections 2477, 2477.1, 2477.2, 2477.3, 2477.4, 2477.5, 2477.6, 2477.7, 2477.8, 2477.9, 2477.10, 2477.11, 2477.12, 2477.13, 2477.14, 2477.15, 2477.16, 2477.17, 2477.18, 2477.19, 2477.20, and 2477.21, Title 13, California Code of Regulations, and new sections 2477.22, 2477.23, and 2477.24, Title 13, California Code of Regulations, as released to the public on December 22, 2021.

Be it further resolved that the Board directs the Executive Officer to make any additional conforming modifications that are appropriate available for public comment, with any additional supporting documents and information, for a period of at least 15 days. The Executive Officer shall consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days. The Executive Officer may present the regulation to the Board for further consideration if he determines it is warranted, and if not, the Executive Officer shall take final action to adopt the regulation after addressing all appropriate modifications.

Be it further resolved that if there is a possibility that any modifications to the regulation made available for additional 15-day public comment periods may affect the conclusion of the environmental analysis, the Executive Officer shall prepare and circulate any additional environmental analysis to the extent required by CARB's regulations at California Code of Regulations, title 17, section 60004.

Be it further resolved that the adopted regulatory text may be further revised with non-substantial or grammatical changes, which will be added to the rulemaking record and indicated as such.

Be it further resolved that CARB staff shall continue outreach efforts to ensure that affected industry are aware of the requirements of the Proposed Amendments, with a focus on owner-operators and available incentive funding opportunities.

Be it further resolved that the Board recognizes the current logistics issues that have affected availability of parts and equipment and directs staff, in implementing this regulation, to continue to monitor and consider whether ongoing issues are causing delays in procuring compliant equipment.

Be it further resolved that CARB staff shall continue to assess zero-emission technologies for trailer TRUs, domestic shipping container TRUs, railcar TRUs, TRU generator sets, and direct-drive refrigeration units (in which the compressor is powered from the vehicle's diesel engine). The technology assessment will inform the development of a subsequent regulation, with a goal for Board consideration in 2025, to transition trailer TRUs, domestic shipping container TRUs, railcar TRUs, TRU generator sets, and direct-drive units to zero-emission technology by 2035 where feasible, as directed by Executive Order N-79-20. CARB shall ensure the public process for the upcoming regulation includes CARB's new comprehensive community engagement model and training curriculum. CARB shall also ensure the regulation recognizes early adopters of advanced TRU technologies and emphasizes emission reductions within disadvantaged communities to the maximum extent feasible.

Be it further resolved that the Board recognizes the importance of identifying and committing additional resources to addressing the need for infrastructure and supporting actions to make a full transition to a zero-emission transportation system. CARB is committed to continue working with the California Energy Commission, the California Public Utilities Commission, the Governor's Office of Business Development, local and regional government, TRU manufacturers, facilities, and fleets to accelerate the adoption of zero-emission TRU technologies and expansion of zero-emission fueling infrastructure. CARB shall continue working on Agency Zero-Emission Vehicle Action Plans that complement California's zero-emission vehicle market development and with our sister agencies in helping them complete their respective action plans.

Be it further resolved that the Board recognizes the importance of identifying and committing additional resources in addressing the need for compatibility between TRU equipment and charging connectors. For that reason, CARB is committed to working with TRU manufacturers, fleets, charger and connector manufacturers, local permitting agencies, and electric utilities. CARB shall also work with the California Energy Commission and the California Public Utilities on equipment to grid operations that have the potential to support consistent load and increase the overall return on infrastructure investment.

Be it further resolved that the Board directs the Executive Officer to finalize the Final Statement of Reasons, submit the completed rulemaking package to the Office of Administrative Law, and transmit the Notice of Decision with the Response to EA Comments to the Secretary of the Natural Resources Agency for posting.

Resolution 22-5

February 24, 2022

Identification of Attachments to the Board Resolution

Attachment A: Findings and Statement of Overriding Considerations

ATTACHMENT A

PROPOSED

FINDINGS and STATEMENT OF OVERRIDING CONSIDERATIONS

Introduction

The California Air Resources Board (CARB), as the lead agency for the *Proposed Amendments to the Airborne Toxic Control Measure (ATCM) for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate* (Proposed Amendments or Proposed Project), prepared a Draft Supplemental Environmental Analysis (EA) in accordance with its certified regulatory program (Cal. Code Regs., tit. 17, §§ 60000 – 60008) to comply with the requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code, §21000, *et seq*.). The Draft EA, entitled *Draft Supplemental Environmental Analysis prepared for the Proposed Amendments to the Airborne Toxic Control Measure (ATCM) for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate*, included as Appendix D to the Staff Report (Initial Statement of Reasons) for the Proposed Regulation, provided an analysis of the potential environmental impacts associated with the Proposed Amendments. Following circulation of the Draft EA for a public review and comment period from July 27, 2021, through September 19, 2021, CARB prepared the *Final Environmental Analysis prepared for Proposed Amendments to the Airborne Toxic Control Measure (ATCM) for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities where TRUs Operate* (Final EA) which includes minor revisions to the Draft EA. While updates have been made to the EA to ensure it reflects the Proposed Amendments as accurately as possible, these changes merely clarify, amplify, or make insignificant modifications to the otherwise-adequate Draft EA. These modifications would not result in any new reasonably foreseeable significant environmental impacts or substantially increase the severity of an identified environmental impact. The Draft EA's findings, overall significance conclusions, mitigation measures and alternatives adequately address the environmental review for the proposed modifications. Therefore, there is no significant new information that would require the EA to be recirculated. The Final EA was posted on CARB's webpage on February 18, 2021.

This statement of findings and overriding considerations was prepared to comply with CEQA's requirement to address the environmental impacts identified in the Final EA. (Pub. Resources Code, §§ 21081, 21081.6, Cal. Code Regs, tit. 14, §§ 15091, 15093.) The Final EA is based on the expected compliance responses of the regulated entities covered by the Proposed Amendments. Although the policy aspects and requirements of the Proposed Amendments would not directly change the physical environment, there are potential indirect physical changes to the environment that could result from reasonably foreseeable actions undertaken by entities in response to the Proposed Amendments. These indirect impacts are the focus of the programmatic-level impacts analysis in the Final EA.

Collectively, across all categories, the Final EA concluded that the reasonably foreseeable compliance responses associated with the Proposed Amendments could result in the following short-term and long-term impacts: beneficial impacts to air quality (operational impacts or long-term), energy demand (operational related or long-term), and greenhouse gas emissions and climate change; less than significant impacts, or no impacts, to energy demand (construction-related or short-term), hazards and hazardous materials (operational related or long-term), land use, mineral resources (construction related or short-term), population, employment and housing, public services, recreation and wildfire; and potentially significant adverse impacts to aesthetics, agriculture and forestry resources, air quality (construction related or short-term), biological resources, cultural resources and tribal resources, geology and soils, hazards and hazardous materials (construction related or short-term), hydrology and water quality, mineral resources (operational related or long-term), noise and vibration, transportation and traffic, and utilities and service systems. The potentially significant and unavoidable adverse impacts are disclosed for both short-term, construction-related activities and long-term operational activities, which is why some resource areas are identified above as having both less-than-significant impacts and potentially significant impacts.

CARB's certified regulatory program requires that before adoption of an action for which significant adverse environmental impacts have been identified during the review process, CARB consider feasible mitigation measures and alternatives that could substantially reduce the impacts. (Cal. Code Regs, tit. 17, §60004.2.) CEQA places the burden on the approving agency to affirmatively show that it has considered feasible mitigation and alternatives that can lessen or avoid identified impacts through a statement of findings for each identified significant impact. (Pub. Resources Code, §21081.) CEQA Guidelines section 15091 provides direction on the content of the statement of findings. That section states that one or more of the following findings should be identified for each impact:

- Changes or alterations have been required in, or incorporated into, such projects which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency, or can and should be adopted by such other agency.

- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the environmental impact report.

The potential adverse impacts identified in this programmatic level EA are potential indirect impacts associated with the compliance responses reasonably foreseeable in response to the Proposed Amendments based on currently available information. The ability to determine site- or project-specific impacts of projects carried out by third parties and the authority to require feasible mitigation lies with those agencies with authority to approve

such actions, e.g. local permitting authorities in city or county governments and local air districts. CARB does not have the ability to determine with any specificity the project level impacts, nor the authority to require project-level mitigation in approving the Proposed Amendments, as discussed in the findings below.

An agency may approve a project with unavoidable (unmitigated) adverse environmental impacts. When doing so, CEQA requires the agency to make a statement in the record of its views on the ultimate balancing of the merits of approving the project despite the environmental impacts in a "statement of overriding considerations". (Pub. Resources Code, §21081(b); Cal. Code Regs, tit. 14, §15093.) The following presents the CARB Board's (Board) statement of findings for each significant adverse impact identified in the Final EA, accompanied by a brief explanation, and its statement of overriding considerations.

STATEMENT OF FINDINGS

The Board has independently reviewed and considered the entire record, including the information contained in the Final EA, public testimony, written comments received, and the written responses to environmental comments, all of which are hereby incorporated by reference. The Board makes the following written findings for each significant adverse impact identified, accompanied by a brief explanation of the rationale for each finding. These findings are supported by substantial evidence in the record.

Aesthetics

Finding and Explanation

The Final EA found that the reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction-related (land based) impacts and long-term operational (land based) impacts on aesthetic resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. The compliance responses described here could adversely affect visual resources by adding new equipment and structures.

The Final EA includes Mitigation Measure 1-1, which identifies existing statutes and regulations and operating permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measure 1-1 is within the

responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measure 1-1 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Impacts may be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval at a later stage. But at this stage, the Board lacks full details on the design of potential programs and associated required mitigation. Consequently, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Agriculture and Forestry Resources

Finding and Explanation

The Final EA found that the reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction-related (land based) impacts and long-term operational (land based) impacts on agriculture and forestry resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. The compliance responses described here could potentially occur in areas currently zoned for or supporting agriculture and forestry resources.

The Final EA includes Mitigation Measure 2-1, which identifies existing statutes and regulations and construction and operating permit requirements as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measure 2-1 is within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measure 2-1 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use

and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Impacts may be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval at a later stage. But at this stage, the Board lacks full details on the design of potential programs and associated required mitigation. Consequently, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Air Quality

Finding and Explanation

The Final EA found that reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction-related (land Based) impacts on air quality. Implementation of the Proposed Amendments could result in new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. The construction of these facilities and functions could result in some amount of short-term increased emissions.

As described in greater detail in the Final EA, it would be expected that the primary sources of construction-related emissions would occur from soil disturbance and use of construction equipment. It is expected that during the construction phase for any new project, criteria air pollutants (e.g., NOx, SOx, and particulate matter (PM)) and toxic air contaminants (TACs) could be generated from a variety of activities and emission sources, such as equipment use and worker commute trips.

The Final EA included Mitigation Measure 3-1, which identifies existing statutes and regulations and construction and operational permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measure 3-1 is within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measure 3-1 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use

and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This impact potential is overridden by the project's benefits as set forth in the statement of overriding considerations.

Biological Resources

Finding and Explanation

The Final EA found that reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction-related (land based) impacts and long-term operational (land based) impacts on biological resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, indirect impacts to species could result from construction noise disturbance that might cause nest or den abandonment and loss of reproductive or foraging potential around the site during construction, transportation, or destruction of equipment and existing structures. Implementation of the Proposed Amendments could require operation of lithium-ion battery infrastructure such as mining facilities, and recycling or refurbishment facilities. Long-term operation of these facilities would often include the presence of workers; movement of automobiles, trucks, and heavy-duty equipment; and operation of stationary equipment. This environment would generally not be conducive to the presence of biological resources located on-site or nearby.

The Final EA included Mitigation Measures 4.-1 and 4.-2, which identify existing statutes and regulations and construction and operational permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measures 4.-1 and 4.-2 are within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measures 4.-1 and 4.-2 should be adopted by those agencies. Public agencies with the requisite authority can and

should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This impact potential is overridden by the project's benefits as set forth in the statement of overriding considerations.

Cultural Resources

Finding and Explanation

The Final EA found that reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction-related (land based) impacts and long-term operational (land based) impacts on cultural resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, ground disturbing activities required by the implementation of the Proposed Amendments may require earth-moving and grading and mining activities that could affect undiscovered and known cultural resources, depending on their location in relation to known resources and whether the substrate is conducive to hosting archaeological resources. As a result, construction impacts would be potentially significant. Presence of new infrastructure may change the visual setting of the surrounding area, which could adversely affect historic resources and districts with an important visual component. For example, although it is unlikely such a facility would be sited in a historic district, a new industrial building or control system may not be consistent with the visual character of a historic district. As a result, construction and operational impacts would be potentially significant.

The Final EA included Mitigation Measure 5-1, which identifies existing statutes and regulations and construction and operational permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county

governments. Therefore, the Board finds that the authority to implement Mitigation Measure 5-1 is within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measure 5-1 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Geology and Soils

Finding and Explanation

The Final EA found that reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction-related (land based) impacts and long-term operational (land based) impacts on geology and soil resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, it is probable construction activities for new facilities would require disturbance of undeveloped areas, such as clearing of vegetation, earth movement and grading, trenching for utility lines, erection of new buildings, and paving of parking lots, delivery areas, and roadways. These activities would have the potential to adversely affect soil and geologic resources. There is inherent uncertainty surrounding the location and magnitude of such facilities, which could be located outside of California. As such, it is conceivable that a facility could be located on soils incapable of supporting facility generated wastewater. Hard rock lithium ion extraction, which would be expected to occur outside of the state and U.S., would have adverse effects to erosion from potential loss of forests and soil disturbance.

The Final EA included Mitigation Measure 7-1, which identifies existing statutes and regulations and construction and operational permit requirements, as well as other

recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measure 7-1 is within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measure 7-1 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Hazards and Hazardous Materials

Finding and Explanation

The Final EA found that the reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially short-term construction-related (land based) impacts on hazards and hazardous material resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, construction activities generally use heavy-duty equipment requiring periodic refueling and lubricating fluids. It is during the transfer of fuel that the potential for an accidental release is most likely. Although precautions would be taken to ensure that any spilled fuel is properly contained and disposed, and such spills are typically minor and localized to the immediate area of the fueling (or maintenance), the potential remains for a substantial release of hazardous materials into the environment.

The Final EA includes Mitigation Measure 9-1, which identifies existing statutes and regulations and construction and operating permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board

finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measure 9-1 is within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measure 9-1 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource is inherently uncertain.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Hydrology and Water Quality

Finding and Explanation

The Final EA found reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction related (land based) impacts and long-term operational (land based) impacts on hydrology and water quality resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, construction activities could require disturbance of undeveloped areas, such as clearing of vegetation, earth movement and grading, trenching for utility lines, erection of new buildings, and paving of parking lots, delivery areas, and roadways. Specific construction projects would be required to comply with applicable erosion, water quality standards, and waste discharge requirements (e.g., NPDES, Stormwater Pollution Prevention Plan [SWPPP]). With respect to depleting groundwater supplies, new facilities are not anticipated to result in substantial groundwater demands. The increased demand for lithium-ion batteries would increase the demand for mined lithium. Lithium is mainly obtained from areas outside of the United States, where State and federal laws and regulations are not enforced. Thus, water quality impacts related

to mining could occur because of implementation of the reasonably foreseeable compliance responses associated with the Proposed Amendments.

The Final EA included Mitigation Measures 10-1, 10-2a and 10-2b, which identify existing statutes and regulations and construction and operational permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measures 10-1, 10-2a and 10-2b are within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measures 10-1, 10-2a and 10-2b should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Mineral Resources

Finding and Explanation

The Final EA found that the Proposed Amendments could result in potentially significant long-term operational (land based) impacts to mineral resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, implementation of the Proposed Amendments and associated compliance responses could result in an increased development where mining for lithium is feasible, which could conceivably affect the availability of these mineral resources if access to resources becomes impeded. Additionally, the Proposed Amendments may increase lithium mining, which would also contribute to the loss of availability of lithium as it is mined and consumed.

The Final EA included Mitigation Measure 12-2, which identifies existing statutes and regulations and construction and operational permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measure 12-2 is within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measure 12-2 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Noise

Finding and Explanation

The Final EA found that reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction-related (land based) impacts and long-term operational (land based) impacts on noise resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, implementation of the Proposed Amendments could result in the generation of short-term construction noise levels in excess of applicable standards or that result in a substantial increase in ambient levels at nearby sensitive receptors, and exposure to excessive vibration levels. New sources of noise associated with implementation of Proposed Amendments could include operation of manufacturing facilities and mining operations.

The Final EA included Mitigation Measures 13-1 and 13-2, which identify existing statutes and regulations and construction and operational permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measures 13-1 and 13-2 are within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measures 13-1 and 13-2 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Transportation and Traffic

Finding and Explanation

The Final EA found that reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction-related (land based) impacts and long-term operational (land based) impacts on transportation and traffic resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, construction of new infrastructure and facilities would result in short-term construction traffic (primarily motorized) in the form of worker commute and material delivery trips. Depending on the amount of trip generation and the location of new facilities, implementation could conflict with applicable programs, plans, ordinances, or policies (e.g., performance standards, congestion management); and/or result in hazardous design features and emergency access issues from road closures, detours, and obstruction of emergency vehicle movement, especially due to project-generated heavy-duty truck trips. Long-term operational-related activities associated with

deliveries and distribution of goods could result in the addition of new trips, which could affect roadway service levels. New facilities may result in additional egress/ingress points or increased traffic that would result in hazardous conditions on local roadways. Inadequate access may impede emergency vehicle access to new facilities.

The Final EA included Mitigation Measures 17-1 and 17-2, which identify existing statutes and regulations and construction permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measures 17-1 and 17-2 are within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measures 17-1 and 17-2 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Utilities and Service Systems

Finding and Explanation

The Final EA found that the reasonably foreseeable actions associated with implementation of the Proposed Amendments could result in potentially significant short-term construction related (land based) and long-term operational related (land based) impacts on utilities and service systems resources. Implementation of the Proposed Amendments could result in construction and operation of new or expanded manufacturing facilities for zero-emissions technologies (e.g., lithium-ion batteries, cryogenic fuels, cold plates, solar photovoltaics); construction and operation of supporting infrastructure, such as electric chargers and fueling stations; increased demand for electricity, requiring more electricity generation; the displacement of fossil fuel extraction, refinement, manufacture, distribution, and combustion; operation of new or modified recycling or refurbishment facilities to accommodate battery disposal; and increased demand for the extraction of raw minerals used in the production of batteries, such as lithium from source countries and states. As described in greater detail in the Final EA, depending on the location, new facilities may require new utility service lines and connections. At this time, the specific location, type, and number of new facilities that would be developed is not known and would be

dependent upon a variety of market factors that are not within the control of CARB. Therefore, the ultimate magnitude and location of demand for utilities such as water and wastewater cannot be known. However, common impacts to utilities and service systems could include exceedances in wastewater treatment requirements of the applicable Regional Water Quality Control Board, requiring the construction of new wastewater treatment infrastructure and/or plants as well as new or expanded stormwater drainage facilities, producing water demand in exceedance of available water supplies, and generating levels of solid waste that exceeds an existing landfill's capacity.

The Final EA includes Mitigation Measure 18-1, which identifies existing statutes and regulations and construction and operating permit requirements, as well as other recognized practices designed to reduce these potentially significant impacts. The Board finds that the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Therefore, the Board finds that the authority to implement Mitigation Measure 18-1 is within the responsibility and jurisdiction of other public agencies, and that the requirements and practices in Mitigation Measure 18-1 should be adopted by those agencies. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible. Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to this resource is inherently uncertain.

Consequently, at this stage without full details on the design of potential programs and associated required mitigation, while impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the impacts to this resource associated with the proposed actions in the Proposed Amendments would be potentially significant and unavoidable. This potential impact is overridden by the project's benefits as set forth in the statement of overriding considerations.

Cumulatively Considerable Impacts

The applicable plan containing the appropriate summary of projections for considering cumulative impacts of the Proposed Amendments is the 2016 State SIP Strategy. The analysis of cumulative impacts for the Proposed Amendments included a summary of the cumulative impacts found for each resource area in this plan, and a conclusion regarding whether the Proposed Amendments could result in a cumulatively considerable contribution to an existing significant cumulative impact.

The Final EA concluded the Proposed Amendments could result in a cumulatively considerable contribution to significant cumulative impacts to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, transportation and traffic, and utilities and service systems. While suggested mitigation is

provided within the respective resource areas of the Final EA analyses that could address the contribution of the Proposed Amendments to each of these potentially cumulatively considerable impacts, the Board finds that because these adverse impacts are potential indirect impacts associated with the compliance responses of covered entities, the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with land use approval and permitting authority, such as city or county governments. Public agencies with the requisite authority can and should implement the identified measures to the degree feasible.

Because the authority and responsibility to determine project-level impacts and require project-level mitigation lies with land use and/or permitting agencies for individual projects, and the programmatic level of analysis associated with the Final EA does not attempt to address project-specific details of mitigation, there is inherent uncertainty in the degree of mitigation that may ultimately be implemented to reduce potentially significant impacts to these resources. Consequently, while cumulative impacts could be reduced to a less-than-significant level by land use and/or permitting agency conditions of approval, the Board takes a conservative approach in its post-mitigation significance conclusion and finds the cumulatively considerable contribution of the Proposed Amendments to existing significant cumulative impacts to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, transportation and traffic, and utilities and service systems to be potentially significant and unavoidable.

Findings on Alternatives to the Project

In addition to the No-Project Alternative, the Final EA considered a reasonable range of potentially feasible alternatives that could potentially reduce or eliminate the significant adverse environmental impacts associated with the Proposed Amendments, while accomplishing most of the basic project objectives.

The Board finds the alternatives analysis is sufficient to inform the Board and the public regarding the tradeoffs between the degree to which the alternatives could reduce environmental impacts and the corresponding degree to which the alternatives could achieve the project objectives.

Based upon a full evaluation of the alternatives, and the entirety of the record, the Board finds that adoption and implementation of the Proposed Amendments is the most desirable, feasible, and appropriate action for achieving the objectives of the project, and the Board rejects the other alternatives because they either fail to meet most project objectives, or are infeasible based on consideration of the relevant factors identified in the Final EA and briefly described below. Please see the Final EA for a more in-depth discussion and analysis regarding project alternatives.

<u>Alternative 1: No Project Alternative</u>

Alternative 1 in the EA describes a reasonably foreseeable scenario if CARB did not approve the Proposed Amendments. Under Alternative 1, the Proposed Amendments would not be

implemented. There would be no requirement for truck TRUs to transition to full zero-emission technology by 2031. There would be no requirement for newly-manufactured trailer TRU, domestic shipping container TRU, railcar TRU, or TRU generator set engines to meet a more stringent PM emission standard. There would also be no requirement to use lower-GWP refrigerants.

The Board finds that the No-Project Alternative would fail to meet most of the project objectives listed in Chapter 2 of the Final EA. First, there would be no reductions in criteria air pollutants that would provide public health benefits, achieve NAAQS, and meet the goals of the SIP. This alternative also would not reduce the State's dependence on petroleum for energy or support the use of diversified fuels. Additionally, the No-Project Alternative would not decrease GHG emissions in support of AB 32 or reduce HFC emissions. The No-Project Alternative also would not result in improvements to zero-emission technologies, nor would it lead the transition of California's off-road sector to zero-emission technology. For these reasons, the Board rejects this alternative.

Alternative 2: Diesel PM Emission Standard Applies to Truck TRUs

Under Alternative 2, all newly-manufactured TRU engines (in truck TRUs, trailer TRUs, domestic shipping container TRUs, railcar TRUs, and TRU generator sets) would be required to meet a more stringent PM emission standard. In contrast to the Proposed Amendments, Alternative 2 would not include a requirement for truck TRUs to transition to zero-emission technology. The refrigerant requirement would remain unchanged from the Proposed Amendments.

The Board finds that Alternative 2 would fail to fully meet most of the project objectives listed in Chapter 2 of the Final EA. Alternative 2 would not not achieve the maximum emission reductions possible from TRUs. Under alternative 2 TRUs would continue to use petroleum-based fuels. Alternative 2 would also not limit use of internal combustion engine-powered TRUs, would not lead the transition of the off-road sector to zero-emission technology, and would not improve zero-emission technology for TRUs. Therefore, this alternative would fail to meet most of the basic project objectives. For these reasons, the Board rejects this alternative.

Alternative 3: Shorter Timeline and Reduced Zero-Emission Fleet Percentage for Truck TRUs

Under Alternative 3, the truck TRU compliance timeline would be shorter; however, the ultimate requirement for transitioning to zero-emission would be less than the Proposed Amendments. Under Alternative 3, truck TRU fleets, beginning in 2024, would be required to transition 50 percent of their fleet to zero-emission by 2030. Compared to the Proposed Amendments, this is one year sooner but requires only half of the zero-emission transition. This would result in approximately half of the infrastructure installations that would be expected under the Proposed Amendments. The refrigerant and more stringent diesel PM emission standard requirements would be the same as the Proposed Amendments.

The Board finds that this alternative meets most of the basic project objectives, though it does so to a lesser extent than the Proposed Amendments in some cases because it

would not require as many truck TRUs to transition to zero-emission. In addition, alternative 3 would not meet Objective 2 because it would not achieve the maximum emission reductions possible from TRUs, since greater emissions reductions are possible under the Proposed Amendments. Alternative 3 would meet most of the basic project objectives in accordance with CEQA's requirement, but largely not to the same degree as the Proposed Amendments. For these reasons, the Board rejects this alternative.

Alternatives Considered but Rejected

Two additional alternatives were considered during development of the alternatives to the Proposed Amendments. The first was "No Zero-Emission Truck TRU Phase-in Schedule" and the second was "Ultra-Low NOx Truck TRUs". The CEQA Guidelines Section 15126.6(c) includes three factors that may be used to eliminate alternatives from detailed consideration in an Environmental Impact Report (EIR): "(i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impact." As described in detail in Chapter 7 of the Final EA, these alternatives were rejected because they do not meet the most basic of the project objectives or are either infeasible or would not avoid significant environmental impacts.

STATEMENT OF OVERRIDING CONSIDERATIONS

CARB expects that many of the significant adverse impacts identified in the Final EA will be avoided or mitigated; however, since uncertainty exists as to the extent of mitigation that other agencies will require at the site- and project-specific level, the Board is conservatively considering certain impacts to be potentially significant and unavoidable. The Board finds that despite the potential for adverse environmental impacts associated with the Proposed Amendments benefits of the proposed actions are determined to be overriding considerations that warrant approval of the Proposed Amendments and outweigh and override its unavoidable significant impacts. Each benefit set forth below constitutes an overriding consideration warranting approval of the project, independent of the other benefits, despite each and every unavoidable impact. These benefits include:

1. Reducing statewide fine particulate matter (PM2.5) and oxides of nitrogen emissions from diesel-powered TRUs, exposure to which is associated with premature mortality, hospital visits for cardiovascular and respiratory illnesses, and emergency room visits for asthma, especially in sensitive receptors including children, the elderly, and people with chronic heart or lung disease;

2. Minimizing near-source exposure to diesel particulate matter produced by TRUs and reducing resulting cancer risk to individual residents and off-site workers near facilities where TRUs operate, including those located in and near disadvantaged and Assembly Bill 617 communities;

3. Supporting the attainment of the National Ambient Air Quality Standards for Ozone and PM in all regions of California, as required by the Federal Clean Air Act. These include the 2023 deadline for attainment of the 80 parts per billion (ppb) 8-hour ozone standard, 2024 for the 35 microgram per cubic meter (µg/m3) 24-hour PM2.5 standard, and 2025 for the 12 µg/m3 annual PM2.5 standard. There are also mid-

term attainment years of 2031 and 2037 for the more recent 8-hour ozone standards of 75 ppb and 70 ppb, respectively;

4. Reducing greenhouse gas emissions from TRU engines and refrigerant, including short-lived climate pollutants, such as black carbon and hydrofluorocarbons, in support of California's climate change goals;

5. Supporting Executive Order N-79-20, which set a goal for 100 percent zero-emission off-road vehicles and equipment in the State by 2035;

6. Increasing the use of zero-emission technology in the off-road sector;

7. Providing benefits to zero-emission TRU manufacturers, as well as various businesses in the zero-emission TRU supply chain, including those involved in battery, fuel cell, cold plate, and solar photovoltaic technology;

8. Providing opportunities for design, engineering, construction, and project management firms to design new and expanded infrastructure at approximately 1,000 truck TRU home base facilities statewide, as well as benefitting suppliers, equipment installers, and electricians;

9. Increasing the amount of electricity supplied by utility providers and helping the State's investor-owned utilities meet the goals of Senate Bill 350, which requires the State's investor-owned utilities to develop programs to accelerate widespread transportation electrification with goals to reduce dependence on petroleum, increase the uptake of zero-emission vehicles, help meet air quality standards, and reduce greenhouse gas emissions; and

10. Providing noise reduction benefits to those near facilities where diesel-powered TRUs operate.

LOCATION AND CUSTODIAN OF THE RECORD

The documents and other materials that constitute the record of proceedings on which these findings are based are located at 1001 I Street Sacramento, CA 95814. The custodian for these documents is the California Air Resources Board Legal Office, inquiries can be submitted to CaliforniaEnvironmentalQualityAct@arb.ca.gov.