

Title 13. California Air Resources Board

Notice of Public Hearing to Consider Proposed Amendments to the Small Off-Road Engine Regulations: Transition to Zero Emissions

The California Air Resources Board (CARB or Board) will conduct a public hearing at the date and time noted below to consider approving for adoption the Proposed Amendments to the Small Off-Road Engine Regulations: Transition to Zero Emissions (hereinafter referred to as the Proposed Amendments).

Date: December 9, 2021

Time: 9:00 A.M.

This public meeting may continue at 8:30 a.m., on December 10, 2021. Please consult the public agenda, which will be posted ten days before the December 9, 2021, Board Meeting, for important details, including, but not limited to, the day on which this item will be considered and any appropriate direction regarding a possible remote-only Board Meeting. If the meeting is to be held in person – in addition to remote access – it will be held at the California Air Resources Board, Byron Sher Auditorium, 1001 I Street, Sacramento, California 95814.

Written Comment Period and Submittal of Comments

In accordance with the Administrative Procedure Act, interested members of the public may present comments orally or in writing during the hearing and may provide comments by postal mail or by electronic submittal before the hearing. The public comment period for this regulatory action will begin on October 15, 2021. Written comments not submitted during the hearing must be submitted on or after October 15, 2021, and received **no later than November 29, 2021**. Comments submitted outside that comment period are considered untimely. CARB may, but is not required to, respond to untimely comments, including those raising significant environmental issues. The Board also encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action. Comments submitted in advance of the hearing must be addressed to one of the following:

Postal mail: Clerks' Office, California Air Resources Board
1001 I Street, Sacramento, California 95814

[Electronic submittal](https://www.arb.ca.gov/lispub/comm/bclist.php): <https://www.arb.ca.gov/lispub/comm/bclist.php>

Please note that under the California Public Records Act (Gov. Code, § 6250 et seq.), your written and oral comments, attachments, and associated contact information

(e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

Additionally, the Board requests but does not require that persons who submit written comments to the Board reference the title of the proposal in their comments to facilitate review.

Authority and Reference

This regulatory action is proposed under the authority granted in California Health and Safety Code, sections 39600, 39601, 43013, 43018, 43101, 43102, and 43104. This action is proposed to implement, interpret, and make specific sections 43013, 43017, 43018, 43101, 43102, 43104, 43150-43154, 43205.5, and 43210-43212.

Informative Digest of Proposed Action and Policy Statement Overview (Gov. Code, § 11346.5, subd. (a)(3))

Sections Affected:

Proposed amendment to California Code of Regulations, title 13, sections 2400, 2401, 2402, 2403, 2404, 2405, 2405.1, 2405.2, 2405.3, 2406, 2407, 2408, 2408.1, 2750, 2752, 2753, 2754, 2754.1, 2754.2, 2755, 2756, 2757, 2758, 2759, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2767.1, and 2771.

Proposed adoption of California Code of Regulations, title 13, sections 2408.2 and 2754.3.

Proposed repeal of California Code of Regulations, title 13, section 2768.

Documents Incorporated by Reference (Cal. Code Regs., tit. 1, § 20, subd. (c)(3)):

The following certification and test procedures and standards would be incorporated by reference in the specified sections of the regulations:

- CARB. Small Off-Road Engine Evaporative Emissions Test Procedure, TP-901, Test Procedure for Determining Permeation Emissions from Small Off-Road Engine Fuel Tanks. Adopted July 26, 2004, amended in this rulemaking. **Sections 2755(b) and 2758(b)(4)(A)2.**
- CARB. Small Off-Road Engine Evaporative Emissions Test Procedure, TP-902, Test Procedure for Determining Evaporative Emissions from Small Off-Road Engines. Adopted July 26, 2004, amended in this rulemaking. **Section 2758(a)(4)(B).**
- CARB. Small Off-Road Engine Evaporative Emission Control System Certification Procedure, CP-902, Certification Procedure for Evaporative

Emission Control Systems on Small Off-Road Engines. Adopted July 26, 2004, amended in this rulemaking. **Section 2753(a)**.

- CARB. California Exhaust Emission Standards and Test Procedures for New 2013 and Later Small Off-Road Engines; Engine-Testing Procedures (Part 1054). Adopted October 25, 2012, amended in this rulemaking. **Section 2403(d)**.
- CARB. California Exhaust Emission Standards and Test Procedures for New 2013 and Later Small Off-Road Engines; Engine-Testing Procedures (Part 1065). Adopted October 25, 2012, amended in this rulemaking. **Section 2403(d)**.

The above listed documents are also being amended by this proposed regulatory action, and thus the amendment date would be the date that the regulations are adopted by CARB. These documents are attached as separate appendices in the Staff Report: Initial Statement of Reasons (ISOR) with full proposed regulatory language illustrated in underline and strikeout.

The Proposed Amendments also incorporate by reference in the specified sections of the regulations the following documents that were not previously incorporated. These are copyrighted documents and will be on file as part of the public record.

- American National Standards Institute, Inc. (ANSI)/National Electrical Manufacturers Association (NEMA). 2016. ANSI/NEMA WD 6-2016, Wiring Devices - Dimensional Specifications. ANSI Approval Date: February 11, 2016. Copyrighted. **Section 2401(a)(36)**.
- American National Standards Institute, Inc. (ANSI)/Outdoor Power Equipment Institute (OPEI). 2018. ANSI/OPEI B71.10-2018, American National Standard for Off-Road Ground-Supported Outdoor Power Equipment – Gasoline Fuel Systems – Performance Specifications and Test Procedures. Published November 12, 2018. Copyrighted. **Section 2752(a)(3)**.
- SAE International. 2011. Surface Vehicle Standard SAE J1527, Marine Fuel Hoses. Revised February 2011. Copyrighted. **Section 2752(a)(29)**.
- SAE International. 2012. Surface Vehicle Standard SAE J30, Fuel and Oil Hoses. Revised February 2012. Copyrighted. **Section 2752(a)(28)**.
- SAE International. 2013. Surface Vehicle Recommended Practice SAE J2996, Small Diameter Fuel Line Permeation Test Procedure. Issued January 2013. Copyrighted. **Section 2752(a)(32)**.
- SAE International. 2017. Surface Vehicle Recommended Practice SAE J1930, Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms - Equivalent to ISO/TR 15031-2. Revised March 2017. Copyrighted. **Sections 2404(c)(4)(D) and 2752(a)(31)**.
- SAE International. 2019. Surface Vehicle Recommended Practice SAE J1737, Test Procedure to Determine the Hydrocarbon Losses from Fuel Tubes, Hoses,

Fittings, and Fuel Line Assemblies by Recirculation. Revised August 2019. Copyrighted. **Sections 2752(a)(30) and 2754(b)(2).**

The Proposed Amendments incorporate by reference in the specified sections the following documents that were not previously incorporated in the "California Exhaust Emission Standards and Test Procedures for New 2013 and Later Small Off-Road Engines; Engine-Testing Procedures (Part 1054)":

- Title 40, Code of Federal Regulations, Part 1051—Control of Emissions from Recreational Engines and Vehicles, section 1051.505. Last amended June 29, 2021. **Section 1054.501(d).**
- Title 40, Code of Federal Regulations, Part 1068—General Compliance Provisions for Highway, Stationary, and Nonroad Programs, sections 1068.103(f) and 1068.215. Last amended June 29, 2021. **Sections 1054.10(g) and 1054.601(b) and (c).**

The Proposed Amendments incorporate by reference in section 1065.1010 and the specified sections the following documents that were not previously incorporated in the "California Exhaust Emission Standards and Test Procedures for New 2013 and Later Small Off-Road Engines; Engine-Testing Procedures (Part 1065)". All of these documents except the CARB test procedures and certification procedure, federal test procedures, and National Institute of Standards and Technology (NIST) publications, are copyrighted documents. All of these documents will be on file as part of the public record.

- Title 40, Code of Federal Regulations, Part 63, Appendix A—Test Methods, Test Method 320—Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy. Last amended December 2, 2020. **Sections 1065.266 and 1065.275.**
- Title 40, Code of Federal Regulations, Part 86—Control of Emissions from New and In-Use Highway Vehicles and Engines, section 86.132-96(j). Last amended June 29, 2021. **Section 1065.405(e)(2) [re-lettered to 1065.405(f)(2) by the Proposed Amendments].**
- Title 40, Code of Federal Regulations, Part 1090—Regulation of Fuels, Fuel Additives, and Regulated Blendstocks. Last amended December 4, 2020. **Section 1065.701(d)(2).**
- ASTM International. 1995. D2986 – 95a, Standard Practice for Evaluation of Air Assay Media by the Monodisperse DOP (Diocetyl Phthalate) Smoke Test. Approved September 10, 1995. Copyrighted. **Section 1065.170(c).**
- ASTM International. 2009. F1471 – 09, Standard Test Method for Air Cleaning Performance of a High-Efficiency Particulate Air Filter System. Approved March 1, 2009. Copyrighted. **Section 1065.1001.**

- ASTM International. 2010. D5291 – 10, Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants. Approved May 1, 2010. Copyrighted. **Section 1065.655(e).**
- ASTM International. 2010. D5599 – 00 (Reapproved 2010), Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection. Approved October 1, 2010. Copyrighted. **Sections 1065.655(e).**
- ASTM International. 2012. D4629 – 12, Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection. Approved April 15, 2012. Copyrighted. **Section 1065.655(e).**
- ASTM International. 2012. D5762 – 12, Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence. Approved April 15, 2012. Copyrighted. **Section 1065.655(e).**
- ASTM International. 2012. D6348 – 12^{e1}, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy. Approved February 1, 2012. Copyrighted. **Sections 1065.266(b) and 1065.275(b).**
- ASTM International. 2020. D1835 – 20, Standard Specification for Liquefied Petroleum (LP) Gases. Approved May 1, 2020. Copyrighted. **Section 1065.701.**
- CARB. 2012. California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles. Amended December 6, 2012. **Section 1065.701.**
- CARB. 2018. California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles. Amended December 19, 2018. **Section 1065.701.**
- GPA Midstream Association. 2017. GPA Midstream Standard 2140-17, Liquefied Petroleum Gas Specifications and Test Methods. Adopted as Recommended Procedures 1931, revised 2017. Copyrighted. **Section 1065.701.**
- International Organization for Standardization (ISO). 2020. ISO 8178-1, Reciprocating internal combustion engines — Exhaust emission measurement — Part 1: Test-bed measurement systems of gaseous and particulate emissions. Reference number ISO 8178-1:2020(E). Published June 2020. Copyrighted. **Section 1065.601(c)(1).**

- NIST. 1994. NIST Technical Note 1297, 1994 Edition, Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results. September 1994. **Section 1065.1001.**
- NIST. 2008. NIST Special Publication 811, 2008 Edition, Guide for the Use of the International System of Units (SI). March 2008. **Sections 1065.20(a) and 1065.1005.**
- SAE International. 2011. Surface Vehicle Recommended Practice SAE J1151, Methane Measurement Using Gas Chromatography. Stabilized September 2011. Copyrighted. **Sections 1065.267(b) and 1065.750(a)(2)(i).**

Background and Effect of the Proposed Regulatory Action:

Background:

Small off-road engines (SORE) are spark-ignition engines rated at or below 19 kilowatts (kW). Emissions from SORE occur both when the engine is running (exhaust and evaporative emissions) and when it is not running (evaporative emissions). CARB regulates SORE emissions by adopting and enforcing emission standards, and certification and test procedures, for engines produced for sale or lease for use or operation in California (collectively, SORE regulations).

Section 209(e) of the federal Clean Air Act uniquely grants the State of California the authority to adopt and enforce emission standards and other requirements relating to the control of emissions from new nonroad engines or vehicles within the state, which includes SORE. California is, effectively, allowed an exemption from federal Clean Air Act provisions that otherwise prevent states from setting their own emission standards for these nonroad mobile sources. The exemption recognizes California's long standing air pollution challenges and pioneering work to reduce mobile source emissions. Under section 209, subsection (e)(1) of the federal Clean Air Act, "New engines which are used in construction equipment or vehicles or used in farm equipment or vehicles and which are smaller than 175 horsepower" are preempt from CARB's emission standards and only subject to emission standards from the U.S. Environmental Protection Agency (U.S. EPA).

CARB adopted the first SORE regulations in 1990 when setting the first exhaust emission standards. The exhaust emission regulations include emission standards for hydrocarbons (HC), oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM). The exhaust emission standards were implemented in two tiers between model years (MYs) 1995 and 2002. CARB adopted further exhaust emission standards and the first CARB evaporative emission standards for SORE in 2003. The most recent SORE exhaust emission standards were implemented between MYs 2000 and 2008. The evaporative emission standards were implemented between MYs 2006 and 2013. The most recent amendments to the evaporative emission regulations were adopted in 2016, following validation studies that found low rates of compliance with existing

emission standards. A major purpose of those amendments was to increase compliance rates and facilitate compliance testing and enforcement actions.

In September 2020, Governor Gavin Newsom issued Executive Order (EO) N-79-20, which sets a goal to “transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible.” EO N-79-20 specifically directs CARB, to the extent consistent with State and federal law, to develop and propose strategies, in coordination with other state agencies, U.S. EPA, and local air districts, to achieve 100 percent zero-emission from off-road vehicles and equipment operations in the State by 2035. The EO further states that in implementing the strategies, CARB “shall act consistently with technological feasibility and cost-effectiveness.”

The 2016 State SIP Strategy includes control measures to achieve the reductions necessary from mobile sources, including SORE, fuels, and consumer products, to meet the national ambient air quality standards (NAAQS) for ozone and PM_{2.5} (PM with diameter of 2.5 micrometers or smaller). The 2016 State SIP Strategy includes a measure to reduce statewide NO_x and ROG emissions from SORE by an estimated 4 and 36 tons per day (tpd), respectively, in 2031. The 2016 State SIP Strategy also includes region-specific goals for the South Coast Air Basin (reduce NO_x emissions by 2 tpd and ROG emissions by 16 tpd) and the San Joaquin Valley (reduce NO_x emissions by 0.3 tpd). Additionally, the 2016 State SIP Strategy includes a measure for “Further Deployment of Cleaner Technologies: Off-Road Equipment” specific to the South Coast Air Basin. The goal of this measure is to achieve 18 tpd of NO_x emission reductions and 20 tpd of ROG emission reductions by 2031, but the measure does not specify the source of the reductions. As described in the 2016 State SIP Strategy, this measure would accelerate the penetration of near-zero and zero-emission equipment. The Proposed Amendments would help achieve the further emission reductions expected under this measure.

ZEE are available for most small off-road equipment categories, including lawn and garden equipment and utility equipment, for both residential and professional use. The level of performance, number of brands, and number of equipment options have increased greatly and continue to do so today. At present, there are at least 35 brands of zero-emission lawn mowers available, with several brands directed at professional users. While adoption rates for ZEE among professional landscapers are lower than for residential users, there is substantial evidence that all new small off-road equipment can be zero-emission. Using ZEE is technologically feasible and can offer significant cost-savings to professional users. There are at least 12 brands of zero-emission lawn and garden equipment designed for professional users available for sale.

Summary and Effect of Proposed Regulatory Action:

The Proposed Amendments would accelerate the transition of SORE equipment to ZEE. SORE equipment and ZEE are collectively referred to as small off-road

equipment. Deployment of ZEE is key to meeting the expected emission reductions in the 2016 State SIP Strategy and the goals of EO N-79-20. The Proposed Amendments would update emission standards for new SORE (engines or equipment produced for sale or lease for use or operation in California) and would not affect equipment already in use. This would be achieved by setting SORE emission standards to zero in two phases. First, for model year (MY) 2024 and all subsequent model years, exhaust emission standards would be set to zero (0.00 grams per kilowatt-hour or $\text{g}\cdot\text{kWh}^{-1}$), except for carbon monoxide (CO). Evaporative emission standards would also be set to zero (0.00 grams per test or $\text{g}\cdot\text{test}^{-1}$). The evaporative emission standards would include “hot soak” emissions (representing emissions that occur when placing a hot engine in storage after use on a hot summer day) to better evaluate emissions from real-world use of SORE equipment. These emission standards of zero would apply for engines used in all equipment types produced for sale or lease for operation in California, except generators. Generator emission standards would be more stringent than the existing emission standards starting in MY 2024, but would not be zero. The second phase would be implemented starting in MY 2028, when the emission standards for generators would be zero.

The Proposed Amendments would also amend existing emission reduction credit programs to improve consistency and add flexibility for manufacturers. The exhaust emission regulations include an emission reduction credit averaging, banking, and trading (ABT) program, where manufacturers can generate credits with engines that emit below the emission standards and use them to produce engines that emit above the emission standards. This averaging of emissions gives manufacturers the flexibility to certify those higher-emitting engines. Exhaust emission reduction credits may be banked for up to five years, to be used later, or may be traded with other manufacturers. The existing evaporative emission reduction credit program only includes averaging and banking. In the Proposed Amendments, trading would be added to the evaporative credit program. New zero emission generator credit programs would be added to the ABT programs, which would allow manufacturers to earn emission reduction credits for zero-emission generators.

Other Proposed Amendments to the regulations include sunsetting the voluntary “Blue Sky Series” engine requirements and repealing the variance provisions in the evaporative emission regulations. The Blue Sky Standards were developed to allow manufacturers to receive recognition for certifying to lower emission standards, but CARB has no record of any manufacturer taking advantage of the program for engines. Under the current evaporative emission regulations, a manufacturer that cannot meet one or more requirements, due to extraordinary reasons beyond the manufacturer’s reasonable control, may apply in writing for a variance. Repealing the variance provisions would ensure equity for all manufacturers, because all manufacturers would be required to meet the requirements of the regulations. Additionally, the Proposed Amendments to the evaporative emission test procedures would add further instructions for a fuel tank pressure test, a new fuel cap and tether

test, a tilt test to check for fuel leaks, and instructions for accelerated preconditioning of engines. The Proposed Amendments to evaporative emissions test procedure TP-901 would ensure fuel tank testing configurations were closer to those of production fuel tanks by requiring the hole for a fuel line and grommet system to be present in the fuel tanks and requiring fuel tanks to be tested with the same production fuel cap throughout testing. Evaporative emission control system certification procedure CP-902 would be used for all engines, including those with displacement less than 80 cc, which currently use a different certification procedure.

Most of the Proposed Amendments to the exhaust emission test procedures are intended to align them with updates to the federal test procedures that have been adopted since CARB adopted its test procedures. The Proposed Amendments also include California-specific changes necessary to maintain the stringency of California emission standards, provide consistency with other California SORE regulations, prevent redundant effort and confusion for testers, or provide additional flexibility. For example, the requirements for exhaust emission compliance testing would be changed from testing “a reasonable number of engines” to “one or more engines.” Procedure text that provides examples based on equipment or fuel types that are not relevant to SORE, such as locomotives and compression-ignition engines, would be removed to prevent confusion. References to NIST-traceable standards would be changed to *Système International d’Unités* (SI)-traceable standards to allow flexibility for manufacturers around the world to use other recognized international standards while still maintaining the consistency necessary to ensure test data accuracy, precision, and comparability to the emission standards.

CARB may also consider other changes to the sections affected, as listed on page 2 of this notice, during the course of this rulemaking process.

Objectives and Benefits of the Proposed Regulatory Action:

Emission and Health Benefits:

Under the Proposed Amendments, significant reductions in both NO_x and ROG emissions would begin in calendar year 2025. In 2031, the expected summer average emission reductions would be 7.9 tpd of NO_x and 64.5 tpd of ROG. These represent 43 percent and 51 percent reductions of NO_x and ROG, respectively, compared to the emissions in the absence of the Proposed Amendments. These emission reductions would meet the expected emission reductions put forth for SORE in the 2016 State SIP Strategy and result in public health benefits.

From 2023 through 2043, the Proposed Amendments would result in cumulative total emission reductions of approximately 59,307 tons of NO_x and 423,240 tons of ROG from 2023 through 2043, compared to the emissions in the absence of the Proposed Amendments. Such emission reductions would decrease the amount of adverse health impacts in California. Through 2043, premature deaths due to cardiopulmonary causes would decrease by 892; emergency room visits for asthma would decrease by 438;

and acute respiratory and cardiovascular hospitalizations would decrease by 169 and 142, respectively.

The health benefits are monetized in accordance with U.S. EPA practice. The estimated value of the accrued statewide health benefit derived from criteria emission reductions is about \$8.82 billion, with \$8.80 billion resulting from reduced premature mortality and \$17.2 million resulting from reduced hospitalizations and emergency room visits for asthma.

The Proposed Amendments would decrease the use of fossil fuels in California, which would decrease carbon dioxide and other greenhouse gas (GHG) emissions. The benefit of the GHG emission reductions can be estimated using the Social Cost of Carbon, which calculates benefits between \$339 million and \$1.43 billion through 2043, depending on the discount rate.

In addition to reduced emissions, ZEE offer a number of other benefits to operators when compared to SORE equipment. ZEE are quieter, which reduces noise at the worksite as well as in the community where the equipment is operating. SORE equipment frequently creates noise above the threshold of 85 decibels set by the Occupational Health and Safety Administration (OSHA). OSHA requires employers to implement a hearing conservation program when employees may be exposed to noise above this threshold. The sound from ZEE is typically below the 85 decibel threshold. Specifically related to gasoline-powered lawn and garden equipment, it has been shown that the noise exposure and associated health effects from these will be more pronounced in workers because they will be operating in close proximity to this equipment for a significant amount of time, such as an 8-hour work day. These workers often lack resources to protect themselves from high noise levels such as using hearing protection devices. Also, many local jurisdictions have noise ordinances that limit when small off-road equipment can be used. By choosing ZEE, users may have more flexible working hours with their equipment.

Furthermore, SORE are known to emit CO, PM_{2.5}, and toxic air contaminants (TAC). CO poisoning can occur when users follow manufacturers' instructions and from improper use of SORE equipment, including using the equipment indoors. TACs are compounds that may contribute to mortality or adverse human health effects such as cancer, eye and lung impacts, and reproductive and developmental effects. By choosing ZEE, users would have less exposure to CO and TACs.

Economic Impacts and Benefits:

ZEE often have a higher purchase price than SORE equipment but frequently provide operational savings in terms of lower fuel and maintenance costs. Maintenance is much less intensive and required less frequently on ZEE. Having more durable equipment that is not taken out of service for maintenance reduces the need for backup equipment and spare parts. Overall, the Proposed Amendments would have a net direct cost of \$4.08 billion accrued over the modeled regulatory horizon of 2023

through 2043. Residential users are expected to experience a net direct cost accrued through 2043 of \$2.79 billion, while professional users (nonlandscaping businesses, landscapers, and government entities) are expected to experience a net direct cost of \$1.29 billion. When health benefits are considered, the Proposed Amendments are estimated to have a net benefit of \$4.27 billion accrued through 2043. Overall, the Proposed Amendments would have a benefit-cost ratio of 1.30, meaning the monetized benefits are greater than the costs.

Public Process:

CARB staff held public workshops and attended meetings with interested stakeholders during the development of the Proposed Amendments. Stakeholders' comments during and after these informal pre-rulemaking discussions provided staff with useful information that staff considered during development of the Proposed Amendments. Key elements of the public process that staff conducted to inform the development of the Proposed Amendments are described below.

1. Informational Briefing to the CARB Board during a Public Meeting

CARB staff presented an update on zero-emission alternatives to SORE to the CARB Board in November 2018. Staff described demonstration projects that provide professional landscapers an opportunity to use and test professional-grade battery-operated landscaping equipment. Additionally, staff provided information on cities in California that had already replaced their SORE municipal landscaping equipment with ZEE. Staff noted that some colleges and universities in California are also on the path to adopt ZEE to replace their SORE equipment. There was a showcase of ZEE outside the meeting room with eight manufacturers and businesses showing their newest ZEE. A similar showcase of ZEE was conducted in the November 2016 Board meeting.

2. Participation in Conventions and Community Meetings

CARB staff attended four conventions held for landscapers in California, which provided opportunities for staff to inform professional landscapers about potential regulatory changes and about ZEE capabilities and availability. CARB staff also gave presentations at several meetings attended by landscapers and local decision makers in California, including the Pleasanton Committee on Energy and the Environment in January 2019, the San Francisco Integrated Pest Management Technical Advisory Committee in March 2019, the San Mateo Integrated Pest Management Workshop in April 2019, the San Francisco Commission on the Environment in November 2019, and the Tri Valley Air Quality Community Alliance in April 2021.

3. Public Workshops Organized by CARB Staff

CARB staff held three public workshops on SORE rulemaking from 2019 through early 2021. The workshops focused on various regulatory concepts including timelines to transition to ZEE and specific potential changes to test and certification procedures.

Workshops were attended by manufacturers, industry groups, environmental groups, and interested citizens.

4. ZEE Roadshow

Since 2018, CARB staff has operated a demonstration project called the ZEE Roadshow, where several brands of zero-emission lawn and garden equipment designed for professional use are loaned to landscaping crews throughout the state. This provides them with an opportunity to use ZEE without purchasing it. The response has been overwhelmingly positive, with nearly all crews finding at least one ZEE type that they preferred over SORE equipment. Landscaping crews receiving the ZEE Roadshow have included theme parks, colleges and universities, school districts, and municipal organizations.

Comparable Federal Regulations:

When California's SORE exhaust emission standards were adopted in 1990, and when California's SORE evaporative emission standards were adopted in 2003, no comparable federal rules existed. In 1995, U.S. EPA adopted Title 40, Code of Federal Regulations (40 CFR) Part 90, to control exhaust emissions from new nonroad spark-ignition engines at or below 19 kW, and in 2008, U.S. EPA adopted CFR Parts 1054 and 1060 to control exhaust emissions from new, small nonroad spark-ignition engines and equipment and evaporative emissions from new and in-use nonroad and stationary equipment, respectively. Subsequent California rulemakings in 2011 and 2016 helped to align California's exhaust and evaporative test and certification procedures with federal requirements, but differences remain between the two sets of regulations.

Although staff has made an effort to align California requirements with federal requirements as much as possible, significant additional stringency in California regulations of SORE is justified in light of California's unique air quality concerns. Low rates of compliance with evaporative emission standards in CARB's validation studies, compliance testing, and other testing suggest the expected emission reduction benefits of CARB's regulations have not been completely realized. Replacing new SORE equipment with ZEE would ensure emission reductions are achieved, as expected under the 2016 State SIP Strategy. California's exhaust and evaporative regulations for this category, as specified in title 13, California Code of Regulations, sections 2400-2409 and 2750-2774, are already equivalent to or more stringent than the existing federal standards.

An Evaluation of Inconsistency or Incompatibility with Existing State Regulations (Gov. Code, § 11346.5, subd. (a)(3)(D)):

During the process of developing the proposed regulatory action, CARB conducted a search of any similar regulations on this topic and concluded these regulations are neither inconsistent nor incompatible with existing state regulations.

Disclosure Regarding the Proposed Regulation

Fiscal Impact/Local Mandate Determination Regarding the Proposed Action (Gov. Code, § 11346.5, subs. (a)(5)&(6)):

The determinations of the Board's Executive Officer concerning the costs or savings incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulatory action are presented below.

Under Government Code sections 11346.5, subdivision (a)(5) and 11346.5, subdivision (a)(6), the Executive Officer has determined that the proposed regulatory action would create costs or savings to any State agency, would not create costs or savings in federal funding to the State, would create costs or mandate to any local agency or school district, whether or not reimbursable by the State under Government Code, title 2, division 4, part 7 (commencing with section 17500), and would create other nondiscretionary cost or savings to State or local agencies.

Cost to Any Local Agency or School District Requiring Reimbursement under Section 17500 et seq.:

None. Because the regulatory requirements apply equally to all regulated entities and unique requirements are not imposed on local agencies or school districts, the Executive Officer has determined that the proposed regulatory action imposes no costs on local agencies or school districts that are required to be reimbursed by the State pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, and does not impose a mandate on local agencies or school districts that is required to be reimbursed pursuant to Section 6 of Article XIII B of the California Constitution.

Cost or Savings for State Agencies:

Agencies that own and operate small off-road equipment subject to the SORE regulations could be impacted by new costs and cost-savings due to the Proposed Amendments. These agencies are expected to bear higher upfront costs for new equipment under the Proposed Amendments, but also realize fuel and operational savings. The net of these costs and cost-savings represents a fiscal impact to the State government. Based on its 23 percent share of total government employment in California, the State would incur a \$1.36 million incremental cost to comply with the Proposed Amendments accrued over the regulatory horizon of 2023 through 2043. Annual net cost-savings would not occur during the regulatory horizon.

Other Non-Discretionary Costs or Savings on Local Agencies:

Local agencies that own and operate small off-road equipment under the SORE regulations could be impacted by new costs and cost-savings due to the Proposed Amendments. These agencies are expected to bear higher upfront costs for new equipment under the Proposed Amendments, but also realize fuel and operation

savings. The net of these costs and cost-savings represents a fiscal impact to local agencies. Based on its 77 percent share of total government employment in California, local government entities as a whole would incur a \$4.54 million incremental cost to comply with the Proposed Amendments accrued over the regulatory horizon of 2023 through 2043. Annual net cost-savings would not occur during the regulatory horizon.

Cost or Savings in Federal Funding to the State:

None. Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action would not create costs or savings in federal funding to the State.

Housing Costs (Gov. Code, § 11346.5, subd. (a)(12)):

The Executive Officer has also made the initial determination that the proposed regulatory action will not have a significant effect on housing costs.

Significant Statewide Adverse Economic Impact Directly Affecting Business, Including Ability to Compete (Gov. Code, §§ 11346.3, subd. (a), 11346.5, subd. (a)(7), 11346.5, subd. (a)(8)):

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

Results of the Economic Impact Analysis/Assessment (Gov. Code, § 11346.5, subd. (a)(10)):

A detailed assessment of the economic impacts of the proposed regulatory action can be found in Chapter VII and Appendix I of the ISOR. Appendix I contains the Standardized Regulatory Impact Assessment with Department of Finance (DOF) comments.

Major Regulation: Statement of the Results of the Standardized Regulatory Impact Analysis (SRIA) (Gov. Code, § 11346.3, subd. (c))

The creation or elimination of jobs within the state:

Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work for all industries. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included. The employment impacts represent the net change in employment across the economy, which is composed of positive impacts for some industries and negative impacts for others. The Proposed Amendments are estimated to result in an initial decrease in employment growth that does not exceed 0.02 percent of baseline employment that diminishes towards the

end of the regulatory horizon. In 2043, the Proposed Amendments are estimated to result in job gains of 707 across most economic sectors and 1,160 jobs foregone predominantly in the services and government sectors. The net job impact of the Proposed Amendments in 2043 is estimated to be a loss of 453 jobs.

The creation of new businesses or the elimination of existing businesses within the state:

The macroeconomic model used in this analysis cannot directly estimate the creation or elimination of businesses. Changes in jobs and output for the California economy can be used to understand some potential impacts. The overall jobs and output impacts of the Proposed Amendments are very small relative to the total California economy, representing changes less than 0.03 percent. However, impacts in some specific sectors are larger. The trend of decreasing production costs for the services to buildings and dwellings industry and has the potential to result in an expansion or increase in the number of businesses in this industry if sustained over time. The decreasing trend in demand for gasoline fuel following from the Proposed Amendments has the potential to result in a decrease in the number of businesses in this industry if sustained over time. The personal and household maintenance and repair industry sees the largest relative decrease in industry employment and output from the Proposed Amendments and may be indicative of potential business contraction or eliminations. In particular, staff expects small-engine repair shops to see significant impacts to their business. ZEE do not contain an engine and are expected to need significantly less repair than SORE equipment. The remaining revenue for these businesses would likely come from repair of equipment other than SORE, such as saws and hand tools, from repair that would be conducted on both ZEE and SORE, including blade sharpening, as well as from sales of new equipment.

The competitive advantages or disadvantages for businesses currently doing business within the state:

The small off-road equipment manufacturers that must comply with requirements of the Proposed Amendments are mostly based outside of California and therefore do not present any competitiveness impacts for this industry inside California. Small off-road equipment dealers may potentially find themselves at a competitive disadvantage as a result of the Proposed Amendments. Businesses, or individuals could purchase small off-road equipment out of state and bring it into California for use. Due to the small price differences on the household side of the market between SORE equipment and ZEE, this is unlikely to happen at the individual level. However, the higher upfront costs associated with professional ZEE may make this enticing for large businesses. The additional costs of transportation for purchasing and repair may prevent some of this. In contrast, online sales of noncompliant equipment are expected to be low, as CARB staff search for such equipment and have initiated enforcement mechanisms against online retailers selling noncompliant SORE. The requirements result in an incremental net savings to professional users of the equipment. These net savings are anticipated to be realized generally across

professional users and are not anticipated to result in any competitive advantages or disadvantages within industries.

The increase or decrease of investment in the state:

Private domestic investment consists of purchases of residential and nonresidential structures and of equipment and software by private businesses and nonprofit institutions. It is used as a proxy for impacts on investments in California because it provides an indicator of the future productive capacity of the economy. The Proposed Amendments would cause a decrease of private investment by about \$231 million in 2027 and an increase of \$41 million in 2043, not exceeding 0.05 percent of baseline investment.

The incentives for innovation in products, materials, or processes:

The Proposed Amendments are written to provide maximum flexibility to manufacturers, while still meeting California’s air quality goals. A new zero-emission generator credit program is being added to incentivize an earlier adoption of zero-emission generators by allowing credit generation to offset emissions from SORE.

The benefits of the regulations, including, but not limited to, benefits to the health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life, among any other benefits identified by the agency:

The objective of the Proposed Amendments is to accelerate the replacement of SORE equipment produced for sale or lease for operation in California with ZEE. A transition to ZEE is not expected to occur without the Proposed Amendments. Without further regulation, the SORE equipment population is projected to be higher in 2043 than it is in 2021. Accelerating the adoption of ZEE would create public health benefits by reducing emissions and create the potential for cost-savings to users of small off-road equipment. A summary of these benefits is provided in the “Objectives and Benefits of the Proposed Regulatory Action” section of the Informative Digest of Proposed Action and Policy Statement Overview on page 10 of this document.

Department of Finance Comments and Responses:

DOF Comments:

Finance generally concurs with the methodology used to estimate impacts of the proposed regulations, with two exceptions.

1. The SRIA must be modified to include benefits—such as avoided health costs and emissions reductions—on an annual basis.
2. Given that cost increases differ widely by type of equipment, the SRIA should include a cost and benefit breakdown analysis for each of the nine regulated product categories identified by CARB to identify impacts on representative individuals and

businesses that use the equipment. The SRIA does so for certain types of businesses, such as for one-person landscaping businesses, which are projected to incur an upfront cost of \$1,300 to replace a lawnmower, leaf blower, hedge trimmer, chainsaw and string trimmer with zero emission equipment, and to save \$1,800 per year due to reduced maintenance and operational costs. These discussions are helpful and should be extended to cover typical users of all types of equipment. CARB should then discuss any differential impact on individuals and businesses. For instance, the upfront costs of \$1,300 to a one-person landscaping businesses are about 1 percent of their average yearly revenue. However, a business that uses a pressure washer will incur an incremental upfront cost of \$18,250, which is about 5 percent of the annual revenue for home and dwelling service businesses with less than 20 employees. Therefore, businesses with low operating cash and savings might not be able to purchase the new equipment and might be driven out of business.

Responses:

1. In response to DOF's request that annual benefits such as avoided health costs and emission reductions be added, staff has added tables delineating the annual reduction in emissions, reduction in negative health outcomes, and associated cost-benefits for both the Proposed Amendments and considered alternatives.

2. In response to DOF's comment that the SRIA should include a cost and benefit breakdown analysis for each of the nine regulated product categories identified by CARB to identify impacts on representative individuals and businesses that use the equipment, staff has added more discussion of specific equipment types. The reasons for and impacts of the large upfront costs of switching to zero emission generators and pressure washers are now discussed. Furthermore, staff has added a table that shows the length of time it would take a typical owner of a piece of ZEE to experience cost-savings compared to SORE for each equipment type. This table shows that owners of some equipment types are expected to break even nearly immediately, and owners of other equipment types may not break even within the median lifetime of the equipment. Finally, staff has added more discussion of the differential impacts on residential versus professional users.

Business Report (Gov. Code, §§ 11346.5, subd. (a)(11); 11346.3, subd. (d)):

In accordance with Government Code sections 11346.5, subdivision (a)(11) and 11346.3, subdivision (d), the Executive Officer finds the reporting requirements of the proposed regulatory action which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California. The Proposed Amendments include reporting requirements as part of the amendments for the voluntary emission reduction credit programs. Manufacturers that voluntarily seek to utilize the updated ABT program and the newly proposed zero-emission generator program under the Proposed Amendments would be required to report sales information, consistent with requirements for existing credit programs. The information contained in the reports is necessary for CARB to be able to verify

compliance with emission credit program requirements, which is necessary to prevent potential inappropriate generation and subsequent use of credits that could lead to excess emissions. CARB staff expects such potential reporting costs would be negligible and would have no impact on costs to consumers because manufacturers would not be required to create new information. Manufacturers are already required to maintain and submit sales reports under current regulations for purposes of verifying compliance with production line testing, warranty, emission related defect reporting, recall, and emission reduction credit requirements.

Cost Impacts on Representative Private Persons or Businesses (Gov. Code, § 11346.5, subd. (a)(9)):

In developing this regulatory proposal, CARB staff evaluated the potential economic impacts on representative private persons or businesses. As part of this evaluation, CARB contracted with the Social Science Research Center at California State University, Fullerton (CSUF) to conduct an intensive survey between 2017 and 2019 of households, nonlandscaping businesses, and landscapers on their ownership and use of small off-road equipment, and other related topics. The survey (referred to as CSUF survey) reached over 1,100 households, 1,300 businesses and 600 landscaping businesses throughout the state.

Representative Individuals:

Individuals most likely to be affected by the Proposed Amendments are homeowners who do their own landscaping. More than half (56 percent) of California households do not own any lawn and garden equipment and they will not be directly impacted by the Proposed Amendments. The remaining 44 percent of households owning equipment could be impacted. From CSUF survey data, the three most frequently owned types of residential lawn and garden equipment are lawn mowers, leaf blowers, and string trimmers/edgers/brush cutters. As an example, consider a new homeowner who needs these three pieces of equipment to maintain their yard. The upfront cost would be \$326 higher for ZEE than for SORE equipment. If all three pieces of equipment were purchased at once, it would take seven years after purchase for the homeowner to break even. Seven years is longer than the median ages from CSUF survey data for these three equipment types. However, a seven-year life is common for residential ZEE, and cost-savings are possible.

As a second example, staff assumed that an individual in a rural area may own a generator to run some electric equipment during a power outage, and a riding mower to maintain a large area of grass. Under the Proposed Amendments, the individual would incur an increase in upfront cost of \$1,898 by having to purchase ZEE, assuming both pieces of equipment are purchased at once. At average use times, the individual would reach the break-even point before nine years of ownership. After ten years of ownership, the homeowner would have saved \$400 by purchasing ZEE instead of SORE equipment. A ten-year life is common for these types of residential ZEE.

Representative Businesses:

A representative typical business is one that does not do landscaping work but may own small off-road equipment such as pumps and generators to maintain its own property or conduct work outdoors. Based on CSUF survey data, 15 percent of all businesses in the state that are not landscapers own at least one piece of lawn and garden equipment. Roughly 25 percent of all businesses surveyed had another piece of small off-road equipment such as a generator or pump. Therefore, most typical businesses would have no costs associated with the Proposed Amendments, as most do not own any small off-road equipment.

Effect on Small Business (Cal. Code Regs., tit. 1, § 4, subds. (a) and (b)):

The Executive Officer has also determined under California Code of Regulations, title 1, section 4, that the proposed regulatory action would affect small businesses, because 99 percent of all landscaping businesses are considered small businesses. These businesses rely on small off-road equipment to do their work.

One third of all landscaping business owners surveyed in the CSUF survey responded that they do not have any employees. As an example, assume a sole proprietorship landscaping business needs to purchase a chainsaw, a lawn mower, a leaf blower, a string trimmer, and a hedge trimmer to conduct its work. Due to the Proposed Amendments, despite an increased upfront cost of \$2,134 for a complete suite of ZEE, the landscaping business in this example would start saving money between two and three years after purchasing ZEE due to decreased fuel and maintenance costs. Most professional-grade lawn and garden equipment used by landscapers is less than five years old. Over five years, the landscaping business in this example would experience a cost-savings of \$2,621. The increased upfront cost difference of \$2,134 is roughly 1 percent of the average revenue of a landscaping business with fewer than 5 employees. This hypothetical example assumes that a landscaping business would purchase its ZEE all at once. In reality, ZEE purchase costs would likely be spread out over several years as landscapers purchase new ZEE when SORE equipment breaks.

Based on median populations from CSUF survey data, a small landscaping business with ten employees likely has three chainsaws, two lawn mowers, one riding mower, two leaf blowers, two string trimmers, and two hedge trimmers. Under the Proposed Amendments, this small landscaping business would incur an increase in upfront cost of \$14,110, assuming all equipment is purchased at once. The ten-employee landscaping business in this example would reach a break-even point before five years of ZEE ownership. The cost-savings after five years of ownership, which corresponds to the median age of professional lawn and garden equipment, would be \$238.62.

Other types of small businesses that will be impacted by the Proposed Amendments are outdoor power equipment stores (known as equipment dealers) and small engine repair shops. They are expected to be indirectly impacted due to lost revenue from the reduced maintenance requirements for ZEE. In California, there are 78 businesses

that are classified as “home and garden equipment repair.” These 78 businesses average \$1.7 million per year in revenue, for a total of \$132.6 million per year as of 2018. There are 334 business in California that are classified as outdoor power equipment stores. These businesses are also all small businesses and have \$449.1 million per year in combined revenue as of 2018. Based on the estimated overall maintenance cost-savings to small off-road equipment purchasers under the Proposed Amendments, CARB staff estimated there would be an average annual lost revenue of \$24.96 million per year expected for home and garden equipment repair and outdoor power equipment stores between 2023 and 2043.

Consideration of Alternatives (Gov. Code, § 11346.5, subd. (a)(13)):

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board, or that has otherwise been identified and brought to the attention of the Board, would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law. CARB staff considered reasonable alternatives to the Proposed Amendments, as described in Chapter VIII of the ISOR.

State Implementation Plan Revision

If adopted by CARB, CARB plans to submit the proposed regulatory action to U.S. EPA for approval as a revision to the California State Implementation Plan required by the federal Clean Air Act. The adopted regulatory action would be submitted as a State Implementation Plan revision because it amends regulations intended to reduce emissions of air pollutants in order to attain and maintain the NAAQS promulgated by U.S. EPA pursuant to the federal Clean Air Act.

Environmental Analysis

The Proposed Amendments are substantively similar to a regulatory concept measure previously included within CARB’s 2016 State SIP Strategy. In its approval of the 2016 State SIP Strategy, CARB certified an environmental analysis (EA), entitled Final Environmental Analysis for the Revised Proposed 2016 State Strategy for the State Implementation Plan (Final EA), that evaluated the impacts associated with the 2016 State SIP Strategy’s SORE regulatory measures. CARB identified mitigation for those impacts, evaluated overarching alternatives to the 2016 State SIP Strategy, and adopted a statement of overriding circumstances for impacts deemed significant and unavoidable. While the Proposed Amendments fill in more detail with respect to specifying the more stringent emission standards and eventual emission standards of zero, the additional detail does not change the potential compliance responses

identified in the Final EA and associated impacts and mitigation measures from potential compliance-response development projects. Rather, the only change triggered by the Proposed Amendments that warrants an addendum to the Final EA is the need to add the Proposed Amendments' detail to the project description of the 2016 State SIP Strategy's SORE measures. Therefore, since the Final EA adequately evaluated impacts, mitigation, and alternatives associated with the 2016 State SIP Strategy SORE measures and the Proposed Amendments are substantively similar to the 2016 State SIP Strategy SORE measures, the Proposed Amendments do not trigger the need to prepare a subsequent EA. The basis for reaching this conclusion is provided in Chapter V of the ISOR.

Special Accommodation Request

Consistent with California Government Code section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language; and
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerks' Office at cotb@arb.ca.gov or (916) 322-5594 as soon as possible, but no later than ten business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia;
- Documentos disponibles en un formato alterno u otro idioma; y
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al cotb@arb.ca.gov o (916) 322-5594 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

Agency Contact Persons

Inquiries concerning the substance of the proposed regulatory action may be directed to the agency representative Dorothy Fibiger, Air Resources Engineer, Testing and Certification Section, at (916) 324-8426 or (designated back-up contact) Chris Burford, Air Resources Engineer, Testing and Certification Section, at (916) 327-4719.

Availability of Documents

CARB staff has prepared a Staff Report: Initial Statement of Reasons for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled: Public Hearing to Consider Proposed Amendments to the Small Off-Road Engine Regulations: Transition to Zero Emissions.

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikethrough format to allow for comparison with the existing regulations, may be accessed on CARB's website listed below, on October 12, 2021. Please contact [Bradley Bechtold](mailto:Bradley.Bechtold@arb.ca.gov), Regulations Coordinator, at Bradley.Bechtold@arb.ca.gov or (916) 322-6533 if you need physical copies of the documents. Because of current travel, facility, and staffing restrictions, the California Air Resources Board's offices have limited public access. Pursuant to Government Code section 11346.5, subdivision (b), upon request to the aforementioned Regulations Coordinator, physical copies would be obtained from the Public Information Office, California Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814.

Further, the agency representative to whom nonsubstantive inquiries concerning the proposed administrative action may be directed is Bradley Bechtold, Regulations Coordinator, (916) 322-6533. The Board staff has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

Hearing Procedures

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Government Code, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340).

Following the public hearing, the Board may take action to approve for adoption the regulatory language as originally proposed, or with non-substantial or grammatical modifications. The Board may also approve for adoption the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice and that the regulatory language as modified could result from the proposed regulatory action. If

this occurs, the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15-days before final adoption.

The public may request a copy of the modified regulatory text from CARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814.

Final Statement of Reasons Availability

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on CARB's website listed below.

Internet Access

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on [CARB's website](https://ww2.arb.ca.gov/rulemaking/2021/sore2021) for this rulemaking at <https://ww2.arb.ca.gov/rulemaking/2021/sore2021>

California Air Resources Board



Richard W. Corey
Executive Officer

Date: September 28, 2021

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see [CARB's website](http://www.arb.ca.gov) (www.arb.ca.gov).