State of California AIR RESOURCES BOARD

Amendments to the Large Spark-Ignition Engine Fleet Requirements Regulation

Resolution 16-10

July 21, 2016

Agenda Item No.: 16-7-3

WHEREAS, sections 39001, 39002, 39003, 39500, and 43000 of the Health and Safety Code charge the Air Resources Board (ARB or Board) with the responsibility for systematically addressing the serious air pollution problem caused by motor vehicles;

WHEREAS, sections 43013, 43018, 43101, 43102, 43104, 43150, and 43151 of the Health and Safety Code authorize the Board to achieve the maximum degree of emission reductions possible from vehicular and other mobile sources in order to accomplish the attainment of the State standards for ambient air quality at the earliest practicable date;

WHEREAS, sections 39600, 39601, 39602.5, and 43600 of the Health and Safety Code authorize the 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 39607 of the Health and Safety Code authorizes the Board to establish a program to secure data on air quality and inventory sources of air pollution;

WHEREAS, the Board is implementing, interpreting, or making specific sections 39001, 39002, 39003, 39500, 39600, 39602.5, 39607, 39658, 4300.5, 43009, 43011, 43013, 43017, 43018, 43101, 43102, 43104, and 43151 of the Health and Safety Code;

WHEREAS, The Board-adopted 2003 State Implementation Plan (SIP) included a commitment to achieve additional reductions from the Large Spark-Ignition (LSI) Engine category;

WHEREAS, the Board-adopted the Off-Road Large Spark-Ignition Engine Fleet Requirements Regulation (LSI Fleet Regulation), California Code of Regulations, title 13, sections 2775. 2775.1, and 2775.2, pursuant to its authority and rationale set forth in Resolution 06-11;

WHEREAS, the Board-adopted 2006 fleet requirements harmonized California's 1998 engine standards with the U.S. Environmental Protection Agency's (U.S. EPA) LSI engine standards of 2.0 g/bhp-hr of hydrocarbons (HC) and oxides of nitrogen (NOx)

beginning with the 2007 model year, set forth more stringent 0.6 g/bhp-hr standards beginning with the 2010 model year, and established in-use fleet requirements;

WHEREAS, the Board-adopted amendments to the LSI Fleet Regulation, California Code of Regulations, title 13, sections 2775. 2775.1, and 2775.2, pursuant to its authority and rationale set forth in Resolution 10-48;

WHEREAS, the Board-adopted 2010 amendments provided additional compliance flexibility; excluded certain categories, such as limited hours of use, boneyard, and retired equipment; and clarified the recordkeeping requirements;

WHEREAS, ARB requested and was granted authorization by the U.S. EPA on March 29, 2012, to enforce California's non-road engine emission standards and certification and test procedures for LSI non-road engines and in-use fleet average emission requirements as described in the LSI Fleet Regulation;

WHEREAS, between June 2015 and October 2015, ARB staff met and worked with affected private industry fleets, public fleets, and the public, and held two sets of three workshops statewide to discuss potential amendments to the regulation;

WHEREAS, taking into account the information and comments received at the aforementioned meetings, ARB staff prepared a report entitled "Staff Report: Initial Statement of Reasons for Proposed Rulemaking: Proposed Amendments to the Large Spark-Ignition Engine Fleet Requirements Regulation" (ISOR) and released it to the public on May 31, 2016;

WHEREAS, the ISOR identifies and explains the need to amend the current regulation for the following reasons:

LSI engines are "spark-ignition engines" (i.e., Otto-cycle) greater than 25 horsepower that are used in a variety of equipment, including but not limited to forklifts, air ground support equipment, sweepers/scrubbers, industrial tow tractors, generators sets, and irrigation pumps;

The Board adopted in 2006, and later amended in 2010, the LSI Fleet Regulation to significantly reduce emissions of NOx and HC from in-use LSI equipment in California by accelerating the introduction of cleaner equipment, retrofits, and the retirement of uncontrolled in-use equipment;

The LSI Fleet Regulation applies to medium fleets (4 to 25 pieces of equipment) and large fleets (26 or more pieces of equipment), whereas small fleets (1 to 3 forklifts and/or 1 to 3 non-forklift equipment) and certain agricultural fleets are exempt from the requirements;

The final regulatory performance milestones reached on January 1, 2013 and June 30, 2016 marks the sunset of the recordkeeping requirement for most fleets;

LSI fleet operators are required to keep equipment in compliance with the LSI Fleet Regulation once it is in compliance, so long as the operator is operating equipment in California:

There are estimated to be 2,000 fleets, consisting of approximately 90,000 total pieces of affected equipment that are subject to the current LSI Fleet Regulation;

Limited data has hindered ARB's ability to accurately assess air quality progress from the LSI sector:

There are no effective mechanisms in place for determining rates of compliance;

Enforcement is challenging and fleets may be violating the requirements of the LSI Fleet Regulation undetected, which increases the public's exposure to air pollutants;

Lack of data could hinder development of future measures such as the Sustainable Freight Strategy (Resolution 15-22) and the Zero Emission Off-Road Measure identified in the Sustainable Freight: Pathways to Zero and Near-Zero Emissions, Discussion Draft (Pathways Document);

WHEREAS, ARB staff has proposed amending the LSI Fleet Regulation as set forth in Attachment A to:

Modify the current recordkeeping provision language to require fleets to submit an initial report by June 30, 2017, and then annually thereafter;

Modify the current recordkeeping provision language to require fleets to label all affected equipment with an ARB-issued equipment identification number;

Extend the current administrative recordkeeping requirement until 2023, beginning in 2017; and

Provide minor clean-up of the existing regulatory language;

WHEREAS, Attachment A hereto contains the proposed amendments to the regulation;

WHEREAS, ARB'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, § 15251(d)); and ARB conducts its CEQA review according to this certified program (California Code of Regulations, title 17, §§ 60000-60007);

WHEREAS, ARB staff has determined that the proposed amendments are exempt from CEQA under California Code of Regulations, title 14, section 15061(b)(3) ("common sense" exemption) because the record evidence shows with certainty that there is no

possibility that the proposed amendments may result in a significant adverse impact on the environment, as the proposed amendments require only reporting, labeling, and recordkeeping, as described in Chapter V of the ISOR;

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;

WHEREAS, the Board finds that:

Despite advances in reducing emissions from mobile sources, stationary sources, and area sources, California still has the most severe air pollution problems in the United States;

The emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the states (Health and Safety Code § 43000(a));

To meet federal and California Clean Air Act (CAA) emission reduction requirements, ARB must continue to seek reductions from all sources under its authority, including off-road LSI equipment;

Statewide emission reductions projected for the LSI Fleet Regulation were committed to in the 2003 SIP; however, ensuring these reductions are actually being achieved has been challenging;

There is very limited data available on the LSI sector, which has hindered ARB staff's ability to accurately assess the progress made towards achieving the LSI Fleet Regulation's ultimate air quality goals;

Without the proposed amendments, fleets that may have been violating the requirements of the LSI Fleet Regulation could continue operating undetected, which would increase public exposure to air pollutants, results in inequity among regulated fleets, encourage other fleets not to comply, and undermine the original intent of the original LSI Fleet Regulation;

Because supporting data are essential for developing regulatory measures, this proposal is one of several ARB data collection efforts that support the objectives of the Zero Emission Off-Road Measure data collection element;

The LSI sector is expected to serve as the launching point for many transformative technologies that could one day penetrate the off-road diesel sector as well;

The proposed amendments require operators to report information, including basic information pertaining to the fleet, fleet operators, and the equipment in the Diesel Off-road Online Reporting System or by mail. Accordingly, under

California Government Code section 11346.3(d), the reporting requirements of the proposed amendments are necessary for the health, safety, and welfare of the people of the State;

The proposed amendments establish a labeling requirement. Proper labeling of the LSI equipment is essential to facilitate identification that the LSI equipment is legal for use in California and helps ARB;s Enforcement Division identify compliant equipment;

The proposed amendments extend the recordkeeping requirements to 2023. Recordkeeping requirements are necessary to verify compliance with the LSI Fleet Regulation and to inform policy decisions regarding future air quality measures;

The proposed amendments are necessary to improve enforcement effectiveness and compliance rates, ensure business compliance equity, and to provide necessary data to pursue development of potential near-term zero emission off-road actions identified in the updated Sustainable Freight Strategies (Resolution 15 -22), and support cleaner advance technology opportunities and incentives;

The proposed amendments meet the statutory requirements that ARB adopt standards, rules, and regulations, and do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed by the Health and Safety Code, Division 26 and by any other provision of law as identified in Health and Safety Code sections 39600 and 39601;

The proposed amendments meet the statutory requirement to establish uniform procedures for compliance with standards which control or eliminate air pollutants from motor vehicles, as identified in Health and Safety Code section 43000, subdivisions (a)-(d);

The proposed amendments meet the statutory requirements that the attainment and maintenance of air quality standards will necessitate the achievement of substantial improvements in the durability of vehicle emission systems and that the burden of achieving needed reductions in vehicle emissions be distributed equitably among the various classes of vehicles, including both on- and off road vehicles, to accomplish improvements in both the emissions level and in-use performance and durability of all new motor vehicles, as identified in Health and Safety Code section 43000.5;

The proposed amendments meet the statutory requirement that ARB establish criteria for the evaluation of the effectiveness of motor vehicle pollution control devices, as identified in the Health and Safety Code section 43011;

The proposed amendments were developed in an open public process, in consultation with affected parties as required by California Government Code

section 11346.45, through numerous public workshops, individual meetings, and other outreach efforts, and these efforts are expected to continue;

The economic and fiscal impacts of the proposed amendments have been analyzed as required by California Government Code sections 11346.2, 11346.3, 11346.5, and 11346.9, and the conclusions and supporting documentation for this analysis are as described in Chapter VII of the ISOR, as supplemented by ARB staff's presentation at the hearing of this item;

Alternatives have been analyzed as required by California Government Code sections 11346.2 and 11346.9. No reasonable alternatives to the proposed amendments considered to date, or that have otherwise been identified and brought to the attention of ARB, 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 regulation;

The proposed amendments are consistent with ARB's environmental justice policies and Government Code section 65040.12(c), and do not disproportionately impact people of any race, culture, or income; and

The proposed amendments are exempt from CEQA under California Code of Regulations, title 14, section 15061(b)(3) because substantial evidence in the record shows with certainty that there is no possibility that the proposal may result in a significant adverse impact on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption the proposed amendments to sections 2775, 2775.1, and 2775.2, title 13, California Code of Regulations, as set forth in Attachment A.

BE IT FURTHER RESOLVED that if there is a possibility that any modifications to the regulation made available for one or more 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 ARB's regulations at California Code of Regulations, title 17, sections 60000-60007, and prepare written responses to any comments received raising significant environmental issues as necessary, to present to the Board for approval along with the final regulation.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to determine if additional conforming modifications to the regulation are appropriate. If no additional modifications are appropriate, the Executive Officer shall take final action to adopt the regulation, as set forth in Attachment A. If the Executive Officer determines that additional conforming modifications are appropriate, the modified regulatory language shall be made available for public comment, with any additional supporting documents and information. 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 warranted, and if not, the Executive Officer shall take final action to adopt the regulation after addressing all appropriate conforming modifications.

BE IT FURTHER RESOLVED that the Board hereby determines, in accordance with the CAA, section 209(e)(2), that the amendments adopted herein do not undermine the Board's previous determination that the regulation's emission standards, other emission related requirements, and associated enforcement procedures are, in the aggregate, at least as protective of the public health and welfare as applicable federal standards, are necessary as part of ARB's off-road emissions program to meet compelling and extraordinary conditions existing in the State, and are consistent with the CAA, section 209.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulatory amendments to the U.S. EPA with a request that the U.S. EPA confirm that all parts of the amendments to the regulation fall within the scope of an existing authorization pursuant to section 209(e)(2)(A) of the CAA, as appropriate.

I hereby certify that the above is a true and correct copy of Resolution 16-10 as adopted by the Air Resources Board.

Tracy Jensen, Clerk of the Board

Resolution 16-10

July 21, 2016

Identification of Attachments to the Board Resolution

Attachment A: Proposed Amendment to the Large Spark-Ignition Engine Fleet

Requirements Regulation, California Code of Regulations, title 13, sections 2775, 2775.1, and 2775.2, as set forth in Appendix A to the

Initial Statement of Reasons, released May 31, 2016.