

TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE LARGE SPARK-IGNITION ENGINE FLEET REQUIREMENTS REGULATION

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider approval for adoption the proposed Amendments to the Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation.

DATE: July 21, 2016

TIME: 9:00 a.m.

LOCATION: California Environmental Protection Agency
Air Resources Board
Byron Sher Auditorium
1001 I Street
Sacramento, California 95814

This item may be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., July 21, 2016, and may continue at 8:30 a.m., on July 22, 2016. Please consult the agenda for the hearing, which will be available at least 10 days before July 21, 2016 to determine the day on which this item will be considered.

WRITTEN COMMENT PERIOD AND SUBMITTAL OF COMMENTS

Interested members of the public may present comments orally or in writing at 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 June 3, 2016. To be considered by the Board, written comments not physically submitted at the hearing, must be submitted on or after June 3, 2016, and received **no later than 5:00 pm on July 18, 2016**, and must be addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://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.

ARB requests that written and email statements on this item be filed at least 10 days prior to the hearing so that ARB staff and Board members have additional time to consider each comment. The Board 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.

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 Health and Safety Code, sections 39001, 39002, 39003, 39500, 39600, 39601, 39602.5, 39607, 39658, 43000, 43011, 43013, 43018, 43101, 43102, 43104, 43150, 43151, and 43600. This action is proposed to implement, interpret, and make specific sections 39001, 39002, 39003, 39500, 39600, 39602.5, 39607, 39658, 43000.5, 43009, 43011, 43013, 43017, 43018, 43101, 43102, 43104, and 43151 of the Health and Safety Code.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW (GOV. CODE, § 11346.5, subd. (a)(3)):

Sections Affected: Proposed amendments to California Code of Regulations, title 13, sections 2775, 2775.1, and 2775.2.

Background and Effect of the Proposed Regulatory Action:

Large spark-ignition engines, which are defined as spark-ignition (i.e., Otto-cycle) engines greater than 25 horsepower, are used in a variety of equipment, including, but not limited to, forklifts, airport ground support equipment (GSE), sweeper/scrubbers, industrial tow tractors, generator sets, and irrigation pumps. LSI equipment is found in approximately 2,000 fleets throughout the state operating at warehouses and distribution centers, seaports, airports, railyards, manufacturing plants, and many other commercial and industrial facilities.

In 1998, ARB first adopted emission standards for off-road LSI engines. The original LSI regulation required engine manufacturers to certify new LSI engines to a 3.0 gram per brake horsepower-hour (g/bhp-hr) combined hydrocarbons (HC) and oxides of nitrogen (NO_x), or HC+NO_x, standard. The emission control requirements were phased in, in increments of 25 percent of engine sales per year, beginning with the 2001 model year. Thus, by the 2004 model year, 100 percent of new LSI engines were required to be emission-controlled. To achieve this standard, manufacturers relied upon the same emission control technologies used in automotive engines for more than 20 years—three-way catalytic converters, electronic fuel/air controllers, and oxygen sensors. The 3.0 g/bhp-hr standard represented a 75 percent reduction in emissions versus LSI engines with no emission controls.

Building on this success, in 2002, the United States Environmental Protection Agency (U.S. EPA) subsequently harmonized the national standard with California's standard starting with the 2004 model year and adopted a more stringent 2.0 g/bhp-hr HC+NO_x standard for 2007 and subsequent model year engines. The federal program demonstrated that additional reductions from new engines were technically feasible and cost-effective.

In the 2003 State Implementation Plan for Ozone (2003 SIP), California committed to two additional LSI measures—one for the development of more stringent new engine standards and another for the development of in-use fleet requirements. ARB adopted

these two LSI measures in a 2006 rulemaking, which harmonized California's standard with U.S. EPA's 2.0 g/bhp-hr HC+NOx standard starting with the 2007 model year, set forth a more stringent 0.6 g/bhp-hr California standard starting with the 2010 model year, and established in-use LSI fleet requirements. The 0.6 g/bhp-hr standard represents a 95 percent emission reduction versus uncontrolled LSI engines and is still in effect today.

The in-use element of the 2006 rulemaking, adopted as the Large Spark-Ignition Engine Fleet Requirements Regulation (LSI Fleet Regulation), requires in-use fleet operators of four or more forklifts, sweeper/scrubbers, industrial tow tractors, and airport GSE to meet specific HC+NOx Fleet Average Emission Level (FAEL) standards. The FAEL standards, which have become more stringent over time, vary based upon equipment type and fleet size. For example, the FAEL standard for forklifts is more stringent because there are more retrofit devices available for forklifts than for other types of LSI equipment. In addition, FAEL standards are more stringent for large fleets (greater than 25 pieces of LSI equipment) because of their greater ability to incorporate zero and near-zero emission equipment into their operations.

The LSI Fleet Regulation was later amended in 2010, primarily to provide additional compliance flexibility.

In April 2015, the Board affirmed its vision of a zero and near-zero emission freight system through Resolution 15-22, which directed staff to pursue development of the potential near-term actions described in the *Sustainable Freight: Pathways to Zero and Near-Zero Emissions, Discussion Draft* (Pathways Document) as quickly as possible to meet public health and climate change needs. The Pathways Document describes a number of potential immediate and near-term actions intended to facilitate the transition to a zero emission transportation system and supports the on-going effort to develop California's Sustainable Freight Action Plan. This proposal would support two near-term actions identified in the Pathways Document:

- Collection of data from freight facilities to support future actions to reduce emissions and health risk and to improve efficiency (Data Collection); and
- Development of requirements to support broad scale deployment of zero emissions equipment in LSI applications (Zero Emission Off-Road Measure).

To achieve its healthy air quality, climate, and sustainability goals, California must take effective, well-coordinated actions to transition to a zero emission transportation system, for both passengers and freight. The Pathways Document sets out ARB's vision of a clean freight system and the immediate and near-term steps that ARB will take to support steady and continual progress in moving both domestic and international cargo in California more efficiently, with zero emission technology everywhere feasible, and near-zero emission technology with renewable fuels everywhere else. Success will depend on gains made in significantly increasing the capacity and durability of batteries and fuel cells in harsh environments, driving down costs of advanced technologies, and the development and expansion of energy and alternative fuel infrastructure.

This proposal is one of several ARB efforts to provide the data necessary to fully evaluate: (1) the feasibility of increasing deployment of zero emission technology in LSI

and other off-road equipment categories; (2) the cost and economics of widespread deployment of those technologies and the associated fueling infrastructure; and (3) the potential impacts on businesses and the environment.

STAFF'S PROPOSAL

While the current LSI Fleet Regulation requires fleet operators to document key compliance information about their equipment—information ARB could use to increase enforcement effectiveness and compliance rates and to inform policy decisions—it does not require, or provide a mechanism for, operators to report such information to ARB. This proposal, which was developed to address this issue, consists of the following major elements:

- The addition of reporting requirements, starting June 30, 2017;
- The addition of equipment labeling requirements, starting June 30, 2017; and
- The continuation of existing recordkeeping requirements.

Staff is proposing to require fleets subject to the current requirements of the LSI Fleet Regulation to report their LSI equipment to ARB, beginning June 30, 2017, and annually thereafter. Operators would be required to provide information about each piece of LSI equipment, including:

- Equipment Type, Make, Model, Model Year, Serial Number and Lift Capacity;
- Engine Manufacturer, Model Year, Displacement, U.S. EPA Family Name, Emission Certification Standard, Horsepower (or Operating Voltage, if applicable);
- If retrofit is installed, Retrofit Verification Level, Manufacturer, Serial Number; and
- Annual Hour Meter Readings (if necessary to qualify for an exemption).

In addition, affected fleets would also be required to label their LSI equipment with a unique equipment identification number (EIN) assigned by the Executive Officer. Similar to a license plate number for an on-road vehicle, the EIN would stay with the equipment even when sold to a new owner.

Furthermore, because the existing recordkeeping requirements are set to end on June 30, 2016, for most fleets, staff is proposing to extend such requirements until June 30, 2023. After such date, the proposed recordkeeping, reporting, and labeling requirements would all sunset. However, fleets taking advantage of exemptions that currently require documentation in order to qualify would still be required to maintain records, report, and label affected equipment after June 30, 2023.

Other non-substantive amendments are also being proposed for consistency as part of this rulemaking.

OBJECTIVES AND BENEFITS OF THE PROPOSED REGULATORY ACTION:

While the statewide emission reductions projected for the LSI Fleet Regulation were committed to in the 2003 SIP, very limited data are currently available for determining progress towards the regulation's ultimate air quality objectives. The proposed

amendments would address this by providing a mechanism for collecting the data needed. More importantly, they would improve the reliability of the emission reductions projected for the existing LSI Fleet Regulation by increasing enforcement effectiveness and compliance rates.

In addition, this proposal is one of several ARB Data Collection efforts that supports the near-term Data Collection action described in the Pathways Document. The compliance data gathered as a result of the proposed amendments would be used to inform the development of future measures to accelerate the deployment of zero emission technology, including the Zero Emission Off-Road Measure described in the Pathways Document. Staff believes that this future measure will be a key enabling step in transitioning zero emission technology into heavier, higher-power-demand applications, such as those that currently utilize diesel powertrains.

Therefore, this proposal furthers the goals of ARB to protect the health and safety of Californians and the environment by reducing criteria and climate emissions and improving air quality.

Staff has offered the California public several opportunities to learn about and comment on the proposed LSI regulatory amendments. Since starting the rulemaking process, ARB staff has held two sets of three workshops each to discuss the development of this regulatory proposal. Notices were posted to ARB's LSI webpage and e-mailed to subscribers of the LSI listserv. In addition, a toll-free hotline has been made available to stakeholders and those in the public with questions or comments regarding the LSI regulation and the proposed amendments. ARB staff continues to offer free LSI regulatory training classes and has included discussions in these classes on the proposed amendments. In addition, staff provided a brief update on the proposed regulatory amendments during several of the One Stop Truck Events held in the fall and winter 2015 throughout California.

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, ARB staff has conducted a search for similar regulations on this topic and has concluded that 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 necessarily 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 for state agencies that own LSI equipment. The Executive Officer has also determined that the proposed regulatory action is a mandate that would create costs for local agencies and school districts, but these costs would not be

reimbursable by the State pursuant to Government Code, title 2, division 4, part 7 (commencing with section 17500, et. seq.).

The total estimated cost of the proposed amendments for all public agencies is \$981,000. Federal agency fleets would have a cost of \$117,200 and State agency fleets would have cost of \$122,800. Local agency fleets, such as those owned by cities and counties, would have a cost of \$741,000. There are no other non-discretionary costs or savings imposed on federal, State, or local agencies. In addition, the proposed amendment would not create any cost 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 would 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.

Cost Impacts on Representative Private Persons or Businesses

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. It is expected that it would take a maximum of one hour to report and label each piece of equipment. The smallest fleets that would be required to report and label consist of four pieces of equipment. Staff assumed the average size of a private fleet that would be subject to the proposed amendments is 47 pieces of equipment (86,730 equipment / 1,848 fleets) and a typical large fleet operates 100 pieces of equipment. This results in a range of costs from approximately \$270 (for fleets with 4 pieces of equipment) to \$6,700 (for fleets with 100 pieces of equipment).

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

Effect on Jobs/Businesses:

The Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the Economic Impact Analysis in the Staff Report: Initial Statement of Reasons (ISOR).

Benefits of the Proposed Regulation:

The proposed amendments are expected to increase compliance rates and help ensure progress towards achieving the projected emission benefits of the LSI Fleet Regulation. In addition, the data that would be collected as a result of the proposed amendments

would be used to inform the development of the Zero Emission Off-Road Measure, which is identified as a potential near-term action in the Pathways Document.

A summary of these benefits is provided, please refer to “Objectives and Benefits of the Proposed Regulatory Action,” under the Informative Digest of Proposed Action and Policy Statement Overview Pursuant to Government Code 11346.5(a)(3) discussion on page 5.

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

The Executive Officer has also determined, pursuant to California Code of Regulations, title 1, section 4, that the proposed regulatory action would not affect small businesses, because small businesses that own LSI equipment are expected to be small fleets. Because small fleets are exempt from the current requirements of the LSI Fleet Regulation, they would also be exempt from the proposed amendments. However, while small businesses would not be required to report, some may voluntarily comply with the proposed LSI Fleet Regulation reporting and labeling requirements. A small fleet would assume a cost of \$67 for either 1 hour of employee time or a hired consultant to complete the equipment reporting and labeling. The cost to a small fleet, therefore, would range from \$67 (1 piece of equipment) to \$201 (3 pieces of equipment) if they choose to comply.

ALTERNATIVE STATEMENTS (Cal. Code Regs., tit. 1, § 4, subs. (a) and (b)):

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, and during workshops, 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.

BUSINESS REPORTS (Gov. Code, § 11346.3 subd. (c) and 11346.5 (a)(11)):

The Executive Officer has found that 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.

AVAILABILITY OF DOCUMENTS

ARB staff has prepared an ISOR for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled: Proposed Amendments to the Large Spark-Ignition Engine Fleet Requirements Regulation.

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 ARB’s website listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, (916) 322-2990, on June 3, 2016.

ENVIRONMENTAL ANALYSIS

ARB, as the lead agency under the California Environmental Quality Act (CEQA), has reviewed the proposed amendments and concluded that this action is exempt pursuant to CEQA Guidelines §15061(b)(3), because it can be seen with certainty that there is no possibility that the proposed amendments may result in significant adverse impacts on the environment. A brief explanation of the basis for reaching this conclusion is included in Chapter V of the ISOR.

AGENCY CONTACT PERSONS

Inquiries concerning the substance of the proposed regulatory action may be directed to the agency representative: Todd Sterling, Air Pollution Specialist, Off-Road Implementation Section, at (916) 323-2397 or (designated back-up contact) Mr. David Chen, Manager, Advanced Emission Control Strategies Section, at (626) 350-6579.

Further, the agency representative to whom non-substantive inquiries concerning the proposed administrative action may be directed is Nicole Hutchinson, 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 adopt the regulatory language as originally proposed, or with non-substantial or grammatical modifications. The Board may also adopt 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; in such event, 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 ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, (916) 322-2990.

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 ARB's website listed below.

INTERNET ACCESS

This notice, the ISOR, and all subsequent regulatory documents, including the FSOR, when completed, are available on ARB's website for this rulemaking at <http://www.arb.ca.gov/regact/2016/sparkignition2016/sparkignition2016.htm>

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;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 10 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
- 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 (916) 322-5594 o envíe un fax a (916) 322-3928 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.

CALIFORNIA AIR RESOURCES BOARD

/s/

Richard W. Corey
Executive Officer

Date: May 17, 2016

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 our website at www.arb.ca.gov.