



# Air Resources Board



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**Edmund G. Brown Jr.**  
Governor

June 2, 2015

Mail-Out #MSC 15-13

TO: All Interested Parties

SUBJECT: PUBLIC WORKSHOP TO DISCUSS PROPOSED AMENDMENTS TO  
THE OFF-ROAD LARGE SPARK-IGNITION ENGINE FLEET  
REGULATION

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Air Resources Board (ARB) staff invites you to participate in the first set of public workshops to discuss proposed amendments for the Off-Road Large Spark-Ignition Engine Fleet Requirements (LSI Fleet Regulation). The current LSI Fleet Regulation focuses on reducing emissions and keeping records for equipment types such as, most forklifts, sweepers/scrubbers, industrial tow tractors, and airport ground support equipment. In-field agricultural equipment are exempt.

At the workshop, ARB staff will present initial near- and long-term concepts to amend the LSI Fleet Regulation. Near-term, this includes aligning with the reporting and labeling requirements similar to the existing In-Use Off-Road Diesel-Fueled Fleets Regulation to both better characterize the existing California LSI fleet, and to ensure compliance with the existing LSI regulation. Staff is also interested in hearing from affected stakeholders on alternatives to achieving these same objectives.

Key elements of the near-term LSI Fleet Regulation amendments under consideration that will be discussed at these workshops include:

- Propose reporting requirements for all LSI fleets
- Propose equipment labeling requirements
- Clarify regulatory language

Zero emission technologies are commercially available, already in use in many LSI fleets, while other LSI equipment operate in duty cycles where zero emission technologies may be viable. Longer term, a combination of incentives and regulatory approaches are under consideration to expand the deployment of zero emission technologies in the off-road sector.

*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: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

### Workshop Locations

The workshops will be held in the following locations at the listed date and time:

Date: June 8, 2015  
Time: 10:00 a.m. – 12:00 p.m.  
Location: Cal EPA Building  
Byron Sher Auditorium  
1001 I Street  
Sacramento, CA 95814

Date: June 10, 2015  
Time: 10:00 a.m. – 12:00 p.m.  
Location: San Joaquin Valley Air Pollution Control District  
1990 E. Gettysburg Avenue  
Fresno, CA 93726

Date: June 12, 2015  
Time: 10:00 a.m. – 12:00 p.m.  
Location: South Coast Air Quality Management District  
Auditorium  
21865 Copley Drive  
Diamond Bar, CA 91765

The workshops will be webcast for those unable to attend in person. The broadcast for the Sacramento workshop may be accessed at <http://www.calepa.ca.gov/broadcast/?BDO=1>.

The broadcast for the San Joaquin Valley Air Pollution Control District may be accessed at [http://www.valleyair.org/Workshops/public\\_workshops\\_idx.htm](http://www.valleyair.org/Workshops/public_workshops_idx.htm). Information on submitting questions or comments will be provided during the webcast for remote participants.

The broadcast for the South Coast Air Quality Management District may be accessed at <http://www.aqmd.gov/home/library/webcasts>. Information on submitting questions or comments will be provided during the webcast for remote participants.

If you require a special accommodation, please contact the staff member listed below as soon as possible, but no later than 5 business days before the scheduled meeting. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

## Background

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 freight transport system is a major economic engine for California, but also accounts for about half of toxic diesel particulate matter, 45 percent of the emissions of nitrogen oxides (NOx) that form ozone and fine particulate matter in the atmosphere, and 6 percent of the greenhouse gas emissions in California. These statistics include emissions from trucks, ships, locomotives, aircraft, harbor craft, and all types of equipment used to move freight at seaports, airports, rail yards, warehouses and distribution centers. Proposed amendments to the LSI Fleet Regulation are identified in the Sustainable Freight Strategy as a Near-Term ARB Measure.

In 1998, ARB first adopted emission standards for new spark-ignited engines used in propane forklifts and other similar industrial equipment. These engines are referred to as large spark-ignition engines. In addition to forklifts, the LSI category includes airport ground support equipment (GSE), sweepers and scrubbers, generator sets, small irrigation pumps, and a variety of other similar equipment.

The LSI Fleet Regulation applies to operators of forklifts, sweeper/scrubbers, industrial tow tractors, and airport GSE. These vehicles are found in approximately 2,000 LSI fleets in California in industries as diverse as manufacturing, wholesale, transportation and utilities, retail, services, and construction, as well as public agencies. The 2006 LSI rulemaking and 2010 amendments required operators of in-use fleets to achieve specific hydrocarbon + NOx fleet average emission level (FAEL) standards that became more stringent over time, the lowest FAEL for large and medium fleets was to be achieved in 2013. The standards are also more stringent for forklifts than they are for non-forklift LSI equipment. The stringency of the standards reflects the differences in availability of retrofit devices for the 4 categories of in-use LSI equipment as well as the greater ability of large fleets to incorporate zero and near zero-emission equipment into their operations. Since 2007, fleet operators are required to keep updated fleet records at their facilities until June 30, 2016. Small fleets and in-field agricultural equipment are exempt from the LSI Fleet Regulation.

## Amendments under Consideration

Staff proposes reporting and labeling requirements similar to the existing In-Use Off-Road Diesel-Fueled Fleets Regulation for equipment covered by the LSI Fleet Regulation. Additional minor clarifications are also being proposed.

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ARB intends to develop an online reporting system that LSI equipment owners would use to report engine and equipment information. This reporting system would also automatically report a fleet's compliance with the existing LSI Fleet Regulation. The staff proposal for equipment labeling, similar to the In-Use Off-Road Diesel-Fueled Fleets Regulation, ensures that all equipment that operates in California is registered and continues to meet the current LSI fleet average requirements. The proposed amendments are critical to providing needed inventory updates, facilitating uniform compliance, and identifying incentive opportunities.

Staff is also interested in hearing from affected stakeholders on alternatives to achieving these same objectives.

ARB staff will provide a presentation outlining each of the proposed amendments and will be followed by an opportunity for public comment and discussion.

#### Workshop Materials

The formal meeting agenda and a full detailed description of the staff's proposal will be available on our web site for your review at <http://www.arb.ca.gov/msprog/offroad/orspark/orspark.htm> prior to the workshop.

If you did not receive this letter directly but would like to be on the mailing list for future notification, please sign up via our web site at [http://www.arb.ca.gov/listserv/listserv\\_ind.php?listname=orspark](http://www.arb.ca.gov/listserv/listserv_ind.php?listname=orspark).

If you have questions regarding the workshops or the proposed LSI Fleet Regulation amendments, please contact Mr. Todd Sterling, Air Pollution Specialist, at (916) 323-2397 or [Todd.Sterling@arb.ca.gov](mailto:Todd.Sterling@arb.ca.gov). We welcome and appreciate your participation in these workshops.

Sincerely,

/s/

Erik White, Chief  
Mobile Source Control Division

cc: See next page.

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cc: Maritess Sicat  
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