

Air Quality Update

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NEW REPORTING AND LABELING REQUIREMENTS FOR LARGE SPARK-IGNITION EQUIPMENT

In July 2016, the California Air Resources Board (CARB) amended and approved the Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation, which now includes new reporting and labeling requirements. Except for small fleets (1-3 forklifts and/or 1-3 non-forklifts), the LSI regulation applies to operators of off-road LSI engine forklifts, sweepers/scrubbers, industrial tow tractors, or airport ground support equipment with engines of 25 horsepower or greater with a displacement greater than 1.0 liter.

Except for small fleets, the initial reporting deadline is June 30, 2017, and will continue between June 1st and June 30th annually through 2023. Although the LSI regulation is for non-diesel equipment, reporting will be done via the Diesel Off-Road Online Reporting System (DOORS)*, the same reporting system as the diesel off-road regulation. Equipment Identification Numbers (EINs) will be assigned in DOORS for each piece of LSI equipment. EINs need to be labeled on equipment by June 30, 2017.

Fleet average requirements for the LSI rule remain unchanged. Medium forklift fleets (4-25 forklifts), large forklift fleets (26+ forklifts), and non-forklift fleets (4+ non-forklifts) should not exceed the 2013 Fleet Average Emission Level (FAEL) standards. Small fleets are still exempt from FAEL standards, as well as from reporting and labeling requirements.

Limited hours use (LHU) equipment that operated less than 200 hours in the

preceding calendar year are included in the fleet size determination, but can be excluded from the FAEL calculations. LHU equipment must be equipped with a non-resettable hour meter, and usage records must be maintained and reported annually.

**DOORS can be accessed via:*

https://ssl.arb.ca.gov/ssldoors/doors_reporting/doors_login.html

PERP AND PORTABLE ENGINES: PLANNED AMENDMENTS TO FLEET AVERAGE EMISSION STANDARDS

In December 2015, CARB issued an advisory to inform owners/operators of engines subject to either the Airborne Toxic Control Measure (ATCM) for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater and/or the Statewide Portable Equipment Registration Program (PERP) Regulation that amendments are underway for the upcoming 2017 and 2020 fleet average emission standards for diesel particulate matter (DPM). The 2017 and 2020 standards are part of a series of fleet average emission standards that require more stringent standards for DPM, with the first of the standards effective as of January 1, 2013.

The planned amendments are triggered by CARB's determination that widespread compliance with the 2017 and 2020 fleet average standards for DPM may not be feasible. The 2013 fleet average emission standard is still in effect, and the next fleet average reporting is due March 1, 2017. In anticipation of the upcoming amendments, CARB may relax enforcement of the current 2017 standard; see the advisory posted on CARB's website here: <http://www.arb.ca.gov/enf/advs/advs347.pdf>

Currently, CARB is holding multiple workshops to discuss the proposed amendments. The rulemaking process is estimated to begin in early 2017. The requirements prohibiting the use of Tier 0 emergency and low-use engines take effect January 1, 2017, and are not expected to change with the planned amendments.

Air Quality Tip

Facilities that hold a Title V Operating Permit must renew their permit every 5 years. A complete renewal application is due to the District no sooner than 545 days and no later than 180 days before the current permit expires. Be sure to keep an eye on when your facility Title V permit expires and allow enough time to perform the necessary reviews, including any regulatory or facility changes since the prior permit issuance, and to prepare the application forms to submit to the District on time.

Upcoming Training Offered by Yorke Engineering

- Bay Area Air Quality Regulations, Permitting, and Compliance Seminar: October 18 – October 19, 2016
- California Multi-Media Environmental Regulations: Permitting, Compliance, and Reporting Seminar: November 8 – November 9, 2016
<http://www.yorkeengr.com/AirQualityClasses.htm>

Upcoming Due Dates for 2016/2017

- CARB GHG Verification..... 9/1/2016
- CARB GHG Cap-and-Trade Annual Compliance Surrender 11/1/2016
- CARB On-Road Heavy-Duty Diesel Vehicle Reporting for Flexibility Options 1/31/2017
- Semi-Annual Title V Report..... Semi-Annually
- Annual Title V Compliance Certification..... Annually
- Title V – Application for Permit Renewal – Due 180 Days Prior to Permit Expiration

BAAQMD PROPOSED RULE CHANGES

For full details on changes below, go to: <http://www.baaqmd.gov/rules-and-compliance/rule-development/rules-under-development>

■ Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants

Risk Calculation Changes Could Lead to Challenging Operating Adjustments for Facilities

In response to new toxicological guidance issued by California's Office of Environmental Health Hazard Assessment (OEHHA), the Bay Area Air Quality Management District (BAAQMD) is in the process of modifying Regulation 2, Rule 5. This regulation is designed to reduce the impact to human health from new projects and provide net health benefits when sources are modified or replaced.

In reviewing health effects caused by air toxics, OEHHA has determined that early-life exposure to air toxics contributes to a lifetime increase in cancer risk. Children have greater sensitivity to carcinogens due to more rapid breathing and a lower body mass, thereby increasing inhalation risk. The primary purpose of the proposed change in Regulation 2-5 is to update health effect values and trigger levels, as well as to relocate the trigger level table out of the rule and into the BAAQMD Permit Handbook for easier modification in the future. Specific human health risk assessment procedures include:

- Age sensitivity factors;
- Age-specific exposure variables;
- Fraction of time at home;
- Exposure duration; and
- Spatial averaging of exposure concentrations.

The BAAQMD's anticipated result from the rule change is that human

health risk from typical projects and from permit changes will increase by approximately 2-3 times for residential risk, even as emissions stay the same. For 12 specific Toxic Air Contaminants (TACs), cancer risk could increase by up to a factor of 5. This may have significant impacts on many facilities.

In terms of project and facility impacts, the BAAQMD anticipates that approximately 130 projects may need to undergo additional refinements to their Health Risk Assessment (HRA) and, of those, approximately 80 may need to make operational changes, including reduction of operating hours, throughput rates, or emission rates. In addition, abatement devices and control technology upgrades may be needed for about 10 projects per year.

Some facilities are reviewing and updating their TAC emissions inventory and HRA to get ahead of any potential problems. Advance planning and identification of projects or sources that might be impacted will allow for operational adjustments to preemptively address future problems. The best way to start is to calculate your facility's "Prioritization Score," which is a conservative estimate of your facility AB 2588 HRA risk. The Prioritization Score is fairly quick to calculate, once you know your TAC emissions, and can help in your planning for toxics compliance.

The latest version of Regulation 2, Rule 5 is found at the following URL:

http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/reg0205_draft-amendment_jan_2016-pdf?la=en

Yorke Engineering, LLC specializes in air quality and environmental consulting for stationary and mobile sources, including dispersion modeling, health risk assessments, permitting, emission inventories, air quality compliance systems, etc. Yorke Engineering has assisted over 550 customers, including a wide variety of industrial facilities and government organizations throughout California.

BAAQMD OFFERING \$11 MILLION IN GRANTS TO REDUCE DIESEL EMISSIONS

The BAAQMD opened the application period for the Carl Moyer grant program on July 11, 2016. The program will fund up to \$11 million in grants to reduce diesel particulate emissions.

Diesel-powered equipment eligible for the grant funding includes:

- Off-road equipment (loaders, tractors, dozers, forklifts, etc.);
- Trucks;
- Agricultural equipment; and
- Locomotives.

Funding is provided for the replacement of older equipment, replacement of older engines, and installation of air pollution controls. Priority for funding is given to older engines with higher operating hours.



Facilities are advised to review their requirements for diesel equipment under state and local regulations for compliance and to identify equipment eligible for grant funding.

More information on BAAQMD Carl Moyer funding is available at:

<http://www.baaqmd.gov/grant-funding/funding-sources/carl-moyer-program>