Air Quality Update

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DIESEL OFF-ROAD REPORTING REQUIREMENTS FOR MEDIUM FLEETS BEGINS IN 2016

13 CCR §2449 – General Requirements for In-Use Off-Road Diesel-Fueled Fleets

All fleets were required to provide initial reporting of their fleet back in 2009, or within 30 days after the fleet was brought into California, whichever was later. Subsequent reporting deadlines are based on the fleet size, as shown in the below table.

Table 1: Fleet Compliance Due Dates

Fleet Category	Total Fleet HP	Reporting Due Dates	Performance Due Dates
Large	> 5,000 hp	Mar. 1: 2012-2023	Jan. 1: 2014*-2023
Medium	2,501-5,000 hp	Mar. 1: 2016-2023	Jan. 1: 2017-2023
Small	< 2,500 hp	Mar. 1: 2018-2028	Jan. 1: 2019-2028

*2014 performance requirements for large fleets were due July 1, 2014.

Large fleets, defined as having more than 5,000 total fleet horsepower (hp), were required to begin annual reporting in 2012 and continue annually until at least 2023. Performance requirements for large fleets began July 1, 2014, and continues annually by January 1st from 2015 through 2023.

Medium fleets, defined as having a total fleet size of 2,501 to 5,000 hp, must report their January 1, 2016, fleet status by March 1, 2016, and continue annually until at least 2023. Performance requirements for medium fleets begins in 2017 and annually thereafter through 2023.

Small fleets, defined as having a total fleet size of 2,500 hp or less, have annual reporting due from 2018 through at least 2028 and their performance requirements are due from 2019 through 2028.

Annual reporting is done by submitting a Responsible Official Affirmation Reporting (ROAR) form. By having the Responsible Official (or Designee) sign a ROAR, they are indicating that the fleet information in the Diesel Off-Road Online Reporting System (DOORS) is accurate. Updates to the fleet can be done online in DOORS or with paper forms. A designee may be assigned by the Responsible Official at any time with a Designated Official form.

Reporting beyond the 2023 (large and medium fleets) or 2028 (small fleets) due dates will be necessary for fleets that do not meet the final fleet average target, which could be as a result of utilizing the Best Available Control Technology (BACT) annual rate compliance method and/or only meeting the fleet average target with low-use reporting.

Performance requirements can be met in one of two ways, either through meeting the fleet average target or via BACT annual rate. Companies may switch between the two compliance methods as they like. The fleet average target is specific to the fleet makeup, based on the fleet category and individual equipment horsepower and emission factor (tier). The BACT annual rate requirements are based on the fleet size and compliance year. Compliance checks with both methods are done within DOORS. Compliance planning for future years can be done with the aid of the planning tool created by the California Air Resources Board (CARB).

Air Quality Tip

The CARB Refrigerant Management Program requires that all facilities whose largest refrigeration system is a small system (those containing more than 50 pounds but less than 200 pounds) are required to register for the first time by March 1, 2016. Small facilities are not required to file an Annual Report or pay the Annual Implementation Fee. The CARB online Refrigerant Registration and Reporting tool, known as R3, can be accessed via: https://ssl.arb.ca.gov/rmp-r3/.

Upcoming Training Offered by Yorke Engineering

- San Joaquin Valley Air Quality Regulations, Permitting, and Compliance Seminar: May 4 – May 5, 2016 http://www.yorkeengr.com/AirQualityClasses.htm

Upcoming Due Dates for 2016*

- USEPA GHG Report 3/31
- CARB GHG > 25K Metric Tons 4/11
- CARB GHG 10-25K Metric Tons and All Electric Retailers 6/1
- CARB GHG SF_6 Switchgear 6/1
- CARB In-Use Off-Road Diesel Vehicle Annual Reporting for Medium and Large Fleets 3/1
- CARB PERP Equipment Units Annual Report 3/1
- CARB Refrigerant Registration for Small Systems (> 50 lbs., < 200 lbs.) 3/1
- CARB Refrigerant Reporting for Medium and Large Systems (≥ 200 lbs.) 3/1
- 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

**All due dates listed are the statutory dates; sometimes dates are extended when they fall on a weekend/holiday.*

SJVAPCD PROPOSED RULE CHANGES

For full details on changes below, go to: http://www.valleyair.org/Workshops/public_workshops_idx.htm

- **Rule 2201:** ***New and Modified Stationary Source Review***

Rule 2201 is the San Joaquin Valley Air Pollution Control District's (SJVAPCD's) New Source Review (NSR) rule that applies to all new stationary sources and all modifications to existing stationary sources that are subject to District permit requirements. Rule 2201 has a special provision for a Temporary Replacement Emissions Unit (TREU), which is defined as an emissions unit that is at a stationary source for less than 180 days in any 12-month period and replaces an existing emissions unit that is shut down for maintenance or repair, provided that the potential to emit does not exceed the potential to emit from the existing emissions unit being replaced, and in the event that a TREU is used to replace a TREU, the combined time at the stationary source for the two TREUs does not exceed a total of 180 days in any 12-month period.

Typically, TREUs are brought on-site when a facility has to shut down for repair or maintenance and wants to use a TREU in place of the shutdown unit. Currently, the facility must first obtain an Authority to Construct (ATC) before the TREU can be installed and utilized. With the proposed amendment, Rule 2201 will grant an application shield to certain types of TREUs. With the proposed application shield, TREUs may be installed and utilized without first applying for an ATC, provided that the application is submitted to the District within 7 calendar days of completing the installation of the TREU and the following conditions are met:

- The TREU results in no increase in design capacity, unless a replacement unit of the same or lower design capacity is not available, in which case the replacement can result in a design capacity increase of up to 10%;
- The TREU results in no change to the permitted throughput or emissions due to a change in the design capacity as part of the replacement;
- The TREU performs the same function as the equipment being replaced; and
- The TREU either is addressed by a Best Available Retrofit Control Technology (BARCT) rule or is equipped with a control device capable of at least 85% emission control.

An application for a TREU that is removed from the facility within 7 calendar days of completing the installation of the TREU will not be required, provided that a report to the District demonstrating compliance with the requirements of Section 8 of Rule 2201 is submitted within 7 calendar days of completing the installation of the TREU.

RETROFIT EXHAUST CONTROL SYSTEM FOR RICH-BURN, SPARK-IGNITED ENGINES USED IN AGRICULTURAL OPERATIONS

The purpose of Rule 4702: *Internal Combustion (IC) Engines* is to limit emissions of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOCs), and sulfur oxides (SO_x) from IC engines. Rule 4702 specifies the emission limits/standard for both compression-ignited and spark-ignited IC engines. Many Valley agricultural operations have installed exhaust control retrofit systems in order to comply with Rule 4702. Some of the installed systems may be a non-certified exhaust control retrofit system, which are required to complete the following requirements:

- **Initial and Recurring Source Testing** – Per Rule 4702, an initial source test to demonstrate compliance with the NO_x, CO, and VOC emissions needs to be completed, along with the recurring source testing every 60 months thereafter. For an ATC or Permit-Exempt Equipment Registration (PEER) issued on or after July 1, 2015, the initial source test must be performed within 60 days of startup and every 60 months thereafter.
- **Ongoing Emissions Monitoring** – Monthly portable analyzer monitoring is required to demonstrate ongoing emissions compliance, except during months when a source test is performed. The monitoring is required starting the first month after the initial source test is performed and every month thereafter, as applicable.

Thus far, the SJVAPCD has only given a final exhaust control retrofit system certification for the Stationary Natural Gas Emission Compliance (SNGEC) system installed or verified by MurCal or a MurCal-authorized installer. The SJVAPCD has also issued an interim exhaust control retrofit system certification to the Altronic Inc. EPC-50 Air-to-Fuel Ratio Controller (AFRC) system installed or verified by Coastal Ignition & Controls (CIC) or Water Associates.

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 500 customers, including a wide variety of industrial facilities and government organizations throughout California.