

Air Quality Update

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January 1st, 2014 – SJVAPCD

CARB REPORTING FOR FACILITIES WITH MEDIUM-SIZED REFRIGERATION SYSTEMS BEGINS

On March 1, 2014, the Annual Reports will be due for facilities with large and medium-sized refrigeration systems, refrigerant distributors, and reclaimers subject to the California Air Resources Board's (CARB's) Refrigerant Management Program (RMP).

Facilities with large and medium-sized refrigeration systems are also required to pay their annual implementation fee by March 1, 2014. The CARB online Refrigerant Registration and Reporting tool, known as R3, can be accessed via the following URL: <https://ssl.arb.ca.gov/rmp-r3/index>

This year, facilities with medium-sized refrigeration systems must register and report for the first time.

As part of the California Global Warming Solutions Act of 2006 (AB 32), CARB adopted a regulation in 2009 to reduce greenhouse gas (GHG) emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. High-global warming potential (GWP) refrigerants, such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), are used in a large variety of refrigeration and air conditioning systems.

The RMP is designed to: 1) reduce emissions of high-GWP GHG refrig-

erants from leaky stationary, non-residential refrigeration equipment, 2) reduce emissions from the installation and servicing of refrigeration and air conditioning appliances using high-GWP refrigerants, and 3) verify GHG emission reductions. The strategy of the regulation includes registration, refrigerant leak detection and monitoring, leak repair, reporting and record-keeping, system retrofit or retirement planning, required service practices, and refrigerant distributor, wholesaler, and claimer prohibitions, record-keeping, and reporting.

The RMP requires that all facilities with large-sized refrigeration systems (i.e., those with 2,000 pounds of refrigerant or more) submit their next Annual Report by March 1, 2014, for their 2013 refrigeration system leak inspections, leak repairs, and other system servicing. Medium-sized refrigeration facilities (i.e., those facilities whose largest system is 200 pounds or more but less than 2,000 pounds) must submit their registration and first Annual Report by March 1, 2014, for their 2013 refrigeration system leak inspections, leak repairs, and other system servicing. The payment of the annual implementation fee is also due by March 1 for both the large and medium-sized facilities.

Refrigerant distributors, wholesalers, and reclaimers are also required to submit an Annual Report of their 2013 aggregated annual refrigerant sales, transactions, and disposal by the March 1, 2014, due date.

For more details on the requirements of the regulation, please visit the program web page at the following URL: <http://www.arb.ca.gov/stoprefrigerantleaks>

Air Quality Tip

When performing organic leak testing on fugitive components that is required to demonstrate compliance with rules or permit conditions, make sure your testing contractor is calibrating the portable volatile organic compound (VOC) analyzer to the level required. For example, if the requirement is to test for leaks less than 10,000 ppm, your contractor should be calibrating the instrument with 10,000 ppm calibration gas; if your testing contractor uses a 25,000 ppm calibration standard, the local air district could issue a Notice of Violation.

Upcoming Training Offered by Yorke Engineering:

- San Joaquin Valley Air Quality Regulations, Permitting, & Compliance Seminar: March 5 – March 6, 2014
<http://www.yorkeengr.com/AirQualityClasses.htm>

Upcoming Due Dates for 2014

- USEPA GHG Report.....3/31
- CARB GHG >25K Tons4/10
- CARB GHG 10-25K Tons & >25K Tons Electric6/2
- CARB PERP Equipment Units Annual Report3/1
- CARB On-Road Heavy-Duty DV* Report for Low-Use, Phase-In, & Good Faith Efforts.....1/31
- CARB In-Use Off-Road DV*:
 - Ban on Adding Tier 0 Equipment, All Fleets1/1
 - Ban on Adding Tier 1 Equipment, Large & Medium Fleets1/1
 - Report for Large Fleets3/1
- Semi-Annual Title V ReportSemi-Annually
- Annual Title V Compliance Certification Annually
- Title V – Application for Permit Renewal – Due 180 Days Prior to Permit Expiration

*Diesel Vehicle

RULE 4702 – COMPRESSION-IGNITED ENGINE COMPLIANCE DEADLINES

Pursuant to Section 5.2.4 of Rule 4702, all Agricultural Operation (AO) and Non-AO Tier 1 and Tier 2 certified compression-ignited engines rated at greater than 50 brake horsepower (bhp) that are subject to Rule 4702 will need to be replaced with Tier 4 certified engines no later than January 1, 2015, or 12 years after installation, but not later than June 1, 2018. For other certified compression-ignited engines, any replacement is required to meet the current certified compression-ignited engine standards at the time of the installation. Rule 4702 allows for emergency standby engines or low-use engines (no more than 200 hours/year) to be exempted, provided that the engine is equipped with an operating non-resettable elapsed time meter. San Joaquin Valley Air Pollution Control District (SJVAPCD) grant funding is available for the electric repower of Tier 1 or cleaner diesel-powered agricultural irrigation pump engines rated greater than 25 horsepower (HP). For Tier 0 diesel engines, SJVAPCD grant funding is only available for Tier 0 diesel engines rated 25 to 50 HP. District Permit-Exempt Equipment Registrations (PEERs) or Authority to Construct (ATC) permits are required for the replacement of engines. The PEER or ATC permit applications are due 3 months and 6 months, respectively, before the existing engine's replacement deadline.

UPCOMING DEADLINE FOR ABOVEGROUND GASOLINE STORAGE TANKS AT AGRICULTURAL OPERATIONS

In 2008, CARB adopted new Enhanced Vapor Recovery (EVR) requirements for aboveground storage tanks, which affect all aboveground gasoline storage tanks greater than 250 gallons in per-

mitted agricultural operations. For aboveground gasoline storage tanks between 251 gallons and 550 gallons at agricultural operations, an air permit and a submerged fill tube will be needed. For aboveground gasoline storage tanks greater than 550 gallons, aside from a valid air permit, a new Standing Loss Control (CARB Executive Order VR-301-E or VR-302-E) is applicable, which requires these tanks to be painted with a CARB-approved reflective white paint and have a certified pressure/vacuum (P/V) vent valve installed. In addition, by July 1, 2014, existing aboveground gasoline storage tanks greater than 550 gallons will need to be equipped with new Phase I EVR to control emissions during tank filling. For aboveground gasoline storage tanks greater than 550 gallons that are installed at their current location after July 1, 2010, the Phase I EVR is required at the time of installation. An ATC will be required prior to the installation of Phase I EVR.

SJVAPCD PROPOSED RULE CHANGES

For full details on proposed rule changes below, go to:

http://www.valleyair.org/Workshops/public_workshops_idx.htm

- Rule 4308 – *Boilers, Steam Generators, and Process Heaters – 0.075 MMBtu/hr to less than 2.0 MMBtu/hr*: Rule 4308 is the SJVAPCD's point-of-sale rule, which applies to any person who supplies, sells, offers for sale, installs, or solicits the installation of units subject to the rule. The purpose of this rule is to reduce oxides of nitrogen (NO_x) and carbon monoxide (CO) emissions from boilers, steam generators,

and process heaters with a rated heat input capacity of 0.075 to less than 2.0 million British thermal units per hour (MMBtu/hr). The proposed amendments will lower the NO_x emission limit for 0.075-0.4 MMBtu/hr-sized instantaneous water heaters from 55 parts per million by volume (ppmv) to 20 ppmv. The proposed amendments are also intended to clarify the applicability of the rule by adding specific exemption language for hot water pressure washers that are currently exempt from the rule.

- Rule 4702 – *Internal Combustion Engines*: The purpose of this rule is to limit the emissions of NO_x, CO, volatile organic compounds (VOCs), and oxides of sulfur (SO_x) for internal combustion engines rated at 25 bhp or greater. The proposed amendments will clarify rule applicability and clarify that the existing NO_x emission limit for lean-burn waste gas-fired engines used in non-agricultural operations is 65 ppmv.

- Rule 4622 – *Gasoline Transfer into Motor Vehicle Fuel Tanks*: This rule applies to any gasoline storage and dispensing operation or mobile fueler from which gasoline is transferred into motor vehicle fuel tanks. The proposed amendments will add E85 Fuel, Installation, Operation, and Maintenance (IOM) Manual, In-Station Diagnostics (ISD) System, and Liquid Condensate Trap to the list of definitions. In addition, two new exemptions will also be added to allow E85 fuel dispensing operations to be exempted from Rule 4622 requirements and mobile fuelers registered under the District PEER program to be exempted from the testing requirements under Section 6.4.1 of the rule.

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