

Air Quality Update

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September 26, 2023 – SJVAPCD

CARB'S ADVANCED CLEAN FLEETS REGULATION

The California Air Resources Board (CARB) approved the Advanced Clean Fleets (ACF) regulation on April 28, 2023, which will require the transition to Zero-Emission Vehicles (ZEVs). The regulation is anticipated to become law in 2023, and requirements begin as early as January 1, 2024. The ACF regulation applies to vehicles of all fuel types with gross vehicle weight ratings (GVWRs) over 8,500 pounds.

High-Priority and Federal (HPF)

HPF applies to all federal fleets with at least one applicable vehicle and to private fleets that meet the "high-priority" threshold in one of the following two ways, when considering all companies under common ownership: 1) annual gross revenue of \$50 million or more with at least one vehicle, or 2) own or direct 50 or more vehicles in California, regardless of revenue. The default compliance schedule requires that vehicle acquisitions starting January 1, 2024, must be ZEVs. Beginning January 1, 2025, existing vehicles have a compliance phase-out when they reach their minimum useful life (MUL).

As an alternative to the MUL phase-out, the fleet can choose the Zero-Emission Milestone (ZEM) Option, which allows fuel-based vehicle purchases at any time, so long as the fleet fulfills the ZEMs shown in Table 1. There are three milestone groups (MGs). MG1 includes box trucks, vans, two-axle buses, yard tractors, and light-duty package delivery vehicles. MG2 includes work trucks, day cab tractors, and three-axle buses. MG3 includes sleeper cap tractors and specialty vehicles.

Table 1: Zero-Emission MG and ZEV Purchase Schedules

MG	Percent Fleet Purchased				
	10%	25%	50%	75%	100%
1	2025	2028	2031	2033	2035+
2	2027	2030	2033	2036	2039+
3	2030	2033	2036	2039	2042+

State and Local Government Agency (SLGA)

Under ACF regulation, public fleets have two compliance options. Fleets can follow the SLGA purchase compliance schedule of 50% ZEV purchases from January 1, 2024, through December 31, 2026, and 100% ZEV purchases starting January 1, 2027. Alternatively, public fleets can opt into the ZEM Option defined in the ACF HPF regulation as previously described in this article.

Drayage

Starting January 1, 2024, any newly registered drayage vehicle must be a ZEV. Legacy trucks registered by December 31, 2023, will phase out when they reach the MUL or January 1, 2035, whichever occurs first. Legacy trucks must visit a port or intermodal railyard at least once annually and must report annual odometer readings to track MUL status.

There are exemptions and extensions that vary for each type of fleet. Some exemption categories include backup vehicles (1,000 miles per year), annual 5-day pass, mutual aid assistance, and fuel-based vehicle purchases for ZEV unavailability or when ZEVs do not meet daily operational needs, ZEV infrastructure delay, and ZEV delivery delay.

Manufacturers

Manufacturers must meet a 100% zero-emission sales requirement starting January 1, 2036.

For more information, please visit CARB's website at:

<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>

Air Quality Tip

Amendments to the In-Use Off-Road Diesel-Fueled Fleets regulation were finalized on August 18th and have an implementation date of January 1, 2024. For more information, visit:

<https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation>

Upcoming EH&S Training Offered by Yorke Engineering

- Northern California Air Quality Regulations, Permitting, and Compliance Seminar: November 7, 8, 14, 15, 16, 2023 (3-Hour Online Sessions)
- California Multi-Media Environmental Regulations: Permitting, Compliance, and Reporting Seminar: October 17 – October 18, 2023 (Available Online or In-Person in Anaheim, CA)
Class Info at: <http://yorkeengr.com/classes>

Upcoming Due Dates for 2023/2024*

- CARB LCFS Q2 Fuel Report 9/30/23
- CARB GHG Cap-and-Trade Annual Compliance Surrender 11/1/23
- CARB Clean Truck Check Report .. 12/31/23
- CARB LCFS Q3 Fuel Report 12/31/23
- CARB Off-Road Diesel Compliance by Fleet Average or BACT (All Fleets) .. 1/1/24
- CARB Off-Road Diesel Tier 0 Phase-Outs for Large Fleets 1/1/24
- CARB On-Road TRUCRS Reporting for Flexibility Options ... 1/31/24
- CARB Off-Road DOORS Reporting for All Fleets 3/1/24
- CARB PERP Reporting: Equip. Units and Low-Use Engines 3/1/24
- CARB Refrigerant Reporting for Medium/Large Systems (≥ 200 lbs) . 3/1/24
- CARB GHG Semiconductor Report . 3/1/24
- 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

**Due dates listed are statutory dates; sometimes dates are extended when on a weekend/holiday.*

SJVAPCD ADOPTED RULE CHANGES

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

▪ **Rule 4401: Steam-Enhanced Crude Oil Production Wells, Rule 4409: Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities, Rule 4455: Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants, Rule 4623: Storage of Organic Liquids, and Rule 4624: Transfer of Organic Liquid**

In June 2023, the San Joaquin Valley Air Pollution Control District (SJVAPCD) adopted amendments to Rules 4401, 4409, 4455, 4623, and 4624 to address Best Available Retrofit Control Technology (BARCT), the United States Environmental Protection Agency's (U.S. EPA's) 2016 Control Techniques Guidelines (CTG), and establish more stringent leak detection and repair (LDAR) requirements for volatile organic compound (VOC) emissions from components associated with the production of oil and gas. An overview of changes to each rule is summarized below. In general, the revised LDAR requirements begin after June 30, 2024, and include:

- Changes to the definition of a minor gas leak for components other than pressure relief devices was typically lowered to 500 parts per million by volume (ppmv) as methane;
- Generally, the component leak inspection frequency was modified to require quarterly inspections;
- In some cases, the number of allowable leaks identified during inspections was reduced;

➤ The allowable repair period for leaks was reduced to as short as 1 day;

➤ Rule 4401, 4409, and 4455 exemptions for ½-inch or smaller stainless-steel tube fittings have been removed;

➤ For Rules 4401, 4409, and 4455, procedures are specified to request an extended repair period in the event a rig-up operation is required to complete the repair; and

➤ Requirements that leaks detected by optical gas imaging (OGI) be measured by U.S. EPA Method 21 to determine compliance with leak thresholds and repair timeframes.

Amendments to Rule 4623 may require additional VOC control systems. Tanks storing organic liquids with a true vapor pressure (TVP) of ≥ 0.1 pounds per square inch absolute (psia) and < 0.5 psia will require a pressure-vacuum release valve. Tanks with a potential to emit (PTE) of 6 tons per year (TPY) and actual emissions greater than 4 TPY will require a vapor control system if one is not already installed. For tanks required to install a VOC emission control device (including a pressure-vacuum relief valve), a permit application is due by March 31, 2024.

The Rule 4623 amendments also include new tank inspection requirements and leak repair timeframes as specified in Section 5.9. Pressure vessels, gasoline storage tanks $< 19,800$ gallons, wine and spirits storage tanks, and clean-produced water storage tanks (with a PTE ≤ 6 TPY) are exempt from the requirements of Rule 4623.

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 1,750 customers, including a wide variety of industrial facilities and government organizations throughout California.

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**

The SJVAPCD is in the process of amending New Source Review (NSR) requirements. The primary purpose of the revision is to adopt full federal offsetting requirements for nitrogen oxides (NO_x) and VOCs. The SJVAPCD has been requiring federal offset quantities since early 2022, when the District offset program failed to demonstrate equivalency with the federal requirements.

The proposed updates also include:

➤ Public notification requirements for projects that increase the stationary source PTE to $\geq 80\%$ of the major source threshold for one or more pollutants; and

➤ Modifications to the federal offset equivalency demonstration for particulate matter less than 10 and 2.5 microns in size (PM₁₀ and PM_{2.5}) and sulfur oxides (SO_x).

▪ **Rule 2301: Emission Reduction Credit (ERC) Banking**

Rule 2301 proposed amendments include:

➤ Eliminating the ability to bank greenhouse gas ERCs;

➤ Clarifying the definition of "shutdown"; and

➤ Allowing the SJVAPCD to use unbanked shutdown emission reductions in its offset equivalency demonstration.