

Air Quality Update

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January 11, 2024 – SCAQMD

CARB OFF-ROAD DIESEL AMENDMENTS

The California Air Resources Board (CARB) Off-Road Diesel Regulation amendments have been approved, with an effective date of October 1, 2023. The regulation applies to off-road diesel vehicles with engines rated 25 horsepower (HP) or larger, with fleet sizes based on cumulative HP under common ownership in California. The amendments add additional requirements to existing obligations. Fleets are required to clean up 10% of their fleet HP each year until meeting the final fleet average target (F-FAT), with excess cleanup points [Best Available Control Technology (BACT) credits] carrying over until 2023 for Medium or Large fleets and 2028 for Small fleets (see Table 1).

Table 1: Fleet Sizes and Credit Expiry Dates

Size	Cumulative HP	Carryover Expires
Small	25-2,500	1/1/2028
Medium	2501-5,000	1/1/2023
Large	Over 5,000	1/1/2023

Carryover Credits Restart

After the initial expiry dates in Table 1, the amendment allows for BACT credit carryover with no expiration.

Renewable Diesel

Starting January 1, 2024, off-road diesel fleets must demonstrate via fueling records (contracts/receipts) that rental and owned off-road vehicles in the fleet solely use renewable diesel (RD) that is either 99% or 100% RD (R99 or R100). If RD is unavailable, the fleet must maintain quarterly records of attempts to obtain R99 or R100. Fleets

will affirm compliance with the RD requirements during each annual report. Captive attainment fleets or fleets solely comprised of Tier 4-Final (T4-F) engines or cleaner are exempt from RD requirements. If no bulk fuel vendors can provide RD to a fleet, the fleet must use the Alternative Fueling Station Locator tool to locate RD fuel stations near job sites or along trip routes. Screenshots of the tool at the following website may be used as documentation of RD unavailability:

<https://afdc.energy.gov/stations/#/find/nearest>

Tier Phase-Outs

Even if meeting its F-FAT, every fleet must “phase out” Tiers 0-2 engines by the January 1st deadlines in Table 2, via conversion to permanent low use (200 hours per year) or removal from California operations. Tier 0 (T0) engines have a “backstop” that will ban all California operations starting in 2036.

Table 2: January 1st Phase-Out Deadlines

Fleet Size	2024	2026	2028	2030	2032	2036
Large	T0	T1	T2			T0 Backstop
Medium		T0	T1	T2		
Small			T0	T1	T2	

Minimum Tier for Adding Vehicles

Starting January 1, 2024, there will be new minimum tier requirements for adding vehicles to a fleet, as shown in Table 3.

Table 3: Minimum Tier for Adding Vehicles

Minimum Tier for Adding Vehicles (Applicable January 1 st of Each Calendar Year)						
Fleet	2023	2024	2025	2026	2027	2028
Med/Lrg	Tier 3	T4-F				
Small*	Tier 3	Tier 4-Interim (T4-I)			T4-F	

*Fleets following the Optional Compliance Schedule for fleets with 500 HP or less may add T4-I through 2034 and must be T4-F or cleaner starting in 2035.

Air Quality Tip

For your on-road fleet where the CARB Advanced Clean Fleets (ACF) Regulation applies, reporting is due by February 1st. Reporting facilities will choose a compliance pathway of “minimum useful life” or “zero-emission vehicle milestone.” This choice can have a large impact on when fleets need to transition to zero-emission vehicles, and therefore can have a large financial impact.

Upcoming Online EH&S Training Offered by Yorke Engineering (3-Hour Sessions)

- Southern California Air Quality Regulations, Permitting, and Compliance Seminar: May 1, 3, 7, 8, and 9, 2024
- Class Info at: <http://yorkeengr.com/classes>

Upcoming Due Dates for 2024*

- SCAQMD 1110.2 Quarterly..... 1/15
- RECLAIM Quarterly (Cycle 2)..... 1/30
- CARB Clean Truck Check Report..... 1/31
- CARB On-Road TRUCRS Reporting for Flexibility Options 1/31
- CARB ACF Report for HPF Fleets 2/1
- Title V – 500-SAM..... 2/28
- RECLAIM APEP (Cycle 1) 2/29
- Title V – 500-ACC 3/1 (Except RECLAIM Cycle 1 2/29) (Except RECLAIM Cycle 2 8/29)
- CARB Off-Road DOORS Reporting for All Fleets..... 3/1
- CARB PERP Reporting: Equip. Units and Low-Use Engines 3/1
- CARB Refrigerant Reporting for Medium/Large Systems (≥ 200 lbs) 3/1
- CARB GHG Semiconductor Report..... 3/1
- SCAQMD AER..... 3/19
- U.S. EPA GHG Report..... 3/31
- CARB LCFS Q4 Fuel Report..... 3/31
- CARB ACF Report for SLGA Fleets 4/1
- CARB GHG > 25K Metric Tons 4/10
- SCAQMD 1110.2 Quarterly..... 4/15
- RECLAIM Quarterly (Cycles 1 & 2)..... 4/30
- CARB LCFS Annual Fuel Report..... 4/30
- 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.

SMOKE TEST PROGRAMS FOR HEAVY-DUTY VEHICLES

CARB's Periodic Smoke Inspection Program (PSIP)

The PSIP requires fleets with at least two diesel vehicles with a gross vehicle weight rating (GVWR) over 6,000 pounds (lbs) to conduct annual smoke tests when the engine is over 3 years old, if driven on California public roads and registered with the California Department of Motor Vehicles (DMV).

CARB's Heavy-Duty Inspection and Maintenance (HD I/M)/Clean Truck Check (CTC) Program

In October 2022, CARB adopted the HD I/M Program, now known as the CTC Program. Starting in 2024, private and public fleets are required to report their non-gasoline combustion vehicles with a GVWR over 14,000 lbs that operate in California (regardless of which state's DMV they are registered in). This expands the smoke test requirements to other fuel types, such as compressed natural gas (CNG) and propane heavy-duty vehicles.

Fleets must complete initial reporting and pay a \$30 fee per applicable vehicle by January 31, 2024. Smoke tests are required for vehicles with 2012 model year or older engines, and a CARB-approved on-board diagnostic test method is required for 2013 model year or newer engines. Diesel vehicles 6,001-14,000 lbs will continue to require PSIP smoke tests.

Smoke Tester Credentials

The smoke testing must be performed by a certified tester, and testers must renew their credentials every 2 years. The free CTC tester training course, exam, and associated information can be found at:

<https://ww2.arb.ca.gov/our-work/programs/inspection-and-maintenance-program/hd-im-tester-training-course-and-exam>

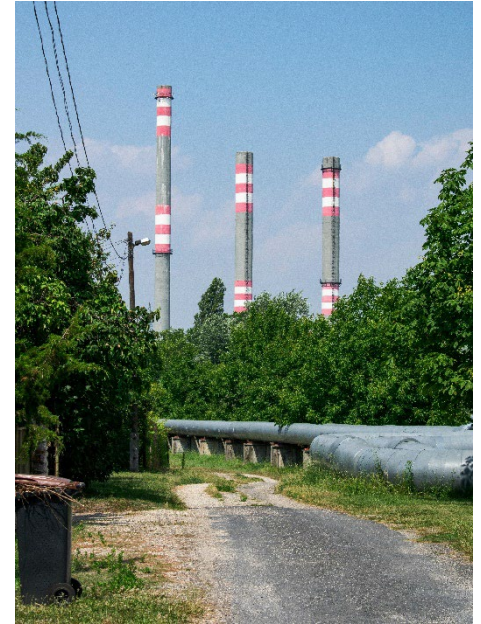
SB 253: CLIMATE CORPORATE DATA ACCOUNTABILITY ACT PASSED

On October 7, 2023, Governor Newsom signed Senate Bill (SB) 253: The Climate Corporate Data Accountability Act (CCDAA) into law, which requires large public and private companies with annual revenues greater than \$1 billion that conduct business in California to publicly disclose their greenhouse gas (GHG) emissions. Following the GHG Protocol Corporate Accounting and Reporting Standard, emissions of GHGs, which includes carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and others, are quantified as belonging to a company or operation in three categories, or "scopes":

- Scope 1 – GHGs emitted directly from a facility (e.g., on-site combustion in boilers and turbines);
- Scope 2 – Indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling; and
- Scope 3 – Indirect emissions not included in Scope 2, including emissions that occur in the value chain of the reporting company both upstream and downstream.

The CCDAA requires reporting of Scope 1 and 2 GHG emissions annually starting in 2026, with additional reporting of Scope 3 GHG emissions starting in 2027. Similar to the CCDAA, the proposed United States Securities and Exchange Commission (SEC) Climate Disclosure Rule and the already adopted European Union Corporate

Sustainability Reporting Directive require companies to report Scope 1, 2, and 3 GHG emissions starting in 2026.



The specifics for implementation of the CCDAA are being developed by CARB and are due to be released to the public by January 1, 2025. It is expected that CARB will clarify exactly what entities will be subject to the act by defining the term "doing business in California," as this term is not defined in SB 253.

Consumers and the public are increasingly advocating for greater transparency concerning corporate GHG emissions and GHG reduction efforts. Many businesses already publicly disclose their GHG emissions using internationally accepted accounting protocols. Some of these businesses are requiring their suppliers and customers to provide Scope 1, 2, and 3 GHG emissions data as part of their business disclosures.

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 1,800 customers, including a wide variety of industrial facilities and government organizations throughout California.

SCAQMD ADOPTED RULE CHANGES

For full details on changes below, go to: <http://www.aqmd.gov/home/regulations/rules/recent-actions>

▪ Rule 1153.1: Emissions of Oxides of Nitrogen from Commercial Food Ovens

Rule 1153.1 was amended by the South Coast Air Quality Management District (SCAQMD) on August 4, 2023. Rule 1153.1 applies to natural gas-fired food ovens, such as bakery ovens, tortilla ovens, dryers, smokehouses, and roasters, that require an SCAQMD permit and are used to prepare foods or products for making beverages for human consumption.

The amended rule will establish revised nitrogen oxides (NO_x) emissions limits in two phases. Phase I will set a NO_x emissions limit of 30 parts per million (ppm) for all food ovens, except for tortilla ovens heated only using infrared burners, which will have a lower limit of 15 ppm. A carbon monoxide (CO) concentration limit of 800 parts per million by volume (ppmv) will apply for all equipment categories in Phase I. For ovens required to comply with these limits, a permit application must be submitted on or before July 1, 2024, if the burner is 7 years old or older as of August 4, 2023, or by July 1st after the calendar year the burner reaches 7 years old.

Food ovens that do not meet these limits may no longer operate 12 months after the date the permit was issued, or the permit expiration date if an extension is granted, and no later than the date the burner reaches 10 years old. Food ovens subject to Rule 1153.1 will be required to be source tested every 5 calendar years to demonstrate compliance with these NO_x and CO emissions limits.

Phase II includes zero-emission NO_x limits for four oven categories: direct-fired bakery ovens and cooking ovens

less than or equal to 3 million British thermal units per hour (MMBtu/hr), indirect-fired bakery ovens, and smokehouses. Phase II requirements start on January 1, 2027, for units that are 25 years old or older and burners 10 years old or older. Units with a Phase II zero-emission limit will not require permits to limit their NO_x or CO emissions and will not have source test requirements.

If a facility cannot determine the age of the burner or the entire unit using invoices from its purchase, the original rating plate permanently affixed to the unit, or any other method that can be substantiated and approved by the SCAQMD, then the burner will be deemed to be 7 years old and the entire unit 25 years old as of July 1, 2024.

Food oven operators may choose to instead comply with a NO_x emissions limit of 1 lb per day per unit or less, or 1 lb per day or less averaged over a calendar month, following the fuel meter and recordkeeping requirements. If a unit is decommissioned instead of complying with the NO_x limits, the unit may continue to operate up to 30 months after the permit application due date if all fuel to the unit is disconnected and the SCAQMD permit is inactivated.

Rule 1153.1 also includes an Alternative Compliance Schedule Plan option to meet the Phase II emissions limit by allowing additional time for a utility to provide the necessary electrical upgrades to their facility to power the electric oven(s). However, the alternative schedule will only be considered for unit upgrades that are necessary for reasons outside of the control of the facility.

Food ovens at Regional Clean Air Incentives Market (RECLAIM) facilities are required to comply with RECLAIM compliance standards until the facility is designated a former RECLAIM facility. Interim concentration limits of 102 ppm NO_x apply to food ovens at former RECLAIM facilities until they are required to comply with the Rule 1153.1 amendment requirements.

RULE 1147 REMINDER

Rule 1147, which applies to all permitted miscellaneous combustion equipment units, such as afterburners, oxidizers, fryers, ovens, dryers, kilns, etc., will require units in use to undergo an initial source test 24 months after May 6, 2022 (i.e., by May 6, 2024) to demonstrate compliance with the Rule 1147 in-use emissions limits if the unit has not been source tested in the last 5 years. If compliance with the applicable in-use emissions limits is not demonstrated, new units will require a permit application to modify the burner to meet the emissions limits in Rule 1147.

RULE 2305 REMINDER

The SCAQMD sent a compliance advisory to facilities in September 2023 that the District has started an enforcement initiative to bring warehouses into compliance with the Rule 2305 Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program. Inspectors have been visiting warehouses and sending follow-up e-mails, noting if further actions are necessary to bring the facility into compliance with the rule. The Rule 2305 reporting requirements are summarized in Table 4.

Table 4: Summary of Operator Warehouse Size and Initial Dates

Total Warehouse Size (Square Feet)	Initial Site Information Report (ISIR) Due	Initial WAIRE Compliance Period	First Annual WAIRE Report (AWR) Due
250,000 or Larger	7/1/2022	1/1/2022 – 12/31/2022	1/31/2023
150,000 – 249,999	7/1/2023	1/1/2023 – 12/31/2023	1/31/2024
100,000 – 149,999	7/1/2024	1/1/2024 – 12/31/2024	1/31/2025