

In-Use Off-Road Diesel-Fueled Fleets Regulation Overview

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Applicability

All self-propelled off-road diesel vehicles 25 horsepower (hp) or greater used in California and most two-engine vehicles (except on-road two-engine sweepers) are subject to the In-Use Off-Road Diesel Fueled Fleets Regulation (Off-Road Regulation). This includes vehicles that are rented or leased (rental or leased fleets).

Personal use vehicles, vehicles used solely for agriculture, vehicles that are awaiting sale, and vehicles already covered by the Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards (Cargo Handling Regulation), are exempt from the Off-Road Regulation.

Emergency operations vehicles, dedicated snow removal vehicles, low-use vehicles (used under 200 hours per year, as confirmed by a non-resettable hour meter), and vehicles used a majority of the time (but not solely) for agricultural operations, must be reported to California Air Resources Board (CARB) and labeled but are exempt from the performance requirements of the Off-Road Regulation.

History

The purpose of the Off-Road Regulation is to reduce diesel particular matter (PM), nitrogen oxides (NOx), and other criteria air pollutants from in-use off-road heavy-duty vehicles in California. With this goal in mind, CARB approved the Off-Road Regulation for adoption in 2007, and it became effective in 2008. The Off-Road Regulation was amended twice in 2009, and again in 2010. The 2009 amendments introduced additional credits to incentivize early actions and added clarifying language. The 2010 amendments made significant changes to the Off-Road Regulation which delayed the initial compliance date for all fleets by four years, provided a path to compliance without any required retrofits, and simplified the Off-Road Regulation.

In November 2022, CARB approved amendments to the Off-Road Regulation that went into effect October 1, 2023. These amendments were one of several measures identified for action by CARB as part of the 2022 State Strategy for the State Implementation Plan. These amendments will achieve additional NOx and PM reductions and enhance the enforceability of the Off-Road Regulation.

On-Road Vehicles: Although primarily targeted at off-road diesel vehicles 25 hp and greater, the regulation also applies to a small group of on-road vehicles. These on-road vehicles include workover rigs, as well as two-engine cranes, two engine water drilling rigs, and other two-engine vehicles as defined by the regulation. To account for these on-road vehicles, the schedules in Tables 2 and 3 also list an on-road engine model year (MY).

Requirements

Performative requirements and compliance dates of the Off-Road Regulation vary by fleet size. For a fleet to determine its size, it must add up all of the off-road hpunder common ownership or control in the fleet.

Table 1. Fleet Size Determination

Fleet Size	Description
Ultra-small	Fleet with less than 500 hp
	Fleet or municipality <= 2,500 hp, or
Small	Municipality fleet in low population county, captive attainment area fleet, or
	non-profit training center, regardless of total hp
Medium	Fleet with 2,501 to 5,000 hp
Large	Fleet with more than 5,000 hp, or
23190	All state and federal government fleets, regardless of total hp

Contracting Requirements

Prime contractors and public works awarding bodies are required to obtain and retain copies of the valid Certificate of Reported Compliance (Certificate) for the fleet(s) selected for the contract and their listed subcontractors, if applicable. Neither contracting entity may award a contract or hire a fleet without a valid Certificate.

Additionally, prime contractors are required to:

- Collect new copies of valid Certificates for fleets with ongoing contracts as of March
 1, of each year
- Allow only fleets with valid Certificates onto the prime contractor's job site(s)
- Report observed noncompliance to CARB
- Disclose responsible parties upon request

- Retain copies of Certificates for three years after the project is complete, and
- Prominently display "Who does the In-Use Off-Road Regulation Apply to?"
 informative signs at job site(s) (signage language can be accessed at <u>Fact Sheet:</u>
 <u>Contracting Requirements | CARB</u>).

Disclosure for Selling Vehicles

Any person selling a vehicle subject to the Off-Road Regulation must provide a disclosure (exact language provided in the regulation) on the bill of sale or invoice and must keep records that the disclosure was provided for three years after the sale. The seller must also report the vehicle sale to CARB via DOORS within 30 days of the sale.

For more information about dealer/seller disclosure, please see the "Advisory 378" available in the Off-Road Regulation's homepage under "Forms & Advisories" at www.arb.ca.gov/ordiesel.

Idling

The regulation prohibits idling for more than five consecutive minutes. There are exceptions for vehicles that need to idle to perform work (such as a crane providing hydraulic power to the boom), vehicles being serviced, or in a queue waiting for work.

Additionally, medium and large fleets must have a written idling policy, see the Frequently Asked Questions (FAQ) available on the Regulation FAQs page in the Off-Road Zone at www.arb.ca.gov/offroadzone. For more information on CARB enforcement advisory for idling, please see Advisories" at www.arb.ca.gov/ordiesel. For the written idling policy, please see Advisories" at www.arb.ca.gov/ordiesel.

Renewable Diesel

All fleets are required to procure and use renewable diesel in all vehicles owned or operated in California that are subject to the Off-Road Regulation, with some limited exceptions, including for lack of availability and cold weather. Fleets must document and retain records related to the fleet's procurement of renewable diesel for three years after the fuel purchase. Fleets are also required to submit an affirmation signed by the Responsible Official or Designated Official that states the fleet has complied with the requirements of procuring renewable diesel. For more information on the renewable diesel requirements, see the renewable diesel fuel requirements fact sheet at https://ww2.arb.ca.gov/resources/fact-sheets/fact-sheet-renewable-diesel-fuel-requirements.

Reporting

All fleets must report annually, and all fleet owners must review and update their information by March 1st each year that annual reporting is required. For each annual reporting date, a fleet must report any changes to the fleet, hour meter readings as applicable (for low-use vehicles and vehicles used a majority of the time, but not solely, for agricultural operations), and also must submit the Responsible Official Affirmation of Reporting form.

Reporting can be completed using <u>DOORS</u>, which is CARB's free online reporting tool for the Off-Road Regulation. Additionally, hard copy reporting forms are also available. More information on how to report and what information is required is available on the on the Off-Road Zone at <u>www.arb.ca.gov/offroadzone</u> on the <u>DOORS Resources</u> page.

Labeling

After a fleet reports their vehicles to CARB, each vehicle is assigned a unique Equipment Identification Number (EIN). The fleet must label its vehicles within 30 days of receiving EINs. Note that CARB does not issue EIN labels; it is the fleet's responsibility to follow CARB's label specifications and to make or purchase the labels or placards or paint the EINs on its vehicles. More information on label specifications, see the "Labeling Vehicles" FAQ available on the Regulation FAQs page in the Off-Road Zone at www.arb.ca.gov/offroadzone.

A list of <u>FIN Label Vendors</u> is available under "Popular Resources" in the Off-Road Zone at <u>www.arb.ca.gov/offroadzone</u>.

The Off-Road Regulation requires the vehicle to be labeled on both sides. Additionally, fleets reported as captive attainment area fleets must have labels with a green background instead of red.

For more information about labeling amendments please see the "<u>Advisory 12-08</u>" available in the Off-Road Regulation's homepage under "Forms & Advisories" at <u>www.arb.ca.gov/ordiesel</u>.

Adding Vehicles

The regulation restricts fleets from adding older tier vehicles. All fleets are prohibited from adding Tier 0 vehicles. Beginning January 1, 2024, fleets using special provisions such as dedicated snow removal, emergency operations, and job corps vehicles will also be prohibited from adding a Tier 0 engine. More information on the adding vehicles

requirements, see the restrictions on the "Adding Vehicles" FAQ available on the Regulation FAQs page in the Off-Road Zone at www.arb.ca.gov/offroadzone.

Large and medium fleets: Large and medium fleets are prohibited from adding Tier 1 and Tier 2 vehicles to fleets. Starting January 1, 2024, Tier 3, Tier 4 Interim (Tier 4i) and model year (MY) 2006 and older on-road vehicles are prohibited from being added to large and medium fleets. In effect, only Tier 4 Final or cleaner off-road and 2007 and newer on-road engines may be added to large and medium fleets starting January 1, 2024.

Small and ultra-small fleets: Small and ultra-small fleets are prohibited from adding Tier 1 and Tier 2 vehicles to fleets. Starting January 1, 2024, Tier 3 engines are prohibited from being added to small and ultra-small fleets. Tier 4i and MY 2006 and older on-road vehicles are prohibited from being added in 2028 for small fleets and in 2035 for ultra-small fleets.

Table 2. Compliance Dates for the Restrictions on Adding Vehicles

Year (January 1st)	Large Fleets	Medium Fleets	Small Fleets	Ultra-Small Fleet Option
2024	Tier 3 Tier 4i On-road ≤2006	Tier 3 Tier 4i On-road <2006	Tier 3	Tier 3
2028			Tier 4i On-road ≤2006	
2035				Tier 4i On-road ≤2006

Tier Phase-Out

The 2022 amendments require that fleets no longer operate vehicles with Tier 0, 1, or 2 off-road engines and comparable on-road vehicles over a 12-year period, between 2024 and 2036. Vehicle operation is phased-out on a progressive schedule, allowing additional

time for smaller fleets to comply. The table below lists the engine Tier and on-road MY that are prohibited from operation in California starting January 1 of the year listed in the table. For more information on the tier phase-out requirements, see the <u>Tier Phase-Out Fact Sheet</u>.

Table 3. Tier and MY Phase-Out Dates by Fleet Size

Year (January 1 st)	Large Fleets	Medium Fleets	Small Fleets	Ultra-Small Fleet Option	Permanent Low-Use and Job Corps
2024	Tier 0 On-road ≤1994				
2026	Tier 1 On-road ≤1999	Tier 0 On-road ≤1994			
2028	Tier 2 On-road ≤2003	Tier 1 On-road ≤1999	Tier 0 On-road ≤1994	Tier 0 On-road <1994	
2030		Tier 2 On-road ≤2003	Tier 1 On-road ≤1999	Tier 1 On-road <1999	
2032			Tier 2 On-road ≤2003		
2036				Tier 2 On-road ≤2003	Tier 0 or On-Road ≤1994

Delay of Tier Phase-Out

For each zero-emission vehicle (ZEV) a fleet adds to its fleet on or after January 1, 2024, the fleet may delay the Tier phase-out for one existing vehicle with a Tier 1 or Tier 2 engine in its fleet for two years, if all of the required conditions (see regulatory text <u>2449.1(d)(1)</u>) are met during those two years.

Fleet Averages & BACT Requirements

The regulation requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (VDECS) (i.e., exhaust retrofits). By each annual compliance deadline, a fleet must demonstrate that it has either met the fleet average target for that year or has completed the Best Available Control Technology (BACT) requirements. Large and medium fleets must meet their final fleet average target set in 2023 and meet the tier phase out requirements. Small fleets have compliance deadlines each year from 2019 through 2028. Fleet averages and BACT requirements can be found in <u>Section 2449.1</u> and a summary can be found below.

Meeting the fleet average targets - The fleet average index is an indicator of a fleet's overall emissions rate and is based on the fleet's average NOx emissions which is determined by the hp and MY of each engine in the fleet. If the fleet average index is equal to or less than the fleet average target for a given year, the fleet is not required to take further action to reduce emissions from its vehicles.

Or

Complying with BACT requirements: If a fleet cannot or does not want to meet the fleet average target in a given year, it may instead choose to comply with the BACT requirements. A fleet may meet the BACT requirements each year by turning over or installing VDECS on a certain percentage (referred to as the BACT rate) of its total fleet horsepower. "Turnover" means retiring a vehicle, designating a vehicle as permanent low-use (a vehicle used less than 200 hours per year), repowering a vehicle with a higher tier engine, or rebuilding the engine to a more stringent emission standard. "Installing VDECS" means installing the highest level VDECS verified by CARB to reduce PM or installing a VDECS verified to reduce NOx. In order to fulfill the BACT requirements, if a VDECS cannot be installed on a vehicle, then that vehicle must be turned over. However, it is important to note that a fleet must meet the tier phase-out requirement even if they are complying using the BACT requirement.

Or

Optional Compliance Schedule for Fleets with 500 hp or Less: Ultra-small fleets with 500 hp or less may comply with the small fleet requirements or may comply with an optional compliance path which requires the fleet to phase out Tier 0 and Tier 1 vehicles by 2029. Ultra-small fleets are subject to the Adding Vehicles Requirements and the Tier Phase-Out provision. This optional compliance schedule is shown in Table 4 below.

Table 4. Optional Compliance Schedule for Fleets with 500 hp or Less

Compliance Date: (January 1 st)	Percent of Fleet (by horsepower) Which Must Have Tier 2 or Higher Engine
2019	25
2022	50
2026	75
2029	100

By 2029, all of the fleet's vehicles must have Tier 2 or higher engines. If small fleets with 500 hp or less choose not to pursue this compliance path, they must meet the small fleet average or BACT requirements above.

Low-Use Exemption

Low-use provisions in the regulation exempt equipment that is rarely used from potentially costly retrofit or replacement requirements. For more information on the low-use requirements, see the *Fact Sheet: Low-Use Requirements*. To qualify for the permanent

low-use exemption, a vehicle must:

- Operate on average 200 or fewer hours per year or less than 600 hours over a three-year period.
- For two-engine vehicles, both engines must separately meet the permanent low-use requirements to qualify.

- Permanent low-use vehicles must have a non-resettable hour meter installed.
- Vehicles designated as permanent low-use are in violation of the regulation if operated more than 200 hours per year. To increase the use to 200 hours or more per year, the vehicle must meet the current adding vehicles requirements in <u>section 2449(d)(6)</u>.
- Low-use vehicles are required to report their hour meter reading for their low-use vehicles every year as follows:
 - o Engine hour meter readings are due to CARB by March 1 each year.
 - Usage data must cover the calendar year between January 1 and December 31 of that year.
 - o Within 30 days of January 1, the engine hour meter reading must be recorded.
- Fleets must maintain a date-stamped photograph of the engine hour meter reading, with limited exceptions.

Alternate Compliance Pathway Zero Emission Technology

An Off-Road Regulation compliant fleet may elect to submit a Zero-Emission Technology Application (ZETA) to CARB requesting the use of this alternate compliance pathway. While the regulatory text details the conditions, an approved application will require a fleet to, at a minimum, remove from the fleet at least 15 percent of the fleets total hp and replace it with ZEV or technology that creates zero-combustion emissions at the job site by January 1, 2030, and 50 percent by January 1, 2035.

Additional Information

Off-Road regulation homepage: www.arb.ca.gov/ordiesel.

The Off-Road Diesel Regulation <u>regulatory text</u> contains the full requirements of the regulation.

For more information on the Off-Road regulation, including Fact Sheets, FAQs, and DOORS User Guides, please visit the Off-Road Zone at www.arb.ca.gov/offroadzone.

For assistance with Off-Road reporting or using CARB's online reporting system DOORS, please contact the DOORS hotline by phone at (877) 59DOORS (877-593- 6677), or by email at <u>doors@arb.ca.gov</u>.