In-Use Off-Road Diesel Vehicle Regulation

Overview, Revised February 2014

California Environmental Protection Agency
AIR RESOURCES BOARD

The Off-Road Regulation Applies To:

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 Regulation for In-Use Off-Road Diesel Fueled Fleets (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 ARB and labeled, but are exempt from the performance requirements of the Off-Road regulation.

Summary:

The overall purpose of the Off-Road regulation is to reduce emissions of oxides of nitrogen (NOx) and particulate matter (PM) from off-road diesel vehicles operating within California. The Off-Road regulation:

- Imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles;
- Requires all vehicles to be reported to ARB (using the Diesel Off-Road Online Reporting System, DOORS) and labeled;
- Restricts the adding of older vehicles into fleets starting on January 1, 2014; and
- 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).

The requirements and compliance dates of the Off-Road regulation vary by fleet size. For a fleet to determine their size, it must add up all of the off-road horsepower under common ownership or control in the fleet.

Fleet Size Category	Description
Small	Fleet or municipality <= 2,500 hp, or 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 All state and federal government fleets, regardless of total hp

Requirements Currently in Effect:

Effective June 2008 for All Fleets: Idling and Disclosure

The following requirements are in effect and being enforced:

Idling Limited to 5 Minutes – Fleets must limit their unnecessary idling to 5 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.
More information – www.arb.ca.gov/enf/advs/advs377.pdf

Written Idling Policy – Medium and large fleets must have a written idling policy.
More information – www.arb.ca.gov/enf/advs/advs391.pdf
Suggested language – www.arb.ca.gov/msprog/ordiesel/faq/idlepolicyfaq.pdf

Disclosure for Selling Vehicles – The seller (whether a dealer or a contractor with just one vehicle) must provide disclosure of the Off-Road regulation (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 ARB via DOORS within 30 days of the sale.
More information and necessary language – www.arb.ca.gov/enf/advs/advs378.pdf

Effective 2009 for All Fleets: Reporting and Labeling

The following requirements are in effect and being enforced:

Reporting – Reporting can be completed using DOORS, which is ARB'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 DOORS website at https://ssl.arb.ca.gov/ssldoors/doors_reporting/doors_login.html.

Labeling – After a fleet reports their vehicles to ARB, each vehicle is assigned a unique Equipment Identification Number (EIN). The fleet must label its vehicles within 30 days of receiving EINs. Note that ARB does not issue EIN labels; it is the fleet's responsibility to follow ARB's label specifications and to make or purchase the labels or placards, or paint the EINs on its vehicles. More information on label specifications is available at www.arb.ca.gov/msprog/ordiesel/faq/faq-labeling.pdf.

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

A list of label vendors is available at www.arb.ca.gov/msprog/ordiesel/labelvendors.htm.

Previously, fleets were only required to label the right (starboard) side of the vehicle. However, the labeling provisions of the Off-Road regulation were amended in December 2010 to require labels on both sides of each vehicle. Additionally, fleets reported as 'captive attainment area fleets' must have labels with a green background instead of red. Fleets had until January 1, 2013, to implement both of these changes.

More information on these labeling amendments is available at http://www.arb.ca.gov/msprog/mailouts/msc1208/msc1208.pdf.

Annual Reporting – All fleet owners must review and update their information by March 1st each year that annual reporting is required. Large fleets must report annually from 2012 to 2023, medium fleets from 2016 to 2023, and small fleets from 2018 to 2028. For each annual reporting date, a fleet must report any changes to the fleet, hour meter readings (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 (ROAR) form. All of these items should be submitted using DOORS.

Effective January 1, 2014 for All Fleets: Restrictions on Adding Vehicles

Effective January 1, 2014, there are restrictions on adding older vehicles to a fleet.

ARB received authorization from the United States Environmental Protection Agency (U.S. EPA) on September 13, 2013, to enforce the Off-Road regulation's restrictions on fleets adding vehicles with older tier engines, and will start enforcing beginning January 1, 2014.

Ban on adding Tier 0s – Effective January 1, 2014, a fleet may not add a vehicle with a Tier 0 engine to its fleet.

Prohibition on adding Tier 1s – Also effective January 1, 2014, for large and medium fleets, and January 1, 2016 for small fleets, a fleet may not add any vehicle with a Tier 1 engine. The engine tier must be Tier 2 or higher.

Prohibition on adding Tier 2s – Beginning January 1, 2018, for large and medium fleets, and January 1, 2023, for small fleets, a fleet may not add a vehicle with a Tier 2 engine to its fleet. The engine tier must be Tier 3 or higher.

More information on the adding vehicles requirements is available at http://www.arb.ca.gov/msprog/ordiesel/faq/addingvehicles.pdf.

Upcoming Requirements:

Upcoming Requirements for all Fleets: Performance Requirements	**The performance requirements begin:** **July 1, 2014, for large fleets** **January 1, 2017, for medium fleets** **January 1, 2019, for small fleets**

Compliance Options – 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 requirements (BACT). Large fleets have compliance deadlines each year from 2014 through 2023, medium fleets each year from 2017 through 2023, and small fleets each year from 2019 through 2028. These requirements are described further below. Note that although the first deadline for large fleets in 2014 is on July 1, the compliance deadline in all future years will be January 1 (for example, the second compliance deadline for large fleets will be on January 1, 2015).

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 horsepower and model year 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 ARB to reduce PM, or installing a VDECS verified to reduce NOx. In order to fulfill the BACT requirements for large and medium fleets, if a VDECS cannot be installed on a vehicle, then that vehicle must be turned over. However, for small fleets, if a VDECS cannot be installed, that vehicle is exempt from the BACT requirements. The BACT rates for each fleet size are shown below.

Large fleets:
2014: 4.8 percent
2015 to 2017: 8 percent
2018 to 2023: 10 percent
Medium fleets:
2017: 8 percent
2018 to 2023: 10 percent
Small fleets:
2019 to 2028: 10 percent

Optional Compliance Schedule for Fleets with 500 Hp or Less – Small fleets with 500 hp or less may comply with the small fleet requirements listed above, or may comply with an optional compliance path which requires the fleet to phase out Tier 0 and Tier 1 vehicles by 2029. This optional compliance schedule is shown in the table below.

Optional Compliance Schedule for Fleets with 500 HP or Less

Compliance Date: January 1 of Year	Percent of Fleet (by horsepower) Which Must Have a 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 requirements above.

Additional Information:

For more information on the Off-Road regulation, including Fact Sheets, Frequently Asked Questions (FAQs), and DOORS User Guides, please visit the Off-Road Knowledge Center at www.arb.ca.gov/msprog/ordiesel/knowcenter.htm

For assistance with Off-Road reporting or using ARB's Diesel Off-Road Online Reporting system (DOORS), please contact the DOORS hotline by phone at (877) 59DOORS (877-593-6677), or by email at doors@arb.ca.gov

For general questions regarding the Off-Road regulation, please contact the Diesel hotline by phone at (866) 6DIESEL (866-634-3735), or by email at 8666diesel@arb.ca.gov

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