

Fact Sheet: Zero-Emission Technology Application

Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation

Introduction

The recently approved amendments to the [In-Use Off-Road Diesel-Fueled Fleets Regulation](#) (Off-Road Regulation) which took effect October 1, 2023 provide voluntary compliance flexibility options to encourage fleets to adopt zero-emission technology. This fact sheet discusses the Zero-Emission Technology Application (ZETA) alternate compliance pathway, which provides relief from fleet average, Best Available Control Technology (BACT) requirements, and Tier phase-out requirements for fleets that replace at least half their diesel vehicles with zero-emissions vehicles.

The ZETA allows a fleet or the portion of a fleet at a single location, to complete an approved ZETA project. In each approved ZETA project, the fleet commits to replace at least half their fleet of compression ignition engines with zero emission vehicle or equipment replacements.

A fleet can apply to CARB to follow a ZETA. CARB reviews ZETA applications and approves ZETA submittals that meet the regulatory requirements, and then the fleet implements the approved ZETA. Each approved ZETA outlines the steps the fleet must take to substantially shift to ZEVs and/or zero-emission operations.

Background

Emission stringency levels for off-road compression-ignition engines are distinguished by the engine Tier, starting with Tier 0 being the dirtiest uncontrolled engine through to the current cleanest, Tier 4 Final. Replacing compression ignition engines with zero-emission vehicles considerably reduces harmful emissions.

The Off-Road Regulation includes fleet average emission targets, BACT requirements, and the targeted phase-out of high-emitting engines. The ZETA provides an alternative compliance pathway option for fleets who can replace half or more of their compression ignition engines with zero-emission vehicles. This ZETA alternative pathway avoids fleet averages, BACT, and phase-out requirements.

ZETA Requirements (Section 2449.1(c))

To utilize the ZETA alternate compliance pathway, a fleet must:

- Be in compliance with sections 2449 and 2449.1(a), (b), (c), and (f) of this regulation at the time of requesting the use of this alternate compliance pathway;
- Maintain compliance with section 2449 and section 2449.1(f) of this regulation; and

- Commit to completing the ZETA project as described in section 2449.1(e)(2).

A ZETA submittal is a request from the fleet to follow the alternate Off-Road Regulation compliance pathway through zero-emission technology instead of the requirements in 2449.1 (a), (b), and (c). The request does not relieve a fleet of the responsibility to continue compliance with the General Requirements for In-Use Off-Road Diesel-Fueled Fleets (2449) and Renewable Diesel Requirements (2449.1(f)).

A fleet can verify compliance with 2449 and 2449.1(a), (b), (c), and (f) at the time of the request by checking their [DOORS](#) account or by calling the help line at 1 (877) 59-DOORS (1-877-593-6677).

A ZETA submittal can be for an entire fleet or just for the fleet vehicles that operate at a single facility. For single facility submittals, the rest of the fleet vehicles not operating at that facility will remain subject to the requirements in sections 2449.1(a), (b), and (c).

Each ZETA submittal must include all of the following:

1. A description of what actions the fleet will take in order to achieve zero-emission operations and in what timeframe. At a minimum, the fleet must:
 - a. Remove from the fleet at least 15 percent of the fleet's total horsepower, or the total horsepower of the vehicles operating at a single facility, and replace it with zero-emission vehicles or technology that creates zero-combustion emissions at the job site by January 1, 2030; and
 - b. Remove from the fleet at least 50 percent of the fleet's total horsepower or the total horsepower of the vehicles operating at a single facility per section and replace it with either zero-emission vehicles or technology that creates zero combustion emissions at the job site by January 1, 2035.
2. A list of all vehicles, including their EINs, that will be removed from operation;
3. A list of zero-emission vehicles that the fleet proposes to add to its fleet;
4. Attest that it meets and agrees to all eligibility requirements outlined in section 2449.1(e)(1);
5. A list of all known entities that the fleet plans to partner with to complete its ZETA project, as well as a description of the role that the entity will have in the fleet's ZETA project;
6. A description of the total power need or other fueling needs of the zero-emission vehicles or technology, as necessary, to complete the ZETA project;
7. A detailed list of milestones and expected completion dates for implementing the actions the fleet will take in order to achieve zero-emission operations. The list of milestones must include:
 - a. Identification of all permits necessary to achieve completion of the ZETA, if applicable;
 - b. Submission of permit applications identified above, if applicable;
 - c. Approval of permit applications identified above, if applicable;

- d. Utility or other fueling infrastructure engagement, including a report on power quality from the utility if the project includes the need for electric vehicle supply equipment;
 - e. Entering contracts or other agreements with technology providers or other partners;
 - f. Making vehicle purchase orders;
 - g. Vehicle deployments;
 - h. Start of infrastructure installation;
 - i. Completion of infrastructure installation; and
 - j. Removal of diesel vehicles from fleet operations; and
8. A commitment to do the following:
- a. Replace all Tier 0, 1, and 2 vehicles by the end of completion of the ZETA project, or by January 1, 2035, whichever occurs first;
 - b. Submit annual updates to CARB by January 31 of each year for the previous calendar year's information.

Process

ZETA submittals must be complete meaning that they include all the elements of the Off-Road Regulation section 2449.1(e)(2). Only a ZETA including all these elements will be accepted by CARB.

Additionally, fleets must submit its ZETA at least four months prior to the next compliance date for which the fleet is looking to receive compliance flexibility for section 2449.1(a), (b), or (c). Submitting a ZETA in advance of compliance dates allows time for project plan review and for a determination to be made.

The fleet may submit its ZETA to CARB using either of the following methods:

(a) By mail to CARB at California Air Resources Board Mobile Source Control Division (In-Use Off-Road Diesel) P.O. Box 2815 Sacramento, CA 95812, or

(b) Electronically submitted to the DOORS@arb.ca.gov email address.

CARB shall review the ZETA within 60 days of submittal by the fleet.

If the fleet meets the requirements outlined in section 2449.1(e)(1) and 2449.1(e)(2), then CARB will issue a letter approving the ZETA.

The fleet will provide annual updates by January 31 of each ZETA year. CARB will review the report by April 30 determining if adjustments or revisions are needed or if the ZETA approval is revoked.

Disclaimer

The fact sheet is intended for informational purposes and does not supersede the regulation. For the full list of requirements and ZETA details, please see the [Off-Road Regulation](#).