

Encouraging Zero-Emission Adoption via the Off-Road Diesel Regulation and the California Clean Construction Program

Topics

- Off-Road Diesel Regulation Flexibilities
 - Vehicle-to-vehicle provision
 - Zero-Emission Technology Application (ZETA)
- California Clean Construction
 - Goals
 - Current Status
 - Current Concept of Program



Off-Road Diesel-Fueled Fleets (ORD) Regulation



ORD Regulation

Applicability:

- Vehicles with diesel engines 25 horsepower and up¹
- Construction, mining, industrial equipment, and others
- Some two-engine on-road vehicles and workover rigs



¹Dedicated snow removal, part-time agricultural, and emergency vehicles are exempt from most requirements, but must still report and label.



ORD Regulation Requirements

- Report and label all vehicles
- Idling limits
- Renewable Diesel
- Contractor Requirements
- Fleet average emissions targets
- Ban on adding vehicles with older engines
 - Tier 0 o Tier 4 Interim bans, based on fleet size
- Phase out of vehicles with older engines
 - Tier 0 to Tier 2, based on fleet size







Voluntary Zero-Emission Flexibility: Vehicle to Vehicle



For each Zero-Emission (ZE) vehicle adopted, the fleet may continue to operate a Tier 1 or Tier 2 vehicle for two additional years beyond the phase-out years

- Must perform work of a diesel equivalent
- Must be of similar max power rating to the internal combustion engine vehicle
- Must report vehicle information to the California Air Resources Board (CARB)



Alternate Compliance Pathway: ZETA

ZETA Submittal

- Compliant at time of submittal
- Submit 4 months prior to next compliance date

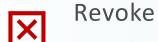


ZETA Review

- Turnover to ZE
 - **15%** (2030)
 - **50%** (2035)
- ZETA must include:
 - Vehicle turnover
 - ZE acquisition
 - List of milestones
 - Estimated completion dates

Annual ZETA Updates

- All milestones complete
 - Continue
- Some progress is shown
 - ? Adjust milestones
- No progress



If denied or revoked



Comply with tier phase-out and fleet average requirements



California Clean Construction



Program Purpose and Framework

- Reduce emissions from Off-Road equipment
- Promote ZE mobile off-road construction equipment
- Voluntary, non-monetary incentive program
- Recognize entities that go above and beyond regulatory requirements





Current Status

- Currently developing program parameters
 - Contracting entities, policymakers, and state and local governments could incorporate the program in contract award considerations
 - Local air districts or other lead agencies could potentially incorporate the program as a California Environmental Quality Act mitigation strategy
- CARB encourages feedback and engagement from the public



Current Program Concepts



- At least 35% of available off-road equipment are ZE for project to participate
- Tier 4 Final with DPF for remaining equipment, if available with DPF from original equipment manufacturer
- Potential to include hybrid equipment.



Contact, Information, and Assistance

Off-Road Regulation Homepage:

https://arb.ca.gov/ordiesel

California Clean Construction

https://ww2.arb.ca.gov/es/node/42861

 DOORS Hotline and E-mail (877) 593-6677
 doors@arb.ca.gov

Program Feedback
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