



ATTACHMENT B CONSTRUCTION DIESEL PARTICULATE AND NO_x EMISSION REDUCTION MEASURES

Particulate emissions from diesel exhaust are classified as carcinogenic by the state of California. The following is a list of regulatory requirements and control strategies that should be implemented to the maximum extent feasible.

The following measures are required by state law:

- **Portable Engines:** All portable diesel-powered construction equipment greater than 50 brake horsepower (bhp) shall be registered with the state's portable equipment registration program (PERP)¹ OR shall obtain an APCD permit.
- **Off-Road Equipment:** Fleet owners of diesel-fueled mobile construction equipment greater than 25 hp are subject to the California Air Resource Board (CARB) In-Use Off-Road Diesel-Fueled Fleets Regulation². All off-road vehicles subject to this regulation must use renewable diesel fuel, with some limited exceptions.
- **Diesel Trucks:** Fleet owners of on-road diesel-fueled heavy-duty trucks and buses are subject to CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), the Statewide Truck and Bus Regulation, and the Advanced Clean Fleets Regulation to reduce emissions from trucks and buses.³
- **Idling:** Drivers of diesel-fueled commercial motor vehicles are subject to the Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.⁴ Idling restrictions for off-road equipment are set forth in CARB's In-Use Off-road Diesel-Fueled Fleets Regulation.

The following measures are recommended:

- At a minimum, off-road diesel equipment should be equipped with engines compliant with, or certified to meet or exceed, CARB Tier 4 emission standards. Where available, off-road construction equipment should be zero-emission. Alternative/renewable fuels such as compressed natural gas (CNG), liquefied natural gas (LNG), or propane should be utilized to the maximum extent feasible when zero-emission is not available. Electric auxiliary power units should be used. The Lead Agency should require commitments to Tier 4 and/or zero-emission equipment in applicable bid documents, purchase orders, and contracts; successful contractors should demonstrate the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- On-road heavy-duty equipment with model year 2014 or newer engines, or powered by zero- or near zero-emission technology, should be used whenever feasible.
- All portable generators should be powered by a source other than diesel or gasoline (i.e., battery, natural gas, propane, etc.)
- All construction equipment should be maintained in tune per the manufacturer's specifications.
- The number of construction equipment operating simultaneously should be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Proposed truck routes should minimize impacts to residential communities and sensitive receptors.
- Construction staging areas should be located away from sensitive receptors such that exhaust and other construction emissions do not enter the fresh air intakes to buildings, air conditioners, and windows. Construction activity schedules and hours should be planned and adjusted as feasible to maximize distance from existing sensitive receptors and minimize exposure to air pollution.

Prior to grading/building permit issuance and/or map recordation, all measures required by the Lead Agency shall be shown as conditions of approval on grading/building plans, and/or on a separate sheet to be recorded with the map. Conditions shall be adhered to throughout grading and construction periods. The contractor shall retain onsite the Certificate of Compliance for CARB's In-Use Regulation for Off-Road Diesel Vehicles and have it available for inspection. The Lead Agency shall ensure measures are on project plans and/or recorded with maps and ensure compliance onsite. APCD inspectors will respond to nuisance complaints.

¹ <https://ww2.arb.ca.gov/our-work/programs/portable-equipment-registration-program-perp>

² <https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation>

³ <https://ww2.arb.ca.gov/our-work/programs/truckstop-resources/truckstop>

⁴ <https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling/about>