

SC 12 DIESEL EMISSION CONTROL.

A. For "Non Road" Equipment Only:

1. All Contractor and sub-contractor diesel powered non-road vehicles, on-road vehicles with auxiliary power source and construction equipment powered by internal combustion engine with gross engine horsepower (HP) ratings of 50 HP and above that are on the Project or are assigned to the Contract shall have:
 - a. Minimum Tier 2 certified diesel engines (emissions meeting Tier 2 standards), fitted with retrofit technology such as Diesel Particulate Filter (DPF) that removes greater than 90% particulate matter without increasing NOX and uses Ultra Low Sulfur Diesel Fuel (maximum 15 parts per million of sulfur).
 - b. In the event that Contractor is unable to use Diesel Particulate Filter technology, Contractor shall request approval of the Engineer to use an alternative retrofit technology. Request shall be made in writing, 30 working days prior to use of equipment. Request shall
 - i. Document efforts made to implement Diesel Particulate Filter
 - ii. Document efforts made to source Diesel Particulate Filter
 - iii. Provide, in original, letters from all EPA verified suppliers stating their inability to provide suitable Diesel Particulate Filter for the specific equipment
 - iv. Demonstrate selected alternative retrofit technology is next best to DPF that can achieve lowest particulate matter emission without increasing NOX.
2. These requirements shall apply to:
 - a. All Non-Road Diesel engines/vehicles/equipment and auxiliary engines mounted on-road vehicles;
 - b. Diesel Engines 50 Gross Horse Power and above
 - b. Stationary and Mobile equipment
 - c. Owned, Leased and Rented Equipment
3. The retrofit technology / retrofit emission control device shall be:
 - a. Included on the US Environmental Protection Agency (EPA) Verified Retrofit Technology List or
 - b. Certified by the US EPA, or
 - c. Certified by California Air Resources Board (CARB), or
 - d. Have satisfactorily met all criteria of VERT emissions tests and be recommended for use on construction equipment.
4. The Contractor shall submit to the Engineer 30 days prior to commencing construction work, a list of non-road diesel powered construction equipment that has been retrofitted. The list shall include:
 - a. Contractor / Subcontractor name / address / contact person
 - b. Equipment data plate info, type, model, serial number
 - c. Engine data plate info, engine serial number, make, model, year of manufacture,

- d. Retrofit type, make, model, manufacturer, EPA verification number, installation date,
 - e. Certification from the original from the Original Equipment Manufacturer (OEM) or EPA or CARB that engine is Tier 2 or Tier 3 or Tier 4 certified
 - f. Certification in original that equipment is fitted with Diesel Particulate Filter
 - g. Test results on exhaust gas emission at idle, 50%load and 100% load. Include test (s) performed and diesel fuel used.
 - h. And complete spreadsheets as provided by transit.
5. The Contractor shall submit a bi-weekly report and digital photographs that are catalogued and related to the spreadsheet information, of the equipment to the Engineer. This report shall be in two parts:
- a. An update of the initial list of non-road diesel equipment showing addition and deletion of diesel equipment.
 - b. Daily log of engine hour meter reading
 - c. Daily log of equipment on site and off site
 - d. Fuel field log by date for ach equipment
6. Information storage, retrieval and automated report generation:
The Contractor shall create a protected web site, post all of the above information in real time, design report generation and submit bi-weekly & annualized reports. The Engineer shall approve all report formats. All reports shall be submitted in electronic format and hard copy as part of payment application process.
7. Equipment shall prominently display a message of 'Clean Exhaust' such as: "this machine is equipped with an air pollution control device and uses Ultra Low Sulfur Diesel fuel".
8. Non-compliant equipment shall be removed immediately from the site.

B. For "Non Road" and "On Road" Equipment:

1. All motor vehicles and construction equipment (both on-highway and non-road) shall comply with all pertinent State and Federal regulations relative to exhaust emission controls and safety.
2. The Contractor shall establish truck-staging zones for vehicles waiting to load or unload material at the Work Site. Such zones shall be located where diesel emissions have the least impact on abutters and the general public.
3. Idling time shall be limited to three consecutive minutes for delivery and dump trucks and all other diesel powered equipment except as follows:
 - a. When a "mobile source" is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control.

- b. When it is necessary to operate heating, cooling or auxiliary equipment installed on the “mobile source” when such equipment is necessary to accomplish the intended use of the “mobile source”.
 - c. To bring the “mobile source” to the manufacturer’s recommended operating temperature.
 - d. When the outdoor temperature is below twenty (20) degrees Fahrenheit.
 - e. When the “mobile source” is being repaired.
4. The Contractor shall ensure that diesel emissions do not cause harmful effects to adjacent sensitive receptors. Sensitive receptors include but are not limited to hospitals, schools, daycare facilities, elderly housing and convalescent facilities.
5. The Contractor shall ensure that diesel powered engines are located away from fresh air intakes, air conditioners, and windows.
6. A Diesel Emission Mitigation plan is required when work will be performed in close proximity (less than 50 feet) to sensitive receptors. No construction shall proceed until a Diesel Emission Mitigation plan is submitted in writing to the Engineer and is accepted by the Engineer. The mitigation plan shall address control of diesel emissions from all diesel-powered equipment including equipment not retrofitted.