

**Philadelphia Department of Public Health, Division of Air Management Services  
Specification Language Requiring Diesel Engine Emissions Controls in Public Works Projects**

**DIESEL ENGINE EMISSIONS CONTROLS FOR PUBLIC WORKS PROJECTS**

In accordance with Executive Order 1-07 and in furtherance of *Greenworks Philadelphia*, City establishes a requirement to include clean diesel specifications in public works contracts. Contractor, by submission of its bid, agrees to meet the requirements of this Section. This Section applies to bids advertised between July 1, 2013 and June 30, 2014 in which the total estimated dollar amount is \$1,000,000 or greater, and to all bids, awarded on or after July 1, 2014, regardless of estimated dollar amount. Notwithstanding the foregoing, engine noncompliance shall not constitute a material breach of contract nor shall monetary penalties be assessed as provided in subsection E.2 until after January 1, 2014. If noncompliant vehicles subject to this Section are observed prior to January 1, 2014, the City may issue written warnings to the contractor.

- A. Covered Vehicles: Vehicles covered under this Section include any nonroad diesel engine that has a horsepower greater than 50.
  
- B. Requirements
  - 1. All bids for public works contracts and all applicable contracts entered into as a result of such bids covered under this Section shall include specifications that all contractors, and all of the contractor's subcontractors, if any, in the performance of such contracts use ultra-low sulfur diesel fuel, and a listed clean diesel technology for reducing the emission of pollutants for diesel-powered non-road engines. Clean diesel technologies are further defined in part D of this Section. Retrofit emission control devices shall consist of diesel oxidation catalysts ("DOC") or such other technologies that provide a minimum emissions reduction of twenty percent (20%) of particulate matter with a mean aerodynamic width of less than ten (10) microns (PM10) in the application for which it is verified. Any retrofit emission control device installed to comply with this Section must either be listed by EPA or the California Air Resources Board (CARB) as a verified diesel retrofit technology that reduces particulate matter emissions by 20% or more, or must be certified by the diesel retrofit device manufacturer as a product that reduces particulate matter emissions by 20% or more for the covered vehicle.
  
  - 2. No later than two business days before any covered vehicle is brought onto the City's contract site, the successful bidder (hereinafter, "contractor") shall submit to the City's project manager information about the vehicle including confirmation that the appropriate emissions control technology has been installed on the vehicle or that the vehicle is Tier 4 or Tier 4 Interim. Except as otherwise provided, any vehicle covered under this Section shall be in compliance with this Section prior to being brought onto the contract site.
    - a. Contractor shall submit the following information for each covered vehicle (using *Fleet Roster for Public Works Construction Projects* form):
      - i. vehicle identification number (VIN), if applicable, or vehicle serial number, and the vehicle type, make, year and owner;

- ii. the horsepower rating of each engine;
    - iii. the emission control device manufacturer name, model, and verifying/certifying organization; and
    - iv. the type of fuel to be used and approximate expected quantity.
  - b. In the event contractor has purchased appropriate emissions control technology, but the technology is not delivered before use of the covered vehicle is required on the contract site, the contractor shall, in addition to submission of a.i., through iv. above, submit proof of purchase of the emissions control technology. Installation of the appropriate emissions control technology must be completed within five (5) days of delivery of the technology. In no event may Contractor use the covered vehicle without the use of the emission control technology, for which the technology has already been purchased and identified, on the contract site for longer than sixty (60) days.
  - c. If a covered vehicle owned by a contractor breaks down on the contract site, contractor may use, if a compliant replacement is unavailable, a temporary vehicle that is not compliant while the covered vehicle is being repaired; the temporary vehicle cannot remain on site for more than 30 cumulative days after the date of the initial breakdown of the covered vehicle. Contractor shall notify the project manager in writing prior to bringing a non-compliant vehicle on the contract site.
3. The contractor shall establish truck-staging zones for vehicles that are waiting to load or unload material at the contract site. Such zones shall be located where the emissions from the trucks will have minimum impact to the public.
4. The contractor shall not permit idling of delivery and/or dump trucks, or equipment on the contract site during periods of non-active use, and it should be limited to three (3) minutes in accordance with the Philadelphia Traffic Code Anti-Idling Ordinance Section 12-1127(1) of The Philadelphia Code ([http://www.phila.gov/philacode/html/data/title12/chapter\\_12\\_1100\\_miscellaneous\\_/12\\_1127\\_excessive\\_idling\\_of\\_an.html](http://www.phila.gov/philacode/html/data/title12/chapter_12_1100_miscellaneous_/12_1127_excessive_idling_of_an.html)) and the Pennsylvania Diesel-Powered Motor Vehicle Idling Act, Title 35 Purdon's Pennsylvania Statutes, Section 4601 *et seq.*

### C. Exemptions

1. Subject to written approval by the City of Philadelphia Air Management Services (AMS), covered vehicles will be exempted from low diesel emission controls if one or more of the following conditions exist:
- a. it is physically impossible to install appropriate emissions control technology on the vehicle;
  - b. installation of the appropriate emissions control technology would render vehicle operation unsafe due to obstructed sightline;

- c. installation of the appropriate emissions control technology would void any applicable expressed manufacturer's warranty on the vehicle; or
  - d. the covered vehicle will not be at the work site for more than a total of three (3) business days.
2. In support of a request for exemption, contractors shall provide to AMS one of the following:
- a. a signed letter from one or more diesel technology vendors, written on the vendor's formal stationary, certifying that no emissions controls that would reduce Particulate Matter (PM) emissions by at least 20% and allow for safe operation could be physically installed, or the cost of installing such control technology would cost 150% more than the purchase price of the clean diesel technology device;
  - b. a signed letter from the vehicle manufacturer certifying that the installation of any device to reduce PM emissions by 20% or more would void the applicable expressed manufacturer's warranty, along with a copy of the warranty for each vehicle for which an exemption is sought; or
  - c. a signed letter on the contractor's company letterhead stating that the covered vehicle will remain on site for no longer than three (3) days total during the duration of the project.
3. In no event will the City grant an exemption from the required use of ultra-low sulfur diesel fuel or the idling laws.

D. Definitions

- 1. Contract site – all areas covered under the contract, and areas accessed for purposes of performing activity under the contract;
- 2. Non-active use – a period of time greater than five (5) minutes when a piece of diesel equipment is not being operated in performance of its work;
- 3. Non-road – diesel vehicles listed by EPA for use in non-road applications. These include construction, agricultural, and other industrial vehicles that are not legally operable on highways;
- 4. On-road – vehicles listed by EPA for on-highway applications;
- 5. Truck-staging zone – a designated area on the contract site where delivery or pickup activities will be located;
- 6. Ultra low sulfur diesel fuel – Diesel fuel with a sulfur content of 15 parts per million or less;

7. Vehicle – a piece of diesel-powered equipment being used for contract activities; and
8. Listed clean diesel technology – includes:
  - a. *Diesel oxidation catalyst – a device similar to a catalytic converter that reduces diesel emissions and does not require regeneration;*
  - b. *Tier 4 or Tier 4 Interim – any vehicle certified by EPA as meeting Tier 4 emissions standards or Tier 4 Interim emissions standards;*
  - c. *Particulate filter – a device that traps soot produced by the engine and vaporizes this soot through the application of heat, requiring only periodic maintenance;*
  - d. *Closed crankcase ventilation – a device that reduces fugitive emissions from the vehicle’s crankcase by routing them through the tailpipe;*
  - e. *Selective catalytic reduction – A device that reduces emissions of oxides of nitrogen by treating exhaust with urea;*
  - f. *Emissions upgrade groups – groups of replacement components that, when installed during vehicle overhaul, reduce engine emissions;*
  - g. *Engine repower – the replacement of a vehicle’s engine with a newer model to reduce tailpipe emissions; and*
  - h. *Any other technology verified by EPA or CARB to reduce diesel particulate emissions by 20% or more.*

E. Monitoring and Penalties for Non-Compliance

1. City reserves the right to request purchase and/or installation documents to verify contractor’s, and any subcontractor’s installation of the retrofit in the vehicle. These purchase documents shall be provided to the City’s project manager by the contractor within five (5) days of the City’s request.
2. Any false certification or representation in connection with these requirements for Diesel Engine Emissions Controls and/or any failure to comply with these requirements shall constitute a material breach of contract entitling the City to all rights and remedies provided in the contract and otherwise available at law and/or in equity, including but not limited to the monetary assessment set forth herein. For contracts of \$500,000.00 or less, an assessment of \$500.00 per offense per day shall be imposed upon the contractor for every covered vehicle operating in violation of this section. For all other contracts, an assessment of \$1000.00 per offense per day shall be imposed upon the contractor for every covered vehicle operating in violation of this section. In addition, it is understood that false certification or representation is subject to penalties under Title 18 Pa. C.S.A. § 4904 (relating to unsworn falsification to authorities).