



# Green Contract Language template

## Purpose

The protection of the health, safety and welfare of Ohio residents to minimize the public health risks associated with diesel particulate matter (PM) by establishing requirements related to Ultra Low Sulfur Diesel (ULSD) Fuel and Best Available Control Technology (BACT) for construction equipment (non-road); additionally to take a step towards meeting federal clean air standards for nitrogen oxides and particle pollution which, once cleaned up, will spur economic development.

The U.S EPA has classified diesel exhaust as a likely human carcinogen, and has identified diesel particulate matter and diesel exhaust organic gases as toxic air pollutants. Additionally, diesel exhaust is also a prime contributor to airborne fine particle pollution that is linked to early death and other serious cardiovascular and pulmonary problems such as heart attacks, abnormal heart rhythms, atherosclerosis, stroke, asthma attacks, permanent respiratory damage and retardation of lung growth in children. The associated health impacts of diesel exposure impact Ohio; 769 early deaths, 1,002 non-fatal heart attacks, 14,464 asthma attacks, 83,963 work loss days and 489,355 minor restricted activity days.

Ohio has nearly one-third of its counties failing federal air quality standards for particle pollution (PM 2.5) and nitrogen oxides (NOx). Nonroad diesel vehicles make up 21% (second highest category) of the diesel particle pollution emissions in Ohio.

The United States Environmental Protection Agency has enacted requirements requiring the substantial reduction of emissions from new diesel engines in both heavy-duty highway vehicles and land-based non-road equipment, but these regulations do not apply to any of the over eleven (11) million existing diesel engines in the United States, most of which emit substantially more pollution and often remain in service for ten (10) to thirty (30) years.

The same technology that limits diesel pollution from new diesel engines can be retrofitted onto existing engines or applied in new replacement engines to reduce harmful diesel emissions by eighty-five percent (85%) or more, and significantly reduce noise, odor, and vibration from diesel equipment. Additionally, compressed natural gas (CNG) and biodiesel are alternative fuels that reduce particle pollution, odor, and reduce noise.

## Definitions

**BACT:** Best Available Technology means technology verified by the U.S. EPA or CA Air Resources board that achieves reductions in particulate matter emissions at the highest classification level for diesel emission control strategies. Such technologies shall not result in a significant increase in nitrogen oxides.

**Contractor:** Means any entity or person that enters into an agreement or contract with the state (including sub contractors and their sub contractors) to perform work or provide goods or services related to such contract.

**Contract:** Contract means a contract with the state for construction projects having a total cost of \$2,000,000 or more, funded in whole or part by the state and federal monies and involving the construction, demolition, rehabilitation, renovation, restoration, or repair of any building, structure, tunnel, excavation, roadway, park or bridge.

Level 1 control: means a verified diesel emission control device that achieves a particulate matter (PM) reduction of twenty-five percent (25%) or more compared to uncontrolled engine emissions levels.

Level 3 control: means a verified diesel emission control device that achieves a particulate matter (PM) emission reduction of eighty-five percent (85%) or more compared to uncontrolled engine emission levels.

Level 2 control: means a verified diesel emission control device that achieves a particulate matter (PM) emission reduction of fifty percent (50%) or more compared to uncontrolled engine emission levels.

Non road engine: means an internal combustion engine (including the fuel system) operating on diesel fuel not used in a motor vehicle or a vehicle used solely for competition or that is not a stationary source, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction project.

Non road vehicle: means a vehicle that is powered by a non-road diesel engine seventy five (75) horsepower and greater, and that is not a motor vehicle or a vehicle used solely for competition, which shall include, but not be limited to, backhoes, bulldozers, compressors, cranes, excavators, generators, and similar equipment; non-road vehicles do not include locomotives or marine vessels.

### **Application**

This contract language is applicable to any public works project that is \$2 million or above that uses State funds for diesel vehicles on the construction site six days or more throughout the duration of the project.

### **Fuel and BACT**

Contingent upon the availability of the State or federal funds to be utilized for purchasing and installing retrofit technology or compressed natural gas engine conversion, any diesel-powered non-road or on-road vehicle that is owned, leased, and/or operated by the State or contractor on a public works project, on and after January 1, 2010, shall:

- « Be powered by ULSD or biodiesel(or compressed natural gas) ; and
- « Utilize best available retrofit technology for reducing diesel particulate emissions, with the specification that if level 3 verified emissions control devices have not been verified for use on particular engines, level 2 verified devices must be required; if neither level 3 nor level 2 devices have been verified for use on particular engines, level 1 verified devices must be required. Compressed natural gas can be used in lieu of the emission control devices listed above.

### **Exceptions**

Upon provision by the contractor to the Energy and Sustainability Manager of appropriate and sufficient documentary evidence, subsections a) (2), b) (2), b) (3) and b) (4) of this section shall not apply to:

- « (1) any diesel-powered non-road or on-road vehicle on the project site working five days or less over the life of the project;
- « (2) vehicles that are specially equipped and used for emergency response, as well as other vehicles that are operated under a contract for emergency response; and
- « (3) vehicles and equipment used exclusively for snow removal.

## **Compliance**

30 days before beginning work, the contractor shall submit to the City/State for approval a list of all diesel-powered non-road and on-road vehicles, and stationary generators to be used on the project. The list shall include the following:

- (1) Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment; and
- (2) Equipment type, manufacturer, engine model year, engine certification ECM calibration, horsepower, plate, serial number, and expected fuel usage and/or hours of operation; and
- (3) For the pollution control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date. Or the documentation of CNG conversion.
- (4) During periods of inactivity, idling of diesel-powered non-road and on-road vehicles shall be minimized and shall not exceed the time allowed under state and local laws. If no laws exist, the vehicle shall not idle for any time if it is not performing a function related to completing the construction project.

## **Enforcement**

- « Civil penalty up to \$5K for each violation
- « False statements are punished up to \$10K civil penalty
- « Swapping retrofits on the project lead up to a \$10K civil penalty

## **Administration:**

- « ODOT, ODAS, or Agency that is entering the agreement