OREGON CLEAN AIR CONSTRUCTION COLLABORATIVE: A Project to Address Diesel Particulate Pollution

Clean Construction Contracting Recommendation

The City of Portland, the Port of Portland, Metro, Multnomah County, and Clackamas County are evaluating the feasibility of implementing a common set of standards requiring that construction equipment meet certain diesel-exhaust-control specifications for public contracts.

Diesel Engine Requirements

Following the effective date of the adopted program and the phase-in schedule outlined below, all diesel-powered off-road construction equipment equal to or greater than 100 horsepower assigned to the project, shall meet the following requirements:

- o Meet Tier 4 standards (including Tier 4i), or
- Retrofit with best available control technology (BACT). BACT consists of:
 - A diesel particulate filter (DPF) which has been verified by the U.S. EPA or the California Air Resources Board (CARB), or;
 - A diesel oxidation catalyst (DOC) verified by EPA or CARB when adequately demonstrated by the contractor that a DPF is not suitable.

Additionally, following the phase-in date of the adopted program, all on-road diesel dump trucks and cement mixers greater than 14,000 Gross Vehicle Weight used by the contractor or its subcontractor(s), shall meet the following requirements:

- o Have engines that are 2007 model year or later, or
- Retrofit with BACT.

Idle Reduction Requirements

To reduce unnecessary idling:

- All non-road diesel equipment must shut down after five minutes of inactivity, and
- · Contractors will post "Five Minute Limit" signs on the job site, and
- Contractors will ensure all diesel-equipment operators are aware of the policy.

Phase-in Schedule

Schedule	Off-road	On-road
On effective date	No idling	No idling
At year 1 following effective date	No tier 0 engines allowed*	
At year 2 following effective date	No tier 1 engines allowed*	
At year 3 following effective date	No tier 2 engines allowed*	
At year 4 following effective date	No tier 3 engines allowed*	No pre-2007 engines*
At year 5 following effective date	Tier 4 only*	
At year 6 following effective date	Tier 4 only*	
At year 7 following effective date	Tier 4 only**	No pre-2007 engines**

^{*}Older equipment allowed when retrofitted with BACT (DPF to DOC)

Diesel Engine Exemptions

An exemption for the following reasons:

- If the equipment is not able to be retrofit with verified filter, or
- If rental equipment compliant with the procurement standard is not available within 100 miles, or
- If a filter will obscure the vision of the operator, or otherwise impact worker safety, or
- If the equipment is needed for an emergency, including for underground equipment operators.
- If there are special circumstances or unique equipment that would result in a significant and demonstrable hardship for the contractor to invest in upgrades.

Diesel Engine Compliance Options

- Use Tier 4 off-road equipment or 2007 or newer on-road vehicles, or
- Retrofit existing equipment with EPA or CARB verified device, or
- · Rent compliant equipment for the job, or
- Avoid the use of diesel equipment; consider electric, CNG, LPG, or other clean burning alternative fuels.

Idle Reduction Exemptions

The following are exemptions to the idling requirement:

 Circumstances where the safety of contractors and their employees may be compromised if diesel equipment is turned off. For example, where employees are working in a trench.

^{**}Older equipment allowed only when retrofitted with DPF

EXHIBIT A

- Situations where the equipment is needed for power. For example, hydraulic power generation, power take off, or tool use such as hoist, winch, lift gate or boom operation.
- Situations where the equipment meets the most stringent EPA emissions standards or has been retrofit with a DPF; frequent shutdowns may be detrimental to the exhaust control system, rendering it less effective by lowering the exhaust temperature.
- Situations where equipment requires testing, servicing, inspection, or repairs.

Data Submission Requirements

The contractor shall be required to submit initial information for covered diesel vehicles and equipment that are used on the construction contract, including information on installed retrofit devices. Public agencies intend to issue compliance decals for all covered vehicles and equipment used on the applicable project sites. Decals must be displayed on covered vehicles and equipment at all times while on the job site. Once registered, the registered equipment and accompanying decal is transferable to other projects within and among participating agencies.

Contractors Responsibilities

Contractors will be responsible for ensuring that equipment used on the job site complies with these specifications, including data submission requirements. The contractor shall be responsible for any upfront costs associated with retrofitting any diesel-powered off-road construction equipment or on-road engines with emission control devices.

<u>Certified Disadvantaged, Minority, Women, and Emerging Small Businesses</u> (<u>DMWESB</u>) <u>Alternative Compliance Method</u>

Certified DMWESBs will need to comply with these standards. To help ease the transition, participating jurisdictions may provide financial incentives to help with retrofit and/or replacement costs, including the potential use of Volkswagen settlement funds.