



WEST COAST COLLABORATIVE

Public-private partnership to reduce diesel emissions

The goal of the Collaborative is to leverage federal funds to strategically reduce emissions from the most polluting diesel sources in impacted communities. The Collaborative seeks to improve air quality and public health by targeting the highest polluting engines with the most cost effective control strategies.

Portland Metropolitan Area Public Fleets Diesel Retrofits and School Bus Clean Diesel Upgrades

The West Coast Collaborative funded the Oregon Department of Environmental Quality \$295,320 in June 2008 for clean diesel upgrades on public fleets in the Portland metropolitan area. Oregon DEQ is committing matching funds to reduce in-cabin school bus self pollution through clean diesel upgrades.

What is the Project?

In the first year, funds will be used to retrofit 37 diesel vehicles and equipment owned by the City of Portland and Multnomah County with after-treatment devices. To meet the match incentive under the Diesel Emissions Reduction Act, the state is committing to spending at least \$196,880 as part of an ongoing project to reduce passenger exposure to diesel exhaust on school buses with installation of closed crank-case ventilation systems (CCVs) on all front diesel school buses model year 1994-2006 throughout Oregon.

Why is this project important?

Diesel Particulate Matter 2.5 emissions from both public and private fleets within Oregon were estimated at around 4,500 tons per year based on a study in 2002. The Portland metropolitan area has both the most people exposed to air toxics, and the highest levels of exposure. The City of Portland and Multnomah County will be undertaking retrofitting of vehicles in their fleet but also begin study of establishing clean diesel standards for contracted public works projects. This will extend utilization of clean diesel technology beyond the scope of this project and result in cleaner air for residents in the metropolitan area.

In-cabin self pollution on school buses has been documented to be a problem such that emission impacts for passengers on the bus is estimated to be 100,000 to a million times greater than from that same bus for residents in the community. Eliminating emissions from the engine's downdraft tube with a CCV is a cost effective first step towards health protection.

What are the estimated environmental benefits?

The public fleets project will utilize the best available passively regenerating exhaust controls, which would reduce particulate emissions by at least 25% and upwards of 95%. An assessment will be completed at the end of the project but estimated emission reductions on the order of 1.5 tons per year are anticipated.

A recent study documented significant reductions in acute childhood respiratory diseases, including asthma and bronchitis, of up to 34% following school bus clean diesel upgrades. Reduced health care costs, sick days and lost work days are expected as a result of the school bus upgrade project.

What is the Collaborative?

The West Coast Collaborative is an ambitious partnership between leaders from federal, state, and local government, the private sector, and environmental groups committed to reducing diesel emissions along the West Coast. Partners come from all over Western North America, including California, Oregon, Washington, Alaska, Arizona, Idaho, Nevada, Hawaii, Canada and Mexico. The Collaborative is part of the National Clean Diesel Campaign (www.epa.gov/cleandiesel). The state of Oregon is a founding member of the Collaborative and implements its efforts through the Oregon Clean Diesel Initiative (www.deq.state.or.us/aq/diesel/).

How can I find out more about the Collaborative?

For more information, on the West Coast Collaborative, please visit our website at www.westcoastcollaborative.org. For more information about this project or about the Public Fleets Sector in general, please contact Grace Cheng: cheng.grace@epa.gov.