Oregon Department of Environmental Quality: ARRA Diesel Retrofit & Repower Project

The West Coast Collaborative (WCC) is pleased to announce the Oregon Department of Environmental Quality's (ODEQ's) completion of its project to retrofit heavy-duty public fleet vehicles and repower marine harbor craft. This project was implemented using $1,726,855 in U.S. Environmental Protection Agency (U.S. EPA) American Recovery & Reinvestment Act of 2009 (ARRA) State Clean Diesel grant funding combined with nearly $237,000 in leveraged funds from the Anchorage Launch Service Company.

What is the Project?

Retrofitted 155 heavy-duty on-highway public fleet diesel engines with diesel particulate filters (DPFs), diesel oxidation catalysts (DOCs), closed crankcase ventilation systems (CCVs) and direct fired heaters (DFHs). Retrofit actions included: 29 municipal vehicle engines, 26 transit buses and 100 school buses. Also, repowered 4 Tier 0 marine harbor craft propulsion engines with lower emitting Tier 2 engines.

Why is this project important?

The general purpose of this grant was to support the retrofit of heavy-duty on-highway vehicles and the repower of marine harbor craft in order to reduce diesel emissions and improve air quality in the State of Oregon. Exposure to diesel exhaust has been associated with decreased lung function and retarded lung development and can also exacerbate the symptoms of asthma, bronchitis and pneumonia. The technologies deployed by this project will reduce exposure to diesel emissions as well as the negative health affects associated with exposure.

What are the Environmental Benefits?

Over the remaining lifetime of the 159 affected engines, these upgrades will reduce emissions of fine particulate matter (PM2.5) by 4.62 tons, nitrogen oxides (NOx) by 40.8 tons, hydrocarbons (HC) by 1.9 tons, carbon monoxide (CO) by 21 tons, and carbon dioxide (CO_2) by 832 tons. Additionally, the reduction of PM2.5 emissions will also reduce black carbon (BC), which influences climate by directly absorbing light, reducing the reflectivity ("albedo") of snow and ice through deposition, and interacting with clouds.

How was this project funded?

The WCC provided $1,726,855 in ARRA State Clean Diesel grant funds to support this project. $236,725 in leveraged funds was contributed by Anchorage Launch Service Company to complete the marine repower portion of the project.

Who are the Partners on this project?

The project was led by ODEQ, a state regulatory agency tasked with restoring, maintaining and enhancing the quality of Oregon's air, land and water, in partnership with Beaverton School District, Bend-LaPine School District, Klamath County School District, Klamath Falls School District, City of Lake Oswego, Lane County, City of Milwaukie, Salem-Keizer School District, Tri-Met, Washington County and Anchorage Launch Service Company. ODEQ received the ARRA grant award through the WCC, and distributed the grant funds to the participating fleets. ODEQ was also responsible for data monitoring and reporting for the project.

What is the Collaborative?

The WCC is an ambitious partnership between leaders from federal, state, local and tribal governments, the private sector, and environmental groups committed to reducing diesel emissions along the West Coast. Partners come from all over Western North America, including: Alaska, Arizona, Hawaii, Idaho, Nevada, California, Oregon, Washington, Canada and Mexico. The WCC is part of the U.S. EPA National Clean Diesel Campaign.
www.epa.gov/cleandiesel

How can I find out more information?

For more information on this project, please contact John Mikulin at U.S. EPA (mikulin.john@epa.gov / 415-972-3956). For more information on the WCC, please visit our website. www.westcoastcollaborative.org