



WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

The goal of the West Coast 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.

DERA 2016: Reducing School Bus Emissions in California

The West Coast Collaborative (WCC) is pleased to announce the California Air Resources Board's (CARB's) completion of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) State grant to retrofit and replace heavy-duty diesel school buses. This project was implemented using \$539,412 in DERA grant funding combined with \$371,168 in CARB matching funds.

What is the Project?

In partnership with the San Joaquin Valley Air Pollution Control District (SJVAPCD) and participating fleets, this project installed Diesel Particulate Filter (DPF) retrofits on 30 heavy-duty school buses, and also replaced 6 older, high-emitting heavy-duty school buses with school buses that met or exceeded the emission standards of 0.20 gram per brake horsepower hour (g/bhp-hr) oxides of nitrogen (NOx) and 0.01 g/bhp-hr particulate matter (PM). These retrofits and replacements occurred throughout the state of California.

Why is this project important?

The primary objective of this project is to improve the environmental health of children. Exposure to diesel exhaust is associated with decreased lung function and development. It can also exacerbate the symptoms of asthma, bronchitis and pneumonia. This project will reduce children's exposure to diesel emissions as well as the negative health effects associated with exposure. Expected unquantifiable benefits of the project include increased awareness of the need to improve air quality, particularly among parents, school officials and others concerned with child health and welfare.

What are the Environmental Benefits?

Over the remaining lifetime of the 36 affected engines, this work is estimated to reduce emissions of fine particulate matter (PM_{2.5}) by 0.5 tons, hydrocarbons (HC) by 1 ton, carbon monoxide (CO) by 2.3 tons, and NO_x by 1 ton. Additionally, the reduction of PM_{2.5} 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.

Who are the Partners on this project?

The project was led by CARB, a state agency tasked with protecting air quality in the State of California, in partnership with the SJVAPCD and participating school bus fleets. CARB received the DERA grant award through the WCC, and distributed the grant funds to SJVAPCD, who then distributed funds to participating eligible school bus owners. CARB will be 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 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: Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Washington, the Pacific Islands, 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 Dana Mayfield at US EPA (mayfield.dana@epa.gov). For more information on the WCC, please visit our website. www.westcoastcollaborative.org