



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 2012: 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 Clean Diesel Program grant to retrofit heavy-duty diesel school buses. This project was implemented using \$454,899 in DERA grant funding combined with \$322,101 in CARB matching funds and \$28,583 in leveraged funds from the San Joaquin Valley Air Pollution Control District (SJVAPCD) and participating school districts.

What is the project?

This project was implemented through a partnership between CARB, SJVAPCD and participating fleets to install Diesel Particulate Filter (DPF) retrofits on 41 heavy-duty school buses operating throughout California.

Why is this project important?

This project's primary objective is to improve the environmental health of children by partnering with school bus fleets to install diesel exhaust retrofits. 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. 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 41 affected engines, these upgrades are estimated to reduce emissions of fine particulate matter (PM_{2.5}) by 3.4 tons, hydrocarbons (HC) by 6.3 tons, and carbon monoxide (CO) by 44.6 tons. On an annual basis, the associated PM_{2.5} emissions reductions will generate over \$3 in monetary health benefits in the affected counties for every \$1 spent on the projects. 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 California, in partnership with SJVAPCD and participating school bus fleets: Black Oak Mine Unified School District, Eastern Sierra Unified School District, Kelseyville Unified School District, Live Oak Unified School District, Oroville Union High School District, Pleasant Grove Joint Union, Seeley Union School District and Tulare Joint Union High School District. CARB received the DERA grant award through the WCC, distributed the grant funds to SJVAPCD, which then distribute funds to the participating school bus fleets. CARB was responsible for the data monitoring and reporting for this 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 US 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 US EPA (mikulin.john@epa.gov / 415-972-3956). For more information on the WCC, please visit our website. www.westcoastcollaborative.org