



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 2012: Agriculture, Construction & Marine Repower/Replacement in Southern California

The West Coast Collaborative (WCC) is pleased to announce the South Coast Air Quality Management District's (SCAQMD's) completion of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) grant to repower and replace heavy-duty diesel marine and nonroad engines. This project was implemented using \$1,045,993 in DERA grant funding combined with \$3,653,712 in matching funds from SCAQMD, the California Air Resources Board (CARB) and participating agricultural, construction and marine fleets.

What is the Project?

This project repowered 21 Tier 0-2 marine engines to Tier 3; replaced two Tier 0 construction wheel loaders with Tier 4 equipment; and replaced seven pieces of Tier 0-3 agricultural equipment with Tier 4 equipment.

Why is this project important?

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 human exposure to diesel emissions as well as the negative health effects associated with exposure. The target fleets were comprised of marine vessels and nonroad equipment operating in Los Angeles, Riverside and San Bernardino Counties, whose residents are disproportionately impacted by diesel goods movement activities at the Ports of Los Angeles and Long Beach, and

along regional goods movement corridors (e.g., I-10, I-15, I-60, I-215 and I-710 freeways).

What are the Environmental Benefits?

Over the remaining lifetime of the 30 affected engines, these upgrades are estimated to reduce emissions of oxides of nitrogen (NO_x) by 76 tons, fine particulate matter (PM_{2.5}) by 3.7 tons, hydrocarbons (HC) by 2 tons, and carbon monoxide (CO) by 21 tons. 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 SCAQMD, a regional agency with jurisdiction over air quality in California's South Coast Air Basin, in partnership CARB's Carl Moyer Program and 16 participating fleets. SCAQMD received the DERA grant award through the WCC, and distributed the grant funds to participating agriculture, construction and marine fleets. SCAQMD was 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 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