



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 2018: Non-Road Equipment Replacements in the Bay Area

The West Coast Collaborative (WCC) is pleased to announce the Bay Area Air Quality Management District's (BAAQMD) receipt of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) grant to replace five non-road vehicles operating at the Port of Richmond and one non-road vehicle operating at a metal recycling facility in Hayward, California. This project will be implemented using \$1,160,311 in DERA grant funding combined with \$2,798,479 in matching funds from BAAQMD and their project partners.

What is the Project?

This project will replace six diesel powered material handlers, operating at the Port of Richmond, with five new Tier 4 diesel material handlers, and one zero-emission electric material handler. It will also replace a diesel material handler operating at a metal recycling facility in Hayward, CA with a new Tier 4 diesel vehicle.

Why is this project important?

Exposure to diesel exhaust has been associated with decreased lung function 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 locomotives to be replaced under this project operate full-time within Contra Costa and Alameda Counties, which both face significant air quality challenges and remain in non-attainment for ozone and particulate matter. Both counties are also designated by US EPA as air toxics assessment areas where much of the population is exposed to more than 2.0 $\mu\text{g}/\text{m}^3$ of diesel particulate matter emissions.

What are the Environmental Benefits?

Over the remaining lifetime of the affected engines, these replacements are estimated to reduce emissions of oxides of nitrogen (NOx) by 11 tons, particulate matter (PM) by 1.4 tons, hydrocarbons (HC) by 1.1 tons, carbon monoxide by 8.3 tons, and carbon dioxide (CO₂) by 911 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 will be administered by the BAAQMD, a regional agency with jurisdiction over air quality in the San Francisco Bay Area. BAAQMD received the DERA grant award through the WCC, and will distribute the grant funds to project partner Sims Metal Management. BAAQMD will be responsible for data monitoring and reporting for the project, and for working with Sims to scrap the replaced material handlers.

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 Francisco Dóñez at US EPA (donez.francisco@epa.gov or 213-244-1834). For more information on the WCC, please visit our website. www.westcoastcollaborative.org