



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 emission control strategies.

DERA 2018: Ultra-Low NOx Truck Replacements 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 project to replace heavy-duty diesel trucks. This project was implemented using \$1,596,030 in DERA grant funding combined with \$1,597,921 in California Proposition 1B funds, \$494,681 in California Energy Commission (CEC) Natural Gas Vehicle Incentive Project funds, and \$1,390,162 in cost-share funds from fleet partner Ecology Auto Parts.

What is the Project?

This project replaced thirty-one (31) legacy diesel Class 8 semi-trucks with new trucks powered by model year 2019 compressed natural gas (CNG) engines certified to meet the California Air Resources Board's (CARB's) Optional Low NOx emission standard of 0.02 g/bhp-hr.

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 project fleet was comprised of Class 8 refuse transport trucks operating in California's Los Angeles, Riverside and San Bernardino counties. These counties are disproportionately impacted by heavy-duty diesel traffic along the major transport corridors, as well as by goods movement operations at ports, rail yards, warehouses, and distribution centers.

What are the Environmental Benefits?

Over the remaining lifetime of the 31 affected engines, these upgrades are estimated to reduce emissions of oxides of nitrogen (NOx) by 43.3 tons, fine particulate matter (PM2.5) by 1.7 tons, hydrocarbons (HC) by 1.9 tons, and carbon dioxide (CO₂) by 4005 tons. Additionally, the reduction of PM2.5 emissions will 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. The project also conserved nearly 356,000 gallons of diesel fuel by employing CNG technology.

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 with the CEC, University of California at Irvine (CEC program administrator), and Ecology Auto Parts. SCAQMD received the DERA grant award through the WCC and distributed the grant funds to Ecology Auto Parts. 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 (<https://www.epa.gov/dera>).

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