



The goal of the West Coast Collaborative is to leverage significant federal funds to reduce emissions from the most polluting diesel sources in the most affected communities. The Collaborative seeks to significantly improve air quality and public health by targeting the highest polluting diesel engines and equipment with the cost-effective control strategies.

DERA 2020: Electrification of Transport Refrigeration in Southern California Grocery Fleets

Under the 2020 Diesel Emissions Reduction Act (DERA) National Clean Diesel Program, the U.S. Environmental Protection Agency's (EPA) West Coast Collaborative awarded a \$2,240,721 grant to the South Coast Air Quality Management District to purchase 26 hybrid-electric Transport Refrigeration Units (TRUs) with trailers, 15 all-electric TRUs with trailers, and 194 electrified parking spaces.

What is the project?

EPA's Pacific Southwest Region 9 provided a grant to the South Coast Air Quality Management District (SCAQMD) to replace 26 diesel-fueled Transport Refrigeration Units (TRUs) and trailers with 26 hybrid electric units; replace 15 diesel TRUs and trailers with 15 all-electric units with supporting infrastructure; and install 194 electrified parking spaces for TRUs at three grocery distribution locations.

Why is this project important?

Exposure to diesel exhaust has been associated with decreased lung function and 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 equipment to be replaced under this project operates full-time within the South Coast Air Basin, which faces significant air quality challenges and remains in non-attainment for ozone and particulate matter. The South Coast is also designated by US EPA as an air toxics assessment area where much of the population is exposed to more than 2.0 $\mu\text{g}/\text{m}^3$ of diesel particulate

matter emissions. The grocery distribution vehicles to be upgraded in this project operate in California's Los Angeles and Orange Counties. These counties are disproportionately impacted by heavy-duty diesel traffic along major transport corridors, as well as by goods movement operations at ports, rail yards, warehouses, and distribution centers.

What are the environmental & health benefits?

These equipment replacements will reduce lifetime emissions of NO_x by 791 tons, fine particulate matter by 48 tons, and carbon monoxide by 155,975 tons. The project will also provide an anticipated annual health benefit of \$3,700,000 in the form of reduced health care costs, missed days of work and school, and reduced mortality from air pollution within the South Coast Air Basin.

How was this project funded?

The EPA, through the West Coast Collaborative, awarded \$2,240,721 in DERA National Program grant funds to the SCAQMD to enable the implementation of this project. SCAQMD's project partner Albertsons-Safeway provided \$4,110,525 in matching funds.

What is the West Coast 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. The WCC is part of the US EPA National Clean Diesel Program (www.epa.gov/cleandiesel).

How can I find out more information?

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