



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 2016: On-Road Heavy-Duty Truck Replacements in the San Joaquin Valley

The West Coast Collaborative (WCC) is pleased to announce San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD) successful completion of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) grant to replace on-road heavy-duty trucks operating in the San Joaquin Valley. This project was implemented using \$981,993 in DERA grant funding combined with \$5,386,262 in matching funds from SJVUAPCD and participating trucking fleets.

What is the Project?

This project replaced 53 model year (MY) 1994–2006 class 5 through 8 heavy-duty diesel delivery trucks with trucks powered by 2015 or newer model year engines.

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 trucks replaced under this project transport goods from distribution centers within the San Joaquin Valley and operate at least 50% of their time within the Valley. The San Joaquin Valley continues to face significant air quality challenges and remains in non-attainment for ozone and particulate matter. Oxides of nitrogen (NOx) is a precursor to the formation of ground-level ozone and heavy-duty diesel trucks remain the greatest source of NOx emissions within the Valley.

What are the Environmental Benefits?

Over the remaining lifetime of the 53 affected engines, these replacements are estimated to reduce emissions of oxides of nitrogen (NOx) by 67.2 short tons, fine particulate matter (PM2.5) by 4.7 short tons, hydrocarbons (HC) by 6 short tons, carbon monoxide (CO) by 24.8 short tons, and carbon dioxide (CO₂) by 721.6 short tons. Additionally, the reduction of PM2.5 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 administered by SJVUAPCD, a regional agency with jurisdiction over air quality in the San Joaquin Valley Air Basin. SJVUAPCD received the DERA grant award through the WCC and distributed the grant funds to participating truck fleets. SJVUAPCD 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 Lauren Badertscher at US EPA (badertscher.lauren@epa.gov or 415-947-4213). For more information on the WCC, please visit our website. www.westcoastcollaborative.org