



## WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

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

# DERA 2017: Reducing Heavy-Duty Truck Emissions 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 \$1,316,297 in DERA grant funding combined with \$7,399,857 in matching funds from the SJVUAPCD and participating trucking fleets.

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### What is the Project?

This project replaced 68 model year (MY) 1995–2006 class 5 through 8 heavy-duty diesel delivery trucks in the San Joaquin Valley. The replacement trucks are powered by 2017 or newer model year engines that meet or exceed EPA emissions standards of 0.2 grams per brake horsepower-hour (g/bhp-hr) oxides of nitrogen (NOx) and 0.01 g/bhp-hr particulate matter (PM).

### Why is this project important?

Exposure to diesel exhaust is associated with decreased lung function and can also exacerbate the symptoms of asthma, bronchitis, and pneumonia. By replacing older, higher-emitting trucks, this project reduces human exposure to diesel emissions and those negative health effects associated with exposure. These diesel delivery trucks transport goods from distribution centers within the San Joaquin Valley and operate at least 50% of their time within the Valley. To date, heavy-duty diesel trucks are the greatest source of NOx emissions within the Valley, which also contribute to the formation of ground-level ozone, another respiratory irritant.

### What are the Environmental Benefits?

Over the remaining lifetime of the 68 affected engines, these replacements are estimated to reduce emissions of oxides of nitrogen (NOx) by 96.2 short tons, fine particulate matter (PM2.5) by 6.8 short tons, hydrocarbons (HC) by 7.2 short tons, and carbon monoxide (CO) by 16.6 short tons. Additionally, the reduction of PM2.5 emissions will also reduce black carbon (BC), which has been shown to affect 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 the 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](http://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](mailto:badertscher.lauren@epa.gov) or 415-947-4213). For more information on the WCC, please visit our website. [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org)