The West Coast Collaborative's goal 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 2018: Reducing Heavy-Duty Truck Emissions in the San Joaquin Valley

The West Coast Collaborative (WCC) is pleased to announce the San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD) receipt of a United States Environmental Protection Agency (USEPA) Diesel Emissions Reduction Act (DERA) grant to replace onroad heavy-duty trucks operating in the San Joaquin Valley. This project will be implemented using \$2,200,000 in DERA grant funding combined with \$11,563,664 in matching funds from the SJVUAPCD and participating trucking fleets.

#### What is the Project?

This funding will assist in the replacement of 105 model year (MY) 1996–2006, class 5 through 8 heavy-duty diesel trucks in the San Joaquin Valley. These new trucks will be powered by 2018 or newer model year engines, that meet or exceed USEPA 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?

The San Joaquin Valley faces significant air quality challenges. The targeted diesel trucks for these replacements transport goods both locally from distribution centers within the San Joaquin Valley, and long-haul throughout the state of California. To date, heavy-duty diesel trucks are the greatest source of oxides of nitrogen (NOx) emissions within the Valley, which contribute to the formation of ground-level ozone and particulate matter (PM). Additionally, exposure to diesel exhaust is associated with decreased lung function and can also exacerbate the symptoms of asthma, bronchitis and pneumonia. By replacing these older, higher-emitting trucks, this project reduces human exposure to diesel emissions and those negative health effects associated with exposure.

#### What are the Environmental Benefits?

Over the remaining lifetime of the 105 affected engines, these replacements are estimated to reduce emissions of oxides of nitrogen (NOx) by 334 short tons, fine particulate matter (PM2.5) by 16 short tons, hydrocarbons (HC) by 18 short tons, carbon monoxide (CO) by 110 short tons, and carbon dioxide by 699 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 will be 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 will distribute the grant funds to participating truck fleets. SJVUAPCD will be 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 (<a href="https://www.epa.gov/cleandiesel">www.epa.gov/cleandiesel</a>).

#### How can I find out more Information?

For more information on this project, please contact Dana Mayfield at US EPA (mayfield.dana@epa.gov or 415-972-3008). For more information on the WCC, please visit our website. www.westcoastcollaborative.org