



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: Replacing Diesel Agricultural Equipment in the San Joaquin Valley, CA

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 (US EPA) Diesel Emissions Reduction Act (DERA) grant to replace off-road mobile agricultural equipment operating in the San Joaquin Valley. This project will be implemented using \$1,239,959 in DERA grant funding combined with \$6,587,258 in matching funds from the SJVUAPCD and participating fleets.

What is the Project?

This project will replace 92 diesel-powered agricultural tractors or loaders operating in the San Joaquin Valley with new off-road agricultural equipment having Tier 4 or cleaner engines. The cleaner engines will greatly reduce the amount of pollution that was emitted by the older, less-efficient off-road equipment. These tractors or loaders will be owned by various farmers and used throughout the San Joaquin Valley as part of regular, daily agricultural operations.

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 agricultural tractors and loaders, this project reduces human exposure to diesel emissions and those negative health effects associated with exposure. The San Joaquin Valley is one of the most productive agricultural regions in the world and due to the unique topographical and meteorological conditions, is also one of the poorest air quality areas in the nation. In the Valley, agriculture is this region's main economic foundation, but many

of the farms here are still operating tractors that are 25 or more years old with engines that do not have any emissions control on them.

What are the Environmental Benefits?

Over the remaining lifetime of the 92 affected engines, these replacements are estimated to reduce emissions of oxides of nitrogen (NOx) by 777 short tons, fine particulate matter (PM2.5) by 108 short tons, hydrocarbons (HC) by 37 short tons, and carbon monoxide (CO) by 236 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 (www.epa.gov/cleandiesel).

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