



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 2020: School Bus & Truck Replacements in Arizona

The West Coast Collaborative (WCC) is pleased to announce the Maricopa County Air Quality Department's (MCAQD's) receipt of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) State Grant to replace legacy diesel school buses and heavy-duty trucks in Arizona. This project will be implemented using \$520,724 in DERA grant funding combined with \$347,149 in state matching funds, and \$1,474,335 in cost-share funds from participating fleets.

What is the Project?

This project will replace 12 heavy-duty legacy diesel vehicles including: six (6) school buses, one (1) Class 6, one (1) Class 7 and four (4) Class 8 short-haul trucks. Replacement vehicles include 5 alternative fuel school buses: three (3) propane and two (2) battery-electric. The older, replaced vehicles will be removed from service and permanently destroyed.

Why is this project important?

This project's primary objective is to improve the environmental health by partnering with school bus and trucking fleet operators to replace high-emitting, heavy-duty legacy diesel vehicles with modern clean diesel and alternative fuel technologies. Exposure to diesel exhaust has been associated with decreased lung function and retarded lung 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. Expected unquantifiable benefits of the project include increased awareness of the need to improve air quality, particularly among Arizona residents and others concerned with health and welfare.

What are the Environmental Benefits?

Over the remaining lifetime of the 12 affected engines, these upgrades are estimated to reduce emissions of fine particulate matter (PM2.5) by 1.1 tons, oxides of nitrogen (NOx) by 12.8 tons, hydrocarbons (HC) by 1.3 tons, carbon monoxide (CO) by 3.7 tons, and carbon dioxide (CO₂) by 613 tons. The project will also conserve over 54,000 gallons of diesel fuel. 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 will be led by MCAQD, a local agency whose mission is to provide clean air to Maricopa County residents and visitors. MCAQD received the DERA grant award through the WCC and will distribute the grant funds to participating fleet operators: Avondale Elementary School District, Cartwright School District, Phoenix Union High School District, Sysco Food Service, White Water LLC, Yuma Elementary School District, and Yuma Union High School District. MCAQD 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, academia, 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 facilitated by the US EPA DERA Program. <https://www.epa.gov/dera>

How can I find out more information?

For more information on this project, please contact John Mikulin at US EPA (mikulin.john@epa.gov / 415-972-3956). For more information on the WCC, please visit our website. www.westcoastcollaborative.org