



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 2019: 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 Clean Diesel Program grant to replace legacy diesel school buses and heavy-duty trucks in Arizona. This project will be implemented using \$486,183 in DERA grant funding combined with \$324,122 in state matching funds, and \$2,471,115 in cost-share funds from participating fleets.

What is the Project?

This project will replace: 1) eight legacy diesel school buses with model year 2017+ diesel buses; 2) ten Class 8 legacy diesel trucks with model year 2020 diesel trucks; and 3) four legacy diesel refuse trucks with model year 2020 CARB-certified low NOx compressed natural gas (CNG) trucks. 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, trucking, and refuse fleet operators to replace high-emitting, legacy heavy-duty 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 22 affected engines, these upgrades are estimated to reduce emissions of fine particulate matter (PM_{2.5}) by 1 ton, oxides of nitrogen (NO_x) by 17 tons, hydrocarbons (HC) by 1.2 tons, carbon monoxide (CO) by 5.6 tons, and carbon dioxide (CO₂) by 316 tons. The project will also conserve over 28,000 gallons of diesel fuel through CNG refuse truck replacements. Additionally, the reduction of PM_{2.5} 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: Agua Fria Union High School District, Avondale Elementary School District, Dysart Unified School District, Sysco Foods, and Waste Management. 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, 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, Canada, Mexico and the Pacific Islands. 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 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