



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 2016: Public Works Retrofits & School Bus Replacements in Arizona

The West Coast Collaborative (WCC) is pleased to announce the Maricopa County Air Quality Department's (MCAQD's) completion of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) State Clean Diesel Program grant project to retrofit heavy-duty diesel public works vehicles, and replace heavy-duty diesel school buses in Arizona. This project was implemented using \$217,069 in DERA grant funding combined with \$400,271 in cost-share funds from DVUSD.

What is the Project?

This project was implemented through partnerships between MCAQD and the: 1) Maricopa County Equipment Services Department (MCESD) to install Diesel Oxidation Catalyst (DOC) retrofits on 19 heavy-duty public works vehicles; and 2) Deer Valley Unified School District to replacement 3 legacy diesel school buses with model year 2017 diesel buses.

Why is this project important?

This project's primary objective is to improve the environmental health by partnering with public fleet operators to install diesel exhaust retrofits on heavy-duty vehicles, as well as to replace legacy diesel school buses. 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 (PM2.5) by 0.3 tons, oxides of nitrogen (NOx) by 3.3 tons, hydrocarbons (HC) by 0.8 tons, and carbon monoxide (CO) by 2 tons. 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 was led by MCAQD, a local agency whose mission is to provide clean air to Maricopa County residents and visitors, in partnership with MCESD and DVUSD. MCAQD received the DERA grant award through the WCC, and distributed the grant funds to MCESD and DVUSD via sub-grant agreements. MCAQD 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).

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