



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: Low NOx Alternative Fuel Refuse Truck Replacements in Phoenix, Arizona

The West Coast Collaborative (WCC) is pleased to announce the City of Phoenix's receipt of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) grant to replace heavy-duty diesel refuse trucks in Arizona. This project will be implemented using \$1,000,000 in DERA grant funding combined with \$2,194,693 in cost-share funds from the City of Phoenix and Mr. Bults, Inc.

What is the Project?

This project will replace 10 Class 8 diesel refuse trucks with model year 2019, or newer Class 8 trucks powered by compressed natural gas (CNG) engines certified to meet the California Air Resources Board's most stringent optional low NOx emission standard of 0.02 g/bhp-hr. The older, replaced diesel 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 Arizona refuse truck fleet operators to replace heavy-duty diesel vehicles with ultra-low NOx emission, alternative fuel vehicles. 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, visitors, and others concerned with public health and welfare.

What are the Environmental Benefits?

Over the remaining lifetime of the 10 affected engines, these upgrades are estimated to reduce emissions of oxides of nitrogen (NOx) by 1.8 tons, fine particulate matter (PM2.5) by 0.1 tons, hydrocarbons (HC) by 0.1 tons, carbon monoxide (CO) by 0.4 tons, and carbon dioxide (CO₂) by 48.4 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. The project will also conserve over 75,000 gallons of diesel fuel by employing ultra-low NOx emission CNG engine technology.

Who are the Partners on this project?

The project will be led by the City of Phoenix Public Works Department (COPPWD), which handles collection and disposal of trash and recyclables for more than 350,000 households in Arizona. COPPWD received the DERA grant award through the WCC, and will distribute the grant funds to the COPPWD Solid Waste Field Services, as well as private refuse fleet partner, Mr. Bults, Inc. COPPWD 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