



WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

The goal of the 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: Washington Department of Ecology – Lift & Yard Truck Replacement Project

Under the Diesel Emission Reduction Act (DERA), the U.S. Environmental Protection Agency (EPA) awarded the Washington Department of Ecology a \$522,450 grant with Fiscal Year 2020 funding. The grant will fund a yard truck and lift truck replacement project to support reduced emissions and improved air quality in Washington communities. The project will be implemented with a cost share of \$1,303,099 from the project partners and \$348,300 in funds from the State of Washington for a total project cost of \$2,173,849.

What is the Project?

The Washington Department of Ecology will work with project partners to replace older marine diesel equipment with fully battery-electric, zero emission units and the installation of charging infrastructure. As part of this project, funds will be used to replace six (6) Tier 2 or Tier 3 diesel yard trucks with battery electric yard trucks and one (1) Tier 1 diesel lift truck with a battery electric lift truck. This program's effort to replace old high-emitting diesel-engines will support reduced diesel emissions and improved air quality in Washington communities.

Why is this Project Important?

Research shows that there is no safe level of exposure to diesel particulate matter. Washington State's Clean Diesel Program strives to significantly reduce diesel particulate matter pollution by cleaning up emissions from the large number of diesel engines in operation within the state. The agency prioritizes projects that maximize health benefits by targeting areas with high population density and areas disproportionately impacted by air pollution from diesel fleets. This project is in line with these goals; the lift truck and yard truck replacements will take place in the Puget Sound Airshed and will reduce exposure to diesel emissions for economically disadvantaged communities and sensitive populations in these urban areas. This retrofit effort will reduce fuel consumption, energy costs, diesel emissions, and health risks related to diesel particulate matter.

What are the Estimated Environmental Benefits?

The lift and yard truck replacements are projected to reduce annual diesel emissions of particulate matter 2.5 (PM_{2.5}) by 1.44 tons, nitrogen oxides (NOx) by 5.72 tons, hydrocarbons (HC) by 0.453 tons, carbon monoxide (CO) by 3.35 tons, and carbon dioxide (CO₂) by 320.1 tons, as well as reduce annual fuel consumption by 28,427 gallons. This will result in estimated cumulative emission reductions of 8.61 tons of PM_{2.5}, 34.29 tons of NOx, 2,698 tons of HC, 20,134 tons of CO, and 1,919 tons of CO₂ over the lifetime of these vehicles.

How is this Project Funded?

The West Coast Collaborative is a partnership between leaders from federal, tribal, state, and local government, the private sector, and environmental groups committed to reducing diesel emissions along the West Coast and is part of the National Clean Diesel Campaign: www.epa.gov/cleandiesel

Where can I find more information?

For more information on the West Coast Collaborative, please visit our website at: www.westcoastcollaborative.org. For more information about this project, please contact Sarah Frederick at Frederick.Sarah@epa.gov