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 2019: Washington Department of Ecology – Tugboat Repower Project

Under the Diesel Emission Reduction Act (DERA), the EPA awarded the Washington Department of Ecology a $486,939 grant with Fiscal Year 2019 funding. The grant will fund a tugboat repower project to support reduced emissions and improved air quality in Washington communities. The project will be implemented with a cost share of $1,136,400 from the project partners and $324,626 in funds from the State of Washington for a total project cost of $1,947,965.

What is the Project?

The Washington Department of Ecology will work with project partners to replace older marine diesel engines with newer, cleaner, more fuel-efficient engines. As part of this project, funds will be used to replace four (4) Pre-Tier or Tier 1 marine diesel propulsion engines and six (6) Pre-Tier or Tier 1 marine diesel auxillary engines on tugboats operating in the Puget Sound Airshed. This program's effort to retrofit and replace old high-emitting marine 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 tugboat repowers 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 tugboat engine repowers are projected to reduce annual diesel emissions of particulate matter 2.5 ($PM_{2.5}$) by 0.83 tons, nitrogen oxides (NOx) by 27.83 tons, hydrocarbons (HC) by 1.04 tons, carbon monoxide (CO) by 4.23 tons, and carbon dioxide (CO_2) by 438.8 tons, as well as reduce annual fuel consumption by 39,000 gallons. This will result in estimated cumulative emission reductions of 10.02 tons of $PM_{2.5}$, 333.95 tons of NOx, 12.53 tons of HC, 428.75 tons of CO, and 5,265 tons of CO_2 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