



## 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 2017: Repowering Marine Engines and Cargo Handling Equipment at the Port of Long Beach

The West Coast Collaborative (WCC) is pleased to announce the City of Long Beach Harbor Department's (COLBHD) receipt of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) grant to replace marine diesel engines and cargo handling equipment operating at the Port of Long Beach. This project will be implemented using \$2,423,448 in DERA grant funding combined with \$3,354,772 in matching funds from the Harbor Department's project partners: Foss Maritime, Curtin Maritime, and SSA Marine.

### What is the Project?

This project will replace 11 diesel-powered marine engines (7 propulsion and 4 auxiliary) to Tier 3 engine standards, including engines on board one of the world's only hybrid tugboats. In addition, POLB will repower the diesel-electric engines of 3 rubber-tired gantry cranes (RTGs) to a grid-connected all-electric zero-emissions operation, creating the nation's largest deployment of zero-emissions RTGs.

### Why is this project important?

Exposure to diesel exhaust has been associated with decreased lung function 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. The marine and cargo handling equipment to be replaced under this project operates full-time within the South Coast air basin, which continues to face significant air quality challenges and

remains in non-attainment for ozone and particulate matter. The South Coast is also designated by US EPA as an air toxics assessment area where much of the population is exposed to more than 2.0  $\mu\text{g}/\text{m}^3$  of diesel particulate matter emissions. People living in the census tracts surrounding the Port of Long Beach face an increased risk of cancer, asthma, birth defects, and decreased lung function.

### What are the Environmental Benefits?

Over the remaining lifetime of the affected engines, these replacements are estimated to reduce emissions of oxides of nitrogen (NOx) by 1,649 tons, particulate matter (PM) by 61 tons, hydrocarbons (HC) by 40 tons, carbon monoxide (CO) by 267 tons, and carbon dioxide (CO<sub>2</sub>) by 15,606 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 will be administered by COLBHD, a city agency with jurisdiction over the Port of Long Beach. COLBHD received the DERA grant award through the WCC, and will distribute the grant funds to project partners Foss Maritime, Curtin Maritime, and SSA Marine. COLBHD 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, the Pacific Islands, Canada and Mexico. The WCC is part of the US EPA National Clean Diesel Campaign ([www.epa.gov/cleandiesel](http://www.epa.gov/cleandiesel)).

### How can I find out more information?

For more information on this project, please contact Francisco Dóñez at US EPA ([donez.francisco@epa.gov](mailto:donez.francisco@epa.gov) or 213-244-1834). For more information on the WCC, please visit our website. [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org)