



## 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 2013 - Port of Tacoma – Locomotive Engine Replacement Project

The West Coast Collaborative is pleased to announce that EPA selected the Port of Tacoma for \$601,949.00 in EPA funding under the Diesel Emissions Reduction Act (DERA).

### What is the Locomotive Engine Replacement Project?

The project will replace one Tier 0 switcher locomotive engine with a Tier 3 or better, certified diesel engine equipped with Automatic Engine Start-Stop (AESS) and microprocessor tractive control systems.

### Why is this project important?

This project will replace a Tier 0 engine with a new cleaner Tier 3 level diesel engine or better, and will incorporate computer-controlled fuel systems and microprocessor-controlled locomotive ancillary systems. The new diesel engine will have reduced emissions with increased fuel efficiency.

### What are the estimated environmental benefits?

Up to 25% savings in fuel consumption and over 50% lube oil savings are estimated. The fully-integrated AESS system can reduce engine idle time by over 50%. The current EPA emission standard for new locomotives is Tier 3. A Tier 0 locomotive engine replacement to Tier 3 engine emission standards can reduce HC and CO emissions by up to 70%, NOx by 58% and PM by 62%. It is estimated that the annual diesel emission pollutants will be reduced by 34.83 (tons/year) in NOx;

0.97 (tons/year) in PM2.5; 2.06 (tons/year) in HC; and 135.9 tons/year in CO2. The lifetime reduction in emissions are estimated at: 940.54 (tons) for NOx; 26.21 (tons) for PM2.5; 55.85 (tons) for HC; 3,669.5 (tons) for CO2.

### How is this project funded?

Through EPA and National Clean Diesel Funding Assistance Program, the West Coast Collaborative is providing \$601,949.00 in support of this project. Additionally, the project will be funded with \$902,924 in sub-recipient/locomotive owner cost shares from Tacoma Rail.

### Who are the partners on this project?

Project partners include the Port of Tacoma and Tacoma Rail. Tacoma Rail's maritime activities include moving containerized goods between the cargo ships and interchanging them to Class I railroads to continue across the nation.

### What is the Collaborative?

The West Coast Collaborative is a partnership between leaders from federal, 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](http://www.epa.gov/cleandiesel). For more information, on the West Coast Collaborative, please visit our website at [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org).

### How can I find out more about the Collaborative?

For more information about this project or the West Coast Collaborative, please Lucita Valiere, EPA Project Officer at [valiere.lucita@epa.gov](mailto:valiere.lucita@epa.gov), or call 206-553-8087.