



## 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 2012: Replacing a Line-Haul Locomotive to with a Cleaner Engine in the Areas of Sacramento, San Joaquin Valley, and San Francisco Bay

Under the 2012 Diesel Emission Reduction Act (DERA) National Program, the U.S. Environmental Protection Agency (EPA) West Coast Collaborative (WCC) awarded the Sacramento Metropolitan Air Quality Management District (SMAQMD) \$700,000 to repower a line-haul locomotive engine.

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### What is this project?

The SMAQMD will repower a Tier 0 engine emission standard line-haul locomotive built in 1979 to the cleanest available, or Tier 2 levels. The EPA will provide \$700,000 with leveraged funds to include an additional \$700,000. This Union Pacific locomotive operates along goods movement corridors in the Sacramento, San Joaquin Valley and San Francisco Bay areas. The repower includes a Tier 2 emission upgrade, which operates over 2,000 annual hours; there is no certified Tier 3 technology for this specific equipment to date.

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### Why is this project important?

Locomotive engines have a long operational life. The anticipated project life of this locomotive repower is 20-30 years. However, the total emission benefit calculation for this project is only based on 20 years.

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### What are the environmental and health benefits?

This project will have an immediate and substantial positive health impacts by reducing local emissions in the affected regions. Since this line-haul locomotive travels throughout northern and central California, the benefits achieved will affect various communities. The annual emissions reduced from this project include 32.36 tons of NO<sub>x</sub>, 1.67 tons of PM<sub>2.5</sub>, and 2.45 tons of HC. Emissions reduced in the 20 year life of this project include 647 tons of NO<sub>x</sub>, 34 tons of PM<sub>2.5</sub>, and 49 tons of HC.

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### How is this project funded?

The West Coast Collaborative is providing \$700,000 in funds in support of this project. SMAQMD and its project participants will provide \$700,000 for a total project cost of \$1,400,000.

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### What is the West Coast Collaborative?

The West Coast Collaborative is an ambitious partnership between leaders from federal, state, and local 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 California, Oregon, Washington, Alaska, Arizona, Idaho, Nevada, Hawaii, Pacific Island Territories, Canada and Mexico. The Collaborative is part of the National Clean Diesel Campaign (<http://epa.gov/cleandiesel>).

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

For more information, on the West Coast Collaborative, please visit our website at [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org)