



WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

The goal of the Collaborative is to leverage significant federal funds to reduce emissions from the most polluting diesel sources in the most affected communities. The Collaborative seeks to significantly improve air quality and public health by targeting the highest polluting engines with the most cost effective control strategies.

DERA 2011: Repowering Two Locomotives in the San Joaquin Valley

The San Joaquin Valley Air Pollution Control District (SJVAPCD) received \$2,000,000 from the U.S. Environmental Protection Agency (EPA), under the 2011 Diesel Emission Reduction Act (DERA) National Program, to repower two locomotives that operate in the San Joaquin Valley with new, cleaner engines.

What is this project?

This project repowers two older existing switch locomotives, medium horsepower or intrastate line-haul locomotives that are currently exempt from regulations. These two locomotives will be replaced with new, cleaner engines to greatly reduce the particulate matter and other air emissions in the San Joaquin Valley. The involved locomotives will use California Air Resources Board (CARB) low sulfur diesel fuel, providing further emissions reductions. Repowered locomotives can have an operational lifetime of 30 years or more. The affected railroad companies will be required to provide up to \$1,530,000 in additional funds, thus the total funding for this project will be around \$3,530,000.

Why is this project important?

The resulting generator set switch locomotives, combined with the required use of CARB diesel fuel, will significantly reduce the emissions of nitrogen oxides (NO_x) and particulate matter (PM). The

levels of PM_{2.5} and ozone in Southern California and the San Joaquin Valley have consistently been the highest in the country. NO_x is a component involved in the creation of ozone. The expected amount of reduction in NO_x and PM emissions will significantly reduce health risks, especially cancer, as diesel PM emissions account for 85 percent of all airborne cancer risks. The estimated impacts to the health of the residents from this project will result in an average annual benefit of approximately \$1,250,000 in the form of reduced health care costs, missed days of school and work, and reduced mortality from air pollution.

What are the estimated environmental benefits?

This repower project will provide approximately 800 tons of NO_x and 33 tons of PM emissions reductions during the project life. These old locomotives, which will be replaced, operate very old, high polluting engines. With the San Joaquin Valley being designated as "extreme" non-attainment for ozone, these locomotives will lead to a significant decrease in ozone.

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, Canada and Mexico. The Collaborative is part of the National Clean Diesel Campaign.

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.