



The West Coast Collaborative is a public-private partnership focused on reducing diesel emissions throughout western North America and the U.S. Pacific Islands. The Collaborative seeks to significantly improve air quality and public health by providing assistance to upgrade high-polluting diesel-fueled engines, vehicles, and equipment with cost-effective and cleaner emission control technologies.

# DERA National 2018: Near-Zero Emissions Locomotive Replacement at the Port of Long Beach



**Where:**

Port of Long Beach, CA



**Grantee:**

South Coast Air Quality Management District



**Replaced:**

1 model year 2007 Tier 2 diesel switcher locomotive



**Funding:**

\$ 719,500 U.S. EPA's DERA  
\$ 2,158,500 Matched



**Emissions Reduced:\***

0.47 tons of PM<sub>2.5</sub>  
17.42 tons of NO<sub>x</sub>  
381 tons of CO  
1.33 tons of HC



**What is the Collaborative?**

The West Coast Collaborative is a partnership among leaders from federal, tribal, state, and local governments, the private sector and environmental and community groups in EPA Regions 9 and 10.

The West Coast Collaborative is pleased to announce the South Coast Air Quality Management District's (SCAQMD) completion of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) grant to replace a diesel switcher locomotive operating at the Port of Long Beach. This project was implemented using \$719,500 in DERA grant funding combined with \$2,158,500 in matching funds from SCAQMD.

**What is this Project?**

This project replaced one engine model year 2007 Tier 2 diesel switcher locomotive, operating at the Port of Long Beach, with a new Tier 4 diesel switcher locomotive, and transferred the replaced Tier 2 unit to displace a Tier 0 switcher locomotive within the Mojave Desert Air Quality Management District (MDAQMD).

**Why is this Project Important?**

Exposure to diesel exhaust is associated with decreased lung function and can also exacerbate the symptoms of asthma, bronchitis and pneumonia. This project reduces human exposure to diesel emissions and therefore negative health effects associated with diesel exposure. The locomotives replaced under this project operate full-time within the South Coast air basin and the Mojave Desert air basin respectively, both of which face significant air quality challenges and remain in non-attainment for ozone and particulate matter. The South Coast is also designated by U.S. EPA as an air toxics assessment area where much of the population is exposed to more than 2.0 µg/m<sup>3</sup> 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.

**Who are the Project Partners?**

This project was administered by the SCAQMD, a regional agency with jurisdiction over air quality in California's South Coast air basin. SCAQMD received this DERA grant through the Collaborative and distributed these grant funds to Metropolitan Stevedore Company (Metro Ports). SCAQMD completed all data monitoring and reporting, and worked with MDAQMD to transfer the Tier 2 locomotive and scrap the replaced Tier 0 locomotive.

\*Estimated air emission reductions over the remaining lifetimes of these engines.