



## WEST COAST COLLABORATIVE

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.

# CalTrans Diesel Particulate Filter After-Treatment Technology Project

The West Coast Collaborative is pleased to announce \$280,000 in Environmental Protection Agency funding and \$147,000 in matching funds from the State of California Department of Transportation and its partners for the CalTrans Diesel Particulate Filter After-Treatment Technology Project.

## What is the CalTrans Diesel Particulate Filter After-Treatment Technology Project?

The State of California's Department of Transportation (CalTrans) will modify and install diesel emission control products on 14 off-road construction vehicles using California Air Resource Board (CARB)-Verified Passive Diesel Particulate Filter (DPF) muffler technology. The intent of this project is to significantly reduce the volume of particulate matter (PM) emissions by installing these diesel emissions control systems.

## Why is this project important?

California faces severe air quality problems, many of which are caused by particulate matter from diesel exhaust.

Construction vehicles are a very significant source of PM emissions. The 2004 Estimated Annual Average Emissions released by CARB states that off-road equipment and construction vehicles are responsible for an estimated 36 percent of particulate matter emissions in the South Coast Air Quality Management District (SCAQMD) of California, which encompasses the counties of Los Angeles, Orange, Riverside, and San Bernardino.

DPF technology has been verified by CARB as a Level 3 solution when used in on-road applications running on ultra-low sulfur diesel (ULSD), exhibiting a greater than 85 percent reduction in particulate matter emissions.

## What public health issues are associated with diesel exhaust?

Exposure to PM is associated with an increased risk of premature death, increased incidences of heart and lung disease, and adverse respiratory symptoms such as asthma. Exposure to diesel emissions over a long period of time may also pose a lung cancer hazard to humans.

## What are the estimated environmental and health benefits of this project?

Implementing these emission control devices on the 14 off-road construction vehicles leads to a number of estimated environmental benefits.

- Annual reduction of PM by 210 pounds per year.
- If project lifespan reaches seven years, total PM emission reduction would amount to 1,470 pounds (.735 tons).
- Accelerated product development leading to environmental and health benefits.

## How is this project funded?

Through EPA, the Collaborative will provide \$280,000 in support, with \$147,000 in matching funds from the State of California's Department of Transportation and its partners.

## Who are the partners on this project?

The State of California Department of Transportation and industry.

## What is the Collaborative?

The West Coast Collaborative is an ambitious partnership between leaders from federal, state and local government, the private sector, and environmental groups in California, Oregon,



Washington, Alaska, Arizona, Idaho, Nevada, Hawaii, Canada and Mexico that are committed to reducing diesel emissions along the West Coast. The Collaborative is part of EPA's National Clean Diesel Campaign ([www.epa.gov/cleandiesel](http://www.epa.gov/cleandiesel)).

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

For more information about the West Coast Collaborative, please contact Peter Murchie ([murchie.peter@epa.gov](mailto:murchie.peter@epa.gov), 503-326-6554) or visit our Web site at [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org).