



## 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.

# Oregon Construction Equipment Emissions Reduction Project

The West Coast Collaborative is pleased to announce that EPA has selected the Oregon Environmental Council's Construction Equipment Emissions Reduction Project for \$26,000 in EPA funding. This project will be implemented with an additional \$27,000 in matching funds.

## What is the Oregon Construction Equipment Emissions Reduction Project?

The Oregon Environmental Council (OEC) proposes to work with builders, state environmental officials, the city of Portland and other metro-area jurisdictions to reduce diesel emissions from construction equipment. This project will reduce diesel emissions from construction equipment used in the City of Portland by at least 20 percent through diesel engine retrofits, cleaner fuels, and idle reduction policies. Once evaluated, the project's most efficient methods may be applied towards reducing construction equipment emissions along the West Coast.

## Why is this project important?

This project will focus on a source of diesel pollution – construction equipment – that is currently not being addressed in any systematic way. Along with other more mobile sources of diesel emissions, construction equipment contributes to roughly 90% of the added cancer risk in Multnomah County. In fact, construction equipment contributes more particulates than all on-road diesel sources combined, accounting for one-third of total diesel emissions in Oregon.

In children, air pollutants like particulate matter (PM) and nitrogen oxides (NOx) have been linked with asthma and bronchitis, and high levels of the pollutants have been associated with increased school absenteeism and emergency room visits.<sup>1</sup>

PM is the microscopic soot emitted by diesel engines. Public health authorities associate exposure to PM with an increased risk of premature death, greater number of hospital admissions for heart and lung disease, and amplified adverse respiratory symptoms such as asthma. Long-term exposure to diesel exhaust may also pose a lung cancer hazard to humans. Recent studies of children's health conducted in California have demonstrated that particle pollution may significantly reduce lung function growth in children because particulate matter becomes embedded in the deepest recesses of the lung where it can disrupt cellular processes.<sup>2</sup>

NOx are a major contributor to ozone formation (a precursor to smog) which affects human health and damages crops and the natural environment. NOx also exacerbate global climate change through their contribution to the so-called "greenhouse gases." Other recent studies reveal how elevated ozone levels are linked to the onset of asthma in exercising children, and ozone can damage the respiratory tract, causing inflammation and irritation, and induce symptoms such as coughing, chest tightness, shortness of breath, and worsening of asthma symptoms.<sup>3</sup>

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

This project will reduce diesel emissions from construction equipment used in the City of Portland by at least 20 percent through diesel engine retrofits, cleaner fuels, and idle reduction policies.

<sup>1</sup> Bailey, Diane. Plenys, Thomas. Solomon, Gina. Campbell, Todd R., Ruderman Feuer, Gail. Masters, Julie and Tonkonogy, Bella. (March 2004). "Harboring Pollution: the Dirty Truth about U.S. Ports." Natural Resources Defense Council. p. 3.

<sup>2</sup> American Lung Association of California and Cal-EPA Air Resources Board. (January 2004). "Recent Research Findings: Health Effects of Particulate Matter and Ozone Air Pollution." Website accessed July 2005: <http://www.arb.ca.gov/research/health/fs/PM-03fs.pdf>

<sup>3</sup> *ibid*

## How is this project funded?

The West Coast Collaborative is providing the following support:

- \$26,000 from EPA;
- \$27,000 from the Oregon Environmental Council.

## What is the Oregon Environmental Council?

Founded in 1968, The Oregon Environmental Council (OEC) is a nonprofit, nonpartisan organization with members throughout the state. Through programs such as the Bottle Bill, curbside recycling and the creation of local watershed councils, OEC has played a leadership role in helping Oregonians be part of the solution to environmental problems. Our current programs focus on protecting kids' health from toxic pollution, cleaning up Oregon's rivers, and protecting our climate by curbing vehicle pollution.

## 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 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 ([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 website at [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org).