

US EPA ARCHIVE DOCUMENT

# MIDWEST CLEAN DIESEL INITIATIVE

## Port of Cleveland Land-Based Equipment Retrofit Project



In addition to waterborne vessels, locomotives, heavy-duty trucks, and land-based equipment contribute to diesel emissions at ports. Examples of land-based equipment include forklifts, tow motors, and cranes. At the Port of Cleveland, three cranes, six light forklifts, and seventeen heavy forklifts (36,000 to 65,000 lbs) will be retrofitted as the port seeks to reduce diesel emissions. These pieces of equipment are all model year 1997 and later.

The cranes and forklifts, which are owned by Federal Marine Terminals, will be retrofitted with diesel oxidation catalysts manufactured by Caterpillar.<sup>1</sup> These devices oxidize pollutants in the exhaust stream and can be packaged with mufflers. The devices that are being installed on the Port of Cleveland equipment reduce particulate matter emissions by 20%, hydrocarbon emissions by 50%, and carbon monoxide emissions by 40%. The installation time for these devices, which cost roughly \$1500, is between 2 and 3 hours.



Diesel oxidation catalyst



EPA Deputy Administrator Marcus Peacock speaks at the project kick-off in October 2005.

At the project kick-off on October 25, 2005, Ohio Senator Voinovich stated, "Retrofitting older diesel engines is the right thing to do for the environment and for our economy. That is why this bipartisan program [the Diesel Emission Reduction Act] has broad support from industry, public and environmental officials."

As of January 2006, 12 of the catalysts have been installed without impacting the operation of the equipment. Look for future information about the success of this project and its expansion to other Federal Marine Terminal locations.

For more information on this project contact Jennifer Dunn at 312-353-5899 or [dunn.jennifer@epa.gov](mailto:dunn.jennifer@epa.gov).

For a complete presentation on this project, visit <http://www.northeastdiesel.org/pdf/Technical-Federal-Marine-Terminals-Pathy.pdf>

1. Funding for this project derives from a consent decree between Caterpillar and the US EPA.

For more information please visit us on the web at:  
<http://www.epa.gov/midwestcleandiesel>

Receive our MCDI e-Update by emailing Jon Nichols at [nichols.jonathan@epa.gov](mailto:nichols.jonathan@epa.gov)

August 2006

