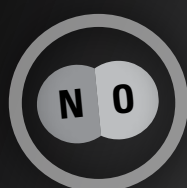


# CONSTRUCTION IS CLEANING UP

In 2005 Congress authorized funding for the Diesel Emissions Reduction Act (DERA), a grant program designed to retrofit or replace the approximately 11 million older diesel engines most likely to impact health. Included in those local projects across all 50 states were long- and short-haul trucks and off-road equipment.

## CLEANER & GREENER

DERA projects have **retrofit, replaced or repowered** more than 50,000 legacy diesel engines—**resulting in emissions reductions** over the life of the engines:



204,000 Tons

81,600,000 Pairs

204,000 tons of NOx (nitrogen oxides), which weigh the same as 81,600,000 pairs of steel-toed boots—enough for everybody in California, Illinois, Texas and South Carolina.



12,500 Tons

248 Truckloads

12,500 tons of PM (particulate matter), which would take approximately 248 full-size pick-up trucks to haul away.

## HEALTH BENEFITS

These reductions will **save 1400 people** from premature deaths **AND** reduce the cost of health care by **up to \$8.2 billion**.

SAVES  
**1400**  
PEOPLE  
+  
**\$8.2 BILLION**



Source for statistics on program:  
<http://www.epa.gov/cleandiesel/documents/420c12031.pdf>

A TYPICAL BULLDOZER  
**emits as much PM as**  
**500 CARS**



## HOW CAN YOU MAKE CONSTRUCTION CLEANER?



### REDUCE YOUR IDLE TIME.

Less idling means fuel savings, extended engine life and a safe, better work environment for operators. A company can save \$475 to \$950 per year per piece of equipment by reducing unnecessary idling for just one hour per day. (based on \$3.17 per gallon for diesel fuel)



### PRACTICE PREVENTIVE ENGINE MAINTENANCE.

Well-maintained engines maximize fuel efficiency and run more cleanly. Plus, regular maintenance avoids costly failures and extends engine life.



### TRAIN YOUR OPERATORS.

When operators run equipment properly and safely, productivity and safety increase while fuel consumption, maintenance costs and emissions decrease.



### SWITCH TO ULTRA LOW-SULFUR DIESEL (ULSD).

ULSD reduces engine wear and oil degradation. On-site fueling is easier when both highway vehicles and offroad equipment use the same fuel.



### RETROFIT OR REPLACE YOUR ENGINES.

You can reduce harmful emissions and create a better work environment, which creates a better image for your company. Engine upgrade kits can be installed during scheduled engine rebuilds. Install new, cleaner engine models if you can.



## MORE ABOUT CLEAN CONSTRUCTION

Clean Construction USA is a voluntary program that promotes the reduction of diesel exhaust emissions from construction equipment and vehicles. The program's goal is to retrofit, rebuild or replace approximately two million diesel engines in the construction sector by 2014.

On January 18, 2013, the US Green Building Council announced a [Clean Construction Pilot Credit](#) that can be used toward Leadership in Energy and Environmental Design (LEED) certification.