

New Jersey's Diesel Demonstration Projects

NJDEP's Bureau of Mobile Sources manages voluntary demonstration projects to reduce diesel emissions using retrofit technologies such as diesel oxidation catalysts (DOCs), diesel particulate filters (DPFs), idle reduction technologies, and off-road repowers and replacements. To date \$24 million in projects have been successfully completed with an additional \$6 million in projects underway. These projects are being implemented across all diesel sectors including on-road vehicles, off-road construction vehicles, locomotives, port-related equipment, and marine vessels. NJDEP does not have a dedicated source of funding for these projects but does receive competitive grants and settlement funds. Projects funded must comply with applicable public bidding regulations. If you have a project that you think should receive consideration for future funding, please complete the Diesel Project Prospectus Form

<http://www.stopthesoot.org/Diesel%20Project%20Prospectus%20Form.pdf> and return to StopTheSoot@dep.nj.gov.

In addition, The Bureau of Mobile Sources managed the Mandatory Diesel Retrofit Program which required a variety of vehicles and equipment to install retrofits using State funds. The program focused on vehicles/equipment that operated closest to the residents of New Jersey with the focus on school/commercial buses, solid waste vehicles and public utility vehicles. Nearly 7,500 school buses and 5,700 other vehicles were retrofit with pollution control equipment. For more information on this program please visit <http://www.stopthesoot.org/mdrp.html>.

Ongoing Projects

N.J. Clean Construction Program for Off-road Vehicles- ~191 retrofits & 35 replacements

Nearly \$8,000,000 in USEPA DERA and FHWA CMAQ grants will be used to fund retrofits and replacements of off-road equipment used in New Jersey.

3 Passenger Ferry Repowers

Three passenger ferry repowers are being completed using \$4.7 million in FHWA CMAQ and USEPA DERA grants, reducing particulates and ozone precursors and reducing fuel consumption.

9 Forklift Replacements

\$1,000,000 in FHWA CMAQ grants are being used to replace forklifts used at South Jersey Port, located in Camden, NJ.

Completed Projects

N.J. Clean Construction Program for Construction Vehicles

\$1,300,000 in USEPA Clean Diesel grants funded retrofits on construction vehicles used in wastewater and drinking water projects funded by the N.J. Environmental Infrastructure Trust.

23 Camden Retrofits

Using \$210,000 of enforcement settlement funds, NJDEP and the Northeast States for Coordinated Air Use Management (NESCAUM) completed retrofits of 10 on-road vehicles and 7 off-road vehicles with DOCs and DPFs. The vehicles are owned by the Camden County Municipal Utility Authority. An additional \$170,000 was allocated for retrofits of 16 vehicles from the County and City of Camden fleets.

Xanadu Construction – 48 diesel emission control devices installed

As part of a Coastal Area Facilities Review Act (CAFRA) permit for the development of the Xanadu shopping/entertainment complex at the Meadowlands, Jingoli Construction is reduced its diesel emissions by installing emission control devices on their construction equipment. 48 pieces of construction equipment have been retrofitted with DOCs, DPFs and closed crankcase ventilation systems.

Truckers Challenge- 168 APUs/Bunk Heaters and 22 retrofits installed

Using \$750,000 of USEPA grant funds, NJDEP partnered with the N.J. Motor Truck Association to develop a reimbursement program to allow truckers operating in N.J. to purchase Auxiliary Power Units, Bunk Heaters and tailpipe retrofits. The auxiliary power units and bunk heaters reduce emissions by providing heat, air-conditioning and electric power to truckers without the need to idle the main engine, resulting in large savings of fuel and money.

South Jersey Port Retrofits – 5 repowers and 4 retrofits

Funding of \$500,000 from an enforcement settlement repowered a wharf crane, 2 front end loaders and 2 large lift trucks. Four additional vehicles were retrofitted with diesel oxidation catalysts at the South Jersey Port in Camden.

Truck Stop Electrification in Paulsboro & Bordentown – 191 electrified parking spaces

Using funds from a variety of sources including enforcement settlements and federal Congestion Mitigation and Air Quality (CMAQ) grants, NJDEP worked with the N.J. Department of Transportation (NJDOT) and the Northeast States for Coordinated Air Use Management (NESCAUM) to bid and install truck stop electrification services at these sites along major highways. Paulsboro includes 98 IdleAire spaces and Bordentown includes 93 spaces. Rather than idling overnight, trucks “hook up” to overhead trusses that provide heat, air-conditioning, internet and related services while reducing emissions and fuel use by approximately 90%. These projects were funded in the amount of \$1.6 million.

Refuse Trucks Retrofitted with Diesel Oxidation Catalysts- 121 retrofits

Conoco Phillip's Bayway Refinery funded the \$200,000 purchase and installation of 121 tailpipe retrofits (DOCs) on Waste Management refuse trucks.

NJ Transit Buses Retrofit with Diesel Particulate Filters- 350 retrofits

Using \$1 million in funds provided as part of an enforcement settlement, NJ Transit purchased and installed 350 diesel particulate filters for its fleet of buses.