



NHDES Air Resources Division – Technical Services Bureau

**American Recovery and Reinvestment Act  
Diesel Emissions Reduction Act (ARRA-DEIRA) Benefits to New Hampshire**

Program Update: May, 2011

In April 2009, DES entered into a Cooperative Agreement with the Environmental Protection Agency (EPA) to use \$1,730,000 in American Recovery and Reinvestment Act (ARRA) funding through the Diesel Emission Reduction Act (DERA) program to reduce air pollution from diesel engines and create jobs in New Hampshire.

DES solicited project proposals from public and private entities in the state to implement diesel emission reduction projects in accordance with ARRA program requirements. Proposals from 42 applicants were scored according to criteria established to rank the proposed project's benefits in reducing emissions, creating or retaining jobs, saving fuel, providing economic stimulus to depressed areas of the state, and improving air quality near sensitive populations and in non-attainment areas. For a listing of all eligible projects and their ranking see: [New Hampshire 2009 Diesel Emission Reduction Act \(DERA\) ARRA Program - Project Priority Ranking List](#) and [NH Diesel Emission Reduction Act – American Reinvestment and Recovery Act Funding Scoring Criteria and Description](#).

Diesel engines emit air pollutants in gaseous and solid form. The visible emissions in diesel exhaust are known as particulate matter or PM. Gaseous emissions include nitrous oxides (NO<sub>x</sub>), unburned hydrocarbons (HC), carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) as well as many toxic substances. These pollutants can cause or exacerbate respiratory symptoms and other diseases, lead to acid precipitation and haze, and contribute to global warming. DES has calculated that the yearly emission reductions attributable to the ARRA projects completed to date will result in almost 5 tons of PM, over 80 tons each of NO<sub>x</sub> and CO<sub>2</sub>, and 33 tons of CO. Over 7,500 work hours can be attributed to the economic stimulus provided by this program since its inception. Additionally, the combined projects will have the potential to save almost 25,000 gallons of diesel fuel per year.

Originally, twenty-two of the top ranking projects were selected to receive the available funding. A few projects were withdrawn, shifted to other grants, or cancelled. As a consequence, grants were awarded to additional applicants from the eligible forty-two, and several recipients were provided additional funding beyond the original awards. As of May 1, 2011, a total of 17 projects representing fourteen applicants have been funded.

New Hampshire's ARRA-DEIRA 14 grant recipients and project types are as follows:


- A long haul trucking firm – 11 idle reduction auxiliary power units;

- One heavy construction equipment firms – 6 equipment re-powers (engine replacements);
- Two transit bus operators – 2 transit coach replacements, 17 idle reduction auxiliary cabin heaters total;
- A steel fabrication company – 3 re-powers of material handling equipment;
- An oil and propane delivery company – 4 replacement delivery trucks;
- Three marine vessel operators – a whale watch vessel re-power, 2 engines, and two fishing boat re-powers, one engine each;
- A cooperative school district – 2 school bus replacements (2010 emissions certification) and 8 idle reduction auxiliary engine heaters; and
- Three municipal public works departments – 3 plow/dump trucks replacements, one motor grader replacement.
- Lake Winnepesaukee excursion vessel – vessel re-power, 2 engines.

These recipients will collectively receive almost \$1.6 million ARRA-DEIRA grant funds and will provide matching funds for a total value of diesel emission reduction projects totaling over \$3.4 million. Details are given in the table below.

<b>NH ARRA-DEIRA Projects Approved by the Governor &amp; Executive Council As of May 1, 2011</b>			
<b>Grant Recipient</b>	<b>Project Description</b>	<b>ARRA-DEIRA Grant Amount</b>	<b>Total Project Value</b>
C&J Transit, Portsmouth, NH	Vehicle Replacement 2-Transit Coaches	\$350,100	\$992,390
C&J Transit, Portsmouth, NH	Idle Reduction 10-Transit Coach Auxiliary Heaters	\$87,000	\$87,000*
City of Manchester Highway Dept.	Vehicle Replacement 1-Dump/Plow Truck	\$37,432	\$149,442
Town of Temple Highway Dept.	Vehicle Replacement 1-Motor Grader	\$58,200	\$232,800
SAU 20, Gorham, NH	Vehicle Replacement 2-School Buses	\$86,000	\$169,622
SAU 20, Gorham, NH	Idle Reduction 8-Engine Preheaters School Buses	\$24,000	\$22,720
Isaacson Structural Steel, Inc. Berlin NH	Engine Replacement 3-Material Handlers	\$140,500	\$327,023
University of New Hampshire Durham, NH	Idle Reduction 7-Transit Coach Auxiliary Heaters	\$29,299	\$29,299
Granite State Whale Watch Rye, NH	Engine Replacement 2 engines in Marine Excursion Vessel	\$126,000	\$161,738
City of Dover, NH	Vehicle Replacement 2-Dump/Plow Trucks	\$65,000	\$211,975
Alvin J. Coleman & Son, Inc. Conway, NH	Engine Replacement 6-Heavy Construction Equipment	\$260,000	\$323,247
Atlantic Distribution Services, Inc. Exeter, NH	Idle Reduction 11-Auxiliary Power Units	\$109,996	\$109,996
Rymes Heating Oils, Inc.	Vehicle Replacement	\$108,000	\$434,726

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Antrim, NH	4-Delivery Trucks		
Winnepesaukee Flagship Corporation	Engine Replacement (2) Marine Excursion Vessel	\$46,315	\$101,164*
Cap'n Sav's Charters Inc.	Engine Replacement 1- Commercial fishing vessel	\$29,500	\$59,000*
Richard Anderson	Engine Replacement 1 - Commercial fishing vessel	\$38,225	\$76,450*
<b>* estimated</b>	<b>Total</b>	<b>\$1,595,567</b>	<b>\$3,251,978</b>

 Green shade indicates the project is not yet completed.

DES is working with the ARRA-DEIRA grant recipients to rapidly move the remaining projects through implementation. DES is also preparing and submitting reports, on behalf of grant recipients, to State and Federal agencies overseeing the program.