

## **Clean Diesel Task Force**

NSTA formed a Clean Diesel Task Force to support the efforts of its members with clean diesel technologies as part of a "Go Yellow, Go Green" campaign. Right now, there are opportunities to receive EPA funding to implement these technologies in contractors' fleets. Here you will find further information on:

1. Overview of the primary source of relevant funding from the EPA, the Diesel Emission Reduction Act (DERA)
2. A chart with DERA deadlines and money available for each Region
3. Eligibility Criteria and Eligible Technologies for DERA funding
4. Additional helpful links to the EPA website
5. A one-page description on how to start working with NSTA to help you go green! [www.yellowbuses.org/gogreen](http://www.yellowbuses.org/gogreen)
6. A checklist of things you will need to assist NSTA in submitting an application on your behalf.

## **Diesel Emission Reduction Act (DERA)**

In 2005, as part of the Energy Policy Act of 2005, Congress authorized \$200 million per year for five years for a new umbrella program for all clean diesel efforts. This new Diesel Emission Reduction Act, or DERA, replaces programs like Clean School Bus USA and is the source of expanded funding that will continue to also be available for public and private school bus fleets. In 2007, funding for all clean diesel programs was increased four-fold to almost \$50 million in annual appropriations. Of that amount, over \$27 million is being offered through a grant solicitation process being offered by the diesel Collaboratives around the country. The money is available for grants to help fund the cost of emission reduction technologies and strategies (described below).

It is important to remember that the DERA program is intended to provide a source of funding for diesel retrofits of all kinds of diesel equipment, not just school buses, so competition is now open to over 11 million legacy vehicles and stationary engines, rather than just the 480,000 school buses on the road. However, school buses remain a major focus of the program because of the sensitive populations of school children that are involved. It is too early to evaluate how well this program will work and what role school buses – and especially contracted school bus fleets – will play in the overall program. However, EPA has assured the industry that school buses remain

a priority and that private contractors will continue to have access to the funding by working with their school districts and/or through non-profit eligible grant recipients like NSTA.

**Overview:**

DERA establishes a voluntary national and state-level grant and loan program to reduce diesel emissions. Specifically, DERA:

- Authorizes \$1 billion over 5 years (\$200 million annually);
- Authorizes EPA to oversee the expenditure of 70 percent of funds;
- Allocates 20 percent of funds to states to develop retrofit programs with an additional 10 percent as an incentive for states to match federal dollars;
- Establishes project priorities (for public fleets and projects that are more cost-effective and affect the greatest number of people); and
- Includes provisions to stimulate the development of new technologies, encourage more action through non-financial incentives and require program accountability.

***Current Funding Status of EPA Programs***

For the current fiscal year, EPA will have over \$49 million to spend on clean diesel programs including both Federal grant programs administered primarily by their regional collaborative and support for state programs. In March, EPA’s regional Diesel Collaboratives announced their grant RFPs which are summarized in the chart below. Note that the programs will accept applications between May 30 and July 1<sup>st</sup> of this year.

<b>Region</b>	<b>States</b>	<b>Amount</b>	<b>Project Size</b>	<b>Due Date</b>
1 + 2	CT, ME, MA, NH, NJ, NY, RI, VT, VI, PR	\$5.4M	\$50,000 - \$750,000	6/12/2008
3	PA, WV, MD, DE, VA	\$3.1M	\$200,000 - \$1,000,000	6/13/2008
4	KY, TN, NC, SC, MS, AL, GA, FL	\$3.6M	\$50,000 - \$750,000	6/12/2008
5	WI, IL, IN, MI, OH	\$5.0M	\$100,00 - \$750,000	6/12/2008

6 + 7	IA, NE, KS, MO, NM, TX, OK, AR, LA	\$5.0M	\$250,000 - \$2,000,000	5/30/2008
8	ND, SD, MT, WY, UT, CO	\$1.6M - \$2.0M	\$100,000 - \$750,000	6/16/2008
9	CA, OR, WA, AK, HI	\$5.1M	\$500,000 - \$1,000,000	7/1/2008

**Additional information concerning EPA Funding, including links to pending solicitations, is available at:**  
**<http://www.epa.gov/otaq/diesel/grantfund.htm>**

## **Eligibility criteria**

Eligible entities are U.S. regional, state, local, tribal or port agencies with jurisdiction over transportation or air quality; and nonprofit organizations or institutions that represent or provide pollution reduction or educational services to persons or organizations that operate diesel fleets; or that have as its principle purpose the promotion of transportation or air quality. School districts, federally recognized Indian tribes, municipalities, metropolitan planning organizations (MPOs), cities and counties are all eligible entities under this program. For local school bus contractors, this means that they must either partners with the their local school district, state or local transportation or air quality governmental entity or a nonprofit entity, such as an air quality advocacy organization or school transportation trade association. NSTA has applied directly for access to the funds under the Clean School Bus USA program and EPA has assured us that NSTA and other nonprofit trade associations could do so in the future. Any funds received would typically need to be distributed to local school bus contractors with the full participation of their local school districts.

## **Eligible technologies**

Funding may not be used to meet Federal or state mandated standards but can be used to accelerate compliance. Also, funds must be used for technologies that have been verified by EPA. A list of verified technologies can be found at the following EPA web site:  
<http://www.epa.gov/oms/retrofit/verif-list.htm>

NSTA recommends that contractors consider the following as the effective technologies in reducing Diesel engine emissions. It is important to note that these technologies, except for Auxiliary Power Units (APUs), are not verified for engines 2004 and newer.

- **Idle Reduction:** Installing idle reduction technologies such as Auxiliary Power Units or APUs that conserve fuel and reduce emissions. APU's can be highly cost effective by heating engine coolant in order to reduce the need for engine idling. APU's cost between \$1,000 and \$3,000 and are available from the following vendors *[Include hyperlink, if possible]*:
  - Espar (<http://www.espar.com/html/applications/buses.html>),
  - Phillips and Temro ([http://www.phillipsandtemro.com/prod\\_ColdStart.asp](http://www.phillipsandtemro.com/prod_ColdStart.asp)), and
  - Webasto ([http://www.webasto.us/press/en/am\\_busses\\_heaters\\_707.html](http://www.webasto.us/press/en/am_busses_heaters_707.html)).
- **Retrofit or After-Treatment:** Contractors may chose to go "green" with newer retrofit technology that will reduce emissions. These technologies include diesel particulate matter (PM) filters or traps (\$5,000 to \$10,000) and diesel oxidation catalysts (DOC's). Highly Oxidizing precious metal **PM filters** are on new buses since January 1, 2007, but may be retrofitted on older buses with verified engines for \$5,000 to \$10,000. ULSD must be used, and you can expect reductions in PM, HC and CO of 90%, and 0-5% of NOX but their optimal use may require high temperature operating conditions that allow contaminants to be burned off. **DOC's** are OEM on 2004 and newer buses but can be added to elder vehicles for \$1,000 to \$2,000. They require the use of ultra low sulfur diesel fuel (ULSD) which is now available across the country. You can expect reductions in PM of 20%-40%, and 90% of both HC and CO. On new buses since January 1, 2007, **Diesel Crankcase Emissions Filters** also can be purchased for verified engines for \$500 to \$1,000 and should be used with a DOC for 25% reduction in PM.
- **New Vehicles:** Funds may be used to replace older buses with new, "greener" buses. Blue Bird's CNG bus is the only new vehicle that currently meets the 2010 standard. There are no school buses on the market today that meet 2010 standards. Note that EPA will not allow funds to be used for new buses that are part of a regular replacement schedule, and you must destroy any bus that is replaced using EPA funds. Check with the leading manufacturers for more information on buses and which emissions standards they meet:
- **Fuels:** Funding may be used to purchase fuels or refueling facilities such as for natural gas, biodiesel or other alternative fuels. Purchase and use

of biodiesel fuels cut can reduce emissions of PM but could actually be worse for communities with ozone problems. Also, EPA grant funding only covers the increased cost of alternative fuels and since biodiesel is selling for less than regular diesel in many areas, funding would not be available. All of the school bus engine manufacturers have approved use of fuel containing up to 5% biodiesel content (B5). Operators should check with their engine manufacturers first before pursuing higher biodiesel content fuels like B20.

### **NSTA 2008 Grant Applications**

In the current round of EPA grant solicitations, NSTA has decided to pursue school bus idle reduction technologies funding for those members of NSTA who have notified us to express an interest in the program. We will evaluate other options for future year funding opportunities. If you are interested in pursuing funding for idle reduction technology in the current round please contact NSTA (see below) as soon as possible. If you would prefer to pursue other clean diesel technologies, you will need to partner with your local school district or one of the other public or non-profit entities that is eligible under the DERA grant program.

### **Additional Information**

NSTA's Supplier Committee will be working with its vendor Partners to develop a list of component suppliers and equipment pricing for its members by July 2008.

For further general information, please contact **Danielle Abe at (703) 684-3200.**