

Yellow School Buses Turn Green

The State Energy Conservation Office (SECO), in conjunction with the Adopt-A-School Bus Program, the Education Foundation of Harris County, the North Central Texas Council of Governments and the Clean Air Force of Central Texas received \$700,000 through a U. S. Environmental Protection Agency grant to help reduce pollution from diesel-powered school buses in the Houston, Dallas/Fort Worth and Austin areas. The chosen project areas fail or are about to fail to meet the National Ambient Air Quality Standards for the one-hour Ozone standard. Houston and Dallas are considered "severe" ozone non-attainment areas under the Clean Air Act classification system.

The final outcome of the project exceeded the original proposal. A total of 109 buses were retrofitted out of an original projected number of 73. The Independent School Districts (ISDs) submitted \$883,674 in Match Funds rather than the originally projected amount of \$384,000. Due to the increased ISD Match amounts, the total project cost was \$1,583,674 versus the original submission of \$1,084,000.

Breakdown by Project:

Dallas

- The Grant award to North Central Texas Council of Governments and Dallas County Schools was \$250,000, matched with \$12,500.
- Dallas County Schools (DCS) chose to use an Engelhard DOC kit. This system was guaranteed 20-25% PM reduction, 5-8% NOx reduction (based on the fuel used), and will reduce HC, CO, and CO2 by 40-80%.
- DOC kits were purchased for 37 buses for \$35,742. The Engelhard PM Filter retrofit that was applied to 32 buses that have electronic engines that cannot be reflashed will get a 90+% PM reduction, 5-10% NOx reduction (based on the fuel used), and will reduce HC, CO, and CO2 by 40-80%.
- PM Filter kits were purchased for 32 buses for \$214,560. DCS purchased over 7001 gallons of their TxLED fuel at .25/gal gallons per delivery (transport load).

Houston

- The Grant award to the Houston Independent School District (HISD) was \$300,000, matched with \$348,000.
- HISD retrofitted 22 school buses and purchased Ultra Low Sulfur Diesel (ULSD)/TXLED fuel with funds awarded.
- The retrofits were to be done on T444E International engines and included a catalyzed particulate trap and a reflash of the electronic control module (ECM) in order to obtain the maximum amount of NOx reduction at a cost of \$7,500 each.
- HISD purchased 1,741,609 gallons of TXLED (Texas low emissions diesel).

Austin

- The Grant award to Clean Air Force of Central Texas was \$135,000 with an Austin Independent School District (AISD) match of \$523,174.
- AISD used the funds to replace older fleet buses with the purchase of new buses with EPA approved emission controls already installed. and to purchase Ultra Low Sulfur Diesel (ULSD)/TXLED.
- Incremental cost of \$7,500 per bus was allocated that met the 2004 Federal Emission Standards.