U.S. Department of Homeland Security Alternative Fuel Vehicle Program Report for Fiscal Year 2006 February 14, 2007

The U.S. Department of Homeland Security (DHS) Alternative Fuel Vehicle (AFV) Program Report for Fiscal Year 2006 presents the Department's data on the number of alternative fuel vehicles acquired in fiscal year (FY) 2006. The report has been developed in accordance with the Energy Policy Act of 1992 (EPAct) (42 U.S.C. 13211-13219) as amended by the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388) (ECRA), and Executive Order (EO) 13149 (signed by the President in April 2000). DHS exceeded the minimum requirement of 75% AFV acquisitions in FY 2006. Of the 1,362 covered vehicles acquired by DHS in FY 2006, 1,202 or 88 percent were AFVs. Our projected acquisitions for FY 2006 and FY 2007 indicate sustained compliance.

Legislative Requirements

The Energy Policy Act of 1992 (EPAct) requires that 75 percent of all covered light-duty vehicles acquired for Federal fleets in FY 2001 and beyond must be AFVs (where the fleets have 20 or more vehicles, are capable of being centrally fueled, and are operated in a metropolitan statistical (MSA) area with a population of more than 250,000 based on the 1980 census). Certain emergency, law enforcement, and national defense vehicles are exempt from these requirements. EPAct also sets a goal of using replacement fuels to displace at least 30 percent of the projected consumption of motor fuel in the United States annually by the year 2010. ECRA amended the EPAct to allow one alternative fuel vehicle acquisition credit for every 450 gallons of pure biodiesel fuel consumed in vehicles over 8,500 pounds gross vehicle weight rating. "Biodiesel credits" may fulfill up to 50 percent of an agency's EPAct requirements. The head of each Federal agency must also prepare and submit a report to Congress outlining the agency's AFV acquisitions and future plans by February 15th each year. EO 13149 directs Federal agencies operating a fleet of 20 or more vehicles within the United States to reduce their annual petroleum consumption by at least 20 percent by the end of FY 2006 (compared to FY 1999 levels) by using alternative fuels in AFVs more than 50 percent of the time, improving the average fuel economy of new light-duty petroleum-fueled vehicle acquisitions by one mpg by FY 2002, and 3 mpg by FY 2006, and using other fleet efficiency measures.

The Department of Homeland Security Approach to Compliance with EPAct and EO 13149

Each DHS component currently operates, maintains, acquires, and funds its vehicle program. Overall, 90% of the Department's fleet is used for law enforcement or is operated outside of an MSA, resulting in ten percent of the Department's fleet covered under the Act. This includes both DHS owned vehicles, as well as those leased from the General Services Administration (GSA).

To achieve compliance with the legislative mandates of EPAct and EO 13149, DHS acquires no less than 75 percent of new covered light-duty vehicles as AFVs. DHS is using alternative fuel in these vehicles a majority of the time, where alternative fuels are readily available and their use does not adversely affect mission accomplishment. To encourage the acquisition of alternative fuel vehicles, DHS began a surcharge program with GSA Fleet in FY 2006 that will add a fee to the cost of every vehicle leased through GSA to offset the higher incremental cost of AFV's.

DHS will continue its effort to acquire light duty vehicles that achieve higher fuel economy in future years, consistent with mission suitability. This effort is hampered by the lack of small fuel-efficient AFV vehicles available from OEMs. For FY2007, the most fuel efficient AFV available is a mid-sized sedan.

DHS continues to investigate the feasibility of establishing alternative fuel refueling facilities. However, much of the fleet is widely dispersed and located in public facilities making it impractical to install refueling infrastructure. The Department continues to investigate the use of alternative fuel refueling at sites operated by other Federal agencies and checks for new commercial alternative fuel sites on the Department of Energy's webpage.

DHS Fleet Compliance for FY 2006

Figure 1 is a graphical depiction of AFV acquisitions by the Department's covered fleet in fiscal year 2006. DHS acquired 1,362 covered light-duty vehicles (LDVs) in fiscal year 2006, of which 1,202 were AFVs.

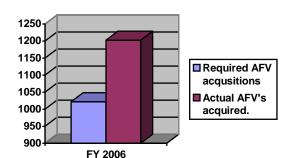


Figure 1. Summary of The Department of Homeland Security's FY 2006 AFV Acquisition

In FY 2006, the Department acquired 4,380 law enforcement vehicles via purchases and commercial leases that were not "covered" vehicles under EPAct and EO 13149. The law enforcement light duty vehicles acquired in FY 2006 included both normal fleet replenishment and fleet expansions due to added mission requirements. DHS continues to urge its components to acquire AFV capable law enforcement vehicles where available and compatible with the mission.

Special Projects Related to AFV and Infrastructure Acquisitions

The Department has investigated the potential for E-85 refueling facilities at the Federal Law Enforcement Training Center (FLETC) campus in Artesia, NM and Cheltenham, MD. in FY2006. The investigation showed that the Maryland location offers the greatest potential for use as an E-85 refueling site and is developing implementation plans. Additionally, B20 Bio-diesel is being considered for Border Patrol sectors having their own refueling capabilities.

Alternative Fuel Use in FY 2006

Table 2 presents alternative fuel use data for the DHS fleets in FY 2006. The majority of covered vehicles acquired by DHS and its component fleets are leased from GSA, and the leasing contract folds in the maintenance and fuel costs for the vehicles. This is accomplished by the use of a GSA credit card that the fleets use to purchase alternative fuel. However, since product code standards are not uniform among suppliers of alternative fuels (e.g., ethanol, CNG, or E-85), it is impossible for credit card vendors to accurately track the purchase of alternative fuels.

Table 2. Homeland Security Fuel Use in FY 2006

Fuel Type	Quantity	Unit
Biodiesel – B100	391	Gallons
CNG	12,579	Gallons @ 3,600 psi, 70°F
CNG		Hundred cu. ft.
Diesel	1,789,598	Gallons
E-85	541,821	Gallons
Gasoline	15,425,320	Gallons
Methanol		Gallons
Propane		Gallons

Homeland Security's Fleet AFV Acquisitions for FY 2007 and FY 2008

The DHS supports the goals of the EPAct and EO 13149 and has urged its components to comply with the requirements to the maximum extent possible, including exempt vehicles. The following challenges may impede our progress in meeting these goals:

- Insufficient availability of dedicated or bi-fuel AFVs suitable for the intended missions, whether from GSA, a commercial lease, or directly from the manufacturer. In particular, there is a lack of sub-compact and compact sedans capable of operating on alternative fuels.
- The additional incremental cost of dedicated AFVs; which can be significant and must be covered from appropriated funds.
- Except for some Border Patrol and FLETC locations, the DHS fleet is dependent on commercial facilities for refueling. There is an overwhelming lack of commercial alternative fuel refueling sites.

Petroleum Savings

It is challenging to make progress in actual petroleum savings due to insufficient availability of small flex-fuel (E-85 capable) and hybrid vehicles, and an extreme lack of commercial E-85 refueling sites. DHS continues to evaluate the establishment of alternative fuel refueling sites and acquires the most fuel efficient mission capable vehicles available, but significant progress in petroleum reduction requires commercial infrastructure.

Summary

DHS has acquired, to the extent possible, AFVs in accordance with the EPAct for FY 2006 and projects sustained compliance in future years. The Department will continue to implement its strategy for complying with the requirements of EO 13149, with the goal of a continuing reduction in the fleet's annual petroleum consumption. This will be done by:

- Encouraging the components to acquire the most fuel-efficient vehicle suited for the task;
- Urging that the number of miles driven by the components be reduced by the use of shuttle buses, taxis and public transportation to the maximum extent possible;
- Implementing a Department-wide fleet management information system that will allow for analysis of overall fleet data and trends, providing opportunities for consolidations that will enhance efficiency and mileage;
- Building on and formalizing a Department-wide Vehicle Authorization Document (VAD) process which determines the appropriate vehicle requirements for each component based on mission, staffing, and location; and
- Reviewing component motor vehicle fleet acquisitions and GSA vehicle assignments at the headquarters level.