

FY09 Fleet Fuel Use Facts:

<u>Fuel</u>	<u>Gallons</u>	<u>% of Total</u>
E10	1,127,456	33%
E85	32,642	1%
Regular	963,491	29%
Diesel	1,175,766	35%
BioDiesel	78,547	2%

FY10 Fleet Fuel Use Facts:

<u>Fuel</u>	<u>Gallons</u>	<u>% of Total</u>
E10	2,065,991	50%
E85	125,937	3%
Regular	512,762	12%
Diesel	1,416,499	34%
BioDiesel	35,458	1%

Blender Pumps and Ethanol use at all state (DOT, GFP & state universities) fueling sites:

- A. There are 96 state fueling sites across South Dakota. Fuel for these sites is purchased on the open market based on lowest cost. E10 blend is routinely the lower cost fuel and is heavily used at state fueling sites.

For example, in June, 2010, 20,908 gallons of regular fuel was pumped from state fuel sites, while 188,177 gallons of E10 was pumped at state fuel sites.

- B. Installing blender pumps at all 96 state fueling sites would require not only the \$15,000 pump at each site, but installation of a second fuel tank at every site as well, with an additional estimated cost of \$10,000 per tank.

A simple extrapolation means installing a new tank and new blender pump at every fueling site would cost a minimum estimated total of \$2,400,000.

- C. Providing \$1 million in grants to promote installation of blender pumps at commercial locations across South Dakota was unprecedented and extraordinary support of higher blend ethanol and promotion of its use for all South Dakota vehicles, and not just the limited number of state government vehicles.

E85 use in state vehicles:

- A. Finding E85 at commercial locations continues to become more difficult, as the number of commercial sites offering E85 blend has decreased from 75 in January, 2010 to 65 in May, 2010.
- B. Last fall, high blend ethanol tanks were installed at three of the largest state fueling sites in Pierre, Rapid City and Sioux Falls. A fourth site at Brookings is

under construction and will begin fueling operation later this year. Installation of the new tanks is largely responsible for more than tripling state vehicles' use of E85 in less than a year.

- C. While blender pumps are designed to allow a retailer purchaser an option of different fuel blends, it is our mission as a fleet manager to find the best fuel to give the best mileage at the best cost at the benefit of taxpayers.

In January, we began a test group of vehicles to compare those using E85 and those using E10 and regular fuel. While E85 is regularly the cheapest fuel, the first six months of the test showed a 23% decrease in miles per gallon in the E85 vehicles.

While the cost difference per gallon was 23¢ cheaper for E85, the overall impact of mileage loss resulted in a 1.49¢ (\$0.0149) cost per mile operating increase for the E85 vehicles.

At the beginning of July, the study continued with the high blend tanks pumping an E30 blend as we work to find the most cost effective fuel through science and economics.

#### Flex Fuel Vehicles

- A. 1,290 state vehicles – 37% of the state's total vehicle fleet (3,442) – are flex fuel capable.

However, the state's vehicle fleet contains many vehicles for which there is no flex fuel option, such as ¾-ton and 1-ton vehicles and equipment that uses diesel fuel. Excluding vehicles that don't have a flex fuel option (935) means that 51% of the state's vehicle fleet is flex fuel capable where possible.

- B. Acquisition of more flex fuel vehicles in recent years has been precluded by budget constraints. No new vehicles have been purchased by Fleet & Travel Management since model year 2009.

#### E15?

The EPA is currently considering approving use of an E15 blend in all vehicles, not just flex fuel vehicles. A decision is expected sometime this summer. Should they approve the use of E15 in non flex fuel vehicles, then the state could utilize that blend in our fleet.