SB 343

Department of Legislative Services

Maryland General Assembly
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FISCAL AND POLICY NOTE

Senate Bill 343 (Senator Garagiola, *et al.*)
Education, Health, and Environmental Affairs

Biodiesel Requirements for the State Vehicle Fleet

This bill requires that, beginning in fiscal 2010, at least 50% of diesel-fueled vehicles in the State vehicle fleet use a blend of fuel that is at least 10% biodiesel fuel.

Fiscal Summary

State Effect: Transportation Trust Fund expenditures by the Maryland Transit Administration and the State Highway Administration would increase by $361,800 in FY 2010 to replace B5 fuel with B10 fuel in half of their vehicles.

(in dollars)	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Revenues	$0	$0	$0	$0	$0
SF Expenditure	0	361,800	361,800	361,800	361,800
Net Effect	$0	($361,800)	($361,800)	($361,800)	($361,800)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

Local Effect: None.

Small Business Effect: Potential meaningful.

Analysis

Current Law: Beginning in fiscal 2008, 50% of diesel-powered vehicles in the State fleet must use a blend of fuel that is 5% biodiesel fuel (B5). Beginning in fiscal 2009, at least 50% of diesel-powered heavy equipment and heating equipment owned by the State must use B5. Any vehicle or piece of equipment for which mechanical failure due to the

use of biodiesel fuel would void the manufacturer's warranty is exempt from these requirements.

Background: Biodiesel fuel offers some environmental advantages over regular petroleum-based diesel fuel (RDF). According to the U.S. Environmental Protection Agency, biodiesel fuel reduces carbon monoxide, sulfur dioxide, and other harmful emissions from diesel-powered vehicles, although it slightly increases nitrous oxide emissions. Because it is produced from renewable sources such as vegetable oils and animal fat, it is also biodegradable, nontoxic, and less flammable than RDF. Diesel fuel blends consisting of 10% biodiesel fuel (called B10), like B5, can be stored in existing diesel fuel storage tanks and used in existing diesel engines without modifications. Increased use of domestically-produced renewable fuel can help reduce the nation's dependence on imported oil. At least 40 federal and other states' vehicle fleets already use biodiesel blends.

B10 offers some performance advantages and disadvantages over B5. Compared to B5, very small reductions in vehicle mileage (0.5%) and vehicle acceleration have been reported for B10. Biodiesel advocates report that B10's enhanced lubricity helps extend engine life, while detractors point out that it can clog fuel filters by loosening accumulated engine deposits. However, this is typically a short-term problem following introduction of B10 to a vehicle that previously used RDF or B5.

The federal Energy Independence and Security Act of 2007 will increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard for fuel producers. The new standard increases almost five-fold, to 36 billion gallons, the amount of biofuel that producers must use by 2022. It also repealed $13 billion in tax breaks for oil companies and redirected those resources to continue incentives for the production of alternative fuels, including biodiesel.

Chapter 540 of 2007 established the Task Force on Renewable Alternative Fuels, chaired by the Secretary of Agriculture. The task force's final report, released in December 2007, found that fewer than one million gallons of biodiesel fuel were produced in the State in 2006, mostly for local consumption. However, three biodiesel production plants have since opened in the State, although their combined production capacity is less than 10 million gallons. The task force identified 10 wholesale distributors of biodiesel in the State, but only 8 retail fueling stations selling biodiesel. To respond to the shortage of biodiesel fuel in the State, the task force recommended that the State offer financial incentives to spur both production and consumption of biofuels, including biodiesel. It also recommended that the State consider increasing State fleet mandates regarding the use of biofuels.

The two largest State consumers of diesel fuel are the Maryland Transit Administration (MTA), which uses 8 million gallons of diesel fuel annually in 700 buses and 59 vans, and the State Highway Administration (SHA), which purchased 1.6 million gallons of diesel fuel in fiscal 2007 for light and heavy duty diesel vehicles. Diesel-fueled cranes used by the Maryland Port Administration would not be affected because they do not qualify as vehicles. The State light-duty vehicle fleet consists of 9,100 vehicles, the vast majority of which do not use diesel fuel.

MTA, the largest user of diesel fuel in the State, advises that it has not yet received delivery of B5 fuel under the supply contract administered by the Department of General Services. It expects delivery of B5 to begin in the near future, but cannot predict when that will be. Based on its conversations with bus manufacturers, it does not anticipate that use of B5 will pose any problems for its buses. SHA advises that it has had no problem complying with the current 50% requirement.

State Fiscal Effect: The Energy Management Institute's Alternative Fuels Index for Baltimore on January 24, 2008 shows an average price increase for a gallon of diesel fuel of 1.5 cents for each 1% increment of biodiesel fuel. This price differential has been fairly consistent in the two years that Legislative Services has been tracking biodiesel prices and is assumed to continue until fiscal 2010. Assuming that the diesel vehicles in the State fleet that currently use B5 as mandated switch to B10, the State would pay 7.5 cents more for each gallon of fuel (5 x 1.5) for those vehicles.

Under the terms of this bill, half of the diesel fuel purchased by MTA and SHA would be B10, or 4.8 million gallons combined. After accounting for the modest reduction in vehicle mileage observed in B10, an additional 24,000 gallons would be purchased, resulting in a total of 4.824 million gallons being purchased. Assuming a 7.5 cent increase for each gallon of fuel, total diesel fuel expenditures from the Transportation Trust Fund by the two agencies would increase by $361,800 in fiscal 2010, the first year of the bill's new mandate. Given the stability of prices for biodiesel fuel, that cost differential is assumed to remain the same in the out-years.

Small Business Effect: By increasing demand for biodiesel fuel, this bill could increase demand for agricultural products used to produce the fuel, such as soybean oil and animal fats. According to the 2002 Census of Agriculture, 2,335 Maryland farms derive most of their farm income from grains and oilseed crops, and some of those are presumed to be small businesses. With three new biodiesel production plants in operation, long-term benefits could be significant if increased demand for biodiesel prompts these new production plants to purchase more local agricultural products.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Department of General Services, Maryland Department of Transportation, Department of Budget and Management, U.S. Environmental Protection Agency, Energy Management Institute, Maryland Department of Agriculture, Department of Legislative Services

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