

**Department of Legislative Services**  
 Maryland General Assembly  
 2007 Session

**FISCAL AND POLICY NOTE**

Senate Bill 51 (Senator Frosh, *et al.*)  
 Judicial Proceedings

**Maryland Clean Cars Act of 2007**

This bill requires the Maryland Department of the Environment (MDE), in conjunction with the Motor Vehicle Administration (MVA), to establish by regulation a Low Emissions Vehicle (LEV) Program applicable to vehicles of the 2011 model year and each model year thereafter. MDE and the MVA must jointly adopt regulations by December 31, 2007.

The bill takes effect June 1, 2007.

**Fiscal Summary**

**State Effect:** General fund expenditure increase of \$59,500 in FY 2008 for MDE to implement the new program. Future year expenditures are annualized and adjusted for inflation. State expenditures for vehicle purchases could increase beginning in FY 2011 (not shown below). Transportation Trust Fund (TTF) expenditures would increase by \$150,000 in FY 2011 to audit vehicle dealerships to insure compliance. Potential increase in TTF expenditures in FY 2009 for computer programming changes. Revenues would not be significantly affected.

(in dollars)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	59,500	61,400	64,500	67,800	71,200
SF Expenditure	0	-	0	150,000	150,000
Net Effect	(\$59,500)	(\$61,400)	(\$64,500)	(\$217,800)	(\$221,200)

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

**Local Effect:** Local expenditures for vehicle purchases could increase beginning with the 2011 model year.

**Small Business Effect:** Potential meaningful.

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## Analysis

**Bill Summary:** The bill:

- requires the program to be authorized by Section 177 of the federal Clean Air Act (CAA);
- requires MDE, as part of the program, to establish motor vehicle emissions standards and compliance requirements for each model year included in the program as authorized by CAA;
- authorizes MDE to: (1) adopt California regulations, procedures, and certification data by reference; (2) adopt by regulation motor vehicle emissions inspection, recall, and warranty requirements; and (3) work in cooperation with and enter into contracts or agreements with California, other states, and the District of Columbia to administer certification, in-use compliance, inspection, recall, and warranty requirements;
- requires MDE to work in conjunction with other states and the District of Columbia to promote and facilitate the regional adoption of LEV programs authorized by CAA;
- authorizes the MVA to adopt regulations to exempt motor vehicles from the program under specified conditions;
- prohibits the MVA from titling or registering a motor vehicle not in compliance with the bill or its regulations;
- requires the MVA to adopt regulations to prohibit the transfer of motor vehicles or motor vehicle engines not in compliance with the bill;
- establishes prohibitions relating to the transfer of a motor vehicle or motor vehicle engine not in compliance with the program and the procurement through fraud or misrepresentation of the title or registration of a noncompliant motor vehicle; and
- applies existing enforcement provisions for violations of specified ambient air quality control provisions to a violation of the bill.

**Current Law:** As amended in 1990, CAA requires all areas of the country to achieve specific air quality standards and provides penalties for states failing to achieve the standards. In order to limit pollution from mobile sources, Title 2 of CAA requires the U.S. Environmental Protection Agency (EPA) to set standards to regulate emissions from new motor vehicles reasonably assumed to have negative effects on public health or welfare. As required, EPA created two new motor vehicle emission standard programs referred to as Tier 1 and Tier 2. The first set of standards, Tier 1, took effect in 1994. The Tier 2 standards began to phase in during 2004.

CAA preempts individual state authority to require on-board controls for mobile sources. Congress made an exception for California, however, both because of that state's acute air quality problems and because the state's economy is large enough to make it reasonable for manufacturers to make cars that comply with the more stringent state standards. CAA also allows other states to adopt California's standards under specified conditions.

**Background:** According to EPA, mobile sources pollute the air through combustion and fuel evaporation; these emissions contribute significantly to air pollution nationwide and are the primary cause of air pollution in many urban areas. Four of the main pollutants emitted from mobile sources include nitrogen oxides (NO<sub>x</sub>), particulate matter, carbon monoxide, and hydrocarbons; these pollutants have been shown to have negative impacts on human health and the environment.

Mobile sources also produce several other air pollutants, such as greenhouse gases and air toxics. Air toxics, which are released in the form of particulates or volatile organic compounds (VOCs), are pollutants such as benzene, a carcinogen, that are known or suspected to cause cancer or other serious health effects or adverse environmental effects.

According to MDE, Marylanders drive more than 135 million miles each day, contributing up to 40% of the pollutants responsible for the State's air pollution problems. On-road sources of pollution account for approximately 30% of VOC emissions and 44% of NO<sub>x</sub> emissions. Maryland has operated a vehicle emissions inspection program in various parts of the State since 1984. New motor vehicles are exempt from inspection for two years.

MDE advises that Maryland programs combined with federal requirements have reduced mobile source emissions in Maryland by about 50% since 1990, even with a 40% increase in vehicle miles traveled. By 2030, mobile source emissions are projected to be 11% of what they were in 1990. Despite this progress, much of the State remains in nonattainment of federal air quality standards for ozone and particulate matter. Accordingly, mobile source pollution remains a concern.

In an effort to reduce mobile source emissions in Maryland, legislation introduced during the 2003 through 2005 sessions would have required MDE, in conjunction with the MVA, to adopt California's LEV Program.

New motor vehicles sold in the U.S. must be certified by the manufacturer under either Tier 2 (the federal program) or CALEV II (the current version of California's LEV Program). To date, 10 states (Connecticut, Maine, Massachusetts, New Jersey, New

York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington) have adopted CALEV II standards.

The centerpiece of California's program is a declining fleet average for nonmethane organic gas (NMOG). CALEV II consists of four broad vehicle categories (low emission vehicles, ultra low emission vehicles, super ultra low emission vehicles, and zero emission vehicles). Manufacturers may sell any mix of those vehicles as long as the fleetwide average emissions of the vehicles sold meet the NMOG standard for that year. In addition to establishing emissions standards, CALEV II mandates that a certain percentage of all vehicles sold be zero emission vehicles (the ZEV mandate).

In September 2004, the California Air Resources Board adopted regulations that would require manufacturers to significantly reduce greenhouse gas (GHG) emissions from vehicles. Beginning in model year 2009, automobile manufacturers will be required to limit GHG emissions such as carbon dioxide, methane, and hydrofluorocarbons. All vehicles produced by the manufacturer must meet an average carbon dioxide-equivalent standard for such GHGs.

In 2005, MDE advised that implementing CALEV II for the 2009 model year would have resulted in additional reductions in VOC emissions totaling approximately three tons per day by 2020. Over that time, VOC emissions would have decreased by approximately 37% under Tier 2 and 40% under CALEV II. MDE is currently updating its models, and updated information was not available for inclusion in this fiscal note. A 2005 Maryland Public Interest Research Group Foundation study projected that CALEV II would reduce air toxics by 15 to 20% over projected emissions levels within 20 years.

**State Revenues:** The civil and criminal penalty provisions of this bill are not expected to significantly affect State revenues.

**State Expenditures:** General fund expenditures for MDE could increase by an estimated \$59,458 in fiscal 2008, as discussed below. State expenditures for vehicle purchases could increase beginning with model year 2011 vehicles. TTF expenditures would increase by \$150,000 annually beginning in fiscal 2011.

#### *Maryland Department of the Environment*

General fund expenditures could increase by an estimated \$59,458 in fiscal 2008, which assumes an October 1, 2007 start-up date. This estimate reflects the cost of hiring one public health engineer to develop regulations and implement the new program. It includes a salary, fringe benefits, one-time start-up costs, and ongoing operating expenses.

Salary and Fringe Benefits	\$41,635
Equipment/Operating Expenses	<u>17,823</u>
<b>Total FY 2008 State Expenditures</b>	<b>\$59,458</b>

Future year expenditures reflect: (1) a full salary with 4.5% annual increases and 3% employee turnover; and (2) 1% annual increases in ongoing operating expenses.

*The Motor Vehicle Administration*

TTF expenditures would increase by \$150,000 annually beginning in fiscal 2011 for auditing vehicle dealerships to ensure dealership compliance with the program. In addition, the MVA advises that TTF expenditures could increase by an estimated \$360,000 in fiscal 2009 for computer programming expenditures to make changes to the Customer Information Control System (CICS) to reflect the bill's provisions relating to titling, registering, and transferring vehicles.

The Department of Legislative Services (DLS) advises that, if other legislation is passed requiring computer programming changes, economies of scale could be realized. This would reduce computer programming costs associated with this bill and other legislation affecting CICS.

*Costs to Purchase Vehicles Beginning with Model Year 2011*

The Department of Budget and Management advises that the State purchases approximately 800 to 1,000 vehicles per year. Accordingly, State expenditures for the purchase of vehicles could increase beginning with model year 2011 vehicles; however, a reliable estimate of any such increase cannot be made at this time. Pricing will depend on manufacturers' design and production decisions, which cannot be reliably predicted.

With respect to the ZEV mandate, estimates vary; however, the California Air Resources Board (CARB), in a 2003 report regarding proposed amendments to its ZEV regulations, estimated the incremental cost of a partial ZEV (PZEV) over a super low emission vehicle at \$100 and the incremental cost of an alternative technology PZEV (AT PZEV) at \$1,200 between 2009 and 2011 and \$700 in 2012 and beyond. Costs for ZEVs were estimated to be significantly higher.

CARB noted, however, that its estimates were subject to great uncertainty given the difficulty of estimating future costs for evolving technology. In addition, CARB noted

that owners of AT PZEVs are expected to realize savings in the long run due to greater fuel economy.

With respect to the GHG standards, MDE advises that California has estimated the incremental costs for 2009-2012 (the first phase of the GHG program) to be \$382 (for passenger cars and small trucks/sport-utility vehicles) and \$358 (for large trucks/sport-utility vehicles); for 2013-2016 (the second phase), the estimated incremental costs increase to \$1,204 (for passenger cars and small trucks/sport-utility vehicles) and \$1,356 (for large trucks/sport-utility vehicles). Again, consumers are expected to realize savings in the long run due to greater fuel economy.

The criminal and civil penalty provisions of this bill are not expected to significantly affect State expenditures.

**Local Revenues:** The civil and criminal penalty provisions of this bill are not expected to significantly affect local revenues.

**Local Expenditures:** Local expenditures for the purchase of vehicles could increase beginning with model year 2011 vehicles; however, operating costs could decrease in the long run due to greater fuel economy. The civil and criminal penalty provisions of this bill are not expected to significantly affect local expenditures.

**Small Business Effect:** Once the new program has been implemented, small businesses may have to pay more to purchase a vehicle meeting the standards adopted under the program; however, greater fuel economy could reduce operating costs in the long run. New car dealerships could be affected to the extent the increased price of vehicles impacts sales.

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### **Additional Information**

**Prior Introductions:** A substantially similar bill, SB 366, was introduced during the 2005 session but received an unfavorable report from the Senate Judicial Proceedings Committee. Similar legislation was introduced as SB 563/HB 314 of 2004 and SB 542/HB 373 of 2003. The Senate Judicial Proceedings Committee held a hearing on SB 563 of 2004 but the bill was subsequently withdrawn; the committee reported SB 542 of 2003 unfavorably. The House Environmental Matters Committee reported both HB 314 of 2004 and HB 373 of 2003 unfavorably.

**Cross File:** HB 44 (Delegate Bobo, *et al.*) – Environmental Matters.

**Information Source(s):** California Air Resources Board, U.S. Environmental Protection Agency, Environment Maryland, Comptroller's Office, Department of Budget and Management, Maryland Department of the Environment, Maryland Department of Transportation, Department of Legislative Services

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Analysis by: Nora C. McArdle

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510