

Department of Legislative Services  
Maryland General Assembly  
2008 Session

FISCAL AND POLICY NOTE  
Revised

House Bill 835

(Delegate Hucker, *et al.*)

Environmental Matters

Education, Health, and Environmental Affairs

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Mercury Switch Removal from Vehicles

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This bill requires a “vehicle manufacturer” that sells motor vehicles in the State to develop a “mercury minimization plan” relating to “mercury switch” removal from vehicles. By September 30, 2008, the plan must be submitted to the Maryland Department of the Environment for review and approval. The bill establishes requirements for the plan and provisions regarding plan approval and implementation. Among other things, manufacturers must pay at least \$4 per switch removed (\$1 to MDE and a minimum of \$3 to recyclers).

The bill’s provisions relating to plan development, approval, and implementation take effect January 1, 2009 contingent upon the determination that fewer than 103,600 switches were captured in Maryland under the National Vehicle Mercury Switch Removal Program (NVMSRP) during a specified period. The bill’s other provisions take effect July 1, 2008.

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Fiscal Summary

**State Effect:** Special fund revenues could increase by \$29,500 in FY 2009 due to the switch removal fee, assuming a January 1, 2009 implementation date; future year fee revenues are annualized but would decrease over time due to the phase out of switches. General fund revenues could increase due to the bill’s penalty provisions. MDE’s administrative costs (shown below as special and general fund expenditures) would total \$55,000 in FY 2009; the general fund would bear any costs not offset by fee revenues. Future year expenditures are annualized, adjusted for inflation, and reflect ongoing operating costs.

(in dollars)	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
GF Revenue	-	-	-	-	-
SF Revenue	29,500	56,000	53,000	49,000	46,000
GF Expenditure	25,500	15,000	21,200	28,600	35,200
SF Expenditure	29,500	56,000	53,000	49,000	46,000
Net Effect	(\$25,500)	(\$15,000)	(\$21,200)	(\$28,600)	(\$35,200)

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

**Local Effect:** Local revenues could increase due to the bill's penalty provisions for those cases heard in the circuit courts.

**Small Business Effect:** Meaningful.

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## Analysis

### Bill Summary:

#### *Determination Regarding NVMSRP*

A vehicle manufacturer must report to MDE by November 1, 2008 on how many mercury switches were captured in the State under NVMSRP during the 12-month period ending September 30, 2008. By December 1, 2008, MDE must determine whether NVMSRP has captured at least 103,600 mercury switches in the State. If MDE determines that NVMSRP has not captured that many switches, then the bill's provisions relating to the development, approval, and implementation of mercury minimization plans take effect. If NVMSRP has captured the specified number of switches, then the bill terminates.

#### *Plan Development and Approval*

The mercury minimization plan must contain:

- information identifying the make, model, and year of vehicles that may contain a mercury switch;
- educational material to assist a vehicle recycler or a scrap recycling facility to undertake a safe method for removal of mercury switches and assemblies;
- a proposal for the method of storage or disposal of mercury switches and assemblies, including the method of packaging and shipping;

- a proposal for the storage of mercury switches and mercury switch assemblies collected and recovered in the event that appropriate management technologies are not available;
- a plan for implementing and financing the system; and
- information that establishes the financing of the removal, collection, and recovery system for mercury switches.

Among other items that must be included in the information that establishes the financing, a vehicle manufacturer must pay for the costs associated with the removal, collection, and recovery of mercury switches and must establish a method to ensure the prompt payment to a vehicle recycler, a scrap recycling facility, and MDE. Costs paid by a manufacturer must include the following:

- a minimum of \$3 for each mercury switch or assembly removed by a vehicle recycler or scrap recycling facility, as partial compensation for the labor and other costs incurred; and
- \$1 for each mercury switch or assembly removed by a vehicle recycler or scrap recycling facility, as partial compensation for MDE for costs incurred in administering and enforcing the bill.

Within 60 days after receiving a mercury minimization plan, MDE must approve, disapprove, or conditionally approve the entire plan. If approved, the vehicle manufacturer must begin implementation within 30 days, or as otherwise determined by MDE. If the plan is disapproved, MDE must inform the manufacturer of the reasons for the disapproval, and the manufacturer has 30 days to submit a new plan.

MDE may approve parts of plans. The bill establishes provisions regarding the submission of revised plans for the disapproved parts. MDE must review and approve, conditionally approve, or disapprove a revised plan within 30 days.

After 90 days, if MDE has neither approved nor disapproved a plan, it would be considered conditionally approved. MDE may complete any portion of a plan that has not been approved by January 1, 2009. In addition, MDE may review an approved plan and recommend modifications at any time.

MDE is authorized to adopt regulations regarding plan development and approval.

### *Plan Implementation*

Unless a mercury switch or assembly is inaccessible due to damage, within 30 days after plan approval, a vehicle recycler that sells, gives, or otherwise conveys ownership of an end-of-life vehicle to a scrap recycling facility for recycling must remove all mercury switches or assemblies identified in the plan from the vehicle before delivery to the scrap recycling facility. The “capture rate” goal must be at least 90%.

A scrap recycling facility may agree to accept an end-of-life vehicle that contains mercury switches under specified conditions. Such a facility must be responsible for removing the mercury switches or assemblies before the end-of-life vehicle is intentionally flattened, crushed, baled, or shredded.

On removal, mercury switches and assemblies must be collected, stored, transported, and otherwise handled as required by the approved plan and in accordance with specified provisions and regulations.

The bill establishes record-keeping requirements for vehicle recyclers and scrap recycling facilities that remove mercury switches or assemblies. The bill establishes annual reporting requirements for vehicle manufacturers regarding plan implementation. MDE may discontinue that reporting requirement if it determines that mercury switches in end-of-life vehicles no longer pose a significant threat to the environment or to public health.

MDE is required to adopt regulations regarding plan implementation.

### *Enforcement*

If a person violates any provision or regulation adopted in accordance with the bill’s provisions relating to plan implementation, MDE may issue an order, impose an administrative penalty (of up to \$7,500 for a first offense, \$10,000 for a second offense, and \$25,000 for a third or subsequent offense), bring an action for injunction, and petition the Attorney General to bring a criminal action. The bill establishes notice requirements for MDE regarding such violations and establishes provisions regarding the request for a hearing. Any penalty imposed may be collected, with costs, in a summary proceeding in accordance with the procedures of the court. In any action for an injunction, the court may grant temporary or interlocutory relief.

A person who willfully or negligently violates the provisions regarding plan implementation is guilty of a misdemeanor and, on conviction of a first offense, is subject

to a fine of at least \$2,500 but not more than \$25,000. For a second offense, the violator would be subject to a fine of at least \$5,000 but not more than \$50,000.

A person that knowingly makes a false statement, representation, or certification in any document filed or required to be maintained under the bill or that falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained is guilty of a misdemeanor and on conviction is subject to a fine of up to \$10,000.

**Current Law:** MDE's mercury program relates primarily to mercury-added products (dyes or pigments, electric switches, fluorescent lamps), thermostats, mercury fever thermometers, mercuric-oxide batteries, the use of mercury in schools, and public outreach and education. Chapter 494 of 2004 establishes prohibitions and requirements relating to the sale and reclamation or destination of mercury-added products. In general, unless a mercury-added product is labeled, a manufacturer or wholesaler may not sell the product at retail in the State or to a retailer in the State. Unless properly labeled, a retailer may not knowingly sell a new mercury-added product in the State. Chapter 56 of 2006 prohibits a marketer from selling or providing a thermostat containing mercury to a consumer.

**Background:** Each year, approximately 10 to 12 million vehicles are retired from useful life in North America. According to the Clean Car Campaign, mercury-containing switches account for more than 99% of the mercury used in automobiles, with each switch containing nearly one gram of mercury. According to a 2004 analysis by the Clean Car Campaign, in the United States alone, automobiles will be responsible for the environmental release of up to 493,000 pounds of mercury from the estimated 217 million switches installed in vehicles from 1974 through 2003. These releases will slowly decrease due to the phase-out of mercury switches in recent years. U.S. automakers indicate that all mercury switches were eliminated from new vehicles by the end of the 2002 model year. According to the Clean Car Campaign, international automakers stopped using mercury switches by 1993, following a ban on such uses in Europe. The European Union adopted a directive in 2000 which, among other things, establishes producer responsibility for the management of end-of-life vehicles and sets increased recycling requirements.

According to a recent model developed by the End of Life Vehicle Solutions Corporation (ELVS), the number of mercury light switches in end-of-life vehicles in Maryland is projected to decrease from 59,000 in 2008 to 28,000 in 2017.

In 2002, the Partnership for Mercury-Free Vehicles issued model state legislation addressing mercury switch removal from vehicles. Several states have enacted

legislation addressing this issue. The bill as introduced was modeled after legislation enacted in Maine and New Jersey.

In August 2006, a coalition of organizations and industry sectors signed a Memorandum of Understanding regarding NVMSRP designed to remove mercury-containing switches from scrap vehicles. The program will terminate in 2017, when estimates indicate that 90% of the vehicle mercury switches will be retired. Maryland joined NVMSRP in January 2007. MDE has partnered with ELVS (the NVMSRP contractor) and the Maryland Auto and Truck Recyclers Association to encourage vehicle recyclers and dismantlers to participate in the program. Under NVMSRP, a \$4 million fund has been established to reward dismantlers and recyclers on a first-come first-served basis for their efforts by paying \$1 per mercury light switch or assembly received and \$3 per antilock braking system module received. ELVS will provide educational materials and will collect and recycle switches at no cost to recyclers and dismantlers.

**State Revenues:** According to MDE, since February 2007, only 2,316 mercury switches have been captured in Maryland under NVMSRP. Accordingly, MDE advises that it is unrealistic to expect that 103,600 switches could be captured in Maryland during the specified 12-month period. Accordingly, for purposes of this Fiscal and Policy Note, it is assumed that the bill's provisions relating to plan development and implementation will take effect January 1, 2009.

State revenues would increase by \$1 for each mercury switch or assembly removed by a vehicle recycler or by a scrap recycling facility. Based on current projections by ELVS, the number of vehicle mercury switches in end-of-life vehicles in Maryland will decrease from 59,000 in 2008 to 46,000 in 2012. Accordingly, special fund revenues could increase by an estimated \$29,500 in fiscal 2009, which assumes a January 1, 2009 effective date. Future year estimates are annualized and reflect the decline in mercury switches in end-of-life vehicles over time due to the phase out of the switches by manufacturers. To the extent the number of switches in retired vehicles varies from the ELVS projections, revenues would vary correspondingly.

Legislative Services notes that the bill does not indicate where the fees collected by MDE would be deposited. However, because the stated intent of the fee is to partially compensate MDE for costs incurred in administering and enforcing the bill, it is assumed that they would be treated as special fund revenues.

General fund revenues could increase due to the bill's penalty provisions for those cases heard in the District Court. Any such increase cannot be reliably estimated at this time.

**State Expenditures:** Administrative expenditures within MDE could increase by an estimated \$55,039 in fiscal 2009, which accounts for a 90-day start-up delay. This estimate reflects the cost of hiring one natural resources planner to review manufacturer reports regarding the number of switches captured under NVMSRP, make the determination required by the bill, review and approve mercury minimization plans, complete any plans not developed by manufacturers, draft regulations, review reports, and develop outreach materials. It includes a salary, fringe benefits, one-time start-up costs, and ongoing operating expenses, including contractual services to print brochures for recyclers. The estimate assumes that existing staff will manage the fees collected from manufacturers and conduct enforcement activities.

Positions	1
Salary and Fringe Benefits	\$43,594
Travel and Contractual Services	7,935
Equipment/Operating Expenses	<u>3,510</u>
<b>Total FY 2009 State Expenditures</b>	<b>\$55,039</b>

Because MDE's expenditures are estimated to be higher than fee revenue projections, it is assumed that the general fund would bear any costs not offset by fee revenues. Based on the revenue estimates described above, special funds would cover an estimated \$29,500 in fiscal 2009, and the general fund would cover the remainder (an estimated \$25,539).

Future year expenditures reflect • a full salary with 4.4% annual increases and 3% employee turnover; • 2% annual increases in ongoing operating expenses; and • decreasing annual fee revenues available to cover MDE's costs, resulting in an increasing reliance on the general fund. Legislative Services notes, however, that because manufacturers have phased out the use of mercury switches in new cars, at some point, the program established by the bill would presumably be phased out.

**Small Business Effect:** Vehicle manufacturers are generally not considered small businesses. However, vehicle and scrap recyclers may be small businesses. These entities would incur costs to • provide data to manufacturers; • remove mercury switches and assemblies from end-of-life vehicles; • store, transport, and handle switches once removed; • maintain associated records; and • carry any necessary liability insurance.

The bill provides that manufacturers would be required to pay a minimum of \$3 per switch or switch assembly to vehicle recyclers and scrap recycling facilities as *partial* compensation for the labor and other costs incurred in the *removal* of the switch or switch

assembly. Based on the bill's language, it is unclear if this fee would cover *all* costs to recyclers, such as packaging, shipping, storage, and disposal.

According to MDE, its Recycling and Operations Program has a list of approximately 200 vehicle recyclers and dismantlers in Maryland that have been encouraged to participate in NVMSRP. As of March 26, 2008, MDE advises that 53 recyclers and dismantlers are participating in the program. According to MDE, it is unclear if these entities would still be able to participate in NVMSRP if this bill were enacted.

The extent to which a vehicle manufacturer would pass its compliance costs on to consumers in the form of higher prices is unknown.

**Additional Comments:** Legislative Services notes that, although the bill's provisions regarding plan development, approval, and implementation would not take effect until January 1, 2009, various deadlines in the bill are inconsistent with that date. Specifically, the deadline for the submission of plans to MDE is September 30, 2008, and MDE is authorized to complete any portion of a plan that has not been approved by January 1, 2009. Accordingly, it is unclear how and when these provisions would be implemented under the bill as currently drafted.

In addition, MDE advises that vehicle manufacturers do not have any information regarding the number of switches captured under NVMSRP; accordingly, they will have to request that information from recyclers in order to submit the required information to MDE.

Finally, the bill refers to the National Vehicle Mercury Switch *Removal* Program; however, MDE advises that the correct name of the program is the National Vehicle Mercury Switch *Recovery* Program.

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### **Additional Information**

**Prior Introductions:** Similar legislation was introduced as SB 366/HB 418 of 2007 and SB 1006/HB 1597 of 2006. SB 366 of 2007 and SB 1006 of 2006 passed the Senate and were referred to the House Environmental Matters Committee, which held hearings on the bills. Environmental Matters also held hearings on HB 418 of 2007 and HB 1597 of 2006 but no further action was taken.

**Cross File:** None.

**Information Source(s):** Maryland Department of the Environment, Maryland Department of Transportation, Office of the Attorney General, Judiciary (Administrative Office of the Courts), Office of Administrative Hearings, Clean Car Campaign, National Automobile Dealers Association, End of Life Vehicle Solutions, New Jersey Department of Environmental Protection, Maine Department of Environmental Protection, United Iron & Metal LLC, Department of Legislative Services

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