

Department of Legislative Services
Maryland General Assembly
2009 Session

FISCAL AND POLICY NOTE
Revised

House Bill 1263

(Delegate Hucker, *et al.*)

Environmental Matters

Education, Health, and Environmental Affairs

Mercury Switch Removal from Vehicles

This bill requires vehicle manufacturers that sold motor vehicles in the State containing mercury switches to, individually or as a group, develop a “mercury minimization plan” relating to “mercury switch” removal from vehicles. By September 30, 2009, the plan must be submitted to the Maryland Department of the Environment (MDE) for review and approval. The bill establishes requirements for the plan and provisions regarding plan approval and implementation. Among other things, manufacturers must pay a fee for each switch removed.

The bill takes effect July 1, 2009, and terminates December 31, 2017.

Fiscal Summary

State Effect: Special fund revenues may increase by \$25,500 in FY 2010 assuming a half year collection of switch removal fees in FY 2010; future year fee revenues are annualized but decrease over time due to the phase out of switches. Special fund revenues may also increase due to the bill’s penalty provisions. Special fund expenditures increase by \$75,700 in FY 2010 for administrative costs at MDE. Future year expenditures are adjusted for inflation and reflect ongoing operating costs.

(in dollars)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
SF Revenue	\$25,500	\$48,000	\$44,000	\$41,000	\$38,000
SF Expenditure	\$75,700	\$73,900	\$77,100	\$80,500	\$84,100
Net Effect	(\$50,200)	(\$25,900)	(\$33,100)	(\$39,500)	(\$46,100)

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

Local Effect: Circuit court caseloads may increase minimally, but can likely be handled with existing resources. No effect on revenues as all penalties must be paid into a State special fund.

Small Business Effect: Meaningful.

Analysis

Bill Summary:

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 and training materials to assist a vehicle recycler or a scrap processing 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.

A vehicle manufacturer that already meets or exceeds the requirements of the bill may propose the use of its existing processes and procedures in its mercury minimization plan.

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 processing facility, and MDE. Costs paid by a manufacturer must include the following:

- a minimum of \$4 for each mercury light switch or light switch assembly and \$6 for each antilock braking system switch assembly removed by a vehicle recycler or scrap processing facility, as partial compensation for the labor and other costs incurred; and
- \$1 for each mercury switch or mercury switch assembly removed by a vehicle recycler or scrap processing facility, as partial compensation for MDE for costs

incurred in administering and enforcing the bill (paid into the State Recycling Trust Fund).

Within 90 days after receiving a mercury minimization plan, MDE may approve, disapprove, or conditionally approve the entire plan. The vehicle manufacturer must begin implementation within 30 days of submitting the plan, 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 disapprove 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. MDE may complete any portion of a plan that has not been approved by January 1, 2010. In addition, MDE may review a submitted plan and recommend modifications at any time.

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

Plan Implementation

Beginning December 1, 2009, unless a mercury switch or assembly is inaccessible due to damage, a vehicle recycler must remove all mercury switches or assemblies identified in the plan from an end-of-life vehicle within 180 days after receipt of the vehicle and before delivery to a scrap processing facility. In addition, by December 31, 2010, a vehicle recycler must remove all mercury switches and assemblies identified in the plan from vehicles in its inventory as of September 30, 2009. The “capture rate” goal must be at least 90% for mercury switch or assembly removal in 2010.

A scrap processing 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, recycled, and otherwise handled as required by the approved plan and in accordance with specified provisions and regulations.

The bill establishes electronic recordkeeping requirements for vehicle recyclers and scrap processing facilities that remove mercury switches or assemblies. The bill establishes annual reporting requirements for vehicle manufacturers regarding plan implementation, and for MDE regarding various statistics and recommendations to improve the capture rate of mercury switches. MDE may discontinue that reporting requirement if it

determines that mercury switches in end-of-life vehicles will no longer pose a significant threat to the environment or to public health by the end of 2020.

Any time after December 1, 2011, if MDE determines that an insufficient number of switches has been recycled, MDE may propose a new strategy to increase the capture of mercury switches, including additional new funding sources.

MDE may 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, he or she is guilty of a misdemeanor, liable for a civil penalty, and may be subject to an administrative fine of: up to \$1,000 for a first offense, \$2,500 for a second offense, and \$5,000 for a third or subsequent offense. If MDE opts to assess an administrative penalty, the bill establishes the factors that must be considered in determining the level of the fine. Each day a violation continues is a separate offense.

All fines and penalties are paid into the State Recycling Trust Fund.

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 the National Vehicle Mercury Switch Recovery Program (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: State Recycling Trust Fund revenues increase by \$1 for each mercury switch or assembly removed by a vehicle recycler or by a scrap processing facility. Based on current projections by ELVS, the number of vehicle mercury switches in end-of-life vehicles in Maryland will decrease from 51,000 in 2010 to 38,000 in 2014. Accordingly, special fund revenues may increase by an estimated \$25,500 in fiscal 2010, which assumes switch removal payments are collected beginning January 1, 2010. 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. Additionally, switch removal fee collections may vary significantly in fiscal 2010 depending on when implementation begins by each manufacturer.

In addition, special fund revenues may increase due to the bill's penalty provisions. Any such increase cannot be reliably estimated at this time.

State Expenditures: Special fund expenditures within MDE may increase by an estimated \$75,685 in fiscal 2010. This estimate reflects the cost of hiring one natural resources planner by July 1, 2009, to review manufacturer reports regarding the number of switches captured under NVMSRP, 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 can manage the fees collected from manufacturers and conduct enforcement activities.

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Salary and Fringe Benefits	\$62,646
Travel and Contractual Services	6,055
Equipment/Operating Expenses	<u>6,984</u>
Total FY 2010 State Expenditures	\$75,685

Future year expenditures reflect a full salary with 4.4% annual increases, 3% employee turnover, 1% annual increases in ongoing operating expenses. 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 will 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 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 requires manufacturers to pay a minimum of \$4 per switch or switch assembly and \$6 per antilock braking switch to vehicle recyclers and scrap processing 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 covers all costs to recyclers, such as packaging, shipping, storage, and disposal.

According to MDE, its Recycling and Operations Program has a list of approximately 152 vehicle recyclers and dismantlers in Maryland that have been encouraged to participate in NVMSRP. As of February 19, 2009, MDE advises that 75 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 may pass its compliance costs on to consumers in the form of higher prices is unknown.

Additional Information

Prior Introductions: Similar legislation was introduced as HB 835 of 2008, SB 366/ HB 418 of 2007 and SB 1006/HB 1597 of 2006. HB 835 passed the House with amendments and was heard by the Senate Education Health and Environmental Affairs Committee but no further action was taken. 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): Montgomery County, Baltimore City, Office of the Attorney General, Maryland Department of the Environment, Judiciary (Administrative Office of the Courts), Maryland Environmental Service, Department of State Police, North East Maryland Waste Disposal Authority, Office of Administrative Hearings, Maryland Department of Transportation, Clean Car Campaign, National Automobile Dealers Association, End of Life Vehicle Solutions, New Jersey Department of Environmental Protection, Maine Department of Environmental Protection, Department of Legislative Services

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