

Department of Legislative Services
Maryland General Assembly
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FISCAL AND POLICY NOTE
Revised

House Bill 189

(Delegate Morhaim, *et al.*)

Health and Government Operations and Education, Health, and Environmental Affairs
Ways and Means

Respiratory Illness Prevention Act

This emergency bill requires that the Maryland Department of the Environment (MDE) receive federal and State funds either awarded to the State or appropriated to install diesel emissions control equipment. MDE must use those funds to establish, award, and oversee diesel emissions control grants to State or local governmental entities, or to any other entity identified by MDE. The grants may be used only for heavy-duty diesel vehicles, as defined by the bill, that are owned, operated, controlled, or leased by each grant recipient.

Fiscal Summary

State Effect: None. The bill generally codifies existing practice.

Local Effect: None. Local governments continue to be eligible for State grants to install emissions control devices on eligible diesel-powered vehicles.

Small Business Effect: None.

Analysis

Bill Summary: State grant awards may be used only to install diesel emissions control devices that:

- have been verified by the U.S. Environmental Protection Agency (EPA) to achieve a specified reduction in emissions of diesel particulate matter (PM); or

- are designed for heavy-duty diesel vehicles for which EPA-verified devices or strategies are not available, are intended to reduce diesel emissions from heavy-duty diesel vehicles; and are approved by MDE.

MDE must provide a reasonable opportunity for all eligible entities to be awarded a grant.

Current Law: Federal regulations require that diesel engines produced since 2007 reduce PM emissions by more than 90%. As of October 2006, all on-road diesel vehicles are required to use ultra low sulfur fuel, which even when used in older engines can reduce PM emissions by about 10%; beginning in 2010, federal regulations require nonroad vehicles to use ultra low sulfur fuel.

Background:

Diesel Emissions Reduction

Diesel engines are the predominant source of power for heavy-duty applications because they are more powerful, efficient, and durable than gasoline-powered engines. Diesel engines are found in two-thirds of farm and construction equipment, over 90% of commercial trucks, and the vast majority of school buses. Older diesel engines, however, emit higher levels of PM, sulfur, and nitrous oxide than their gasoline-powered counterparts.

Recent advances in diesel-engine technology, fuel processing, and government regulation have addressed many of the environmental concerns related to diesel fuel. However, the durability of diesel engines works against efforts to reduce emissions because the vast majority of diesel-powered engines still in use were produced before new technology and federal regulations went into effect.

To accelerate the reduction of PM emissions, vehicle and equipment operators can retrofit existing diesel engines with various types of emissions-reducing devices. EPA and the California Air Resources Board have categorized these devices according to the reductions in emissions they have been shown to produce. **Exhibit 1** summarizes their key traits.

Exhibit 1
Diesel Engine Retrofit Devices

	<u>Most Common Device</u>	<u>PM Emissions Reduction</u>	<u>Cost per Vehicle</u>
Level 1	Diesel oxidation catalyst	25%	\$1,000 to \$2,000
Level 2	Flow-through filter	50%	Unknown
Level 3	Diesel particulate filter	85%	\$5,000 to \$10,000

Source: U.S. Environmental Protection Agency, California Air Resources Board

Federal Programs

The U.S. Congress reauthorized the Congestion Mitigation and Air Quality (CMAQ) program, which dates to 1991, in 2005 to provide funding to state transportation departments and transit agencies to invest in emissions reduction initiatives. CMAQ funding may be used only in areas that do not meet federal air quality standards (nonattainment areas) and former nonattainment areas that are now in compliance (maintenance areas). States must give priority in distributing CMAQ funds to diesel engine retrofit projects and other cost-effective emissions reduction activities.

In fiscal 2009, the Maryland Department of Transportation (MDOT) received approximately \$42 million in CMAQ funds. Except for a small pilot project with the Baltimore Metropolitan Planning Organization, the funds are not distributed to local governments. Instead, the State Highway Administration and the Maryland Transit Administration share the funds to pay for new and cleaner buses, ride sharing, Park & Ride lots, synchronization of traffic lights (to reduce idling), and other emissions reduction efforts.

The U.S. Congress adopted the Diesel Emissions Reduction Act (DERA) in 2005 to fund state and local efforts to retrofit existing diesel engines with emissions control devices. A portion of total funding – 30% – is divided equally among the 50 states and the District of Columbia, while the remainder – 70% – is distributed to regions for competitive grants. The American Recovery and Reinvestment Act of 2009 (ARRA) includes \$300 million in one-time funds for DERA.

In fiscal 2009, MDE received \$196,000 in DERA formula grants; by fulfilling matching requirements, it received an additional \$98,000. Although final awards have not been made, MDE expects to distribute those funds to three local governments to fund retrofits of school buses and other diesel vehicles. MDE expects \$1.7 million in DERA funds from ARRA in fiscal 2010 under the state formula grants; there is no State match for the

next round of funding. Competitive grant awards available to states and local governments will likely range in size from \$1 million to \$7.5 million. Future availability of DERA and CMAQ funds hinges on reauthorization of both programs. CMAQ is well-established, but DERA is a relatively new program, so future funding is less certain. DERA is not currently authorized in the federal budget beyond 2012.

MDE advises that applications for competitive DERA grants are due to EPA by April 28, 2009, and awards are expected to be announced by late June. MDE expects to submit an application for funding to retrofit a significant portion of public school buses operating in the State.

Additional Comments: MDE notes that it is also working with the Maryland Port Administration on a grant proposal to reduce diesel emissions from marine vessels, which are not covered under the bill.

Additional Information

Prior Introductions: None.

Cross File: SB 319 (Senator Gladden) - Education, Health, and Environmental Affairs and Finance.

Information Source(s): U.S. Environmental Protection Agency; California Air Resources Board; Diesel Technology Forum; Charles, Frederick, Montgomery, and Somerset counties; Board of Public Works; Department of Budget and Management; Maryland State Department of Education; Maryland Department of the Environment; Department of Health and Mental Hygiene; Maryland Department of Transportation; University System of Maryland; Department of Legislative Services

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Analysis by: Michael C. Rubenstein

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