SB 686

Department of Legislative Services

Maryland General Assembly
2022 Session

FISCAL AND POLICY NOTE
First Reader

Senate Bill 686 (Senator Ellis)
Education, Health, and Environmental Affairs

Department of the Environment - Study on Environmental Impacts of Lead-Based Fuel Use by Aviation Industry

This bill requires the Maryland Department of the Environment (MDE) to (1) study the environmental impacts of the use of lead-based fuel in the State by the aviation industry and (2) develop recommendations for mitigating such impacts, including prohibiting the use of lead-based fuel by the aviation industry and recommendations other than such a prohibition. By December 1, 2022, MDE must report its findings and recommendations to the General Assembly. **The bill takes effect June 1, 2022.**

Fiscal Summary

State Effect: Despite the bill's requirement that MDE report its findings and recommendations by December 1, 2022, a meaningful study of this magnitude cannot be completed by that deadline. Thus, general fund expenditures increase significantly (perhaps by millions of dollars) in FY 2022 through 2025 for MDE to complete the required study and develop recommendations, as discussed below. State revenues are not affected.

Local Effect: None. The bill does not directly affect local finances or operations.

Small Business Effect: None.

Analysis

Current Law: The United States began phasing out the use of leaded fuels in vehicles in the 1970s. The federal Clean Air Act (CAA) banned the sale of leaded fuel, effective January 1, 1996, for use in new vehicles other than aircraft, racing cars, farm equipment, and marine engines. Under CAA, the U.S. Environmental Protection Agency (EPA) has

the authority, in consultation with the Federal Aviation Administration (FAA), to regulate emissions from aircraft. FAA enforces existing emission standards for commercial jet aircraft and engines through the certification process of engines.

On January 12, 2022, EPA announced that it is beginning a process to evaluate whether emissions from piston-engine aircraft operating on leaded fuel contribute to air pollution that endangers public health and welfare; this evaluation is referred to as an "endangerment finding." EPA anticipates finalizing any endangerment finding in 2023. According to FAA, if the EPA finds that aircraft emissions present an endangerment to public health or welfare, it can establish limits on aircraft emissions, and FAA will have the authority to regulate aircraft emissions through the development of standards for the composition or chemical or physical properties of an aircraft fuel or fuel additive.

State Expenditures: Although a reliable estimate of the increase in general fund expenditures cannot be made at this time, general fund expenditures increase significantly, perhaps by several million dollars, beginning as early as fiscal 2022 (due to the bill's June 1, 2022 effective date) and likely ending in fiscal 2025, for MDE to (1) collect and analyze data; (2) study the environmental impacts of the use of lead-based fuel in the State by the aviation industry; (3) develop the required recommendations; and (4) report to the General Assembly. MDE advises that the timeframe established by the bill is too short for MDE to comply with State procurement rules to contract with an environmental consultant. Thus, it is assumed that MDE likely needs to hire contractual staff and purchase equipment to conduct the required study. Even so, MDE advises that a full study of the magnitude contemplated by the bill cannot be completed by the December 1, 2022 deadline.

For context, MDE notes there are 33 public-use airports in the State and that to conduct the required study, the department needs to set up data collection and monitor lead emissions at each of those airports. MDE estimates that the study takes approximately three years and costs at least $590,000 in fiscal 2023, $211,700 in fiscal 2024, and $217,400 in fiscal 2025, which only reflects the costs to hire 14 contractual employees (five meteorologists, eight natural resource planners, and one environmental program manager). MDE also estimates that costs to purchase sampling and monitoring equipment or to contract with a third-party laboratory (if time permits) total approximately $1.5 million to $2.0 million over the course of the study.

MDE advises that although it was required to conduct lead emissions monitoring at airports in the past, State airports were consistently showing lead emissions that were below federal standards for air pollution, and monitoring was discontinued. Thus, MDE no longer has the capability to conduct lead emissions monitoring at airports in the State.

MDE further notes that it does not have the authority to ban the use of leaded aviation fuel, and, as a result, it is unable to consider or make such a recommendation. As discussed

above, pursuant to federal law, EPA sets the emissions standards for aircrafts, and FAA sets and administers certification requirements for aircraft and engines to demonstrate compliance with EPA's emissions standards. In addition, CAA prohibits states and local communities from setting their own emissions standards.

Additional Information

Prior Introductions: None.

Designated Cross File: None.

Information Source(s): Maryland Department of the Environment; Federal Aviation Administration; U.S. Environmental Protection Agency; Department of Legislative Services

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