

Department of Legislative Services
Maryland General Assembly
2018 Session

FISCAL AND POLICY NOTE
First Reader

Senate Bill 133 (Senator Madaleno, *et al.*)
Education, Health, and Environmental Affairs

Community Healthy Air Act

This bill establishes the Committee on Air Quality, composed of specified subject matter experts, which must develop an air quality sampling and monitoring protocol for the collection of air quality and public health data associated with large animal-feeding operations (AFOs) by January 1, 2019. The Maryland Department of the Environment (MDE) must staff the committee and, by October 1, 2019, (1) use the protocol to assess air pollutants and public health risks associated with all large AFOs in the State and (2) use those assessments to evaluate whether all large AFOs in the State comply with applicable federal and State air pollution emissions laws. By December 15, 2019, MDE must (1) post a report of its findings on its website and (2) report its findings to the Governor and the General Assembly. **The bill takes effect July 1, 2018, and terminates June 30, 2020.**

Fiscal Summary

State Effect: General fund expenditures increase significantly (perhaps by millions of dollars), in FY 2019 and 2020. Revenues are not affected.

Local Effect: None.

Small Business Effect: None.

Analysis

Bill Summary: The required protocol must establish a methodology for MDE to use to (1) quantify the amount of air pollutants emitted from large AFOs, as specified and (2) assess the public health risks associated with those air pollutants. When preparing the protocol, the committee must identify all air pollutants emitted from large AFOs in the

State and the potential public health risks associated with those pollutants. The protocol must be submitted for public comment and peer review, as specified. By April 1, 2019, the committee must review the comments received and incorporate them into the protocol as appropriate. Also by April 1, 2019, MDE must publish the final protocol on its website.

Committee members may not receive compensation but are entitled to reimbursement for expenses under the standard State travel regulations.

Current Law/Background:

Maryland Regulation of AFOs

AFOs in Maryland are not subject to air quality permits issued by MDE. However, AFOs are generally subject to wastewater discharge permits, depending on the size of the facility and whether the facility discharges to waters of the State. To be considered an AFO, the operation must confine its livestock for at least 45 days per year and not grow crops or forage where the animals are confined. Regulation defines whether an operation is considered small, medium, or large based on the number of animals per AFO. MDE advises that there are 245 large AFOs in the State and that all but 12 are poultry-related.

Federal Clean Air Act

The federal Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, the law authorizes the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards to limit levels of “criteria pollutants” to protect public health and public welfare and to regulate emissions of hazardous pollutants.

In 2009, a group of petitioners requested that EPA list concentrated animal feeding operations (CAFOs, which are similar to AFOs as defined in Maryland) as a category of sources under CAA, promulgate standards of performance for new CAFOs, and prescribe regulations for state-performance standards for existing CAFOs. In December 2017, EPA denied the petition because the interactive and highly complex nature of CAFO emissions requires new, more accurate methodologies for estimating those emissions. However, EPA noted that the agency is taking steps to establish and implement a regulatory strategy to address air emissions from CAFOs. EPA plans to conduct a nationwide study of air emissions from CAFOs, develop improved emission-gathering methodologies for these emissions, and gather additional information about the magnitude of CAFO emissions and their control options. According to MDE, this process would provide the basis for setting federal pollution control requirements or industry best practices standards that would apply to all applicable AFOs nationally.

According to EPA, CAFOs can emit a variety of air pollutants, including hydrogen sulfide, ammonia, methane, nitrous oxide, volatile organic compounds, particulate matter, carbon dioxide, and reduced sulfur compounds. These pollutants are emitted from various sources at AFOs and, cannot be standardized based solely on the number and type of animals at each operation. EPA, with the U.S. Department of Agriculture, released a 2017 best management practices document for livestock and poultry farms that identifies actions that have been demonstrated to reduce air emissions of pollutants from such farms.

State Expenditures: Although a reliable estimate of the increase in general fund expenditures resulting from the bill cannot be made at this time, general fund expenditures increase significantly, perhaps by several million dollars, in fiscal 2019 and 2020, for MDE to (1) conduct the required assessment of air pollutants and public health risks associated with all large AFOs in the State and (2) evaluate compliance with applicable federal and State laws. Given the short timeframe established by the bill, MDE likely needs to hire contractors to conduct the assessments and evaluations. Actual expenditures depend on several unknown factors, including the actual protocol developed by the committee, the methods used to assess air emissions from AFOs, and whether MDE must assess and evaluate *all* of the 245 large AFOs in the State.

In a 2017 estimate, MDE advised that contracting to conduct air pollutant assessments for five AFOs was estimated to cost at least \$300,000; however, that estimate did not include any risk assessment work. MDE advises that a robust risk assessment involves a three-step process: (1) quantifying air pollutant emission levels; (2) determining (through modeling or direct measurement) the ground-level concentration of the pollutant at various points beyond a facility's property boundaries; and (3) comparing those pollutant concentrations to an agreed-upon public health based standard that is protective of human health. MDE advises that such an analysis must be conducted for each pollutant because each pollutant has a different risk threshold. MDE also notes that, because no two AFOs are identical in terms of location and operations, this assessment must be conducted for *each individual AFO*. Accordingly, MDE estimates that assessing and evaluating all of the 245 large AFOs in the State likely costs several million dollars.

MDE can staff the committee with existing budgeted staff and resources.

Additional Information

Prior Introductions: None.

Cross File: HB 26 (Delegates R. Lewis and Robinson) - Environment and Transportation and Health and Government Operations.

Information Source(s): Maryland Department of the Environment; Maryland Department of Agriculture; University System of Maryland; U.S. Environmental Protection Agency; Department of Legislative Services

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nb/lgc

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