

Department of Legislative Services
Maryland General Assembly
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FISCAL AND POLICY NOTE
First Reader

Senate Bill 225 (Senator Elfreth)
Education, Energy, and the Environment

Environment - Publicly Owned Treatment Works - PFAS Monitoring

This bill requires the owner or operator of a publicly owned treatment works (POTW) to (1) monitor “PFAS” levels in effluent, influent, and biosolids at least quarterly and (2) report all “PFAS” monitoring data on the applicable discharge monitoring report in accordance with the Code of Federal Regulations (40 C.F.R. § 122.41(l)(4)), which governs monitoring reports under the National Pollutant Discharge Elimination System (NPDES). The monitoring must be conducted in accordance with either the final method adopted by the U.S. Environmental Protection Agency (EPA) under 40 C.F.R. Part 136 (the federal Clean Water Act (CWA)) or, if a final method has not yet been adopted, EPA’s Draft Method 1633 (*i.e.*, EPA’s draft method for the analysis of PFAS in aqueous, solid, biosolids, and tissue sample by liquid chromatography/mass spectrometry). At a minimum, the testing must include each of the 40 “PFAS” parameters detectable by Draft Method 1633. “PFAS” means per- and polyfluoroalkyl substances.

Fiscal Summary

State Effect: General fund expenditures for the Maryland Department of the Environment (MDE) increase significantly (likely by more than \$500,000) in FY 2024, and potentially in future years, as discussed below. State expenditures (multiple fund types) also increase, likely minimally, beginning in FY 2024, for State agencies that own/operate POTWs. State revenues are not directly affected.

Local Effect: Local expenditures increase beginning in FY 2024 for local governments that own/operate POTWs. Local revenues are not affected.

Small Business Effect: Potential meaningful.

Analysis

Current Law:

Federal Clean Water Act and the National Pollutant Discharge Elimination System

CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States. NPDES, a component of CWA, is a permit program that addresses water pollution by regulating point sources that discharge pollutants to U.S. waters. In Maryland, EPA delegates authority to issue NPDES permits to MDE.

According to Cornell Law School's Legal Information Institute, POTW means a treatment works, as that term is defined by section 112(5) of CWA, which is owned by a municipality, a state, an intermunicipal or interstate agency, or any department, agency, or instrumentality of the federal government. This definition includes any intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment. The wastewater treated by these facilities is generated by industrial, commercial, and domestic sources.

Federal regulations (40 C.F.R. § 122.41) specify conditions applicable to all NPDES permits which must be incorporated into the permit, either expressly or by reference. Further, the permittee must comply with all permit conditions; any noncompliance constitutes a violation of CWA.

State Permitting for Wastewater Discharges

MDE's Water and Science Administration and Land and Materials Administration issue discharge permits to protect Maryland's water resources by controlling industrial and municipal wastewater discharges. Surface water discharges are regulated through combined State and federal permits under NPDES. Groundwater discharges are regulated through State-issued groundwater discharge permits.

Statute explicitly authorizes MDE, by rule, regulation, order, permit, or otherwise, to require the owner or operator of any source of a discharge of pollutants or of any source that is an industrial user of a publicly owned treatment works, to (1) keep records; (2) make reports; (3) install, calibrate, use, and maintain monitoring equipment or methods, including where appropriate, biological monitoring materials; (4) to sample discharges in accordance with the methods, at the locations, at the intervals, and in the manner MDE requires, and (5) to provide MDE with any information MDE reasonably requires regarding the discharge of pollutants into waters of the State or the introduction of pollutants into publicly owned treatment works.

Relevant Recent Federal Action

On December 5, 2022, EPA issued a [memo](#) addressing PFAS discharges in NPDES permits through the pretreatment and monitoring programs. The memo also provides guidance for addressing sewage sludge PFAS contamination. The memo recommends that states use the most current sampling and analysis methods in state NPDES programs to identify known or suspected sources of PFAS and to take actions using pretreatment and permitting authorities, such as imposing technology-based limits on sources of PFAS discharges.

State/Local Effect:

Maryland Department of the Environment Administrative Costs

MDE advises that to implement the enhanced monitoring requirements under the bill, it needs to modify the NPDES discharge permits for all POTWs. This change is considered a “major modification” to current NPDES permits, and MDE must conduct full public notice and comment periods for each affected permit. MDE also notes that to the extent that EPA permanently adopts these PFAS testing requirements as part of the NPDES program, the affected State NPDES permits would need to be amended, but that the changes would be incorporated within the five-year permit cycle.

Thus, MDE advises that to implement the bill in a timely manner, general fund expenditures increase by approximately \$864,000 in fiscal 2024 and by at least \$1.0 million annually thereafter to hire 12 natural resources planners and 2 administrative specialists to incorporate the bill’s monitoring requirements into existing permits. MDE notes that its current permit writing staff is fully subscribed implementing recent legislation (Chapter 22 of 2022) that requires the department to clear the backlog of administratively extended discharge permits.

The Department of Legislative Services (DLS) concurs that the bill establishes significant new responsibilities for MDE but expects that most of the workload stemming from the bill likely occurs in the first few years of implementation. MDE was unable to respond to a follow-up question from DLS regarding whether contractual staff or a consulting firm could be hired to implement the changes instead. Without additional information from MDE, DLS is unable to provide a specific estimate of the increase in costs for MDE. Even so, general fund expenditures increase significantly, likely by more than \$500,000 in the first year, for MDE to make changes to affected NPDES permits. Depending on how quickly the work can be completed, costs likely continue in the out-years. Once the initial changes to the NPDES permits are made, however, it is assumed that MDE can implement the bill with existing resources.

Effect on Owners and Operators of Publicly Owned Treatment Works

Beginning in fiscal 2024, expenditures for owners/operators of POTWs (which could include State agencies and local governments) increase to conduct the required additional PFAS testing. MDE notes that there are 294 POTWs in the State. MDE advises that under the required monitoring, each POTW needs to take at least three samples on a quarterly basis, and that each test sample costs between \$300 and \$400, depending on the laboratory used. Based on those figures, costs for each POTW increase by at least \$3,600 to \$4,800 annually. Actual impacts for individual State agencies and local governments depend on several factors, including the availability of local testing laboratories, the number of affected facilities each jurisdiction owns, and the size of the affected facilities.

For example, Baltimore County advises that it operates one affected facility and that costs to implement the additional testing under the bill are minimal. Charles County estimates that its expenditures increase by approximately \$30,000 annually to take an additional 85 samples annually under the bill.

The Maryland Environmental Service notes that very few firms are currently capable of providing the laboratory services required under the bill. Garrett County also advises that there are very few local testing laboratories that are able to conduct the testing, and that costs to purchase the requisite equipment to conduct testing in house are between \$200,000 to \$300,000.

Small Business Effect: For water quality testing laboratories that are small businesses, the bill could potentially result in a meaningful increase in business.

Additional Information

Prior Introductions: Similar legislation has not been introduced within the last three years.

Designated Cross File: HB 499 (Delegate Love) - Environment and Transportation.

Information Source(s): Maryland Environmental Service; Baltimore, Charles, Garrett, and Howard counties; City of Laurel; Maryland Department of the Environment; Department of Public Safety and Correctional Services; U.S. Environmental Protection Agency; Cornell Law Legal Information Institute; Department of Legislative Services

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km/lgc

Analysis by: Kathleen P. Kennedy

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