

Department of Legislative Services
Maryland General Assembly
2022 Session

FISCAL AND POLICY NOTE
First Reader

Senate Bill 302 (Senator Lam)
Education, Health, and Environmental Affairs

Legionnaires' Disease Prevention Act

This bill requires the Maryland Department of the Environment (MDE) to adopt regulations that require an owner or operator of a public building to establish and implement a water management program to prevent the growth and spread of *Legionella pneumophila* in a “building water system” to reduce the risk of Legionnaires’ disease. Among other things, the regulations must (1) require validation testing and sampling of water; (2) be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 188 (Legionellosis: Risk Management for Building Water Systems); and (3) require public building owners and operators to retain a copy of the water management program developed under the bill and copies of any water testing and sampling results, as specified.

Fiscal Summary

State Effect: General fund expenditures increase significantly beginning in FY 2023 for MDE to implement the bill. State expenditures (multiple fund types) increase, likely significantly, beginning in FY 2023 for State agencies that own or operate public buildings to develop the required water management programs, conduct water testing, and potentially for remediation. State revenues are not affected.

Local Effect: Potential significant increase in local government expenditures beginning in FY 2023 to implement the bill’s requirements for locally owned public buildings. Local revenues are not affected. **This bill imposes a mandate on a unit of local government.**

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: “Building water system” includes a potable or nonpotable water system in a building.

In addition to being consistent with ASHRAE 188 and requiring validation testing of water to minimize the growth and transmission of *Legionella pneumophila* in a building water system, the regulations must also require the owner or operator of a public building to (1) retain copies of any sampling results and plans developed pursuant to the bill for at least three years and to provide the copies to MDE upon request and (2) make the water management program developed pursuant to the bill available for inspection on request of any agency or department with licensing or inspection authority. Finally, in addition to any sampling required pursuant to ASHRAE 188 and the mandatory validation testing, the regulations must require the owner or operator of a public building to conduct *Legionella pneumophila* culture sampling and analysis of the building water system at a frequency determined by MDE or upon an MDE determination that (1) one or more cases of Legionnaires’ disease are, or may be, associated with the public building or (2) sampling and analysis are required to satisfy other conditions specified in regulations.

Current Law: State statute is silent regarding Legionnaires’ disease and the *Legionella pneumophila* bacterium. Further, according to MDE, the U.S. Environmental Protection Agency (EPA) does not regulate Legionnaires’ disease under the federal Safe Drinking Water Act (SDWA). EPA recently issued a final rulemaking decision not to include *Legionella pneumophila* in the revised Unregulated Contaminant Monitoring Rule (UCMR 5) for Public Water Systems. EPA concluded the expense of the considered monitoring is not warranted given the limited utility of the data. However, EPA is currently examining opportunities to enhance protection against *Legionella pneumophila* through revisions to the suite of Microbial and Disinfection Byproduct rules.

Regulations for the Maryland Department of Health establish mandatory reporting for any cases of legionellosis (a respiratory disease caused by the *Legionella* bacteria). Healthcare providers and laboratories must report any cases immediately.

State/Local Expenditures:

Maryland Department of the Environment – Administrative Costs

MDE estimates that general fund expenditures for the department increase by at least \$1.2 million annually beginning in fiscal 2023 to hire 17 new staff to (1) develop appropriate standards and promulgate the required regulations; (2) develop protocol (including certification and training) for water testing laboratories in the State to assist in developing capacity to handle the increase in water testing for *Legionella* in the State;

(3) develop a method to receive and organize information and data received from regulated entities; (4) provide oversight for compliance; (5) address remediation actions; and (6) conduct baseline and routine sampling for *Legionella*. MDE advises that very few laboratories in Maryland have the capability to analyze for *Legionella* and generally only test for *Legionella* in emergency conditions. Thus, expanded training and certification for laboratories in the State to handle the mandatory water sampling and testing are necessary under the bill.

MDE further advises that since SDWA does not require sampling for *Legionella* in drinking water, MDE does not currently have any baseline model, plan, or program in place related to monitor *Legionella*. However, MDE does provide oversight if a property elects to install a secondary disinfection treatment system. If a property owner installs a secondary disinfection treatment system, MDE requires a design review process and regulates that property as a consecutive water system because the treatment is applied to the drinking water. MDE notes that it is aware of 29 buildings in the State that voluntarily add treatment specifically for *Legionella* either preemptively or because of a confirmed waterborne outbreak. To the extent that more buildings install additional treatment for *Legionella* pursuant to a new water management program under the bill, MDE's workload increases further to conduct initial design review; oversight of routine monitoring and reporting for bacteria, disinfection byproducts, and lead/copper in the premise plumbing; routine sanitary surveys and other site visits; and reviewing monthly operating reports.

The Department of Legislative Services (DLS) is unable to independently verify MDE's anticipated costs without actual experience under the bill. DLS further notes that since the bill does not define "public building," it is difficult to assess the scope of the bill as it is unclear whether the bill applies to publicly owned buildings and/or privately owned buildings that are accessible to and routinely used by the public. Accordingly, a reliable estimate of MDE's increase in costs cannot be made at this time. Even so, it is anticipated that general fund expenditures increase significantly for MDE beginning in fiscal 2023.

DLS notes that although MDE delegates oversight authority of transient water systems to local health departments, it is assumed that MDE retains the primary implementation role under the bill. MDE advises that recently, eight local health departments returned oversight of transient water systems back to MDE due to limited availability of resources.

State and Local Expenditures – as Building Owners and Operators

State and local expenditures (multiple fund types) increase, potentially significantly, beginning in fiscal 2023 to (1) develop a water management program to prevent the growth and spread of *Legionella pneumophila* in a building water system to reduce the risk of Legionnaires' disease; (2) conduct validation testing of water and any additional sampling required; and (3) conduct any additional follow-up testing and/or remediation as necessary,

depending on the regulations developed under the bill. Ultimately, the water testing and sampling costs depend on the standards developed under MDE's regulations. Costs further vary depending on the size and number of affected buildings and whether any current water management programs already include sufficient testing for *Legionella pneumophila*. However, for some entities, particularly agencies and local governments that own and operate several buildings, these costs could be significant. A limited survey of State and local government agencies gleaned the following information:

- The State Highway Administration estimates that special fund expenditures to develop a water management program total \$100,000 annually and that sampling costs total (conservatively) \$20,000 annually.
- The Motor Vehicle Administration advises that it has established and implemented a water management program for its buildings to prevent the growth and spread of *Legionella pneumophila* and anticipates that it already complies with the bill's requirements.
- The Maryland Transportation Authority estimates that on average, costs to implement the bill are \$45,000 per facility (based on quarterly testing) and that nonbudgeted expenditures increase by \$500,000 per year.
- The Department of Natural Resources (DNR) estimates that although actual costs cannot be reliably estimated, expenditures likely increase significantly because DNR maintains more than 1,900 buildings. Creating an inventory of structures to be tested, developing a water management plan for the buildings, and coordinating and conducting testing, filing all documents, and responding as necessary to any issues significantly increase the department's workload and require hiring additional staff.
- Baltimore City Community College estimates that costs to conduct the required testing are \$175 per test for cooling towers and \$225 for all interior touch points and that contractual costs to develop a water management program are approximately \$5,000 per building.
- St. Mary's College of Maryland estimates that costs increase by \$5,000 in fiscal 2023 to develop a water management program and by approximately \$1,000 annually thereafter for testing.

- The Maryland-National Capital Park and Planning Commission (M-NCPPC) advises that it currently tests all Washington Suburban Sanitary Commission-fed buildings and water fountains annually for lead only. Well-fed buildings are tested and treated for both lead and certain bacteria. M-NCPPC estimates that costs to test all buildings pursuant to the bill total \$20,000.
- St. Mary's Public Schools estimates that expenditures increase by at least \$170,920 annually beginning in fiscal 2023 to hire staff to conduct the additional testing, collect and retain the required records, and ensure that monitoring requirements are met in an estimated 24 facilities.

Small Business Effect: Because the bill does not define “public building,” it is unclear whether the bill’s requirements affect any privately owned and/or operated small businesses that serve or are accessible to the public. To the extent that privately owned buildings are subject to the bill’s requirements, costs for affected small businesses increase similarly to the impact described above for State agencies and local governments to (1) develop water management programs and (2) conduct water testing and any remediation that may be required.

On the other hand, the bill may result in an increase in the demand for services of small businesses that provide related services such as water testing/sampling, analysis, and/or water management program development.

Additional Comments: To the extent that privately owned public buildings are affected under the bill, nonpublic schools also incur additional costs to implement the bill’s water management program and testing requirements.

Additional Information

Prior Introductions: None.

Designated Cross File: HB 248 (Delegate Stewart) - Environment and Transportation.

Information Source(s): Anne Arundel, Baltimore, Caroline, Garrett, Howard, Montgomery, and Prince George’s counties; Maryland Association of Counties; Maryland Technology Development Corporation; Maryland Environmental Service; Maryland-National Capital Park and Planning Commission; Washington Suburban Sanitary Commission; cities of Greenbelt and Laurel; Office of the Attorney General; Comptroller’s Office; Governor’s Office; Secretary of State; Department of State Police; Department of Public Safety and Correctional Services; Maryland State Treasurer’s Office; Judiciary (Administrative Office of the Courts); Baltimore City Community College;

Maryland Department of Health; St. Mary's College of Maryland; Department of Natural Resources; Department of Budget and Management; Department of Juvenile Services; Maryland Department of the Environment; Department of General Services; Maryland Department of Transportation; Maryland State Archives; State Department of Assessments and Taxation; Maryland Energy Administration; Maryland State Lottery and Gaming Control Agency; Public Service Commission; Anne Arundel County Public Schools; Baltimore City Public Schools; St. Mary's County Public Schools; Talbot County Public Schools; Maryland Independent College and University Association; Department of Legislative Services

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