

Department of Legislative Services  
Maryland General Assembly  
2020 Session

FISCAL AND POLICY NOTE  
First Reader

Senate Bill 371 (Senator Carter, *et al.*)  
Education, Health, and Environmental Affairs

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Environment - Drinking Water Outlets in School Buildings - Testing for Elevated  
Level of Lead

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This bill (1) redefines “elevated level of lead” to mean a lead concentration in drinking water that exceeds five parts per billion (ppb) for the purposes of required lead water testing and remedial measures in public and nonpublic schools and (2) makes conforming changes to existing notice and remediation requirements. The bill also specifies that regulations governing the periodic testing for the presence of lead in each drinking water outlet located in public and nonpublic schools must require periodic testing to be conducted at least once every 18 months. **The bill takes effect July 1, 2020.**

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Fiscal Summary

**State Effect:** The Maryland Department of the Environment (MDE) can likely implement the bill with currently planned staff levels, as discussed below. Special fund expenditures from the Healthy School Facility Fund may increase beginning in FY 2021 for grants to assist local school system lead remediation projects. Revenues are not affected.

**Local Effect:** Local expenditures increase, likely significantly, beginning in FY 2021 for additional water testing and remediation. Local grant revenues may increase to offset a portion of these costs. **The bill imposes a mandate on a unit of local government.**

**Small Business Effect:** Potential meaningful.

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## Analysis

### Current Law:

#### *Testing for Lead in Drinking Water Outlets in Maryland Schools*

Chapter 386 of 2017 required MDE, in consultation with the Maryland State Department of Education (MSDE), the Department of General Services, and Maryland Occupational Safety and Health, to adopt regulations to require periodic testing for the presence of lead in each “drinking water outlet” located in a public or nonpublic school building. Chapter 386 also established reporting requirements, which were amended pursuant to Chapter 557 of 2019, to require additional reporting for samples that indicate a concentration of lead above five ppb but less than the standard for an “elevated level of lead.”

MDE promulgated the required regulations, which became effective April 9, 2018. The first round of sampling required all school buildings serving students in prekindergarten through grade 5 and school buildings built before 1988 to complete lead testing by July 1, 2018. Every sample result must be reported to MDE, MSDE, and the appropriate local health department within 30 days after analysis. Schools must conduct lead monitoring on every drinking water outlet every three years, unless a waiver is granted, and lead monitoring must also be conducted within one year of substantive plumbing upgrades or renovations. MDE notes that this required frequency of testing is more stringent than related federal standards.

“Elevated level of lead” means a lead concentration in drinking water that exceeds the standard recommended by the U.S. Environmental Protection Agency (EPA) technical guidance. “Technical guidance” means the most recent technical guidance issued by EPA for reducing lead in drinking water in schools, including *3Ts for Reducing Lead in Drinking Water in Schools (2006)* and any subsequent technical guidance issued by EPA. EPA updated the 2006 version of the Training, Testing, and Taking action approach (*3Ts*) manual in 2018, which is available [online](#). Regulations establish that “elevated level of lead” means a lead concentration in drinking water that exceeds the concentration of 20 ppb. However, Chapter 557 of 2019 expressed the intent of the General Assembly that schools work proactively to reduce the lead concentration in drinking water outlets to a level below 5 ppb, and that specified funds be made available for this purpose.

#### *Initial Testing Results*

According to MDE’s [website](#), as of January 29, 2020, MDE has received a total of 56,387 first-draw lead sample results from 21 public school systems, 215 nonpublic schools, and 5 charter schools. Of this number, 2,375 samples (4.2%) had an elevated level

of lead (greater than 20 ppb). Of the samples that had an elevated level of lead, 1,087 (45.8%) were from drinking water outlets and 1,264 (53.2%) were from nonconsumption outlets. According to MDE, 268 schools have lead water concentration results between 5 ppb and 20 ppb from 3,865 affected consumption outlets.

### *The Healthy School Facility Fund*

Chapter 557 of 2019 required the Interagency Commission on School Construction (IAC), in consultation with MDE, to establish application procedures for school systems to request funds from the Healthy School Facility Fund to assist with the costs of implementing remedial measures to address the presence of lead in drinking water outlets in schools. IAC has developed the required procedures, which are available on its [website](#). Current procedures establish funding eligibility for consumption outlets that test above 5 ppb. However, outlets with lead water levels between 5 ppb and 20 ppb are not considered immediate threats to safety and are prioritized below remediation projects for consumption outlets with lead water levels above 20 ppb and other significant facilities issues, such as heating, ventilation, and air conditioning, and mold problems. IAC advises that, in fiscal 2020, the commission allocated slightly less than \$24 million to projects that were considered immediate risk and \$6 million for nonimmediate risk projects. The nonimmediate risk projects included \$84,000 to fund lead remediation projects below the current law 20 ppb elevated lead level.

### **State Expenditures:**

#### *Administrative Costs*

The fiscal and policy notes for House Bill 270 (Chapter 386) of 2017 and House Bill 1253 (Chapter 557) of 2019 estimated that MDE needed to hire seven full-time permanent employees to fully implement the required lead water testing program in schools. These estimates factored in the General Assembly's intention that the lead concentration in drinking water outlets be reduced to a level below 5 ppb. MDE advises that the department has hired three full-time employees and is working to obtain four additional positions. Thus, MDE estimates, and the Department of Legislative Services concurs, that MDE can implement the bill with the seven employees currently planned and estimated previously. However, to the extent that MDE is unable to hire all of these employees, additional staff are necessary.

MSDE can continue to consult with MDE and receive testing results using existing budgeted staff and resources.

## *Healthy School Facility Fund Expenditures*

Depending on available funding, special fund grant expenditures from the Healthy School Facility Fund increase beginning in fiscal 2021 to assist with the costs of remedial measures to address the presence of lead concentrations above 5 ppb in drinking water outlets in schools. Actual expenditures depend on the number of affected outlets and how schools choose to remediate the issue. Remediation measures can range from providing bottled water, to installing bottle refill stations, replacing just the affected outlets, or replacing the plumbing for an entire school building.

MDE estimates that the cost to replace affected outlets ranges from \$600 to \$1,500 per outlet. Based on initial testing results, 3,865 outlets have lead water concentrations between 5 ppb and 20 ppb. Thus, remediation costs to replace the outlets alone could range from \$2.3 million to \$5.8 million. IAC estimates that the cost to fully remediate affected schools (beyond merely replacing outlets) likely costs between \$10 million and \$30 million.

**Local Fiscal Effect:** Local expenditures increase, potentially significantly, beginning in fiscal 2021 to pay for (1) additional testing every 18 months and additional follow-up sampling and testing in response to the new drinking water standard for lead under the bill and (2) any necessary remedial actions to address findings of lead above five ppb. Local school systems pay for the testing and remedial actions under the current program. Although costs will vary depending on the lead levels in a school's drinking water outlets, the number of outlets, and the status of a school's drinking water system, the costs incurred by local school systems under the bill could be significant.

For example St. Mary's County Public Schools estimates that the bill results in additional costs of between \$210,900 and \$230,000 annually to hire additional employees to test outlets more frequently and conduct remediation.

Anne Arundel County Public Schools estimates that, based on the county's infrastructure footprint and current lead level thresholds, county expenditures increase by between approximately \$2.0 million and \$3.0 million annually.

Frederick County Public Schools estimates that contractual costs for the county increase by between \$64,000 and \$79,000 annually for sampling costs and remediation.

To the extent that a local school system receives grant funding, these costs are mitigated somewhat. However, it is assumed that the total expenditures incurred by local school systems likely exceed the total grant revenues available.

**Small Business Effect:** Small businesses in the plumbing and construction industries and small private laboratories may benefit from an increase in the demand for their services.

**Additional Comments:** Nonpublic schools also incur additional costs to conduct additional sampling and testing on drinking water outlets and to remediate drinking water outlets that are identified as having a lead water concentration above five ppb. To the extent that nonpublic schools receive grant funding under the bill, those costs are mitigated to some extent.

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### **Additional Information**

**Prior Introductions:** None.

**Designated Cross File:** HB 457 (Delegate Rosenberg) - Environment and Transportation.

**Information Source(s):** Anne Arundel County Public Schools; Frederick County Public Schools; St. Mary's County Public Schools; Maryland Association of Counties; Maryland State Department of Education; Maryland Department of the Environment; Department of General Services; Maryland Department of Health; Interagency Commission on School Construction; U.S. Environmental Protection Agency; Department of Legislative Services

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