

**Department of Legislative Services**  
 Maryland General Assembly  
 2019 Session

**FISCAL AND POLICY NOTE**  
**First Reader**

Senate Bill 481 (Senator McCray)  
 Education, Health, and Environmental Affairs

**Environment - Drinking Water Outlets in School Buildings - Elevated Level of Lead and Grant Program**

This bill 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 in the State. The bill also requires the Maryland Department of the Environment (MDE), in consultation with the Maryland State Department of Education (MSDE), to establish and administer a grant program to provide grants to local school systems to assist with specified remedial costs. **The bill takes effect June 1, 2019.**

**Fiscal Summary**

**State Effect:** General fund expenditures increase by *at least* \$1.8 million in FY 2020. Future year expenditures reflect ongoing costs. Revenues are not affected.

(in dollars)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	1,755,300	1,763,300	1,771,900	1,781,000	1,790,500
Net Effect	(\$1,755,300)	(\$1,763,300)	(\$1,771,900)	(\$1,781,000)	(\$1,790,500)

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease*

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

**Small Business Effect:** Potential meaningful.

## Analysis

**Bill Summary:** The bill's new definition of "elevated level of lead" must be construed to apply retroactively, and must be applied to and interpreted to affect any regulation adopted pursuant to the drinking water outlet testing and remediation program that requires follow-up procedures for test results that indicate an elevated level of lead in any drinking water outlet in an occupied public or nonpublic school building regardless of whether the test was conducted before or after the bill's effective date.

The required grant program must provide grants to local school systems to assist with the costs associated with implementing remedial measures to (1) address any findings of elevated levels of lead in drinking water outlets in school buildings or (2) upgrade drinking water systems in school buildings that do not have functioning drinking water outlets.

MDE, in consultation with MSDE must (1) establish application procedures for the grant program; (2) require each applicant to include a remedial measure implementation plan (including costs associated with the plan); (3) award grants to each local school system that applies for a grant and demonstrates that the local school system has completed comprehensive testing for the presence of lead in drink water outlets in school buildings, as specified; (4) prioritize applications that demonstrate the highest level of need and the highest number of drinking water outlets that must be remediated; and (5) after priority is given as specified above, prioritize applications that propose the most cost-effective remedial measures, with preference given to proposals for remedial measures that require minimal upkeep, including the installation of water filling stations.

If MDE or MSDE receives any federal funding to address the presence of lead in drinking water outlets in school buildings, that federal funding must be made available to award grants in accordance with the new grant program. In addition, the Governor may include an appropriation for the grant program in the annual budget bill.

MDE may adopt regulations to implement the grant program in consultation with MSDE.

**Current Law/Background:** Chapter 386 of 2017 required MDE, in consultation with MSDE, the Department of General Services, and the Maryland Occupational Safety and Health, to adopt regulations to require periodic testing for the presence of lead in each "drinking water outlet" located in an occupied public or nonpublic school building. Among other things, the regulations must (1) require initial testing to be conducted by July 1, 2018; (2) phase in the testing in a certain way; and (3) establish specific follow-up actions for positive test results. A waiver from the required testing must be granted under certain conditions. Before adopting the required regulations, MDE must gather certain information and convene a stakeholder group. Chapter 386 also established reporting requirements.

“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. Regulations establish that “elevated level of lead” means a lead concentration in drinking water that exceeds the concentration of 20 ppb.

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. According to MDE’s website, MDE has received 710 applications for a 12-month deferral from initial testing and, in consultation with MSDE, has granted approval for such a deferral to 705 applications. Of the remaining 5 applications, 4 did not meet the requirements for approval and 1 is under review. MDE has received 115 applications for three-year deferrals in initial testing; 88 of these did not meet the requirements for approval, and the remaining 27 are under review. MDE has received 130 applications for waivers from testing; 114 did not meet the strict requirements for approval, and the remaining 16 are under review.

**State Expenditures:** General fund expenditures increase by *at least* \$1,755,330 in fiscal 2020 to provide a minimum amount of funding for the grant program and for MDE’s administrative costs to administer the grant program and implement changes related to the definition of “elevated level of lead.” This analysis assumes there is no effect in fiscal 2019.

#### *Grant Program Funding*

General fund expenditures increase by at least \$1.5 million annually beginning in fiscal 2020. The estimate reflects the minimum amount of funding needed to ensure a viable grant program for eligible schools and is based on a portion of the anticipated costs likely to be incurred by schools under the bill.

MDE advises that parts to replace an outlet cost between \$600 and \$1,500 (based on information from Denver, Colorado). There are approximately 3,000 affected schools in the State, and there is an average of 70 samples, which means an average of 70 drinking water outlets per school. At the current action rate for lead (20 ppb), there has been an average failure rate of 3.8%. At the current failure rate, costs increase by between \$4.7 million and \$11.7 million to replace the outlets alone.

To replace outlets using the new action rate under the bill (five ppb), costs are significantly higher. MDE estimates that the number of failing outlets increases by 400% under the bill’s definition of “elevated level of lead.” Using MDE’s estimate that the failure rate increases

by 400% under the bill, costs to replace the outlets alone range from \$19.2 million to \$47.9 million.

Although the specific remedial measures schools must take under the bill are unknown, the grant program likely only covers a portion of the costs incurred by school systems under the bill.

This analysis does not reflect any potential federal funds that might be obtained for the grant program.

### *Administrative Expenditures*

In addition to the general funds needed to provide grants, general fund expenditures for MDE increase by \$255,330 in fiscal 2020, which accounts for the bill's October 1, 2019 effective date. This estimate reflects the cost of hiring four full-time permanent staff: two administrative officers and two regulatory compliance engineers to (1) establish application procedures and award grants; (2) identify any available outside funding, including federal funding; (3) track additional testing required pursuant to the new definition of elevated level of lead; (4) analyze and reanalyze data collected (both past and present); (5) monitor and track remedial actions taken by schools to address elevated lead levels at additional schools; (6) approve plans and specifications for schools that upgrade their plumbing systems; and (7) provide project management for any remedial work identified. It includes salaries, fringe benefits, one-time start-up costs (including the purchase of a State vehicle), and ongoing operating expenses. The information and assumptions used in calculating the estimate are stated below:

- the grant program is complex and requires significant oversight to review applications and ensure prioritization and funding is provided pursuant to the bill's requirements;
- the grant program requires continuing oversight for ongoing remedial work; and
- the change to the definition of "elevated level of lead" results in an approximate 400% increase in the number of drinking water outlets that need to be addressed, which significantly increases the administrative workload for MDE.

Positions	4
Salaries and Fringe Benefits	\$191,511
Vehicle Purchase	22,000
Other Operating Expenses	<u>41,819</u>
<b>Total FY 2020 MDE Administrative Costs</b>	<b>\$255,330</b>

Future year administrative expenditures reflect full salaries with annual increases and employee turnover and ongoing operating expenses.

MSDE can consult with MDE using existing budgeted resources and staff.

**Local Fiscal Impact:** Local expenditures increase, potentially significantly, beginning in fiscal 2020 to pay for (1) additional follow-up sampling and testing in response to the new 5 ppb elevated level of lead established under the bill and (2) any necessary remedial actions to address findings of elevated lead levels. MDE advises that 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 is likely significant.

For example, Baltimore City currently provides students with water bottles at a cost of approximately \$500,000 annually. The city estimates that the bill results in additional costs of between \$150,000 and \$182,000 annually for testing, replacing failed outlets, data tracking from the increased water sampling, and preventative maintenance. Although plumbing upgrades are not necessarily required, the city estimates that purchasing and installing water fountains and conducting plumbing upgrades to provide drinking water to students will cost \$107.9 million.

Anne Arundel County Public Schools estimates that the bill increases operating and capital budget expenses by between \$1.5 million and \$2.0 million.

To the extent that a local school system receives grant funding under the bill, these costs are mitigated somewhat. However, it is assumed that the total expenditures incurred by local school systems likely exceed the total grant revenues received under the bill (unless other significant sources of funding for the grant program are identified).

**Small Business Impact:** 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 an elevated level of lead. To the extent that nonpublic schools receive grant funding under the bill, those costs are mitigated to some extent.

---

## Additional Information

**Prior Introductions:** None.

**Cross File:** HB 1253 (Delegate Solomon, *et al.*) - Environment and Transportation.

**Information Source(s):** Maryland Association of Counties; Maryland State Department of Education; Maryland Department of the Environment; Baltimore City Public Schools; Baltimore County Public Schools; Anne Arundel County Public Schools; Montgomery County Public Schools; Talbot County Public Schools; Department of Legislative Services

**Fiscal Note History:** First Reader - February 26, 2019  
mag/jc

---

Analysis by: Kathleen P. Kennedy

Direct Inquiries to:

(410) 946-5510

(301) 970-5510