## BALTIMORE CITY PUBLIC SCHOOLS

Catherine E. Pugh Mayor, City of Baltimore Cheryl A. Casciani Chair, Baltimore City Board of School Commissioners Dr. Sonja Brookins Santelises Chief Executive Officer

September 10, 2018

The Honorable Bernard C. "Jack" Young President, Baltimore City Council City Hall, Room 400 100 N. Holliday Street Baltimore, Maryland 21202

Re: City Council Resolution 18-0095R

Dear Council President Young:

On August 6, 2018 the Baltimore City Council introduced the above-captioned bill (Resolution) requesting information about why the water fountains in Baltimore City Public Schools (City Schools) are not being used, about the costs to the school system for the use of bottled water since 2007, about the results of water testing in the schools since 2007, and about any plans to restore school water fountains and other water use equipment to safe use.

Events leading up to the 2007 decision to use bottled water throughout the district, and subsequent efforts to explore alternate technological solutions to the problem of lead content in drinking water, are described in the following timeline:

• 2003: Lead Remediation Program

Baltimore City Health Commissioner Dr. Peter Beilenson ordered City Schools to shut off water fountains due to lead content. City Schools subsequently implemented a Lead Remediation Program with the goal of eliminating lead in drinking water by retrofitting new plumbing components, resampling and repeated retesting of drinking outlets.

2007: Bottled Water Districtwide

Based on continuing problems with high lead levels, it was apparent that the Lead Remediation Program was not effective. In November 2007, City Schools CEO Dr. Andres Alonso – with the support of Baltimore City Health Commissioner Dr. Joshua Sharfstein – discontinued efforts to eliminate lead from drinking water and implemented systemwide use of bottled water.

Over the past 11 years, the district's cost for bottled water and cups has averaged approximately \$500,000 annually. All water bottles (approximately 150,000 bottles annually) are recycled by the vendor.

## • 2009-2018: Point of Entry Filtration (POE):

Point of entry water filtration connects directly to the school's main water line to filter contaminants in incoming water. As part of the Capital Improvement Program (CIP), City Schools installed Point of Entry (POE) water filtration in six existing schools (Waverly Elementary; Violetville Elementary/Middle; Highlandtown Elementary/Middle; Leith Walk Elementary/Middle; Dunbar High School; Carver Vo-Tech High School). At these schools only drinking water fountains and kitchens are connected to the point-of-entry system.

Installing a POE filtration system in an existing building has proven to be expensive. While the expense is dependent upon a number of variables, in a medium-size school the installation cost could be more than \$1,000,000. However, as part of the 21<sup>st</sup> Century School Buildings plan, City Schools has incorporated POE filtration in the design process for the first nine schools completed in 2017-18. This practice is expected to continue throughout the 23-28 schools envisioned under the program. All filtration systems installed in the 21<sup>st</sup> Century Schools plan filter the entire building.

## • 2017-2019: Point of Use Filtration (POU):

Point-of-use systems filter water at the "point" where water is being used and is installed at a single water connection, typically under the sink in the kitchen or underneath individual water fountains. Starting with School Year 2017-18 City Schools implemented a POU water filtration pilot project at two schools (Yorkwood Elementary; Lakeland Elementary/Middle) and in the district office building at 200 E. North Avenue.

The POU pilot program is currently planned to run for two years, in order to ascertain filter expense/longevity, system durability, maintenance expense and security features (water discontinues when filter change is needed). Please note: Bill 18-0095R misstates the expense of the pilot program as \$3.3 million. The expense of the pilot program, including both schools and the district office, is in fact \$91,350 for the 2-year period of the pilot. As stated in the July 2017 Baltimore Sun article, \$3.3 million was the estimated expense (at that time) for rolling out a POU program across the district, not the cost of the pilot contract.

Based on actual expenses incurred in the first year of the pilot, the revised estimate to install POU filtration systems in the remaining 126 school buildings districtwide (excludes charter school buildings and planned 21st Century buildings) is approximately \$5 million, due to higher than anticipated labor costs for installation and maintenance. In addition to this expense, the annual cost of filters across all POU schools would be approximately \$500,000 (which is roughly equivalent to the current annual cost for bottled water and cups). Since the estimated life span of the POU equipment is 10 years, we can also anticipate additional replacement costs for the systems over time. The installation and filtration costs are based on 1,044 POU filtration systems at a ratio of one dispenser per 100 individuals (students and staff), and 127 kitchens. Currently, bottled water dispensers are provided at a ratio of one dispenser per 50 students and staff.

## Conclusions/Recommendations:

• The primary factor in any decision related to lead in City Schools drinking water is the health and safety of our students and staff.

- While City Schools is actively testing alternative filtration technologies (POE filtration in new buildings; POU filtration pilot), we recommend a minimum of another full year of onsite testing before making any decisions on alternatives to bottled water. Prior to completing that study, bottled water remains the best option for our schools and students.
- In making a decision, the following issues should be considered:
  - POU filtration raises potential issues around reduced access to water throughout school buildings.
  - O POU systems have the potential for implementation challenges that could pose additional risks. Any switch to such a system would have to ensure strict and consistent monitoring and implementation of filter changing protocols, which could prove challenging across 150+ sites throughout the district. Failure to replace filters on schedule could result in increased exposure to filtered elements such as lead, as well as bacterial contamination.
  - While we are still assessing costs, an initial review of the costs of the POU filtration systems appears to indicate they are significantly higher than bottled water.
- Since we know that bottled water protects our children from lead hazards at reasonable expense, we should take the necessary time to weigh the costs, benefits and risks of alternatives to bottled water.

We have enclosed a letter from Dr. Joshua Sharfstein, formerly Baltimore City Health Commissioner and Secretary of the Maryland Department of Health and Mental Hygiene, explaining his views on alternatives to bottled water in City Schools. Dr. Sharfstein has graciously expressed his willingness to testify further on this issue if requested.

Thank you for including City Schools in this important discussion. The health and safety of our students and staff is our highest priority, and we will be pleased to testify upon request.

Sincerely, Allen Derbene Chen

Alison Perkins-Cohen

Chief of Staff

Enc: Letter from Dr. Joshua M. Sharfstein