

# Montgomery County Public Schools Lead in Drinking Water Testing Report

**Bradley Hills Elementary School  
8701 Hartsdale Ave.  
Bethesda, MD 20817**

**Report Date: November 26, 2024**

## **LEAD IN DRINKING WATER SAMPLE RESULTS SUMMARY**

All Maryland public and nonpublic schools are required to sample all drinking water outlets for the presence of lead pursuant to the Code of Maryland Regulations (COMAR). Montgomery County Public Schools (MCPS) is required to remediate outlets where lead in drinking water concentrations exceed the State Action Level (AL) of 5 parts per billion (ppb). A summary of the lead in water initial samples collected by KCI Technologies Inc. is presented in the table below.

Sampling Date	10/24/2024
# of Outlets Tested	51
# of Outlets $\geq$ 5 ppb	5

## **NEXT STEPS**

If an initial sample exceeds the AL (5 ppb), the outlet will be shut-down within 24 hours, a follow-up sample collected, and a remedial plan of action developed for this outlet. No additional sampling or remedial actions are required for schools where all initial samples are below the AL.

## **HEALTH EFFECTS OF LEAD**

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead is stored in the bones, and it can be released later in life. During pregnancy, the fetus receives lead from the mother's bones, which may affect brain development. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

## **SOURCES OF HUMAN EXPOSURE TO LEAD**

There are many different sources of human exposure to lead. These include lead-based paint, lead-contaminated dust or soil, some plumbing materials, certain types of pottery, pewter, brass outlets, food, cosmetics, exposure in the workplace and from certain hobbies. According to the Environmental Protection Agency (EPA), 10 to 20 percent of a person's potential exposure to lead may come from drinking water, while for an infant consuming formula mixed with lead-containing water this may increase to 40 to 60 percent.

### **TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER:**

1. Run your water to flush out lead: If water hasn't been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
2. Use cold water for cooking and preparing baby formula: Lead from the plumbing dissolves more easily into hot water.

*\*Please note that boiling the water will not reduce lead levels.*

### **ADDITIONAL INFORMATION**

1. For additional information, please contact Brian Mullikin, Environmental Team Leader, at 240.740.2324 or [brian\\_a\\_mullikin@mcpsmd.org](mailto:brian_a_mullikin@mcpsmd.org).
2. For additional information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at [www.epa.gov/lead](http://www.epa.gov/lead).
3. If you are concerned about exposure; contact your local health department or healthcare provider to find out how you can get your child tested for lead.

*Please refer to the attachment(s) for additional water sampling information.*

**Attachment(s)** A – Lead in Water Sample Results Table

**ATTACHMENT A**

**Lead in Water Sample Results Table**

## Sampling Results for Bradley Hills ES

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW11323	In Hallway Adjacent to Classroom 162	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW11325	In Hallway Adjacent to Girls Room 114	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW11326	In Hallway Adjacent to Girls Room 114	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW11327	In Hallway Adjacent to Girls Room 114	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW11330	In Hallway Adjacent to Classroom 134	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW11331	In Hallway Adjacent to Room 145	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW11332	In Hallway Adjacent to Classroom 211	Bottle Filler/Drinking Fountain Combo Unit - Bottle Filler	<1.0	Pass	Testing Complete
LW11544	In Health Room 101 by Office	Faucet, Cold	<1.0	Pass	Testing Complete
LW11545	In Health Room 101B by Office	Faucet, Cold	2.3	Pass	Testing Complete
LW11546	In Work Room 100G by Administration	Faucet, Cold	<1.0	Pass	Testing Complete
LW11549	In Classroom 104	Combination Sink - Fountain - Bubblers	<1.0	Pass	Testing Complete
LW11550	In Classroom 103	Combination Sink - Fountain - Bubblers	2.7	Pass	Testing Complete
LW11552	In Classroom 105	Combination Sink - Fountain - Bubblers	8.3	Fail	Remediation Action Plan
LW11553	In Classroom 108	Combination Sink - Fountain - Bubblers	4.4	Pass	Testing Complete
LW11557	In Classroom 109	Combination Sink - Fountain - Bubblers	8.9	Fail	Remediation Action Plan
LW11565	In Classroom 119	Combination Sink - Fountain - Bubblers	5.3	Fail	Remediation Action Plan
LW11635	In Kitchen 161	Commercial Kitchen Kettle, Cold	<1.0	Pass	Testing Complete
LW11636	In Kitchen 161	Commercial Kitchen Kettle, Cold	<1.0	Pass	Testing Complete
LW11637	In Kitchen 161	Commercial Kitchen Kettle, Cold	1.2	Pass	Testing Complete
LW11638	In Kitchen 161	Faucet, Cold	6.1	Fail	Remediation Action Plan
LW11639	In Hallway Adjacent to Room 162	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW11640	In Hallway Adjacent to Room 162	Bottle Filler/Drinking Fountain Combo Unit - Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW11644	In Classroom 153	Faucet, Cold	<1.0	Pass	Testing Complete
M31457	In Classroom 127	Combination Sink - Fountain - Bubblers	<1.0	Pass	Testing Complete
M31458	In Classroom 124	Combination Sink - Fountain - Bubblers	6.8	Fail	Remediation Action Plan
M31459	In Classroom 130	Combination Sink - Fountain - Bubblers	<1.0	Pass	Testing Complete
M31492	In Classroom 126	Combination Sink - Fountain - Bubblers	<1.0	Pass	Testing Complete
M31494	In Classroom 129	Combination Sink - Fountain - Bubblers	<1.0	Pass	Testing Complete
M31500	In Classroom 131	Combination Sink - Fountain - Bubblers	<1.0	Pass	Testing Complete
M31505	In Classroom 134	Combination Sink - Fountain - Bubblers	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
M31511	In Hallway Adjacent to Classroom 134	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
M31512	In Hallway Adjacent to Classroom 134	Bottle Filler/Drinking Fountain Combo Unit - Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
M31518	In Classroom 138	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31520	In Hallway Outside of Media Center	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
M31521	In Hallway Outside of Media Center	Bubbler	<1.0	Pass	Testing Complete
M31522	In Media Center Office	Faucet, Cold	4.2	Pass	Testing Complete
M31525	In Classroom 121	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31534	In Gym Hallway	Bubbler	<1.0	Pass	Testing Complete
M31535	In Gym Hallway	Bubbler	<1.0	Pass	Testing Complete
M31541	In Classroom 201	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31543	In Classroom 205	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31544	In Classroom 204	Combination Sink - Fountain - Bubbler	1.4	Pass	Testing Complete
M31546	In Classroom 209	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31548	In Classroom 206	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31550	In Hallway Across from Classroom 217	Bottle Filler/Drinking Fountain Combo Unit - Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
M31551	In Hallway Across from Classroom 217	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
M31553	In Classroom 211	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31555	In Classroom 215	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31564	In Classroom 217	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31565	In Classroom 221	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete
M31567	In Classroom 224	Combination Sink - Fountain - Bubbler	<1.0	Pass	Testing Complete

# Montgomery County Public Schools Lead in Drinking Water Testing Report

**Bradley Hills Elementary School  
8701 Hartsdale Avenue  
Bethesda, MD 20817**

**Report Date: February 23<sup>rd</sup>, 2022**

## LEAD IN DRINKING WATER SAMPLE RESULTS SUMMARY

All Maryland public and nonpublic schools are required to sample all drinking water outlets for the presence of lead pursuant to the Code of Maryland Regulations (COMAR). Montgomery County Public Schools (MCPS) is required to remediate outlets where lead in drinking water concentrations exceed the Montgomery County Action Level (AL) of 5 parts per billion (ppb). A summary of the lead in water initial samples collected by SaLUT are presented in the table below.

Sampling Date	12/03/2021
# of Outlets Tested	62
# of Outlets $\geq$ 5 ppb	6

## NEXT STEPS

If an initial sample exceeds the AL (5 ppb), the outlet will be immediately shut-down, a follow-up sample collected, and a remedial plan of action developed for this outlet. No additional sampling or remedial actions are required for schools where all initial samples are below the AL.

## HEALTH EFFECTS OF LEAD

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead is stored in the bones and it can be released later in life. During pregnancy, the fetus receives lead from the mother's bones, which may affect brain development. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

## **SOURCES OF HUMAN EXPOSURE TO LEAD**

There are many different sources of human exposure to lead. These include: lead-based paint, lead-contaminated dust or soil, some plumbing materials, certain types of pottery, pewter, brass fixtures, food, cosmetics, exposure in the work place and from certain hobbies. According to the Environmental Protection Agency (EPA), 10 to 20 percent of a person's potential exposure to lead may come from drinking water, while for an infant consuming formula mixed with lead-containing water this may increase to 40 to 60 percent.

## **TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER:**

1. Run your water to flush out lead: If water hasn't been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
2. Use cold water for cooking and preparing baby formula: Lead from the plumbing dissolves more easily into hot water.

*\*Please note that boiling the water will not reduce lead levels.*

## **ADDITIONAL INFORMATION**

1. For additional information, please contact Brian Mullikin, Environmental Team Leader, at 240.740.2324 or [brian\\_a\\_mullikin@mcpsmd.org](mailto:brian_a_mullikin@mcpsmd.org).
2. For additional information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at [www.epa.gov/lead](http://www.epa.gov/lead).
3. If you are concerned about exposure; contact your local health department or healthcare provider to find out how you can get your child tested for lead.

*Please refer to the attachment(s) for additional water sampling information.*

**Attachment(s)** A – Lead in Water Sample Results Table

**ATTACHMENT A**

**Lead in Water Sample Results Table**



## Sampling Results for Bradley Hills ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
M31525	In art 121	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
M31526	In art 121	Classroom Sink	2.1	Pass	N/A	Testing Complete
LW11547	In classroom 102	Teacher's Lounge Sink	9.1	Fail	<1	Testing Complete
LW11549	In classroom 104	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
LW11548	In classroom 104	Classroom Sink	6.8	Fail	<1	Testing Complete
LW11556	In classroom 107	Classroom Sink	19.8	Fail	<1	Testing Complete
Lw11324	In classroom 109	Classroom Sink	12.2	Fail	1.2	Testing Complete
M31497	In classroom 124	Classroom Sink	<1	Pass	N/A	Testing Complete
M31457	In classroom 127	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
M31489	In classroom 127	Classroom Sink	<1	Pass	N/A	Testing Complete
M31495	In classroom 129	Classroom Sink	<1	Pass	N/A	Testing Complete
M31502	In classroom 130	Classroom Sink	1.6	Pass	N/A	Testing Complete
M31499	In classroom 131	Classroom Sink	<1	Pass	N/A	Testing Complete
M31500	In classroom 131	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
M31501	In classroom 131	Classroom Sink	<1	Pass	N/A	Testing Complete
M31506	In classroom 134	Classroom Sink	<1	Pass	N/A	Testing Complete
M31517	In classroom 138	Classroom Sink	<1	Pass	N/A	Testing Complete
M31518	In classroom 138	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
LW11644	In classroom 153	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M31541	In classroom 201	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
M31540	In classroom 201	Classroom Sink	3.1	Pass	N/A	Testing Complete
M31544	In classroom 204	Classroom Sink	2.1	Pass	N/A	Testing Complete
M31545	In classroom 204	Classroom Sink	2.3	Pass	N/A	Testing Complete
M31542	In classroom 205	Classroom Sink	<1	Pass	N/A	Testing Complete
M31543	In classroom 205	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
M31549	In classroom 206	Classroom Sink	<1	Pass	N/A	Testing Complete
M31548	In classroom 206	Bubbler - Indoor	3.9	Pass	N/A	Testing Complete
M31547	In classroom 209	Classroom Sink	<1	Pass	N/A	Testing Complete
M31546	In classroom 209	Bubbler - Indoor	1.6	Pass	N/A	Testing Complete
M31553	In classroom 211	Bubbler - Indoor	<1	Pass	N/A	Testing Complete

M31552	In classroom 211	Classroom Sink	2.3	Pass	N/A	Testing Complete
M31556	In classroom 215	Classroom Sink	<1	Pass	N/A	Testing Complete
M31555	In classroom 215	Bubbler - Indoor	1.6	Pass	N/A	Testing Complete
M31563	In classroom 217	Classroom Sink	<1	Pass	N/A	Testing Complete
M31564	In classroom 217	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
M31565	In classroom 221	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
M31566	In classroom 221	Classroom Sink	<1	Pass	N/A	Testing Complete
M31568	In classroom 224	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M31567	In classroom 224	Bubbler - Indoor	1.1	Pass	N/A	Testing Complete
LW11330	In hallway adjacent to classroom 134	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11323	In hallway adjacent to classroom 162	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11332	In hallway adjacent to classroom 211	Bottle Filler	<1	Pass	N/A	Testing Complete
M31511	In hallway adjacent to CR 134	Drinking Fountain	<1	Pass	N/A	Testing Complete
M31512	In hallway adjacent to CR 134	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11326	In hallway adjacent to girls room 114	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11331	In hallway adjacent to room 145	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11639	In hallway adjacent to room 162	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11640	In hallway adjacent to room 162	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11559	In hallway next to 114	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11560	In hallway next to 114	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11544	In health room 101 by office	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW11545	In health room 101B by office	Nurses Office Sink	3.7	Pass	N/A	Testing Complete
LW11636	In kitchen 161	Kitchen Sink	1.2	Pass	N/A	Testing Complete
LW11635	In kitchen 161	Kitchen Sink	1.3	Pass	N/A	Testing Complete
LW11637	In kitchen 161	Kitchen Sink	1.7	Pass	N/A	Testing Complete
LW11638	In kitchen 161	Kitchen Sink	3.1	Pass	N/A	Testing Complete
M31569	In music room 223	Classroom Sink	9.2	Fail	<1	Testing Complete
M31492	In office 126	Bubbler - Indoor	<1	Pass	N/A	Testing Complete
M31493	In office 126	Classroom Sink	1.6	Pass	N/A	Testing Complete
M31524	In office 149	Classroom Sink	3.3	Pass	N/A	Testing Complete
LW11546	In work room 100G by administration	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M31522	In work room 145A by media center	Classroom Sink	7.6	Fail	<1	Testing Complete



## Montgomery County Public Schools Lead in Drinking Water Post-Remediation Follow-Up Testing 2019

October 30, 2019

### Executive Summary:

#### Bradley Hills Elementary School

8701 Hartsdale Avenue

Bethesda, Maryland 20817

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/23/2019
# of Outlets Tested:	6
# of Outlets $\geq$ 5 ppb:	5
Low Value (ppb):	2.1
High Value (ppb):	63.9

### Project Status

**Testing Complete:** Post-remediation follow-up testing completed for following rooms:

Classroom 108 - Outlet (LW11553) will be removed from service

Classroom 109 - Outlet (LW11557) will be removed from service

Classroom 118 - Outlet (LW11567) will be removed from service

Work Room Media Center Inside IMC 145A - Outlet (M31522) will be placed back into service

Classroom 150 - Outlet (LW11569) will have signage affixed

Classroom 118 - Outlet (M40947) will be removed from service



October 30, 2019

Mr. Brian Mullikin, MS  
Environmental Team Leader  
Montgomery County Public Schools  
8301 Turkey Thicket Dr., Bldg A, 1st Floor  
Gaithersburg, Maryland 20879

Re: Lead in Water Post-Remediation Follow-up Testing Service

**Location: Bradley Hills Elementary School**

8701 Hartsdale Avenue  
Bethesda, Maryland 20817

Dear Mr. Mullikin:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of the post-remediation follow-up lead in water testing at Bradley Hills Elementary School, located at 8701 Hartsdale Avenue in Bethesda, Maryland 20817.

**SCOPE OF SERVICES**

Six drinking water outlets were remediated at Bradley Hills Elementary School due to initial lead levels that exceeded the lead action level of 5 parts per billion (ppb). KCI Technologies, Inc. conducted lead in water post-remediation follow-up testing in accordance with the Maryland Code of Regulations (COMAR) 26.16.07 - Lead in Drinking Water - Public and Nonpublic Schools.

KCI Technologies, Inc. visited the site on 1/23/2019 to collect post-remediation follow-up samples from 6 drinking water outlets that had been replaced. Samples were submitted to a laboratory for lead in water analysis using current US EPA methodology. The laboratory has been certified by the Maryland Department of the Environment to analyze drinking water for lead.

**RESULTS**

The initial, flush, and post-remediation follow-up results are highlighted in the summary table below:

Barcode ID	Room Number	Location	Notes	Equipment Type	Initial (ppb)	Flush (ppb)	Post-Remediation Follow-up (ppb)	Post-Remediation Follow-up Pass/Fail	Status
LW11553	108	Classroom		Bubbler - Indoor	42.8	6.7	14.8	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service
LW11557	109	Classroom		Bubbler - Indoor	34.9	4.3	18.8	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service
LW11567	118	Classroom		Bubbler - Indoor	35.9	<1.0	42.7	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service
M31522	145A	Work Room Media Center Inside IMC		Faucet	22.3	<1.0	2.1	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW11569	150	Classroom		Faucet	36.1	1.9	6.6	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed
M40947	118	Classroom		Faucet	35	<1.0	63.9	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service

## **DISCUSSION**

Lead is a naturally occurring element that can be harmful to humans when ingested or inhaled, particularly to children under the age of six. Lead can adversely affect the development of children's brain potentially leading to detrimental alterations in intelligence and behavior. Lead has been historically used in plumbing, paint and other building materials. Lead is released into the environment from industrial sources and fuel combustion. Lead may also be found in consumer products (imported candy, medicines, toys, dishes, etc.).

Most lead leaches into drinking water from contact with plumbing components such as faucets and valves made of brass or lead-containing solder. The physical and chemical interaction that occurs between the plumbing and water directly contributes to the amount of lead that is released into the water. Although plumbing components installed prior to the 1990's could contain more lead than newer materials, the amount of lead in the drinking water cannot be predicted by the age of building. The purpose of this regulation is to establish a program to minimize the risk of exposure to lead in drinking water outlets at

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schools. The Environmental Protection Agency (EPA) developed the 3T's (Training, Testing, and Telling) to assist schools in reducing the lead concentrations in their drinking water. More information about 3T's can be found on the EPA website.

Simple steps like keeping your home clean and well-maintained will go a long way in preventing lead exposure. These steps include inspecting and maintaining all painted surfaces to prevent paint deterioration, using only cold water to prepare food and drinks, flushing water outlets used for drinking or food preparation, and cleaning around painted areas where friction can generate dust, such as doors, windows, and drawers. Wipe these areas with a wet sponge or rag to remove paint chips or dust, and wash children's hands, bottles, pacifiers and toys often.

Respectfully Submitted,  
KCI Technologies, Inc.



Kamau McAbee  
MDE Certified Water Sampler #8281KM  
KCI Job #1214634186



## MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

June 28, 2018

**Executive Summary:**  
**Bradley Hills Elementary School**  
8701 Hartsdale Avenue,  
Bethesda, MD 20817

Round of Testing:	Initial
# of Outlets Tested:	86
# of Outlets $\geq$ 20 ppb:	6
Low Value (ppb):	< 1.0
High Value (ppb):	42.8
Follow-Up Testing Required (Samples $\geq$ 20 ppb):	Classroom 108 (42.8 ppb) Classroom 109 (34.9 ppb) Classroom 118 (35.9 ppb and 35.0 ppb) Classroom 150 (36.1 ppb) Media Center Workroom 145A (22.3 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	6

### **Project Status** **Testing Complete: Remediation Plan**

- Classroom 108 – Replace fixture (LW11553), in addition to supply line and valve located under sink
- Classroom 109 – Replace fixture (LW11557), in addition to supply line and valve located under sink
- Classroom 118 – Replace fixture (LW11567), in addition to supply line and valve located under sink
- Classroom 150 – Replace fixtures (LW11569 and M40947), in addition to supply line and valve located under sink
- Media Center Workroom 145A– Replace fixture (M31522), in addition to supply line and valve located under sink
- Classroom 118 – Replace fixture (M40947), in addition to supply line and valve located under sink



June 28, 2018

Mr. Brian Mullikin  
Environmental Team Leader  
Montgomery County Public Schools  
8301 Turkey Thicket Drive  
Building A, First Floor  
Gaithersburg, Maryland 20879

Re: Lead in Water Testing Service

Location: Bradley Hills Elementary School  
8701 Hartsdale Avenue,  
Bethesda, MD 20817

Dear Mr. Mullikin:

Professional Services Industries (PSI), Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial lead in water testing at Bradley Hills Elementary School, located 8701 Hartsdale Avenue, Bethesda, MD 20817.

**Scope of Services:**

PSI conducted lead in water testing at Bradley Hills Elementary School in accordance with the Environmental Protection Agency (EPA) and Maryland House Bill (HB) 270. State regulation established an action level of 20 parts per billion (ppb) to evaluate lead levels in school buildings, a concentration EPA recommends that schools take action to reduce lead below this action level. Maryland requires periodic testing for the presence of lead in drinking water in occupied public and nonpublic school buildings. EPA developed the 3T's (Training, Testing, and Telling) to assist schools in reducing the lead concentrations in their drinking water. More information about 3T's can be found on the EPA website.

PSI visited the site on 4/24/18 and 4/25/18 to collect samples from 86 drinking water outlets in accordance with current criteria described by the Maryland Department of the Environment (MDE) Draft Lead in Drinking Water—Public and Nonpublic Schools, Title 26, Subtitle 16 Lead, Chapter 07. Six 30 second follow-up sample were collected on 6/6/18.

Samples were submitted to a laboratory for lead in water analysis using current US EPA methodology. The laboratory has been certified by the Maryland Department of the Environment to analyze drinking water for lead.

**Results:**

There were six results of the initial lead in water analysis at or above 20 parts per billion (ppb) and subsequent follow up 30 second results are highlighted in the summary table below:





Barcode ID	Sample Location	Date Collected	Initial Sample Result (ppb)	Date Collected	30 Second Follow Up Sample Result (ppb)
LW11553	Classroom 108	4/25/18	42.8	6/6/18	6.7
LW11557	Classroom 109	4/25/18	34.9	6/6/18	4.3
LW11567	Classroom 118	4/25/18	35.9	6/6/18	<1.0
LW11569	Classroom 150	4/25/18	36.1	6/6/18	1.9
M31522	Media Center Workroom 145A	4/25/18	22.3	6/6/18	<1.0
M40947	Classroom 118	4/25/18	35.0	6/6/18	<1.0

\*ppb = parts per billion

The initial lead in water sample results (4/25/18) and 30 second follow up results (6/6/18) are shown in Attachment A.

### **Discussion:**

Lead is a naturally occurring element that can be harmful to humans when ingested or inhaled, particularly to children under the age of six. Lead can adversely affect the development of children's brain potentially leading to detrimental alterations in intelligence and behavior. Lead has been historically used in plumbing, paint and other building materials. Lead is released into the environment from industrial sources and fuel combustion. Lead may also be found in consumer products (imported candy, medicines, toys, dishes, etc.).

Most lead leaches into drinking water from contact with plumbing components such as faucets and valves made of brass or lead-containing solder. The physical and chemical interaction that occurs between the plumbing and water directly contributes to the amount of lead that is released into the water. Although plumbing components installed prior to the 1990's could contain more lead than newer materials, the amount of lead in the drinking water cannot be predicted by the age of building. The purpose of this regulation is to establish a program to minimize the risk of exposure to lead in drinking water outlets at schools.

Simple steps like keeping your home clean and well-maintained will go a long way in preventing lead exposure. These steps include inspecting and maintaining all painted surfaces to prevent paint deterioration, using only cold water to prepare food and drinks, flushing water outlets used for drinking or food preparation, and cleaning around painted areas where friction can generate dust, such as doors, windows, and drawers. Wipe these areas with a wet sponge or rag to remove paint chips or dust, and wash children's hands, bottles, pacifiers and toys often.



Respectfully Submitted,

**PROFESSIONAL SERVICE INDUSTRIES, INC.**

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Attachments:            A – Lead in Water Test Summary Table

# ATTACHMENT A

## Bradley Hill Elementary School Water Test Summary Table

**Contractor:** Professional Services Industries, Inc.

**Certified Laboratory:** Microbac Laboratories, Inc.

Initial Sample Results for Bradley Hills Elementary School (4/25/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW11544	101	Health Room Office		Faucet	<1.0	Pass	Testing Complete
LW11545	101B	Health Room Office		Faucet	<1.0	Pass	Testing Complete
LW11546	100G	Work Room Administration		Faucet	2.7	Pass	Testing Complete
LW11547	102	Classroom		Faucet	3.5	Pass	Testing Complete
LW11548	104	Classroom		Faucet	7.7	Pass	Testing Complete
LW11550	103	Classroom		Bubbler - Indoor	14.4	Pass	Testing Complete
LW11551	103	Classroom		Faucet	2.6	Pass	Testing Complete
LW11552	105	Classroom		Bubbler - Indoor	6.0	Pass	Testing Complete
LW11553	108	Classroom		Bubbler - Indoor	42.8	Fail	Follow-Up Testing Needed
LW11554	108	Classroom		Faucet	14.9	Pass	Testing Complete
LW11556	107	Classroom		Faucet	1.0	Pass	Testing Complete
LW11557	109	Classroom		Bubbler - Indoor	34.9	Fail	Follow-Up Testing Needed
LW11558	109	Classroom		Faucet	8.2	Pass	Testing Complete
LW11559		Hallway	Next To 114	Cooler	<1.0	Pass	Testing Complete
LW11560		Hallway	Next To 114	Cooler	<1.0	Pass	Testing Complete
LW11562	117	Classroom		Faucet	11.4	Pass	Testing Complete
LW11564	116	Classroom		Faucet	10.3	Pass	Testing Complete
LW11565	119	Classroom		Bubbler - Indoor	9.6	Pass	Testing Complete
LW11566	119	Classroom		Faucet	18.7	Pass	Testing Complete
LW11567	118	Classroom		Bubbler - Indoor	35.9	Fail	Follow-Up Testing Needed
LW11569	150	Classroom		Faucet	36.1	Fail	Follow-Up Testing Needed
LW11635	161	Kitchen		Faucet	2.4	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW11636	161	Kitchen		Faucet	3.6	Pass	Testing Complete
LW11637	161	Kitchen		Faucet	4.1	Pass	Testing Complete
LW11638	161	Kitchen		Faucet	2.1	Pass	Testing Complete
LW11639		Hallway	Across From 162	Cooler	<1.0	Pass	Testing Complete
LW11640		Hallway	Across From 162	Cooler	<1.0	Pass	Testing Complete
LW11641	168	Art		Bubbler - Indoor	4.5	Pass	Testing Complete
LW11642	168	Art		Faucet	3.7	Pass	Testing Complete
LW11643	168	Art		Faucet	<1.0	Pass	Testing Complete
LW11644	153	Classroom		Faucet	<1.0	Pass	Testing Complete
M31457	127	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31458	124	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31459	130	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31489	127	Classroom		Faucet	<1.0	Pass	Testing Complete
M31492	126	Office		Bubbler - Indoor	1.0	Pass	Testing Complete
M31493	126	Office		Faucet	<1.0	Pass	Testing Complete
M31494	129	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31495	129	Classroom		Faucet	<1.0	Pass	Testing Complete
M31497	124	Classroom		Faucet	<1.0	Pass	Testing Complete
M31500	131	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31501	131	Classroom		Faucet	<1.0	Pass	Testing Complete
M31502	130	Classroom		Faucet	<1.0	Pass	Testing Complete
M31505	134	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31506	134	Classroom		Faucet	<1.0	Pass	Testing Complete
M31511		Hallway	Across from Classroom 134	Cooler	<1.0	Pass	Testing Complete
M31512		Hallway	Across from Classroom 134	Cooler	<1.0	Pass	Testing Complete
M31517	138	Classroom		Faucet	<1.0	Pass	Testing Complete
M31518	138	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31520		Hallway	Across from 145 IMC	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M31521		Hallway	Across from 145 IMC	Cooler	<1.0	Pass	Testing Complete
M31522	145A	Work Room Media Center	Inside IMC	Faucet	22.3	Fail	Follow-Up Testing Needed
M31523	149	Office		Bubbler - Indoor	2.7	Pass	Testing Complete
M31524	149	Office		Faucet	1.1	Pass	Testing Complete
M31525	121	Art		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31526	121	Art		Faucet	<1.0	Pass	Testing Complete
M31534		Hallway	Across from Gym 01	Cooler	<1.0	Pass	Testing Complete
M31535		Hallway	Across from Gym 01	Cooler	<1.0	Pass	Testing Complete
M31540	201	Classroom		Faucet	1.1	Pass	Testing Complete
M31541	201	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31542	205	Classroom		Faucet	<1.0	Pass	Testing Complete
M31543	205	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31544	204	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31545	204	Classroom		Faucet	2.2	Pass	Testing Complete
M31546	209	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31547	209	Classroom		Faucet	1.2	Pass	Testing Complete
M31548	206	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31549	206	Classroom		Faucet	1.6	Pass	Testing Complete
M31550		Hallway	Across from Classroom 211	Cooler	<1.0	Pass	Testing Complete
M31551		Hallway	Across from Classroom 211	Cooler	<1.0	Pass	Testing Complete
M31552	211	Classroom		Faucet	1.4	Pass	Testing Complete
M31553	211	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31555	215	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31556	215	Classroom		Faucet	1.9	Pass	Testing Complete
M31563	217	Classroom		Faucet	1.5	Pass	Testing Complete
M31564	217	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31565	221	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31566	221	Classroom		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M31567	224	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31568	224	Classroom		Faucet	<1.0	Pass	Testing Complete
M31569	223	Music		Faucet	4.2	Pass	Testing Complete
M40939	162	Kindergarten		Faucet	8.3	Pass	Testing Complete
M40947	118	Classroom		Faucet	35.0	Fail	Follow-Up Testing Needed
M40956	102	Classroom		Bubbler - Indoor	4.0	Pass	Testing Complete
M40957	105	Classroom		Faucet	2.0	Pass	Testing Complete
M40959	110	Classroom		Faucet	7.4	Pass	Testing Complete

\*ppb = parts per billion

**Contractor:** Professional Services Industries, Inc.  
**Certified Laboratory:** Microbac Laboratories, Inc.

Follow Up Sample Results for Bradley Hills Elementary School (6/6/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 <sup>nd</sup> ) (PPB)	30 Second Draw (PPB)	Status
LW11553	108	Classroom	Bubbler-Indoor	48.6	6.7	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW11557	109	Classroom	Bubbler-Indoor	30.2	4.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW11567	118	Classroom	Bubbler-Indoor	<1.0	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW11569	150	Classroom	Faucet	14.7	1.9	Remediation required – replace fixture, in addition to supply line and valve located under sink
M31522	145A	Media Center Workroom	Faucet	1.8	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
M40947	118	Classroom	Faucet	8.8	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink

\*ppb = parts per billion

Note: Fixture(s) with elevated test results were immediately removed from service. Subsequent 2nd round testing was performed on these fixture(s) for further diagnostics for remediation. Because the fixture was shut off after the first test, the subsequent test results may not be representative of an in-use fixture because of stagnant water in the supply line and the operation of shut off valves prior to the tests. All fixtures with elevated test results are to be remediated. After remediation, post remediation testing will be conducted before the fixture is returned to service.