

# Montgomery County Public Schools Lead in Drinking Water Testing Report

Potomac Elementary School  
10311 River Road  
Potomac, MD 20854

Report Date: February 16<sup>th</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	10/20/2021
# of Outlets Tested	85
# of Outlets $\geq$ 5 ppb	1

## 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 Potomac ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW10504	In room 101 clinic	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW10505	In room 101C office	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW10506	In room 101D exam	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW10507	In room 100H workroom	Classroom Sink	<1	Pass	N/A	Testing Complete
LW10508	In classroom 109	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10509	In classroom 109	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10510	In classroom 110	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
LW10511	In classroom 110	Classroom Combination Sink	2.4	Pass	N/A	Testing Complete
LW10512	In classroom 114	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10513	In classroom 114	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10514	In classroom 113	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10515	In classroom 113	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10516	In classroom 117	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10517	In classroom 117	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10518	In classroom 116	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10519	In classroom 116	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10520	In classroom 120	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10521	In classroom 120	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10522	In hallway across from 132 gym	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10523	In hallway across from 132 gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10524	In hallway across from 132 gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10525	In cafeteria adjacent to stage	Classroom Sink	<1	Pass	N/A	Testing Complete
LW10526	In cafeteria	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10527	In cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10528	In cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10529	In kitchen	Kitchen Sink	1.5	Pass	N/A	Testing Complete
LW10530	In kitchen	Kitchen Sink	1.8	Pass	N/A	Testing Complete
LW10531	In kitchen	Kitchen Sink	2.2	Pass	N/A	Testing Complete
LW10532	In kitchen (handwash)	Kitchen Sink	1.2	Pass	N/A	Testing Complete
LW10533	In kitchen (on island)	Kitchen Sink	1.2	Pass	N/A	Testing Complete

LW10534	In classroom 139 music	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW10535	In classroom 139 music	Classroom Combination Sink	2.6	Pass	N/A	Testing Complete
LW10536	In classroom 141 music	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
LW10537	In classroom 141 music	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
LW10538	In classroom 162 kindergarten	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10539	In classroom 162 kindergarten	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10540	In classroom 166 kindergarten	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10541	In classroom 166 kindergarten	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10542	In classroom 163 art	Classroom Sink	<1	Pass	N/A	Testing Complete
LW10543	In classroom 163 art	Classroom Sink	<1	Pass	N/A	Testing Complete
LW10544	In classroom 163 art	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10545	In classroom 163 art	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10546	In office 165 speech	Classroom Sink	1.1	Pass	N/A	Testing Complete
LW10547	In office 169 OT/PT	Classroom Sink	2.9	Pass	N/A	Testing Complete
LW10548	In classroom 168 kindergarten	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10549	In classroom 168 kindergarten	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10550	In classroom 172 kindergarten	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10551	In classroom 172 kindergarten	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10552	In media center 186	Classroom Sink	<1	Pass	N/A	Testing Complete
LW10553	In classroom 187	Classroom Combination Drinking Fountain	2.7	Pass	N/A	Testing Complete
LW10554	In classroom 187	Classroom Combination Sink	2.2	Pass	N/A	Testing Complete
LW10555	In hallway adjacent to 191 boys	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10556	In hallway adjacent to 191 boys	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10557	In hallway adjacent to 191 boys	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10558	In classroom 208	Classroom Combination Drinking Fountain	1.3	Pass	N/A	Testing Complete
LW10559	In classroom 208	Classroom Combination Sink	2.5	Pass	N/A	Testing Complete
LW10560	In classroom 209	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW10561	In classroom 209	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
LW10562	In classroom 210	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10563	In classroom 210	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10564	In classroom 214	Classroom Combination Drinking Fountain	1.6	Pass	N/A	Testing Complete
LW10565	In classroom 214	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
LW10566	In classroom 216	Classroom Combination Drinking Fountain	2.1	Pass	N/A	Testing Complete

LW10567	In classroom 216	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10568	In hallway adjacent to 219 girls	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10569	In hallway adjacent to 219 girls	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10570	In hallway adjacent to 219 girls	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10571	In teachers lounge 220	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW10572	In classroom 226	Classroom Combination Drinking Fountain	5.2	Fail	2.5	Testing Complete
LW10573	In classroom 226	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10574	In classroom 260	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10575	In classroom 260	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10576	In classroom 263 support	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
LW10577	In classroom 263 support	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
LW10578	In classroom 256	Classroom Combination Drinking Fountain	1.3	Pass	N/A	Testing Complete
LW10579	In classroom 256	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10580	In classroom 252	Classroom Combination Drinking Fountain	2.6	Pass	N/A	Testing Complete
LW10581	In classroom 252	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
LW10582	In classroom 246	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW10583	In classroom 246	Classroom Combination Sink	2.2	Pass	N/A	Testing Complete
LW10584	In hallway adjacent to 245 girls	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10585	In hallway adjacent to 245 girls	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10586	In hallway adjacent to 245 girls	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10587	In classroom 242	Classroom Combination Drinking Fountain	3.5	Pass	N/A	Testing Complete
LW10588	In classroom 242	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete



## Montgomery County Public Schools Lead in Drinking Water Testing 2018

April 27, 2018

**Executive Summary:**  
**Potomac Elementary School**  
10311 River Road  
Potomac, Maryland 20854

Round of Testing:	Initial
# of Outlets Tested:	55
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	42.1
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Work Room Media Center (42.1 ppb)

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	1

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

Work Room Media Center - Replace fixture (M14082), in addition to supply line and valve located under sink.



April 27, 2018

Mr. Brian Mullikin, MS  
Environmental Team Leader  
Montgomery County Public Schools  
Division of Maintenance  
Gaithersburg, Maryland 20879

Re: Drinking Water Testing

KCI Job #1214634189

**Location: Potomac Elementary School**

10311 River Road  
Potomac, Maryland 20854

Dear Mr. Mullikin:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial and follow-up lead in water testing at Potomac Elementary School, located at 10311 River Road in Potomac, Maryland 20854.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at Potomac 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.

KCI visited the site on 3/8/2018 and 3/9/2018 to collect samples from 55 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. On 4/12/2018, one 30 second follow-up sample was collected.

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.



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## **RESULTS**

There was one result of the 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:

<b>Barcode ID</b>	<b>Sample Location</b>	<b>Date Collected</b>	<b>Initial Sample Result (ppb)</b>	<b>Date Collected</b>	<b>30 Second Follow Up Sample Result (ppb)</b>
M14082	Faucet - Work Room Media Center	3/9/2018	42.1	4/12/2018	572

The initial lead in water sample results (3/9/2018) and 30 second follow up results (4/12/2018) 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.

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Respectfully Submitted,  
KCI Technologies, Inc.



Kamau McAbee  
MDE Certified Water Sampler #8281KM

Attachment:

A- Lead in Water Test Summary Table

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# ATTACHMENT A

## Lead in Water Test Summary Table

ATTACHMENT A

Lead in Water Test Summary Table

**Contractor:** KCI Technologies, Inc.  
**Certified Laboratory:** Microbac Laboratories, Inc.

Initial Sample Results for Potomac Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW05640		Kitchen		Faucet	4.0	Pass	Testing Complete
LW05641	26	Music		Faucet	7.4	Pass	Testing Complete
LW05642	26	Music		Bubbler - Indoor	4.6	Pass	Testing Complete
LW05643	25	Art		Faucet	4.1	Pass	Testing Complete
LW05644	25	Art		Bubbler - Indoor	3.2	Pass	Testing Complete
LW05645	25	Art		Faucet	4.6	Pass	Testing Complete
LW05646		Break Room		Faucet	3.1	Pass	Testing Complete
LW05647		Break Room Administration		Faucet	6.6	Pass	Testing Complete
LW05648		Health Room Administration		Faucet	2.4	Pass	Testing Complete
LW05649	2	Classroom		Faucet	5.0	Pass	Testing Complete
LW05650	2	Classroom		Bubbler - Indoor	8.5	Pass	Testing Complete
LW05651	9	Classroom		Faucet	6.3	Pass	Testing Complete
LW05652	9	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW05653		Hallway	Next To Cr14	Cooler	<1.0	Pass	Testing Complete
LW05654	16	Classroom		Faucet	6.7	Pass	Testing Complete
LW05655	16	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW05656		Hallway	Next To Cr 19	Cooler	<1.0	Pass	Testing Complete
LW05657		Hallway	Next To Health Rm	Cooler	<1.0	Pass	Testing Complete
M14072	3	Classroom		Faucet	11.5	Pass	Testing Complete
M14073	3	Classroom		Bubbler - Indoor	3.1	Pass	Testing Complete
M14074	6	Classroom		Faucet	14.5	Pass	Testing Complete
M14075	6	Classroom		Bubbler - Indoor	7.2	Pass	Testing Complete
M14076	4	Classroom		Faucet	5.2	Pass	Testing Complete
M14077	4	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M14078	5	Classroom		Faucet	11.8	Pass	Testing Complete
M14080	7	Classroom		Faucet	10.2	Pass	Testing Complete
M14081	7	Classroom		Bubbler - Indoor	4.1	Pass	Testing Complete
M14082		Work Room Media Center		Faucet	42.1	Fail	Testing Complete
M14083	8	Classroom		Faucet	5.9	Pass	Testing Complete
M14084	8	Classroom		Bubbler - Indoor	4.0	Pass	Testing Complete
M14095	14	Classroom		Faucet	5.3	Pass	Testing Complete
M14096	14	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
M14097	10	Classroom		Faucet	6.4	Pass	Testing Complete
M14098	10	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
M14099	11	Classroom		Faucet	5.4	Pass	Testing Complete
M14100	11	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
M14101	12	Classroom		Faucet	3.1	Pass	Testing Complete
M14102	12	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete
M14103	15	Classroom		Faucet	1.9	Pass	Testing Complete
M14105	15	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
M14107	13	Classroom		Faucet	3.1	Pass	Testing Complete
M14108	13	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
M14112	17	Classroom		Faucet	7.3	Pass	Testing Complete
M14113	17	Classroom		Bubbler - Indoor	4.5	Pass	Testing Complete
M14114	21	Classroom		Faucet	7.9	Pass	Testing Complete
M14115	21	Classroom		Bubbler - Indoor	4.0	Pass	Testing Complete
M14116	18	Classroom		Faucet	13.0	Pass	Testing Complete
M14117	18	Classroom		Bubbler - Indoor	3.1	Pass	Testing Complete
M14118	20	Classroom		Faucet	9.0	Pass	Testing Complete
M14119	20	Classroom		Bubbler - Indoor	5.0	Pass	Testing Complete
M14120	19	Classroom		Faucet	18.3	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M14121	19	Classroom		Bubbler - Indoor	10.3	Pass	Testing Complete
M14139		All Purpose Room		Cooler	1.0	Pass	Testing Complete
M14140		Kitchen		Faucet	2.0	Pass	Testing Complete
M14143		Kitchen		Faucet	1.1	Pass	Testing Complete

\*PPB = parts per billion

Follow Up Sample Result for Potomac Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)*	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)	Status
M14082		Work Room Media Center	Faucet	28.0	3.7	572	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 and 3rd 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.