

Montgomery County Public Schools Lead in Drinking Water Testing Report

Belmont Elementary School
19528 Olney Mill Road
Olney, MD 20832

Report Date: February 24th, 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	11/30/21
# of Outlets Tested	28
# of Outlets \geq 5 ppb	9

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.
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.
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 Belmont ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW03419	In kitchen	Kitchen Sink	8.7	Fail	20.8	Testing Complete
LW03421	In classroom 20	Classroom Sink	2.0	Pass	N/A	Testing Complete
LW03432	In classroom 18	Classroom Combination Drinking Fountain	10.4	Fail	4.8	Testing Complete
LW03434	In classroom 19	Classroom Combination Drinking Fountain	12.2	Fail	4.5	Testing Complete
LW03437	In classroom 11	Classroom Combination Drinking Fountain	3.8	Pass	N/A	Testing Complete
LW03439	In classroom 10	Classroom Combination Drinking Fountain	3.5	Pass	N/A	Testing Complete
LW03443	In hallway adjacent to classroom 8	Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW03444	In classroom 7	Classroom Combination Sink	112.0	Fail	6.6	Testing Complete
LW03446	In classroom 6	Classroom Sink	10.3	Fail	1.3	Testing Complete
LW03447	In classroom 6	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW03448	In classroom 5	Classroom Combination Sink	28.8	Fail	16.1	Testing Complete
LW03449	In classroom 5	Classroom Combination Drinking Fountain	5.0	Fail	4.0	Testing Complete
LW03450	In classroom 4	Classroom Sink	11.2	Fail	Device Removed	Testing Complete
LW03451	In classroom 4	Classroom Combination Drinking Fountain	2.3	Pass	N/A	Testing Complete
LW03455	In art 1	Classroom Combination Drinking Fountain	2.9	Pass	N/A	Testing Complete
LW03456	In break room	Teachers Lounge Sink	3.7	Pass	N/A	Testing Complete
LW03457	In hallway adjacent to gymnasium	Drinking Fountain	1.3	Pass	N/A	Testing Complete
LW03458	In hallway adjacent to administration	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW03490	In hallway adjacent to classroom K2	Classroom Combination Drinking Fountain	3.7	Pass	N/A	Testing Complete
LW03494	In classroom 16	Classroom Combination Drinking Fountain	2.6	Pass	N/A	Testing Complete
LW03496	In classroom 13	Classroom Combination Drinking Fountain	5.1	Fail	Device Removed	Testing Complete
LW03498	In classroom 14	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW03500	In classroom 12	Classroom Combination Drinking Fountain	3.5	Pass	N/A	Testing Complete
M05630	In kitchen	Kitchen Sink	4.2	Pass	N/A	Testing Complete
M05668	In classroom 3	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M05669	In classroom 3	Classroom Sink	<1	Pass	N/A	Testing Complete
M05690	In classroom K1	Classroom Combination Drinking Fountain	2.7	Pass	N/A	Testing Complete
M05692	In classroom K2	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete



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

October 30, 2019

Executive Summary:

Belmont Elementary School

19528 Olney Mill Road

Olney, Maryland 20832

Round of Testing:	Post-Remediation Follow-up
Sample Date	2/4/2019 and 2/12/2019
# of Outlets Tested:	3
# of Outlets \geq 5 ppb:	1
Low Value (ppb):	2.8
High Value (ppb):	16.8

Project Status

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

- Kitchen Cafeteria - Outlet (LW03419) will have signage affixed
- Classroom 10 - Outlet (LW03438) will be placed back into service
- Classroom 8 - Outlet (LW03441) will be placed back into 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: Belmont Elementary School

19528 Olney Mill Road
Olney, Maryland 20832

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 Belmont Elementary School, located at 19528 Olney Mill Road in Olney, Maryland 20832.

SCOPE OF SERVICES

Three drinking water outlets were remediated at Belmont 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 2/4/2019 and 2/12/2019 to collect post-remediation follow-up samples from 3 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
LW03419		Kitchen Cafeteria		Faucet	21.1	14	16.8	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed
LW03438	10	Classroom		Faucet	39.3	ND	4.2	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW03441	8	Classroom		Faucet	28.6	6.1	2.8	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into 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 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 Lead in Drinking Water Testing 2018

April 30, 2018

Executive Summary:
Belmont Elementary School
19528 Olney Mill Road
Olney, Maryland 20832

Round of Testing:	Initial
# of Outlets Tested:	53
# of Outlets ≥ 20 ppb:	3
Low Value (ppb):	<1.0
High Value (ppb):	39.3
Follow-Up Testing Required (Samples ≥ 20 ppb):	Classroom 10 (39.3 ppb) Kitchen (21.1 ppb) Classroom 8 (28.6 ppb)

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	3

Project Status:
Testing Complete: Remediation Plan

Classroom 10 - Replace fixture (LW03438), in addition to supply line and valve located under sink
Kitchen - Replace fixture (LW03419), in addition to supply line and valve located under sink
Classroom 8 - Replace fixture (LW03441), in addition to supply line and valve located under sink



April 30, 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: Belmont Elementary School

19528 Olney Mill Road
Olney, Maryland 20832

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 Belmont Elementary School, located at 19528 Olney Mill Road in Olney, Maryland 20832.

SCOPE OF SERVICES

KCI conducted lead in water testing at Belmont 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 2/26/2018 and 2/27/2018 to collect samples from 53 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, three 30 second follow-up samples were 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.

RESULTS

There were three results 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:

Barcode ID	Sample Location	Date Collected	Initial Sample Result (ppb)	Date Collected	30 Second Follow Up Sample Result (ppb)
LW03438	Faucet - Classroom 10	2/27/2018	39.3	4/12/2018	ND
LW03419	Faucet - Kitchen	2/27/2018	21.1	4/12/2018	14.0
LW03441	Faucet - Classroom 8	2/27/2018	28.6	4/12/2018	6.1

The initial lead in water sample results (2/27/2018) 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.

Respectfully Submitted,
KCI Technologies, Inc.



Kamau McAbee
MDE Certified Water Sampler #8281KM

Attachment:

A- Lead in Water Test Summary Table

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 Belmont Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW03419		Kitchen		Faucet	21.1	Fail	Follow-up Testing Needed
LW03420	22	Classroom		Faucet	3.2	Pass	Testing Complete
LW03421	20	Classroom		Faucet	11.8	Pass	Testing Complete
LW03422	20	Classroom		Bubbler - Indoor	14.7	Pass	Testing Complete
LW03423	21	Classroom		Faucet	12.4	Pass	Testing Complete
LW03430	21	Classroom		Bubbler - Indoor	6.9	Pass	Testing Complete
LW03431	18	Classroom		Faucet	7.4	Pass	Testing Complete
LW03432	18	Classroom		Bubbler - Indoor	3.7	Pass	Testing Complete
LW03433	19	Classroom		Faucet	5.3	Pass	Testing Complete
LW03434	19	Classroom		Bubbler - Indoor	2.8	Pass	Testing Complete
LW03435	K1	Classroom		Faucet	3.0	Pass	Testing Complete
LW03436	K2	Classroom		Faucet	1.8	Pass	Testing Complete
LW03437	11	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete
LW03438	10	Classroom		Faucet	39.3	Fail	Follow-up Testing Needed
LW03439	10	Classroom		Bubbler - Indoor	2.0	Pass	Testing Complete
LW03440	9	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW03441	8	Classroom		Faucet	28.6	Fail	Follow-up Testing Needed
LW03442	8	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03443	8	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW03444	7	Classroom		Faucet	6.0	Pass	Testing Complete
LW03445	7	Classroom		Bubbler - Indoor	3.4	Pass	Testing Complete
LW03446	6	Classroom		Faucet	4.6	Pass	Testing Complete
LW03447	6	Classroom		Bubbler - Indoor	2.2	Pass	Testing Complete
LW03448	5	Classroom		Faucet	5.2	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW03449	5	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW03450	4	Classroom		Faucet	3.9	Pass	Testing Complete
LW03451	4	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW03452	2	Classroom		Faucet	6.2	Pass	Testing Complete
LW03453	2	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
LW03454	1	Art		Faucet	3.1	Pass	Testing Complete
LW03455	1	Art		Bubbler - Indoor	3.0	Pass	Testing Complete
LW03456		Break Room		Faucet	1.9	Pass	Testing Complete
LW03457		Hallway Gymnasium	Across From	Cooler	1.0	Pass	Testing Complete
LW03458		Hallway Administration	Across From	Cooler	<1.0	Pass	Testing Complete
LW03489	K2	Hallway	Across From	Faucet	3.6	Pass	Testing Complete
LW03490	K2	Hallway	Across From	Bubbler - Indoor	2.2	Pass	Testing Complete
LW03491	15	Classroom		Faucet	4.2	Pass	Testing Complete
LW03492	15	Classroom		Bubbler - Indoor	6.4	Pass	Testing Complete
LW03493	16	Classroom		Faucet	8.2	Pass	Testing Complete
LW03494	16	Classroom		Bubbler - Indoor	4.4	Pass	Testing Complete
LW03495	13	Classroom		Faucet	1.5	Pass	Testing Complete
LW03496	13	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW03497	14	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03498	14	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW03499	12	Classroom		Faucet	5.5	Pass	Testing Complete
LW03500	12	Classroom		Bubbler - Indoor	3.1	Pass	Testing Complete
LW03501	11	Classroom		Faucet	<1.0	Pass	Testing Complete
M05630		Kitchen		Faucet	1.9	Pass	Testing Complete
M05653	9	Classroom		Faucet	13	Pass	Testing Complete
M05668	3	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M05669	3	Classroom		Faucet	2.6	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M05690	K1	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
M05692	K2	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete

*PPB = parts per billion

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

Follow Up Sample Results for Belmont Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW03419		Kitchen	Faucet	17.9	1310	14.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW03438	10	Classroom	Faucet	23.7	3.5	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW03441	8	Classroom	Faucet	13.3	6.1	6.1	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.