

Montgomery County Public Schools Lead in Drinking Water Testing Report

**Meadow Hall Elementary School
951 Twinbrook Parkway
Rockville, MD 20851**

Report Date: March 31st, 2020

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	3/04/2020
# of Outlets Tested	52
# of Outlets \geq 5 ppb	5

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. Due to the Stay-at-Home Order to combat the spread of COVID-19 (coronavirus), no follow-up samples were collected. 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 Meadow Hall ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW06657	In health room 3 by administration	Nurses Office Sink	3.8	Pass	N/A	Testing Complete
LW06658	In kindergarten 10	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW06659	In kindergarten 12	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW07233	In special ed 14	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW07234	In special ed 13	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW07236	In special ed 11	Classroom Combination Sink	3.0	Pass	N/A	Testing Complete
LW07237	In office 33 by media center	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW07238	In break room 20	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW07239	In classroom 23	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07240	In classroom 23	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
LW07242	In classroom 25	Classroom Combination Sink	3.3	Pass	N/A	Testing Complete
LW07243	In classroom 25	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW07247	In classroom 28	Classroom Combination Sink	283	Fail	NC	Remediation Action Plan
LW07248	In classroom 28	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07249	In hallway right of room 28	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07250	In classroom 52	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW07251	In classroom 52	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW07252	In classroom 47	Classroom Combination Drinking Fountain	1.7	Pass	N/A	Testing Complete
LW07253	In classroom G9	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW07254	In classroom G6	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW07255	In classroom G6	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW07256	In hallway outside of gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07257	In hallway outside of gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
M11191	In hallway across from G7	Drinking Fountain	<1	Pass	N/A	Testing Complete
M11193	In classroom G7	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M11194	In classroom G7	Classroom Combination Drinking Fountain	1.8	Pass	N/A	Testing Complete
M11197	In classroom G9	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete

M11200	In classroom G8	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M11201	In classroom G8	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M11203	In classroom 47	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M11206	In classroom 45	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
M11208	In classroom 45	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M11210	In hallway hall across 46	Drinking Fountain	<1	Pass	N/A	Testing Complete
M13247	In hallway across from room 20	Drinking Fountain	<1	Pass	N/A	Testing Complete
M13257	In classroom 30	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M13258	In classroom 30	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
M13259	In classroom 27	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M13260	In classroom 27	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M13262	In classroom 31	Classroom Combination Drinking Fountain	11.4	Fail	NC	Remediation Action Plan
M13263	In classroom 32	Classroom Combination Sink	6.7	Fail	NC	Remediation Action Plan
M13264	In classroom 32	Classroom Combination Drinking Fountain	5.1	Fail	NC	Remediation Action Plan
M41053	In hallway hall across health	Drinking Fountain	<1	Pass	N/A	Testing Complete
M41058	In kindergarten 10	Drinking Fountain	<1	Pass	N/A	Testing Complete
M41060	In kindergarten 12	Drinking Fountain	<1	Pass	N/A	Testing Complete
M41415	In music 43	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M41416	In music 43	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M41417	In hallway hall next 37	Drinking Fountain	<1	Pass	N/A	Testing Complete
M41419	In kitchen by all purpose room	Kitchen Sink	1.6	Pass	N/A	Testing Complete
M41421	In kitchen by all purpose room	Kitchen Sink	<1	Pass	N/A	Testing Complete
M41422	In kitchen by all purpose room	Kitchen Sink	<1	Pass	N/A	Testing Complete
M41423	In kitchen by all purpose room	Kitchen Sink	<1	Pass	N/A	Testing Complete
M13261	In classroom 31	Classroom Combination Sink	14.2	Fail	NC	Remediation Action Plan

NC - Not Collected (No follow-up sample collected due to COVID-19 (Coronavirus) Stay-at-Home Order.)



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

August 30, 2019

Executive Summary:

Meadow Hall Elementary School

951 Twinbrook Parkway

Rockville, Maryland 20851

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/30/19
# of Outlets Tested:	2
# of Outlets ≥ 5 ppb:	0
Low Value (ppb):	1.1
High Value (ppb):	1.1

Project Status

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

Classroom 45 - Outlet (M11208) will be placed back into service

Classroom 45 - Outlet (M11206) will be placed back into service



August 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: Meadow Hall Elementary School

951 Twinbrook Parkway
Rockville, Maryland 20851

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 Meadow Hall Elementary School, located at 951 Twinbrook Parkway in Rockville, Maryland 20851.

SCOPE OF SERVICES

Two drinking water outlets were remediated at Meadow Hall 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 1/30/19 to collect post-remediation follow-up samples from 2 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
M11208	45	Classroom	Fixture type corrected, both fixtures replaced and retested	Faucet	165	<1.0	1.1	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
M11206	45	Classroom	Fixture type corrected, both fixtures replaced and retested	Bubbler - Indoor	2	N/A	1.1	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 DRINKING WATER TESTING 2018

May 10, 2018

Executive Summary:
Meadow Hall Elementary School
951 Twinbrook Parkway
Rockville, MD 20851

Round of Testing:	Initial
# of Outlets Tested:	60
# of Outlets \geq 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	165.0
Follow-Up Testing Required (Samples \geq 20 ppb):	Classroom 45 (165.0 ppb)

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

Project Status
Testing Complete: Remediation Plan

Classroom 45 – Replace fixture (M11208), in addition to supply line and valve located under sink



May 10, 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: Meadow Hall Elementary School
951 Twinbrook Parkway
Rockville, MD 20851

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 Meadow Hall Elementary School, located at 951 Twinbrook Parkway, Rockville, MD 20851.

Scope of Services:

PSI conducted lead in water testing at Meadow Hall 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 3/1/18 and 3/2/18 to collect samples from 60 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. One 30 second follow-up sample was collected on 4/13/18.

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 was one result 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)
M11208	Classroom 45	3/2/18	165.0	4/13/18	<1.0

The initial lead in water sample results (3/2/18) and 30 second follow up results (4/13/18) 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.

Nand Kaushik, P.E.
Department Manager, Environmental Services
Nand.Kaushik@psiusa.com

Attachments: A – Lead in Water Test Summary Table

ATTACHMENT A

Meadow Hall Elementary School Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Meadow Hall Elementary School (3/2/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW06657	3	Health Room Administration		Faucet	<1.0	Pass	Testing Complete
LW06658	10	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW06659	12	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW07233	14	Special Ed		Faucet	<1.0	Pass	Testing Complete
LW07234	13	Special Ed		Faucet	<1.0	Pass	Testing Complete
LW07235	11	Special Ed		Faucet	9.8	Pass	Testing Complete
LW07236	11	Special Ed		Faucet	<1.0	Pass	Testing Complete
LW07237	33	Office Media Center		Faucet	1.1	Pass	Testing Complete
LW07238	20	Break Room		Faucet	<1.0	Pass	Testing Complete
LW07239	23	Classroom		Cooler	1.6	Pass	Testing Complete
LW07240	23	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07241	23	Classroom		Bubbler - Indoor	6.2	Pass	Testing Complete
LW07242	25	Classroom		Faucet	3.9	Pass	Testing Complete
LW07243	25	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete
LW07244	26	Art		Faucet	<1.0	Pass	Testing Complete
LW07245	26	Art		Faucet	5.0	Pass	Testing Complete
LW07246	26	Art		Bubbler - Indoor	2.1	Pass	Testing Complete
LW07247	28	Classroom		Faucet	1.5	Pass	Testing Complete
LW07248	28	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
LW07249		Hallway	Right of Room 28	Cooler	<1.0	Pass	Testing Complete
LW07250	52	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07251	52	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW07252	47	Classroom		Bubbler - Indoor	3.1	Pass	Testing Complete
LW07253	G9	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07254	G6	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07255	G6	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW07256		Hallway	Outside of Gym	Cooler	<1.0	Pass	Testing Complete
LW07257		Hallway	Outside of Gym	Cooler	<1.0	Pass	Testing Complete
M11191		Hallway	Across from G7	Cooler	<1.0	Pass	Testing Complete
M11193	G7	Classroom		Faucet	1.9	Pass	Testing Complete
M11194	G7	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M11197	G9	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M11200	G8	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M11201	G8	Classroom		Faucet	<1.0	Pass	Testing Complete
M11203	47	Classroom		Faucet	<1.0	Pass	Testing Complete
M11206	45	Classroom		Faucet	2.0	Pass	Testing Complete
M11208	45	Classroom		Bubbler - Indoor	165.0	Fail	Follow-Up Testing Needed
M11210		Hallway	Across from 46	Cooler	<1.0	Pass	Testing Complete
M13231	13	Special Ed		Cooler	<1.0	Pass	Testing Complete
M13234	14	Bathroom Special Ed		Faucet	<1.0	Pass	Testing Complete
M13247		Hallway	Across from Room 20	Cooler	<1.0	Pass	Testing Complete
M13257	30	Classroom		Faucet	1.1	Pass	Testing Complete
M13258	30	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
M13259	27	Classroom		Faucet	2.7	Pass	Testing Complete
M13260	27	Classroom		Bubbler - Indoor	2.7	Pass	Testing Complete
M13261	31	Classroom		Faucet	5.3	Pass	Testing Complete
M13262	31	Classroom		Bubbler - Indoor	4.8	Pass	Testing Complete
M13263	32	Classroom		Faucet	4.3	Pass	Testing Complete
M13264	32	Classroom		Bubbler - Indoor	3.9	Pass	Testing Complete
M41053		Hallway	Across Health Room	Cooler	<1.0	Pass	Testing Complete
M41058	10	Kindergarten		Cooler	<1.0	Pass	Testing Complete
M41060	12	Kindergarten		Cooler	<1.0	Pass	Testing Complete
M41065	11	Bathroom		Faucet	<1.0	Pass	Testing Complete
M41415	43	Music		Faucet	<1.0	Pass	Testing Complete
M41416	43	Music		Bubbler - Indoor	2.5	Pass	Testing Complete
M41417		Hallway	Next to Room 37	Cooler	<1.0	Pass	Testing Complete
M41419		Kitchen		Faucet	2.1	Pass	Testing Complete
M41421		Kitchen		Faucet	<1.0	Pass	Testing Complete
M41422		Kitchen		Faucet	3.8	Pass	Testing Complete
M41423		Kitchen		Faucet	<1.0	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for Meadow Hall Elementary School (4/13/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
M11208	45	Classroom	Bubbler - Indoor	2.2	<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.