

Montgomery County Public Schools Lead in Drinking Water Testing Report

**Mill Creek Towne Elementary School
17700 Park Mill Drive
Rockville, MD 20855**

Report Date: February 18th, 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	10/28/2021
# of Outlets Tested	32
# 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. 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 Mill Creek Towne ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW07501	In Staff Lounge 115	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW07502	In classroom 120	Classroom Combination Sink	4.7	Pass	N/A	Testing Complete
LW07504	In hallway across from 111	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07506	In classroom 126	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
LW07508	In classroom 128	Classroom Combination Sink	1.7	Pass	N/A	Testing Complete
LW07510	In hallway right of 140	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07511	In classroom 210	Classroom Combination Sink	3.2	Pass	N/A	Testing Complete
LW07514	In classroom 118	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW07516	In hallway left of room 109a	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07517	In classroom 122	Classroom Combination Sink	7.2	Fail	4.0	Testing Complete
LW07519	In classroom 125	Classroom Combination Sink	2.0	Pass	N/A	Testing Complete
LW07521	In classroom 127	Classroom Combination Sink	2.5	Pass	N/A	Testing Complete
LW07525	In work room 139A	Classroom Sink	3.0	Pass	N/A	Testing Complete
LW07527	In classroom 143	Classroom Combination Sink	5.2	Fail	3.0	Testing Complete
LW07529	In classroom 207	Classroom Combination Sink	3.1	Pass	N/A	Testing Complete
LW07533	In classroom 213	Classroom Combination Sink	15.7	Fail	1.2	Testing Complete
LW07535	In hallway across from classroom 227	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07536	In hallway across from classroom 227	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07537	In classroom 227	Classroom Combination Sink	1.8	Pass	N/A	Testing Complete
LW07539	In Health 100A located in main office	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW07553	In work room 100H	Teachers Lounge Sink	1.4	Pass	N/A	Testing Complete
M04415	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M04416	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M04417	In kitchen	Kitchen Sink	1.4	Pass	N/A	Testing Complete
M04418	In kitchen	Kitchen Sink	1.1	Pass	N/A	Testing Complete
M04421	In music room 104	Classroom Sink	<1	Pass	N/A	Testing Complete
M16231	In classroom 214	Classroom Combination Sink	1.9	Pass	N/A	Testing Complete
M41073	In office 231	Classroom Sink	<1	Pass	N/A	Testing Complete
M41080	In classroom 223	Classroom Combination Sink	11.1	Fail	5.0	Testing Complete
M41087	In classroom 209	Classroom Combination Sink	17.6	Fail	1.8	Testing Complete

M41094	In classroom 208	Classroom Combination Sink	4.0	Pass	N/A	Testing Complete
M41105	In classroom 124	Classroom Combination Sink	<1	Pass	N/A	Testing Complete



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

August 30, 2019

Executive Summary:

Mill Creek Towne Elementary School

17700 Park Mill Drive

Rockville, Maryland 20855

Round of Testing:	Post-Remediation Follow-up
Sample Date	2/4/19
# of Outlets Tested:	1
# of Outlets ≥ 5 ppb:	0
Low Value (ppb):	2.1
High Value (ppb):	2.1

Project Status

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

Classroom 143 - Outlet (LW07527) 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: Mill Creek Towne Elementary School

17700 Park Mill Drive
Rockville, Maryland 200855

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 Mill Creek Towne Elementary School, located at 17700 Park Mill Drive in Rockville, Maryland 200855.

SCOPE OF SERVICES

One drinking water outlet was remediated at Mill Creek Towne 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 2/4/19 to collect a post-remediation follow-up sample from 1 drinking water outlet that had been replaced. The sample was 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
LW07527	143	Classroom		Faucet	110	<1.0	2.1	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 25, 2018

Executive Summary:
Mill Creek Towne Elementary School
17700 Park Mill Drive
Derwood, MD 20855

Round of Testing:	Initial
# of Outlets Tested:	53
# of Outlets \geq 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	110.0
Follow-Up Testing Required (Samples \geq 20 ppb):	Room 143 (110.0 ppb)

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

Project Status
Testing Complete: Remediation Plan

Classroom 143– Replace fixture (LW07527), in addition to supply line and valve located under sink



May 25, 2018

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

Re: Lead in Water Testing Service

Location: Mill Creek Towne Elementary School
17700 Park Mill Drive
Derwood, MD 20855

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 Mill Creek Towne Elementary School, located at 17700 Park Mill Drive in Derwood, MD 20855.

Scope of Services:

PSI conducted lead in water testing at Mill Creek Towne 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 3/20/18 and 3/21/18 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. One 30 second follow-up sample was collected on 5/8/18.

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)
LW07527	Classroom	3/21/18	110.0	5/8/18	<1.0

The initial lead in water sample results (3/21/18) and 30 second follow up results (5/8/18) 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

Mill Creek Towne ES Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Mill Creek Towne Elementary School (3/21/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07501	115	Break Room	Across from 118	Faucet	<1.0	Pass	Testing Complete
LW07502	120	Classroom		Faucet	2.3	Pass	Testing Complete
LW07503	120	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW07504		Hallway	Across from 111	Cooler	<1.0	Pass	Testing Complete
LW07505	123	Classroom		Faucet	6.6	Pass	Testing Complete
LW07506	126	Classroom		Faucet	4.8	Pass	Testing Complete
LW07507	126	Classroom		Bubbler - Indoor	4.0	Pass	Testing Complete
LW07508	128	Classroom		Faucet	1.2	Pass	Testing Complete
LW07510		Hallway	Right of 140	Cooler	<1.0	Pass	Testing Complete
LW07511	210	Classroom		Faucet	1.3	Pass	Testing Complete
LW07512	210	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07513	225	Classroom		Faucet	8.7	Pass	Testing Complete
LW07514	118	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07516		Hallway	Left of Room 109a	Cooler	<1.0	Pass	Testing Complete
LW07517	122	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07519	125	Classroom		Faucet	3.8	Pass	Testing Complete
LW07520	125	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07521	127	Classroom		Faucet	3.4	Pass	Testing Complete
LW07523	129	Classroom		Faucet	16.6	Pass	Testing Complete
LW07524	129	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW07525	139A	Work Room		Faucet	<1.0	Pass	Testing Complete
LW07526	209	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW07527	143	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07527	143	Classroom		Faucet	3.9	Pass	Testing Complete
LW07527	143	Classroom		Faucet	110.0	Fail	Follow-Up Testing Needed
LW07529	207	Classroom		Faucet	2.0	Pass	Testing Complete
LW07530	207	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW07531	211	Classroom		Faucet	10.6	Pass	Testing Complete
LW07532	211	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07533	213	Classroom		Faucet	1.4	Pass	Testing Complete
LW07534	213	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07535		Hallway	Right of 228	Cooler	<1.0	Pass	Testing Complete
LW07536		Hallway	Right of 228	Cooler	<1.0	Pass	Testing Complete
LW07537	227	Classroom		Faucet	1.9	Pass	Testing Complete
LW07538	227	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07539		Health Room Administration		Faucet	<1.0	Pass	Testing Complete
LW07540	225	Classroom		Bubbler - Indoor	3.2	Pass	Testing Complete
LW07553	100H	Work Room		Faucet	<1.0	Pass	Testing Complete
M04415		Kitchen		Faucet	<1.0	Pass	Testing Complete
M04416		Kitchen		Faucet	<1.0	Pass	Testing Complete
M04417		Kitchen		Faucet	<1.0	Pass	Testing Complete
M04418		Kitchen		Faucet	<1.0	Pass	Testing Complete
M04421	104	Music		Faucet	<1.0	Pass	Testing Complete
M16231	214	Classroom		Faucet	2.1	Pass	Testing Complete
M16232	214	Classroom		Bubbler	1.5	Pass	Testing Complete
M16329	123	Classroom		Bubbler	1.2	Pass	Testing Complete
M41073	231	Office		Faucet	4.7	Pass	Testing Complete
M41079	215	Classroom		Faucet	5.9	Pass	Testing Complete
M41080	223	Classroom		Faucet	4.9	Pass	Testing Complete
M41085	212	Classroom		Faucet	5.2	Pass	Testing Complete
M41086	212	Classroom		Bubbler	<1.0	Pass	Testing Complete
M41087	209	Classroom		Faucet	1.7	Pass	Testing Complete
M41091	208	Classroom		Bubbler	3.3	Pass	Testing Complete
M41094	208	Classroom		Faucet	<1.0	Pass	Testing Complete
M41105	124	Classroom		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 Mill Creek Towne Elementary School (5/8/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
LW07527	143	Classroom	Faucet	3.9	<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.