

Montgomery County Public Schools Lead in Drinking Water Testing Report

**Cold Spring Elementary School
9201 Falls Chapel Way
Potomac, MD 20854**

Report Date: March 22nd, 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	12/08/2021
# of Outlets Tested	28
# of Outlets \geq 5 ppb	20

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 Cold Spring ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW06926	In classroom 1	Classroom Sink	40.0	Fail	1.7	Testing Complete
LW06929	In break room	Teachers Lounge Sink	5.7	Fail	<1	Testing Complete
LW06931	In computer lab 20	Abandoned/Removed	7.4	Fail	Device Removed	Testing Complete
LW06953	In classroom 15	Classroom Sink	4.6	Pass	N/A	Testing Complete
Lw06957	In kitchen	Kitchen Sink	5.7	Fail	3.0	Testing Complete
LW06958	In kitchen	Kitchen Sink	3.6	Pass	N/A	Testing Complete
Lw06993	In classroom 9	Classroom Sink	14.6	Fail	1.7	Testing Complete
Lw10478	In classroom 18	Classroom Sink	9.0	Fail	<1	Testing Complete
Lw10479	In classroom 21	Classroom Sink	10.1	Fail	<1	Testing Complete
Lw10480	In classroom 13	Classroom Sink	7.0	Fail	<1	Testing Complete
Lw10481	In classroom 8	Classroom Sink	3.9	Pass	N/A	Testing Complete
Lw10482	In classroom 7	Classroom Sink	5.1	Fail	1.3	Testing Complete
Lw10483	In classroom 6	Classroom Sink	7.9	Fail	1.4	Testing Complete
Lw10484	In hallway next to room 6	Bottle Filler	<1.0	Pass	N/A	Testing Complete
Lw10485	In classroom 5	Classroom Sink	6.8	Fail	<1	Testing Complete
Lw10486	In classroom 4	Classroom Sink	13.6	Fail	14.7	Testing Complete
Lw10487	In classroom 2	Classroom Sink	27.7	Fail	<1	Testing Complete
Lw10488	In classroom 17	Classroom Sink	8.1	Fail	1.9	Testing Complete
Lw10490	In classroom 15	Classroom Sink	8.9	Fail	<1	Testing Complete
Lw10790	In kitchen	Kitchen Sink	2.3	Pass	N/A	Testing Complete
Lw10791	In workroom	Teacher's Lounge Sink	10.2	Fail	<1	Testing Complete
M12572	In classroom 10	Teacher's Lounge Sink	4.9	Pass	N/A	Testing Complete
M12601	In classroom 5	Classroom Sink	11.1	Fail	8.9	Testing Complete
M12613	In classroom 24	Classroom Combination Drinking Fountain	5.3	Fail	<1	Testing Complete
M12616	In classroom 24	Teacher's Lounge Sink	8.4	Fail	4.9	Testing Complete
M12637	In kitchen	Kitchen Sink	3.4	Pass	N/A	Testing Complete
M12638	In kitchen	Kitchen Sink	4.6	Pass	N/A	Testing Complete
W10489	In classroom 1	Classroom Sink	5.6	Fail	<1	Testing Complete



**MONTGOMERY COUNTY PUBLIC SCHOOL LEAD IN DRINKING WATER
POST-REMEDATION FOLLOW-UP TESTING 2019**

November 13, 2019

Executive Summary:
Cold Spring Elementary School
9201 Falls Chapel Way,
Potomac, MD 20854

Round of Testing:	Post-Remediation Follow-up
Sample Date	02/01/2019
# of Outlets Tested:	9
# of Outlets \geq 5 ppb:	5
Low Value (ppb):	2.3
High Value (ppb):	126

Project Status

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

- Classroom 13 – Outlet (LW06997) will be placed back in service.
- Classroom 24 – Outlet (M12613) will be placed back in service.
- Computer Lab 20 – Outlet (LW06931) will be placed back in service.
- Classroom 5 – Outlet (LW06923) will be removed from service.
- Classroom 19 – Outlet (LW06933) will be removed from service.
- Classroom 1 – Outlet (M14040) will be placed back in service.
- Classroom 19 – Outlet (LW06932) will have signage affixed.
- Computer Lab 20 – Outlet (M12618) will have signage affixed.
- Media Center – Outlet (LW06928) will be removed from service.



November 13, 2019

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 Post-Remediation Follow-up Testing Service

Location: Cold Spring Elementary School
9201 Falls Chapel Way,
Potomac, MD 20854

Dear Mr. Mullikin:

Intertek-PSI, Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of post-remediation lead in water testing at Cold Spring Elementary School, located at 9201 Falls Chapel Way, Potomac, MD 20854.

Scope of Services:

Nine (9) drinking water outlets were remediated at Cold Spring Elementary School due to initial levels that exceeded the lead action level of 5 parts per billion (ppb). Intertek-PSI 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.

Intertek-PSI visited the site on 02/01/2019 to collect post-remediation follow-up samples from 9 of the outlets that have 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
LW06997	13	Classroom		Bubbler - Indoor	56.3	<1.0	2.3	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service
M12613	24	Classroom		Bubbler - Indoor	35.9	2.3	4.0	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service
LW06931	20	Computer Lab		Bubbler - Indoor	79.1	12.2	4.5	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service
LW06923	5	Classroom		Bubbler - Indoor	24.2	4.1	5.4	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service
LW06933	19	Classroom		Bubbler - Indoor	36.1	2.4	9.0	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service
M14040	1	Classroom		Faucet	26.2	<1.0	4.7	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service
LW06932	19	Classroom		Faucet	41.0	<1.0	6.2	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed
M12618	20	Computer Lab		Faucet	30.1	19.7	6.3	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed
LW06928		Media Center		Faucet	72.6	1.8	126.0	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service

*ppb = parts per billion

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 Intertek-PSI, 2930 Eskridge Road, Fairfax, VA 22031 www.intertek.com/building



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.

Nan Lin
Department Manager, Environmental Services
Nan.Lin@intertek.com



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 17, 2018

Executive Summary:
Cold Spring Elementary School
9201 Falls Chapel Way
Potomac, MD 20854

Round of Testing:	Initial
# of Outlets Tested:	37
# of Outlets \geq 20 ppb:	9
Low Value (ppb):	< 1.0
High Value (ppb):	79.1
Follow-Up Testing Required (Samples \geq 20 ppb):	Room 5 (24.2 ppb) Media Center (72.6 ppb) Computer Lab (79.1 ppb) Room 19 (41.0 ppb) Room 19 (36.1) Room 13 (56.3 ppb) Room 24 (35.9 ppb) Computer Lab (30.1 ppb) Room 1 (26.2 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	9

Project Status **Testing Complete: Remediation Plan**

Classroom 5– Replace fixture (LW06923), in addition to supply line and valve located under sink
 Media Center– Replace fixture (LW06928), in addition to supply line and valve located under sink
 Computer Lab– Replace fixture (LW06931), in addition to supply line and valve located under sink
 Classroom 19– Replace fixture (LW06932), in addition to supply line and valve located under sink
 Classroom 19– Replace fixture (LW06933), in addition to supply line and valve located under sink
 Classroom 13– Replace fixture (LW06997), in addition to supply line and valve located under sink
 Classroom 24– Replace fixture (M12613), in addition to supply line and valve located under sink
 Computer Lab– Replace fixture (M12618), in addition to supply line and valve located under sink
 Classroom 1– Replace fixture (M14040), in addition to supply line and valve located under sink



May 17, 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: Cold Spring Elementary School
9201 Falls Chapel Way
Potomac, MD 20854

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 Cold Spring Elementary School, located at 9201 Falls Chapel Way in Potomac, MD 20854.

Scope of Services:

PSI conducted lead in water testing at Cold Spring 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 3/13/18 and 3/14/18 to collect samples from 37 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. Nine 30 second follow-up sample were 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 were nine 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)
LW06923	Classroom 5	3/14/18	24.2	5/8/18	4.1
LW06928	Media Center	3/14/18	72.6	5/8/18	1.8
LW06931	Computer Lab 20	3/14/18	79.1	5/8/18	12.2
LW06932	Classroom 19	3/14/18	41.0	5/8/18	<1.0
LW06933	Classroom 19	3/14/18	36.1	5/8/18	2.4
LW06997	Classroom 13	3/14/18	56.3	5/8/18	<1.0
M12613	Classroom 24	3/14/18	35.9	5/8/18	2.3
M12618	Computer Lab 20	3/14/18	30.1	5/8/18	19.7
M14040	Classroom 1	3/14/18	26.2	5/8/18	<1.0

The initial lead in water sample results (03/14/2018) 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.

A handwritten signature in black ink that reads "Nand Kaushik".

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

Attachments: A – Lead in Water Test Summary Table

ATTACHMENT A

Cold Spring ES Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Cold Spring Elementary School (3/14/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW06922		Hallway	Across From 6	Cooler	<1.0	Pass	Testing Complete
LW06923	5	Classroom		Bubbler - Indoor	24.2	Fail	Follow-Up Testing Needed
LW06928		Media Center		Faucet	72.6	Fail	Follow-Up Testing Needed
LW06929		Break Room		Faucet	2.3	Pass	Testing Complete
LW06931	20	Computer Lab		Bubbler - Indoor	79.1	Fail	Follow-Up Testing Needed
LW06932	19	Classroom		Faucet	41.0	Fail	Follow-Up Testing Needed
LW06933	19	Classroom		Bubbler - Indoor	36.1	Fail	Follow-Up Testing Needed
LW06947		Hallway	In Front Of Gym	Cooler	<1.0	Pass	Testing Complete
LW06948		Hallway	In Front Of Gym	Cooler	<1.0	Pass	Testing Complete
LW06950	15	Classroom		Faucet	3.0	Pass	Testing Complete
LW06951	15	Classroom		Faucet	5.3	Pass	Testing Complete
LW06957		Kitchen		Faucet	5.5	Pass	Testing Complete
LW06958		Kitchen		Faucet	1.9	Pass	Testing Complete
LW06993	9	Classroom		Faucet	12.7	Pass	Testing Complete
LW06994	11	Classroom		Faucet	9.3	Pass	Testing Complete
LW06997	13	Classroom		Bubbler - Indoor	56.3	Fail	Follow-Up Testing Needed
M12572	10	Classroom		Faucet	4.2	Pass	Testing Complete
M12577	13	Classroom		Faucet	10.5	Pass	Testing Complete
M12580	8	Classroom		Faucet	12.9	Pass	Testing Complete
M12582	7	Classroom		Faucet	7.6	Pass	Testing Complete
M12584	6	Classroom		Faucet	16.6	Pass	Testing Complete
M12595	2	Classroom		Faucet	7.2	Pass	Testing Complete
M12597	1	Classroom		Faucet	14.7	Pass	Testing Complete
M12599	3	Classroom		Faucet	11.6	Pass	Testing Complete
M12603	4	Classroom		Faucet	6.3	Pass	Testing Complete
M12610	21	Classroom		Faucet	8.8	Pass	Testing Complete
M12612	23	Classroom		Faucet	5.1	Pass	Testing Complete
M12613	24	Classroom		Bubbler - Indoor	35.9	Fail	Follow-Up Testing Needed
M12616	24	Classroom		Faucet	2.1	Pass	Testing Complete
M12618	20	Computer Lab		Faucet	30.1	Fail	Follow-Up Testing Needed
M12621		Hallway	Next to Admin	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M12622	18	Classroom		Faucet	5.7	Pass	Testing Complete
M12637		Kitchen		Faucet	1.2	Pass	Testing Complete
M12638		Kitchen		Faucet	2.4	Pass	Testing Complete
M12645	17	Classroom		Faucet	13.2	Pass	Testing Complete
M12648		Work Room Admin		Faucet	8.1	Pass	Testing Complete
M14040	1	Classroom		Faucet	26.2	Fail	Follow-Up Testing Needed

*ppb = parts per billion

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

Follow Up Sample Results for Cold Spring Elementary School (5/8/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
LW06923	5	Classroom	Bubbler - Indoor	12.2	4.1	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06928		Media Center	Faucet	17.2	1.8	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06931	20	Computer Lab	Bubbler - Indoor	62.8	12.2	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06932	19	Classroom	Faucet	14.8	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06933	19	Classroom	Bubbler - Indoor	34.6	2.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06997	13	Classroom	Bubbler - Indoor	7.1	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
M12613	24	Classroom	Bubbler - Indoor	6.2	2.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
M12618	20	Computer Lab	Faucet	145.0	19.7	Remediation required – replace fixture, in addition to supply line and valve located under sink
M14040	1	Classroom	Faucet	4.7	<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.