Montgomery County Public Schools
Lead in Drinking Water Testing Report

Ridgeview Middle School
16600 Raven Rock Drive
Gaithersburg, MD 20878

Report Date: February 23rd, 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	11/17/2021
# of Outlets Tested	31
# of Outlets ≥ 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 Ridgeview MS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
M50581	In admin work room 18	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW09062	In boys locker room 121	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW09060	In break room 230	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW01659	In cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01660	In cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
M11391	In classroom 202	Classroom Sink	6.4	Fail	1.7	Testing Complete
LW09061	In girls locker room 120	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01697	In hallway adjacent to 226	Drinking Fountain	3.5	Pass	N/A	Testing Complete
LW01698	In hallway adjacent to boys bathroom 4B	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW09063	In hallway adjacent to boys bathroom 6B	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01658	In hallway adjacent to cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW09056	In hallway adjacent to elevator	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW09057	In hallway adjacent to elevator	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01700	In hallway adjacent to girls locker room 120	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01701	In hallway adjacent to girls locker room 120	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01662	In hallway adjacent to gym 231	Drinking Fountain	1.9	Pass	N/A	Testing Complete
LW01702	In hallway adjacent to room 119	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01703	In hallway adjacent to room 119	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11095	In hallway adjacent to room 119	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11096	In hallway adjacent to room 237	Bottle Filler	<1	Pass	N/A	Testing Complete
LW01663	In hallway adjacent to staff restroom 2A	Drinking Fountain	1.7	Pass	N/A	Testing Complete
LW01657	In health room 11	Ice Machine	1.4	Pass	N/A	Testing Complete
M50582	In health room 11	Nurses Office Sink	4.1	Pass	N/A	Testing Complete
M11649	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M11650	In kitchen	Kitchen Sink	1.4	Pass	N/A	Testing Complete
M11651	In kitchen	Kitchen Sink	1.8	Pass	N/A	Testing Complete
LW09059	In media center 212	Teacher's Lounge Sink	5.2	Fail	4.0	Testing Complete
LW01664	In team room 206A	Teacher's Lounge Sink	11.4	Fail	1.5	Testing Complete
LW09058	In team room 217A	Teacher's Lounge Sink	14.4	Fail	3.7	Testing Complete
LW01699	In team room 220A	Teacher's Lounge Sink	6.0	Fail	1.6	Testing Complete

MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER
POST-REMEDIATION FOLLOW-UP TESTING 2019

November 13, 2019

Executive Summary:
Ridgeview Middle School
16600 Raven Rock Drive,
Gaithersburg, MD 20878

Round of Testing:	**Post-Remediation Follow-up**
Sample Date	02/05/2019
# of Outlets Tested:	1
# of Outlets ≥ 5 ppb:	1
Low Value (ppb):	63.6
High Value (ppb):	63.6

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

Health Room Administration Inside Room Next to 013 Storage in Health (11) – Outlet (M50585) 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: Ridgeview Middle School
16600 Raven Rock Drive,
Gaithersburg, MD 20878

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 Ridgeview Middle School, located at 16600 Raven Rock Drive, Gaithersburg, MD 20878.

Scope of Services:

One (1) drinking water outlet was remediated at Ridgeview Middle 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 02/05/2019 to collect post-remediation follow-up samples from 1 outlet 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
M50585	11	Health Room Administration Inside Rm Next to 013 Storage in Health		Faucet	23.1	ND	63.6	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 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

July 23, 2018

Executive Summary:
Ridgeview Middle School
16600 Raven Rock Drive,
Gaithersburg, MD 20878

Round of Testing:	Initial
# of Outlets Tested:	33
# of Outlets ≥ 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	23.1
Follow-Up Testing Required (Samples ≥ 20 ppb):	Health Rm. (23.1 ppb)

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

Project Status
Testing Complete: Remediation Plan

Health Room – Replace fixture (M50585), in addition to supply line and valve located under sink

July 23, 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: Ridgeview Middle School
16600 Raven Rock Drive,
Gaithersburg, MD 20878

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 Ridgeview Middle School, located 16600 Raven Rock Drive, Gaithersburg, MD 20878.

Scope of Services:

PSI conducted lead in water testing at Ridgeview Middle 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 4/09/18 and 4/10/18 to collect samples from 33 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 5/16/18.

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)
M50585	Health Room	4/10/18	23.1	5/16/18	ND

*ppb = parts per billion

ND = Non Detect

The initial lead in water sample results (4/10/18) and 30 second follow up results (5/16/18) 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

Ridgeview Middle School Water Test Summary Table

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

Initial Sample Results for Ridgeview Middle School (4/10/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW01657	11	Health Room Administration		Icemaker	2.0	Pass	Testing Complete
LW01658		Hallway	Across From Cafeteria	Cooler	<1.0	Pass	Testing Complete
LW01659		Cafeteria		Cooler	<1.0	Pass	Testing Complete
LW01660		Cafeteria		Cooler	<1.0	Pass	Testing Complete
LW01661		Kitchen Cafeteria		Faucet	5.6	Pass	Testing Complete
LW01662		Hallway	Left Of Gym 231	Cooler	<1.0	Pass	Testing Complete
LW01663		Hallway	Left Of Staff Restroom 2a	Cooler	<1.0	Pass	Testing Complete
LW01664	206A	Team Room		Faucet	3.4	Pass	Testing Complete
LW01697		Hallway	Across From Cr 226	Cooler	<1.0	Pass	Testing Complete
LW01698		Hallway	Next To Boys Bathroom 4b	Cooler	<1.0	Pass	Testing Complete
LW01699	220A	Team Room		Faucet	4.5	Pass	Testing Complete
LW01700		Hallway	Next To Girls Locker Room 120	Cooler	<1.0	Pass	Testing Complete
LW01701		Hallway	Next To Girls Locker Room 120	Cooler	<1.0	Pass	Testing Complete
LW01702		Hallway	Right Of 119	Cooler	<1.0	Pass	Testing Complete
LW01703		Hallway	Right Of 119	Cooler	<1.0	Pass	Testing Complete
LW09056		Hallway	Next To Elevator	Cooler	<1.0	Pass	Testing Complete
LW09057		Hallway	Next To Elevator	Cooler	<1.0	Pass	Testing Complete
LW09058	217A	Team Room		Faucet	4.9	Pass	Testing Complete
LW09059	212	Media Center		Faucet	3.8	Pass	Testing Complete
LW09060	230	Break Room		Faucet	1.3	Pass	Testing Complete
LW09061		Locker Room - Girls	Room 120	Cooler	<1.0	Pass	Testing Complete
LW09062		Locker Room - Boys	Room 121	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW09063		Hallway	Left Of Boys Bathroom 6b	Cooler	<1.0	Pass	Testing Complete
M11391	202	Classroom		Faucet	4.7	Pass	Testing Complete
M11392	202	Classroom		Faucet	9.2	Pass	Testing Complete
M11393	202	Classroom		Faucet	13.3	Pass	Testing Complete
M11401	224	Supply Room Special Ed		Faucet	13.4	Pass	Testing Complete
M11649		Kitchen Cafeteria		Faucet	2.2	Pass	Testing Complete
M11650		Kitchen Cafeteria		Faucet	2.1	Pass	Testing Complete
M11651		Kitchen Cafeteria		Faucet	1.8	Pass	Testing Complete
M50581	18	Work Room Administration	Inside Office	Faucet	<1.0	Pass	Testing Complete
M50582	11	Health Room Administration		Faucet	<1.0	Pass	Testing Complete
M50585	11	Health Room Administration	Next to 013 Storage in Health	Faucet	23.1	Fail	Follow-Up Testing Needed

*ppb = parts per billion

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

Follow Up Sample Results for Ridgeview Middle School (5/16/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	30 Second Draw (PPB)	Status
M50585	11	Health Room Administration	Faucet	22.5	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink

*ppb = parts per billion
ND = Non Detect

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.