MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 3, 2018

Executive Summary:
Summit Hall Elementary School
101 West Deer Park Road
Gaithersburg, MD 20877

Round of Testing:	Initial
# of Outlets Tested:	103
# of Outlets ≥ 20 ppb:	2
Low Value (ppb):	< 1.0
High Value (ppb):	32.4
Follow-Up Testing Required (Samples ≥ 20 ppb):	Room 23 (21.5 ppb) Room 19 (32.4 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	2

Project Status
Testing Complete: Remediation Plan

Room 19 – Replace fixture (LW00769), in addition to supply line and valve located under sink
Room 23 – Replace fixture (LW00763), in addition to supply line and valve located under sink

May 3, 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: Summit Hall Elementary School
101 West Deer Park Road
Gaithersburg, MD 20877

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 Summit Hall Elementary School, located at 101 West Deer Park Road in Gaithersburg, MD 20877.

Scope of Services:

PSI conducted lead in water testing at Summit 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 02/5/18 and 02/6/18 to collect samples from 103 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. Two 30 second follow-up samples were collected on 4/11/18.

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 two 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)
LW00763	Classroom 23	2/6/2018	21.5	4/11/18	Non Detect
LW00769	Classroom 19	2/6/2018	32.4	4/11/18	9.8

The initial lead in water sample results (02/6/18) and 30 second follow up results (4/11/18) are shown in Attachment A.

Discussion:

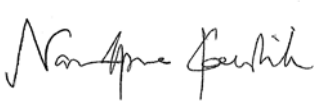
Lead is a naturally occurring element that can be harmful to humans when ingested or inhaled, particularly to children under the age of six. Lead can adversely affect the development of children's brain potentially leading to detrimental alterations in intelligence and behavior. Lead has been historically 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

Summit Hall ES Water Test Summary Table

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

Initial Sample Results for Summit Hall Elementary School (2/6/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00716		Hallway	Across From Men's Restroom	Cooler	<1.0	Pass	Testing Complete
LW00717		Hallway	Across From Men's Restroom	Cooler	<1.0	Pass	Testing Complete
LW00718		Hallway	Across From Men's Restroom	Cooler	<1.0	Pass	Testing Complete
LW00719	202	Classroom		Faucet	1.2	Pass	Testing Complete
LW00720	202	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00721	201	Classroom		Faucet	1.1	Pass	Testing Complete
LW00722	201	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00723	204	Classroom		Faucet	1.0	Pass	Testing Complete
LW00724	204	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00725	203	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00726	203	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00727	207	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00728	207	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00729	208	Classroom		Faucet	1.4	Pass	Testing Complete
LW00730	208	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00731	209	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00732	209	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00733	210	Classroom		Faucet	1.2	Pass	Testing Complete
LW00734	210	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00735		Hallway	Across From Men's Restroom	Cooler	<1.0	Pass	Testing Complete
LW00736		Hallway	Across From Men's Restroom	Cooler	<1.0	Pass	Testing Complete
LW00737		Hallway	Across From Men's Restroom	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00738	301	Classroom		Faucet	2.4	Pass	Testing Complete
LW00739	301	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00740	302	Classroom		Faucet	3.7	Pass	Testing Complete
LW00741	302	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW00742	303	Classroom		Faucet	1.7	Pass	Testing Complete
LW00743	303	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00744	304	Classroom		Faucet	1.1	Pass	Testing Complete
LW00745	304	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00746	307	Classroom		Faucet	1.4	Pass	Testing Complete
LW00747	307	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00748	308	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00749	308	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00750	309	Classroom		Faucet	1.1	Pass	Testing Complete
LW00751	309	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00752	310	Classroom		Faucet	1.2	Pass	Testing Complete
LW00753	310	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00754	121	Health Room		Faucet	1.4	Pass	Testing Complete
LW00755	109	Health Room		Faucet	2.2	Pass	Testing Complete
LW00756	114	Health Room		Faucet	1.8	Pass	Testing Complete
LW00757	115	Health Room		Faucet	1.7	Pass	Testing Complete
LW00758	26	Classroom		Faucet	1.3	Pass	Testing Complete
LW00759	26	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW00760	25	Classroom		Faucet	2.3	Pass	Testing Complete
LW00761	25	Classroom		Bubbler - Indoor	2.5	Pass	Testing Complete
LW00762	24	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW00763	23	Classroom		Faucet	21.5	Fail	Follow-Up Testing Needed
LW00764	22	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00765	21	Classroom		Faucet	2.6	Pass	Testing Complete
LW00766	21	Classroom		Bubbler - Indoor	2.7	Pass	Testing Complete
LW00768	18	Classroom		Faucet	10.1	Pass	Testing Complete
LW00769	19	Classroom		Faucet	32.4	Fail	Follow-Up Testing Needed
LW00770	19	Classroom		Bubbler - Indoor	7.6	Pass	Testing Complete
LW00771	17	Classroom		Faucet	4.4	Pass	Testing Complete
LW00773	16	Classroom		Faucet	9.6	Pass	Testing Complete
LW00774	16	Classroom		Bubbler - Indoor	6.2	Pass	Testing Complete
LW00775		Hallway	Next To Classroom 3	Cooler	<1.0	Pass	Testing Complete
LW00776	1	Music		Faucet	4.9	Pass	Testing Complete
LW00777	1	Music		Bubbler - Indoor	4.2	Pass	Testing Complete
LW00778	20	Classroom		Faucet	5.6	Pass	Testing Complete
LW00779	20	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW00780		Hallway	Next To Classroom 16	Cooler	<1.0	Pass	Testing Complete
LW00781		Media Center		Faucet	4.7	Pass	Testing Complete
LW00782	3	Art		Faucet	4.7	Pass	Testing Complete
LW00783	3	Art		Bubbler - Indoor	2.9	Pass	Testing Complete
LW00784	4	Classroom		Faucet	2.2	Pass	Testing Complete
LW00785	4	Classroom		Bubbler - Indoor	5.3	Pass	Testing Complete
LW00786	5	Classroom		Faucet	16.1	Pass	Testing Complete
LW00787	5	Classroom		Bubbler - Indoor	15.3	Pass	Testing Complete
LW00788		Hallway	Between Classroom 12 And 14	Cooler	<1.0	Pass	Testing Complete
LW00789	14	Classroom		Faucet	8.3	Pass	Testing Complete
LW00790	14	Classroom		Bubbler - Indoor	6.5	Pass	Testing Complete
LW00791	15	Classroom		Faucet	1.7	Pass	Testing Complete
LW00792	15	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
LW00793	2	Music		Faucet	6.8	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00795	DNIKA	Office Administration		Faucet	2.1	Pass	Testing Complete
LW00796		Work Room Administration		Faucet	1.8	Pass	Testing Complete
LW00797	6	Classroom		Faucet	4.4	Pass	Testing Complete
LW00798	6	Classroom		Bubbler - Indoor	3.8	Pass	Testing Complete
LW00799	13	Classroom		Faucet	2.4	Pass	Testing Complete
LW00800	13	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW00801	12	Classroom		Faucet	4.1	Pass	Testing Complete
LW00802	12	Classroom		Bubbler - Indoor	4.5	Pass	Testing Complete
LW00803	11	Classroom		Faucet	2.2	Pass	Testing Complete
LW00804	11	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
LW00805	10	Classroom		Faucet	4.7	Pass	Testing Complete
LW00806	10	Classroom		Bubbler - Indoor	3.3	Pass	Testing Complete
LW00807	9	Classroom		Faucet	4.2	Pass	Testing Complete
LW00808	9	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW00809	8	Classroom		Faucet	2.4	Pass	Testing Complete
LW00810	8	Classroom		Bubbler - Indoor	4.6	Pass	Testing Complete
LW00811	7	Classroom		Faucet	2.1	Pass	Testing Complete
LW00812	7	Classroom		Bubbler - Indoor	3.3	Pass	Testing Complete
LW00813		Hallway	Next To Gym Entrance	Cooler	<1.0	Pass	Testing Complete
M00099		Kitchen		Faucet	2.9	Pass	Testing Complete
M00100		Kitchen		Faucet	2.7	Pass	Testing Complete
M00101		Kitchen	By Loading Dock	Faucet	3.9	Pass	Testing Complete
M00103		Break Room Administration		Faucet	1.3	Pass	Testing Complete
M00137	24	Classroom		Faucet	2.4	Pass	Testing Complete
M00141	22	Classroom		Faucet	<1.0	Pass	Testing Complete
M00145	33	Classroom		Faucet	2.2	Pass	Testing Complete
M00192		Hallway	Across from CR 7	Cooler	<1.0	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for Summit Hall Elementary School (4/11/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	Initial draw (3rd) (PPB)	30 Second Draw (PPB)	Status
LW00763	23	Classroom	Faucet	3.4	2.3	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW00769	19	Classroom	Faucet	19.2	29.1	9.8	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 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.