MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

July 24, 2018

Executive Summary:
Bethesda-Chevy Chase High School
4301 East West Highway,
Bethesda, MD 20814

Round of Testing:	Initial
# of Outlets Tested:	57
# of Outlets ≥ 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	55.5
Follow-Up Testing Required (Samples ≥ 20 ppb):	Material Prep Area (55.5 ppb)

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

Project Status
Testing Complete: Remediation Plan

Material Prep Room B226A – Replace fixture (M25158), in addition to supply line and valve located under sink

July 24, 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: Bethesda-Chevy Chase High School
4301 East West Highway
Bethesda, MD 20814

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 Bethesda-Chevy Chase High School, located 4301 East West Highway, Bethesda, MD 20814.

Scope of Services:

PSI conducted lead in water testing at Bethesda-Chevy Chase High 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 5/3/18 and 5/4/18 to collect samples from 57 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 6/21/18.

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)
M25158	Material Prep Room B226A	5/4/18	55.5	6/21/18	ND

*ppb = parts per billion
ND = Non Detect

The initial lead in water sample results (5/4/18) and 30 second follow up results (6/21/18) 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

Bethesda-Chevy Chase High School Water Test Summary Table

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

Initial Sample Results for Bethesda-Chevy Chase High School (5/4/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW11661		Kitchen		Faucet	3.5	Pass	Testing Complete
LW11662		Kitchen		Faucet	3.1	Pass	Testing Complete
LW11663		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW11664		Kitchen		Faucet	1.1	Pass	Testing Complete
LW11665		Kitchen		Faucet	1.8	Pass	Testing Complete
LW11666		Kitchen		Faucet	1.5	Pass	Testing Complete
LW11667		Kitchen		Faucet	2.8	Pass	Testing Complete
LW11668		Hallway	Front of Café	Cooler	<1.0	Pass	Testing Complete
LW11669		Hallway	Front of Café	Cooler	<1.0	Pass	Testing Complete
LW11670		Hallway	Front of Café	Cooler	<1.0	Pass	Testing Complete
LW11671		Concession		Faucet	2.0	Pass	Testing Complete
LW11673	B136	Health Room		Faucet	<1.0	Pass	Testing Complete
LW11674		Hallway		Cooler	<1.0	Pass	Testing Complete
LW11675		Hallway		Cooler	<1.0	Pass	Testing Complete
LW11676		Hallway		Faucet	<1.0	Pass	Testing Complete
LW11677	B104	Work Room		Faucet	<1.0	Pass	Testing Complete
LW11678	C113	Child Development		Faucet	1.3	Pass	Testing Complete
LW11680	C110	Break Room		Faucet	<1.0	Pass	Testing Complete
LW11681		Hallway	In Front of E007	Cooler	<1.0	Pass	Testing Complete
LW11682		Locker Room - Men's		Cooler	<1.0	Pass	Testing Complete
LW11683		Locker Room - Women's		Cooler	<1.0	Pass	Testing Complete
LW11684		Dressing Room - Women's		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW11685		Dressing Room - Women's		Faucet	2.6	Pass	Testing Complete
LW11686		Hallway	Next to B225	Cooler	<1.0	Pass	Testing Complete
LW11687	C203	Office		Faucet	1.0	Pass	Testing Complete
LW11688	C208	Work Room		Faucet	<1.0	Pass	Testing Complete
LW11689	B220A	Office Science		Faucet	5.8	Pass	Testing Complete
LW11690		Hallway	Next to B214	Cooler	<1.0	Pass	Testing Complete
LW11691		Hallway	Next to B214	Cooler	<1.0	Pass	Testing Complete
LW11692		Hallway	Next to B214	Cooler	<1.0	Pass	Testing Complete
LW11693	A320	Office		Faucet	3.3	Pass	Testing Complete
LW11694	C303	Office		Faucet	<1.0	Pass	Testing Complete
LW11695		Hallway	Right of B320	Cooler	<1.0	Pass	Testing Complete
LW11696		Hallway	Right of B320	Cooler	<1.0	Pass	Testing Complete
LW11697	B303	Classroom		Faucet	<1.0	Pass	Testing Complete
LW11698		Hallway	Right of B310	Cooler	<1.0	Pass	Testing Complete
LW11699		Hallway	Right of B310	Cooler	<1.0	Pass	Testing Complete
LW11700		Hallway	Next to Elevator 4 Floor	Cooler	<1.0	Pass	Testing Complete
M25125	C308	Office		Faucet	<1.0	Pass	Testing Complete
M25152		Kitchen Career Center	Across from A209	Faucet	<1.0	Pass	Testing Complete
M25153	B217A	Material Prep Science		Faucet	13.3	Pass	Testing Complete
M25158	B226A	Material Prep		Faucet	55.5	Fail	Follow-Up Testing Needed
M37173	B203	Work Room Media Center		Faucet	<1.0	Pass	Testing Complete
M42705		Boys Dressing Room	Across from E030	Faucet	2.7	Pass	Testing Complete
M42707		Girls Dressing Room	Across from E031	Faucet	1.0	Pass	Testing Complete
M42744		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
M42752		Kitchen Cafeteria		Ice Maker	<1.0	Pass	Testing Complete
M42782	C101	Office		Faucet	<1.0	Pass	Testing Complete
M42784	C104	Office		Faucet	<1.0	Pass	Testing Complete
M42787	C113	Child Development		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M42797		Hallway	4th Floor	Cooler	<1.0	Pass	Testing Complete
M43077	A418	Office		Faucet	1.2	Pass	Testing Complete
M43078	A410	Work Room		Faucet	11.0	Pass	Testing Complete
M43083		Hallway	Next to B310	Cooler	<1.0	Pass	Testing Complete
M43102	B313A	Material Prep Area		Faucet	9.5	Pass	Testing Complete
M44475	D201	Office		Faucet	<1.0	Pass	Testing Complete
M44492		Hallway	Next to B225	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 Bethesda-Chevy Chase High School (6/21/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	30 Second Draw (PPB)	Status
M25158	B226A	Material Prep	Faucet	27.8	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.