MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

June 26, 2018

Executive Summary:
Poolesville High School
17501 West Willard Road,
Poolesville, MD 20837

Round of Testing:	Initial
# of Outlets Tested:	33
# of Outlets ≥ 20 ppb:	8
Low Value (ppb):	< 1.0
High Value (ppb):	195.0
Follow-Up Testing Required (Samples ≥ 20 ppb):	Classroom 61 (30.0 ppb) Classroom 28 (21.7 ppb) Kitchen (25.1 ppb) Kitchen (23.1 ppb) Kitchen (90.4 ppb) Math Office Room 37 (77.8 ppb) Classroom 24 (195.0 ppb) Dressing Room (28.5 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	8

Project Status
Testing Complete: Remediation Plan

Classroom 61 – Replace fixture (LW11505), in addition to supply line and valve located under sink
Classroom 28 – Replace fixture (LW11520), in addition to supply line and valve located under sink
Kitchen – Replace fixture (LW11522), in addition to supply line and valve located under sink
Kitchen – Replace fixture (LW11523), in addition to supply line and valve located under sink
Kitchen – Replace fixture (LW11525), in addition to supply line and valve located under sink
Math Office Room 37 – Replace fixture (LW11527), in addition to supply line and valve located under sink
Classroom 24 – Replace fixture (M04374), in addition to supply line and valve located under sink
Dressing Room – Replace fixture (M20994), in addition to supply line and valve located under sink

June 26, 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: Poolesville High School
17501 West Willard Road,
Poolesville, MD 20837

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 Poolesville High School, located 17501 West Willard Road, Poolesville, MD 20837.

Scope of Services:

PSI conducted lead in water testing at Poolesville 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 4/18/18, 4/19/18 and 4/20/18 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. Eight 30 second follow-up sample were collected on 6/7/18.

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 eight 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)
LW11505	Classroom 61	4/19/18	30.0	6/7/18	8.7
LW11520	Classroom 28	4/19/18	21.7	6/7/18	3.4
LW11522	Kitchen	4/19/18	25.1	6/7/18	1.7
LW11523	Kitchen	4/19/18	23.1	6/7/18	2.1
LW11525	Kitchen	4/19/18	90.4	6/7/18	7.4
LW11527	Math Office – Room 37	4/19/18	77.8	6/7/18	9.7
M04374	Classroom 24	4/19/18	195.0	6/7/18	13.7
M20994	Dressing Room	4/19/18	28.5	6/7/18	13.1

*ppb = parts per billion

The initial lead in water sample results (4/19/18 and 4/20/18) and 30 second follow up results (6/7/18) 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
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Attachments: A – Lead in Water Test Summary Table

ATTACHMENT A

Poolesville High School Water Test Summary Table

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

Initial Sample Results for Poolesville High School (4/19/18 and 4/20/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW11505	61	Classroom		Faucet	30.0	Fail	Follow-Up Testing Needed
LW11506		Hallway	Across From Box Office	Cooler	3.5	Pass	Testing Complete
LW11507		Hallway	Across From Box Office	Cooler	<1.0	Pass	Testing Complete
LW11508		Hallway	Across From Box Office	Cooler	<1.0	Pass	Testing Complete
LW11509	59	Health Room		Faucet	3.5	Pass	Testing Complete
LW11510		Hallway	Left Of Cr 53	Cooler	<1.0	Pass	Testing Complete
LW11511	53	Break Room		Faucet	7.5	Pass	Testing Complete
LW11512	45	Break Room Science		Faucet	5.2	Pass	Testing Complete
LW11513		Work Room Administration		Faucet	6.8	Pass	Testing Complete
LW11514	58A	Office		Faucet	5.9	Pass	Testing Complete
LW11515		Hallway	Right Of Cr 11	Cooler	1.1	Pass	Testing Complete
LW11516		Hallway	Right Of Cr 4	Cooler	1.0	Pass	Testing Complete
LW11517		Hallway	Across From Cr 22	Cooler	<1.0	Pass	Testing Complete
LW11518		Hallway	Across From Cr 23	Cooler	<1.0	Pass	Testing Complete
LW11519		Hallway	Across From Cr 26	Cooler	3.1	Pass	Testing Complete
LW11520	28	Computer Lab		Faucet	21.7	Fail	Follow-Up Testing Needed
LW11521		Kitchen		Faucet	18.4	Pass	Testing Complete
LW11522		Kitchen		Faucet	25.1	Fail	Follow-Up Testing Needed
LW11523		Kitchen		Faucet	23.1	Fail	Follow-Up Testing Needed
LW11524		Kitchen		Faucet	3.7	Pass	Testing Complete
LW11525		Kitchen		Faucet	90.4	Fail	Follow-Up Testing Needed
LW11526		Kitchen		Ice Maker	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW11527	37	Office Math		Faucet	77.8	Fail	Follow-Up Testing Needed
LW11528		Hallway	Left Of 196	Cooler	1.2	Pass	Testing Complete
LW11529		Hallway	Left Of 196	Cooler	<1.0	Pass	Testing Complete
LW11530		Hallway	Across From 291	Cooler	<1.0	Pass	Testing Complete
LW11531		Hallway	Across From 291	Cooler	1.4	Pass	Testing Complete
LW11532	299	Office		Faucet	2.4	Pass	Testing Complete
M04374	24	Classroom		Faucet	195.0	Fail	Follow-Up Testing Needed
M04470		Hallway	Left Of 53	Cooler	6.5	Pass	Testing Complete
M20903	3	Office		Faucet	13.8	Pass	Testing Complete
M20938		Girls Locker Room		Cooler	1.2	Pass	Testing Complete
M20994		Dressing		Faucet	28.5	Fail	Follow-Up Testing Needed

*ppb = parts per billion

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

Follow Up Sample Results for Poolesville High School (6/7/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	30 Second Draw (PPB)	Status
LW11505	61	Classroom	Faucet	36.4	8.7	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW11520	28	Classroom	Faucet	28.1	3.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW11522		Kitchen	Faucet	2.6	1.7	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW11523		Kitchen	Faucet	3.4	2.1	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW11525		Kitchen	Faucet	108.0	7.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW11527	37	Math Office	Faucet	42.1	9.7	Remediation required – replace fixture, in addition to supply line and valve located under sink
M04374	24	Classroom	Faucet	209.0	13.7	Remediation required – replace fixture, in addition to supply line and valve located under sink
M20994		Dressing Room	Faucet	46.2	13.1	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.