MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 3, 2018

Executive Summary:
Albert Einstein High School
11135 Newport Mill Rd
Kensington, MD 20895

Round of Testing:	Initial
# of Outlets Tested:	68
# of Outlets ≥ 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	700
Follow-Up Testing Required (Samples ≥ 20 ppb):	Kitchen (700 ppb)

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

Project Status
Testing Complete: Remediation Plan

Kitchen – Replace fixture (M41997), 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: Albert Einstein High School
11135 Newport Mill Rd
Kensington, MD 20895

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 Albert Einstein High School, located at 8720 11135 Newport Mill Rd in Kensington, MD 20895.

Scope of Services:

PSI conducted lead in water testing at Albert Einstein 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 02/14/18 and 02/15/18 to collect samples from 68 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 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 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)
M41997	Kitchen	2/15/2018	700	4/11/18	1.3

The initial lead in water sample results (02/15/18) and 30 second follow up results (4/11/18) are shown in Attachment A.

Discussion:

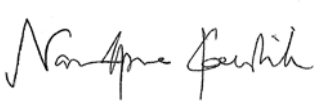
Lead is a naturally occurring element that can be harmful to humans when ingested or inhaled, particularly to children under the age of six. Lead can adversely affect the development of children's brain potentially leading to detrimental alterations in intelligence and behavior. Lead has been historically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

ATTACHMENT A

Albert Einstein HS Water Test Summary Table

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

Initial Sample Results for Albert Einstein High School (2/15/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
F56646	116K	Kitchen		Icemaker	<1.0	Pass	Testing Complete
LW02031		Hallway	In Front Of 116K Kitchen	Cooler	<1.0	Pass	Testing Complete
LW02032		Hallway	In Front Of 116K Kitchen	Cooler	<1.0	Pass	Testing Complete
LW02033		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW02034	116K	Kitchen		Faucet	<1.0	Pass	Testing Complete
LW02035	116K	Kitchen		Faucet	1.4	Pass	Testing Complete
LW02036	116K	Kitchen		Faucet	1.1	Pass	Testing Complete
LW02037	116K	Kitchen		Faucet	<1.0	Pass	Testing Complete
LW02038	116K	Kitchen		Faucet	<1.0	Pass	Testing Complete
LW02039	116K	Kitchen		Faucet	1.8	Pass	Testing Complete
LW02040	116K	Kitchen		Faucet	2.2	Pass	Testing Complete
LW02041	116K	Kitchen		Faucet	<1.0	Pass	Testing Complete
LW02042		Hallway	In Front Of 138	Cooler	<1.0	Pass	Testing Complete
LW02043		Hallway	In Front Of 138	Cooler	<1.0	Pass	Testing Complete
LW02044		Hallway	Next To 139	Cooler	<1.0	Pass	Testing Complete
LW02045		Hallway	Next To 139	Cooler	<1.0	Pass	Testing Complete
LW02046		Hallway	In Front Of 107	Cooler	<1.0	Pass	Testing Complete
LW02047		Hallway	In Front Of 107	Cooler	<1.0	Pass	Testing Complete
LW02048		Work Room Admin		Faucet	1.4	Pass	Testing Complete
LW02050		Hallway	Next To 1003	Cooler	<1.0	Pass	Testing Complete
LW02051		Hallway	Next To 1003	Cooler	<1.0	Pass	Testing Complete
LW02052	1007B	Band		Faucet	1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW02053		Hallway	Next To 192	Cooler	<1.0	Pass	Testing Complete
LW02054		Hallway	Next To 192	Cooler	<1.0	Pass	Testing Complete
LW02055	191	Office Music		Faucet	1.4	Pass	Testing Complete
LW02056		Hallway	In Front Of 220	Cooler	<1.0	Pass	Testing Complete
LW02057		Hallway	In Front Of 220	Cooler	<1.0	Pass	Testing Complete
LW02058		Hallway	In Front Of 214	Cooler	<1.0	Pass	Testing Complete
LW02059		Hallway	In Front Of 214	Cooler	<1.0	Pass	Testing Complete
LW02060	207	Math Office		Faucet	1.7	Pass	Testing Complete
LW02061		Hallway	In Front Of 248	Cooler	<1.0	Pass	Testing Complete
LW02062		Hallway	In Front Of 248	Cooler	<1.0	Pass	Testing Complete
LW02063	238	Home Economics		Faucet	2.3	Pass	Testing Complete
LW02064	238	Home Economics		Faucet	2.9	Pass	Testing Complete
LW02065	238	Home Economics		Faucet	1.0	Pass	Testing Complete
LW02066	238	Home Economics		Faucet	1.3	Pass	Testing Complete
LW02067	238	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW02068	238	Home Economics		Faucet	1.8	Pass	Testing Complete
LW02069	238	Home Economics		Faucet	2.1	Pass	Testing Complete
LW02070	238	Home Economics		Faucet	4.2	Pass	Testing Complete
LW02071		Hallway	In Front Of 3001	Cooler	<1.0	Pass	Testing Complete
LW02072		Hallway	In Front Of 3001	Cooler	<1.0	Pass	Testing Complete
LW02073		Hallway	Next To 29	Cooler	<1.0	Pass	Testing Complete
LW02074		Hallway	Next To 29	Cooler	<1.0	Pass	Testing Complete
LW02075	25	Special Ed		Faucet	1.0	Pass	Testing Complete
LW02076	22	Classroom		Faucet	<1.0	Pass	Testing Complete
LW02077	19	Child Development		Faucet	<1.0	Pass	Testing Complete
M41997	116K	Kitchen Cafeteria		Faucet	700	Fail	Follow-Up Testing Needed
M42010	128	Break Room		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M42013	119B	Work Room		Faucet	1.0	Pass	Testing Complete
M42016	121	English Office		Faucet	1.5	Pass	Testing Complete
M42032	149	Social Studies		Faucet	1.3	Pass	Testing Complete
M42033	151	Break Room		Faucet	<1.0	Pass	Testing Complete
M42035	153	Health Room		Faucet	<1.0	Pass	Testing Complete
M42039	155	Health Room Health		Cooler	<1.0	Pass	Testing Complete
M42040	155	Health Room Health		Cooler	<1.0	Pass	Testing Complete
M42061		Girls Locker Room		Cooler	<1.0	Pass	Testing Complete
M42072		Hallway Auditorium	Next To Auditorium	Cooler	<1.0	Pass	Testing Complete
M42073		Hallway Auditorium	Next To Auditorium	Cooler	<1.0	Pass	Testing Complete
M42131	09	Building Service - Office BS Office		Faucet	9.0	Pass	Testing Complete
M42146		Hallway	Next to 20R	Cooler	<1.0	Pass	Testing Complete
M42147		Hallway	Next to 21R	Cooler	<1.0	Pass	Testing Complete
M42149	29	Math		Faucet	<1.0	Pass	Testing Complete
M43432	233	Work Room		Faucet	1.3	Pass	Testing Complete
M43496	265	Special Ed		Faucet	11.8	Pass	Testing Complete
M43498	259	Office Break Room		Faucet	1.2	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for Albert Einstein High School (4/11/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	Initial draw (3rd) (PPB)	30 Second Draw (PPB)	Status
M41997	116K	Kitchen	Faucet	4.4	21.0	1.3	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 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.