MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

April 24, 2018

Executive Summary:
Montgomery Village Middle School
19300 Watkins Mill Road
Montgomery Village, MD 20886

Round of Testing:	Initial
# of Outlets Tested:	60
# of Outlets ≥ 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	45.6
Follow-Up Testing Required (Samples ≥ 20 ppb):	Room 153B (45.6 ppb)

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

Project Status
Testing Complete: Remediation Plan

Room 153B – Replace fixture (M15466), in addition to supply line and valve located under sink

April 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: Montgomery Village Middle School
19300 Watkins Mill Road
Montgomery Village, MD 20886

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 the initial and follow-up lead in water testing at Montgomery Village Middle School, located at 19300 Watkins Mill Road in Montgomery Village, MD 20886.

Scope of Services:

PSI conducted lead in water testing at Montgomery Village 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 02/21/18 and 02/22/18 to collect samples from 60 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 4/12/18.

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)
M15466	Faucet – Room 153B inside of classroom 153	2/22/2018	45.6	4/12/18	<1.0

The initial lead in water sample results (2/22/18) and 30 second follow up results (4/12/18) 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 – Initial Lead in Water Test Summary Table

ATTACHMENT A

Montgomery Village MS Water Test Summary Table

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

Initial Sample Results for Montgomery Village Middle School (2/22/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW00456	110	Special Ed		Faucet	<1.0	Pass	Testing Complete
LW00457		Hallway	Left Of Room 128 Choral	Cooler	<1.0	Pass	Testing Complete
LW00458		Hallway	In Front Of Main Office	Cooler	<1.0	Pass	Testing Complete
LW00459	100E	Work Room Administration		Faucet	<1.0	Pass	Testing Complete
LW00460	102	Health Room		Faucet	<1.0	Pass	Testing Complete
LW00461		Hallway	Right Of Health Room	Cooler	<1.0	Pass	Testing Complete
LW00462		Hallway	In Front Of Cafeteria	Cooler	<1.0	Pass	Testing Complete
LW00463	152	Cafeteria		Cooler	<1.0	Pass	Testing Complete
LW00464		Kitchen Cafeteria		Faucet	2.3	Pass	Testing Complete
LW00465		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW00466		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW00467		Kitchen Cafeteria		Faucet	4.9	Pass	Testing Complete
LW00468		Kitchen Cafeteria		Faucet	1.9	Pass	Testing Complete
LW00469		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW00470		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW00471		Kitchen Cafeteria		Faucet	1.3	Pass	Testing Complete
LW00472		Kitchen Cafeteria		Icemaker	<1.0	Pass	Testing Complete
LW00473		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW00474	158	Special Ed	Inside Of Restroom 158a	Faucet	<1.0	Pass	Testing Complete
LW00475	158	Special Ed	158b	Faucet	<1.0	Pass	Testing Complete
LW00476	158	Special Ed	Inside Of Restroom 158b	Faucet	<1.0	Pass	Testing Complete
LW00477		Hallway	In Front Of Room 158b	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW00479		Hallway	Left Of Room 181	Cooler	<1.0	Pass	Testing Complete
LW00479		Hallway	Left Of Room 181	Cooler	<1.0	Pass	Testing Complete
LW00480		Hallway	Right Of Room 192	Cooler	<1.0	Pass	Testing Complete
LW00481	178	Conference Room		Faucet	<1.0	Pass	Testing Complete
LW00482		Hallway	Right Of Room 134	Cooler	<1.0	Pass	Testing Complete
LW00483		Hallway	Right Of Room 164	Cooler	<1.0	Pass	Testing Complete
LW01262		Hallway	Next To Room 048	Cooler	<1.0	Pass	Testing Complete
LW01263		Hallway	Next To Room 040	Cooler	<1.0	Pass	Testing Complete
LW01266	24	Classroom		Faucet	<1.0	Pass	Testing Complete
LW01267		Hallway	In Front Of Room 020	Cooler	<1.0	Pass	Testing Complete
LW01269	019	Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete
LW01270	011	Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete
M04515	137	Work Room Media Center		Faucet	<1.0	Pass	Testing Complete
M04517	140	Break Room		Faucet	<1.0	Pass	Testing Complete
M04519	112	Special Ed		Faucet	<1.0	Pass	Testing Complete
M04520	112	Special Ed		Faucet	<1.0	Pass	Testing Complete
M12555	31	Conference Room		Faucet	<1.0	Pass	Testing Complete
M12557	29	Conference Room		Faucet	1.1	Pass	Testing Complete
M12559	24	Classroom		Faucet	<1.0	Pass	Testing Complete
M15462	120	Special Ed		Faucet	<1.0	Pass	Testing Complete
M15463	120	Special Ed		Faucet	<1.0	Pass	Testing Complete
M15466	153B	Classroom		Faucet	45.6	Fail	Follow-Up Testing Needed
M15467	153F	Lab Classroom	Inside Of Room 153	Faucet	2.0	Pass	Testing Complete
M15482	158	Special Ed	Room 158b	Faucet	<1.0	Pass	Testing Complete
M15483	158	Special Ed		Faucet	<1.0	Pass	Testing Complete
M15487	160	Classroom		Faucet	1.7	Pass	Testing Complete
M15488	160	Classroom		Faucet	1.5	Pass	Testing Complete
M15494	167	Conference		Faucet	1.2	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M15495	173	Conference		Faucet	1.0	Pass	Testing Complete
M15501	181	Classroom		Faucet	<1.0	Pass	Testing Complete
M15502	181	Classroom		Faucet	<1.0	Pass	Testing Complete
M15507	179	Office		Faucet	2.3	Pass	Testing Complete
M15508	180	Classroom		Faucet	1.0	Pass	Testing Complete
M15509	180	Classroom		Faucet	<1.0	Pass	Testing Complete
M45499	15	Conference		Faucet	<1.0	Pass	Testing Complete
M45507	174	Seminar Room		Faucet	<1.0	Pass	Testing Complete
M45508	174	Seminar Room		Faucet	<1.0	Pass	Testing Complete
M45518	128B	Storage Music	Inside Of Room 130	Faucet	<1.0	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for Montgomery Village MS (4/12/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	Initial draw (3rd) (PPB)	30 Second Draw (PPB)	Status
M15466	153B	Classroom	Faucet	68.3	29.8	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink

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.