



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

April 24, 2018

Executive Summary:
East Silver Spring Elementary School
631 Silver Spring Avenue
Silver Spring, MD 20910

Round of Testing:	Initial
# of Outlets Tested:	79
# of Outlets \geq 20 ppb:	2
Low Value (ppb):	< 1.0
High Value (ppb):	49.8
Follow-Up Testing Required (Samples \geq 20 ppb):	Media Center (49.8 ppb) Instrument Room (27.7 ppb)

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

Project Status
Testing Complete: Remediation Plan

Media Center – Replace fixture (LW00935), in addition to supply line and valve located under sink
Instrument Room – Replace fixture (M08846), 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: East Silver Spring Elementary School
631 Silver Spring Avenue
Silver Spring, MD 20910

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 East Silver Spring Elementary School, located at 631 Silver Spring Avenue in Silver Spring, MD 20910.

Scope of Services:

PSI conducted lead in water testing at East Silver Spring 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 02/14/18 and 02/15/18 to collect samples from 79 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)
LW00935	Instrument Room	2/15/2018	49.8	4/11/18	Non Detect
M08846	Media Center	2/15/2018	27.7	4/11/18	2.1

The initial lead in water sample results (01/31/18) 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 – Initial Lead in Water Test Summary Table

ATTACHMENT A

East Silver Spring ES Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for East Silver Spring Elementary School (2/15/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW00910	5	Classroom		Faucet	16.5	Pass	Testing Complete
LW00911	5	Classroom		Bubbler - Indoor	7.7	Pass	Testing Complete
LW00914	7	Classroom		Faucet	8.0	Pass	Testing Complete
LW00916		Hallway	Next To CR 4	Cooler	<1.0	Pass	Testing Complete
LW00917	4	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00918	4	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00919	8	Classroom		Faucet	1.8	Pass	Testing Complete
LW00920	8	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW00921	10	Classroom		Faucet	1.6	Pass	Testing Complete
LW00923	2	Classroom		Faucet	2.1	Pass	Testing Complete
LW00924	9	Classroom		Faucet	2.1	Pass	Testing Complete
LW00925	9	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
LW00926		Hallway	By Main Entrance	Cooler	1.0	Pass	Testing Complete
LW00927	1	Classroom		Faucet	2.2	Pass	Testing Complete
LW00928	1	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW00929	3	Classroom		Faucet	7.3	Pass	Testing Complete
LW00930	3	Classroom		Bubbler - Indoor	2.5	Pass	Testing Complete
LW00931	103	Support Room		Faucet	4.5	Pass	Testing Complete
LW00932	103	Support Room		Faucet	9.5	Pass	Testing Complete
LW00933		Kitchen		Faucet	3.4	Pass	Testing Complete
LW00934		Kitchen		Faucet	1.1	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW00935		Media Center		Faucet	49.8	Fail	Follow-Up Testing Needed
LW00936		Hallway	Next To CR 15	Cooler	<1.0	Pass	Testing Complete
LW00937	2	Classroom		Bubbler - Indoor	4.5	Pass	Testing Complete
LW00938	100A	Work Room		Faucet	<1.0	Pass	Testing Complete
LW00939	102	Health Room		Faucet	1.1	Pass	Testing Complete
LW00940	102	Health Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00941	102B	Health Room		Faucet	10.8	Pass	Testing Complete
LW00942		Hallway	Next To CR 104	Cooler	1.3	Pass	Testing Complete
LW00943	14	Classroom		Faucet	9.1	Pass	Testing Complete
LW00945	18	Classroom		Faucet	11.4	Pass	Testing Complete
LW00947	17	Classroom		Faucet	14.2	Pass	Testing Complete
LW00948	17	Classroom		Bubbler - Indoor	5.5	Pass	Testing Complete
LW00949	13	Classroom		Faucet	16.8	Pass	Testing Complete
LW00950	13	Classroom		Bubbler - Indoor	8.4	Pass	Testing Complete
LW00951	12	Classroom		Faucet	11.3	Pass	Testing Complete
LW00952	12	Classroom		Bubbler - Indoor	2.8	Pass	Testing Complete
LW00953		Hallway	Next To CR 12	Cooler	3.0	Pass	Testing Complete
LW00954	16	Classroom		Faucet	2.7	Pass	Testing Complete
LW00956	31	Classroom		Faucet	2.6	Pass	Testing Complete
LW00957	33	Kindergarten		Faucet	5.6	Pass	Testing Complete
LW00958	33	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00959	19	Classroom		Faucet	2.9	Pass	Testing Complete
LW00961	20	Classroom		Faucet	3.7	Pass	Testing Complete
LW00962	20	Classroom		Bubbler - Indoor	12.3	Pass	Testing Complete
LW00963	22	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00964	22	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW00965	21	Classroom		Faucet	1.6	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW00967		Classroom	Next To CR 41	Cooler	<1.0	Pass	Testing Complete
M08843		Hallway	Next to CR 109 Parent Community	Cooler	<1.0	Pass	Testing Complete
M08844		Hallway	Next to CR 109 Parent Community	Cooler	<1.0	Pass	Testing Complete
M08845	108	Inst Music		Faucet	4.2	Pass	Testing Complete
M08846	108	Inst Music		Bubbler - Indoor	27.7	Fail	Follow-Up Testing Needed
M08847	107	Classroom Music		Faucet	1.3	Pass	Testing Complete
M08848	107	Classroom Music		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08853	25	Classroom		Faucet	1.4	Pass	Testing Complete
M08854	25	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08856	24	Classroom		Faucet	<1.0	Pass	Testing Complete
M08857	24	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08861	23	Classroom		Faucet	<1.0	Pass	Testing Complete
M08862	23	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08864		Hallway	Next to CR 30 Therapy	Cooler	<1.0	Pass	Testing Complete
M08865		Hallway	Next to CR 30 Therapy	Cooler	<1.0	Pass	Testing Complete
M08870	29	Break Room		Faucet	2.2	Pass	Testing Complete
M08871	29	Break Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08875		Hallway	Next to CR 41	Cooler	<1.0	Pass	Testing Complete
M08876	41	Classroom		Faucet	2.4	Pass	Testing Complete
M08877	41	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08882	40	Classroom		Faucet	4.3	Pass	Testing Complete
M08883	40	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08884	34	Classroom		Faucet	2.3	Pass	Testing Complete
M08885	34	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08890	32	Classroom		Faucet	<1.0	Pass	Testing Complete
M08891	32	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M08894	31	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M08896		Hallway	Across from CR 31	Cooler	<1.0	Pass	Testing Complete
M08897		Classroom	Across from CR 31	Cooler	<1.0	Pass	Testing Complete
M09013	38	Special Ed		Faucet	3.6	Pass	Testing Complete
M09014	38	Special Ed		Bubbler - Indoor	<1.0	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for East Silver Spring Elementary School (4/11/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	Initial draw (3 rd) (PPB)	30 Second Draw (PPB)	Status
LW00935	-	Instrument Room	Bubbler - Indoor	27.7	2.0	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
M08846	-	Media Center	Faucet	49.8	27.6	2.1	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.