



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

June 15, 2018

Executive Summary:
Poolesville Elementary School
19565 Fisher Ave
Poolesville, MD 20837

Round of Testing:	Initial
# of Outlets Tested:	64
# of Outlets \geq 20 ppb:	11
Low Value (ppb):	< 1.0
High Value (ppb):	60.3
Follow-Up Testing Required (Samples \geq 20 ppb):	Kitchen (20.5 ppb) Kitchen (25.6 ppb) Room 1 (47.0 ppb) Room 7 (22.5 ppb) Room 10 (23.7 ppb) Room 17 (60.3 ppb) Room 18 (20.4 ppb) Room 19 (26.3 ppb) Room 20 (31.2 ppb) Room 21 (32.2 ppb) Kitchen (31.2 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	11

Project Status

Testing Complete: Remediation Plan

- Kitchen – Replace fixture (LW07631), in addition to supply line and valve located under sink
- Kitchen – Replace fixture (LW07632), in addition to supply line and valve located under sink
- Classroom 1 – Replace fixture (LW07652), in addition to supply line and valve located under sink
- Classroom 7 – Replace fixture (LW07656), in addition to supply line and valve located under sink
- Classroom 10 – Replace fixture (LW07661), in addition to supply line and valve located under sink
- Classroom 17 – Replace fixture (LW07677), in addition to supply line and valve located under sink
- Classroom 18 – Replace fixture (LW07679), in addition to supply line and valve located under sink
- Classroom 19 – Replace fixture (LW07681), in addition to supply line and valve located under sink
- Classroom 20 – Replace fixture (LW07683), in addition to supply line and valve located under sink
- Classroom 21 – Replace fixture (LW07685), in addition to supply line and valve located under sink
- Kitchen – Replace fixture (M00377), in addition to supply line and valve located under sink



June 15, 2018

Mr. Brian Mullikin
Environmental Team Leader

Montgomery County Public Schools
8301 Turkey Thicket Drive
Building A, First Floor
Burtonsville, Maryland 20879

Re: Lead in Water Testing Service

Location: Poolesville Elementary School
19565 Fisher Avenue
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 Elementary School, located at 19565 Fisher Avenue, Poolesville, MD 20837.

Scope of Services:

PSI conducted lead in water testing at Poolesville 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 4/19/18 and 4/20/18 to collect samples from 64 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. Eleven 30 second follow-up samples were collected on 5/17/18.

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 eleven 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)
LW07631	Kitchen	4/20/18	20.5	5/17/18	2.1
LW07632	Kitchen	4/20/18	25.6	5/17/18	13.6
LW07652	Classroom 1	4/20/18	47.0	5/17/18	1.6
LW07656	Classroom 7	4/20/18	22.5	5/17/18	2.6
LW07661	Classroom 10	4/20/18	23.7	5/17/18	47.1
LW07677	Classroom 17	4/20/18	60.3	5/17/18	85.2
LW07679	Classroom 18	4/20/18	20.4	5/17/18	28.8
LW07681	Classroom 19	4/20/18	26.3	5/17/18	353.0
LW07683	Classroom 20	4/20/18	31.2	5/17/18	6.6
LW07685	Classroom 21	4/20/18	32.2	5/17/18	28.1
M00377	Kitchen	4/20/18	31.2	5/17/18	2.4

The initial lead in water sample results (4/20/18) and 30 second follow up results (5/17/18) 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.

A handwritten signature in black ink that reads "Nand Kaushik".

Nand Kaushik, P.E.
Department Manager, Environmental Services
Nand.Kaushik@psiusa.com

Attachments: A – Lead in Water Test Summary Table

ATTACHMENT A

Poolesville ES Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Poolesville Elementary School (4/20/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW07631		Kitchen		Faucet	20.5	Fail	Follow-Up Testing Needed
LW07632		Kitchen		Faucet	25.6	Fail	Follow-Up Testing Needed
LW07633		Break Room		Faucet	5.2	Pass	Testing Complete
LW07634	26	Classroom		Faucet	19.0	Pass	Testing Complete
LW07636		Art		Faucet	5.7	Pass	Testing Complete
LW07637		Hallway	Left Of Health Room	Cooler	<1.0	Pass	Testing Complete
LW07638		Hallway	Left Of Health Room	Cooler	<1.0	Pass	Testing Complete
LW07639		Health Room		Faucet	17.8	Pass	Testing Complete
LW07640	2	Classroom		Faucet	4.7	Pass	Testing Complete
LW07641	2	Classroom		Bubbler - Indoor	6.3	Pass	Testing Complete
LW07642	3	Classroom		Faucet	7.6	Pass	Testing Complete
LW07643	3	Classroom		Bubbler - Indoor	4.6	Pass	Testing Complete
LW07644	4	Classroom		Faucet	6.7	Pass	Testing Complete
LW07645	4	Classroom		Bubbler - Indoor	5.6	Pass	Testing Complete
LW07646	5	Classroom		Faucet	2.6	Pass	Testing Complete
LW07647	5	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
LW07648		Hallway	Across From Room 8	Cooler	<1.0	Pass	Testing Complete
LW07649		Hallway	Across From Room 8	Cooler	<1.0	Pass	Testing Complete
LW07650	6	Classroom		Faucet	12.5	Pass	Testing Complete
LW07651	6	Classroom		Bubbler - Indoor	6.7	Pass	Testing Complete
LW07652	1	Classroom		Faucet	47.0	Fail	Follow-Up Testing Needed
LW07654	8	Classroom		Faucet	7.3	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW07655	8	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW07656	7	Classroom		Faucet	22.5	Fail	Follow-Up Testing Needed
LW07657	7	Classroom		Bubbler - Indoor	6.4	Pass	Testing Complete
LW07658		Hallway	In Front Of Gym	Cooler	<1.0	Pass	Testing Complete
LW07659		Hallway	In Front Of Gym	Cooler	<1.0	Pass	Testing Complete
LW07660	9	Reading		Faucet	17.2	Pass	Testing Complete
LW07661	10	Classroom		Faucet	23.7	Fail	Follow-Up Testing Needed
LW07662	10	Classroom		Bubbler - Indoor	12.8	Pass	Testing Complete
LW07663		Material Prep Area Media Center		Faucet	11.9	Pass	Testing Complete
LW07664	11	Classroom		Faucet	6.4	Pass	Testing Complete
LW07665	11	Classroom		Bubbler - Indoor	5.4	Pass	Testing Complete
LW07666	12	Classroom		Faucet	5.2	Pass	Testing Complete
LW07667	12	Classroom		Bubbler - Indoor	3.1	Pass	Testing Complete
LW07668		Hallway	Between Room 13 And 12	Cooler	<1.0	Pass	Testing Complete
LW07669		Hallway	Between Room 13 And 12	Cooler	<1.0	Pass	Testing Complete
LW07670	13	Classroom		Faucet	16.8	Pass	Testing Complete
LW07671	13	Classroom		Bubbler - Indoor	8.3	Pass	Testing Complete
LW07672	14	Classroom		Faucet	18.2	Pass	Testing Complete
LW07673	15	Classroom		Faucet	6.6	Pass	Testing Complete
LW07674	15	Classroom		Bubbler - Indoor	7.9	Pass	Testing Complete
LW07675	16	Classroom		Faucet	7.0	Pass	Testing Complete
LW07676	16	Classroom		Bubbler - Indoor	15.4	Pass	Testing Complete
LW07677	17	Classroom		Faucet	60.3	Fail	Follow-Up Testing Needed
LW07679	18	Classroom		Faucet	20.4	Fail	Follow-Up Testing Needed
LW07681	19	Classroom		Faucet	26.3	Fail	Follow-Up Testing Needed
LW07683	20	Classroom		Faucet	31.2	Fail	Follow-Up Testing Needed
LW07684	21	Classroom		Faucet	17.8	Pass	Testing Complete
LW07685	21	Classroom		Bubbler - Indoor	32.2	Fail	Follow-Up Testing Needed

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW07686	22	Classroom		Faucet	9.1	Pass	Testing Complete
LW07687	22	Classroom		Bubbler - Indoor	7.0	Pass	Testing Complete
LW07688	24	Classroom		Faucet	5.7	Pass	Testing Complete
LW07689	24	Classroom		Bubbler - Indoor	3.7	Pass	Testing Complete
LW07690	25	Classroom		Faucet	5.0	Pass	Testing Complete
LW07691	25	Classroom		Bubbler - Indoor	3.0	Pass	Testing Complete
LW07692		Hallway	Across From Room 26	Cooler	<1.0	Pass	Testing Complete
LW07693		Hallway	Across From Room 26	Cooler	<1.0	Pass	Testing Complete
LW07694		Music		Faucet	14.0	Pass	Testing Complete
LW07696	23	Classroom		Faucet	7.4	Pass	Testing Complete
LW07697	23	Classroom		Bubbler - Indoor	3.4	Pass	Testing Complete
M00285		Work Room Admin		Faucet	15.0	Pass	Testing Complete
M00377		Kitchen		Faucet	31.2	Fail	Follow-Up Testing Needed
M00378		Kitchen	Outside Right of BR	Faucet	8.0	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for Poolesville Elementary School (5/17/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
LW07631	Kitchen	Kitchen	Faucet	29.2	2.1	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07632	Kitchen	Kitchen	Faucet	13.6	2.2	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07652	1	Classroom	Faucet	9.5	1.6	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07656	7	Classroom	Faucet	9.3	2.6	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07661	10	Classroom	Faucet	47.1	1.8	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07677	17	Classroom	Faucet	268.0	85.2	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07679	18	Classroom	Faucet	483.0	28.8	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07681	19	Classroom	Faucet	1690.0	353.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07683	20	Classroom	Faucet	78.2	6.6	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07685	21	Classroom	Bubbler	23.4	28.1	Remediation required – replace fixture, in addition to supply line and valve located under sink
M00377	Kitchen	Kitchen	Faucet	36.9	2.4	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.