



## MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 25, 2018

**Executive Summary:**  
**Burtonsville Elementary School**  
15516 Old Columbia Pike  
Burtonsville, MD 20866

Round of Testing:	Initial
# of Outlets Tested:	75
# of Outlets $\geq$ 20 ppb:	2
Low Value (ppb):	< 1.0
High Value (ppb):	48.6
Follow-Up Testing Required (Samples $\geq$ 20 ppb):	Room 8 (48.6 ppb) Room 8 (23.5 ppb)

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

### **Project Status** **Testing Complete: Remediation Plan**

Classroom 8– Replace fixture (M45751), in addition to supply line and valve located under sink  
Classroom 8– Replace fixture (M45753), in addition to supply line and valve located under sink



May 25, 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: Burtonsville Elementary School  
15516 Old Columbia Pike  
Burtonsville, MD 20866

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 Burtonsville Elementary School, located at 15516 Old Columbia Pike in Burtonsville, MD 20866.

**Scope of Services:**

PSI conducted lead in water testing at Burtonsville 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 4/4/18 and 4/5/18 to collect samples from 75 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 5/8/18.

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)
M45751	Classroom 8	4/5/18	23.5	5/8/18	<1.0
M45753	Classroom 8	4/5/18	48.6	5/8/18	1.1

The initial lead in water sample results (4/5/18) and 30 second follow up results (5/8/18) 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

## Burtonsville ES Water Test Summary Table

**Contractor:** Professional Services Industries, Inc.

**Certified Laboratory:** Microbac Laboratories, Inc.

Initial Sample Results for Burtonsville Elementary School (4/5/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW01803		Hallway	In Front of Gymnasium	Cooler	<1.0	Pass	Testing Complete
LW01804	24	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW01805	23	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01806	20	Classroom		Faucet	1.1	Pass	Testing Complete
LW01807	20	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW01810		Hallway	Between Room 18 and 19	Cooler	<1.0	Pass	Testing Complete
LW01811	17	Classroom		Faucet	2.7	Pass	Testing Complete
LW01812	17	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01813		Hallway	Across from Room 58	Cooler	<1.0	Pass	Testing Complete
LW01814	14	Classroom		Faucet	1.3	Pass	Testing Complete
LW01815	14	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW01816	13	Classroom		Faucet	1.7	Pass	Testing Complete
LW01817	13	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW01842		Hallway	Across Room 28	Cooler	<1.0	Pass	Testing Complete
LW01843	30	Classroom	Art	Faucet	<1.0	Pass	Testing Complete
LW01844	30	Classroom	Art	Bubbler - Indoor	1.3	Pass	Testing Complete
LW06934	7	Break Room		Faucet	1.8	Pass	Testing Complete
LW06935	4	Classroom		Faucet	2.6	Pass	Testing Complete
LW06936	4	Classroom		Bubbler - Indoor	4.5	Pass	Testing Complete
LW06937	3	Classroom		Faucet	1.5	Pass	Testing Complete
LW06938	3	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06939	2	Classroom		Faucet	1.8	Pass	Testing Complete
LW06940	2	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
LW06941	1	Classroom		Faucet	1.6	Pass	Testing Complete
LW06942	1	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
LW06943		Hallway	Across from Cafeteria	Cooler	<1.0	Pass	Testing Complete
LW06959		Hallway	Right of Main Entrance	Cooler	<1.0	Pass	Testing Complete
M40119	21	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M40122	21	Classroom		Faucet	1.2	Pass	Testing Complete
M45680	42	Classroom		Faucet	9.4	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M45681	42	Classroom		Bubbler - Indoor	3.4	Pass	Testing Complete
M45684	28	Classroom		Faucet	1.4	Pass	Testing Complete
M45685	28	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
M45691	33	Classroom		Faucet	3.2	Pass	Testing Complete
M45692	33	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
M45693	34	Classroom		Faucet	1.2	Pass	Testing Complete
M45694	34	Classroom		Bubbler - Indoor	2.2	Pass	Testing Complete
M45702	27	Classroom		Faucet	<1.0	Pass	Testing Complete
M45703	27	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
M45704	26	Classroom		Faucet	1.7	Pass	Testing Complete
M45705	26	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
M45706	24	Classroom		Faucet	1.6	Pass	Testing Complete
M45708	25	Classroom		Faucet	1.6	Pass	Testing Complete
M45709	25	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
M45710	23	Classroom		Faucet	2.1	Pass	Testing Complete
M45712	22	Classroom		Faucet	1.5	Pass	Testing Complete
M45713	22	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
M45716	19	Classroom		Faucet	1.5	Pass	Testing Complete
M45717	19	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
M45723	18	Classroom		Faucet	2.1	Pass	Testing Complete
M45724	18	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M45732	58	Classroom		Faucet	1.7	Pass	Testing Complete
M45733	58	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
M45735	55	Classroom		Faucet	2.2	Pass	Testing Complete
M45736	55	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
M45737	57	Classroom		Faucet	2.3	Pass	Testing Complete
M45738	57	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M45743	12	Classroom		Faucet	1.4	Pass	Testing Complete
M45744	12	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
M45745	11	Classroom		Faucet	1.4	Pass	Testing Complete
M45746	11	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
M45747	10	Classroom		Faucet	7.1	Pass	Testing Complete
M45748	10	Classroom		Bubbler - Indoor	3.2	Pass	Testing Complete
M45749	9	Classroom		Faucet	3.4	Pass	Testing Complete
M45750	9	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
M45751	8	Classroom		Faucet	23.5	Fail	Follow-Up Testing Needed
M45753	8	Classroom		Bubbler - Indoor	48.6	Fail	Follow-Up Testing Needed
M45754	6	Classroom		Faucet	3.1	Pass	Testing Complete
M45755	6	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M45771		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
M45772		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
M45773		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
M45774		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
M45784		Work Room Admin		Faucet	1.8	Pass	Testing Complete
M45786		Health Room		Faucet	1.5	Pass	Testing Complete
M45788		Work Room Media Center		Faucet	6.0	Pass	Testing Complete

\*ppb = parts per billion

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

Follow Up Sample Results for Burtonsville Elementary School (5/8/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 <sup>nd</sup> ) (PPB)	30 Second Draw (PPB)	Status
M45751	8	Classroom	Faucet	6.4	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
M45753	8	Classroom	Bubbler - Indoor	5.8	1.1	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.