



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

July 18, 2018

Executive Summary:
Bannockburn Elementary School
6520 Dalroy Lane,
Bethesda, MD 20817

Round of Testing:	Initial
# of Outlets Tested:	36
# of Outlets \geq 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	28.1
Follow-Up Testing Required (Samples \geq 20 ppb):	Media Center Office (28.10 ppb)

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

Project Status
Testing Complete: Remediation Plan

Media Center Office – Replace fixture (M38683), in addition to supply line and valve located under sink



July 18, 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: Bannockburn Elementary School
6520 Dalroy Lane,
Bethesda, MD 20817

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 Bannockburn Elementary School, located 6520 Dalroy Lane, Bethesda, MD 20817.

Scope of Services:

PSI conducted lead in water testing at Bannockburn 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 4/25/18 and 4/26/18 to collect samples from 36 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 6/21/18.

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)
M38683	Media Center Office	4/26/18	28.1	6/21/18	1.6

*ppb = parts per billion

The initial lead in water sample results (4/26/18) and 30 second follow up results (6/21/18) 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

Bannockburn Elementary School Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Bannockburn Elementary School (4/26/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW12012		Health Room		Bubbler - Indoor	1.1	Pass	Testing Complete
LW12013		Hallway	Right Of Main Office	Cooler	<1.0	Pass	Testing Complete
LW12014		Kitchen		Faucet	9.4	Pass	Testing Complete
LW12015	15	Music		Faucet	4.4	Pass	Testing Complete
LW12016		Hallway	Left Of Room 25	Cooler	<1.0	Pass	Testing Complete
LW12017	20	Break Room		Faucet	<1.0	Pass	Testing Complete
LW12018		Hallway	Across From Rm 18	Cooler	<1.0	Pass	Testing Complete
LW12019	K1	Kindergarten Classroom		Faucet	3.1	Pass	Testing Complete
LW12020	K1	Kindergarten Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW12021		Hallway	Right Of Room 1	Cooler	<1.0	Pass	Testing Complete
LW12022	14	Classroom		Faucet	16.1	Pass	Testing Complete
LW12023		Hallway	Right Of 13	Cooler	<1.0	Pass	Testing Complete
M38647		Classroom		Faucet	11.7	Pass	Testing Complete
M38648		Kindergarten		Faucet	2.5	Pass	Testing Complete
M38649		Kindergarten		Bubbler - Indoor	7.2	Pass	Testing Complete
M38655	3	Classroom		Faucet	<1.0	Pass	Testing Complete
M38656	3	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
M38657	1	Classroom		Faucet	1.7	Pass	Testing Complete
M38658	1	Classroom		Bubbler - Indoor	2.9	Pass	Testing Complete
M38659	2	Classroom		Faucet	2.2	Pass	Testing Complete
M38660	2	Classroom		Bubbler - Indoor	3.4	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M38661	4	Classroom		Faucet	3.9	Pass	Testing Complete
M38662	4	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
M38680	22	Reading		Faucet	1.9	Pass	Testing Complete
M38683		Office Media Center		Faucet	28.1	Fail	Follow-Up Testing Needed
M38684		Hallway	Across CR 7	Cooler	<1.0	Pass	Testing Complete
M38693	10	Classroom		Faucet	8.1	Pass	Testing Complete
M38700	13	Classroom		Faucet	6.2	Pass	Testing Complete
M38702	12	Classroom		Faucet	11.2	Pass	Testing Complete
M38713		Kitchen		Faucet	3.7	Pass	Testing Complete
M38714		Kitchen		Faucet	2.7	Pass	Testing Complete
M38715		Kitchen		Faucet	1.4	Pass	Testing Complete
M38719		Health Room		Faucet	1.4	Pass	Testing Complete
M38724	31	Classroom		Faucet	1.9	Pass	Testing Complete
M38725	5	Kiln Classroom		Faucet	3.2	Pass	Testing Complete
M38726	5	Kiln Classroom		Bubbler - Indoor	3.8	Pass	Testing Complete

*ppb = parts per billion

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Results for Bannockburn Elementary School (6/21/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
M38683		Media Center Office	Faucet	21.7	1.6	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.