## Montgomery County Public Schools Lead in Drinking Water Testing Report

## Benjamin Banneker Middle School 14800 Perrywood Drive Burtonsville, MD 20866

Report Date: February 20<sup>th</sup>, 2022

### LEAD IN DRINKING WATER SAMPLE RESULTS SUMMARY

All Maryland public and nonpublic schools are required to sample all drinking water outlets for the presence of lead pursuant to the Code of Maryland Regulations (COMAR). Montgomery County Public Schools (MCPS) is required to remediate outlets where lead in drinking water concentrations exceed the Montgomery County Action Level (AL) of 5 parts per billion (ppb). A summary of the lead in water initial samples collected by SaLUT are presented in the table below.

Sampling Date	11/16/2021		
# of Outlets Tested	21		
# of Outlets ≥ 5 ppb	3		

#### **NEXT STEPS**

If an initial sample exceeds the AL (5 ppb), the outlet will be immediately shut-down, a follow-up sample collected, and a remedial plan of action developed for this outlet. No additional sampling or remedial actions are required for schools where all initial samples are below the AL.

### **HEALTH EFFECTS OF LEAD**

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead is stored in the bones and it can be released later in life. During pregnancy, the fetus receives lead from the mother's bones, which may affect brain development. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

#### SOURCES OF HUMAN EXPOSURE TO LEAD

There are many different sources of human exposure to lead. These include: lead-based paint, lead-contaminated dust or soil, some plumbing materials, certain types of pottery, pewter, brass fixtures, food, cosmetics, exposure in the work place and from certain hobbies. According to the Environmental Protection Agency (EPA), 10 to 20 percent of a person's potential exposure to lead may come from drinking water, while for an infant consuming formula mixed with lead-containing water this may increase to 40 to 60 percent.

### TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER:

- Run your water to flush out lead: If water hasn't been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- 2. Use cold water for cooking and preparing baby formula: Lead from the plumbing dissolves more easily into hot water.

\*Please note that boiling the water will not reduce lead levels.

### ADDITIONAL INFORMATION

- 1. For additional information, please contact Brian Mullikin, Environmental Team Leader, at 240.740.2324 or brian\_a\_mullikin@mcpsmd.org.
- 2. For additional information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at <a href="https://www.epa.gov/lead">www.epa.gov/lead</a>.
- 3. If you are concerned about exposure; contact your local health department or healthcare provider to find out how you can get your child tested for lead.

Please refer to the attachment(s) for additional water sampling information.

**Attachment(s)** A – Lead in Water Sample Results Table

### **ATTACHMENT A**

Lead in Water Sample Results Table

## Sampling Results for Benjamin Banneker Middle School

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW01822	In health room	Nurses Office Sink	3.5	Pass	N/A	Testing Complete
LW01825	In classroom 205	Classroom Combination Sink	1.8	Pass	N/A	Testing Complete
LW01828	In hallway adjacent to classroom 233	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW01829	In hallway adjacent to classroom 226	In hallway adjacent to classroom 226 Drinking Fountain		Pass	N/A	Testing Complete
LW01830	In boys locker room	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW01831	In hallway adjacent cafeteria	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW01836	In kitchen adjacent to cafeteria	Kitchen Sink	5.5	Fail	<1	Testing Complete
LW01837	In kitchen adjacent to cafeteria	Kitchen Sink	1.9	Pass	N/A	Testing Complete
LW01838	In kitchen adjacent to cafeteria	Kitchen Sink	1.6	Pass	N/A	Testing Complete
LW01839	In hallway adjacent to classroom 131	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW01841	In home economics 123	Classroom Sink	<1.0	Pass	N/A	Testing Complete
Lw11089	In hallway adjacent to cafeteria	Bottle Filler	<1.0	Pass	N/A	Testing Complete
LW11090	In classroom 235G	Classroom Combination Sink	62.8	Fail	14.0	Testing Complete
Lw11091	In hallway adjacent classroom 119	Bottle Filler	<1.0	Pass	N/A	Testing Complete
Lw11092	In hallway adjacent classroom 119	Bubbler - Indoor	<1.0	Pass	N/A	Testing Complete
LW11093	In classroom 131	Bubbler - Indoor	<1.0	Pass	N/A	Testing Complete
Lw11094	In classroom 131	Classroom Combination Sink	<1.0	Pass	N/A	Testing Complete
M38432	In hallway by health room ie. next health	Drinking Fountain	1.8	Pass	N/A	Testing Complete
M38433	In hallway by health room ie. next health	Drinking Fountain	2.7	Pass	N/A	Testing Complete
M38439	In hallway adjacent IMC storage 209	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
M40724	In office 225c	Classroom Sink	7.5	Fail	4.3	Testing Complete



# MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER TESTING 2018

## **Executive Summary: Benjamin Banneker Middle School**

14800 Perrywood Drive Burtonsville, MD 20866

Date of Test Report:	05/11/2018
Round of Testing:	Initial
# of Outlets Tested:	24
# of Outlets ≥ 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	15.1

### **Project Status**

Initial testing complete: All results less than 20 ppb.



May 11, 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: Benjamin Banneker Middle School

14800 Perrywood Drive 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 Benjamin Banneker Middle School, located at 14800 Perrywood Drive, Burtonsville, MD 20866.

### **Scope of Services:**

PSI conducted lead in water testing at Benjamin Banneker 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 4/3/18, 4/4/18 and 4/5/18 to collect samples from 24 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.

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 no results of the lead in water analysis at or above 20 parts per billion (ppb).

The lead in water sample results < 20 ppb for sample collection dates 4/4/18 and 4/5/18 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

## Lead in Water Test Summary Table

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

### Sample Results for Benjamin Banneker Middle school

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Fail Status	
LW01821		Work Room Office	Mail Room	Faucet	7.2	Pass	Testing Complete	
LW01822		Health Room		Faucet	<1.0	Pass	Testing Complete	
LW01823		Resource Center	By Room 207	Faucet	8.7	Pass	Testing Complete	
LW01824	211	Work Room	IMC Work Room	Faucet	7.6	Pass	Testing Complete	
LW01825	205	Classroom		Faucet	3.8	Pass	Testing Complete	
LW01826	235G	Resource Center		Faucet	15.1	Pass	Testing Complete	
LW01828		Hallway	Left of Room 233	Cooler	<1.0	Pass	Testing Complete	
LW01829		Hallway	Left of Room 226	Cooler	<1.0	Pass	Testing Complete	
LW01830		Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete	
LW01831		Hallway	Left of Cafeteria	Cooler	<1.0	Pass	Testing Complete	
LW01832		Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete	
LW01833		Kitchen		Icemaker	<1.0	Pass	Testing Complete	
LW01834		Kitchen		Faucet	1.9	Pass	Testing Complete	
LW01835		Kitchen		Faucet	3.0	Pass	Testing Complete	
LW01836		Kitchen		Faucet	3.4	Pass	Testing Complete	
LW01837		Kitchen		Faucet	1.6	Pass	Testing Complete	
LW01838		Kitchen		Faucet	1.7	Pass	Testing Complete	
LW01839		Hallway	Across from Room 131	Cooler	<1.0	Pass	Testing Complete	
LW01840		Hallway	In Front of Room 119	Cooler	<1.0	Pass	Testing Complete	
LW01841	123	Home Economics		Faucet	1.4	Pass	Testing Complete	
M38432		Hallway	Next to Health Room	Cooler	<1.0	Pass	Testing Complete	
M38433		Hallway	Next to Health Room	Cooler	<1.0	Pass	Testing Complete	

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M38439		Hallway	Near IMC Storage 209	Cooler	1.1	Pass	Testing Complete
M40719	229A	Office		Faucet	2.8	Pass	Testing Complete

<sup>\*</sup>ppb = parts per billion