

# Montgomery County Public Schools Lead in Drinking Water Testing Report

Goshen Elementary School  
8701 Warfield Rd  
Gaithersburg, MD 20882

Report Date: February 17<sup>th</sup>, 2020

## 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	2/4/2020
# of Outlets Tested	70
# of Outlets $\geq$ 5 ppb	0

## 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:**

1. 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](mailto: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 [www.epa.gov/lead](http://www.epa.gov/lead).
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**

## Sample Results for Goshen ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW00663	In hallway next to storage 249	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00664	In classroom 19	Classroom Combination Sink	1.6	Pass	N/A	Testing Complete
LW00666	In classroom 8	Classroom Sink	2.2	Pass	N/A	Testing Complete
LW00667	In break room staff lounge	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW00668	In hallway between gym and elevator	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00671	In conference room in office next to principal's office	Classroom Combination Sink	3.1	Pass	N/A	Testing Complete
LW00672	In health room by office	Nurses Office Sink	1.5	Pass	N/A	Testing Complete
LW00673	In hallway next to Multipurpose room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00674	In classroom K2	Classroom Sink	<1	Pass	N/A	Testing Complete
LW00675	In break room next to kitchen	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
M35222	In classroom K4	Classroom Sink	1.9	Pass	N/A	Testing Complete
M35223	In classroom K4	Drinking Fountain	<1	Pass	N/A	Testing Complete
M35225	In classroom K3	Classroom Sink	<1	Pass	N/A	Testing Complete
M35226	In classroom K3	Drinking Fountain	<1	Pass	N/A	Testing Complete
M35229	In classroom K2	Drinking Fountain	1.0	Pass	N/A	Testing Complete
M35231	In classroom K1	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35232	In classroom K1	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35245	In kitchen	Kitchen Sink	2.2	Pass	N/A	Testing Complete
M35246	In kitchen by kitchen	Kitchen Sink	1.3	Pass	N/A	Testing Complete
M35247	In kitchen by kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M35250	In material prep by media center	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35254	In computer across from storage 106	Classroom Sink	<1	Pass	N/A	Testing Complete
M35257	In classroom 6	Classroom Sink	<1	Pass	N/A	Testing Complete
M35258	In classroom 6	Drinking Fountain	1.2	Pass	N/A	Testing Complete
M35259	In classroom 7	Classroom Sink	1.3	Pass	N/A	Testing Complete
M35260	In classroom 7	Drinking Fountain	<1	Pass	N/A	Testing Complete
M35262	In classroom 8	Drinking Fountain	1.5	Pass	N/A	Testing Complete

M35264	In classroom 9	Drinking Fountain	4.8	Pass	N/A	Testing Complete
M35276	In classroom 2	Classroom Sink	<1	Pass	N/A	Testing Complete
M35277	In classroom 2	Drinking Fountain	<1	Pass	N/A	Testing Complete
M35278	In classroom 3	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35279	In classroom 3	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35280	In classroom 4	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
M35281	In classroom 4	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35283	In classroom 5	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35286	In classroom 1	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35290	In all purpose room by dual purpose room	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35292	In music by music	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
M35301	In classroom 12	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35302	In classroom 12	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35303	In classroom 14	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35304	In classroom 14	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35305	In classroom 11	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35306	In classroom 11	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35307	In classroom 13	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35308	In classroom 13	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35309	In classroom 15	Classroom Combination Sink	3.8	Pass	N/A	Testing Complete
M35310	In classroom 15	Classroom Combination Drinking Fountain	2.7	Pass	N/A	Testing Complete
M35311	In classroom 16	Classroom Combination Sink	3.0	Pass	N/A	Testing Complete
M35312	In classroom 16	Classroom Combination Drinking Fountain	3.5	Pass	N/A	Testing Complete
M35313	In classroom 17	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35314	In classroom 17	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35315	In break room next to CR 16	Teachers Lounge Sink	2.0	Pass	N/A	Testing Complete
M35316	In classroom 18	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35317	In classroom 18	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35319	In classroom 19	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35321	In classroom 20	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
M35322	In classroom 21	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete

M35323	In classroom 21	Classroom Combination Drinking Fountain	1.0	Pass	N/A	Testing Complete
M35332	In reading R reading room	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35334	In classroom 22	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
M35335	In classroom 22	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35336	In classroom 23	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35337	In classroom 23	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35338	In classroom 24	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35339	In classroom 24	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
M35340	In classroom 25	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
M35341	In classroom 25	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M35342	In classroom 26	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M35343	In classroom 26	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete



**MONTGOMERY COUNTY PUBLIC SCHOOLS  
LEAD IN DRINKING WATER TESTING 2018**

**Executive Summary:**  
**Goshen Elementary School**  
18820 Strawberry Knoll Road  
Gaithersburg, MD 20879

Date of Test Report:	03/12/2018
Round of Testing:	Initial
# of Outlets Tested:	78
# of Outlets $\geq$ 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	13.9

**Project Status**

**Initial testing complete:** All results less than 20 ppb.



March 12, 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: Goshen Elementary School  
8701 Warfield Road  
Gaithersburg, MD 20882

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 Goshen Elementary School, located at 8701 Warfield Road, Gaithersburg, MD 20882.

**Scope of Services:**

PSI conducted lead in water testing at Goshen 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 01/31/18 and 02/01/18 to collect samples from 78 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 date 02/01/18 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](mailto:Nand.Kaushik@psiusa.com)

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 Goshen Elementary School

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00663		Hallway	Next To Storage 249	Cooler	<1.0	Pass	Testing Complete
LW00664	19	Classroom		Faucet	2.2	Pass	Testing Complete
LW00665		Hallway	Across From Room 10	Cooler	<1.0	Pass	Testing Complete
LW00666	8	Classroom		Faucet	3.5	Pass	Testing Complete
LW00667		Break Room	Staff Lounge	Faucet	1.2	Pass	Testing Complete
LW00668		Hallway	Between Gym And Elevator	Cooler	<1.0	Pass	Testing Complete
LW00669		All Purpose Room Dual Purpose Room		Bubbler - Indoor	6.5	Pass	Testing Complete
LW00670		Break Room Office	Combined With Conference Room	Faucet	7.4	Pass	Testing Complete
LW00671		Conference Room Office	Next To Principal Office	Faucet	1.9	Pass	Testing Complete
LW00672		Health Room Office		Faucet	2.9	Pass	Testing Complete
LW00673		Hallway	Next To Multipurpose Room	Cooler	<1.0	Pass	Testing Complete
LW00674	K2	Classroom		Faucet	2.5	Pass	Testing Complete
LW00675		Break Room	Next To Kitchen	Faucet	<1.0	Pass	Testing Complete
M35222	K4	Classroom		Faucet	3.8	Pass	Testing Complete
M35223	K4	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
M35225	K3	Classroom		Faucet	1.4	Pass	Testing Complete
M35226	K3	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
M35229	K2	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M35231	K1	Classroom		Faucet	1	Pass	Testing Complete
M35232	K1	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
M35245		Kitchen		Faucet	1.7	Pass	Testing Complete
M35246		Kitchen		Faucet	2	Pass	Testing Complete
M35247		Kitchen		Faucet	3.3	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M35248		Kitchen		Faucet	13.9	Pass	Testing Complete
M35250		Material Prep Media Center		Faucet	1.1	Pass	Testing Complete
M35254		Computer	Across From Storage 106	Faucet	1.3	Pass	Testing Complete
M35257	6	Classroom		Faucet	1.3	Pass	Testing Complete
M35258	6	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete
M35259	7	Classroom		Faucet	3	Pass	Testing Complete
M35260	7	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M35262	8	Classroom		Bubbler - Indoor	3	Pass	Testing Complete
M35263	9	Classroom		Faucet	5.7	Pass	Testing Complete
M35264	9	Classroom		Bubbler - Indoor	3	Pass	Testing Complete
M35265	10	Classroom		Faucet	5.4	Pass	Testing Complete
M35266	10	Classroom		Bubbler - Indoor	3.5	Pass	Testing Complete
M35276	2	Classroom		Faucet	1.7	Pass	Testing Complete
M35277	2	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M35279	3	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M35280	4	Classroom		Faucet	2.9	Pass	Testing Complete
M35281	4	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M35282	5	Classroom		Faucet	5.3	Pass	Testing Complete
M35283	5	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
M35286	1	Classroom		Faucet	1.7	Pass	Testing Complete
M35287	1	Classroom		Bubbler - Indoor	6.1	Pass	Testing Complete
M35290		All Purpose Room Dual Purpose Room		Faucet	1.6	Pass	Testing Complete
M35292		Music		Faucet	2	Pass	Testing Complete
M35301	12	Classroom		Faucet	1.8	Pass	Testing Complete
M35302	12	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
M35303	14	Classroom		Faucet	1.3	Pass	Testing Complete
M35304	14	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
M35305	11	Classroom		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M35306	11	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
M35307	13	Classroom		Faucet	1.8	Pass	Testing Complete
M35308	13	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M35309	15	Classroom		Faucet	<1.0	Pass	Testing Complete
M35310	15	Classroom		Bubbler - Indoor	3.5	Pass	Testing Complete
M35311	16	Classroom		Faucet	1.1	Pass	Testing Complete
M35312	16	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
M35312	16	Classroom		Bubbler - Indoor	2	Pass	Testing Complete
M35314	17	Classroom		Bubbler - Indoor	4.9	Pass	Testing Complete
M35315		Break Room	Next to CR 16	Faucet	3.7	Pass	Testing Complete
M35316	18	Classroom		Faucet	1.4	Pass	Testing Complete
M35317	18	Classroom		Bubbler - Indoor	1	Pass	Testing Complete
M35319	19	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M35320	20	Classroom		Faucet	10.2	Pass	Testing Complete
M35321	20	Classroom		Bubbler - Indoor	3.2	Pass	Testing Complete
M35322	21	Classroom		Faucet	3.2	Pass	Testing Complete
M35323	21	Classroom		Bubbler - Indoor	1	Pass	Testing Complete
M35332	R	Reading	Reading Room	Faucet	1.1	Pass	Testing Complete
M35334	22	Classroom		Faucet	2.1	Pass	Testing Complete
M35335	22	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
M35336	23	Classroom		Faucet	1.6	Pass	Testing Complete
M35337	23	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M35338	24	Classroom		Faucet	2.9	Pass	Testing Complete
M35340	25	Classroom		Faucet	1.7	Pass	Testing Complete
M35340	25	Classroom		Faucet	2.6	Pass	Testing Complete
M35342	26	Classroom		Faucet	2.6	Pass	Testing Complete
M35343	26	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete

\*ppb = parts per billion