

Montgomery County Public Schools Lead in Drinking Water Testing Report

**Strawberry Knoll Elementary School
18820 Strawberry Knoll Rd
Gaithersburg, MD 20879**

Report Date: February 17th, 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	1/30/2020
# of Outlets Tested	60
# 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.
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.
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 Strawberry Knoll ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW00110	In kitchen 157	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW00111	In dual purpose room	Classroom Sink	1.0	Pass	N/A	Testing Complete
LW00112	In classroom HS	Classroom Sink	<1	Pass	N/A	Testing Complete
LW00113	In art room across from art storage	Classroom Sink	<1	Pass	N/A	Testing Complete
LW00114	In classroom 11	Classroom Sink	1.1	Pass	N/A	Testing Complete
LW00115	In classroom 11	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00116	In classroom 10	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00117	In classroom 10	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00119	In classroom 7	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
LW00120	In classroom 7	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00121	In classroom 6	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00122	In classroom 6	Classroom Combination Drinking Fountain	1.0	Pass	N/A	Testing Complete
LW00123	In classroom 5	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00124	In classroom 5	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00125	In classroom 8	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
LW00126	In classroom 8	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00127	In classroom 9	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
LW00128	In classroom 9	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00129	In classroom 4	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00130	In classroom 4	Classroom Combination Drinking Fountain	1.4	Pass	N/A	Testing Complete
LW00131	In classroom 3	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00132	In classroom 3	Classroom Combination Drinking Fountain	3.8	Pass	N/A	Testing Complete
LW00134	In classroom 2	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00135	In classroom 1	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00136	In classroom 1	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00139	In classroom 19	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW00141	In classroom 20	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete

LW00142	In classroom 21	Classroom Combination Sink	1.9	Pass	N/A	Testing Complete
LW00143	In classroom 21	Classroom Combination Drinking Fountain	2.4	Pass	N/A	Testing Complete
LW00144	In classroom 18	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00147	In classroom 17	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW00148	In classroom 16	Classroom Combination Drinking Fountain	2.9	Pass	N/A	Testing Complete
LW00149	In classroom 16	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
LW00150	In classroom 15	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
LW00151	In classroom 15	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
LW00152	In classroom 13	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00153	In classroom 13	Classroom Combination Drinking Fountain	1.3	Pass	N/A	Testing Complete
LW00154	In reading resource room	Classroom Sink	1.2	Pass	N/A	Testing Complete
LW00157	In classroom 22	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
LW00158	In classroom 22	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
LW00159	In classroom 13	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00160	In classroom 13	Classroom Combination Drinking Fountain	3.4	Pass	N/A	Testing Complete
LW00161	In classroom 12	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
LW00162	In classroom 12	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00165	In classroom K4	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW00166	In classroom K2	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00168	In classroom K2	Classroom Combination Drinking Fountain	4.6	Pass	N/A	Testing Complete
LW00170	In classroom K3	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW00172	In classroom EC	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00174	In classroom P2	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
LW00175	In classroom K1	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
LW00176	In classroom K1	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00178	In classroom P1	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00181	In staff work room	Classroom Sink	1.2	Pass	N/A	Testing Complete
LW00182	In break room staff lounge	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
M03644	In hallway adjacent to multipurpose room	Drinking Fountain	<1	Pass	N/A	Testing Complete
M03647	In kitchen 157	Kitchen Sink	2.1	Pass	N/A	Testing Complete

M03648	In kitchen 157	Kitchen Sink	<1	Pass	N/A	Testing Complete
M03654	In material prep area 178 by media center	Classroom Sink	<1	Pass	N/A	Testing Complete
M03761	In hallway entrance to gymnasium	Drinking Fountain	<1	Pass	N/A	Testing Complete



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

**Executive Summary:
Strawberry Knoll Elementary School**

18820 Strawberry Knoll Road
Gaithersburg, MD 20879

Date of Test Report:	03/12/2018
Round of Testing:	Initial
# of Outlets Tested:	76
# of Outlets \geq 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	12.9

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: Strawberry Knoll Elementary School
18820 Strawberry Knoll Road
Gaithersburg, MD 20879

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 Strawberry Knoll Elementary School, located at 18820 Strawberry Knoll Road, Gaithersburg, MD 20879.

Scope of Services:

PSI conducted lead in water testing at Strawberry Knoll 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 01/30/18 and 01/31/18 to collect samples from 76 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 01/30/18 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
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 Strawberry Knoll Elementary School

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00110	157	Kitchen		Faucet	1.7	Pass	Testing Complete
LW00111	175	Dual Purpose Room	Inter. Autism	Faucet	1.5	Pass	Testing Complete
LW00112	189	Classroom	Headstart/Pre-K	Faucet	1.5	Pass	Testing Complete
LW00113	174/191	Classroom		Faucet	2.5	Pass	Testing Complete
LW00114	179	Classroom		Faucet	2.2	Pass	Testing Complete
LW00115	179	Classroom		Bubbler - Indoor	2	Pass	Testing Complete
LW00116	177	Classroom		Faucet	1.9	Pass	Testing Complete
LW00117	177	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00118	154	Speech Therapy		Faucet	11.6	Pass	Testing Complete
LW00119	142	Closet		Faucet	4.6	Pass	Testing Complete
LW00120	142	Classroom		Bubbler - Indoor	2.2	Pass	Testing Complete
LW00121	153	Classroom		Faucet	3.9	Pass	Testing Complete
LW00122	153	Classroom		Bubbler - Indoor	3.8	Pass	Testing Complete
LW00123	155	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00124	155	Classroom	Room 5	Bubbler - Indoor	1.1	Pass	Testing Complete
LW00125	164	Classroom	Classroom 8	Faucet	3.4	Pass	Testing Complete
LW00126	164	Classroom	Classroom 8	Bubbler - Indoor	1.4	Pass	Testing Complete
LW00127	158	Classroom	Classroom 9	Faucet	3.2	Pass	Testing Complete
LW00128	158	Classroom	Classroom 9	Bubbler - Indoor	1.2	Pass	Testing Complete
LW00129	172	Classroom	Classroom 4	Faucet	1.9	Pass	Testing Complete
LW00130	172	Classroom	Classroom 4	Bubbler - Indoor	1.2	Pass	Testing Complete
LW00131	173	Classroom	Classroom 3	Faucet	1.3	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00132	173	Classroom	Classroom 3	Bubbler - Indoor	2	Pass	Testing Complete
LW00133	166	Classroom	Classroom 2	Faucet	11.4	Pass	Testing Complete
LW00134	166	Classroom	Classroom 2	Bubbler - Indoor	1.8	Pass	Testing Complete
LW00135	188	Classroom	Classroom 1	Faucet	2.2	Pass	Testing Complete
LW00136	188	Classroom	Classroom 1	Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00137	162/170	Reading		Faucet	12.9	Pass	Testing Complete
LW00138	114	Classroom	Classroom 19	Faucet	8.9	Pass	Testing Complete
LW00139	114	Classroom	Classroom 19	Bubbler - Indoor	3.3	Pass	Testing Complete
LW00140	121	Classroom	Classroom 20	Faucet	5.8	Pass	Testing Complete
LW00141	121	Classroom	Classroom 20	Bubbler - Indoor	3.5	Pass	Testing Complete
LW00142	113	Classroom	Classroom 21	Faucet	3.1	Pass	Testing Complete
LW00143	113	Classroom	Classroom 21	Bubbler - Indoor	2.4	Pass	Testing Complete
LW00144	142	Classroom	Classroom 18	Faucet	3.6	Pass	Testing Complete
LW00145	142	Classroom	Classroom 18	Bubbler - Indoor	5	Pass	Testing Complete
LW00146	117	Classroom	Classroom 17	Faucet	5.3	Pass	Testing Complete
LW00147	117	Classroom	Classroom 17	Bubbler - Indoor	4.4	Pass	Testing Complete
LW00148	141	Classroom	Classroom 16	Faucet	2.5	Pass	Testing Complete
LW00149	141	Classroom	Classroom 16	Bubbler - Indoor	2.4	Pass	Testing Complete
LW00150	119	Classroom	Classroom 15	Faucet	3.3	Pass	Testing Complete
LW00151	119	Classroom	Classroom 15	Bubbler - Indoor	1.8	Pass	Testing Complete
LW00152	105	Classroom	Classroom 13	Faucet	2.6	Pass	Testing Complete
LW00153	105	Classroom	Classroom 14	Bubbler - Indoor	1.9	Pass	Testing Complete
LW00154	108	Reading		Faucet	3	Pass	Testing Complete
LW00155	127	Kindergarten	K3	Faucet	3.1	Pass	Testing Complete
LW00156	127	Kindergarten	K3	Bubbler - Indoor	2.5	Pass	Testing Complete
LW00157	125	Classroom	Classroom 22	Faucet	3	Pass	Testing Complete
LW00158	125	Classroom	Classroom 22	Bubbler - Indoor	1.7	Pass	Testing Complete
LW00159	110	Classroom	Classroom 13	Faucet	2.7	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00160	110	Classroom	Classroom 13	Bubbler - Indoor	1.6	Pass	Testing Complete
LW00161	111	Classroom	Classroom 12	Faucet	3.1	Pass	Testing Complete
LW00162	111	Classroom	Classroom 12	Bubbler - Indoor	1.8	Pass	Testing Complete
LW00163	143	Kindergarten	Classroom K4	Faucet	8.7	Pass	Testing Complete
LW00164	143	Kindergarten	Classroom K4	Faucet	5.8	Pass	Testing Complete
LW00165	143	Kindergarten	Classroom K4	Bubbler - Indoor	2.1	Pass	Testing Complete
LW00166	107	Kindergarten	Classroom K2/PEP	Faucet	3	Pass	Testing Complete
LW00167	107	Kindergarten	Classroom K2/PEP	Faucet	3.4	Pass	Testing Complete
LW00168	107	Kindergarten	Classroom K2/PEP	Bubbler - Indoor	2.1	Pass	Testing Complete
LW00170	127	Kindergarten	K3	Faucet	3.8	Pass	Testing Complete
LW00171	130	Special Ed	Primary Autism	Faucet	<1.0	Pass	Testing Complete
LW00172	130	Special Ed	Primary Autism	Faucet	4.2	Pass	Testing Complete
LW00174	118	Classroom	Room P2	Faucet	2.2	Pass	Testing Complete
LW00176	146	Kindergarten	Classroom K1	Faucet	1.3	Pass	Testing Complete
LW00177	123	Preschool	P1	Faucet	4.8	Pass	Testing Complete
LW00178	123	Preschool	P1	Faucet	1.7	Pass	Testing Complete
LW00179		Office	Between Conference Rooms	Faucet	6.3	Pass	Testing Complete
LW00180	128	Health Room Office		Faucet	9.1	Pass	Testing Complete
LW00181	148	Work Room		Faucet	2.1	Pass	Testing Complete
LW00182	140	Break Room	Staff Lounge	Faucet	<1.0	Pass	Testing Complete
LW00183	134	Music	Next To APR	Faucet	10.9	Pass	Testing Complete
M03635	139	Work Room Admin		Faucet	6.1	Pass	Testing Complete
M03644		Hallway	Hall Outside APR	Cooler	<1.0	Pass	Testing Complete
M03647	157	Kitchen		Faucet	1.6	Pass	Testing Complete
M03648	157	Kitchen		Faucet	1.5	Pass	Testing Complete
M03761	104	Gymnasium	Hall Outside Gym	Cooler	<1.0	Pass	Testing Complete

*ppb = parts per billion