

Montgomery County Public Schools Lead in Drinking Water Testing Report

Laytonsville Elementary School
21401 Laytonsville Road
Gaithersburg, MD 20882

Report Date: March 31st, 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	43
# of Outlets \geq 5 ppb	1

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 Laytonville ES

Fixture Barode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW00676	In classroom K2	Classroom Combination Sink	5.4	Fail	67.5	Remediation Action Plan
LW00677	In classroom K1	Classroom Combination Sink	1.7	Pass	N/A	Testing Complete
LW00678	In classroom K3	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
LW00682	In health room	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
LW00683	In break room by staff lounge	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW00684	In classroom CR 1	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
LW00686	In classroom CR 3	Classroom Combination Sink	1.6	Pass	N/A	Testing Complete
LW00689	In classroom CR 5	Classroom Combination Sink	1.9	Pass	N/A	Testing Complete
LW00690	In classroom CR 6	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00691	In classroom CR 7	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00692	In classroom CR 8	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
LW00693	In classroom CR 9	Classroom Combination Sink	2.5	Pass	N/A	Testing Complete
LW00695	In classroom CR 11	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
LW00697	In classroom CR 13	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
LW00698	In classroom CR 14	Classroom Combination Sink	2.0	Pass	N/A	Testing Complete
LW00701	In classroom CR 20	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00704	In classroom CR 17	Classroom Combination Sink	2.0	Pass	N/A	Testing Complete
LW00707	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW00708	In kitchen	Kitchen Sink	3.7	Pass	N/A	Testing Complete
LW08086	In health room	Classroom Combination Drinking Fountain	2.5	Pass	N/A	Testing Complete
M32963	In kitchen	Kitchen Sink	1.0	Pass	N/A	Testing Complete
M32965	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M33339	In hallway across from staff lounge	Drinking Fountain	<1	Pass	N/A	Testing Complete
M33340	In classroom CR 1	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M33341	In classroom CR 2	Classroom Combination Drinking Fountain	3.9	Pass	N/A	Testing Complete
M33342	In classroom CR 3	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M33345	In classroom CR 5	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M33346	In classroom CR 6	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete

M33347	In classroom CR 7	Classroom Combination Drinking Fountain	1.6	Pass	N/A	Testing Complete
M33348	In classroom CR 8	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M33350	In classroom CR 10	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M33351	In classroom CR 11	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
M33352	In classroom CR 12	Classroom Combination Drinking Fountain	4.2	Pass	N/A	Testing Complete
M33353	In classroom CR 13	Classroom Combination Drinking Fountain	1.9	Pass	N/A	Testing Complete
M33354	In classroom CR 14	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M33355	In hallway near girls bathroom 2	Drinking Fountain	<1	Pass	N/A	Testing Complete
M33356	In classroom CR 17	Classroom Combination Drinking Fountain	1.9	Pass	N/A	Testing Complete
M33357	In classroom CR 16	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
M33359	In classroom CR 20	Classroom Combination Drinking Fountain	2.3	Pass	N/A	Testing Complete
M33362	In hallway right of music room	Drinking Fountain	<1	Pass	N/A	Testing Complete
M33365	In hallway next to gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
M33368	In classroom K3	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M33369	In classroom K2	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete



MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER TESTING 2018

Executive Summary: Laytonsville Elementary School

21401 Laytonsville Road
Gaithersburg, MD 20882

Date of Test Report:	03/12/2018
Round of Testing:	Initial
# of Outlets Tested:	63
# of Outlets \geq 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	19.6

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: Laytonsville Elementary School
21401 Laytonsville 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 Laytonsville Elementary School, located at 21401 Laytonsville Road, Gaithersburg, MD 20882.

Scope of Services:

PSI conducted lead in water testing at Laytonsville Elementary School in accordance with the Environmental Protection Agency (EPA) and Maryland House Bill (HB) 270. State regulations 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 regulations 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 02/01/18, 02/02/18, 02/05/18, and 02/06/18 to collect samples from 63 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 02/02/18 and 02/06/18 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 contained 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 Laytonsville Elementary School

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00676	K2	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00677	K1	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00678	K3	Classroom		Faucet	2.8	Pass	Testing Complete
LW00679	K4	Classroom		Faucet	5.7	Pass	Testing Complete
LW00680		Media Center Media Center	Media Workroom	Faucet	6.7	Pass	Testing Complete
LW00681		Mail Room		Faucet	8.3	Pass	Testing Complete
LW00682		Health Room		Faucet	1.9	Pass	Testing Complete
LW00683		Break Room	Staff Lounge	Faucet	3.3	Pass	Testing Complete
LW00684	CR 1	Classroom		Faucet	4.9	Pass	Testing Complete
LW00685	CR 2	Classroom		Faucet	5.5	Pass	Testing Complete
LW00686	CR 3	Classroom		Faucet	3.6	Pass	Testing Complete
LW00687	CR 4	Classroom		Faucet	2.6	Pass	Testing Complete
LW00688	CR 3A	Classroom		Faucet	15.7	Pass	Testing Complete
LW00689	CR 5	Classroom		Faucet	3.1	Pass	Testing Complete
LW00690	CR 6	Classroom		Faucet	2.5	Pass	Testing Complete
LW00691	CR 7	Classroom		Faucet	2.4	Pass	Testing Complete
LW00692	CR 8	Classroom		Faucet	2.4	Pass	Testing Complete
LW00693	CR 9	Classroom		Faucet	4.6	Pass	Testing Complete
LW00694	CR 10	Classroom		Faucet	5.4	Pass	Testing Complete
LW00695	CR 11	Classroom		Faucet	3.5	Pass	Testing Complete
LW00696	CR 12	Classroom		Faucet	5.2	Pass	Testing Complete
LW00697	CR 13	Classroom		Faucet	4.8	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00698	CR 14	Classroom		Faucet	2.4	Pass	Testing Complete
LW00699	CR 18	Classroom		Faucet	17.7	Pass	Testing Complete
LW00700	CR 19	Classroom		Faucet	5.2	Pass	Testing Complete
LW00701	CR 20	Classroom		Faucet	3.3	Pass	Testing Complete
LW00702	CR 15	Classroom		Faucet	8.2	Pass	Testing Complete
LW00703	CR 16	Classroom		Faucet	5	Pass	Testing Complete
LW00704	CR 17	Classroom		Faucet	2.9	Pass	Testing Complete
LW00705		Music		Faucet	13.1	Pass	Testing Complete
LW00706		Classroom	Resource 3	Faucet	19.6	Pass	Testing Complete
LW00707		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW00708		Kitchen		Faucet	1.9	Pass	Testing Complete
M32963		Kitchen		Faucet	2.8	Pass	Testing Complete
M32965		Kitchen		Faucet	1.1	Pass	Testing Complete
M33339		Hallway	Across From Staff Lounge	Cooler	<1.0	Pass	Testing Complete
M33340	CR 1	Classroom		Bubbler - Indoor	4.7	Pass	Testing Complete
M33341	CR 2	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
M33342	CR 3	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
M33344	CR 3A	Classroom		Bubbler - Indoor	8.3	Pass	Testing Complete
M33345	CR 5	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
M33346	CR 6	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
M33347	CR 7	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
M33348	CR 8	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
M33349	CR 9	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
M33350	CR 10	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete
M33351	CR 11	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
M33352	CR 12	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
M33353	CR 13	Classroom		Bubbler - Indoor	2.2	Pass	Testing Complete
M33354	CR 14	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M33356	CR 17	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
M33357	CR 16	Classroom		Bubbler - Indoor	2	Pass	Testing Complete
M33358	CR 15	Classroom		Bubbler - Indoor	3.9	Pass	Testing Complete
M33359	CR 20	Classroom		Bubbler - Indoor	4.7	Pass	Testing Complete
M33361	CR 18	Classroom		Bubbler - Indoor	13.9	Pass	Testing Complete
M33362		Hallway	Right Of Music Room	Faucet	<1.0	Pass	Testing Complete
M33363		Music		Bubbler - Indoor	5.2	Pass	Testing Complete
M33364		Classroom	Resource 3	Bubbler - Indoor	12.3	Pass	Testing Complete
M33365		Hallway	Next To Gym	Cooler	<1.0	Pass	Testing Complete
M33367	K4	Classroom		Bubbler - Indoor	11.1	Pass	Testing Complete
M33368	K3	Classroom		Bubbler - Indoor	3	Pass	Testing Complete
M33369	K2	Classroom		Bubbler - Indoor	4.3	Pass	Testing Complete
M33370	K1	Classroom		Bubbler - Indoor	8.8	Pass	Testing Complete

*ppb = parts per billion