

Montgomery County Public Schools Lead in Drinking Water Testing Report

**Redland Middle School
6505 Muncaster Mill Road
Derwood, MD 20855**

Report Date: February 18th, 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	10/29/2021
# of Outlets Tested	34
# 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 Redland MS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW02146	In hallway right of 114	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02147	In mail room 100C in office	Classroom Sink	<1	Pass	N/A	Testing Complete
LW02148	In hallway left of 101	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02149	In hallway left of 129	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02153	In hallway right of 217	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02154	In hallway right of 217	Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW02155	In team room 215	Classroom Sink	<1	Pass	N/A	Testing Complete
LW07159	In hallway outside of 189	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07160	In band room 189A	Drinking Fountain	9.6	Fail	122	Testing Complete
LW07161	In boys locker room 179	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07162	In girls locker room 171	Drinking Fountain	1.4	Pass	N/A	Testing Complete
LW07163	In hallway outside of 168	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07164	In hallway adjacent to 180 (left when facing 180)	Drinking Fountain	2.1	Pass	N/A	Testing Complete
LW07165	In work room 139	Classroom Sink	<1	Pass	N/A	Testing Complete
LW07166	In kitchen 126	Kitchen Sink	1.4	Pass	N/A	Testing Complete
LW07167	In kitchen 126	Kitchen Sink	1.7	Pass	N/A	Testing Complete
LW07473	In hallway adjacent to 180 (right when facing 180)	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07474	In work room 145	Classroom Sink	<1	Pass	N/A	Testing Complete
LW07475	In hallway across from 134	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07476	In kitchen 126	Kitchen Sink	1.4	Pass	N/A	Testing Complete
LW07477	In kitchen 126	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW07478	In kitchen 126	Ice Machine	<1	Pass	N/A	Testing Complete
LW07479	In work room 126A	Classroom Sink	<1	Pass	N/A	Testing Complete
LW07480	In kitchen 126	Kitchen Sink	1.7	Pass	N/A	Testing Complete
LW07481	In cafeteria by Courtyard	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07482	In hallway adjacent to cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07483	In hallway right of 114	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07484	In hallway left of 129	Drinking Fountain	1.1	Pass	N/A	Testing Complete
LW10936	In hallway adjacent to cafeteria 126	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10937	In cafeteria 126 adjacent to courtyard	Drinking Fountain	<1	Pass	N/A	Testing Complete

LW10938	In hallway adjacent to 180	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10939	In hallway adjacent to 189	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10941	In hallway adjacent to main office 100	Bottle Filler	<1	Pass	N/A	Testing Complete
M13148	In health room 105	Nurses Office Sink	1.2	Pass	N/A	Testing Complete



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

Executive Summary:
Redland Middle School
6505 Muncaster Mill Road
Derwood, MD 20855

Date of Test Report:	04/13/2018
Round of Testing:	Initial
# of Outlets Tested:	35
# of Outlets \geq 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	10.5

Project Status

Initial testing complete: All results less than 20 ppb.



April 13, 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: Redland Middle School
6505 Muncaster Mill Road
Derwood, MD 20855

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 Redland Middle School, located at 6505 Muncaster Mill Road, Derwood, MD 20855.

Scope of Services:

PSI conducted lead in water testing at Redland 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 03/19/18 and 03/20/18 to collect samples from 55 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 03/20/18 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 Redland Middle School

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW02146		Hallway	Right Of Room 114	Cooler	<1.0	Pass	Testing Complete
LW02147	100C	Administration		Faucet	<1.0	Pass	Testing Complete
LW02148		Hallway	Left Of Room 101	Cooler	<1.0	Pass	Testing Complete
LW02149		Hallway	Left Of Room 129	Cooler	<1.0	Pass	Testing Complete
LW02150	229	Home Economics		Faucet	10.5	Pass	Testing Complete
LW02151	229	Home Economics		Faucet	7.4	Pass	Testing Complete
LW02152	229	Home Economics		Faucet	5.0	Pass	Testing Complete
LW02153		Hallway	Right Of Room 217	Cooler	<1.0	Pass	Testing Complete
LW02154		Hallway	Right Of Room 217	Cooler	<1.0	Pass	Testing Complete
LW02155	215	Team Room		Faucet	1.0	Pass	Testing Complete
LW07159		Hallway	Outside Of Room 189	Cooler	<1.0	Pass	Testing Complete
LW07160	189	Music		Cooler	5.6	Pass	Testing Complete
LW07161		Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete
LW07162		Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete
LW07163		Hallway	Outside Of Room 168	Cooler	1.1	Pass	Testing Complete
LW07164		Hallway	Across From Room 180	Cooler	<1.0	Pass	Testing Complete
LW07165	139	Work Room		Faucet	<1.0	Pass	Testing Complete
LW07166	126	Kitchen		Faucet	1.7	Pass	Testing Complete
LW07167	126	Kitchen		Faucet	2.9	Pass	Testing Complete
LW07473		Hallway	In Front Of Room 180	Cooler	<1.0	Pass	Testing Complete
LW07474	145	Work Room		Faucet	<1.0	Pass	Testing Complete
LW07475		Hallway	Across From Room 134	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW07476	126	Kitchen		Faucet	1.8	Pass	Testing Complete
LW07477	126	Kitchen		Faucet	1.9	Pass	Testing Complete
LW07478	126	Kitchen		Icemaker	<1.0	Pass	Testing Complete
LW07479	126A	Work Room		Faucet	<1.0	Pass	Testing Complete
LW07480	126	Kitchen		Faucet	1.6	Pass	Testing Complete
LW07481		Cafeteria	By Courtyard	Cooler	<1.0	Pass	Testing Complete
LW07482		Hallway	Under Room 126 Sign	Cooler	1.8	Pass	Testing Complete
LW07483		Hallway	Right Of Room 114	Cooler	<1.0	Pass	Testing Complete
LW07484		Hallway	Left Of Room 129	Cooler	<1.0	Pass	Testing Complete
M13134		Hallway	Across From Room 176	Bubbler - Indoor	2.8	Pass	Testing Complete
M13140		Media Center		Faucet	5.0	Pass	Testing Complete
M13148	105	Health Room		Faucet	<1.0	Pass	Testing Complete
M15013	126H	Break Room	Cafeteria	Faucet	7.2	Pass	Testing Complete

*ppb = parts per billion