

Montgomery County Public Schools Lead in Drinking Water Testing Report

**John Poole Middle School
17014 Tom Fox Ave
Poolesville, MD 20837**

Report Date: April 2nd, 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	3/12/2020
# of Outlets Tested	20
# 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 John Poole MS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW02159	In hallway In front of main gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02160	In hallway In front of main gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02161	In office 308 by classroom	Classroom Combination Sink	2.0	Pass	N/A	Testing Complete
LW02162	In office across from room 300	Classroom Combination Sink	2.3	Pass	N/A	Testing Complete
LW02165	In hallway across from room 200	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02166	In hallway across from room 200	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02168	In health room	Nurses Office Sink	1.9	Pass	N/A	Testing Complete
LW07197	In kitchen	Kitchen Sink	2.5	Pass	N/A	Testing Complete
LW07198	In kitchen	Kitchen Sink	3.7	Pass	N/A	Testing Complete
LW07201	In break room 502	Teachers Lounge Sink	1.0	Pass	N/A	Testing Complete
LW07202	In hallway across from room 400	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07203	In hallway across from room 400	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW07204	In locker room - girls	Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW07205	In hallway right of 405	Drinking Fountain	2.6	Pass	N/A	Testing Complete
LW07206	In team room 303	Classroom Combination Sink	3.2	Pass	N/A	Testing Complete
LW07492	In kitchen	Ice Machine	<1	Pass	N/A	Testing Complete
M05493	In work room by admin	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M05499	In kitchen by kitchen	Kitchen Sink	1.2	Pass	N/A	Testing Complete
M05552	In classroom 300	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
LW02163	In classroom 205	Classroom Combination Sink	4.3	Pass	N/A	Testing Complete



**MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER
POST-REMEDATION FOLLOW-UP TESTING 2019**

November 13, 2019

Executive Summary:
John Poole Middle School
17014 Tom Fox Avenue,
Poolesville, MD 20837

Round of Testing:	Post-Remediation Follow-up
Sample Date	01/23/2019
# of Outlets Tested:	2
# of Outlets \geq 5 ppb:	1
Low Value (ppb):	4.3
High Value (ppb):	17.8

Project Status

Testing Complete: Post-remediation follow-up testing completed for the following rooms:

Kitchen – Outlet (M05499) will be placed back in service.
Kitchen – Outlet (LW07200) will have signage affixed.



November 13, 2019

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 Post-Remediation Follow-up Testing Service

Location: John Poole Middle School
17014 Tom Fox Avenue,
Poolesville, MD 20837

Dear Mr. Mullikin:

Intertek-PSI, Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of post-remediation lead in water testing at John Poole Middle School, located at 17014 Tom Fox Avenue, Poolesville, MD 20837.

Scope of Services:

Two (2) drinking water outlets were remediated at John Poole Middle School due to initial levels that exceeded the lead action level of 5 parts per billion (ppb). Intertek-PSI conducted lead in water post-remediation follow-up testing in accordance with the Maryland Code of Regulations (COMAR) 26.16.07-Lead in Drinking Water – Public and Nonpublic Schools.

Intertek-PSI visited the site on 01/23/2019 to collect post-remediation follow-up samples from 2 of the outlets that have been replaced. 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:

The initial, flush, and post-remediation follow-up results are highlighted in the summary table below:



Barcode ID	Room Number	Location	Notes	Equipment Type	Initial (ppb)	Flush (ppb)	Post-Remediation Follow-up (ppb)	Post-Remediation Follow-up Pass/Fail	Status
M05499		Kitchen		Faucet	20.2	ND	4.3	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service
LW07200		Kitchen		Faucet	20.3	1.7	17.8	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed

*ppb = parts per billion

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.

Nan Lin
Department Manager, Environmental Services
Nan.Lin@intertek.com



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

June 27, 2018

Executive Summary:
John Poole Middle School
17014 Tom Fox Avenue,
Poolesville, MD 20837

Round of Testing:	Initial
# of Outlets Tested:	29
# of Outlets \geq 20 ppb:	2
Low Value (ppb):	< 1.0
High Value (ppb):	20.3
Follow-Up Testing Required (Samples \geq 20 ppb):	Kitchen (20.2 ppb) Kitchen (20.3 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	2

Project Status **Testing Complete: Remediation Plan**

Kitchen– Replace fixture (M05499), in addition to supply line and valve located under sink
Kitchen– Replace fixture (LW07200), in addition to supply line and valve located under sink



June 27, 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: John Poole Middle School
17014 Tom Fox Avenue,
Poolesville, MD 20837

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 John Poole Middle School, located at 17014 Tom Fox Avenue, Poolesville, MD 20837.

Scope of Services:

PSI conducted lead in water testing at John Poole 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 4/18/18 and 4/19/18 to collect samples from 29 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. Two 30 second follow-up samples were collected on 5/24/18.

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 two results of the initial lead in water analysis at or above 20 parts per billion (ppb) and subsequent follow up 30 second results are highlighted in the summary table below:



Barcode ID	Sample Location	Date Collected	Initial Sample Result (ppb)	Date Collected	30 Second Follow Up Sample Result (ppb)
M05499	Kitchen	4/19/18	20.2	5/24/18	ND
LW07200	Kitchen	4/19/18	20.3	5/24/18	1.7

The initial lead in water sample results (4/19/18) and 30 second follow up results (5/24/18) 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

John Poole Middle School Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for John Poole Middle School (4/19/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW02159		Hallway	In Front Of Main Gym	Cooler	1.1	Pass	Testing Complete
LW02160		Hallway	In Front Of Main Gym	Cooler	<1.0	Pass	Testing Complete
LW02161	308	Office Classroom		Faucet	3.1	Pass	Testing Complete
LW02162		Office	Across From Room 300	Faucet	2.1	Pass	Testing Complete
LW02163	205	Team Room		Faucet	8.9	Pass	Testing Complete
LW02164		Work Room Media Center		Faucet	7.3	Pass	Testing Complete
LW02165		Hallway	Across From Room 200	Cooler	<1.0	Pass	Testing Complete
LW02166		Hallway	Across From Room 200	Cooler	<1.0	Pass	Testing Complete
LW02167	104	Team Room		Faucet	6.3	Pass	Testing Complete
LW02168		Health Room		Faucet	3.0	Pass	Testing Complete
LW07197		Kitchen		Faucet	3.8	Pass	Testing Complete
LW07198		Kitchen		Faucet	3.3	Pass	Testing Complete
LW07199		Kitchen		Faucet	16.5	Pass	Testing Complete
LW07200		Kitchen		Faucet	20.3	Fail	Follow-Up Testing Needed
LW07201	502	Break Room		Faucet	2.1	Pass	Testing Complete
LW07202		Hallway	Across From Room 400	Cooler	<1.0	Pass	Testing Complete
LW07203		Hallway	Across From Room 400	Cooler	<1.0	Pass	Testing Complete
LW07204		Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete
LW07205		Hallway	Right Of 405	Cooler	1.6	Pass	Testing Complete
LW07206	303	Team Room		Faucet	3.8	Pass	Testing Complete
LW07492		Kitchen		Ice Maker	<1.0	Pass	Testing Complete
M04454	501	Music Storage		Faucet	7.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M05493		Work Room Admin		Faucet	1.0	Pass	Testing Complete
M05499		Kitchen		Faucet	20.2	Fail	Follow-Up Testing Needed
M05500		Kitchen		Faucet	16.9	Pass	Testing Complete
M05501		Kitchen		Faucet	10.0	Pass	Testing Complete
M05552	300	Classroom		Faucet	4.1	Pass	Testing Complete
M05586		Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete
M05587		Hallway	Right Of 405	Cooler	<1.0	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for John Poole Middle School (5/24/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
M05499		Kitchen	Faucet	19.1	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07200		Kitchen	Faucet	20.3	1.7	Remediation required – replace fixture, in addition to supply line and valve located under sink

*ppb = parts per billion
ND = Non Detect

Note: Fixture(s) with elevated test results were immediately removed from service. Subsequent 2nd round testing was performed on these fixture(s) for further diagnostics for remediation. Because the fixture was shut off after the first test, the subsequent test results may not be representative of an in-use fixture because of stagnant water in the supply line and the operation of shut off valves prior to the tests. All fixtures with elevated test results are to be remediated. After remediation, post remediation testing will be conducted before the fixture is returned to service.