

Montgomery County Public Schools Lead in Drinking Water Testing Report

**Neelsville Middle School
11700 Neelsville Church Road
Germantown, MD 20876**

Report Date: March 27th, 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	3/3/2020
# of Outlets Tested	26
# 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. Due to the Stay-at-Home Order to combat the spread of COVID-19 (coronavirus), no follow-up samples were collected. 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 Neelsville MS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW01167	In hallway across from CR 223	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01169	In office 234 science office	Classroom Sink	1.0	Pass	N/A	Testing Complete
LW01170	In office 233 science office	Classroom Sink	7.7	Fail	NC	Remediation Action Plan
LW01172	In hallway left of CR 112	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW01173	In kitchen by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW01174	In kitchen by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW01175	In kitchen by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW01176	In kitchen by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW01177	In kitchen by cafeteria	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW01178	In kitchen by cafeteria	Ice Machine	<1	Pass	N/A	Testing Complete
LW02355	In hallway across from CR 244	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02356	In health room	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW02357	In hallway outside of general office	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02358	In hallway outside of general office	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02359	In music storage 100	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02360	In hallway across from cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02362	In home economics 107	Home Economics Room Sink	<1	Pass	N/A	Testing Complete
LW02363	In home economics 107	Home Economics Room Sink	1.5	Pass	N/A	Testing Complete
LW02365	In home economics 107	Home Economics Room Sink	<1	Pass	N/A	Testing Complete
LW02366	In fitness room 110	Drinking Fountain	<1	Pass	N/A	Testing Complete
M15894	In work room 239	Classroom Sink	2.7	Pass	N/A	Testing Complete
M15918	In break room next to ramp	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
M15919	In work room by administration	Classroom Sink	<1	Pass	N/A	Testing Complete
M15977	In girls locker room 106 by gymnasium	Drinking Fountain	<1	Pass	N/A	Testing Complete
M15982	In boys locker room 103 by gymnasium	Drinking Fountain	<1	Pass	N/A	Testing Complete
M16005	In music storage 100 in back	Classroom Combination Sink	<1	Pass	N/A	Testing Complete

NC - Not Collected (No follow-up sample collected due to COVID-19 (Coronavirus) Stay-at-Home Order.)



MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER TESTING 2018

Executive Summary:
Neelsville Middle School
11700 Neelsville Church Road
Germantown, MD 20876

Date of Test Report:	03/20/2018
Round of Testing:	Initial
# of Outlets Tested:	30
# of Outlets \geq 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	10

Project Status

Initial testing complete: All results less than 20 ppb.



March 20, 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: Neelsville Middle School
11700 Neelsville Church Road
Germantown, MD 20876

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 Neelsville Middle School, located at 11700 Neelsville Church Road, in Germantown, MD 20876.

Scope of Services:

PSI conducted lead in water testing at Neelsville 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 02/22/18 and 02/23/18 to collect samples from 30 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 02/23/18 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 Neelsville Middle School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW01167		Hallway	Across From CR 223	Cooler	<1.0	Pass	Testing Complete
LW01168	225	ESOL	Special Education Class	Faucet	6.5	Pass	Testing Complete
LW01169	234	Office	Science Office	Faucet	4.9	Pass	Testing Complete
LW01170	233	Office	Science Office	Faucet	2.7	Pass	Testing Complete
LW01172		Hallway	Left Of CR 112	Cooler	<1.0	Pass	Testing Complete
LW01173		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW01174		Kitchen Cafeteria		Faucet	1.5	Pass	Testing Complete
LW01175		Kitchen Cafeteria		Faucet	2.3	Pass	Testing Complete
LW01176		Kitchen Cafeteria		Faucet	2	Pass	Testing Complete
LW01177		Kitchen Cafeteria		Faucet	<1.0	Pass	Testing Complete
LW01178		Kitchen Cafeteria		Icemaker	<1.0	Pass	Testing Complete
LW02355		Hallway	Across From CR 244	Cooler	<1.0	Pass	Testing Complete
LW02356		Health Room		Faucet	<1.0	Pass	Testing Complete
LW02357		Hallway	Outside Of General Office	Cooler	<1.0	Pass	Testing Complete
LW02358		Hallway	Outside Of General Office	Cooler	<1.0	Pass	Testing Complete
LW02359	100	Music Storage		Bubbler - Indoor	1.2	Pass	Testing Complete
LW02360		Hallway	Across From Cafeteria	Cooler	<1.0	Pass	Testing Complete
LW02361	107	Home Economics		Faucet	1.2	Pass	Testing Complete
LW02362	107	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW02363	107	Home Economics		Faucet	2.2	Pass	Testing Complete
LW02365	107	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW02366	110	Fitness Room		Cooler	1	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
M15894	239	Work Room		Faucet	4	Pass	Testing Complete
M15895	215	ESOL	Special Education Class	Faucet	10	Pass	Testing Complete
M15917	252	Classroom	Special Education	Faucet	6	Pass	Testing Complete
M15918		Break Room	Next to Ramp	Faucet	<1.0	Pass	Testing Complete
M15919		Work Room Administration		Faucet	<1.0	Pass	Testing Complete
M15977	106	Girls Locker Room Gymnasium		Bubbler - Indoor	<1.0	Pass	Testing Complete
M15982	103	Boys Locker Room Gymnasium		Bubbler	1.2	Pass	Testing Complete
M16005	100	Music Storage	In Back Room	Faucet	2.6	Pass	Testing Complete

*ppb = parts per billion