

Montgomery County Public Schools Lead in Drinking Water Testing Report

Woodfield Elementary School
24200 Woodfield Road
Gaithersburg, MD 20882

Report Date: April 20th, 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	23
# 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

Sample Results for Woodfield ES

Fixture Code	Fixture Location	Type: Name	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW05020	In classroom 13	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW05022	In classroom 12A	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05023	In classroom 12A	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW05025	In classroom 8	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW05026	In classroom 8	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05027	In classroom 6	Classroom Sink	<1	Pass	N/A	Testing Complete
LW05029	In classroom 2	Classroom Combination Sink	4.4	Pass	N/A	Testing Complete
LW05031	In classroom 1	Classroom Combination Sink	2.8	Pass	N/A	Testing Complete
LW05032	In classroom 1	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05033	In break room across from office	Teachers Lounge Sink	1.9	Pass	N/A	Testing Complete
LW05034	In break room across from office	Ice Machine	<1	Pass	N/A	Testing Complete
LW05035	In break room across from office	Ice Machine	<1	Pass	N/A	Testing Complete
LW05041	In hallway by classroom 13	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05046	In hallway across from classroom 1	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05047	In hallway across from gymnasium	Drinking Fountain	<1	Pass	N/A	Testing Complete
M23213	In hallway across from office	Drinking Fountain	<1	Pass	N/A	Testing Complete
M23229	In classroom 3	Classroom Combination Sink	2.3	Pass	N/A	Testing Complete
M23232	In classroom 4	Classroom Combination Sink	2.1	Pass	N/A	Testing Complete
M23279	In classroom 21	Classroom Combination Sink	24.3	Fail	<1	Remediation Action Plan
M23283	In classroom 23	Classroom Combination Sink	4.0	Pass	N/A	Testing Complete
M23288	In hallway across from kitchen	Drinking Fountain	<1	Pass	N/A	Testing Complete
M23291	In kitchen by kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M23293	In kitchen by kitchen	Kitchen Sink	3.2	Pass	N/A	Testing Complete



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

November 13, 2019

Executive Summary:
Woodfield Elementary School
24200 Woodfield Road,
Gaithersburg, MD 20882

Round of Testing:	Post-Remediation Follow-up
Sample Date	02/01/2019
# of Outlets Tested:	5
# of Outlets \geq 5 ppb:	4
Low Value (ppb):	3.6
High Value (ppb):	15.7

Project Status

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

- Classroom 3 – Outlet (M23229) will be placed back in service.
- Classroom 9 – Outlet (M23242) will have signage affixed.
- Classroom 23 – Outlet (M23283) will have signage affixed.
- Classroom 2 – Outlet (LW05029) will have signage affixed.
- Classroom 21 – Outlet (M23279) 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: Woodfield Elementary School
24200 Woodfield Road,
Gaithersburg, MD 20882

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 Woodfield Elementary School, located at 24200 Woodfield Road, Gaithersburg, MD 20882.

Scope of Services:

Five (5) drinking water outlets were remediated at Woodfield Elementary 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 5 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
M23229	3	Classroom		Faucet	22.2	ND	3.6	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service
M23242	9	Classroom		Faucet	23.7	1.2	9.5	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed
M23283	23	Classroom		Faucet	38.6	ND	10.0	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed
LW05029	2	Classroom		Faucet	33.0	1.4	11.5	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed
M23279	21	Classroom		Faucet	141.0	7.3	15.7	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.

A handwritten signature in blue ink, appearing to read 'Nan Lin', is written over a light blue horizontal line.

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

Montgomery County Public Schools Lead in Drinking Water Testing 2018

May 3, 2018

Executive Summary:

Woodfield Elementary School

24200 Woodfield Road

Gaithersburg, Maryland 20882

Round of Testing:	Initial
# of Outlets Tested:	48
# of Outlets ≥ 20 ppb:	5
Low Value (ppb):	<1.0
High Value (ppb):	141
Follow-Up Testing Required (Samples ≥ 20 ppb):	Classroom 23 (38.6 ppb) Classroom 21 (141 ppb) Classroom 9 (23.7 ppb) Classroom 3 (22.2 ppb) Classroom 2 (33.0 ppb)

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	5

Project Status:

Testing Complete: Remediation Plan

Classroom 23 - Replace fixture (M23283), in addition to supply line and valve located under sink

Classroom 21 - Replace fixture (M23279), in addition to supply line and valve located under sink

Classroom 9 - Replace fixture (M23242), in addition to supply line and valve located under sink

Classroom 3 - Replace fixture (M23229), in addition to supply line and valve located under sink

Classroom 2 - Replace fixture (LW05029), in addition to supply line and valve located under sink



May 3, 2018

Mr. Brian Mullikin, MS
Environmental Team Leader
Montgomery County Public Schools
Division of Maintenance
Gaithersburg, Maryland 20879

Re: Drinking Water Testing

KCI Job #1214634191

Location: Woodfield Elementary School

24200 Woodfield Road
Gaithersburg, Maryland 20882

Dear Mr. Mullikin:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial and follow-up lead in water testing at Woodfield Elementary School, located at 24200 Woodfield Road in Gaithersburg, Maryland 20882.

SCOPE OF SERVICES

KCI conducted lead in water testing at Woodfield 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.

KCI visited the site on 3/20/2018 and 3/21/2018 to collect samples from 48 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. On 4/20/2018, five 30 second follow-up samples were collected.

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 five results of the 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)
M23283	Faucet - Classroom 23	3/21/2018	38.6	4/20/2018	ND
M23279	Faucet - Classroom 21	3/21/2018	141	4/20/2018	7.3
M23242	Faucet - Classroom 9	3/21/2018	23.7	4/20/2018	1.2
M23229	Faucet - Classroom 3	3/21/2018	22.2	4/20/2018	ND
LW05029	Faucet - Classroom 2	3/21/2018	33.0	4/20/2018	1.4

The initial lead in water sample results (3/21/2018) and 30 second follow up results (4/20/2018) 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,
KCI Technologies, Inc.



Kamau McAbee
MDE Certified Water Sampler #8281KM

Attachment:

A- Lead in Water Test Summary Table

ATTACHMENT A

Lead in Water Test Summary Table

ATTACHMENT A

Lead in Water Test Summary Table

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Woodfield Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW05018	18	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW05019	16	Classroom		Bubbler - Indoor	6.7	Pass	Testing Complete
LW05020	13	Classroom		Faucet	<1.0	Pass	Testing Complete
LW05021	13	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW05022	12A	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW05023	12A	Classroom		Faucet	<1.0	Pass	Testing Complete
LW05025	8	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW05026	8	Classroom		Faucet	<1.0	Pass	Testing Complete
LW05027	6	Classroom		Faucet	<1.0	Pass	Testing Complete
LW05029	2	Classroom		Faucet	33.0	Fail	Follow-Up Testing Needed
LW05031	1	Classroom		Faucet	4.6	Pass	Testing Complete
LW05032	1	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW05033		Break Room Office	Across From	Faucet	3.4	Pass	Testing Complete
LW05034		Break Room Office	Across From	Icemaker	1.3	Pass	Testing Complete
LW05035		Break Room Office	Across From	Icemaker	<1.0	Pass	Testing Complete
LW05036	22	Classroom		Faucet	12.4	Pass	Testing Complete
LW05037	19	Classroom		Faucet	14.7	Pass	Testing Complete
LW05039	17	Classroom		Faucet	13.8	Pass	Testing Complete
LW05041		Hallway		Cooler	<1.0	Pass	Testing Complete
LW05042	9	Classroom		Faucet	10.9	Pass	Testing Complete
LW05043	9	Classroom		Faucet	9.3	Pass	Testing Complete
LW05044	5	Classroom		Faucet	8.3	Pass	Testing Complete
LW05046	1	Hallway Classroom	Across From	Cooler	<1.0	Pass	Testing Complete
LW05047		Hallway Gymnasium	Across From	Cooler	<1.0	Pass	Testing Complete
M23208		Work Room Office	Inside Of	Faucet	17.4	Pass	Testing Complete
M23209		Health Room Office		Faucet	14.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M23213		Hallway Office	Across From	Cooler	<1.0	Pass	Testing Complete
M23229	3	Classroom		Faucet	22.2	Fail	Follow-Up Testing Needed
M23232	4	Classroom		Faucet	3.8	Pass	Testing Complete
M23240	7	Classroom		Faucet	6.3	Pass	Testing Complete
M23242	9	Classroom		Faucet	23.7	Fail	Follow-Up Testing Needed
M23245	10	Classroom		Faucet	6.2	Pass	Testing Complete
M23247	11	Classroom		Faucet	16.0	Pass	Testing Complete
M23258	14	Classroom		Faucet	10.0	Pass	Testing Complete
M23259	14	Classroom		Bubbler - Indoor	7.0	Pass	Testing Complete
M23262	15	Classroom		Faucet	8.1	Pass	Testing Complete
M23263	15	Classroom		Bubbler - Indoor	4.9	Pass	Testing Complete
M23264		Work Room Media Center	Inside Of	Faucet	15.8	Pass	Testing Complete
M23265	16	Classroom		Faucet	7.8	Pass	Testing Complete
M23271	18	Classroom		Faucet	13.4	Pass	Testing Complete
M23277	20	Classroom		Faucet	11.3	Pass	Testing Complete
M23279	21	Classroom		Faucet	141	Fail	Follow-Up Testing Needed
M23282	22	Classroom		Bubbler - Indoor	8.0	Pass	Testing Complete
M23283	23	Classroom		Faucet	38.6	Fail	Follow-Up Testing Needed
M23288		Hallway Kitchen	Across From	Cooler	<1.0	Pass	Testing Complete
M23291		Kitchen		Faucet	2.9	Pass	Testing Complete
M23292		Kitchen		Faucet	12.5	Pass	Testing Complete
M23293		Kitchen		Faucet	3.6	Pass	Testing Complete

*PPB = parts per billion

Contractor: KCI Technologies, Inc.
Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Results for Woodfield Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW05029	2	Classroom	Faucet	N/A	30.2	1.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
M23229	3	Classroom	Faucet	N/A	13.9	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
M23242	9	Classroom	Faucet	N/A	11.4	1.2	Remediation required – replace fixture, in addition to supply line and valve located under sink
M23279	21	Classroom	Faucet	N/A	62.9	7.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
M23283	23	Classroom	Faucet	N/A	13.4	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink

*PPB = parts per billion

Note: Fixture(s) with elevated test results were immediately removed from service. Subsequent 2nd and 3rd 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.