

# Montgomery County Public Schools Lead in Drinking Water Testing Report

**Clopper Mill Elementary School  
18501 Cinnamon Drive  
Germantown, MD 20874**

**Report Date: February 20<sup>th</sup>, 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	11/12/2021
# of Outlets Tested	34
# of Outlets $\geq$ 5 ppb	10

## **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](mailto: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](http://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 Clopper Mill ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW03543	In hallway adjacent to classroom 4	Drinking Fountain	2.2	Pass	N/A	Testing Complete
LW03857	In hallway adjacent to classroom 4	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06184	In kitchen by break room	Teachers Lounge Sink	1.1	Pass	N/A	Testing Complete
LW06185	In kitchen by cafeteria	Kitchen Sink	3.8	Pass	N/A	Testing Complete
LW06186	In kitchen by cafeteria	Kitchen Sink	1.2	Pass	N/A	Testing Complete
LW06187	In classroom K1	Classroom Sink	4.6	Pass	N/A	Testing Complete
Lw06189	In classroom K2	Classroom Sink	7.9	Fail	12.3	Testing Complete
LW06193	In classroom K4	Classroom Sink	1.1	Pass	N/A	Testing Complete
Lw06195	In classroom 2	Classroom Sink	8.0	Fail	1.2	Testing Complete
Lw06197	In classroom 3	Classroom Sink	9.0	Fail	14.7	Testing Complete
LW06199	In hallway adjacent to classroom 4	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06200	In hallway adjacent to classroom 4	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06201	In classroom 4	Classroom Sink	10.4	Fail	38.9	Testing Complete
LW06203	In hallway next to classroom 5	Drinking Fountain	<1	Pass	N/A	Testing Complete
Lw06204	In classroom 6	Classroom Sink	4.7	Pass	N/A	Testing Complete
Lw06206	In classroom 7	Classroom Sink	10.1	Fail	9.9	Testing Complete
LW06208	In classroom 8	Classroom Sink	1.6	Pass	N/A	Testing Complete
Lw06212	In classroom 10	Classroom Sink	10.1	Fail	9.8	Testing Complete
LW06214	In classroom 11	Classroom Sink	2.6	Pass	N/A	Testing Complete
LW06216	In classroom 12	Classroom Sink	3.2	Pass	N/A	Testing Complete
LW06218	In classroom 13	Classroom Sink	2.6	Pass	N/A	Testing Complete
Lw06220	In classroom 14	Classroom Sink	7.2	Fail	5.2	Testing Complete
LW06224	In hallway adjacent to classroom 17	Drinking Fountain	4.5	Pass	N/A	Testing Complete
LW06225	In hallway adjacent to classroom 17	Drinking Fountain	2.0	Pass	N/A	Testing Complete
LW06232	In hallway adjacent to classroom 19	Drinking Fountain	2.5	Pass	N/A	Testing Complete
LW06233	In hallway adjacent to classroom 19	Drinking Fountain	1.3	Pass	N/A	Testing Complete
Lw06236	In classroom 21	Classroom Sink	5.5	Fail	6.4	Testing Complete
Lw06238	In classroom 22	Classroom Sink	9.5	Fail	4.9	Testing Complete
Lw06240	In classroom 23	Classroom Sink	15.1	Fail	12.6	Testing Complete
Lw10931	In hallway adjacent to classroom 4	Bottle Filler	<1	Pass	N/A	Testing Complete

M02277	In work room by admin	Classroom Sink	4.2	Pass	N/A	Testing Complete
M02282	In kitchen by cafeteria	Kitchen Sink	2.8	Pass	N/A	Testing Complete
M02295	In hallway outside of classroom 28	Drinking Fountain	<1	Pass	N/A	Testing Complete
M02296	In hallway outside of classroom 28	Drinking Fountain	<1	Pass	N/A	Testing Complete



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

November 13, 2019

**Executive Summary:**  
**Clopper Mill Elementary School**  
18501 Cinnamon Drive,  
Germantown, MD 20874

Round of Testing:	Post-Remediation Follow-up
Sample Date	01/24/2019
# of Outlets Tested:	4
# of Outlets $\geq$ 5 ppb:	2
Low Value (ppb):	2.4
High Value (ppb):	10.5

**Project Status**

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

Hallway Across from Classroom 4 – Outlet (LW03543) will be placed back in service.

Admin Work Room – Outlet (M02277) will be placed back in service.

Classroom 6 – Outlet (LW06204) will have signage affixed.

Kitchen Cafeteria – Outlet (M02282) 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: Clopper Mill Elementary School  
18501 Cinnamon Drive,  
Germantown, MD 20874

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 Clopper Mill Elementary School, located at 18501 Cinnamon Drive, Germantown, MD 20874.

**Scope of Services:**

Four (4) drinking water outlets were remediated at Clopper Mill 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 01/24/2019 to collect post-remediation follow-up samples from 4 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
LW03543	4	Hallway Across From		Cooler	31.3	11.3	4.3	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service
M02277		Work Room Admin		Faucet	21.2	1.4	2.4	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service
LW06204	6	Classroom		Faucet	24.8	1.9	6.1	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed
M02282		Kitchen Cafeteria		Faucet	26.0	ND	10.5	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

Intertek-PSI, 2930 Eskridge Road, Fairfax, VA 22031

[www.intertek.com/building](http://www.intertek.com/building)





## Montgomery County Public Schools Lead in Drinking Water Testing 2018

June 11, 2018

**Executive Summary:**  
**Clopper Mill Elementary School**  
18501 Cinnamon Drive  
Germantown, Maryland 20874

Round of Testing:	Initial
# of Outlets Tested:	60
# of Outlets $\geq 20$ ppb:	4
Low Value (ppb):	<1.0
High Value (ppb):	31.3
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Hall Across From Rm 4 (31.3 ppb) Classroom 6 (24.8 ppb) Admin Work Room (21.2 ppb) Cafeteria (26.0 ppb)

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	4

**Project Status:**  
**Testing Complete: Remediation Plan**

Hall Across From Rm 4 - Replace fixture (LW06199), in addition to supply line and valve located under sink  
Classroom 6 - Replace fixture (LW06204), in addition to supply line and valve located under sink  
Admin Work Room - Replace fixture (M02277), in addition to supply line and valve located under sink  
Cafeteria - Replace fixture (M02282), in addition to supply line and valve located under sink



June 11, 2018

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

Re: Drinking Water Testing

KCI Job #1214634193

**Location: Clopper Mill Elementary School**

18501 Cinnamon Drive  
Germantown, Maryland 20874

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 Clopper Mill Elementary School, located at 18501 Cinnamon Drive in Germantown, Maryland 20874.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at Clopper Mill 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 4/24/2018 and 4/25/2018 to collect samples from 60 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 6/5/2018, four 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 four 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:

<b>Barcode ID</b>	<b>Sample Location</b>	<b>Date Collected</b>	<b>Initial Sample Result (ppb)</b>	<b>Date Collected</b>	<b>30 Second Follow Up Sample Result (ppb)</b>
LW06199	Cooler - Hall Across From Rm 4	4/25/2018	31.3	6/5/2018	11.3
LW06204	Faucet - Classroom 6	4/25/2018	24.8	6/5/2018	1.9
M02277	Faucet - Admin Work Room	4/25/2018	21.2	6/5/2018	1.4
M02282	Faucet - Cafeteria	4/25/2018	26.0	6/5/2018	ND

The initial lead in water sample results (4/25/2018) and 30 second follow up results (6/5/2018) 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 Clopper Mill Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW06184		Kitchen Break Room		Faucet	1.1	Pass	Testing Complete
LW06185		Kitchen Cafeteria		Faucet	3.8	Pass	Testing Complete
LW06186		Kitchen Cafeteria		Faucet	3.4	Pass	Testing Complete
LW06187	K1	Classroom		Faucet	4.3	Pass	Testing Complete
LW06188	K1	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
LW06189	K2	Classroom		Faucet	8.7	Pass	Testing Complete
LW06190	K2	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
LW06191	K3	Classroom		Faucet	5.8	Pass	Testing Complete
LW06192	K3	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
LW06193	K4	Classroom		Faucet	3.1	Pass	Testing Complete
LW06194	K4	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW06195	2	Classroom		Faucet	9.8	Pass	Testing Complete
LW06197	3	Classroom		Faucet	16.3	Pass	Testing Complete
LW06198	3	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW06199	4	Hallway	Across From	Cooler	31.3	Fail	Follow Up Testing Needed
LW06200	4	Hallway	Across From	Cooler	11.9	Pass	Testing Complete
LW06201	4	Classroom		Faucet	3.1	Pass	Testing Complete
LW06202	4	Classroom		Bubbler - Indoor	3.9	Pass	Testing Complete
LW06203	5B	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
LW06204	6	Classroom		Faucet	24.8	Fail	Follow Up Testing Needed
LW06205	6	Classroom		Bubbler - Indoor	10.4	Pass	Testing Complete
LW06206	7	Classroom		Faucet	15.8	Pass	Testing Complete
LW06207	7	Classroom		Bubbler - Indoor	4.8	Pass	Testing Complete
LW06208	8	Classroom		Faucet	2	Pass	Testing Complete
LW06210	9	Classroom		Faucet	5	Pass	Testing Complete
LW06211	9	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
LW06212	10	Classroom		Faucet	6.1	Pass	Testing Complete
LW06213	10	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
LW06214	11	Classroom		Faucet	1.9	Pass	Testing Complete
LW06215	11	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW06216	12	Classroom		Faucet	4.1	Pass	Testing Complete
LW06217	12	Classroom		Bubbler - Indoor	2.5	Pass	Testing Complete
LW06218	13	Classroom		Faucet	3.2	Pass	Testing Complete
LW06219	13	Classroom		Bubbler - Indoor	3.2	Pass	Testing Complete
LW06220	14	Classroom		Faucet	18.6	Pass	Testing Complete
LW06221	14	Classroom		Bubbler - Indoor	4.8	Pass	Testing Complete
LW06222	16	Classroom		Faucet	7.7	Pass	Testing Complete
LW06223	16	Classroom		Bubbler - Indoor	5.8	Pass	Testing Complete
LW06225	17	Hallway	Across From	Cooler	3.2	Pass	Testing Complete
LW06226	17	Classroom		Faucet	9.2	Pass	Testing Complete
LW06228	18	Classroom		Faucet	8.1	Pass	Testing Complete
LW06229	18	Classroom		Bubbler - Indoor	3.2	Pass	Testing Complete
LW06230	19	Classroom		Faucet	12.1	Pass	Testing Complete
LW06231	19	Classroom		Bubbler - Indoor	10.8	Pass	Testing Complete
LW06232	19	Hallway	Across From	Cooler	2.0	Pass	Testing Complete
LW06233	19	Hallway	Across From	Cooler	3.3	Pass	Testing Complete
LW06234	20	Classroom		Faucet	5.7	Pass	Testing Complete
LW06236	21	Classroom		Faucet	8.3	Pass	Testing Complete
LW06238	22	Classroom		Faucet	5.7	Pass	Testing Complete
LW06240	23	Classroom		Faucet	9.7	Pass	Testing Complete
LW06241	23	Classroom		Bubbler - Indoor	3.3	Pass	Testing Complete
LW06242	24	Classroom		Bubbler - Indoor	4.6	Pass	Testing Complete
M02277		Work Room Admin		Faucet	21.2	Fail	Follow Up Testing Needed
M02279		Health Administration		Faucet	6.6	Pass	Testing Complete
M02282		Kitchen Cafeteria		Faucet	26.0	Fail	Follow Up Testing Needed
M02293		Work Room Media Center		Faucet	5.3	Pass	Testing Complete
M02295	28	Hallway	Outside Of	Cooler	1.2	Pass	Testing Complete
M02296	28	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
M02298	24	Classroom		Faucet	10.3	Pass	Testing Complete
M02349	5B	Hallway	Next To	Cooler	1.4	Pass	Testing Complete

\*PPB = parts per billion

**Contractor:** KCI Technologies, Inc.

**Certified Laboratory:** Microbac Laboratories, Inc.

Follow Up Sample Results for Clopper Mill Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW06199	4	Hallway	Cooler	N/A	6.1	11.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06204	6	Classroom	Faucet	N/A	10.5	1.9	Remediation required – replace fixture, in addition to supply line and valve located under sink
M02277		Work Room Admin	Faucet	N/A	14.2	1.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
M02282		Kitchen Cafeteria	Faucet	N/A	6.2	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.