# Montgomery County Public Schools Lead in Drinking Water Testing Report

Dr. Martin Luther King, Jr. Middle School 13737 Wisteria Drive Germantown, MD 20874

Report Date: February 23<sup>rd</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	11/23/2021		
# of Outlets Tested	33		
# of Outlets ≥ 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 <a href="https://www.epa.gov/lead">www.epa.gov/lead</a>.
- 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 Dr. Martin Luther King, Jr. MS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
M35108	In admin C118	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW03674	In art A117	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW03675	In art A117	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW03673	In art A120	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M38991	In break room 216	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW03678	In break room A214	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW03677	In break room A216	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
M12508	In break room A217	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
M14957	In break room B115	Teachers Lounge Sink	4.8	Pass	N/A	Testing Complete
M14956	In break room B116	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
M37205	In break room C147	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW03691	In cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
M14996	In classroom A120	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW03672	In hallway adjacent to classroom A120	Drinking Fountain	<1	Pass	N/A	Testing Complete
M14976	In hallway adjacent to classroom B104	Drinking Fountain	<1	Pass	N/A	Testing Complete
M14977	In hallway adjacent to classroom B104	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW03676	In hallway adjacent to gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW03690	In hallway adjacent to health room	Drinking Fountain	<1	Pass	N/A	Testing Complete
M12515	In hallway adjacent to room A216	Drinking Fountain	<1	Pass	N/A	Testing Complete
M12516	In hallway adjacent to room A216	Drinking Fountain	<1	Pass	N/A	Testing Complete
M12483	In hallway adjacent to room B215	Drinking Fountain	<1	Pass	N/A	Testing Complete
M12484	In hallway adjacent to room B215	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW03689	In health room C102	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW03671	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW03695	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW03696	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M37196	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M38985	In kitchen	Ice Machine	<1	Pass	N/A	Testing Complete
LW03692	In kitchen	Kitchen Sink	1.5	Pass	N/A	Testing Complete
M37203	In kitchen	Kitchen Sink	1.8	Pass	N/A	Testing Complete

LW03694	In kitchen	Kitchen Sink	1.9	Pass	N/A	Testing Complete
LW03679	In media center C125	Teacher's Lounge Sink	1.1	Pass	N/A	Testing Complete
M14988	In staff lounge A123	Teacher's Lounge Sink	5.5	Fail	<1	Testing Complete



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# Montgomery County Public Schools Lead in Drinking Water Post-Remediation Follow-Up Testing 2019

August 30, 2019

# Executive Summary: Dr. Martin Luther King, Jr. Middle School

13737 Wisteria Drive Germantown, Maryland 20874

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/31/19
# of Outlets Tested:	1
# of Outlets ≥5 ppb:	0
Low Value (ppb):	1.7
High Value (ppb):	1.7

### **Project Status**

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

Kitchen - Outlet (M37203) will be placed back into service



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August 30, 2019

Mr. Brian Mullikin, MS Environmental Team Leader Montgomery County Public Schools 8301 Turkey Thicket Dr., Bldg A, 1st Floor Gaithersburg, Maryland 20879

Re: Lead in Water Post-Remediation Follow-up Testing Service

**Location: Dr. Martin Luther King, Jr. Middle School** 13737 Wisteria 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 the post-remediation follow-up lead in water testing at Dr. Martin Luther King, Jr. Middle School, located at 13737 Wisteria Drive in Germantown, Maryland 20874.

#### **SCOPE OF SERVICES**

One drinking water outlet was remediated at Dr. Martin Luther King, Jr. Middle School due to initial lead levels that exceeded the lead action level of 5 parts per billion (ppb). KCI Technologies, Inc. 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.

KCI Technologies, Inc. visited the site on 1/31/19 to collect a post-remediation follow-up sample from 1 drinking water outlet that had been replaced. The sample was 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
M37203		Kitchen		Faucet	30.8	<1.0	1.7	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service

#### **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. The Environmental Protection Agency (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.

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.

Kara Plelle-

Kamau McAbee

MDE Certified Water Sampler #8281KM

KCI Job #1214634186



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

June 19, 2018

# Executive Summary: Dr. Martin Luther King, Jr. Middle School

13737 Wisteria Drive Germantown, Maryland 20874

Round of Testing:	Initial
# of Outlets Tested:	33
# of Outlets ≥20 ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	30.8
Follow-Up Testing Required	Kitchen (30.8 ppb)
(Samples $\geq 20$ ppb):	

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	1

## **Project Status:**

**Testing Complete: Remediation Plan** 

Kitchen - Replace fixture (M37203), in addition to supply line and valve located under sink



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June 19, 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: Dr. Martin Luther King, Jr. Middle School 13737 Wisteria 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 Dr. Martin Luther King, Jr. Middle School, located at 13737 Wisteria Drive in Germantown, Maryland 20874.

#### **SCOPE OF SERVICES**

KCI conducted lead in water testing at Dr. Martin Luther King, Jr. 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.

KCI visited the site on 4/17/2018 and 4/18/2018 to collect samples from 33 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 5/24/2018, one 30 second follow-up sample was 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 was one result 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:

					30 Second
		Date	Initial Sample	Date	Follow Up Sample
Barcode ID	Sample Location	Collected	Result (ppb)	Collected	Result (ppb)
M37203	Faucet - Kitchen	4/18/2018	30.8	5/24/2018	ND

The initial lead in water sample results (4/18/2018) and 30 second follow up results (5/24/2018) 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.

Kara Plelle-

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 Dr. Martin Luther King Jr. Middle School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW03671		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW03672		Hallway		Cooler	<1.0	Pass	Testing Complete
LW03673	A120	Art		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03674	A117	Art		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03675	A117	Art		Faucet	<1.0	Pass	Testing Complete
LW03676		Hallway	Next To Gym	Cooler	<1.0	Pass	Testing Complete
LW03677	A216	Break Room		Faucet	<1.0	Pass	Testing Complete
LW03678	A214	Break Room		Faucet	<1.0	Pass	Testing Complete
LW03679	C125	Media Center		Faucet	<1.0	Pass	Testing Complete
LW03689	C102	Health Room		Faucet	<1.0	Pass	Testing Complete
LW03690		Hallway	Across From Health Room	Cooler	<1.0	Pass	Testing Complete
LW03691		Cafeteria		Cooler	<1.0	Pass	Testing Complete
LW03692		Kitchen		Faucet	1.9	Pass	Testing Complete
LW03693		Kitchen		Faucet	5.7	Pass	Testing Complete
LW03694		Kitchen		Faucet	1.6	Pass	Testing Complete
LW03695		Kitchen		Faucet	1.4	Pass	Testing Complete
LW03696		Kitchen		Faucet	<1.0	Pass	Testing Complete
M12483		Hallway	Next Rm B215	Cooler	<1.0	Pass	Testing Complete
M12484		Hallway	Next Rm B215	Cooler	<1.0	Pass	Testing Complete
M12508	A217	Break Room	on map it is Rm A216	Faucet	<1.0	Pass	Testing Complete
M12515		Hallway	Next Rm A216	Cooler	<1.0	Pass	Testing Complete
M12516		Hallway	Next Rm A216	Cooler	<1.0	Pass	Testing Complete
M14956	B116	Break Room		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M14957	B115	Break Room		Faucet	<1.0	Pass	Testing Complete
M14976		Hallway	Across CR B104	Cooler	<1.0	Pass	Testing Complete
M14977		Hallway	Across CR B104	Cooler	<1.0	Pass	Testing Complete
M14996	A120	Classroom		Faucet	<1.0	Pass	Testing Complete
M35108	C118	Admin		Faucet	<1.0	Pass	Testing Complete
M37196		Kitchen		Faucet	2.0	Pass	Testing Complete
M37203		Kitchen		Faucet	30.8	Fail	Follow Up Testing Needed
M37205	C147	Break Room		Faucet	<1.0	Pass	Testing Complete
M38985		Kitchen Cafeteria		Ice Maker	<1.0	Pass	Testing Complete
M38991	216	Break Room		Faucet	<1.0	Pass	Testing Complete

<sup>\*</sup>PPB = parts per billion

### Lead in Water Test Summary Table

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

#### Follow Up Result for Dr. Martin Luther King Jr. Middle School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M37203		Kitchen	Faucet	N/A	22.3	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink

<sup>\*</sup>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.