

# Montgomery County Public Schools Lead in Drinking Water Testing Report

**Parkland Middle School  
4610 West Frankfort Drive  
Rockville, MD 20853**

**Report Date: March 16<sup>th</sup>, 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	2/12/2020
# of Outlets Tested	34
# 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](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 Parkland MS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW02670	In conference room 2003	Classroom Sink	<1	Pass	N/A	Testing complete
LW02735	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing complete
LW02736	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing complete
LW02786	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing complete
M07485	In health room 1201 by health	Nurses Office Sink	<1	Pass	N/A	Testing complete
M07490	In hallway next to health 1201	Drinking Fountain	<1	Pass	N/A	Testing complete
M07491	In hallway next to health 1201	Drinking Fountain	<1	Pass	N/A	Testing complete
M07492	In work room 1209B by media center ie. inside IMC	Classroom Sink	<1	Pass	N/A	Testing complete
M07493	In conference 1221	Classroom Sink	<1	Pass	N/A	Testing complete
M07494	In break room 1222	Classroom Sink	<1	Pass	N/A	Testing complete
M07496	In classroom 1225	Classroom Sink	<1	Pass	N/A	Testing complete
M07501	In hallway across from 1020A	Drinking Fountain	<1	Pass	N/A	Testing complete
M07502	In hallway across from 1020A	Drinking Fountain	<1	Pass	N/A	Testing complete
M07505	In classroom 1011	Classroom Sink	1.3	Pass	N/A	Testing complete
M07524	In hallway across from 1006 BBR	Drinking Fountain	<1	Pass	N/A	Testing complete
M07525	In hallway across from 1006 BBR	Drinking Fountain	<1	Pass	N/A	Testing complete
M07536	In work room 1000B	Classroom Sink	<1	Pass	N/A	Testing complete
M07539	In conference 1311	Classroom Sink	<1	Pass	N/A	Testing complete
M07540	In conference 1404	Classroom Sink	<1	Pass	N/A	Testing complete
M07791	In hallway between 2021 and 2023	Drinking Fountain	<1	Pass	N/A	Testing complete
M07801	In conference room 2013	Classroom Sink	<1	Pass	N/A	Testing complete
M07816	In kitchen by kitchen	Kitchen Sink	<1	Pass	N/A	Testing complete
M07817	In kitchen by kitchen	Ice Machine	<1	Pass	N/A	Testing complete

M07819	In kitchen 1109	Kitchen Sink	5.0	Fail	NC	Remediation Action Plan
M07821	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing complete
M07823	In kitchen by kitchen	Kitchen Sink	<1	Pass	N/A	Testing complete
M07834	In hallway between 1301 and 1303	Drinking Fountain	<1	Pass	N/A	Testing complete
LW08073	In Boys locker room 1123	Drinking Fountain	<1	Pass	N/A	Testing complete
LW08074	In Boys locker room 1123	Drinking Fountain	<1	Pass	N/A	Testing complete
LW08075	In girls locker room 1117	Drinking Fountain	<1	Pass	N/A	Testing complete
LW08076	Girls Locker Room	Drinking Fountain	<1	Pass	N/A	Testing complete
LW08077	In hallway adjacent to classroom 1020A	Drinking Fountain	<1	Pass	N/A	Testing complete
LW08078	In hallway adjacent from boys restroom 1006	Drinking Fountain	<1	Pass	N/A	Testing complete
LW08079	In hallway adjacent from classroom 2006	Drinking Fountain	<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 Post-Remediation Follow-Up Testing 2019

August 30, 2019

### Executive Summary:

#### Parkland Middle School

4610 West Frankfort Drive

Rockville, Maryland 20853

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/30/19
# of Outlets Tested:	1
# of Outlets $\geq 5$ ppb:	0
Low Value (ppb):	<1.0
High Value (ppb):	<1.0

### Project Status

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

Kitchen 1109 - Outlet (M07819) will be placed back into service



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: Parkland Middle School**

4610 West Frankfort Drive  
Rockville, Maryland 20853

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 Parkland Middle School, located at 4610 West Frankfort Drive in Rockville, Maryland 20853.

**SCOPE OF SERVICES**

One drinking water outlet was remediated at Parkland 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 1/30/19 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
M07819	1109	Kitchen		Faucet	33.9	37.7	<1.0	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.



Kamau McAbee  
MDE Certified Water Sampler #8281KM  
KCI Job #1214634186



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

April 27, 2018

### Executive Summary:

#### Parkland Middle School

4610 West Frankfort Drive

Rockville, Maryland 20853

Date of Test Report:	April 27, 2018
Round of Testing:	Initial
# of Outlets Tested:	29
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	33.9
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Kitchen (37.7 ppb)

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

### Project Status:

#### Testing Complete: Remediation Plan

Kitchen - Replace fixture (M07819), in addition to supply line and valve located under sink



April 27, 2018

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

Re: Drinking Water Testing

KCI Job #1214634186

**Location: Parkland Middle School**

4610 West Frankfort Drive  
Rockville, Maryland 20853

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 Parkland Middle School, located at 4610 West Frankfort Drive in Rockville, Maryland 20853.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at Parkland 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 2/1/2018 and 2/2/2018 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. On 4/11/2018, 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:

<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>
M07819	Faucet - Kitchen	2/2/2018	33.9	4/11/2018	37.7

The initial lead in water sample results (2/2/2018) and 30 second follow up results (4/11/2018) 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 Result for Parkland Middle School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW02670	2003	Conference Room		Faucet	<1.0	Pass	Testing Complete
LW02735		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW02736		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW02786		Kitchen		Faucet	<1.0	Pass	Testing Complete
M07485	1201	Health Room		Faucet	<1.0	Pass	Testing Complete
M07488	1201D	Exam Health		Faucet	6.0	Pass	Testing Complete
M07490		Hallway	Next to Health 1201	Cooler	<1.0	Pass	Testing Complete
M07491		Hallway	Next to Health 1201	Cooler	<1.0	Pass	Testing Complete
M07492	1209B	Work Room Media Center	inside IMC	Faucet	1.0	Pass	Testing Complete
M07493	1221	Conference		Faucet	<1.0	Pass	Testing Complete
M07494	1222	Break Room		Faucet	<1.0	Pass	Testing Complete
M07496	1225	Classroom		Faucet	<1.0	Pass	Testing Complete
M07501		Hallway	Across from Rm 1020A	Cooler	<1.0	Pass	Testing Complete
M07502		Hallway	Across from Rm 1020A	Cooler	<1.0	Pass	Testing Complete
M07505	1011	Classroom		Faucet	1.0	Pass	Testing Complete
M07524		Hallway	Across from 1006 BBR	Cooler	<1.0	Pass	Testing Complete
M07525		Hallway	Across from 1006 BBR	Cooler	<1.0	Pass	Testing Complete
M07536	1000B	Work Room		Faucet	<1.0	Pass	Testing Complete
M07539	1311	Conference		Faucet	<1.0	Pass	Testing Complete
M07540	1404	Conference		Faucet	<1.0	Pass	Testing Complete
M07791		Hallway	Between Rm 2021 and 2023	Cooler	<1.0	Pass	Testing Complete
M07801	2013	Conference Room		Faucet	1.4	Pass	Testing Complete
M07816		Kitchen		Faucet	<1.0	Pass	Testing Complete
M07817		Kitchen		Ice Maker	<1.0	Pass	Testing Complete
M07819		Kitchen		Faucet	33.9	Fail	Follow-up Testing Needed
M07821		Kitchen		Faucet	<1.0	Pass	Testing Complete
M07823		Kitchen		Faucet	<1.0	Pass	Testing Complete
M07833		Hallway	Between Rm 1301 and Rm 1303	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M07834		Hallway	Between Rm 1301 and Rm 1303	Cooler	<1.0	Pass	Testing Complete

\*PPB = Parts per billion



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

Follow Up Sample Result for Parkland Middle School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M07819		Kitchen	Faucet	93.7	49.7	37.7	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.