



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

April 27, 2018

### Executive Summary:

#### Viers Mill Elementary School

11711 Joseph Mill Road

Silver Spring, Maryland 20906

Round of Testing:	Initial
# of Outlets Tested:	115
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	59.9
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Classroom 311 (59.9 ppb)

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

### Project Status:

#### Testing Complete: Remediation Plan

Classroom 311 - Replace fixture (LW03323), 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: Viers Mill Elementary School**

11711 Joseph Mill Road  
Silver Spring, Maryland 20906

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 Viers Mill Elementary School, located at 11711 Joseph Mill Road in Silver Spring, Maryland 20906.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at Viers 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 2/7/2018 and 2/8/2018 to collect samples from 115 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.

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## **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>
LW03323	Faucet - Classroom 311	2/8/2018	59.9	4/11/2018	3.9

The initial lead in water sample results (2/8/2018) 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.

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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 Viers Mill Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW02709		Kitchen		Faucet	2.4	Pass	Testing Complete
LW02710		Kitchen		Faucet	7.4	Pass	Testing Complete
LW02711		Kitchen		Faucet	2.2	Pass	Testing Complete
LW02712		Break Room		Faucet	<1.0	Pass	Testing Complete
LW02713		Office	Main Office Sink	Faucet	2.3	Pass	Testing Complete
LW02714		Office	Main Office Sink	Bubbler - Indoor	1.8	Pass	Testing Complete
LW02715	104	Classroom		Faucet	1.5	Pass	Testing Complete
LW02716	104	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW02717	106	Classroom		Faucet	<1.0	Pass	Testing Complete
LW02718	105	Classroom		Faucet	1.2	Pass	Testing Complete
LW02719	107	Classroom		Faucet	2.1	Pass	Testing Complete
LW02720	107	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW02721		Hallway	Across From 100	Cooler	<1.0	Pass	Testing Complete
LW03298	301	Classroom		Faucet	1.9	Pass	Testing Complete
LW03299	301	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW03300	300	Classroom		Faucet	3.0	Pass	Testing Complete
LW03301	300	Classroom		Bubbler - Indoor	2.9	Pass	Testing Complete
LW03302	103	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03303	103	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03304	102	Classroom		Faucet	1.2	Pass	Testing Complete
LW03305	102	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03306	101	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03307	308	Classroom		Faucet	6.2	Pass	Testing Complete
LW03308	308	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03309	306	Classroom		Faucet	1.3	Pass	Testing Complete
LW03310	306	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW03311	305	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03312	305	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW03313		Hallway	Across From 306	Cooler	<1.0	Pass	Testing Complete
LW03314	304	Classroom		Faucet	3.8	Pass	Testing Complete
LW03315	304	Classroom		Bubbler - Indoor	9.3	Pass	Testing Complete
LW03316	303	Classroom		Faucet	7.2	Pass	Testing Complete
LW03317	303	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete
LW03318	302	Classroom		Faucet	2.9	Pass	Testing Complete
LW03319	302	Classroom		Bubbler - Indoor	2.4	Pass	Testing Complete
LW03320		Hallway	Across From 100	Cooler	<1.0	Pass	Testing Complete
LW03321		Hallway	Beside Gym	Cooler	<1.0	Pass	Testing Complete
LW03322	623	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03323	311	Classroom		Faucet	59.9	Fail	Follow-up Testing Needed
LW03324	311	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW03325	321	Classroom		Faucet	3.9	Pass	Testing Complete
LW03326	312	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW03327	310	Classroom		Faucet	3.4	Pass	Testing Complete
LW03328	310	Classroom		Bubbler - Indoor	5.2	Pass	Testing Complete
LW03329	309	Classroom		Faucet	3.3	Pass	Testing Complete
LW03330	309	Classroom		Bubbler - Indoor	1.1	Pass	Testing Complete
LW03331	307	Classroom		Faucet	1.6	Pass	Testing Complete
LW03332	307	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW04607	214	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04608	214	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04609		Hallway	Across From Computer Lab	Cooler	<1.0	Pass	Testing Complete
LW04610		Hallway	Across From Computer Lab	Cooler	<1.0	Pass	Testing Complete
LW04611		Office Media Center	Media Center Office	Faucet	10.2	Pass	Testing Complete
LW04620	205	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04621	203	Classroom		Faucet	3.1	Pass	Testing Complete
LW04622	203	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW04623	204	Classroom		Faucet	4.7	Pass	Testing Complete
LW04624	204	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW04625	199	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04626	199	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04627	402	Classroom		Faucet	2.5	Pass	Testing Complete
LW04628	403	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04629	403	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04630	401	Classroom		Faucet	2.7	Pass	Testing Complete
LW04631	401	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04632	400	Classroom		Faucet	1.6	Pass	Testing Complete
LW04633	101	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04634	415	Classroom		Faucet	1.3	Pass	Testing Complete
LW04635	415	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW04636	413	Classroom		Faucet	3.4	Pass	Testing Complete
LW04637	413	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04638	404	Classroom		Faucet	2.8	Pass	Testing Complete
LW04639	208	Classroom		Faucet	2.6	Pass	Testing Complete
LW04641	207	Classroom		Faucet	3.9	Pass	Testing Complete
LW04642	207	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW04643	206	Classroom		Faucet	2.7	Pass	Testing Complete
LW04644	206	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
LW04645	205	Classroom		Faucet	3.8	Pass	Testing Complete
M03802		Kitchen		Faucet	1.5	Pass	Testing Complete
M03803		Kitchen		Faucet	3.8	Pass	Testing Complete
M03895		Break Room Kitchen	Left of 103	Faucet	2.4	Pass	Testing Complete
M03896		Break Room Kitchen	Left of 103	Faucet	<1.0	Pass	Testing Complete
M03897		Break Room Kitchen	Left of 103	Faucet	<1.0	Pass	Testing Complete
M31632		Hallway	Across from Health of Linkages Center	Cooler	<1.0	Pass	Testing Complete
M31634	625	Health Room		Faucet	<1.0	Pass	Testing Complete
M31640	632	Classroom		Faucet	<1.0	Pass	Testing Complete
M31641	632	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31642	628	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31643	628	Classroom		Faucet	<1.0	Pass	Testing Complete
M31644	623	Classroom		Faucet	<1.0	Pass	Testing Complete
M31646	623	Classroom		Faucet	<1.0	Pass	Testing Complete
M31647		Hallway	Across from CR 623	Cooler	<1.0	Pass	Testing Complete



Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M31651	216	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31652	216	Classroom		Faucet	<1.0	Pass	Testing Complete
M31653	622	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31654	622	Classroom		Faucet	<1.0	Pass	Testing Complete
M31656	617	Classroom		Faucet	<1.0	Pass	Testing Complete
M31657	617	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31659	616	Classroom		Faucet	<1.0	Pass	Testing Complete
M31661	612C	Material Prep	inside CR 612	Faucet	<1.0	Pass	Testing Complete
M31662	611	Classroom		Faucet	1.0	Pass	Testing Complete
M31664	611C	Material Prep	inside CR 611	Faucet	<1.0	Pass	Testing Complete
M31665	612	Classroom		Faucet	<1.0	Pass	Testing Complete
M31667	607	Classroom		Faucet	<1.0	Pass	Testing Complete
M31669	601	Classroom		Faucet	<1.0	Pass	Testing Complete
M31670	601	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31672	604	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31674	317	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31675	317	Classroom		Faucet	<1.0	Pass	Testing Complete
M31678	315	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31679	315	Classroom		Faucet	<1.0	Pass	Testing Complete
M31680	313	Classroom		Faucet	<1.0	Pass	Testing Complete
M31681	313	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M31682	314	Classroom		Faucet	<1.0	Pass	Testing Complete
M31683	314	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

\*PPB = parts per billion

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

Follow Up Sample Result for Viers Mill Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW03323	311	Classroom	Faucet	56.4	721	3.9	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.