



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

June 21, 2018

### Executive Summary:

#### North Chevy Chase Elementary School

3700 Jones Bridge Road

Chevy Chase, Maryland 20815

Round of Testing:	Initial
# of Outlets Tested:	65
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	22.0
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Kitchen (22.0 ppb)

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

### Project Status:

#### Testing Complete: Remediation Plan

Kitchen - Replace fixture (M42902), 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: North Chevy Chase Elementary School**

3700 Jones Bridge Road  
Chevy Chase, Maryland 20815

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 North Chevy Chase Elementary School, located at 3700 Jones Bridge Road in Chevy Chase, Maryland 20815.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at North Chevy Chase 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 5/3/2018 and 5/4/2018 to collect samples from 65 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, 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>
M42902	Faucet - Kitchen	5/4/2018	22.0	6/5/2018	2.4

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

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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 North Chevy Chase Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW06303		Health Room Administration		Faucet	<1.0	Pass	Testing Complete
LW06304		Work Room Media Center		Faucet	<1.0	Pass	Testing Complete
LW06305	18	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW06306	18	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW06307		Hallway Administration	Across From	Cooler	<1.0	Pass	Testing Complete
LW06308		Hallway Administration	Across From	Cooler	<1.0	Pass	Testing Complete
LW06309		Break Room		Faucet	<1.0	Pass	Testing Complete
LW06310		Hallway Gymnasium	Across From	Cooler	<1.0	Pass	Testing Complete
LW06311		Hallway Gymnasium	Across From	Cooler	<1.0	Pass	Testing Complete
LW06312	104	Classroom		Faucet	3.2	Pass	Testing Complete
LW06313	110A	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06314	105	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06315	103	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06316	207	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06317	205	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06318	203	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06319	200	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06320	202	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06321	208	Classroom		Faucet	<1.0	Pass	Testing Complete
LW06322	31	Classroom		Faucet	7.9	Pass	Testing Complete
LW06323	31	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW06324		Hallway All Purpose Room	Across From	Cooler	<1.0	Pass	Testing Complete
LW06325		Hallway All Purpose Room	Across From	Cooler	<1.0	Pass	Testing Complete
LW06334	107	Testing Room		Faucet	1.2	Pass	Testing Complete
M33292	104	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
M33293	203	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M33294	200	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M33295	202	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M33297	205	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M33298	207	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M33299	208	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M33304	213	Hallway	Outside	Cooler	<1.0	Pass	Testing Complete
M33305	213	Hallway	Outside	Cooler	<1.0	Pass	Testing Complete
M33308	115	Hallway	Across From Elevator	Cooler	<1.0	Pass	Testing Complete
M33309	115	Hallway	Across From Elevator	Cooler	<1.0	Pass	Testing Complete
M33313	107	Testing Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
M33314	105	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M33315	103	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M33316	110A	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M42845	25	Classroom		Faucet	4.9	Pass	Testing Complete
M42846	25	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
M42847	23	Classroom		Faucet	1.9	Pass	Testing Complete
M42848	23	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M42849	26	Classroom		Faucet	12.0	Pass	Testing Complete
M42850	26	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
M42851	21	Classroom		Faucet	4.9	Pass	Testing Complete
M42852	21	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
M42901		Kitchen		Faucet	1.7	Pass	Testing Complete
M42902		Kitchen		Faucet	22.0	Fail	Follow-Up Testing Needed
M42903		Kitchen		Faucet	1.5	Pass	Testing Complete
M42904		Kitchen		Faucet	1.2	Pass	Testing Complete
M42909		Work Room Admin		Faucet	1.4	Pass	Testing Complete
M42917	18	Classroom		Faucet	1.2	Pass	Testing Complete
M42918	18	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M42924	17	Classroom		Faucet	1.3	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M42925	17	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M42926	16	Classroom		Faucet	2.1	Pass	Testing Complete
M42927	16	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M42928	13	Classroom		Faucet	2.7	Pass	Testing Complete
M42929	14	Classroom		Faucet	2.9	Pass	Testing Complete
M42930	14	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M42931	12	Classroom		Faucet	2.4	Pass	Testing Complete
M42932	12	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M42975	27	Classroom		Faucet	1.6	Pass	Testing Complete
M42976	27	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 North Chevy Chase Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M42902		Kitchen	Faucet	N/A	13.2	2.4	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.