



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

April 26, 2018

### Executive Summary:

#### Northwood High School

919 University Boulevard

Silver Spring, Maryland 20901

Round of Testing:	Initial
# of Outlets Tested:	38
# of Outlets $\geq 20$ ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	128
Follow-Up Testing Required (Samples $\geq 20$ ppb):	Work Room (128 ppb)

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

### Project Status:

#### Testing Complete: Remediation Plan

Work Room - Replace fixture (LW04572), in addition to supply line and valve located under sink



April 26, 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: Northwood High School**

919 University Boulevard  
Silver Spring, Maryland 20901

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 Northwood High School, located at 919 University Boulevard in Silver Spring, Maryland 20901.

**SCOPE OF SERVICES**

KCI conducted lead in water testing at Northwood High 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 2/22/2018 and 2/23/2018 to collect samples from 38 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>
LW04572	Faucet - Work Room	2/23/2018	128	4/11/2018	ND

The initial lead in water sample results (2/23/2018) 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 Northwood High School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW03424	B215B	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW03425	E209	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW03426	A224	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW03427	D102	Hallway Locker Room - Boys	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW03428	G118	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW03429	D102	Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete
LW04572		Work Room		Faucet	128	Fail	Follow-up Testing Needed
LW04573		Hallway		Cooler	2.6	Pass	Testing Complete
LW04574		Hallway	Across From Rm E119	Cooler	<1.0	Pass	Testing Complete
LW04575		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04576		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04577		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04578		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04579		Kitchen		Icemaker	<1.0	Pass	Testing Complete
LW04580		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04581		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04582		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04583		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04584		Kitchen		Faucet	1.0	Pass	Testing Complete
LW04585		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04586	F115	Health Room		Faucet	1.2	Pass	Testing Complete
LW04587	F115B	Health Room		Faucet	1.3	Pass	Testing Complete
LW04588		Health Room	Near Rest Rooms	Cooler	2.1	Pass	Testing Complete
LW04589		Hallway		Cooler	<1.0	Pass	Testing Complete
LW04590	F122B	Media Center		Faucet	<1.0	Pass	Testing Complete
LW04591	F124	Classroom		Faucet	1.8	Pass	Testing Complete
LW04592	F124	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04594	E109	Art		Faucet	1.1	Pass	Testing Complete
LW04598		Hallway	Inside Of Girls Locker Room	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04599		Hallway	Next To A125	Cooler	<1.0	Pass	Testing Complete
LW04600		Hallway	In Front Of Auditorium	Cooler	1.0	Pass	Testing Complete
LW04601		Locker Room - Girls		Icemaker	<1.0	Pass	Testing Complete
LW04602	W12	Health Room	F115	Faucet	1.6	Pass	Testing Complete
LW04603	W15	Health Room	F115	Faucet	3.8	Pass	Testing Complete
LW04604	W11	Health Room	F115	Faucet	3.5	Pass	Testing Complete
LW04605	W16	Health Room	F115	Faucet	14.7	Pass	Testing Complete
M25454		Girls Locker Room		Cooler	<1.0	Pass	Testing Complete

\*PPB = parts per billion

**Contractor:** KCI Technologies, Inc.

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

Follow Up Initial Sample Results for Northwood High School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW04572		Work Room	Faucet	1.6	ND	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.