



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 (Samples ≥ 20 ppb):	Kitchen (30.8 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



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:

Barcode ID	Sample Location	Date Collected	Initial Sample Result (ppb)	Date Collected	30 Second Follow Up Sample 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.



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

*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

*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.