



Montgomery County Public Schools Lead in Drinking Water Testing 2018

April 27, 2018

Executive Summary:

Sligo Middle School

1401 Dennis Avenue

Silver Spring, Maryland 20902

Round of Testing:	Initial
# of Outlets Tested:	41
# of Outlets ≥ 20 ppb:	2
Low Value (ppb):	<1.0
High Value (ppb):	50.6
Follow-Up Testing Required (Samples ≥ 20 ppb):	Break Room (50.6 ppb) Kitchen (29.0 ppb)

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	2

Project Status:

Testing Complete: Remediation Plan

Break Room - Replace fixture (LW04731), in addition to supply line and valve located under sink

Kitchen - Replace fixture (M26118), 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: Sligo Middle School

1401 Dennis Avenue
Silver Spring, Maryland 20902

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 Sligo Middle School, located at 1401 Dennis Avenue in Silver Spring, Maryland 20902.

SCOPE OF SERVICES

KCI conducted lead in water testing at Sligo 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 2/21/2018 and 2/22/2018 to collect samples from 41 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 and 4/13/2018, two 30 second follow-up samples were 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 were two results 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)
LW04731	Faucet - Break Room	2/22/2018	50.6	4/11/2018 and 4/13/2018	2.9
M26118	Faucet - Kitchen	2/22/2018	29.0	4/11/2018 and 4/13/2018	12.7

The initial lead in water sample results (2/22/2018) and 30 second follow up results (4/11/2018 and 4/13/2018) 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

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Lead in Water Test Summary Table

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Sligo Middle School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04714		Kitchen		Faucet	1.7	Pass	Testing Complete
LW04715		Kitchen		Faucet	1.3	Pass	Testing Complete
LW04716		Kitchen		Faucet	1.0	Pass	Testing Complete
LW04717		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW04718		Kitchen		Faucet	3.2	Pass	Testing Complete
LW04719		Work Room Office		Faucet	1.0	Pass	Testing Complete
LW04720		Hallway	Across From Café	Cooler	<1.0	Pass	Testing Complete
LW04721		Hallway	Across From Café	Cooler	<1.0	Pass	Testing Complete
LW04722		Health Room		Faucet	2.4	Pass	Testing Complete
LW04723	102	Classroom		Faucet	1.7	Pass	Testing Complete
LW04724	102	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04725	101	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04726	104	Art		Faucet	4.5	Pass	Testing Complete
LW04727	104	Art		Faucet	<1.0	Pass	Testing Complete
LW04728		Hallway	Next To Room 106	Cooler	<1.0	Pass	Testing Complete
LW04729		Hallway	Next To Room 106	Cooler	<1.0	Pass	Testing Complete
LW04730	111	Break Room		Faucet	2.8	Pass	Testing Complete
LW04731	111	Break Room		Faucet	50.6	Fail	Follow-up Testing Needed
LW04732	111	Break Room		Faucet	5.0	Pass	Testing Complete
LW04733	111	Break Room		Faucet	2.8	Pass	Testing Complete
LW04734	111	Break Room		Faucet	1.6	Pass	Testing Complete
LW04735	111	Break Room		Faucet	1.2	Pass	Testing Complete
LW04736		Hallway	Across From Room 113a	Cooler	<1.0	Pass	Testing Complete
LW05283	113	Classroom		Faucet	4.8	Pass	Testing Complete
LW05284	113B	Classroom		Faucet	1.6	Pass	Testing Complete
LW05285	TR-B	Team Room		Faucet	<1.0	Pass	Testing Complete
LW05286		Work Room Media Center		Faucet	2.4	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW05287		Hallway	Next To Room 120	Cooler	<1.0	Pass	Testing Complete
LW05288		Hallway	Next To Room 120	Cooler	<1.0	Pass	Testing Complete
LW05289	TR-C	Team Room		Faucet	2.1	Pass	Testing Complete
LW05290		Hallway	Across From Room 021	Cooler	<1.0	Pass	Testing Complete
LW05291		Hallway	Across From Room 021	Cooler	<1.0	Pass	Testing Complete
LW05292		Hallway	Across From Room 025	Cooler	<1.0	Pass	Testing Complete
LW05293		Hallway	Across From Room 025	Cooler	<1.0	Pass	Testing Complete
LW05294	TR-A	Team Room		Faucet	1.1	Pass	Testing Complete
LW05295		Hallway	Next To Room 220	Cooler	<1.0	Pass	Testing Complete
LW05335		Hallway	Next To Room 220	Cooler	<1.0	Pass	Testing Complete
LW05336	TR-D	Team Room		Faucet	<1.0	Pass	Testing Complete
M26118		Kitchen		Faucet	29.0	Fail	Follow-up Testing Needed
M26119		Kitchen		Faucet	1.0	Pass	Testing Complete
M26139	101	Work Room		Faucet	<1.0	Pass	Testing Complete

*PPB = Parts per billion

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Results for Sligo Middle School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW04731	111	Break Room	Faucet	N/A	121	2.9	Remediation required – replace fixture, in addition to supply line and valve located under sink
M26118		Kitchen	Faucet	11.4	26.5	12.7	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.