KCI TECHNOLOGIES
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936 RIDGEBROOK ROAD • SPARKS, MD 21152 • 410-316-7800 • (FAX) 410-316-7935

Montgomery County Public Schools
Lead in Drinking Water Testing 2018

April 27, 2018

Executive Summary:
Silver Spring International Middle School
313 Wayne Avenue
Silver Spring, Maryland 20910

Round of Testing:	Initial
# of Outlets Tested:	42
# of Outlets ≥20 ppb:	2
Low Value (ppb):	<1.0
High Value (ppb):	31.0
Follow-Up Testing Required (Samples ≥ 20 ppb):	Classroom 130 (29.0 ppb) Workroom (31.0 ppb)

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

Project Status:
Testing Complete: Remediation Plan

Classroom 130 - Replace fixture (LW04660), in addition to supply line and valve located under sink
Workroom - Replace fixture (M38457), in addition to supply line and valve located under sink

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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: Silver Spring International Middle School
313 Wayne Avenue
Silver Spring, Maryland 20910

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 Silver Spring International Middle School, located at 313 Wayne Avenue in Silver Spring, Maryland 20910.

SCOPE OF SERVICES

KCI conducted lead in water testing at Silver Spring International 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 2/15/2018 and 2/16/2018 to collect samples from 42 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, 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)
LW04660	Faucet - Classroom 130	2/16/2018	29.0	4/11/2018	ND
M38457	Faucet - Workroom	2/16/2018	31.0	4/11/2018	1.8

The initial lead in water sample results (2/16/2018) 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.

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 Silver Spring International Middle School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04646		Health Room		Faucet	<1.0	Pass	Testing Complete
LW04647		Health Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04648	110	Break Room		Faucet	<1.0	Pass	Testing Complete
LW04649	110	Health Room		Bubbler - Indoor	4.9	Pass	Testing Complete
LW04650	139	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW04651	139	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW04652	139	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW04653	139	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW04654	139	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW04655	136	Team Room		Faucet	<1.0	Pass	Testing Complete
LW04657		Hallway Hallway	Outside Of Rm 133	Cooler	<1.0	Pass	Testing Complete
LW04658	131	Classroom		Faucet	7.3	Pass	Testing Complete
LW04660	130	Classroom		Faucet	29.0	Fail	Follow-up Testing Needed
LW04662	127	Math		Faucet	14.3	Pass	Testing Complete
LW04664		Hallway	Across From Room 123	Cooler	<1.0	Pass	Testing Complete
LW04665		Hallway	Across From Room 123	Cooler	<1.0	Pass	Testing Complete
LW04666		Hallway	Across From Stairway 3	Cooler	<1.0	Pass	Testing Complete
LW04668	117	Office		Bubbler - Indoor	2.2	Pass	Testing Complete
LW04669	119A	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04670	114B	Work Room Media Center		Faucet	<1.0	Pass	Testing Complete
LW04671		Hallway	Across From Room 139	Cooler	<1.0	Pass	Testing Complete
LW04672		Hallway	Outside Of Room 308	Cooler	<1.0	Pass	Testing Complete
LW04673	307	Team Room		Faucet	1.8	Pass	Testing Complete
LW04674	307	Team Room		Bubbler - Indoor	1.5	Pass	Testing Complete
LW04675		Hallway	Across From Room 304	Cooler	<1.0	Pass	Testing Complete
LW04677		Hallway	Outside Of Room 242	Cooler	<1.0	Pass	Testing Complete
LW04678		Hallway	Across From Room 233	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04679		Hallway	Across From Room 233	Cooler	<1.0	Pass	Testing Complete
LW04680	225	Team Room		Faucet	4.6	Pass	Testing Complete
LW04681		Hallway	Across From Room 216	Cooler	<1.0	Pass	Testing Complete
LW04682		Hallway	Across From Room 216	Cooler	<1.0	Pass	Testing Complete
M38270		Lobby	Next Admin	Cooler	<1.0	Pass	Testing Complete
M38271		Lobby	Next Admin	Cooler	<1.0	Pass	Testing Complete
M38272	105A	Work Room		Faucet	1.6	Pass	Testing Complete
M38288	117	Office		Faucet	<1.0	Pass	Testing Complete
M38290	120	Classroom		Faucet	<1.0	Pass	Testing Complete
M38333		Hallway	Across From Room 139	Cooler	<1.0	Pass	Testing Complete
M38457	308	Work Room		Faucet	31.0	Fail	Follow-up Testing Needed
M38458	308	Work Room		Bubbler - Indoor	1.5	Pass	Testing Complete
M38494	227	Break Room		Faucet	<1.0	Pass	Testing Complete
M38498	224	Team Room		Faucet	12.7	Pass	Testing Complete
M38499	224	Team Room		Bubbler - Indoor	<1.0	Pass	Testing Complete

*PPB = Parts per billion

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

Follow Up Sample Results for Silver Spring International Middle School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW04660	130	Classroom	Faucet	ND	70.1	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
M38457	308	Work Room	Faucet	65.4	224	1.8	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.