KCI TECHNOLOGIES
ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS
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:
Luxmanor Elementary School
6201 Tilden Lane
Rockville, Maryland 20852

Round of Testing:	Initial
# of Outlets Tested:	54
# of Outlets ≥20 ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	80.0
Follow-Up Testing Required (Samples ≥ 20 ppb):	Kitchen (80.0 ppb)

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

Project Status:
Testing Complete: Remediation Plan

Kitchen - Replace fixture (M22398), 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 #1214634189

Location: Luxmanor Elementary School
6201 Tilden Lane
Rockville, Maryland 20852

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 Luxmanor Elementary School, located at 6201 Tilden Lane in Rockville, Maryland 20852.

SCOPE OF SERVICES

KCI conducted lead in water testing at Luxmanor 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 3/1/2018 and 3/2/2018 to collect samples from 54 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 4/12/2018, 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)
M22398	Faucet - Kitchen	3/2/2018	80.0	4/12/2018	ND

The initial lead in water sample results (3/2/2018) and 30 second follow up results (4/12/2018) 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 Luxmanor Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04753		Health Room		Faucet	1.2	Pass	Testing Complete
LW04754		Work Room Administration		Faucet	2.7	Pass	Testing Complete
LW04755		Break Room		Faucet	3.0	Pass	Testing Complete
LW04756	K2	Classroom		Faucet	3.6	Pass	Testing Complete
LW04759	K1	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04760	K1	Classroom		Faucet	1.3	Pass	Testing Complete
LW04761	1	Classroom		Faucet	6.8	Pass	Testing Complete
LW04763	2	Classroom		Faucet	4.9	Pass	Testing Complete
LW04764	2	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
LW04765	3	Classroom		Faucet	6.8	Pass	Testing Complete
LW04766	3	Classroom		Bubbler - Indoor	4.6	Pass	Testing Complete
LW04767	4	Classroom		Faucet	3.9	Pass	Testing Complete
LW04768	4	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW04769	6	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04770	7	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04771	8	Classroom		Faucet	4.3	Pass	Testing Complete
LW04772	8	Classroom		Bubbler - Indoor	3.0	Pass	Testing Complete
LW04773	9	Classroom		Faucet	1.0	Pass	Testing Complete
LW04774	9	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04776	10	Classroom		Faucet	3.4	Pass	Testing Complete
LW04777	5	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW04778		Work Room Media Center		Faucet	1.6	Pass	Testing Complete
LW04779	11	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
LW04780	11	Classroom		Faucet	6.3	Pass	Testing Complete
LW04781	11	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04782	12	Classroom		Faucet	2.3	Pass	Testing Complete
LW04783	13	Classroom		Faucet	1.5	Pass	Testing Complete
LW04784	14	Classroom		Faucet	4.9	Pass	Testing Complete
LW04785	100	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04786	100	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04787	101	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04788	101	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04789	102	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04790	102	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04791	103	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04792	103	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04793	213	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW04794	213	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW04795	212	ESOL		Faucet	3.2	Pass	Testing Complete
LW04796	212	ESOL		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04797	201	Classroom		Faucet	1.3	Pass	Testing Complete
LW04798	201	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04799	202	Classroom		Faucet	1.1	Pass	Testing Complete
LW04800	202	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04801	203	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04802	203	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M22395		Kitchen		Faucet	3.9	Pass	Testing Complete
M22396		Kitchen		Faucet	2.6	Pass	Testing Complete
M22398		Kitchen		Faucet	80.0	Fail	Follow-up Testing Needed
M22399		Kitchen		Faucet	15.3	Pass	Testing Complete
M22407	5	Classroom		Faucet	8.2	Pass	Testing Complete
M22434	12	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M22436	13	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M22438	14	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 Luxmanor Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M22398		Kitchen	Faucet	4.0	2.3	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.