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:
Kensington-Parkwood Elementary School
4710 Saul Road
Kensington, Maryland 20895

Round of Testing:	Initial
# of Outlets Tested:	74
# of Outlets ≥20 ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	27.9
Follow-Up Testing Required (Samples ≥ 20 ppb):	Work Room (27.9 ppb)

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

Project Status:
Testing Complete: Remediation Plan

Work Room - Replace fixture (M06895), 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: Kensington-Parkwood Elementary School
4710 Saul Road
Kensington, Maryland 20895

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 Kensington-Parkwood Elementary School, located at 4710 Saul Road in Kensington, Maryland 20895.

SCOPE OF SERVICES

KCI conducted lead in water testing at Kensington-Parkwood 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 3/5/2018 and 3/7/208 to collect samples from 74 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)
M06895	Faucet - Work Room	3/7/208	27.9	4/12/2018	3.1

The initial lead in water sample results (3/7/208) 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 Kensington-Parkwood Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04803	117	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW04804	13	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
LW04815	117	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW04816	112	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04817	112	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04818	149	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW04819	140	Classroom		Faucet	2.5	Pass	Testing Complete
LW04820	140	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04821	144	Classroom		Faucet	1.0	Pass	Testing Complete
LW04822	144	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04823	165	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
LW04824	170	Day Care		Faucet	<1.0	Pass	Testing Complete
M06888	115	Classroom		Faucet	<1.0	Pass	Testing Complete
M06889	115	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06890	111	Classroom		Faucet	<1.0	Pass	Testing Complete
M06891	111	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06892	108	Classroom		Faucet	<1.0	Pass	Testing Complete
M06893	108	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06894	103	Work Room Media Center		Faucet	<1.0	Pass	Testing Complete
M06895	104	Work Room		Faucet	27.9	Fail	Follow-Up Testing Needed
M06899	102	Health Room Health		Faucet	<1.0	Pass	Testing Complete
M06903	127	Break Room		Faucet	<1.0	Pass	Testing Complete
M06904	137	Classroom		Faucet	2.0	Pass	Testing Complete
M06905	137	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M06906	139	Classroom		Faucet	8.1	Pass	Testing Complete
M06907	139	Classroom		Bubbler - Indoor	4.7	Pass	Testing Complete
M06908	130	Classroom		Faucet	<1.0	Pass	Testing Complete
M06909	130	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06910	134	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06911	134	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06912	141	Classroom		Faucet	<1.0	Pass	Testing Complete
M06913	141	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06914	145	Classroom		Faucet	<1.0	Pass	Testing Complete
M06915	145	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06921	149	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
M06926	151	Classroom		Faucet	<1.0	Pass	Testing Complete
M06927	151	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06928	155	Classroom		Faucet	<1.0	Pass	Testing Complete
M06929	155	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06932	154	Classroom		Faucet	1.0	Pass	Testing Complete
M06933	154	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06934	156	Classroom		Faucet	<1.0	Pass	Testing Complete
M06935	156	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06937	157	Classroom		Faucet	<1.0	Pass	Testing Complete
M06938	157	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06939	161	Classroom		Faucet	<1.0	Pass	Testing Complete
M06946	162	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
M06948	164	Classroom		Faucet	<1.0	Pass	Testing Complete
M06949	164	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06951	168	Classroom		Faucet	<1.0	Pass	Testing Complete
M06952	168	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M06954	167	Classroom		Faucet	<1.0	Pass	Testing Complete
M06955	167	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06956	171	Classroom		Faucet	<1.0	Pass	Testing Complete
M06957	171	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06958	172	Classroom		Faucet	<1.0	Pass	Testing Complete
M06959	172	Classroom		Bubbler - Outdoor	<1.0	Pass	Testing Complete
M06960	176	Classroom		Faucet	<1.0	Pass	Testing Complete
M06961	175	Classroom		Faucet	<1.0	Pass	Testing Complete
M06962	175	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06963	179	Classroom		Faucet	<1.0	Pass	Testing Complete
M06964	179	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06967	10	Office		Faucet	6.8	Pass	Testing Complete
M06968	12	Conference		Faucet	1.3	Pass	Testing Complete
M06969	1	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06970	1	Classroom		Faucet	<1.0	Pass	Testing Complete
M06972	5	Classroom		Faucet	<1.0	Pass	Testing Complete
M06973	5	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M06983		Kitchen		Faucet	<1.0	Pass	Testing Complete
M06984		Kitchen		Faucet	5.4	Pass	Testing Complete
M06985		Kitchen		Faucet	3.7	Pass	Testing Complete
M06986		Kitchen		Faucet	<1.0	Pass	Testing Complete
M06987		Kitchen		Faucet	<1.0	Pass	Testing Complete
M06988	15	Kitchen		Ice Maker	<1.0	Pass	Testing Complete

*PPB = parts per billion

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

Follow Up Sample Result for Kensington-Parkwood Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M06895	104	Work Room	Faucet	1.8	1630	3.1	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.