



Montgomery County Public Schools Lead in Drinking Water Testing 2018

April 30, 2018

Executive Summary:

Woodlin Elementary School

2101 Luzerne Avenue

Silver Spring, Maryland 20910

Round of Testing:	Initial
# of Outlets Tested:	45
# of Outlets ≥ 20 ppb:	3
Low Value (ppb):	<1.0
High Value (ppb):	106
Follow-Up Testing Required (Samples ≥ 20 ppb):	Classroom 9 (40.0 ppb) Classroom 23 (41.4 ppb) Classroom 25 (106 ppb)

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	3

Project Status:

Testing Complete: Remediation Plan

Classroom 9 - Replace fixture (LW04526), in addition to supply line and valve located under sink

Classroom 23 - Replace fixture (LW04551), in addition to supply line and valve located under sink

Classroom 25 - Replace fixture (LW04539), in addition to supply line and valve located under sink



April 30, 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: Woodlin Elementary School

2101 Luzerne 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 Woodlin Elementary School, located at 2101 Luzerne Avenue in Silver Spring, Maryland 20910.

SCOPE OF SERVICES

KCI conducted lead in water testing at Woodlin 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 2/21/2018 and 2/22/2018 to collect samples from 45 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, 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)
LW04526	Faucet - Classroom 9	2/22/2018	40.0	4/11/2018	3.4
LW04551	Bubbler-Indoor - Classroom 23	2/22/2018	41.4	N/A	N/A
LW04539	Bubbler-Indoor - Classroom 25	2/22/2018	106	N/A	N/A

The initial lead in water sample results (2/22/2018) 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

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Lead in Water Test Summary Table

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Woodlin Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04503	2	Classroom		Faucet	2.9	Pass	Testing Complete
LW04504	2	Classroom		Bubbler - Indoor	6.4	Pass	Testing Complete
LW04506	3	Classroom		Faucet	2.7	Pass	Testing Complete
LW04507	4	Classroom		Faucet	4.5	Pass	Testing Complete
LW04509	12	Classroom		Faucet	1.0	Pass	Testing Complete
LW04511	13	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04512	13	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
LW04513	14	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04514	14	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW04515	15	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04516	15	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04517	16	Classroom		Faucet	2.7	Pass	Testing Complete
LW04518	16	Classroom		Bubbler - Indoor	5.2	Pass	Testing Complete
LW04519	17	Classroom		Faucet	2.1	Pass	Testing Complete
LW04520	17	Classroom		Bubbler - Indoor	3.5	Pass	Testing Complete
LW04521	18	Classroom		Faucet	2.0	Pass	Testing Complete
LW04523	19	Classroom		Faucet	1.4	Pass	Testing Complete
LW04525		Office Media Center		Faucet	1.2	Pass	Testing Complete
LW04526	9	Classroom		Faucet	40.0	Fail	Follow-up Testing Needed
LW04528	10	Classroom		Faucet	2.7	Pass	Testing Complete
LW04529	10	Classroom		Bubbler - Indoor	7.3	Pass	Testing Complete
LW04530	5	Classroom		Faucet	2.5	Pass	Testing Complete
LW04531	5	Classroom		Bubbler - Indoor	4.3	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04532		Break Room		Faucet	2.4	Pass	Testing Complete
LW04533		Work Room		Faucet	2.5	Pass	Testing Complete
LW04534	22	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04536	24	Classroom		Faucet	5.1	Pass	Testing Complete
LW04538	25	Classroom		Faucet	7.2	Pass	Testing Complete
LW04539	25	Classroom		Bubbler - Indoor	106	Fail	Follow-up Testing Needed
LW04540	30	Classroom		Faucet	3.4	Pass	Testing Complete
LW04542	33	Classroom		Faucet	3.9	Pass	Testing Complete
LW04543	34	Classroom		Faucet	2.8	Pass	Testing Complete
LW04544		Kitchen		Faucet	1.5	Pass	Testing Complete
LW04545		Kitchen		Faucet	3.6	Pass	Testing Complete
LW04546		Kitchen		Faucet	2.4	Pass	Testing Complete
LW04547		Kitchen		Faucet	1.4	Pass	Testing Complete
LW04548	35	Classroom		Faucet	10.0	Pass	Testing Complete
LW04550	23	Classroom		Faucet	1.8	Pass	Testing Complete
LW04551	23	Classroom		Bubbler - Indoor	41.4	Fail	Follow-up Testing Needed
LW04552		Hallway	Across From Gym	Cooler	<1.0	Pass	Testing Complete
LW04553		Hallway	Left Of 30	Cooler	<1.0	Pass	Testing Complete
LW04554		Health Room		Faucet	<1.0	Pass	Testing Complete
LW04555		Hallway	Across From 7	Cooler	<1.0	Pass	Testing Complete
M05449		Hallway	Beside Cr 3	Cooler	<1.0	Pass	Testing Complete

*PPB = parts per billion

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Results for Woodlin Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW04526	9	Classroom	Faucet	3.4	23.6	3.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW04539	25	Classroom	Bubbler - Indoor	10.1	N/A	N/A	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW04551	23	Classroom	Bubbler - Indoor	11.6	N/A	N/A	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.