Montgomery County Public Schools Lead in Drinking Water Testing Report

Seven Locks Elementary School 9500 Seven Locks Road Bethesda, MD 20817

Report Date: July 27th, 2023

LEAD IN DRINKING WATER SAMPLE RESULTS SUMMARY

All Maryland public and nonpublic schools are required to sample all drinking water outlets for the presence of lead pursuant to the Code of Maryland Regulations (COMAR). Montgomery County Public Schools (MCPS) is required to remediate outlets where lead in drinking water concentrations exceed the State Action Level (AL) of 5 parts per billion (ppb). A summary of the lead in water initial samples collected by Inspection Experts Inc. is presented in the table below.

Sampling Date	4/28/23
# of Outlets Tested	44
# of Outlets ≥ 5 ppb	0

NEXT STEPS

If an initial sample exceeds the AL (5 ppb), the outlet will be shut-down within 24 hours, a follow up sample collected, and a remedial plan of action developed for this outlet. No additional sampling or remedial actions are required for schools where all initial samples are below the AL.

HEALTH EFFECTS OF LEAD

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead is stored in the bones and it can be released later in life. During pregnancy, the fetus receives lead from the mother's bones, which may affect brain development. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

SOURCES OF HUMAN EXPOSURE TO LEAD

There are many different sources of human exposure to lead. These include: lead-based paint, lead-contaminated dust or soil, some plumbing materials, certain types of pottery, pewter, brass outlets, food, cosmetics, exposure in the workplace and from certain hobbies. According to the Environmental Protection Agency (EPA), 10 to 20 percent of a person's potential exposure to lead may come from drinking water, while for an infant consuming formula mixed with lead containing water this may increase to 40 to 60 percent.

TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER:

- 1. Run your water to flush out lead: If water hasn't been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- 2. Use cold water for cooking and preparing baby formula: Lead from the plumbing dissolves more easily into hot water.

*Please note that boiling the water will not reduce lead levels.

ADDITIONAL INFORMATION

- 1. For additional information, please contact Brian Mullikin, Environmental Team Leader, at 240.740.2324 or brian_a_mullikin@mcpsmd.org.
- 2. For additional information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at <u>www.epa.gov/lead</u>.
- 3. If you are concerned about exposure; contact your local health department or healthcare provider to find out how you can get your child tested forlead.

Please refer to the attachment(s) for additional water sampling information.

Attachment(s):

A - Lead in Water Sample Results Table

Lead in Water Sample Results Table

Sampling Results for Seven Locks ES

Outlet Barcode	Outlet Location	Outlet Type	Initials Results (ppb)	Pass/Fail	Status
M50712	In hallway 149	Drinking Fountain	<1.0	Pass	Testing Complete
M50713	In hallway 149	Drinking Fountain	<1.0	Pass	Testing Complete
M50716	In kitchen 157	Kitchen Sink	<1.0	Pass	Testing Complete
M50717	In kitchen 157	Kitchen Sink	<1.0	Pass	Testing Complete
M50718	In kitchen 157	Kitchen Sink	<1.0	Pass	Testing Complete
M50719	In art 144	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50721	In classroom 144	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50723	In hallway 144	Drinking Fountain	<1.0	Pass	Testing Complete
M50724	In hallway 144	Drinking Fountain	<1.0	Pass	Testing Complete
M50726	In classroom 146	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50728	In classroom 146	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50730	In hallway 115	Drinking Fountain	<1.0	Pass	Testing Complete
M50731	In hallway 115	Drinking Fountain	<1.0	Pass	Testing Complete
M50734	In classroom 116	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50736	In classroom 117	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50738	In classroom 120	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50740	In classroom 122	Classroom Combination Drinking Fountain	1.4	Pass	Testing Complete
M50744	In classroom 126	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50750	In classroom 134	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50754	In classroom 138	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initials Results (ppb)	Pass/Fail	Status
M50762	In classroom 140	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50764	In classroom 143	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50766	In work room 200A by media center	Classroom Combination Sink	<1.0	Pass	Testing Complete
M50768	In classroom 238	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50770	In classroom 205	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50772	In classroom 208	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50774	In classroom 209	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50776	In classroom 210	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50781	In classroom 213	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50784	In classroom 216	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50788	In classroom 222	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50791	In classroom 226	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50796	In classroom 229	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50798	In classroom 230	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50800	In classroom 233	Classroom Combination Drinking Fountain	<1.0	Pass	Testing Complete
M50802	In break room 106	Teachers Lounge Sink	<1.0	Pass	Testing Complete
M50804	In health room 102	Nurses Office Sink	<1.0	Pass	Testing Complete
M50805	In exam 102C by health	Nurses Office Sink	<1.0	Pass	Testing Complete
M50810	In hallway 200	Drinking Fountain	<1.0	Pass	Testing Complete
M50811	In hallway 200	Drinking Fountain	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initials Results (ppb)	Pass/Fail	Status
LW12677	In Hallway 149 BF	Drinking Fountain	<1.0	Pass	Testing Complete
LW12678	Hallway Outside of Classroom 115 BF	Drinking Fountain	<1.0	Pass	Testing Complete
LW12679	In Hallway across 200	Drinking Fountain	<1.0	Pass	Testing Complete
M50760	Office 139	Teachers Lounge Sink	<1.0	Pass	Testing Complete

Montgomery County Public Schools Lead in Drinking Water Testing Report

Seven Locks Elementary School 9500 Seven Locks Road Bethesda, MD 20817

Report Date: April 2nd, 2020

LEAD IN DRINKING WATER SAMPLE RESULTS SUMMARY

All Maryland public and nonpublic schools are required to sample all drinking water outlets for the presence of lead pursuant to the Code of Maryland Regulations (COMAR). Montgomery County Public Schools (MCPS) is required to remediate outlets where lead in drinking water concentrations exceed the Montgomery County Action Level (AL) of 5 parts per billion (ppb). A summary of the lead in water initial samples collected by SaLUT are presented in the table below.

Sampling Date	3/11/2020
# of Outlets Tested	66
# of Outlets ≥ 5 ppb	0

NEXT STEPS

If an initial sample exceeds the AL (5 ppb), the outlet will be immediately shut-down, a follow-up sample collected, and a remedial plan of action developed for this outlet. No additional sampling or remedial actions are required for schools where all initial samples are below the AL.

HEALTH EFFECTS OF LEAD

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead is stored in the bones and it can be released later in life. During pregnancy, the fetus receives lead from the mother's bones, which may affect brain development. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

SOURCES OF HUMAN EXPOSURE TO LEAD

There are many different sources of human exposure to lead. These include: lead-based paint, lead-contaminated dust or soil, some plumbing materials, certain types of pottery, pewter, brass fixtures, food, cosmetics, exposure in the work place and from certain hobbies. According to the Environmental Protection Agency (EPA), 10 to 20 percent of a person's potential exposure to lead may come from drinking water, while for an infant consuming formula mixed with lead-containing water this may increase to 40 to 60 percent.

TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER:

- 1. Run your water to flush out lead: If water hasn't been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- 2. Use cold water for cooking and preparing baby formula: Lead from the plumbing dissolves more easily into hot water.

*Please note that boiling the water will not reduce lead levels.

ADDITIONAL INFORMATION

- 1. For additional information, please contact Brian Mullikin, Environmental Team Leader, at 240.740.2324 or brian_a_mullikin@mcpsmd.org.
- 2. For additional information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at <u>www.epa.gov/lead</u>.
- 3. If you are concerned about exposure; contact your local health department or healthcare provider to find out how you can get your child tested for lead.

Please refer to the attachment(s) for additional water sampling information.

Attachment(s) A – Lead in Water Sample Results Table

Lead in Water Sample Results Table

Sampling Results for Seven Locks ES

Fixture			Initial		Follow up	
Barcode Fixture Location Fixt		Fixture Type	Results (ppb)	Pass/Fail	Results (ppb)	Status
M50712	In hallway 149	Drinking Fountain	<1	Pass	N/A	Testing Complete
M50713	In hallway 149	Drinking Fountain	<1	Pass	N/A	Testing Complete
M50716	In kitchen 157 by kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M50717	In kitchen 157 by kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M50718	In kitchen 157 by kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M50719	In art 144	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50720	In classroom 144	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
M50721	In classroom 144	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50723	In hallway 144 across from	Drinking Fountain	<1	Pass	N/A	Testing Complete
M50724	In hallway 144 across from	Drinking Fountain	<1	Pass	N/A	Testing Complete
M50725	In classroom 146	Classroom Combination Sink	1.7	Pass	N/A	Testing Complete
M50726	In classroom 146	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50727	In classroom 146	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
M50728	In classroom 146	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50730	In hallway 115 outside of	Drinking Fountain	<1	Pass	N/A	Testing Complete
M50731	In hallway 115 outside of	Drinking Fountain	<1	Pass	N/A	Testing Complete
M50733	In classroom 115	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M50734	In classroom 116	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50735	In classroom 116	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M50736	In classroom 117	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50737	In classroom 117	Classroom Combination Sink	1.8	Pass	N/A	Testing Complete
M50738	In classroom 120	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50739	In classroom 120	Classroom Combination Sink	1.5	Pass	N/A	Testing Complete
M50740	In classroom 122	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50741	In classroom 122	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
M50743	In classroom 126	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
M50744	In classroom 126	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50750	In classroom 134	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete

	1					Testine
M50751	In classroom 134	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
M50753	In classroom 138	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
M50754	In classroom 138	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50762	In classroom 140	Classroom Combination Drinking	<1	Pass	N/A	Testing
M50763	In classroom 140	Fountain Classroom Combination Sink	1.5	Pass	N/A	Complete Testing
M50764	In classroom 143	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
		Fountain			-	Complete Testing
M50766	In work room 200A by media center	Classroom Combination Sink Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
M50768	In classroom 238	Fountain	<1	Pass	N/A	Complete
M50769	In classroom 238	Classroom Combination Sink	1.9	Pass	N/A	Testing Complete
M50770	In classroom 205	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50771	In classroom 205	Classroom Combination Sink	2.2	Pass	N/A	Testing Complete
M50772	In classroom 208	Classroom Combination Drinking Fountain	1.9	Pass	N/A	Testing Complete
M50773	In classroom 208	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
M50774	In classroom 209	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M50775	In classroom 209	Classroom Combination Sink	1.7	Pass	N/A	Testing Complete
M50776	In classroom 210	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing
M50777	In classroom 210	Classroom Combination Sink	1.7	Pass	N/A	Testing
M50781	In classroom 213	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing
M50782	In classroom 213	Classroom Combination Sink	1.5	Pass	N/A	Testing Complete
M50784	In classroom 216	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing
M50785	In classroom 216	Classroom Combination Sink	<1	Pass	N/A	Testing
M50787	In classroom 220	Classroom Combination Sink	2.6	Pass	N/A	Complete Testing
M50788	In classroom 222	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
M50789	In classroom 222	Fountain Classroom Combination Sink	<1	Pass	N/A	Complete Testing
M50791	In classroom 226	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
M50792	In classroom 226	Fountain Classroom Combination Sink	2.9	Pass	N/A	Complete Testing
		Classroom Combination Drinking				Complete Testing
M50796	In classroom 229	Fountain	<1	Pass	N/A	Complete Testing
M50797	In classroom 229	Classroom Combination Sink Classroom Combination Drinking	1.7	Pass	N/A	Complete Testing
M50798	In classroom 230	Fountain	<1	Pass	N/A	Complete
M50799	In classroom 230	Classroom Combination Sink	2.5	Pass	N/A	Testing Complete
M50800	In classroom 233	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete

M50801	In classroom 233	Classroom Combination Sink	1.1	Pass	N/A	Testing Complete
M50802	In break room 106	Taachars Launga Sink	-1	Dass	NI/A	Testing
10150802	In break room 106	Teachers Lounge Sink	<1	Pass	N/A	Complete
M50804	In health room 102	Nurses Office Sink	<1	Pass	N/A	Testing
10150804	in health room 102	Nurses Office Slifk	<1	Pass	N/A	Complete
M50805	In exam 102C by health	Nurses Office Sink	<1	Pass	N/A	Testing
10130803	In exam 102C by health	Nulses Office Slifk	~1	Pass	N/A	Complete
M50808	In work room 106C by admin	Classroom Combination Sink	<1	Pass	N/A	Testing
10130608		Classi bolli Combination sink	~1	Pass		Complete
M50810	In hallway 200 across from	Drinking Fountain	<1	Pass	N/A	Testing
10130810		Drinking Fountain	~1	Pass	N/A	Complete
M50811	In hallway 200 across from	Drinking Fountain	1	Dace		Testing
1180511	in nanway 200 across from	Drinking Fountain	<1	Pass	N/A	Complete



MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER POST-REMEDIATION FOLLOW-UP TESTING 2019

November 13, 2019

Executive Summary: Seven Locks Elementary School 9500 Seven Locks Road, Bethesda, MD 20817

Round of Testing:	Post-Remediation Follow-up
Sample Date	01/25/2019
# of Outlets Tested:	2
# of Outlets ≥ 5 ppb:	1
Low Value (ppb):	4.9
High Value (ppb):	6.0

Project Status

Testing Complete: Post-remediation follow-up testing completed for the following rooms:

Classroom 220 – Outlet (M50786) will be removed from service. Classroom 220 – Outlet (M50787) will be placed back in service.



November 13, 2019

Mr. Brian Mullikin Environmental Team Leader Montgomery County Public Schools 8301 Turkey Thicket Drive Building A, First Floor Gaithersburg, Maryland 20879

Re: Lead in Water Post-Remediation Follow-up Testing Service

Location: Seven Locks Elementary School 9500 Seven Locks Road, Bethesda, MD 20817

Dear Mr. Mullikin:

Intertek-PSI, Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of post-remediation lead in water testing at Seven Locks Elementary School, located at 9500 Seven Locks Road, Bethesda, MD 20817.

Scope of Services:

Two (2) drinking water outlets were remediated at Seven Locks Elementary School due to initial levels that exceeded the lead action level of 5 parts per billion (ppb). Intertek-PSI conducted lead in water post-remediation follow-up testing in accordance with the Maryland Code of Regulations (COMAR) 26.16.07-Lead in Drinking Water – Public and Nonpublic Schools.

Intertek-PSI visited the site on 01/25/2019 to collect post-remediation follow-up samples from 2 of the outlets that have been replaced.

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:

The initial, flush, and post-remediation follow-up results are highlighted in the summary table below:



Barcode ID	Room Number	Location	Notes	Equipment Type	Initial (ppb)	Flush (ppb)	Post- Remediation Follow-up (ppb)	Post- Remediation Follow-up Pass/Fail	Status
M50786	220	Classroom		Bubbler- Indoor	20.0	2.6	6.0	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service
M50787	220	Classroom		Faucet	47.1	3.3	4.9	Pass	Post-remediation follow-up testing complete. Outlet will be placed back in service

*ppb = parts per billion

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,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Nan Lin Department Manager, Environmental Services <u>Nan.Lin@intertek.com</u>



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

Montgomery County Public Schools Lead in Drinking Water Testing 2018

April 30, 2018

Executive Summary: Seven Locks Elementary School 9500 Seven Locks Road Bethesda, Maryland 20817

Round of Testing:	Initial
# of Outlets Tested:	70
# of Outlets ≥ 20 ppb:	2
Low Value (ppb):	<1.0
High Value (ppb):	47.1
Follow-Up Testing Required	Classroom 220 (20.0 ppb)
(Samples ≥ 20 ppb):	Classroom 220 (47.1 ppb)

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

Project Status: Testing Complete: Remediation Plan

Classroom 220 - Replace fixture (M50786), in addition to supply line and valve located under sink Classroom 220 - Replace fixture (M50787), 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 #1214634189

Location: Seven Locks Elementary School 9500 Seven Locks Road Bethesda, Maryland 20817

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 Seven Locks Elementary School, located at 9500 Seven Locks Road in Bethesda, Maryland 20817.

SCOPE OF SERVICES

KCI conducted lead in water testing at Seven Locks 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 3/12/2018 and 3/13/2018 to collect samples from 70 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, 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:

					30 Second
			Initial		Follow Up
		Date	Sample	Date	Sample
Barcode ID	Sample Location	Collected	Result (ppb)	Collected	Result (ppb)
M50786	Bubbler-Indoor -	3/13/2018	20.0	4/12/2018	2.6
	Classroom 220				
M50787	Faucet - Classroom 220	3/13/2018	47.1	4/12/2018	3.3

The initial lead in water sample results (3/13/2018) 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.

Kara Melle-

Kamau McAbee MDE Certified Water Sampler #8281KM

Attachment:

A- Lead in Water Test Summary Table

Lead in Water Test Summary Table

Lead in Water Test Summary Table

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

Initial Sample Results for Seven Locks Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M50712	149	Hallway		Cooler	<1.0	Pass	Testing Complete
M50713	149	Hallway	Cooler		<1.0	Pass	Testing Complete
M50716	157	Kitchen		Faucet	1.4	Pass	Testing Complete
M50717	157	Kitchen		Faucet	<1.0	Pass	Testing Complete
M50718	157	Kitchen		Faucet	<1.0	Pass	Testing Complete
M50719	144	Art		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50720	144	Classroom		Faucet	2.5	Pass	Testing Complete
M50721	144	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50722	144	Art		Faucet	2.5	Pass	Testing Complete
M50723	144	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
M50724	144	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
M50725	146	Classroom		Faucet	1.9	Pass	Testing Complete
M50726	146	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50727	146	Classroom		Faucet	1.7	Pass	Testing Complete
M50728	146	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50730	115	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
M50731	115	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
M50733	115	Classroom		Faucet	<1.0	Pass	Testing Complete
M50734	116	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50735	116	Classroom		Faucet	<1.0	Pass	Testing Complete
M50736	117	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50737	117	Classroom		Faucet	3.1	Pass	Testing Complete
M50738	120	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M50739	120	Classroom		Faucet		Pass	Testing Complete
M50740	122	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50741	122	Classroom		Faucet	2.3	Pass	Testing Complete
M50743	126	Classroom		Faucet	2.4	Pass	Testing Complete
M50744	126	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50750	134	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50751	134	Classroom		Faucet	4.5	Pass	Testing Complete
M50753	138	Classroom		Faucet	1.9	Pass	Testing Complete
M50754	138	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50761	139	Classroom		Faucet	5.6	Pass	Testing Complete
M50762	140	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50763	140	Classroom		Faucet	2.7	Pass	Testing Complete
M50764	143	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50765	143	Classroom		Faucet	5.1	Pass	Testing Complete
M50766	200A	Work Room Media Center		Faucet	<1.0	Pass	Testing Complete
M50768	238	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50769	238	Classroom		Faucet	3.9	Pass	Testing Complete
M50770	205	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50771	205	Classroom		Faucet	3.0	Pass	Testing Complete
M50772	208	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50773	208	Classroom		Faucet	3.3	Pass	Testing Complete
M50774	209	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50775	209	Classroom		Faucet	2.8	Pass	Testing Complete
M50776	210	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50777	210	Classroom		Faucet	2.1	Pass	Testing Complete
M50781	213	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50782	213	Classroom		Faucet	2.4	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M50784	216	Classroom	Bubbler - Indoor		<1.0	Pass	Testing Complete
M50785	216	Classroom		Faucet	1.1	Pass	Testing Complete
M50786	220	Classroom		Bubbler - Indoor	20.0	Fail	Follow-Up Testing Needed
M50787	220	Classroom		Faucet	47.1	Fail	Follow-Up Testing Needed
M50788	222	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50789	222	Classroom		Faucet	<1.0	Pass	Testing Complete
M50791	226	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50792	226	Classroom		Faucet	3.1	Pass	Testing Complete
M50796	229	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50797	229	Classroom		Faucet	2.4	Pass	Testing Complete
M50798	230	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50799	230	Classroom		Faucet	3.8	Pass	Testing Complete
M50800	233	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50801	233	Classroom		Faucet	2.2	Pass	Testing Complete
M50802	106	Break Room		Faucet	<1.0	Pass	Testing Complete
M50804	102	Health Room		Faucet	<1.0	Pass	Testing Complete
M50805	102C	Exam Health		Faucet	2.6	Pass	Testing Complete
M50808	106C	Work Room Admin		Faucet	3.5	Pass	Testing Complete
M50810	200	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete
M50811	200	Hallway	Across From	Cooler	<1.0	Pass	Testing Complete

*PPB = parts per billion

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

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M50786	220	Classroom	Bubbler - Indoor	6.3	4.6	2.6	Remediation required – replace fixture, in addition to supply line
							and valve located under sink
M50787		220 Classroom	Faucet	33.3	22.9	3.3	Remediation required – replace
	220						fixture, in addition to supply line
							and valve located under sink

Follow UP Sample Results for Seven Locks Elementary School

*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.