Montgomery County Public Schools Lead in Drinking Water Testing Report

Cannon Road Elementary School 901 Cannon Rd. Silver Spring, MD 20904

Report Date: April 25th, 2024

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	2/27/2024
# of Outlets Tested	44
# of Outlets ≥ 5 ppb	1

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 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:

- 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 www.epa.gov/lead.
- 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 Cannon Road ES

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
M30191	In health room 102C	Faucet, Cold	14.5	Fail	Remediation Action Plan
M30095	In classroom 256	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30098	In classroom 252	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30101	In classroom 248	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30107	M30107 In classroom fount		<1.0	Pass	Testing Complete
M30111	In hallway adjacent to 242	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
M30116	In classroom 242	n classroom fountain - Rubbler		Pass	Testing Complete
M30120	Drink		<1.0	Pass	Testing Complete
M30123	In classroom Drinking Water		Pass	Testing Complete	
M30190	In Health Faucet, Cold		1.3	Pass	Testing Complete
M30136	In classroom 218	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
M30137	In classroom 211	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30140	In classroom 222	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30141	In classroom 215	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30143	In classroom 226	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30146	In staff development 219	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30148	In classroom 228	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30149	In classroom 221	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30151	In classroom 232	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30154	In classroom 225	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30158	In classroom 130	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30164	In classroom 126	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30166	In classroom 115	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
M30168	In classroom 124	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30170	In classroom 111	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30174	In classroom 120	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30175	In classroom 107	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30179	In classroom 116	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30185	In hallway adjacent to administration	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
M30186	In hallway adjacent to administration	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
M30189	In administration work room 100H	Faucet, Cold	<1.0	Pass	Testing Complete
M30196	M30196 In classroom 145 fountain - Bubble Style		<1.0	Pass	Testing Complete
M30156	Drink		<1.0	Pass	Testing Complete
M30198	In classroom 151	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30201	In break room 154	Faucet, Cold	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
M30203	In instructional music 158	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30103	In music classroom 269	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30205	In music classroom 162	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M30216	In hallway adjacent to 180	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
M30217	In hallway adjacent to 180	Bottle Refill Dispenser/Water Refill Station	<1.0	Pass	Testing Complete
M30218	In kitchen	Faucet, Cold	<1.0	Pass	Testing Complete
M30219	In kitchen	Faucet, Cold	<1.0	Pass	Testing Complete
M30220	In kitchen	Faucet, Cold	<1.0	Pass	Testing Complete
M30222	In classroom 156	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete

Montgomery County Public Schools Lead in Drinking Water Testing Report

Cannon Road Elementary School 901 Cannon Road Silver Spring, MD 20904

Report Date: June 7th, 2022

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	11/04/2021
# of Outlets Tested	77
# of Outlets ≥ 5 ppb	1

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 www.epa.gov/lead.
- 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 Cannon Road ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
M30095	In classroom 256	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30096	In classroom 256	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30097	In classroom 252	Teacher's Lounge Sink	1.3	Pass	N/A	Testing Complete
M30098	In classroom 252	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30100	In classroom 248	Teacher's Lounge Sink	1.2	Pass	N/A	Testing Complete
M30101	In classroom 248	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30107	In classroom 244	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30111	In hallway adjacent to 242	Drinking Fountain	<1	Pass	N/A	Testing Complete
M30116	In classroom 242	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30117	In classroom 242	Teacher's Lounge Sink	1.5	Pass	N/A	Testing Complete
M30120	In ESOL 241	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30121	In ESOL 241	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30122	In classroom 200	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30123	In classroom 200	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30125	In classroom 204	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30127	In special ed 205	Teacher's Lounge Sink	1.4	Pass	N/A	Testing Complete
M30128	In hallway adjacent to 205	Drinking Fountain	<1	Pass	N/A	Testing Complete
M30129	In hallway adjacent to 205	Drinking Fountain	<1	Pass	N/A	Testing Complete
M30135	In classroom 218	Teacher's Lounge Sink	1.3	Pass	N/A	Testing Complete
M30136	In classroom 218	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30137	In classroom 211	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30139	In classroom 222	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30140	In classroom 222	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30141	In classroom 215	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30142	In classroom 215	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30143	In classroom 226	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30144	In classroom 226	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30145	In staff development 219	Teacher's Lounge Sink	<1	Pass	N/A	Testing
M30146	In staff development 219	Classroom Combination Drinking Fountain	<1	Pass	N/A	Complete Testing
M30147	In classroom 228	Teacher's Lounge Sink	<1	Pass	N/A	Complete Testing Complete

		1				Tankina
M30148	In classroom 228	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30149	In classroom 221	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30150	In classroom 221	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30151	In classroom 232	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30152	In classroom 232	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30153	In classroom 225	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30154	In classroom 225	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30155	In classroom 121	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30158	In classroom 130	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30159	In classroom 130	Teacher's Lounge Sink	1.3	Pass	N/A	Testing Complete
M30160	In classroom 117	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30161	In classroom 117	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30163	In classroom 126	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30164	In classroom 126	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30165	In classroom 115	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30166	In classroom 115	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30168	In classroom 124	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30169	In classroom 124	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30170	In classroom 111	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30171	In classroom 111	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30173	In classroom 120	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30174	In classroom 120	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30175	In classroom 107	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30178	In classroom 116	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30179	In classroom 116	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30185	In hallway adjacent to administration	Drinking Fountain	<1	Pass	N/A	Testing Complete
M30186	In hallway adjacent to administration	Drinking Fountain	<1	Pass	N/A	Testing Complete
M30188	In media center work room 140A	Teacher's Lounge Sink	4.4	Pass	N/A	Testing Complete
M30189	In administration work room 100H	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30191	In health room 102C	Nurses Office Sink	6.2	Fail	6.3	Testing Complete
M30195	In classroom 145	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M30196	In classroom 145	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M30198	In classroom 151	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete

				_		Testing
M30199	In classroom 151	Teacher's Lounge Sink	1.6	Pass	N/A	Complete
M30200	In classroom 146	Teacher's Lounge Sink	<1	Pass	N/A	Testing
14130200	111 Clu33100111 140	redefier 3 Eddinge Sink	``	1 033	117/7	Complete
M30201	In break room 154	Teachers Lounge Sink	<1	Pass	N/A	Testing
		reactions accurate count		. 455	,,,	Complete
M30202	In instructional music 158	Teacher's Lounge Sink	2.9	Pass	N/A	Testing
					,	Complete
M30203	In instructional music 158	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing
					,	Complete
M30204	In music classroom 162	Teacher's Lounge Sink	<1	Pass	N/A	Testing
					,	Complete
M30205	In music classroom 162	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing
		, and the second				Complete
M30206	In dual purpose room 166	Teacher's Lounge Sink	2.0	Pass	N/A	Testing
		0				Complete
M30216	In hallway adjacent to 180	Drinking Fountain	<1	Pass	N/A	Testing
					,	Complete
M30217	In hallway adjacent to 180	Bottle Filler	<1	Pass	N/A	Testing
						Complete
M30218	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing
					·	Complete
M30219	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing
						Complete
M30220	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing
						Complete
M30222	In classroom 156	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing
						Complete



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

August 29, 2019

Executive Summary: Cannon Road Elementary School

901 Cannon Road, Silver Spring, MD 20904

Round of Testing:	Post-Remediation Follow-Up
Sample Date	02/02/2019
# of Outlets Tested:	1
# of Outlets ≥ 5 ppb:	0
Low Value (ppb):	1.6
High Value (ppb):	1.6

Project Status

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

Instrument Music Room 158: Outlet (M30202) can be placed back into service



August 29, 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: Cannon Road Elementary School

901 Cannon Road, Silver Spring, MD 20904

Dear Mr. Mullikin:

Intertek-PSI Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of the post-remediation lead in water testing at Cannon Road Elementary School, located at 901 Cannon Road in Silver Spring, MD 20904.

Scope of Services:

One (1) drinking water outlet was remediated at Cannon Road Elementary School due to initial lead 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 02/01/2019 and 02/02/2019 to collect post-remediation follow-up sample from 1 drinking water outlet that had 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
M30202	158	Instrument Music		Faucet	22.1	18.8	1.6	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service

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. The Environmental Protection Agency (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.

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,

INTERTEK-PSI

Nan Lin

Department Manager, Environmental Services

nan.lin@intertek.com



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

Montgomery County Public Schools Lead in Drinking Water Testing 2018

June 15, 2018

Executive Summary: Cannon Road Elementary School

901 Cannon Road Silver Spring, Maryland 20904

Round of Testing:	Initial
# of Outlets Tested:	89
# of Outlets ≥20 ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	22.1
Follow-Up Testing Required	Inst. Music Room 158 (22.1 ppb)
(Samples \geq 20 ppb):	

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

Project Status:

Testing Complete: Remediation Plan

Inst. Music Room 158 - Replace fixture (M30202), in addition to supply line and valve located under sink



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

June 15, 2018

Mr. Brian Mullikin, MS Environmental Team Leader Montgomery County Public Schools Division of Maintenance Gaithersburg, Maryland 20879

Re: Drinking Water Testing

KCI Job #1214634193

Location: Cannon Road Elementary School 901 Cannon Road Silver Spring, Maryland 20904

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 Cannon Road Elementary School, located at 901 Cannon Road in Silver Spring, Maryland 20904.

SCOPE OF SERVICES

KCI conducted lead in water testing at Cannon Road 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 4/16/2018 and 4/17/2018 to collect samples from 89 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 5/24/2018, 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:

					30 Second Follow Up
		Date	Initial Sample	Date	Sample
Barcode ID	Sample Location	Collected	Result (ppb)	Collected	Result (ppb)
M30202	Faucet - Inst. Music	4/17/2018	22.1	5/24/2018	1.9
	Room 158				

The initial lead in water sample results (4/17/2018) and 30 second follow up result (5/24/2018) 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 Plelle-

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 Cannon Road Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M30095	256	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30096	256	Classroom		Faucet	<1.0	Pass	Testing Complete
M30097	252	Classroom		Faucet	<1.0	Pass	Testing Complete
M30098	252	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30099	279	ESOL		Faucet	6.7	Pass	Testing Complete
M30100	248	Classroom		Faucet	1.0	Pass	Testing Complete
M30101	248	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30102	269	Classroom		Faucet	11.6	Pass	Testing Complete
M30103	269	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30106	244	Classroom		Faucet	7.9	Pass	Testing Complete
M30107	244	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30116	242	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30117	242	Classroom		Faucet	<1.0	Pass	Testing Complete
M30118	245	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
M30119	245	Classroom		Faucet	12.4	Pass	Testing Complete
M30120	241	ESOL		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30121	241	ESOL		Faucet	2.3	Pass	Testing Complete
M30122	200	Classroom		Faucet	1.0	Pass	Testing Complete
M30124	204	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30125	204	Classroom		Faucet	<1.0	Pass	Testing Complete
M30127	205	Special Ed		Faucet	1.4	Pass	Testing Complete
M30128		Hallway	Across from CR 205	Cooler	<1.0	Pass	Testing Complete
M30129		Hallway	Across from CR 205	Cooler	<1.0	Pass	Testing Complete
M30135	218	Classroom		Faucet	1.0	Pass	Testing Complete
M30136	218	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30137	211	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30138	211	Classroom		Faucet	8.4	Pass	Testing Complete
M30139	222	Classroom		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M30140	222	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30141	215	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30142	215	Classroom		Faucet	<1.0	Pass	Testing Complete
M30143	226	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30144	226	Classroom		Faucet	<1.0	Pass	Testing Complete
M30145	219	Staff Development		Faucet	2.1	Pass	Testing Complete
M30146	219	Staff Development		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30147	228	Classroom		Faucet	<1.0	Pass	Testing Complete
M30148	228	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30149	221	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30150	221	Classroom		Faucet	<1.0	Pass	Testing Complete
M30151	232	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30152	232	Classroom		Faucet	<1.0	Pass	Testing Complete
M30153	225	Classroom		Faucet	1.8	Pass	Testing Complete
M30154	225	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30155	121	Classroom		Faucet	1.0	Pass	Testing Complete
M30156	121	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30158	130	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30159	130	Classroom		Faucet	1.4	Pass	Testing Complete
M30160	117	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30161	117	Classroom		Faucet	<1.0	Pass	Testing Complete
M30163	126	Classroom		Faucet	3.2	Pass	Testing Complete
M30164	126	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30165	115	Classroom		Faucet	1.1	Pass	Testing Complete
M30166	115	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30168	124	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30169	124	Classroom		Faucet	<1.0	Pass	Testing Complete
M30170	111	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30171	111	Classroom		Faucet	<1.0	Pass	Testing Complete
M30173	120	Classroom		Faucet	1.1	Pass	Testing Complete
M30174	120	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30175	107	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
M30176	107	Classroom		Faucet	1.2	Pass	Testing Complete
M30178	116	Classroom		Faucet	1.8	Pass	Testing Complete
M30179	116	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30185		Hallway	Across from Admin	Cooler	<1.0	Pass	Testing Complete
M30186		Hallway	Across from Admin	Cooler	<1.0	Pass	Testing Complete
M30188	140A	Work Room Media Center		Faucet	1.2	Pass	Testing Complete
M30189	100H	Work Room Admin		Faucet	3.2	Pass	Testing Complete
M30190	102	Health		Faucet	1.3	Pass	Testing Complete
M30191	102C	Health	inside Health	Faucet	9.3	Pass	Testing Complete
M30195	145	Classroom		Faucet	1.8	Pass	Testing Complete
M30196	145	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30198	151	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30199	151	Classroom		Faucet	3.4	Pass	Testing Complete
M30200	146	Classroom		Faucet	3.7	Pass	Testing Complete
M30201	154	Break Room		Faucet	2.0	Pass	Testing Complete
M30202	158	Inst Music		Faucet	22.1	Fail	Follow Up Testing Needed
M30203	158	Inst Music		Bubbler - Indoor	1.8	Pass	Testing Complete
M30204	162	Music		Faucet	1.4	Pass	Testing Complete
M30205	162	Music		Bubbler - Indoor	<1.0	Pass	Testing Complete
M30206	166	Dual Purpose Room		Faucet	1.4	Pass	Testing Complete
M30216		Hallway	Across from Rm 180 Building Services	Cooler	<1.0	Pass	Testing Complete
M30217		Hallway	Across from Rm 180 Building Services	Cooler	<1.0	Pass	Testing Complete
M30218		Kitchen		Faucet	<1.0	Pass	Testing Complete
M30219		Kitchen		Faucet	<1.0	Pass	Testing Complete
M30220		Kitchen		Faucet	<1.0	Pass	Testing Complete
M30222	156	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
M30223	156	Classroom		Faucet	9.9	Pass	Testing Complete

^{*}PPB = parts per billion

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

Follow Up Sample Result for Cannon Road Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M30202	158	Inst Music	Faucet	N/A	18.8	1.9	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.