Montgomery County Public Schools Lead in Drinking Water Testing Report

Forest Knolls Elementary School 10830 Eastwood Ave Silver Spring, MD 20901

Report Date: April 13th, 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	2/19/2020
# 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:

- 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

ATTACHMENT A

Lead in Water Sample Results Table

Sampling Results for Forest Knolls ES

Fixture Barcode	Fixture Location Fixture Type		Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW02692	In hallway adjacent to 46 counseling room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02693	In classroom 44	Classroom Combination Sink	7.6	Fail	11.8	Remediation Action Plan
LW02695	In classroom 42	Classroom Combination Sink	2.1	Pass	N/A	Testing Complete
LW02724	In classroom 27	Classroom Sink	<1	Pass	N/A	Testing Complete
LW02725	In classroom 20	Classroom Sink	<1	Pass	N/A	Testing Complete
LW02726	In classroom 16	Classroom Sink	<1	Pass	N/A	Testing Complete
LW02727	In classroom 12	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW02728	In classroom 12	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02729	In classroom 10	Classroom Combination Sink	<1	Pass	N/A	Testing
LW02730	In classroom 10	Classroom Combination Drinking Fountain	<1	Pass	N/A	Complete Testing Complete
LW02731	In classroom 18	Classroom Sink	<1	Pass	N/A	Testing Complete
LW02732	In classroom 8	Classroom Combination Sink	<1	Pass	N/A	Testing
LW02733	In classroom 8	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
LW02734	In classroom 6	Fountain Classroom Combination Sink	<1	Pass	N/A	Complete Testing Complete
LW02790	In health room	Nurses Office Sink	<1	Pass	N/A	Testing
LW02791	In work room	Classroom Sink	<1	Pass	N/A	Complete Testing Complete
LW02792	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW02793	In kitchen	Kitchen Sink	1.4	Pass	N/A	Testing
LW02795	In hallway adjacent to 52 Art room	Drinking Fountain	<1	Pass	N/A	Complete Testing
LW02796	In hallway adjacent to 52 Art room	Drinking Fountain	<1	Pass	N/A	Complete Testing
LW02800	In classroom 42	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
LW02801	In Classroom 40	Fountain Classroom Combination Sink	<1	Pass	N/A	Complete Testing
LW02802	In Classroom 40	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
LW02803	In classroom 38	Fountain Classroom Combination Sink	<1	Pass	N/A	Complete Testing
LW02804	In Classroom 38	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
LW02805	In classroom 36	Fountain Classroom Combination Sink	<1	Pass	N/A	Complete Testing
LW02806	In classroom 36	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
LW02807	In classroom 34	Fountain Classroom Combination Sink	<1	Pass	N/A	Complete Testing
LW02808	In classroom 34	Classroom Combination Drinking Fountain	<1	Pass	N/A	Complete Testing Complete

LW02809	In classroom 32	Classroom Combination Sink	<1	Pass	N/A	Testing
LW02810	In classroom 32	In classroom 32 Classroom Combination Drinking		Pass	N/A	Complete Testing
LW02811	In classroom 30	Fountain Classroom Sink		Pass	N/A	Complete Testing
LW02812	In classroom 28	Classroom Sink	<1	Pass	N/A	Complete Testing
LW03071	In break room	Teachers Lounge Sink	<1	Pass	N/A	Complete Testing
LW03072	In hallway adjacent to classroom 46	Drinking Fountain	<1	Pass	N/A	Complete Testing
	counseling room In classroom 26					Complete Testing
LW03112		Classroom Sink	<1	Pass	N/A	Complete Testing
LW03113	In classroom 55	Classroom Combination Sink Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
LW03114	In classroom 55	Fountain	<1	Pass	N/A	Complete
LW03116	In Classroom 57	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW03117	In hallway adjacent to 33M mechanical room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW03118	In hallway adjacent to 33M mechanical room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW03119	In classroom 31	Classroom Sink	<1	Pass	N/A	Testing Complete
LW03120	In classroom 33	Classroom Sink	<1	Pass	N/A	Testing Complete
LW03121	In classroom 29	Classroom Sink	<1	Pass	N/A	Testing
LW03122	In 24 Occupational health	Nurses Office Sink	<1	Pass	N/A	Complete Testing
LW03123	In classroom 22	Classroom Sink	<1	Pass	N/A	Complete Testing
LW04556	In classroom 6	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
LW04557	In classroom 4	Fountain Classroom Combination Sink	<1	Pass	N/A	Complete Testing
LW04558	In classroom 4	Classroom Combination Drinking	<1	Pass	N/A	Complete Testing
		Fountain				Complete Testing
LW04559	In hallway left of 7 office	Drinking Fountain	<1	Pass	N/A	Complete Testing
LW04560	In hallway left of 7 office	Drinking Fountain	<1	Pass	N/A	Complete
LW04561	In classroom 37	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW04562	In classroom 37	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04563	In classroom 39	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW04564	In classroom 39	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04565	In classroom 41	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW04566	In classroom 41	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW04567	In classroom 43	Classroom Combination Sink	<1	Pass	N/A	Testing
LW04569	In hallway adjacent to 23A building	Drinking Fountain	<1	Pass	N/A	Complete Testing
LW04570	services In hallway adjacent to Classroom 16	Drinking Fountain	<1	Pass	N/A	Complete Testing
LW04570	In hallway adjacent to Classroom 16	Drinking Fountain			N/A	Complete Testing
LVVU45/1	in nailway aujacent to Classroom 16	DINKING FOUNTAIN	<1	Pass	IV/A	Complete

LW05134	In classroom 43	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05135	In classroom 45	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW05136	In classroom 45	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05137	In classroom 47	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW05138	In classroom 47	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05139	In classroom 49	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW06362	In classroom 49	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW06363	In classroom 51	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW06364	In classroom 51	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
M44314	In media center 1	Classroom Sink	<1	Pass	N/A	Testing Complete
M44396	In kitchen by kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW08347	In nurses room	Nurses Office Sink	<1	Pass	N/A	Testing Complete
LW02794	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
M44330	In office 19	Classroom Sink	<1	Pass	N/A	Testing Complete
LW03115	In classroom 57	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW08348	In hallway adjacent to 33M mechanical room	Drinking Fountain	<1	Pass	N/A	Testing Complete



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Montgomery County Public Schools Lead in Drinking Water Testing 2018

Executive Summary: Forest Knolls Elementary School

10830 Eastwood Avenue Silver Spring, Maryland 20901

Date of Test Report:	3/13/2018
Round of Testing:	Initial
# of Outlets Tested:	79
# of Outlets ≥20 ppb:	0
Low Value (ppb):	<1.0
High Value (ppb):	6.7

Project Status:

Initial testing complete; All results less than 20 ppb.



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3/13/2018

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: Forest Knolls Elementary School 10830 Eastwood Avenue Silver Spring, Maryland 20901

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 lead in water testing at Forest Knolls Elementary School, located at 10830 Eastwood Avenue in Silver Spring, Maryland 20901.

SCOPE OF SERVICES

KCI conducted lead in water testing at Forest Knolls 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 79 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.

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 are no results of the lead in water analysis at or above 20 parts per billion (ppb). The lead in water sample results for sample collection date 2/22/2018 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.

Frank Fleller

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.

Sample Results for Forest Knolls ES

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status	
LW02692		Hallway		Cooler	<1.0	Pass	Testing Complete	
LW02693	44	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW02695	42	Classroom		Faucet	3.4	Pass	Testing Complete	
LW02724	27	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW02725	20	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW02726	16	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW02727	12	Classroom		Faucet	1	Pass	Testing Complete	
LW02728	12	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete	
LW02729	10	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW02730	10	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete	
LW02731	18	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW02732	8	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW02733	8	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete	
LW02734	6	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW02790		Health Room		Faucet	1.1	Pass	Testing Complete	
LW02791		Work Room		Faucet	<1.0	Pass	Testing Complete	
LW02792		Kitchen		Faucet	1.4	Pass	Testing Complete	
LW02793		Kitchen		Faucet	1.4	Pass	Testing Complete	
LW02794		Indoor Kitchen		Faucet	1	Pass	Testing Complete	
LW02795		Hallway		Cooler	<1.0	Pass	Testing Complete	
LW02796		Hallway		Cooler	<1.0	Pass	Testing Complete	
LW02797	52	Art		Faucet	<1.0	Pass	Testing Complete	
LW02798	52	Art		Faucet	<1.0	Pass	Testing Complete	
LW02799	52	Art		Faucet	<1.0	Pass	Testing Complete	
LW02800	42	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete	
LW02801	42	Classroom		Faucet	2.2	Pass	Testing Complete	
LW02802		Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete	

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW02803	38	Classroom		Faucet	<1.0	Pass	Testing Complete
LW02804		Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW02805	36	Classroom		Faucet	<1.0	Pass	Testing Complete
LW02806	36	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW02807	34	Classroom		Faucet	<1.0	Pass	Testing Complete
LW02808	34	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW02809	32	Classroom		Faucet	<1.0	Pass	Testing Complete
LW02810	32	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW02811	30	Classroom		Faucet	<1.0	Pass	Testing Complete
LW02812	28	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03071		Break Room		Faucet	1.8	Pass	Testing Complete
LW03072		Hallway		Cooler	<1.0	Pass	Testing Complete
LW03112	26	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03113	55	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03114	55	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03115	57	Classroom		Faucet	6.7	Pass	Testing Complete
LW03116	55	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW03117		Hallway		Cooler	<1.0	Pass	Testing Complete
LW03118		Hallway		Cooler	<1.0	Pass	Testing Complete
LW03119	31	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03120	33	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03121	29	Classroom		Faucet	<1.0	Pass	Testing Complete
LW03122	24	Other (See Location Notes)	Occupational Health	Faucet	1.6	Pass	Testing Complete
LW03123	22	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04556	6	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04557	4	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04558	4	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW04559		Hallway	Left Of 7 Office	Cooler	<1.0	Pass	Testing Complete
LW04560		Hallway	Left Of 7 Office	Cooler	<1.0	Pass	Testing Complete
LW04561	37	Classroom		Faucet	<1.0	Pass	Testing Complete
LW04562	37	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status	
LW04563	39	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW04564	39	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete	
LW04565	41	Classroom		Faucet	1.2	Pass	Testing Complete	
LW04566	41	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete	
LW04567	43	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW04568		Hallway		Cooler	<1.0	Pass	Testing Complete	
LW04569		Hallway		Cooler	<1.0	Pass	Testing Complete	
LW04570		Hallway		Cooler	<1.0	Pass	Testing Complete	
LW04571		Hallway		Cooler	<1.0	Pass	Testing Complete	
LW05134	43	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete	
LW05135	45	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW05136	45	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete	
LW05137	47	Classroom		Faucet	<1.0	Pass	Testing Complete	
LW05138	47	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete	
LW05139	49	Classroom		Faucet	2.4	Pass	Testing Complete	
LW06362	49	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete	
LW06363	51	Classroom		Faucet	2.2	Pass	Testing Complete	
LW06364	51	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete	
M44314	1	Media Center		Faucet	2.1	Pass	Testing Complete	
M44396		Kitchen Kitchen		Faucet	<1.0	Pass	Testing Complete	
M44409	40			Faucet	2.3	Pass	Testing Complete	

^{*}PPB = parts per billion