### Montgomery County Public Schools Lead in Drinking Water Testing Report

Grosvenor Center 5701 Grosvenor Lane Bethesda, MD 20814

Report Date: August 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	2/27/2020
# of Outlets Tested	33
# of Outlets ≥ 5 ppb	2

#### **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. Due to the Stay-at-Home Order to combat the spread of COVID-19 (coronavirus), no follow-up samples were collected. 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 <a href="https://www.epa.gov/lead">www.epa.gov/lead</a>.
- 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 Grosvenor Center**

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW07035	In classroom 3	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW07036	In classroom 1	Classroom Combination Sink	2.3	Pass	N/A	Testing complete
LW07037	In classroom 4	Classroom Combination Sink	1.9	Pass	N/A	Testing complete
LW07038	In classroom 4	Classroom Combination Drinking Fountain	3.5	Pass	N/A	Testing complete
LW07039	In classroom 2	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW07040	In classroom 5	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW07041	In classroom 5	Classroom Combination Sink	3.3	Pass	N/A	Testing complete
LW07042	In hallway across from 5	Drinking Fountain	<1	Pass	N/A	Testing complete
LW07043	In break room	Teachers Lounge Sink	<1	Pass	N/A	Testing complete
LW07044	In work room by administration	Classroom Combination Sink	2.0	Pass	N/A	Testing complete
LW07045	In all purpose room	Classroom Combination Sink	1.1	Pass	N/A	Testing complete
LW07046	In kitchen	Kitchen Sink	2.2	Pass	N/A	Testing complete
LW07047	In classroom 9	Classroom Combination Sink	4.1	Pass	N/A	Testing complete
LW07048	In classroom 9	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW07049	In classroom 10	Classroom Combination Sink	1.2	Pass	N/A	Testing complete
LW07051	In classroom 13	Classroom Sink	<1	Pass	N/A	Testing complete
LW07052	In classroom 11	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW07053	In hallway across from 11	Drinking Fountain	<1	Pass	N/A	Testing complete
LW07054	In classroom 12	Classroom Sink	<1	Pass	N/A	Testing complete
LW07056	In classroom 14	Classroom Sink	<1	Pass	N/A	Testing complete
LW07057	In hallway left of Imc	Drinking Fountain	<1	Pass	N/A	Testing complete
LW07058	In work room by media center	Classroom Combination Sink	2.4	Pass	N/A	Testing complete

LW07090	In classroom 19	Classroom	1.5	Docc	NI/A	Testing
LW07090	in classroom 19	Combination Sink	1.5	Pass	N/A	complete
LW07091	In classroom 17	Classroom	3.0	Pass	NI/A	Testing
LW07091	III Classiooni 17	Combination Sink	5.0	PdSS	N/A	complete
LW07092	In classroom 17	Classroom	<1	Pass	N/A	Testing
LVV07092	III Classiooiii 17	Combination Sink	7	P d 5 5		complete
LW07093	In classroom 20	Classroom	4.3	Pass	N/A	Testing
LW07093	III Classioonii 20	Combination Sink	4.5	PdSS	IN/A	complete
		Classroom			NC	Remediation
LW07094	In classroom 20	Combination	6.2	Fail		Action Plan
		Drinking Fountain				Action Flan
LW07095	In classroom 18	Classroom	2.5	Pass	N/A	Testing
LVV07033	111 Classicom 10	Combination Sink	2.5	1 033	14/7	complete
		Classroom	2.8	Pass	N/A	Testing
LW07096	In classroom 18	Combination				complete
		Drinking Fountain				'
LW07099	In classroom 15	Classroom	2.9	Pass	N/A	Testing
21107033	0.0001.00 20	Combination Sink			,	complete
M00259	In hallway hall of IMC	Drinking Fountain	<1	Pass	N/A	Testing
10100233	in nanway nan or nivic	Drinking rountain	',1	1 433	14//	complete
M00282	In kitchen by kitchen	Kitchen Sink	1.3	1.3 Pass	N/A	Testing
14100202	in Menen by Menen	Riterien Sink	1.5	1 033	11/7	complete
M00283	In kitchen by kitchen	Kitchen Sink	46.1	Fail	NC	Remediation
14100283	in Ritchell by Ritchell	Ritchell Sillk	70.1	i ali	140	Action Plan

NC - Not Collected (No follow-up sample collected due to COVID-19 (Coronavirus) Stay-at-Home Order.)



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

# Montgomery County Public Schools Lead in Drinking Water Post-Remediation Follow-Up Testing 2019

August 30, 2019

# **Executive Summary: Grosvenor Center**

5701 Grosvenor Lane Bethesda, Maryland 20814

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/24/19 and 2/4/19
# of Outlets Tested:	6
# of Outlets ≥5 ppb:	0
Low Value (ppb):	<1.0
High Value (ppb):	4.5

#### **Project Status**

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

Classroom 19 - Outlet (LW07090) will be placed back into service
Kitchen - Outlet (M00283) will be placed back into service
Media Center Work Room - Outlet (LW07058) will be placed back into service
Classroom 10 - Outlet (LW07050) taken out of service
All Purpose Room - Outlet (LW07045) will be placed back into service
Classroom 2 - Outlet (LW07039) will be placed back into service



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

August 30, 2019

Mr. Brian Mullikin, MS Environmental Team Leader Montgomery County Public Schools 8301 Turkey Thicket Dr., Bldg A, 1st Floor Gaithersburg, Maryland 20879

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

**Location: Grosvenor Center** 5701 Grosvenor Lane

Bethesda, Maryland 20814

Dear Mr. Mullikin:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of the post-remediation follow-up lead in water testing at Grosvenor Center, located at 5701 Grosvenor Lane in Bethesda, Maryland 20814.

#### **SCOPE OF SERVICES**

Six drinking water outlets were remediated at Grosvenor Center due to initial lead levels that exceeded the lead action level of 5 parts per billion (ppb). KCI Technologies, Inc. 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.

KCI Technologies, Inc. visited the site on 1/23/19, 1/24/19 and 2/4/19 to collect post-remediation follow-up samples from 6 drinking water outlets 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
LW07090	19	Classroom			43	<1.0	<1.0	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
M00283		Kitchen			40	2.3	4.5	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW07058		Media Center Work Room			24.1	1.7	1.2	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW07050	10	Classroom		Faucet	30.4	8.4	N/A*	N/A*	Taken out of service
LW07045		All Purpose Room		Faucet	76.8	13.5	2.5	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW07039	2 aken out of	Classroom		Faucet	20.3	2.0	3.3	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, KCI Technologies, Inc.

Kara Mellen

Kamau McAbee

MDE Certified Water Sampler #8281KM

KCI Job #1214634186





#### **MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018**

August 30, 2018

# Executive Summary: Luxmanor Elementary School at Grosvenor Center

5701 Grosvenor Lane Bethesda, MD 20814

Round of Testing:	Initial
# of Outlets Tested:	33
# of Outlets ≥ 20 ppb:	6
Low Value (ppb):	< 1.0
High Value (ppb):	76.8
	Classroom 2 (20.3 ppb)
	All Purpose Room (76.8 ppb)
Follow-Up Testing Required	Classroom 10 (30.4 ppb)
(Samples <u>&gt;</u> 20 ppb):	Media Center Workroom (24.1 ppb)
	Classroom 19 (43.0 ppb)
	Kitchen (40.0 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	6

Project Status
Testing Complete: Remediation Plan

Classroom 2– Replace fixture (LW07039), in addition to supply line and valve located under sink All Purpose Room– Replace fixture (LW07045), in addition to supply line and valve located under sink Classroom 10– Replace fixture (LW07050), in addition to supply line and valve located under sink Media Center Workroom– Replace fixture (LW07058), in addition to supply line and valve located under sink Classroom 19– Replace fixture (LW07090), in addition to supply line and valve located under sink Kitchen– Replace fixture (M00283), in addition to supply line and valve located under sink



August 30, 2018

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 Testing Service

Location: Luxmanor Elementary School at Grosvenor Center

5701 Grosvenor Lane Bethesda, MD 20814

Dear Mr. Mullikin:

Professional Services Industries (PSI), Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial lead in water testing at Luxmanor Elementary School at Grosvenor Center, located at 5701 Grosvenor Lane, Bethesda, MD 20814.

#### **Scope of Services:**

PSI conducted lead in water testing at Luxmanor Elementary School at Grosvenor Center 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.

PSI visited the site on 7/31/18 and 8/1/18 to collect samples from 33 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. Six 30 second follow-up samples were collected on 8/14/18.

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 6 results of the initial 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)
LW07039	Classroom 2	7/31/18	20.3	8/14/18	2.0
LW07045	All Purpose Room	7/31/18	76.8	8/14/18	13.5
LW07050	Classroom 10	7/31/18	30.4	8/14/18	8.4
Lw07058	Media Center Workroom	7/31/18	24.1	8/14/18	1.7
LW07090	Classroom 19	7/31/18	43.0	8/14/18	ND
M00283	Kitchen	7/31/18	40.0	8/14/18	2.3

The initial lead in water sample results (7/31/18) and 30 second follow up results (8/14/18) are shown in Attachment B.

#### **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.

Nand Kaushik, P.E.

Department Manager, Environmental Services

Nand.Kaushik@psiusa.com

Non-April Fourth



Attachments: A – Lead in Water Test Summary Table

### ATTACHMENT A

## Luxmanor ES at Grosvenor Center Water Test Summary Table

**Contractor:** Professional Services Industries, Inc. **Certified Laboratory:** Microbac Laboratories, Inc.

Initial Sample Results for Luxmanor Elementary School at Grosvenor Center (7/31/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW07036	1	Classroom		Faucet	2.6	Pass	Testing Complete
LW07037	4	Classroom		Faucet	8.2	Pass	Testing Complete
LW07038	4	Classroom		Bubbler - Indoor	5.9	Pass	Testing Complete
LW07039	2	Classroom		Faucet	20.3	Fail	Follow-Up Testing Needed
LW07040	5	Classroom		Faucet	7.7	Pass	Testing Complete
LW07041	5	Classroom		Faucet	9.1	Pass	Testing Complete
LW07042		Hallway	Across from 5	Cooler	<1.0	Pass	Testing Complete
LW07043		Break Room		Faucet	2.8	Pass	Testing Complete
LW07044		Work Room Administration		Faucet	11.8	Pass	Testing Complete
LW07045		All Purpose Room		Faucet	76.8	Fail	Follow-Up Testing Needed
LW07046		Kitchen		Faucet	1.9	Pass	Testing Complete
LW07047	9	Classroom		Faucet	18.2	Pass	Testing Complete
LW07048	9	Classroom		Bubbler - Indoor	4.7	Pass	Testing Complete
LW07049	10	Classroom		Faucet	4.2	Pass	Testing Complete
LW07050	10	Classroom		Bubbler - Indoor	30.4	Fail	Follow-Up Testing Needed
LW07051	13	Classroom		Faucet	19.0	Pass	Testing Complete
LW07052	11	Classroom		Faucet	4.2	Pass	Testing Complete
LW07053		Hallway	Across From 11	Cooler	<1.0	Pass	Testing Complete
LW07054	12	Classroom		Faucet	2.7	Pass	Testing Complete
LW07056	14	Classroom		Faucet	4.3	Pass	Testing Complete
LW07057		Hallway	Left of IMC	Cooler	<1.0	Pass	Testing Complete
LW07058		Work Room Media Center		Faucet	24.1	Fail	Follow-Up Testing Needed
LW07090	19	Classroom		Faucet	43.0	Fail	Follow-Up Testing Needed

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW07091	17	Classroom		Faucet	8.1	Pass	Testing Complete
LW07093	20	Classroom		Faucet	3.9	Pass	Testing Complete
LW07094	20	Classroom		Bubbler - Indoor	13.9	Pass	Testing Complete
LW07095	18	Classroom		Faucet	6.4	Pass	Testing Complete
LW07096	18	Classroom		Bubbler - Indoor	13.2	Pass	Testing Complete
LW07097	16	Classroom		Faucet	2.1	Pass	Testing Complete
LW07099	15	Classroom		Faucet	9.6	Pass	Testing Complete
M00259		Hallway	Hall of IMC	Cooler	<1.0	Pass	Testing Complete
M00282		Kitchen		Faucet	1.5	Pass	Testing Complete
M00283		Kitchen		Faucet	40.0	Fail	Follow-Up Testing Needed

<sup>\*</sup>ppb = parts per billion

**Contractor:** Professional Services Industries, Inc. **Certified Laboratory:** Microbac Laboratories, Inc.

Follow Up Sample Results for Luxmanor Elementary School at Grosvenor Center (8/14/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 <sup>nd</sup> ) (PPB)	30 Second Draw (PPB)	Status
LW07039	2	Reading	Faucet	12.3	2.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07045		All Purpose Room	Faucet	166	13.5	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07050	10	Classroom	Bubbler-Indoor	14.0	8.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07058		Media Center Workroom	Faucet	27.2	1.7	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW07090	19	Computer Lab	Faucet	9.1	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink
M00283		Kitchen	Faucet	4.5	2.3	Remediation required – replace fixture, in addition to supply line and valve located under sink

<sup>\*</sup>ppb = parts per billion ND = Non Detect

Note: Fixture(s) with elevated test results were immediately removed from service. Subsequent 2nd 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.