

Montgomery County Public Schools Lead in Drinking Water Testing Report

South Lake Elementary School
18201 Contour Rd.
Gaithersburg, MD 20877

Report Date: December 19, 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 KCI Technologies Inc. is presented in the table below.

Sampling Date	11/07/2024
# of Outlets Tested	37
# of Outlets \geq 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 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 South Lake ES

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW13332	In Room A132	Faucet, Cold	<1.0	Pass	Testing Complete
LW13579	In Room B006 Prep/Serving	Faucet, Cold	<1.0	Pass	Testing Complete
LW13580	In Room B006 Prep/Serving	Faucet, Cold	<1.0	Pass	Testing Complete
LW13581	In Room B006 Prep/Serving	Faucet, Cold	<1.0	Pass	Testing Complete
LW13582	In Room B006 Prep/Serving	Faucet, Cold	<1.0	Pass	Testing Complete
LW13583	In Room B006 Prep/Serving	Commercial Kitchen Kettle, Cold	<1.0	Pass	Testing Complete
LW13584	In Room B006 Prep/Serving	Faucet, Cold	<1.0	Pass	Testing Complete
LW13585	In Room C010 Music	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW13586	In Room C010 Music	Bottle Filler/Drinking Fountain Combo Unit - Bottle Filler	<1.0	Pass	Testing Complete
LW13587	In Room C003 Work room	Faucet, Cold	1.1	Pass	Testing Complete
LW13588	In Room D007 Staff Lounge	Faucet, Cold	<1.0	Pass	Testing Complete
LW13589	In Hallway Outside Room D011	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW13590	In Hallway Outside Room D011	Bottle Filler/Drinking Fountain Combo Unit - Bottle Filler	<1.0	Pass	Testing Complete
LW13591	In Hallway Outside Room D011	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW13592	In Hallways Across from Room D110	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW13593	In Hallway Across from Room D110	Bottle Filler/Drinking Fountain Combo Unit - Bottle Filler	<1.0	Pass	Testing Complete
LW13594	In Work Room A203	Faucet, Cold	<1.0	Pass	Testing Complete
LW13595	In Work Room B207	Faucet, Cold	<1.0	Pass	Testing Complete
LW13596	In Hallways Across from Room B210	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW13597	In Hallway Across from Room B210	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW13599	In Staff Lounge B231	Faucet, Cold	<1.0	Pass	Testing Complete
LW13600	In Hallway Outside Multipurpose Room	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW13601	In Hallway Outside Multipurpose Room	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW13602	In Hallway Outside Multipurpose Room	Bottle Filler/Drinking Fountain Combo Unit - Bottle Filler	<1.0	Pass	Testing Complete
LW13603	In Before Care Room B003	Faucet, Cold	<1.0	Pass	Testing Complete
LW13604	In Work Room C011	Faucet, Cold	<1.0	Pass	Testing Complete
LW13620	In Health Room A130	Faucet, Cold	<1.0	Pass	Testing Complete
LW13621	In A125 Lab	Faucet, Cold	<1.0	Pass	Testing Complete
LW13622	In Health Assessment Room A121	Faucet, Cold	<1.0	Pass	Testing Complete
LW13623	In Work Room A102	Faucet, Cold	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW13624	In Room A102.A PHN	Faucet, Cold	1.7	Pass	Testing Complete
LW13625	In Hallway Across from Classroom B107	Bottle Filler/Drinking Fountain Combo Unit - Cooler/Chiller (Refrigerated)	<1.0	Pass	Testing Complete
LW13626	In Hallway Across from Classroom B107	Bottle Filler/Drinking Fountain Combo Unit - Bottle Filler	<1.0	Pass	Testing Complete
LW13627	In Hallway Across from Classroom B107	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW13628	In B118.B Work Room in Media Center	Faucet, Cold	<1.0	Pass	Testing Complete
LW13629	In Classroom B114	Faucet, Cold	<1.0	Pass	Testing Complete
LW13630	In Room C103 Therapy	Faucet, Cold	<1.0	Pass	Testing Complete

Montgomery County Public Schools Lead in Drinking Water Testing Report

South Lake Elementary School
18201 Contour Road
Gaithersburg, MD 20877

Report Date: March 31st, 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	3/3/2020
# of Outlets Tested	64
# of Outlets \geq 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. 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 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

South Lake ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW00417	In music 14B	Classroom Combination Sink	4.8	Pass	N/A	Testing Complete
LW00418	In music 14B	Classroom Combination Drinking Fountain	3.8	Pass	N/A	Testing Complete
LW00419	In music 14A	Classroom Combination Sink	2.5	Pass	N/A	Testing Complete
LW00420	In music 14 A	Classroom Combination Drinking Fountain	2.6	Pass	N/A	Testing Complete
LW00421	In resource center 30	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00422	In resource center 30	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00423	In kindergarten K-3	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00424	In kindergarten K-3	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00425	In kindergarten K-4	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00426	In kindergarten K-4	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00427	In kindergarten K-5	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00428	In kindergarten K-5	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00429	In kindergarten K-6	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00430	In kindergarten K-6	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00431	In classroom CR 31	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00432	In classroom CR 31	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00433	In classroom CR 32	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00434	In classroom CR 32	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00435	In hallway In front of gym	Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW00437	In classroom CR 40	Classroom Combination Sink	1.8	Pass	N/A	Testing Complete
LW00438	In classroom CR 40	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00439	In classroom CR 41	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00440	In classroom CR 41	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00441	In classroom CR 42	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW00442	In classroom CR 42	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00444	In classroom CR 43	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW00445	In hallway In front of CR 41	Drinking Fountain	<1	Pass	N/A	Testing Complete

LW00446	In hallway In front of CR 41	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02321	In classroom CR 7	Classroom Combination Sink	2.1	Pass	N/A	Testing Complete
LW02322	In classroom CR 7	Classroom Combination Drinking Fountain	1.7	Pass	N/A	Testing Complete
LW02325	In classroom CR 6	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
LW02419	In classroom CR 10	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
LW02423	In classroom CR 9	Classroom Combination Drinking Fountain	1.8	Pass	N/A	Testing Complete
LW02424	In classroom CR 8	Classroom Combination Sink	1.6	Pass	N/A	Testing Complete
LW02425	In classroom CR 8	Classroom Combination Drinking Fountain	1.4	Pass	N/A	Testing Complete
LW02427	In classroom 13B	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02429	In classroom 13C	Classroom Combination Drinking Fountain	1.0	Pass	N/A	Testing Complete
LW02430	In classroom 12B	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW02431	In classroom 12B	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02432	In classroom 12C	Classroom Combination Sink	1.2	Pass	N/A	Testing Complete
LW02433	In classroom 12C	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02434	In hallway right of CR 11	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02436	In classroom CR 14	Classroom Combination Drinking Fountain	1.9	Pass	N/A	Testing Complete
LW02437	In classroom CR 15	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
LW02439	In classroom CR 16	Classroom Combination Sink	5.9	Fail	NC	Remediation Action Plan
LW02440	In classroom CR 16	Classroom Combination Drinking Fountain	4.0	Pass	N/A	Testing Complete
LW02442	In classroom CR 17	Classroom Combination Drinking Fountain	2.7	Pass	N/A	Testing Complete
LW02443	In classroom CR 18	Classroom Combination Sink	1.8	Pass	N/A	Testing Complete
LW02471	In classroom CR 4	Classroom Combination Drinking Fountain	2.6	Pass	N/A	Testing Complete
LW02473	In classroom CR 3	Classroom Combination Drinking Fountain	1.9	Pass	N/A	Testing Complete
LW02474	In classroom CR 2	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW02477	In classroom CR 1	Classroom Combination Drinking Fountain	1.8	Pass	N/A	Testing Complete
LW02478	In hallway In front of CR 1	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02480	In break room by administration	Teachers Lounge Sink	1.4	Pass	N/A	Testing Complete
LW02481	In hallway In front of 24	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02482	In classroom CR 24	Classroom Sink	1.1	Pass	N/A	Testing Complete
LW02484	In classroom CR 2	Classroom Sink	2.0	Pass	N/A	Testing Complete

LW02488	In hallway In front of CR 19	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW02490	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW02491	In classroom K-2	Classroom Combination Sink	1.4	Pass	N/A	Testing Complete
LW02492	In classroom K-2	Classroom Combination Drinking Fountain	2.1	Pass	N/A	Testing Complete
LW02494	In classroom K-1	Classroom Combination Drinking Fountain	2.4	Pass	N/A	Testing Complete
LW02495	In classroom CR 11	Classroom Combination Sink	3.7	Pass	N/A	Testing Complete
LW02483	In classroom	Classroom Sink	1.9	Pass	N/A	Testing Complete

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



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

August 30, 2019

Executive Summary:

South Lake Elementary School

18201 Contour Road

Gaithersburg, Maryland 20877

Round of Testing:	Post-Remediation Follow-up
Sample Date	2/4/19
# of Outlets Tested:	8
# of Outlets ≥ 5 ppb:	0
Low Value (ppb):	1.8
High Value (ppb):	4.5

Project Status

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

Classroom CR 7 - Outlet (LW02321) will be placed back into service
Classroom CR 6 - Outlet (LW02325) will be placed back into service
Classroom CR 10 - Outlet (LW02419) will be placed back into service
Classroom 12C - Outlet (LW02433) will be placed back into service
Classroom CR 15 - Outlet (LW02437) will be placed back into service
Classroom CR 18 - Outlet (LW02443) will be placed back into service
Classroom CR 2 - Outlet (LW02474) will be placed back into service
Classroom CR 24 - Outlet (LW02482) will be placed back into service



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: South Lake Elementary School

18201 Contour Road
Gaithersburg, Maryland 20877

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 South Lake Elementary School, located at 18201 Contour Road in Gaithersburg, Maryland 20877.

SCOPE OF SERVICES

Eight drinking water outlets were remediated at South Lake Elementary School 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 2/4/19 to collect post-remediation follow-up samples from 8 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
LW02321	CR 7	Classroom		Faucet	28.6	<1.0	1.8	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW02325	CR 6	Classroom		Faucet	66.1	3	3.4	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW02419	CR 10	Classroom		Faucet	431	<1.0	2.5	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW02433	12C	Classroom		Bubbler - Indoor	25.3	1.0	2.0	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW02437	CR 15	Classroom		Faucet	28.4	47.6	3.3	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW02443	CR 18	Classroom		Faucet	97.6	1.3	3.5	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW02474	CR 2	Classroom		Faucet	54.3	1.6	1.9	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
LW02482	CR 24	Classroom		Faucet	174	<1.0	2.5	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.



Kamau McAbee
MDE Certified Water Sampler #8281KM
KCI Job #1214634186



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 17, 2018

Executive Summary:
South Lake Elementary School
18201 Contour Road
Gaithersburg, MD 20877

Round of Testing:	Initial
# of Outlets Tested:	89
# of Outlets \geq 20 ppb:	8
Low Value (ppb):	< 1.0
High Value (ppb):	431.0
Follow-Up Testing Required (Samples \geq 20 ppb):	Room 7 (28.6 ppb) Room 6 (66.1 ppb) Room 10 (431.0 ppb) Room 12C (25.3 ppb) Room 15 (28.4 ppb) Room 18 (97.6 ppb) Room 2 (54.3 ppb) Room 24 (174.0 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	8

Project Status **Testing Complete: Remediation Plan**

Classroom 7 – Replace fixture (LW02321), in addition to supply line and valve located under sink
Classroom 6 – Replace fixture (LW02325), in addition to supply line and valve located under sink
Classroom 10 – Replace fixture (LW02419), in addition to supply line and valve located under sink
Classroom 12C – Replace fixture (LW02433), in addition to supply line and valve located under sink
Classroom 15 – Replace fixture (LW02437), in addition to supply line and valve located under sink
Classroom 18 – Replace fixture (LW02443), in addition to supply line and valve located under sink
Classroom 2 – Replace fixture (LW02474), in addition to supply line and valve located under sink
Classroom 24 – Replace fixture (LW02482), in addition to supply line and valve located under sink



May 17, 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: South Lake Elementary School
18201 Contour Road
Gaithersburg, MD 20877

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 South Lake Elementary School, located at 18201 Contour Road in Gaithersburg, MD 20877.

Scope of Services:

PSI conducted lead in water testing at South Lake 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.

PSI visited the site on 2/15/18, 2/16/18, 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. Eight 30 second follow-up sample were collected on 4/10/18, 4/11/18, 5/7/18, and 5/8/18.

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 eight 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)
LW02321	Faucet – Room 7	2/16/18	28.6	4/11/18	<1.0
LW02325	Faucet – Room 6	2/16/18	66.1	5/8/18	3.0
LW02419	Faucet – Room 10	2/16/18	431.0	5/8/18	<1.0
LW02433	Bubbler Indoor – Room 12C	2/16/18	25.3	4/11/18	1.0
LW02437	Faucet – Room 15	2/16/18	28.4	4/11/18	47.6
LW02443	Faucet – Room 18	2/16/18	97.6	4/11/18	1.3
LW02474	Faucet – Room 2	2/16/18	54.3	4/11/18	1.6
LW02482	Faucet – Room 24	2/16/18	174.0	4/11/18	<1.0

The initial lead in water sample results (02/16/2018) and 30 second follow up results (4/11/18 and 5/8/18) 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,

PROFESSIONAL SERVICE INDUSTRIES, INC.

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Attachments: A – Lead in Water Test Summary Table

ATTACHMENT A

South Lake ES Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for South Lake Elementary School (2/16/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW00417	14B	Music		Faucet	3.9	Pass	Testing Complete
LW00419	14A	Music		Faucet	3.3	Pass	Testing Complete
LW00420	14 A	Music		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00421	30	Resource Center		Faucet	3.3	Pass	Testing Complete
LW00422	30	Resource Center		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00423	K-3	Kindergarten		Faucet	1.0	Pass	Testing Complete
LW00424	K-3	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00425	K-4	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW00426	K-4	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00427	K-5	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW00428	K-5	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00429	K-6	Kindergarten		Faucet	1.4	Pass	Testing Complete
LW00430	K-6	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00431	CR 31	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00432	CR 31	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00433	CR 32	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00434	CR 32	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00435		Hallway	In Front Of Gym	Cooler	<1.0	Pass	Testing Complete
LW00436		Hallway	In Front Of Gym	Cooler	<1.0	Pass	Testing Complete
LW00437	CR 40	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00438	CR 40	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00439	CR 41	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00440	CR 41	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00441	CR 42	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00442	CR 42	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00443	CR 43	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00444	CR 43	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00445		Hallway	In Front Of Cr 41	Cooler	<1.0	Pass	Testing Complete
LW00446		Hallway	In Front Of Cr 41	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW02321	CR 7	Classroom		Faucet	28.6	Fail	Follow-Up Testing Needed
LW02322	CR 7	Classroom		Bubbler - Indoor	4.1	Pass	Testing Complete
LW02323	CR 5	Classroom		Faucet	9.4	Pass	Testing Complete
LW02324	CR 5	Classroom		Bubbler - Indoor	5.3	Pass	Testing Complete
LW02325	CR 6	Classroom		Faucet	66.1	Fail	Follow-Up Testing Needed
LW02326	CR 6	Classroom		Bubbler - Indoor	5.5	Pass	Testing Complete
LW02327	CR 4	Classroom		Faucet	12.0	Pass	Testing Complete
LW02419	CR 10	Classroom		Faucet	431.0	Fail	Follow-Up Testing Needed
LW02420	CR 10	Classroom		Bubbler - Indoor	5.0	Pass	Testing Complete
LW02421		Media Center		Faucet	8.0	Pass	Testing Complete
LW02422	CR 9	Classroom		Faucet	5.6	Pass	Testing Complete
LW02423	CR 9	Classroom		Bubbler - Indoor	3.0	Pass	Testing Complete
LW02424	CR 8	Classroom		Faucet	4.8	Pass	Testing Complete
LW02425	CR 8	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
LW02426	13B	Classroom		Faucet	5.8	Pass	Testing Complete
LW02427	13B	Classroom		Bubbler - Indoor	4.3	Pass	Testing Complete
LW02428	13C	Classroom		Faucet	17.3	Pass	Testing Complete
LW02429	13C	Classroom		Bubbler - Indoor	2.8	Pass	Testing Complete
LW02430	12B	Classroom		Faucet	3.0	Pass	Testing Complete
LW02431	12B	Classroom		Bubbler - Indoor	4.0	Pass	Testing Complete
LW02432	12C	Classroom		Faucet	1.3	Pass	Testing Complete
LW02433	12C	Classroom		Bubbler - Indoor	25.3	Fail	Follow-Up Testing Needed
LW02434		Hallway	Right Of Cr 11	Cooler	<1.0	Pass	Testing Complete
LW02435	CR 14	Classroom		Faucet	6.2	Pass	Testing Complete
LW02436	CR 14	Classroom		Bubbler - Indoor	3.7	Pass	Testing Complete
LW02437	CR 15	Classroom		Faucet	28.4	Fail	Follow-Up Testing Needed
LW02438	CR 15	Classroom		Bubbler - Indoor	5.5	Pass	Testing Complete
LW02439	CR 16	Classroom		Faucet	4.1	Pass	Testing Complete
LW02440	CR 16	Classroom		Bubbler - Indoor	4.5	Pass	Testing Complete
LW02441	CR 17	Classroom		Faucet	11.4	Pass	Testing Complete
LW02442	CR 17	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
LW02443	CR 18	Classroom		Faucet	97.6	Fail	Follow-Up Testing Needed
LW02444	CR 18	Classroom		Bubbler - Indoor	5.5	Pass	Testing Complete
LW02471	CR 4	Classroom		Bubbler - Indoor	2.8	Pass	Testing Complete
LW02472	CR 3	Classroom		Faucet	5.0	Pass	Testing Complete
LW02473	CR 3	Classroom		Bubbler - Indoor	2.2	Pass	Testing Complete
LW02474	CR 2	Classroom		Faucet	54.3	Fail	Follow-Up Testing Needed

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW02475	CR 2	Classroom		Bubbler - Indoor	6.3	Pass	Testing Complete
LW02476	CR 1	Classroom		Faucet	5.2	Pass	Testing Complete
LW02477	CR 1	Classroom		Bubbler - Indoor	3.5	Pass	Testing Complete
LW02478		Hallway	In Front Of Cr 1	Cooler	1.7	Pass	Testing Complete
LW02479		Work Room Administration		Faucet	10.1	Pass	Testing Complete
LW02480		Break Room Administration		Faucet	3.1	Pass	Testing Complete
LW02481		Hallway	In Front Of Cr 24	Cooler	<1.0	Pass	Testing Complete
LW02482	CR 24	Classroom		Faucet	174.0	Fail	Follow-Up Testing Needed
LW02483	23	Classroom		Faucet	6.7	Pass	Testing Complete
LW02484	CR 2	Classroom		Faucet	4.8	Pass	Testing Complete
LW02485	CR 21	Classroom		Faucet	7.4	Pass	Testing Complete
LW02486	CR 20	Classroom		Faucet	6.5	Pass	Testing Complete
LW02487	CR 19	Classroom		Faucet	7.4	Pass	Testing Complete
LW02488		Hallway	In Front Of Cr 19	Cooler	<1.0	Pass	Testing Complete
LW02489		Kitchen		Faucet	11.7	Pass	Testing Complete
LW02490		Kitchen		Faucet	3.1	Pass	Testing Complete
LW02491	K-2	Classroom		Faucet	1.1	Pass	Testing Complete
LW02492	K-2	Classroom		Bubbler - Indoor	2.1	Pass	Testing Complete
LW02493	K-1	Classroom		Faucet	5.1	Pass	Testing Complete
LW02494	K-1	Classroom		Bubbler - Indoor	2.0	Pass	Testing Complete
LW02495	CR 11	Classroom		Faucet	4.0	Pass	Testing Complete
LW02496	CR 11	Classroom		Bubbler - Indoor	8.7	Pass	Testing Complete
M22471		Kitchen		Faucet	10.4	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for South Lake Elementary School (4/11/18 and 5/8/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	Initial draw (3 rd) (PPB)	30 Second Draw (PPB)	Status
LW02419	CR 10	Classroom	Faucet	8.5	3.4	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW02482	CR 24	Classroom	Faucet	DNS	12.3	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW02443	CR 18	Classroom	Faucet	DNS	13.1	1.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW02325	CR 6	Classroom	Faucet	20.1	15.6	3.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW02474	CR 2	Classroom	Faucet	12.6	10.2	1.6	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW02321	CR 7	Classroom	Faucet	36.8	2.3	<1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW02437	CR 15	Classroom	Faucet	DNS	69.70	47.6	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW02433	12C	Classroom	Faucet	DNS	2.0	1.0	Remediation required – replace fixture, in addition to supply line and valve located under sink

*ppb = parts per billion
 DNS= Did Not Sample

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.