Montgomery County Public Schools
Lead in Drinking Water Testing Report

Rachel Carson Elementary School
100 Tschiffely Square Rd.
Gaithersburg, MD 20878

Report Date: May 6th, 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	4/9/2024
# of Outlets Tested	41
# 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:

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 Rachel Carson ES

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW07390	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW10997	In hallway adjacent to 123	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW01654	In classroom 234	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW01656	In classroom 236	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW01722	In classroom 126	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW01724	In preschool 124	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW01727	In classroom 224	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW01736	In classroom 229	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW01739	In hallway adjacent to boy's bathroom 238	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW01741	In classroom 232	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07363	In media center office	Faucet, Cold	5.4	Fail	Remediation Action Plan

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW07365	In work room 103	Faucet, Cold	<2.0	Pass	Testing Complete
LW07366	In teacher's lounge 112	Faucet, Cold	<2.0	Pass	Testing Complete
LW07368	In classroom 121	Faucet, Cold	<2.0	Pass	Testing Complete
LW07369	In hallway adjacent to 123	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW07370	In health room 123	Faucet, Cold	<2.0	Pass	Testing Complete
LW07371	In hallway adjacent to girl's restroom 118	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW07373	In classroom 151	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07375	In classroom 150	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07377	In classroom 148	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07382	In classroom 147	Faucet, Cold	<2.0	Pass	Testing Complete
LW07383	In classroom 147	Drinking Water fountain - Bubbler Style	3.2	Pass	Testing Complete
LW07388	In hallway adjacent to girl's bathroom 135	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW07389	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW07391	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW07392	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW07393	In classroom 143	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07394	In classroom 143	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07397	In classroom 141	Faucet, Cold	<2.0	Pass	Testing Complete
LW07399	In classroom 140	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07401	In classroom 139	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07403	In classroom 138	Drinking Water fountain - Bubbler Style	3.5	Pass	Testing Complete
LW07404	In classroom 131	Faucet, Cold	<2.0	Pass	Testing Complete
LW07405	In classroom 131	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW07407	In classroom 132	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
M11951	In hallway adjacent to boys bathroom 220	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
M11979	In classroom 225	Drinking Water fountain - Bubbler Style	2.4	Pass	Testing Complete
M11988	In office 204	Drinking Water fountain - Bubbler Style	<2.0	Pass	Testing Complete
LW13146	In hallway adjacent to girl's bathroom 118	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW13147	In hallway adjacent to girl's bathroom 118	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW13149	Health Room 123 in office	Faucet, Cold	<2.0	Pass	Testing Complete

Montgomery County Public Schools
Lead in Drinking Water Testing Report

Rachel Carson Elementary School
100 Tschiffely Square Road
Gaithersburg, MD 20878

Report Date: February 20th, 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	11/17/2021
# of Outlets Tested	65
# of Outlets ≥ 5 ppb	16

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

ATTACHMENT A

Lead in Water Sample Results Table

Sampling Results for Rachel Carson Elementary School

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW01654	In classroom 234	Classroom Combination Drinking Fountain	6.7	Fail	<1	Testing Complete
LW01655	In classroom 236	Classroom Combination Sink	10.7	Fail	<1	Testing Complete
LW01656	In classroom 236	Classroom Combination Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW01722	In classroom 126	Classroom Combination Drinking Fountain	2.5	Pass	N/A	Testing Complete
LW01723	In preschool 124	Classroom Combination Sink	<1.0	Pass	N/A	Testing Complete
LW01724	In preschool 124	Classroom Combination Drinking Fountain	1.7	Pass	N/A	Testing Complete
LW01726	In classroom 224	Classroom Combination Sink	3.5	Pass	N/A	Testing Complete
LW01727	In classroom 224	Classroom Combination Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW01728	In classroom 225	Classroom Combination Sink	27.1	Fail	2.6	Testing Complete
LW01729	In classroom 226	Classroom Sink	3.4	Pass	N/A	Testing Complete
LW01731	In classroom 227	Classroom Combination Sink	6.1	Fail	<1	Testing Complete
LW01735	In classroom 229	Classroom Combination Sink	2.4	Pass	N/A	Testing Complete
LW01736	In classroom 229	Classroom Combination Drinking Fountain	3.4	Pass	N/A	Testing Complete
LW01737	In classroom 230	Classroom Combination Sink	<1.0	Pass	N/A	Testing Complete
LW01738	In classroom 230	Classroom Combination Drinking Fountain	1.6	Pass	N/A	Testing Complete
LW01739	In hallway adjacent to boys bathroom 238	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW01740	In classroom 232	Classroom Combination Sink	7.1	Fail	<1	Testing Complete
LW01741	In classroom 232	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
LW01742	In classroom 234	Classroom Combination Sink	24.6	Fail	<1	Testing Complete
LW07363	In media center office	Teacher's Lounge Sink	<1.0	Pass	N/A	Testing Complete
LW07365	In work room 103	Teacher's Lounge Sink	<1.0	Pass	N/A	Testing Complete
LW07366	In teachers lounge 112	Teachers Lounge Sink	13.1	Fail	<1	Testing Complete
LW07368	In classroom 121	Teacher's Lounge Sink	<1.0	Pass	N/A	Testing Complete
LW07369	In hallway adjacent to 123	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW07370	In health room 123	Nurses Office Sink	<1.0	Pass	N/A	Testing Complete
LW07371	In hallway adjacent to girls restroom 118	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW07372	In classroom 151	Classroom Combination Sink	2.8	Pass	N/A	Testing Complete
LW07373	In classroom 151	Classroom Combination Drinking Fountain	3.0	Pass	N/A	Testing Complete
LW07374	In classroom 150	Classroom Combination Sink	<1.0	Pass	N/A	Testing Complete
LW07375	In classroom 150	Classroom Combination Drinking Fountain	3.2	Pass	N/A	Testing Complete
LW07376	In classroom 148	Classroom Sink	2.9	Pass	N/A	Testing Complete

LW07377	In classroom 148	Classroom Combination Drinking Fountain	2.6	Pass	N/A	Testing Complete
LW07380	In classroom 146	Teacher's Lounge Sink	16.9	Fail	<1	Testing Complete
LW07382	In classroom 147	Teacher's Lounge Sink	2.0	Pass	N/A	Testing Complete
LW07383	In classroom 147	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW07386	In classroom 144	Classroom Combination Sink	5.5	Fail	<1	Testing Complete
LW07387	In classroom 144	Classroom Combination Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW07388	In hallway adjacent to girls bathroom 135	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW07389	In kitchen	Kitchen Sink	<1.0	Pass	N/A	Testing Complete
LW07390	In kitchen	Kitchen Sink	3.1	Pass	N/A	Testing Complete
LW07391	In kitchen	Kitchen Sink	3.9	Pass	N/A	Testing Complete
LW07392	In kitchen	Kitchen Sink	13.7	Fail	<1	Testing Complete
LW07393	In classroom 143	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW07394	In classroom 143	Classroom Combination Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW07397	In classroom 141	Teacher's Lounge Sink	1.6	Pass	N/A	Testing Complete
LW07398	In classroom 140	Classroom Combination Sink	6.6	Fail	<1	Testing Complete
LW07399	In classroom 140	Classroom Combination Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW07400	In classroom 139	Classroom Combination Sink	2.0	Pass	N/A	Testing Complete
LW07401	In classroom 139	Classroom Combination Drinking Fountain	1.7	Pass	N/A	Testing Complete
LW07402	In classroom 138	Classroom Combination Sink	<1.0	Pass	N/A	Testing Complete
LW07403	In classroom 138	Classroom Combination Drinking Fountain	2.5	Pass	N/A	Testing Complete
LW07404	In classroom 131	Teacher's Lounge Sink	1.4	Pass	N/A	Testing Complete
LW07405	In classroom 131	Classroom Combination Drinking Fountain	1.6	Pass	N/A	Testing Complete
LW07406	In classroom 132	Classroom Combination Sink	11.5	Fail	<1	Testing Complete
LW07407	In classroom 132	Classroom Combination Drinking Fountain	1.7	Pass	N/A	Testing Complete
LW07408	In classroom 130	Classroom Sink	14.4	Fail	<1	Testing Complete
LW07409	In classroom 130	Classroom Sink	11.1	Fail	<1	Testing Complete
LW07411	In kindergarten 127	Classroom Sink	1.4	Pass	N/A	Testing Complete
LW07412	In classroom 127	Classroom Sink	<1.0	Pass	N/A	Testing Complete
LW10997	In hallway adjacent to 123	Bottle Filler	<1.0	Pass	N/A	Testing Complete
M11951	In hallway adjacent to boys bathroom 220	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
M11979	In classroom 225	Classroom Combination Drinking Fountain	3.7	Pass	N/A	Testing Complete
M11988	In office 204	Classroom Combination Drinking Fountain	3.4	Pass	N/A	Testing Complete
M11989	In office 204	Classroom Combination Sink	31.1	Fail	<1	Testing Complete
M11994	In classroom 208	Classroom Sink	5.3	Fail	<1	Testing Complete

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

August 29, 2019

Executive Summary:
Rachel Carson Elementary School
100 Tschiffely Square Road, Gaithersburg, MD 20878

Round of Testing:	Post-Remediation Follow-up
Sample Date	02/05/2019
# of Outlets Tested:	2
# of Outlets ≥ 5 ppb:	0
Low Value (ppb):	3.5
High Value (ppb):	4.7

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

Classroom 127: Outlet (LW07411) will be placed back into service
Classroom 131: Outlet (M12036) will 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: Rachel Carson Elementary School
100 Tschiffely Square Road,
Gaithersburg, MD 20878

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 Rachel Carson Elementary School, located at 100 Tschiffely Square Road in Gaithersburg, MD 20878.

Scope of Services:

Two (2) drinking water outlets were remediated at Rachel Carson 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 02/04/2019 and 02/05/2019 to collect post-remediation follow-up samples from 2 drinking water outlets that have been replaced. Samples were submitted to a laboratory for lead in water analysis using current US EPA methodology. The laboratory has been certified by the Maryland Department of the Environment to analyze drinking water for lead.

Results:

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

Barcode ID	Room Number	Location	Notes	Equipment Type	Initial (ppb)	Flush (ppb)	Post-remediation follow-up (ppb)	Post-remediation follow-up Pass/Fail	Status
LW07411	127	Classroom		Faucet	32.0	33.6	4.7	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
M12036	131	Classroom		Faucet	34.2	40.7	3.5	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,

INTERTEK-PSI

Nan Lin
Department Manager, Environmental Services
nan.lin@intertek.com

MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 25, 2018

Executive Summary:
Rachel Carson Elementary School
100 Tschiffely Square Road
Gaithersburg, MD 20878

Round of Testing:	Initial
# of Outlets Tested:	82
# of Outlets ≥ 20 ppb:	2
Low Value (ppb):	< 1.0
High Value (ppb):	34.2
Follow-Up Testing Required (Samples ≥ 20 ppb):	Room 131 (34.2 ppb) Room 127 (32.0 ppb)

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

Project Status
Testing Complete: Remediation Plan

Classroom 127– Replace fixture (LW07411), in addition to supply line and valve located under sink
Classroom 131– Replace fixture (M12036), in addition to supply line and valve located under sink

May 25, 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: Rachel Carson Elementary School
100 Tschiffely Square Road
Gaithersburg, MD 20878

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 Rachel Carson Elementary School, located at 100 Tschiffely Square Road in Gaithersburg, MD 20878.

Scope of Services:

PSI conducted lead in water testing at Rachel Carson 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 4/4/18 and 4/5/18 to collect samples from 82 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. Two 30 second follow-up samples were collected on 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 two 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)
LW07411	Classroom 127	4/5/18	32.0	5/8/18	1.3
M12036	Classroom 131	4/5/18	34.2	5/8/18	2.2

The initial lead in water sample results (4/5/18) and 30 second follow up results (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.

Nand Kaushik, P.E.
Department Manager, Environmental Services
Nand.Kaushik@psiusa.com

Attachments: A – Lead in Water Test Summary Table

ATTACHMENT A

Rachel Carson ES Water Test Summary Table

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

Initial Sample Results for Rachel Carson Elementary School (4/5/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW01654	234	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01655	236	Classroom		Faucet	5.3	Pass	Testing Complete
LW01656	236	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01721	126	Classroom		Faucet	8.1	Pass	Testing Complete
LW01722	126	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01723	124	Preschool		Faucet	<1.0	Pass	Testing Complete
LW01724	124	Preschool		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01725	206	Classroom		Faucet	8.5	Pass	Testing Complete
LW01726	224	Classroom		Faucet	4.8	Pass	Testing Complete
LW01727	224	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01728	225	Classroom		Faucet	1.1	Pass	Testing Complete
LW01729	226	Classroom		Faucet	4.8	Pass	Testing Complete
LW01730	226	Classroom		Bubbler - Indoor	7.9	Pass	Testing Complete
LW01731	227	Classroom		Faucet	4.9	Pass	Testing Complete
LW01733	228	Classroom		Faucet	9.8	Pass	Testing Complete
LW01734	228	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01735	229	Classroom		Faucet	4.2	Pass	Testing Complete
LW01736	229	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01737	230	Classroom		Faucet	<1.0	Pass	Testing Complete
LW01738	230	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01739		Hallway	Next to BBR 238	Cooler	<1.0	Pass	Testing Complete
LW01740	232	Classroom		Faucet	4.1	Pass	Testing Complete
LW01741	232	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01742	234	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07363		Media Center		Faucet	4.9	Pass	Testing Complete
LW07364		Health Room		Faucet	1.9	Pass	Testing Complete
LW07365	103	Work Room		Faucet	<1.0	Pass	Testing Complete
LW07366		Break Room		Faucet	<1.0	Pass	Testing Complete
LW07367	120	Classroom		Faucet	3.8	Pass	Testing Complete
LW07368	121	Classroom		Faucet	2.5	Pass	Testing Complete
LW07369		Hallway	Across from Room 123	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07370	123	Music		Faucet	<1.0	Pass	Testing Complete
LW07371		Hallway	Across from Girls Restroom 118	Cooler	<1.0	Pass	Testing Complete
LW07372	151	Classroom		Faucet	4.1	Pass	Testing Complete
LW07373	151	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07374	150	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07375	150	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07376	148	Classroom		Faucet	2.1	Pass	Testing Complete
LW07377	148	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW07378	149	Classroom		Faucet	9.6	Pass	Testing Complete
LW07379	149	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW07380	146	Classroom		Faucet	1.9	Pass	Testing Complete
LW07381	146	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07382	147	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07383	147	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07384	145	Classroom		Faucet	8.2	Pass	Testing Complete
LW07385	145	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07386	144	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07387	144	Classroom		Bubbler - Indoor	3.9	Pass	Testing Complete
LW07388		Hallway	Left of Girls Restroom Room 135	Cooler	<1.0	Pass	Testing Complete
LW07389		Kitchen All Purpose Room		Faucet	<1.0	Pass	Testing Complete
LW07390		Kitchen All Purpose Room		Faucet	5.1	Pass	Testing Complete
LW07391		Kitchen All Purpose Room		Faucet	1.8	Pass	Testing Complete
LW07392		Kitchen All Purpose Room		Faucet	1.7	Pass	Testing Complete
LW07393	143	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW07394	143	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07395	142	Classroom		Faucet	5.5	Pass	Testing Complete
LW07396	142	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07397	141	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07398	140	Classroom		Faucet	4.7	Pass	Testing Complete
LW07399	140	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07400	139	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07401	139	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW07402	138	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07403	138	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07404	131	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07405	131	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07406	132	Classroom		Faucet	3.2	Pass	Testing Complete
LW07407	132	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07408	130	Classroom		Faucet	17.2	Pass	Testing Complete
LW07409	130	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07410	130	Classroom		Bubbler - Indoor	11.4	Pass	Testing Complete
LW07411	127	Classroom		Faucet	32.0	Fail	Follow-Up Testing Needed
LW07412	127	Classroom		Faucet	<1.0	Pass	Testing Complete
LW07413	127	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW07414	126	Classroom		Faucet	14.1	Pass	Testing Complete
M11951		Hallway	Near BBR Rm 220	Cooler	<1.0	Pass	Testing Complete
M11979	225	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M11988	204	Office		Bubbler - Indoor	4.9	Pass	Testing Complete
M11989	204	Office		Faucet	14.9	Pass	Testing Complete
M11994	208	Classroom		Faucet	1.7	Pass	Testing Complete
M12036	131	Classroom		Faucet	34.2	Fail	Follow-Up Testing Needed

*ppb = parts per billion

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

Follow Up Sample Results for Rachel Carson Elementary School (5/8/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	30 Second Draw (PPB)	Status
LW07411	127	Classroom	Faucet	33.6	1.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
M12036	131	Classroom	Faucet	40.7	2.2	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 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.