

Montgomery County Public Schools Lead in Drinking Water Testing Report

Greencastle Elementary School
13611 Robey Rd.
Silver Spring, MD 20904

Report Date: April 30th, 2024

LEAD IN DRINKING WATER SAMPLE RESULTS SUMMARY

All Maryland public and nonpublic schools are required to sample all drinking water outlets for the presence of lead pursuant to the Code of Maryland Regulations (COMAR). Montgomery County Public Schools (MCPS) is required to remediate outlets where lead in drinking water concentrations exceed the State Action Level (AL) of 5 parts per billion (ppb). A summary of the lead in water initial samples collected by Inspection Experts Inc. is presented in the table below.

Sampling Date	2/22/2024
# of Outlets Tested	39
# of Outlets \geq 5 ppb	2

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 Greencastle ES

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
M21933	Next to stair 4	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
LW08861	In kitchen	Faucet, Cold	6.1	Fail	Remediation Action Plan
LW08813	In kitchen	Faucet, Cold	<1.0	Pass	Testing Complete
LW08896	In classroom 232	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
LW08898	In classroom 213	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
LW08900	In classroom 211	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
LW08903	In classroom 207	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
M21944	In hallway next to stair 4	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
LW08830	In classroom 104	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
LW08832	In classroom 103	Drinking Water fountain - Bubbler Style	<1.0	Pass	Testing Complete
LW08836	In health room	Faucet, Cold	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW08837	In classroom 112	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08854	In classroom 132	Drinking Water fountain - Bubblers Style	2.2	Pass	Testing Complete
LW08856	In classroom 133	Drinking Water fountain - Bubblers Style	2.3	Pass	Testing Complete
LW08858	In classroom 134	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08860	In classroom 136	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08863	In classroom 229	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08887	In classroom 208	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08885	In classroom 210	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08891	In classroom 11	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08892	In classroom 228	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08894	In classroom 230	Drinking Water fountain - Bubblers Style	1.2	Pass	Testing Complete
LW08866	In classroom 205	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW08869	In classroom 203	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08880	In classroom 214	Drinking Water fountain - Bubblers Style	1.3	Pass	Testing Complete
LW08882	In classroom 212	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08865	In classroom 231	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08883	In hallway next to Stair 2	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
LW11766	In hallway next to Admin	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
LW11765	In hallway outside Gym	Drinking Water Fountain - Cooler/Chiller Style	<1.0	Pass	Testing Complete
LW08802	In classroom 120	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08804	In classroom 112	Drinking Water fountain - Bubblers Style	1.1	Pass	Testing Complete
LW08809	In classroom 135	Drinking Water fountain - Bubblers Style	1.4	Pass	Testing Complete
LW08811	In kitchen	Faucet, Cold	1.0	Pass	Testing Complete
LW08812	In kitchen	Faucet, Cold	6.0	Fail	Remediation Action Plan

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW08820	In classroom 114	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08822	In classroom 117	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete
LW08824	In classroom 119	Drinking Water fountain - Bubblers Style	1.2	Pass	Testing Complete
LW08826	In classroom 121	Drinking Water fountain - Bubblers Style	<1.0	Pass	Testing Complete

Montgomery County Public Schools Lead in Drinking Water Testing Report

Greencastle Elementary School
13611 Robey Road
Silver Spring, MD 20904

Report Date: March 28th, 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	11/02/2021
# of Outlets Tested	79
# of Outlets \geq 5 ppb	5

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 Greencastle ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW08802	In classroom 120	Classroom Combination Drinking Fountain	2.6	Pass	N/A	Testing Complete
LW08804	In classroom 112	Classroom Combination Drinking Fountain	2.2	Pass	N/A	Testing Complete
LW08805	In classroom 122	Teacher's Lounge Sink	1.3	Pass	N/A	Testing Complete
LW08806	In hallway next to the gym	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08807	In staff lounge	Teachers Lounge Sink	<1	Pass	N/A	Testing Complete
LW08809	In classroom 135	Classroom Combination Drinking Fountain	2.3	Pass	N/A	Testing Complete
LW08810	In classroom 135	Teacher's Lounge Sink	2.7	Pass	N/A	Testing Complete
LW08811	In kitchen	Kitchen Sink	12.7	Fail	<1	Testing Complete
LW08812	In kitchen	Kitchen Sink	10.3	Fail	29.3	Testing Complete
Lw08813	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW08820	In classroom 114	Classroom Combination Drinking Fountain	1.3	Pass	N/A	Testing Complete
Lw08821	In classroom 117	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW08822	In classroom 117	Classroom Combination Drinking Fountain	1.1	Pass	N/A	Testing Complete
Lw08823	In classroom 119	Classroom Combination Sink	2.0	Pass	N/A	Testing Complete
LW08824	In classroom 119	Classroom Combination Drinking Fountain	1.8	Pass	N/A	Testing Complete
LW08825	In classroom 121	Teacher's Lounge Sink	1.8	Pass	N/A	Testing Complete
LW08826	In classroom 121	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08827	In classroom 107	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW08828	In classroom 105	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW08829	In classroom 104	Teacher's Lounge Sink	1.5	Pass	N/A	Testing Complete
LW08830	In classroom 104	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08831	In classroom 103	Teacher's Lounge Sink	2.0	Pass	N/A	Testing Complete
LW08832	In classroom 103	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08833	In classroom 102	Teacher's Lounge Sink	1.2	Pass	N/A	Testing Complete
LW08835	In work room by administration	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW08836	In health room	Nurses Office Sink	1.1	Pass	N/A	Testing Complete
LW08837	In classroom 112	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08838	In classroom 112	Teacher's Lounge Sink	1.4	Pass	N/A	Testing Complete
LW08839	In classroom 114	Teacher's Lounge Sink	3.2	Pass	N/A	Testing Complete
LW08853	In classroom 132	Teacher's Lounge Sink	2.1	Pass	N/A	Testing Complete

LW08854	In classroom 132	Classroom Combination Drinking Fountain	1.7	Pass	N/A	Testing Complete
LW08855	In classroom 133	Teacher's Lounge Sink	6.0	Fail	4.7	Testing Complete
LW08856	In classroom 133	Classroom Combination Drinking Fountain	3.5	Pass	N/A	Testing Complete
LW08857	In classroom 134	Teacher's Lounge Sink	1.9	Pass	N/A	Testing Complete
LW08858	In classroom 134	Classroom Combination Drinking Fountain	1.7	Pass	N/A	Testing Complete
LW08859	In classroom 136	Teacher's Lounge Sink	2.3	Pass	N/A	Testing Complete
LW08860	In classroom 136	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing Complete
LW08861	In kitchen	Kitchen Sink	9.7	Fail	3.4	Testing Complete
LW08862	In classroom 229	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW08863	In classroom 229	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08864	In classroom 231	Teacher's Lounge Sink	1.7	Pass	N/A	Testing Complete
LW08865	In classroom 231	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08866	In classroom 205	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW08867	In classroom 205	Teacher's Lounge Sink	1.9	Pass	N/A	Testing Complete
LW08868	In classroom 203	Teacher's Lounge Sink	1.1	Pass	N/A	Testing Complete
LW08869	In classroom 203	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08879	In classroom 214	Teacher's Lounge Sink	2.7	Pass	N/A	Testing Complete
LW08880	In classroom 214	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08881	In classroom 212	Teacher's Lounge Sink	1.5	Pass	N/A	Testing Complete
LW08882	In classroom 212	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08883	In hallway next to STAIR 2	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08884	In classroom 210	Teacher's Lounge Sink	2.2	Pass	N/A	Testing Complete
LW08885	In classroom 210	Classroom Combination Drinking Fountain	2.0	Pass	N/A	Testing Complete
LW08886	In classroom 208	Teacher's Lounge Sink	12.0	Fail	4.7	Testing Complete
LW08887	In classroom 208	Classroom Combination Drinking Fountain	1.4	Pass	N/A	Testing Complete
LW08888	In classroom 206	Teacher's Lounge Sink	2.5	Pass	N/A	Testing Complete
LW08890	In classroom 204	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW08891	In classroom 11	Classroom Combination Drinking Fountain	2.1	Pass	N/A	Testing Complete
LW08892	In classroom 228	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08893	In classroom 228	Teacher's Lounge Sink	1.1	Pass	N/A	Testing Complete
LW08894	In classroom 230	Classroom Combination Drinking Fountain	1.6	Pass	N/A	Testing Complete
LW08895	In classroom 230	Teacher's Lounge Sink	3.1	Pass	N/A	Testing Complete
LW08896	In classroom 232	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete

LW08897	In classroom 232	Teacher's Lounge Sink	1.9	Pass	N/A	Testing Complete
LW08898	In classroom 20	Classroom Combination Drinking Fountain	1.2	Pass	N/A	Testing Complete
LW08899	In classroom 20	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW08900	In classroom 211	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08901	In classroom 211	Teacher's Lounge Sink	2.4	Pass	N/A	Testing Complete
LW08902	In room 209	Classroom Sink	4.1	Pass	N/A	Testing Complete
LW08903	In classroom 207	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing Complete
LW08904	In classroom 207	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
Lw10623	In classroom 120	Classroom Combination Sink	3.5	Pass	N/A	Testing Complete
M20709	In administration across from telephone	Teacher's Lounge Sink	2.5	Pass	N/A	Testing Complete
M20759	In room 128	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
M21933	Next to stair 4	Drinking Fountain	<1	Pass	N/A	Testing Complete
M21941	In room 140	Teacher's Lounge Sink	4.2	Pass	N/A	Testing Complete
M21942	In hallway across from admin	Drinking Fountain	<1	Pass	N/A	Testing Complete
M21944	In hallway next to stair 4	Drinking Fountain	<1	Pass	N/A	Testing Complete
M21956	In classroom 223	Classroom Combination Sink	3.0	Pass	N/A	Testing Complete



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

November 13, 2019

Executive Summary:
Greencastle Elementary School
13611 Robey Road,
Silver Spring, MD 20904

Round of Testing:	Post-Remediation Follow-up
Sample Date	02/01/2019
# of Outlets Tested:	1
# of Outlets \geq 5 ppb:	1
Low Value (ppb):	7.1
High Value (ppb):	7.1

Project Status

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

Classroom 3 – Outlet (LW08803) will have signage affixed.



November 13, 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: Greencastle Elementary School
13611 Robey Road,
Silver Spring, MD 20904

Dear Mr. Mullikin:

Intertek-PSI Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of post-remediation lead in water testing at Greencastle Elementary School, located at 13611 Robey Road, Silver Spring, MD 20904.

Scope of Services:

One (1) drinking water outlet was remediated at Greencastle Elementary School due to initial levels that exceeded the lead action level of 5 parts per billion (ppb). Intertek-PSI conducted lead in water post-remediation follow-up testing in accordance with the Maryland Code of Regulations (COMAR) 26.16.07-Lead in Drinking Water – Public and Nonpublic Schools.

Intertek-PSI visited the site on 02/01/2019 to collect post-remediation follow-up samples from 1 outlet that had been replaced. Samples were submitted to a laboratory for lead in water analysis using current US EPA methodology. The laboratory has been certified by the Maryland Department of the Environment to analyze drinking water for lead.

Results:

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



Barcode ID	Room Number	Location	Notes	Equipment Type	Initial (ppb)	Flush (ppb)	Post-Remediation Follow-up (ppb)	Post-Remediation Follow-up Pass/Fail	Status
LW08803	3	Classroom		Faucet	45.5	<1.0	7.1	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed

*ppb = parts per billion

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.

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



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 25, 2018

Executive Summary:
Greencastle Elementary School
13611 Robey Road
Silver Spring, MD 20904

Round of Testing:	Initial
# of Outlets Tested:	81
# of Outlets \geq 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	45.5
Follow-Up Testing Required (Samples \geq 20 ppb):	Classroom 3 (45.5 ppb)

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

Project Status
Testing Complete: Remediation Plan

Classroom 3– Replace fixture (LW08803), 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: Greencastle Elementary School
13611 Robey Road
Silver Spring, MD 20904

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 Greencastle Elementary School, located at 13611 Robey Road in Silver Spring, MD 20904.

Scope of Services:

PSI conducted lead in water testing at Greencastle 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 4/3/18 and 4/4/18 to collect samples from 81 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. One 30 second follow-up sample was 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 was one result 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)
LW08803	Classroom	4/4/18	45.5	5/8/18	<1.0

The initial lead in water sample results (4/4/18) 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

Greencastle ES Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Greencastle Elementary School (4/4/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW08801		Material Prep Area		Faucet	5.1	Pass	Testing Complete
LW08802	3	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
LW08803	3	Classroom		Faucet	45.5	Fail	Follow-Up Testing Needed
LW08804	5	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08805	5	Classroom		Faucet	1.7	Pass	Testing Complete
LW08806		Hallway	Next to The Gym in Front of A Tree	Cooler	<1.0	Pass	Testing Complete
LW08807		Break Room		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08808		Break Room		Instant Hot Water	<1.0	Pass	Testing Complete
LW08809	9	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW08810	9	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08811		Kitchen		Faucet	2.3	Pass	Testing Complete
LW08812		Kitchen		Faucet	1.0	Pass	Testing Complete
LW08813		Kitchen		Faucet	13.7	Pass	Testing Complete
LW08820	APK	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW08821		Reading		Faucet	5.2	Pass	Testing Complete
LW08822		Reading		Bubbler - Indoor	1.3	Pass	Testing Complete
LW08823	2	Classroom		Faucet	8.9	Pass	Testing Complete
LW08824	2	Classroom		Bubbler - Indoor	3.3	Pass	Testing Complete
LW08825	4	Classroom		Faucet	3.4	Pass	Testing Complete
LW08826	4	Classroom		Bubbler - Indoor	4.0	Pass	Testing Complete
LW08827	IMU	Music		Faucet	<1.0	Pass	Testing Complete
LW08828	K-4	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW08829	K3	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW08830	K3	Kindergarten		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08831	K2	Kindergarten		Faucet	1.9	Pass	Testing Complete
LW08832	K2	Kindergarten		Bubbler - Indoor	1.0	Pass	Testing Complete
LW08833	K1	Kindergarten		Faucet	<1.0	Pass	Testing Complete
LW08834	K1	Kindergarten		Bubbler - Indoor	8.9	Pass	Testing Complete
LW08835		Work Room Administration		Faucet	<1.0	Pass	Testing Complete
LW08836		Health Room		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW08837	MU	Music		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08838	MU	Music		Faucet	4.0	Pass	Testing Complete
LW08839	APR	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08853	6	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08854	6	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW08855	7	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08856	7	Classroom		Bubbler - Indoor	2.5	Pass	Testing Complete
LW08857	8	Classroom		Faucet	2.5	Pass	Testing Complete
LW08858	8	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08859	10	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08860	10	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
LW08861		Kitchen		Faucet	12.2	Pass	Testing Complete
LW08862	23	Classroom		Faucet	1.6	Pass	Testing Complete
LW08863	23	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08864	25	Classroom		Faucet	1.2	Pass	Testing Complete
LW08865	25	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08866	14	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08867	14	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08868	12	Classroom		Faucet	2.1	Pass	Testing Complete
LW08869	12	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08879	21	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08880	21	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW08881	19	Classroom		Faucet	4.0	Pass	Testing Complete
LW08882	19	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW08883		Hallway	Left of RM 17	Cooler	<1.0	Pass	Testing Complete
LW08884	17	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08885	17	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08886	15	Art		Faucet	1.7	Pass	Testing Complete
LW08887	15	Art		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08888	13	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08889	13	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08890	11	Classroom		Faucet	3.9	Pass	Testing Complete
LW08891	11	Classroom		Bubbler - Indoor	4.1	Pass	Testing Complete
LW08892	22	Classroom		Bubbler - Indoor	2.8	Pass	Testing Complete
LW08893	22	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08894	24	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW08895	24	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08896	26	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08897	26	Classroom		Faucet	1.2	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW08898	20	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08899	20	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08900	18	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08901	18	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08902		Support Room		Faucet	2.2	Pass	Testing Complete
LW08903	16	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW08904	16	Classroom		Faucet	<1.0	Pass	Testing Complete
M20709		Administration	Across from Telephone Room	Faucet	<1.0	Pass	Testing Complete
M20759		Office	Left of Staff Lounge	Faucet	<1.0	Pass	Testing Complete
M21941		Linkages to Learning Office		Faucet	3.6	Pass	Testing Complete
M21942		Hallway	Across from Admin	Cooler	<1.0	Pass	Testing Complete
M21944		Hallway	Next to Storage Closet 249	Cooler	<1.0	Pass	Testing Complete

*ppb = parts per billion

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

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

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
LW08803	3	Classroom	Faucet	4.9	<1.0	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.