Montgomery County Public Schools
Lead in Drinking Water Testing Report

Quince Orchard High School
15800 Quince Orchard Rd.
Gaithersburg, MD 20878

Report Date: May 16th, 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	52
# of Outlets ≥ 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 Quince Orchard HS

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW11340	In hallway adjacent to library 245	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW11343	In hallway adjacent to cafeteria 214	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW11345	In hallway adjacent to gym 206	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW10890	In hallway next to room 308	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW11346	In hallway adjacent to room 126	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW11347	In hallway adjacent to 119B	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW10893	In hallway adjacent to room 116	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW13222	In girls locker room	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
M35174	In room 105D	Faucet, Cold	<2.0	Pass	Testing Complete
LW10891	In hallway adjacent to 338	Bottle Refill Dispenser/Water Refill Station	<2.0	Pass	Testing Complete
LW08714	In concessions 259	Faucet, Cold	4.4	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW08946	In kitchen	Faucet, Cold	3.3	Pass	Testing Complete
LW08947	In kitchen	Faucet, Cold	7.6	Fail	Remediation Action Plan
LW08948	In kitchen	Faucet, Cold	2	Pass	Testing Complete
LW08950	In hallway adjacent to cafeteria 214	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08951	In hallway adjacent to room 288B	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08952	In hallway adjacent to room 152	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08953	In boys locker room	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08954	In hallway adjacent to electrical room	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08955	In hallway adjacent to electrical room	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08956	In hallway adjacent to electrical room	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
M35217	In admin work room 200D	Faucet, Cold	<2.0	Pass	Testing Complete
M36133	In hallway adjacent to 119B	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
M46192	In hallway adjacent to media center	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
M46205	In hallway adjacent to room 288B	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08586	In hallway adjacent to room 308	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08710	In hallway adjacent to media center	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08712	In health room 254	Faucet, Cold	<2.0	Pass	Testing Complete
LW08713	In concession 259	Faucet, Cold	3.3	Pass	Testing Complete
LW08715	In concession 259	Ice Machine	<2.0	Pass	Testing Complete
LW08716	In hallway adjacent to room 260	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08717	In hallway adjacent to room 260	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08718	In hallway adjacent to room 260	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08719	In hallway adjacent to gym	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08720	In hallway adjacent to gym	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW08721	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW08722	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW08931	In kitchen	Faucet, Cold	28.3	Fail	Remediation Action Plan
LW08944	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW08945	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW08589	In hallway adjacent to room 323B	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08590	In hallway adjacent to room 338	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08591	In hallway adjacent to room 338	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08592	In hallway adjacent to media center	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08593	In kitchen	Faucet, Cold	<2.0	Pass	Testing Complete
LW08594	In kitchen	Faucet, Cold	2.6	Pass	Testing Complete
LW08606	In training room adjacent to boys locker room	Ice Machine	<2.0	Pass	Testing Complete

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW08607	In girls locker room	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW13223	In Boys locker room	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08608	In hallway adjacent to room 119B	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08610	In hallway adjacent to room 126	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete
LW08611	In hallway adjacent to room 126	Drinking Water Fountain - Cooler/Chiller Style	<2.0	Pass	Testing Complete

Montgomery County Public Schools
Lead in Drinking Water Testing Report

Quince Orchard High School
15800 Quince Orchard 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	70
# of Outlets ≥ 5 ppb	14

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 Quince Orchard High School

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW08588	In break room 308	Teachers Lounge Sink	<1.0	Pass	N/A	Testing Complete
LW08589	In hallway adjacent to room 323B	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08590	In hallway adjacent to room 338	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08591	In hallway adjacent to room 338	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08592	In hallway adjacent to media center	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08593	In kitchen	Kitchen Sink	1.6	Pass	N/A	Testing Complete
LW08594	In kitchen	Kitchen Sink	4.4	Pass	N/A	Testing Complete
LW08595	In kitchen	Ice Machine	<1.0	Pass	N/A	Testing Complete
LW08596	In computer lab 133	Classroom Sink	<1.0	Pass	N/A	Testing Complete
LW08606	In training room adjacent to boys locker room	Ice Machine	<1.0	Pass	N/A	Testing Complete
LW08607	In girls locker room	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08608	In hallway adjacent to room 119B	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08609	In computer lab 119G	Classroom Sink	1.6	Pass	N/A	Testing Complete
LW08610	In hallway adjacent to room 126	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08611	In hallway adjacent to room 126	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08612	In music 124A	Classroom Sink	<1.0	Pass	N/A	Testing Complete
LW08613	In music 124A	Classroom Sink	2.1	Pass	N/A	Testing Complete
LW08614	In music 124A	Classroom Sink	1.6	Pass	N/A	Testing Complete
LW08615	In child development 121	Classroom Sink	<1.0	Pass	N/A	Testing Complete
LW08616	In child development 121	Classroom Sink	1.5	Pass	N/A	Testing Complete
LW08710	In hallway adjacent to media center	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08711	In classroom 251	Teacher's Lounge Sink	<1.0	Pass	N/A	Testing Complete
LW08712	In health room 254	Nurses Office Sink	5.0	Fail	3.2	Testing Complete
LW08713	In concession 259	Kitchen Sink	14.8	Fail	5.8	Testing Complete
LW08714	In concessions 259	Kitchen Sink	18.5	Fail	8.1	Testing Complete
LW08716	In hallway adjacent to room 260	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08717	In hallway adjacent to room 260	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08718	In hallway adjacent to room 260	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08719	In hallway adjacent to gym	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08720	In hallway adjacent to gym	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08721	In kitchen	Kitchen Sink	<1.0	Pass	N/A	Testing Complete

LW08722	In kitchen	Kitchen Sink	<1.0	Pass	N/A	Testing Complete
LW08931	In kitchen	Kitchen Sink	26.1	Fail	37.1	Testing Complete
LW08944	In kitchen	Kitchen Sink	<1.0	Pass	N/A	Testing Complete
LW08945	In kitchen	Kitchen Sink	<1.0	Pass	N/A	Testing Complete
LW08946	In kitchen	Kitchen Sink	7.8	Fail	5.0	Testing Complete
LW08947	In kitchen	Kitchen Sink	2.7	Pass	N/A	Testing Complete
LW08948	In kitchen	Kitchen Sink	4.7	Pass	N/A	Testing Complete
LW08950	In hallway adjacent to cafeteria 214	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08951	In hallway adjacent to room 288B	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08952	In hallway adjacent to room 152	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08953	In boys locker room	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08954	In hallway adjacent to electrical room	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08955	In hallway adjacent to electrical room	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
LW08956	In hallway adjacent to electrical room	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
Lw10891	In hallway adjacent to 338	Bottle Filler	<1.0	Pass	N/A	Testing Complete
LW10893	In hallway adjacent to room 116	Bottle Filler	<1.0	Pass	N/A	Testing Complete
LW10992	In room 105M	Teacher's Lounge Sink	3.2	Pass	N/A	Testing Complete
Lw11340	In hallway adjacent to library 245	Bottle Filler	<1.0	Pass	N/A	Testing Complete
LW11342	In classroom 228B	Classroom Sink	6.1	Fail	5.1	Testing Complete
LW11343	In hallway adjacent to cafeteria 214	Bottle Filler	<1.0	Pass	N/A	Testing Complete
LW11345	In hallway adjacent to gym 206	Bottle Filler	<1.0	Pass	N/A	Testing Complete
LW11346	In hallway adjacent to room 126	Bottle Filler	<1.0	Pass	N/A	Testing Complete
LW11347	In hallway adjacent to 119B	Bottle Filler	<1.0	Pass	N/A	Testing Complete
M05969	In classroom 119E	Classroom Sink	29.3	Fail	24.5	Testing Complete
M35134	In classroom 120	Classroom Sink	11.4	Fail	9.8	Testing Complete
M35138	In classroom 118	Classroom Sink	7.1	Fail	5.4	Testing Complete
M35139	In room 118	Classroom Sink	5.5	Fail	3.5	Testing Complete
M35165	In training room	Classroom Sink	5.5	Pass	N/A	Testing Complete
M35166	In girls locker room	Classroom Sink	<1.0	Pass	N/A	Testing Complete
M35167	In girls locker room	Abandoned/Removed	26.9	Fail	5.0	Testing Complete
M35174	In room 105D	Teacher's Lounge Sink	<1.0	Pass	N/A	Testing Complete
M35181	In girls dressing room 134D	Classroom Sink	5.5	Fail	3.6	Testing Complete
M35182	In girls dressing room 134D	Classroom Sink	10.7	Fail	7.7	Testing Complete
M35217	In admin work room 200D	Teacher's Lounge Sink	1.4	Pass	N/A	Testing Complete

M36133	In hallway adjacent to 119B	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
M46192	In hallway adjacent to media center	Drinking Fountain	<1.0	Pass	N/A	Testing Complete
M46199	In room 245 adjacent to media center	Teacher's Lounge Sink	1.2	Pass	N/A	Testing Complete
M46204	In office 231	Teacher's Lounge Sink	<1.0	Pass	N/A	Testing Complete
M46205	In hallway adjacent to room 288B	Drinking Fountain	<1.0	Pass	N/A	Testing Complete

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

August 29, 2019

Executive Summary:
Quince Orchard High School
15800 Quince Orchard Road, Gaithersburg, MD 20878

Round of Testing:	Post-Remediation Follow-Up
Sample Date	02/05/2019
# of Outlets Tested:	1
# of Outlets ≥ 5 ppb:	0
Low Value (ppb):	3.3
High Value (ppb):	3.3

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

Training Room: Outlet (M35165) 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: Quince Orchard High School
15800 Quince Orchard 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 Quince Orchard High School, located at 15800 Quince Orchard Road, Gaithersburg, MD 20878.

Scope of Services:

One (1) drinking water outlet was remediated at Quince Orchard High 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 sample from 1 drinking water 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
M35165		Training Room		Faucet	29.1	7.3	3.3	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service

Discussion:

Lead is a naturally occurring element that can be harmful to humans when ingested or inhaled, particularly to children under the age of six. Lead can adversely affect the development of children's brain potentially leading to detrimental alterations in intelligence and behavior. Lead has been historically used in plumbing, paint and other building materials. Lead is released into the environment from industrial sources and fuel combustion. Lead may also be found in consumer products (imported candy, medicines, toys, dishes, etc.).

Most lead leaches into drinking water from contact with plumbing components such as faucets and valves made of brass or lead-containing solder. The physical and chemical interaction that occurs between the plumbing and water directly contributes to the amount of lead that is released into the water. Although plumbing components installed prior to the 1990's could contain more lead than newer materials, the amount of lead in the drinking water cannot be predicted by the age of building. The purpose of this regulation is to establish a program to minimize the risk of exposure to lead in drinking water outlets at schools. The Environmental Protection Agency (EPA) developed the 3T's (Training, Testing, and Telling) to assist schools in reducing the lead concentrations in their drinking water. More information about 3T's can be found on the EPA website.

Simple steps like keeping your home clean and well-maintained will go a long way in preventing lead exposure. These steps include inspecting and maintaining all painted surfaces to prevent paint deterioration, using only cold water to prepare food and drinks, flushing water outlets used for drinking or food preparation, and cleaning around painted areas where friction can generate dust, such as doors, windows, and drawers. Wipe these areas with a wet sponge or rag to remove paint chips or dust, and wash children's hands, bottles, pacifiers and toys often.

Respectfully Submitted,

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:
Quince Orchard High School
15800 Quince Orchard Road
Gaithersburg, MD 20878

Round of Testing:	Initial
# of Outlets Tested:	62
# of Outlets ≥ 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	29.1
Follow-Up Testing Required (Samples ≥ 20 ppb):	Training Room (29.1 ppb)

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

Project Status
Testing Complete: Remediation Plan

Training Room– Replace fixture (M35165), 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: Quince Orchard High School
15800 Quince Orchard 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 Quince Orchard High School, located at 15800 Quince Orchard Road in Gaithersburg, MD 20878.

Scope of Services:

PSI conducted lead in water testing at Quince Orchard High 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 4/09/18 and 4/10/18 to collect samples from 62 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)
M35165	Training Room	4/10/18	29.1	5/8/18	<1.0

The initial lead in water sample results (4/10/18) 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 – Floor Plan with Test Locations
B – Lead in Water Test Summary Table
C – Laboratory Analytical Results and Chain of Custody

ATTACHMENT A

Quince Orchard HS Water Test Summary Table

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

Initial Sample Results for Quince Orchard High School (4/10/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW08586		Hallway	Next to 308	Cooler	<1.0	Pass	Testing Complete
LW08587		Hallway	Next to 308	Cooler	<1.0	Pass	Testing Complete
LW08588	308	Break Room		Faucet	<1.0	Pass	Testing Complete
LW08589		Hallway	Next to 323b	Cooler	<1.0	Pass	Testing Complete
LW08590		Hallway	Across from 338	Cooler	<1.0	Pass	Testing Complete
LW08591		Hallway	Across from 338	Cooler	<1.0	Pass	Testing Complete
LW08592		Hallway	Across from Media Center	Cooler	<1.0	Pass	Testing Complete
LW08593		Kitchen		Faucet	1.0	Pass	Testing Complete
LW08594		Kitchen		Faucet	3.7	Pass	Testing Complete
LW08595		Kitchen		Icemaker	<1.0	Pass	Testing Complete
LW08596	133	Computer Lab		Faucet	1.1	Pass	Testing Complete
LW08606		Training Room Locker Room - Boys		Icemaker	<1.0	Pass	Testing Complete
LW08607		Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete
LW08608		Hallway	Across from 119B	Cooler	<1.0	Pass	Testing Complete
LW08609	119G	Computer Lab		Faucet	1.7	Pass	Testing Complete
LW08610		Hallway	Next to 126	Cooler	<1.0	Pass	Testing Complete
LW08611		Hallway	Next to 126	Cooler	<1.0	Pass	Testing Complete
LW08612	124A	Music		Faucet	<1.0	Pass	Testing Complete
LW08613	124A	Music		Faucet	<1.0	Pass	Testing Complete
LW08614	124A	Music		Faucet	2.7	Pass	Testing Complete
LW08615	121	Child Development		Faucet	1.0	Pass	Testing Complete
LW08616	121	Child Development		Faucet	1.4	Pass	Testing Complete
LW08617	121	Child Development		Faucet	2.6	Pass	Testing Complete
LW08618	121	Child Development		Bubbler - Indoor	2.2	Pass	Testing Complete
LW08710		Hallway	Across from Media Center	Cooler	<1.0	Pass	Testing Complete
LW08711	251	Classroom		Faucet	<1.0	Pass	Testing Complete
LW08712	254	Health Room		Faucet	1.3	Pass	Testing Complete
LW08713	259	Concession		Faucet	4.4	Pass	Testing Complete
LW08714	259	Concession		Faucet	5.3	Pass	Testing Complete
LW08715	259	Concession		Icemaker	<1.0	Pass	Testing Complete
LW08716		Hallway	Next to Restroom	Cooler	<1.0	Pass	Testing Complete
LW08717		Hallway	Next to Restroom	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW08718		Hallway	Next to Restroom	Cooler	<1.0	Pass	Testing Complete
LW08719		Hallway	Across from Gym	Cooler	<1.0	Pass	Testing Complete
LW08720		Hallway	Across from Gym	Cooler	<1.0	Pass	Testing Complete
LW08721		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW08722		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW08944		Kitchen		Faucet	1.1	Pass	Testing Complete
LW08945		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW08946		Kitchen		Faucet	3.0	Pass	Testing Complete
LW08947		Kitchen		Faucet	3.6	Pass	Testing Complete
LW08948		Kitchen		Faucet	4.7	Pass	Testing Complete
LW08949		Hallway	Across from Kitchen	Cooler	<1.0	Pass	Testing Complete
LW08950		Hallway	Across from Kitchen	Cooler	<1.0	Pass	Testing Complete
LW08951		Hallway	Across from 288B	Cooler	<1.0	Pass	Testing Complete
LW08952		Hallway	Across from 152	Cooler	<1.0	Pass	Testing Complete
LW08953		Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete
LW08954		Hallway	Next to Electrical Room	Cooler	<1.0	Pass	Testing Complete
LW08956		Hallway	Next to Electrical Room	Cooler	<1.0	Pass	Testing Complete
M05969	119E	Classroom		Faucet	3.3	Pass	Testing Complete
M05970	153A	Music Storage		Faucet	6.8	Pass	Testing Complete
M35134	120	Classroom		Faucet	4.7	Pass	Testing Complete
M35165		Training Room		Faucet	29.1	Fail	Follow-Up Testing Needed
M35167		Training Room		Faucet	17.7	Pass	Testing Complete
M35181	134 D	Dressing Room - Girls		Faucet	3.3	Pass	Testing Complete
M35182	134D	Dressing Room - Girls		Faucet	3.2	Pass	Testing Complete
M35217	200D	Work Room Admin		Faucet	1.2	Pass	Testing Complete
M36133		Hallway	Across from 119B	Cooler	<1.0	Pass	Testing Complete
M46192		Hallway	Across IMC	Cooler	<1.0	Pass	Testing Complete
M46199	245	Media Center		Faucet	<1.0	Pass	Testing Complete
M46204	231	Office		Faucet	<1.0	Pass	Testing Complete
M46205		Hallway	Across From 288B	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 Quince Orchard High School (5/8/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	30 Second Draw (PPB)	Status
M35165		Training Room	Faucet	7.3	<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.