Montgomery County Public Schools
Lead in Drinking Water Testing Report

MacDonald Knolls Center
10611 Tenbrook Dr.
Silver Spring, MD 20901

Report Date: April 30, 2025

LEAD IN DRINKING WATER SAMPLE RESULTS SUMMARY

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

Sampling Date	3/26/2025
# of Outlets Tested	14
# 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 MacDonald Knolls Center

Outlet Barcode	Outlet Location	Outlet Type	Initial Results (ppb)	Pass/Fail	Status
LW07104	In Classroom 1	Faucet, Cold	1.6	Pass	Testing Complete
LW07107	In Office 2A	Faucet, Cold	<1.0	Pass	Testing Complete
LW07110	In Lounge 4	Faucet, Cold	<1.0	Pass	Testing Complete
LW11040	In Kitchen	Faucet, Cold	2.8	Pass	Testing Complete
LW11041	In Hallway Next To Room One	Bottle Filler/Drinking Fountain Combo Unit - Bottle Filler	<1.0	Pass	Testing Complete
LW11046	In Hallway Next To Classroom Two	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW11047	In Staff Lounge	Faucet, Cold	<1.0	Pass	Testing Complete
LW11048	In Staff Lounge	Faucet, Cold	3.7	Pass	Testing Complete
LW13777	In Kitchen	Faucet, Cold	1.3	Pass	Testing Complete
LW13778	In Kitchen	Faucet, Cold	<1.0	Pass	Testing Complete
LW13779	In Hallway Next To Room One	Bottle Filler/Drinking Fountain Combo Unit - Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete
LW13780	In Classroom 5	Faucet, Cold	6.6	Fail	Remediation Action Plan
LW13781	In Classroom 3	Combination Sink - Fountain - Bubbler	1.0	Pass	Testing Complete
LW13782	In Hallway Outside Multipurpose Room	Drinking Water Fountain - Cooler/Chiller Style (Refrigerated)	<1.0	Pass	Testing Complete

Montgomery County Public Schools
Lead in Drinking Water Testing Report

MacDonald Knolls Early Childhood Center
10611 Tenbrook Drive
Silver Spring, MD 20901

Report Date: July 14th, 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	06/09/2022
# of Outlets Tested	34
# of Outlets ≥ 5 ppb	2

NEXT STEPS

If an initial sample exceeds the AL (5 ppb), the outlet will be immediately shut-down, a follow-up sample collected, and a remedial plan of action developed for this outlet. 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 MacDonald Knolls Early Childhood Center

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW07104	In classroom 1	Classroom Sink	3.6	Pass	N/A	Testing Complete
LW07105	In kitchen 2	Kitchen Sink	3.2	Pass	N/A	Testing Complete
LW07106	In kitchen 2	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW07107	In building Service - office Old conference	Teacher's Lounge Sink	1.2	Pass	N/A	Testing Complete
LW07109	In classroom 3	Classroom Sink	3.0	Pass	N/A	Testing Complete
LW07110	In classroom 4	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW07112	In classroom 5	Classroom Sink	16.0	Fail	N/A	Testing Complete
LW07114	In classroom 6	Classroom Sink	<1	Pass	N/A	Testing Complete
LW07116	In classroom 7	Classroom Sink	2.9	Pass	N/A	Testing Complete
LW07118	In classroom 8	Classroom Sink	2.0	Pass	N/A	Testing Complete
LW07120	In classroom 9	Classroom Sink	1.6	Pass	N/A	Testing Complete
LW07122	In classroom 10	Classroom Sink	3.8	Pass	N/A	Testing Complete
LW07123	In hallway right of room 16	Drinking Fountain	2.8	Pass	N/A	Testing Complete
LW07125	In classroom 11	Classroom Sink	4.7	Pass	N/A	Testing Complete
LW07126	In classroom 12	Classroom Sink	<1	Pass	N/A	Testing Complete
LW07127	In classroom 13	Classroom Sink	2.8	Pass	N/A	Testing Complete
LW07128	In classroom 16	Classroom Sink	1.2	Pass	N/A	Testing Complete
LW08099	In hallway In front of conference room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW09461	In classroom 14	Classroom Sink	2.1	Pass	N/A	Testing Complete
LW09462	In classroom 15	Classroom Sink	<1	Pass	N/A	Testing Complete
LW09463	In classroom 17	Classroom Sink	<1	Pass	N/A	Testing Complete
LW11040	In Kitchen 2	Kitchen Sink	1.2	Pass	N/A	Testing Complete
LW11041	In hallway next to classroom 1	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11042	In PK3	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW11043	In PK3	Classroom Sink	<1	Pass	N/A	Testing Complete
LW11044	In PK2	Classroom Sink	5.4	Fail	N/A	Testing Complete
LW11045	In PK2	Classroom Sink	2.6	Pass	N/A	Testing Complete
LW11046	In hallway across from Adult Restroom	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11047	In PK Staff Lounge	Teacher's Lounge Sink	<1	Pass	N/A	Testing Complete
LW11048	In PK Staff Lounge	Teacher's Lounge Sink	1.7	Pass	N/A	Testing Complete

LW11049	In PK1	Classroom Sink	<1	Pass	N/A	Testing Complete
LW11050	In PK1	Classroom Sink	<1	Pass	N/A	Testing Complete
LW11051	In PK4	Classroom Sink	<1	Pass	N/A	Testing Complete
LW11052	In PK4	Classroom Sink	<1	Pass	N/A	Testing Complete

KCI TECHNOLOGIES
ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS
936 RIDGEBROOK ROAD • SPARKS, MD 21152 • 410-316-7800 • (FAX) 410-316-7935

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

August 30, 2019

Executive Summary:
MacDonald Knolls Center
10611 Tenbrook Drive
Silver Spring, Maryland 20901

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/29/19
# of Outlets Tested:	1
# of Outlets ≥5 ppb:	0
Low Value (ppb):	1.9
High Value (ppb):	1.9

Project Status

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

Conference Room - Outlet (LW07107) will be placed back into service

KCI TECHNOLOGIES
ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS
936 RIDGEBROOK ROAD • SPARKS, MD 21152 • 410-316-7800 • (FAX) 410-316-7935

August 30, 2019

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

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

Location: MacDonald Knolls Center
10611 Tenbrook Drive
Silver Spring, Maryland 20901

Dear Mr. Mullikin:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of the post-remediation follow-up lead in water testing at MacDonald Knolls Center, located at 10611 Tenbrook Drive in Silver Spring, Maryland 20901.

SCOPE OF SERVICES

One drinking water outlet was remediated at MacDonald Knolls Center due to initial lead levels that exceeded the lead action level of 5 parts per billion (ppb). KCI Technologies, Inc. conducted lead in water post-remediation follow-up testing in accordance with the Maryland Code of Regulations (COMAR) 26.16.07 - Lead in Drinking Water - Public and Nonpublic Schools.

KCI Technologies, Inc. visited the site on 1/29/19 to collect a post-remediation follow-up sample from 1 drinking water outlet that had been replaced. The sample was 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
LW07107		Conference Room		Faucet	29.7	<1.0	1.9	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service

DISCUSSION

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

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

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

Respectfully Submitted,
KCI Technologies, Inc.

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

MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

September 20, 2018

Executive Summary:
MacDonald Knolls Elementary School
10611 Tenbrook Drive
Silver Spring, MD 20901

Round of Testing:	Initial
# of Outlets Tested:	29
# of Outlets ≥ 20 ppb:	1
Low Value (ppb):	< 1.0
High Value (ppb):	29.7
Follow-Up Testing Required (Samples ≥ 20 ppb):	Conference Room (29.7 ppb)

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

Project Status
Testing Complete: Remediation Plan

Conference Room – Replace fixture (LW07107), in addition to supply line and valve located under sink

September 20, 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: MacDonald Knolls Elementary School
10611 Tenbrook Drive
Silver Spring, MD 20901

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 MacDonald Knolls Elementary School, located at 10611 Tenbrook Drive, Silver Spring, MD 20901.

Scope of Services:

PSI conducted lead in water testing at MacDonald Knolls 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 8/31/18, 9/1/18, 9/13/18, and 9/14/18 to collect samples from 29 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 9/14/18.

Samples were submitted to a laboratory for lead in water analysis using current US EPA methodology. The laboratory has been certified by the Maryland Department of the Environment to analyze drinking water for lead.

Results:

There 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)
LW07107	Conference Room	9/1/18	29.7	9/14/18	ND

*ppb = parts per billion
ND = Non Detect

The initial lead in water sample results (9/1/18 and 9/14/18) and 30 second follow up results (9/14/18) 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

Fox Chapel ES Water Test Summary Table

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

Initial Sample Results for MacDonald Knolls Elementary School (9/1/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW07103	1	Classroom		Bubbler - Indoor	5.5	Pass	Testing Complete
LW07104	1	Classroom		Faucet	3.9	Pass	Testing Complete
LW07105	2	Kitchen		Faucet	7.7	Pass	Testing Complete
LW07106	2	Kitchen		Faucet	1.4	Pass	Testing Complete
LW07107		Conference Room		Faucet	29.7	Fail	Follow-Up Testing Needed
LW07108	3	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW07109	3	Classroom		Faucet	3.1	Pass	Testing Complete
LW07110	4	Classroom		Faucet	6.4	Pass	Testing Complete
LW07111	5	Classroom		Bubbler - Indoor	2.5	Pass	Testing Complete
LW07112	5	Classroom		Faucet	7.0	Pass	Testing Complete
LW07113	6	Classroom		Bubbler - Indoor	3.0	Pass	Testing Complete
LW07114	6	Classroom		Faucet	3.3	Pass	Testing Complete
LW07115	7	Classroom		Bubbler - Indoor	4.9	Pass	Testing Complete
LW07116	7	Classroom		Faucet	9.7	Pass	Testing Complete
LW07117	8	Classroom		Bubbler - Indoor	1.8	Pass	Testing Complete
LW07118	8	Classroom		Faucet	6.2	Pass	Testing Complete
LW07119	9	Classroom		Bubbler - Indoor	5.1	Pass	Testing Complete
LW07120	9	Classroom		Faucet	1.8	Pass	Testing Complete
LW07121	10	Classroom		Bubbler - Indoor	2.7	Pass	Testing Complete
LW07122	10	Classroom		Faucet	8.3	Pass	Testing Complete
LW07123		Hallway	Right Of Room 16	Cooler	<1.0	Pass	Testing Complete
LW07125	11	Classroom		Faucet	2.6	Pass	Testing Complete
LW07126	12	Classroom		Faucet	1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW07127	13	Classroom		Faucet	1.4	Pass	Testing Complete
LW07128	16	Classroom		Faucet	1.2	Pass	Testing Complete
LW08099		Hallway	In Front of Conference	Cooler	1.7	Pass	Testing Complete
LW09461	14	Classroom		Faucet	2.3	Pass	Testing Complete
LW09462	15	Classroom		Faucet	1.6	Pass	Testing Complete
LW09463	17	Classroom		Faucet	2.2	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for MacDonald Knolls Elementary School (9/14/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2nd) (PPB)	30 Second Draw (PPB)	Status
LW07107		Conference	Faucet	1.6	ND	Remediation required – replace fixture, in addition to supply line and valve located under sink

*ppb = parts per billion
ND = Non Detect

Note: Fixture(s) with elevated test results were immediately removed from service. Subsequent 2nd round testing was performed on these fixture(s) for further diagnostics for remediation. Because the fixture was shut off after the first test, the subsequent test results may not be representative of an in-use fixture because of stagnant water in the supply line and the operation of shut off valves prior to the tests. All fixtures with elevated test results are to be remediated. After remediation, post remediation testing will be conducted before the fixture is returned to service.