



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

October 30, 2019

Executive Summary:
Rocking Horse Road Center
4910 Macon Road
Rockville, Maryland 20852

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/30/2019
# of Outlets Tested:	2
# of Outlets \geq 5 ppb:	2
Low Value (ppb):	12.2
High Value (ppb):	77.3

Project Status

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

Office 146E - Outlet (M26952) will be removed from service
Office 133 - Outlet (M26962) will have signage affixed



October 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: Rocking Horse Road Center

4910 Macon Road
Rockville, Maryland 20852

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 Rocking Horse Road Center, located at 4910 Macon Road in Rockville, Maryland 20852.

SCOPE OF SERVICES

Two drinking water outlets were remediated at Rocking Horse Road 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 1/30/2019 to collect post-remediation follow-up samples from 2 drinking water outlets that had been replaced. Samples were submitted to a laboratory for lead in water analysis using current US EPA methodology. The laboratory has been certified by the Maryland Department of the Environment to analyze drinking water for lead.

RESULTS

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

Barcode ID	Room Number	Location	Notes	Equipment Type	Initial (ppb)	Flush (ppb)	Post-Remediation Follow-up (ppb)	Post-Remediation Follow-up Pass/Fail	Status
M26952	146E	Office		Faucet	110	4.2	77.3	Fail	Post-remediation follow-up testing complete. Outlet will be removed from service
M26962	133	Office		Faucet	27.7	1.4	12.2	Fail	Post-remediation follow-up testing complete. Outlet will have signage affixed

DISCUSSION

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

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

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

Respectfully Submitted,
KCI Technologies, Inc.



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



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 10, 2018

Executive Summary:
Rocking Horse Road Center
4910 Macon Road,
Rockville, MD 20852

Round of Testing:	Initial
# of Outlets Tested:	25
# of Outlets \geq 20 ppb:	2
Low Value (ppb):	<1.0
High Value (ppb):	110.0
Follow-Up Testing Required (Samples \geq 20 ppb):	Office 146E (110.0 ppb) Office 133 (27.7 ppb)

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

Project Status
Testing Complete: Remediation Plan

Office 146E – Replace fixture (M26952), in addition to supply line and valve located under sink
Office 133 – Replace fixture (M26962), in addition to supply line and valve located under sink



May 10, 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: Rocking Horse Road Center
4910 Macon Road,
Rockville, MD 20852

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 Rocking Horse Road Center, located at 4910 Macon Road, Rockville, MD 20852.

Scope of Services:

PSI conducted lead in water testing at Rocking Horse Road Center 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 3/6/18 and 3/7/18 to collect samples from 25 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 4/13/18.

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)
M26952	Office 146E	3/7/18	110.0	4/13/18	4.2
M26962	Office 133	3/7/18	27.7	4/13/18	1.4

The initial lead in water sample results (3/7/18) and 30 second follow up results (4/13/18) 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

Rocking Horse Road Center Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Rocking Horse Road Center (3/7/18)

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results	Pass/Fail	Status
LW07467	100	Office		Faucet	2.3	Pass	Testing Complete
LW07468	100	Office		Bubbler - Indoor	5.3	Pass	Testing Complete
LW07469	102	Break Room		Faucet	2.0	Pass	Testing Complete
LW07470		Hallway	Across from All Purpose Room	Cooler	1.2	Pass	Testing Complete
LW07471		Hallway	Left of Room 202	Cooler	7.4	Pass	Testing Complete
LW07493	104	Office	Converted Bathroom to Break Area	Faucet	2.5	Pass	Testing Complete
LW07494	113	Health Room		Faucet	7.8	Pass	Testing Complete
LW07495	153B	Break Room		Faucet	<1.0	Pass	Testing Complete
LW07496	141D	Office		Faucet	2.7	Pass	Testing Complete
LW07497		Hallway	Left of Room 133 By Stairway	Cooler	<1.0	Pass	Testing Complete
LW07498		Hallway	In front of 147 Reception	Cooler	8.7	Pass	Testing Complete
LW07499		Hallway	In front of 147 Reception	Cooler	9.1	Pass	Testing Complete
LW07500	103	Building Service - Office		Faucet	3.1	Pass	Testing Complete
M26943	200	Work Room		Faucet	2.0	Pass	Testing Complete
M26950	203	Kitchen Office		Faucet	1.9	Pass	Testing Complete
M26952	146E	Office		Faucet	110.0	Fail	Follow-Up Testing Needed
M26954	144	Break Room		Faucet	2.0	Pass	Testing Complete
M26960	132	Office		Faucet	2.2	Pass	Testing Complete
M26962	133	Office		Faucet	27.7	Fail	Follow-Up Testing Needed
M26968	121	Office		Faucet	5.8	Pass	Testing Complete
M26969	125	Classroom		Faucet	4.2	Pass	Testing Complete
M26973	114	Health Room		Faucet	2.4	Pass	Testing Complete
M26974	114	Health Room		Faucet	5.1	Pass	Testing Complete
M26975	114	Health Room		Faucet	10.5	Pass	Testing Complete
M26976	114	Health Room		Faucet	12.8	Pass	Testing Complete

*ppb = parts per billion

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

Follow Up Sample Results for Rocking Horse Road Center (4/13/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	Initial draw (3 rd) (PPB)	30 Second Draw (PPB)	Status
M26952	146E	Office	Faucet	DNS	59.3	4.2	Remediation required – replace fixture, in addition to supply line and valve located under sink
M26962	133	Office	Faucet	48.9	27.9	1.4	Remediation required – replace fixture, in addition to supply line and valve located under sink

*ppb = parts per billion
DNS = Did Not Sample

Note: Fixture(s) with elevated test results were immediately removed from service. Subsequent 2nd and 3rd round testing was performed on these fixture(s) for further diagnostics for remediation. Because the fixture was shut off after the first test, the subsequent test results may not be representative of an in-use fixture because of stagnant water in the supply line and the operation of shut off valves prior to the tests. All fixtures with elevated test results are to be remediated. After remediation, post remediation testing will be conducted before the fixture is returned to service.