

# Montgomery County Public Schools Lead in Drinking Water Testing Report

**Pine Crest Elementary School  
201 Woodmoor Drive  
Silver Spring, MD 20901**

**Report Date: August 13<sup>th</sup>, 2020**

## 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	2/25/2020
# of Outlets Tested	48
# of Outlets $\geq$ 5 ppb	1

## 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. Due to the Stay-at-Home Order to combat the spread of COVID-19 (coronavirus), no follow-up samples were collected. 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](mailto: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](http://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 Pine Crest ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW00387	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing complete
LW00388	In building services managers room adjacent to GYM	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00389	In building services managers room adjacent to GYM	Classroom Combination Drinking Fountain	1.5	Pass	N/A	Testing complete
LW00390	In break room STFLG	Teachers Lounge Sink	<1	Pass	N/A	Testing complete
LW00495	In health room by administration	Nurses Office Sink	<1	Pass	N/A	Testing complete
LW00496	In music room 12	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00497	In hallway next to work/mail	Drinking Fountain	<1	Pass	N/A	Testing complete
LW00498	In media center office	Classroom Sink	<1	Pass	N/A	Testing complete
LW00500	In hallway adjacent to elevator E	Drinking Fountain	<1	Pass	N/A	Testing complete
LW00501	In classroom 1	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00502	In classroom 1	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00503	In classroom 2	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00504	In classroom 2	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00505	In hallway adjacent to Gym	Drinking Fountain	<1	Pass	N/A	Testing complete
LW00506	In classroom 6	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00507	In classroom 6	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00508	In classroom 7	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00509	In classroom 7	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00510	In classroom 8	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00511	In classroom 8	Classroom Combination Drinking Fountain	1.6	Pass	N/A	Testing complete
LW00512	In classroom 9	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00513	In classroom 9	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00514	In hallway adjacent to elevator E	Drinking Fountain	<1	Pass	N/A	Testing complete
LW00515	In classroom 20	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00516	In classroom 20	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00517	In classroom 19	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00518	In classroom 19	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete

LW00519	In classroom 21	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00521	In classroom 18	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00522	In classroom 18	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00523	In classroom 17	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00524	In classroom 17	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00525	In classroom 16	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00526	In classroom 16	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00527	In classroom 15	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00529	In classroom 30	Classroom Combination Sink	1.1	Pass	N/A	Testing complete
LW00530	In classroom 30	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
LW00535	In hallway adjacent to writing lab 25	Drinking Fountain	<1	Pass	N/A	Testing complete
LW00536	In classroom 29	Classroom Combination Sink	<1	Pass	N/A	Testing complete
LW00538	In classroom 28	Classroom Sink	<1	Pass	N/A	Testing complete
LW00540	In break room 27	Teachers Lounge Sink	<1	Pass	N/A	Testing complete
LW00542	In art AET	Classroom Combination Drinking Fountain	<1	Pass	N/A	Testing complete
M44591	In math 27	Classroom Sink	19.2	Fail	NC	Remediation Action Plan
M44683	In kitchen by kitchen	Kitchen Sink	1.1	Pass	N/A	Testing complete
M44685	In kitchen by kitchen	Kitchen Sink	<1	Pass	N/A	Testing complete
M44682	In kitchen	Kitchen Sink	4.4	Pass	N/A	Testing complete
LW00531	In Classroom 23	Classroom Combination Sink	1.7	Pass	N/A	Testing complete
LW00533	In Classroom 24	Classroom Combination Sink	2.3	Pass	N/A	Testing complete

NC - Not Collected (No follow-up sample collected due to COVID-19 (Coronavirus) Stay-at-Home Order.)



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

August 30, 2019

### Executive Summary:

#### Pine Crest Elementary School

201 Woodmoor Drive

Silver Spring, Maryland 20901

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/25/19
# of Outlets Tested:	2
# of Outlets $\geq 5$ ppb:	0
Low Value (ppb):	1.4
High Value (ppb):	1.6

### Project Status

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

Classroom 30 - Outlet (LW00530) will be placed back into service

Office Next To 27 - Outlet (M44591) will be placed back into service



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: Pine Crest Elementary School**

201 Woodmoor 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 Pine Crest Elementary School, located at 201 Woodmoor Drive in Silver Spring, Maryland 20901.

**SCOPE OF SERVICES**

Two drinking water outlets were remediated at Pine Crest Elementary School 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 1/25/19 and 1/25/19 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
LW00530	30	Classroom		Bubbler - Indoor	28.4	3.7	1.4	Pass	Post-remediation follow-up testing complete. Outlet will be placed back into service
M44591		Office Next To 27		Faucet	31.9	<1.0	1.6	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.



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Respectfully Submitted,  
KCI Technologies, Inc.



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



## MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

May 3, 2018

**Executive Summary:**  
**Pine Crest Elementary School**  
201 Woodmoor Drive  
Silver Spring, MD 20901

Round of Testing:	Initial
# of Outlets Tested:	54
# of Outlets $\geq$ 20 ppb:	2
Low Value (ppb):	< 1.0
High Value (ppb):	31.9
Follow-Up Testing Required (Samples $\geq$ 20 ppb):	Room 30 (28.4 ppb), Office Next to Room 27 (31.9 ppb)

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

**Project Status**  
**Testing Complete: Remediation Plan**

Room 30 – Replace fixture (LW00530), in addition to supply line and valve located under sink  
Office Next to Room 27 – Replace fixture (M44591), in addition to supply line and valve located under sink



May 3, 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: Pine Crest Elementary School  
201 Woodmoor 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 the initial and follow-up lead in water testing at Pine Crest Elementary School, located at 201 Woodmoor Drive in Silver Spring, MD 20901.

**Scope of Services:**

PSI conducted lead in water testing at Pine Crest 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 02/07/18 and 02/08/18 to collect samples from 54 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 4/11/18.

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)
LW00530	Bubbler– Classroom 30	2/08/2018	28.4	4/11/18	3.7
M44591	Faucet – Office Next to Room 27	2/08/2018	31.9	4/11/18	<1.0

The initial lead in water sample results (02/08/18) and 30 second follow up results (4/11/18) 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](mailto:Nand.Kaushik@psiusa.com)

Attachments:            A – Initial Lead in Water Test Summary Table

# ATTACHMENT A

## Pine Crest ES Water Test Summary Table

**Contractor:** Professional Services Industries, Inc.

**Certified Laboratory:** Microbac Laboratories, Inc.

Initial Sample Results for Pine Crest ES (2/08/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00387		Kitchen		Faucet	1.3	Pass	Testing Complete
LW00388		Conference Room		Faucet	1.1	Pass	Testing Complete
LW00389		Conference Room		Bubbler - Indoor	1.5	Pass	Testing Complete
LW00390	STFLG	Break Room		Faucet	<1.0	Pass	Testing Complete
LW00495		Health Room Administration		Faucet	<1.0	Pass	Testing Complete
LW00496		Music		Faucet	<1.0	Pass	Testing Complete
LW00497		Hallway	Next To Work/Mail Rm	Cooler	<1.0	Pass	Testing Complete
LW00498		Media Center Office		Faucet	1.8	Pass	Testing Complete
LW00499		Media Center Office		Bubbler - Indoor	5.4	Pass	Testing Complete
LW00500		Hallway	Next To Elevator	Cooler	<1.0	Pass	Testing Complete
LW00501	1	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00502	1	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00503	2	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00504	2	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW00505		Hallway	In Front Of Gym	Cooler	<1.0	Pass	Testing Complete
LW00506	6	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00507	6	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00508	7	Classroom		Faucet	1.1	Pass	Testing Complete
LW00509	7	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00510	8	Classroom		Faucet	1.2	Pass	Testing Complete
LW00511	8	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00512	9	Classroom		Faucet	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW00513	9	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW00514		Hallway	Next To 2F Elevator	Cooler	<1.0	Pass	Testing Complete
LW00515	20	Classroom		Faucet	1.4	Pass	Testing Complete
LW00516	20	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
LW00517	19	Classroom		Faucet	1.0	Pass	Testing Complete
LW00518	19	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW00519	21	Classroom		Faucet	1.3	Pass	Testing Complete
LW00520	21	Classroom		Bubbler - Indoor	1.5	Pass	Testing Complete
LW00521	18	Classroom		Faucet	1.4	Pass	Testing Complete
LW00522	18	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
LW00523	17	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00524	17	Classroom		Bubbler - Indoor	1.7	Pass	Testing Complete
LW00525	16	Classroom		Faucet	1.2	Pass	Testing Complete
LW00526	16	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW00527	15	Classroom		Faucet	1.2	Pass	Testing Complete
LW00528	15	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW00529	30	Classroom		Faucet	1.1	Pass	Testing Complete
LW00530	30	Classroom		Bubbler - Indoor	28.4	Fail	Follow-Up Testing Needed
LW00531	23	Classroom		Faucet	6.0	Pass	Testing Complete
LW00533	24	Classroom		Faucet	5.7	Pass	Testing Complete
LW00535		Hallway	In Front Of Room 25	Cooler	<1.0	Pass	Testing Complete
LW00536	29	Classroom		Faucet	1.6	Pass	Testing Complete
LW00538	28	Classroom		Faucet	<1.0	Pass	Testing Complete
LW00539	28	Classroom		Bubbler - Indoor	8.3	Pass	Testing Complete
LW00540	27	Break Room		Faucet	<1.0	Pass	Testing Complete
LW00541	ART	Art		Faucet	1.0	Pass	Testing Complete
LW00542	ART	Art		Bubbler - Indoor	<1.0	Pass	Testing Complete
M44591		Office	Next To Room 27	Faucet	31.9	Fail	Follow-Up Testing Needed

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M44676		Work Room Admin		Faucet	12.8	Pass	Testing Complete
M44682		Kitchen		Faucet	9.1	Pass	Testing Complete
M44683		Kitchen		Faucet	1.5	Pass	Testing Complete
M44685		Kitchen		Faucet	<1.0	Pass	Testing Complete

\*ppb = parts per billion

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

Follow Up Sample Results for Pine Crest ES (4/11/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 <sup>nd</sup> ) (PPB)	Initial draw (3 <sup>rd</sup> ) (PPB)	30 Second Draw (PPB)	Status
LW00530	30	Classroom	Bubbler - Indoor	123.0	41.8	3.7	Remediation required – replace fixture, in addition to supply line and valve located under sink
M44591		Office – Next to Room 27	Faucet	188.0	18.6	<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 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.