

Montgomery County Public Schools Lead in Drinking Water Testing Report

**Damascus Elementary School
10201 Bethesda Church Road
Damascus, MD 20872**

Report Date: February 8th, 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	10/20/2021
# of Outlets Tested	30
# of Outlets \geq 5 ppb	9

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 Damascus ES

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW03859	In all purpose room by kitchen	Bottle Filler	<1	Pass	N/A	Testing Complete
LW05011	In all purpose room by Kitchen	Drinking Fountain	<1	Pass	N/A	Testing Complete
M23140	In classroom 1	Classroom Sink	2.8	Pass	N/A	Testing Complete
LW04920	In classroom 10	Classroom Combination Sink	4.5	Pass	N/A	Testing Complete
M23130	In classroom 103	Classroom Sink	5.7	Fail	4.2	Testing Complete
M23148	In classroom 11	Classroom Sink	9.2	Fail	8.3	Testing Complete
M23170	In classroom 12	Classroom Combination Sink	2.8	Pass	N/A	Testing Complete
M23172	In classroom 13	Classroom Combination Sink	2.6	Pass	N/A	Testing Complete
M23178	In classroom 14	Classroom Sink	3.8	Pass	N/A	Testing Complete
M23176	In classroom 15	Classroom Sink	1.1	Pass	N/A	Testing Complete
M23185	In classroom 17	Classroom Combination Sink	6.0	Fail	4.6	Testing Complete
M23142	In classroom 2	Classroom Sink	5.1	Fail	5.9	Testing Complete
M23161	In classroom 6	Classroom Sink	4.5	Pass	N/A	Testing Complete
LW04918	In classroom 7	Classroom Sink	2.3	Pass	N/A	Testing Complete
M23159	In classroom 8	Classroom Combination Sink	3.5	Pass	N/A	Testing Complete
M23153	In classroom 9	Classroom Combination Sink	6.3	Fail	5.8	Testing Complete
M23137	In classroom K1	Classroom Combination Sink	2.2	Pass	N/A	Testing Complete
M23132	In classroom K2	Classroom Combination Sink	<1	Pass	N/A	Testing Complete
LW10659	In hallway	Bottle Filler	<1	Pass	N/A	Testing Complete
M23175	In hallway 15 outside CR 15	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10657	In hallway by classroom 15	Bottle Filler	<1	Pass	N/A	Testing Complete
LW05016	In health room by office	Nurses Office Sink	<1	Pass	N/A	Testing Complete
M23196	In Kitchen	Kitchen Sink	11	Fail	8.4	Testing Complete
M23195	In kitchen	Kitchen Sink	2.3	Pass	N/A	Testing Complete
M23192	In Kitchen	Kitchen Sink	10.1	Fail	10.7	Testing Complete
M23193	In Kitchen	Kitchen Sink	8.1	Fail	7.4	Testing Complete
M23194	In Kitchen	Kitchen Sink	6.5	Fail	7.3	Testing Complete
M23197	In Kitchen	Kitchen Sink	2.1	Pass	N/A	Testing Complete
M23187	In resource	Classroom Sink	3.2	Pass	N/A	Testing Complete
LW05013	In staff lounge	Teachers Lounge Sink	2.8	Pass	N/A	Testing Complete



Montgomery County Public Schools Lead in Drinking Water Testing 2018

April 30, 2018

Executive Summary:

Damascus Elementary School

10201 Bethesda Church Road

Damascus, Maryland 20872

Round of Testing:	Initial
# of Outlets Tested:	40
# of Outlets ≥ 20 ppb:	2
Low Value (ppb):	<1.0
High Value (ppb):	175
Follow-Up Testing Required (Samples ≥ 20 ppb):	Classroom 11 (30.7 ppb) Classroom 12 (175 ppb)

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

Project Status:

Testing Complete: Remediation Plan

Classroom 11 - Replace fixture (M23149), in addition to supply line and valve located under sink

Classroom 12 - Replace fixture (M23171), in addition to supply line and valve located under sink



April 30, 2018

Mr. Brian Mullikin, MS
Environmental Team Leader
Montgomery County Public Schools
Division of Maintenance
Gaithersburg, Maryland 20879

Re: Drinking Water Testing

KCI Job #1214634191

Location: Damascus Elementary School

10201 Bethesda Church Road
Damascus, Maryland 20872

Dear Mr. Mullikin:

KCI Technologies, Inc. (KCI) is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial and follow-up lead in water testing at Damascus Elementary School, located at 10201 Bethesda Church Road in Damascus, Maryland 20872.

SCOPE OF SERVICES

KCI conducted lead in water testing at Damascus 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.

KCI visited the site on 3/19/2018 and 3/20/2018 to collect samples from 40 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. On 4/13/2018, two 30 second follow-up samples were collected.

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 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)
M23149	Faucet - Classroom 11	3/20/2018	30.7	4/13/2018	2.1
M23171	Bubbler-Indoor - Classroom 12	3/20/2018	175	4/13/2018	4.5

The initial lead in water sample results (3/20/2018) and 30 second follow up results (4/13/2018) 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,
KCI Technologies, Inc.



Kamau McAbee
MDE Certified Water Sampler #8281KM

Attachment:

A- Lead in Water Test Summary Table

ATTACHMENT A

Lead in Water Test Summary Table

ATTACHMENT A

Lead in Water Test Summary Table

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Damascus Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Date Collected	Results (PPB)*	Pass/Fail	Status
LW04918	7	Classroom		Faucet	3/20/18	4.0	Pass	Testing Complete
LW04920	10	Classroom		Faucet	3/20/18	3.3	Pass	Testing Complete
LW04921	K1	Classroom		Bubbler - Indoor	3/20/18	2.4	Pass	Testing Complete
LW04922		Hallway	Across From 11	Cooler	3/20/18	2.1	Pass	Testing Complete
LW05011		All Purpose Room		Cooler	3/20/18	10.2	Pass	Testing Complete
LW05013		Break Room		Faucet	3/20/18	<1.0	Pass	Testing Complete
LW05014		Break Room		Instant Hot Water	3/20/18	<1.0	Pass	Testing Complete
LW05015		Work Room		Faucet	3/20/18	1.8	Pass	Testing Complete
LW05016		Health Room Office		Faucet	3/20/18	1.8	Pass	Testing Complete
LW05017		Hallway Office	In Front Of	Bubbler - Indoor	3/20/18	<1.0	Pass	Testing Complete
M23118		Media Center Media Center		Faucet	3/20/18	7.9	Pass	Testing Complete
M23129	4	Classroom		Faucet	3/20/18	5.7	Pass	Testing Complete
M23130	5	Closet Classroom		Faucet	3/20/18	3.6	Pass	Testing Complete
M23132	K2	Classroom		Faucet	3/20/18	3.3	Pass	Testing Complete
M23137	K1	Classroom		Faucet	3/20/18	3.8	Pass	Testing Complete
M23140	1	Classroom		Faucet	3/20/18	4.8	Pass	Testing Complete
M23141	CR1	Hallway	Outside Of	Cooler	3/20/18	1.1	Pass	Testing Complete
M23142	2	Classroom		Faucet	3/20/18	7.0	Pass	Testing Complete
M23143	2	Classroom		Bubbler - Indoor	3/20/18	2.7	Pass	Testing Complete
M23149	11	Classroom		Faucet	3/20/18	30.7	Fail	Follow-Up Testing Needed
M23153	9	Classroom		Faucet	3/20/18	5.0	Pass	Testing Complete
M23158	7	Classroom		Bubbler - Indoor	3/20/18	6.4	Pass	Testing Complete
M23159	8	Classroom		Faucet	3/20/18	4.8	Pass	Testing Complete
M23161	6	Classroom		Faucet	3/20/18	3.2	Pass	Testing Complete
M23162	6	Classroom		Bubbler - Indoor	3/20/18	5.6	Pass	Testing Complete
M23163		Hallway	Outside Gym	Cooler	3/20/18	1.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Date Collected	Results (PPB)*	Pass/Fail	Status
M23170	12	Classroom		Faucet	3/20/18	9.5	Pass	Testing Complete
M23171	12	Classroom		Bubbler - Indoor	3/20/18	175	Fail	Follow-Up Testing Needed
M23172	13	Classroom		Faucet	3/20/18	1.9	Pass	Testing Complete
M23175	15	Hallway	Outside CR 15	Cooler	3/20/18	<1.0	Pass	Testing Complete
M23176	15	Classroom		Faucet	3/20/18	1.0	Pass	Testing Complete
M23178	14	Classroom		Faucet	3/20/18	3.5	Pass	Testing Complete
M23185	17	Classroom		Faucet	3/20/18	9.2	Pass	Testing Complete
M23187		Resource Rm		Faucet	3/20/18	4.0	Pass	Testing Complete
M23192		Kitchen		Faucet	3/20/18	7.3	Pass	Testing Complete
M23193		Kitchen		Faucet	3/20/18	19.4	Pass	Testing Complete
M23194		Kitchen		Faucet	3/20/18	7.9	Pass	Testing Complete
M23195		Kitchen		Faucet	3/20/18	4.9	Pass	Testing Complete
M23196		Kitchen		Faucet	3/20/18	16.2	Pass	Testing Complete
M23197		Kitchen		Faucet	3/20/18	5.0	Pass	Testing Complete

*PPB = parts per billion

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Results for Damascus Elementary School

Barcode ID	Room #	Location	Equipment Type	Date Collected	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M23149	11	Classroom	Faucet	3/20/18	N/A	8.4	2.1	Remediation required – replace fixture, in addition to supply line and valve located under sink
M23171	12	Classroom	Bubbler - Indoor	3/20/18	N/A	55.7	4.5	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.