## Montgomery County Public Schools Lead in Drinking Water Testing Report

### Tilden Middle School 11211 Old Georgetown Road Rockville, MD 20852

Report Date: February 10<sup>th</sup>, 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	12/02/2021
# of Outlets Tested	67
# of Outlets ≥ 5 ppb	0

#### **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 <a href="https://www.epa.gov/lead">www.epa.gov/lead</a>.
- 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 Tilden MS

Fixture Barcode	Fixture Location	Fixture Type	Initial Results (ppb)	Pass/Fail	Follow up Results (ppb)	Status
LW10116	In boys locker room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW05466	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW05467	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW05468	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW100117	In hallway next to girls 2023	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10062	In hallway next to girls 2097	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10063	In hallway next to girls 2097	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10065	In classroom 2044	Classroom Sink	<1	Pass	N/A	Testing Complete
LW10066	In classroom 2044	Classroom Sink	<1	Pass	N/A	Testing Complete
LW10067	In classroom 2044	Classroom Sink	<1	Pass	N/A	Testing Complete
LW10070	In gymnasium 2072	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10071	In gymnasium 2072	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10072	In gymnasium 2072	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10073	In hallway next girls 2023	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10074	In hallway next to girls 2097	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10075	In hallway next to 2023	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10076	In hallway next to 3091	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10077	In hallway next to 3091	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10078	In hallway next to 3091	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10079	In hallway next to girls 3003	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10080	In hallway next to girls 3003	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10081	In hallway next to girls 3003	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10082	In hallway next to girls 3023	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10083	In hallway next to girl's locker room 3023	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10085	In hallway next to girls 3023	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10086	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW10087	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW10114	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW10115	In kitchen	Ice Machine	<1	Pass	N/A	Testing Complete
LW10119	In hallway adjacent to gym	Drinking Fountain	<1	Pass	N/A	Testing Complete

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LW10192	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW10193	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW10194	In kitchen	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW10195	In girls locker room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10196	In girls locker room	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10197	In girls locker room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10198	In hallway next to girls locker room	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10199	In hallway next to girls locker room	Bottle Filler	<1	Pass	N/A	Testing
LW10200	In hallway next to girls locker room	Drinking Fountain	<1	Pass	N/A	Complete Testing Complete
LW10201	In boys locker room	Bottle Filler	<1	Pass	N/A	Testing Complete
LW10202	In boys locker room	Drinking Fountain	<1	Pass	N/A	Testing
LW10203	In hallway adjacent to gym	Drinking Fountain	<1	Pass	N/A	Complete Testing
LW10279	In backstage room	Classroom Sink	<1	Pass	N/A	Complete Testing
LW11168	In health room 1100	Classroom Sink	<1	Pass	N/A	Complete Testing
LW11169	In health room 1100	Drinking Fountain	<1	Pass	N/A	Complete Testing
LW11170	In gymnasium	Drinking Fountain	<1	Pass	N/A	Complete Testing Complete
LW11171	In gymnasium	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11172	In gymnasium	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11177	In hallway next to 1113	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11178	In hallway next to girls 1113	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11179	In hallway next to girls 1113	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11204	In hallway adjacent to gym	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11273	In hallway adjacent to main office	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11274	In work room 1000C	Classroom Sink	<1	Pass	N/A	Testing Complete
LW11275	In hallway adjacent to main office	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11276	In main office hallway	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11278	In classroom 1080	Classroom Sink	<1	Pass	N/A	Testing Complete
LW11279	In backstage	Kitchen Sink	<1	Pass	N/A	Testing Complete
LW11280	In cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW11281	In cafeteria	Bottle Filler	<1	Pass	N/A	Testing Complete
LW11282	In cafeteria	Drinking Fountain	<1	Pass	N/A	Testing Complete
LW10068	In classroom 2044A	Classroom Sink	1.1	Pass	N/A	Testing Complete
LW10069	In work room 2066	Classroom Sink	1.3	Pass	N/A	Testing Complete

LW11277	In work room 1064	Classroom Combination Sink	1.3	Pass	N/A	Testing Complete
LW11173	In prep room 1045A inside 1049	Classroom Sink	1.5	Pass	N/A	Testing Complete
LW10118	In work room 3052	Classroom Sink	2.4	Pass	N/A	Testing Complete
LW10225	In classroom 1102A	Teacher's Lounge Sink	4.9	Pass	N/A	Testing Complete



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

October 30, 2019

## **Executive Summary:** Tilden Middle School

11211 Old Georgetown Road Rockville, Maryland 20852

Round of Testing:	Post-Remediation Follow-up
Sample Date	1/24/2019
# of Outlets Tested:	1
# of Outlets $\geq$ 5 ppb:	1
Low Value (ppb):	24
High Value (ppb):	24

#### **Project Status**

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

Home Economics A133 - Outlet (M40975) will be removed from service



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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: Tilden Middle School** 11211 Old Georgetown 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 Tilden Middle School, located at 11211 Old Georgetown Road in Rockville, Maryland 20852.

#### **SCOPE OF SERVICES**

One drinking water outlet was remediated at Tilden Middle 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 1/24/2019 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	Room			Equipment	Initial	Flush	Post- Remediation Follow-up	Post- Remediation Follow-up	
ID	Number	Location	Notes	Type	(ppb)	(ppb)	(ppb)	Pass/Fail	Status
M40975	A133	Home Economics		Faucet	48.1	5	24	Fail	Post-remediation follow-up testing complete. Outlet will be removed from 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.

Farm Flell-

Kamau McAbee

MDE Certified Water Sampler #8281KM

KCI Job #1214634186



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# **Montgomery County Public Schools Lead in Drinking Water Testing 2018**

April 27, 2018

## **Executive Summary:** Tilden Middle School

11211 Old Georgetown Road Rockville, Maryland 20852

Round of Testing:	Initial
# of Outlets Tested:	36
# of Outlets ≥20 ppb:	1
Low Value (ppb):	<1.0
High Value (ppb):	48.1
Follow-Up Testing Required	Home Economics (48.1 ppb)
(Samples $\geq 20$ ppb):	

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

#### **Project Status:**

**Testing Complete: Remediation Plan** 

Home Economics - Replace fixture (M40975), in addition to supply line and valve located under sink



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April 27, 2018

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

Re: Drinking Water Testing

KCI Job #1214634189

**Location: Tilden Middle School** 11211 Old Georgetown 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 initial and follow-up lead in water testing at Tilden Middle School, located at 11211 Old Georgetown Road in Rockville, Maryland 20852.

#### **SCOPE OF SERVICES**

KCI conducted lead in water testing at Tilden Middle 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 3/1/2018 and 3/2/2018 to collect samples from 36 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 4/12/2018, one 30 second follow-up sample was 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 was one result 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:

					30 Second Follow Up
		Date	Initial Sample	Date	Sample
Barcode ID	Sample Location	Collected	Result (ppb)	Collected	Result (ppb)
M40975	Faucet - Home	3/2/2018	48.1	4/12/2018	5.0
	Economics				

The initial lead in water sample results (3/2/2018) and 30 second follow up results (4/12/2018) 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.

Kara Plelle-

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 Tilden Middle School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW05466		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW05467		Kitchen		Faucet	3.5	Pass	Testing Complete
LW05468		Kitchen		Faucet	1.6	Pass	Testing Complete
LW05469		Kitchen		Faucet	10.9	Pass	Testing Complete
LW05470		Kitchen		Faucet	8.1	Pass	Testing Complete
LW05471		Kitchen		Faucet	5.2	Pass	Testing Complete
LW05472		Kitchen		Faucet	14.9	Pass	Testing Complete
LW05473		Kitchen		Icemaker	<1.0	Pass	Testing Complete
LW05474	A112	Office Office		Faucet	2.0	Pass	Testing Complete
LW05475		Hallway	Across From Office	Cooler	<1.0	Pass	Testing Complete
LW05476		Hallway	Across From Office	Cooler	<1.0	Pass	Testing Complete
LW05477	A133	Home Economics		Faucet	<1.0	Pass	Testing Complete
LW05478	A133	Home Economics		Faucet	1.1	Pass	Testing Complete
LW05479	A133	Home Economics		Faucet	5.5	Pass	Testing Complete
LW05480	A133	Home Economics		Faucet	1.5	Pass	Testing Complete
LW05481	A133	Home Economics		Faucet	3.9	Pass	Testing Complete
LW05482		Hallway	Across From Rm D109	Cooler	<1.0	Pass	Testing Complete
LW05483		Hallway	Next To Rm A159	Cooler	<1.0	Pass	Testing Complete
LW05484	A160	Classroom		Faucet	3.1	Pass	Testing Complete
LW05485	A160	Classroom		Faucet	5.9	Pass	Testing Complete
LW05486		Hallway	Next To Rm C102	Cooler	<1.0	Pass	Testing Complete
LW05487		Locker Room - Boys		Cooler	<1.0	Pass	Testing Complete
LW05488	B201	Locker Room - Girls		Cooler	<1.0	Pass	Testing Complete
LW05489	_	Hallway	Across From Rm A202	Cooler	<1.0	Pass	Testing Complete
LW05491		Hallway	Across From Rm A232	Cooler	<1.0	Pass	Testing Complete
LW05492	A251	Classroom		Faucet	9.1	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW05494	A253	Break Room		Faucet	2.7	Pass	Testing Complete
LW05608		Cafeteria		Cooler	<1.0	Pass	Testing Complete
M40697	A251	Classroom		Faucet	1.7	Pass	Testing Complete
M40962	A175	Work Room Media Center		Faucet	3.1	Pass	Testing Complete
M40975	A133	Home Economics		Faucet	48.1	Fail	Testing Complete
M40986	A136	Classroom		Faucet	3.7	Pass	Testing Complete
M40992	A137	Classroom		Faucet	12.9	Pass	Testing Complete
M41011	A165	Office Child Development		Faucet	<1.0	Pass	Testing Complete
M41045	A128	Health Room Health		Faucet	1.7	Pass	Testing Complete

<sup>\*</sup>PPB = parts per billion

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

#### Follow Up Sample Result for Tilden Middle School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
M40975	A133	Home Economics	Faucet	59.0	46.3	5.0	Remediation required – replace fixture, in addition to supply line and valve located under sink

<sup>\*</sup>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.