



Montgomery County Public Schools Lead in Drinking Water Testing 2018

June 11, 2018

Executive Summary:
Clopper Mill Elementary School
18501 Cinnamon Drive
Germantown, Maryland 20874

Round of Testing:	Initial
# of Outlets Tested:	60
# of Outlets ≥ 20 ppb:	4
Low Value (ppb):	<1.0
High Value (ppb):	31.3
Follow-Up Testing Required (Samples ≥ 20 ppb):	Hall Across From Rm 4 (31.3 ppb) Classroom 6 (24.8 ppb) Admin Work Room (21.2 ppb) Cafeteria (26.0 ppb)

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	4

Project Status:
Testing Complete: Remediation Plan

- Hall Across From Rm 4 - Replace fixture (LW06199), in addition to supply line and valve located under sink
- Classroom 6 - Replace fixture (LW06204), in addition to supply line and valve located under sink
- Admin Work Room - Replace fixture (M02277), in addition to supply line and valve located under sink
- Cafeteria - Replace fixture (M02282), in addition to supply line and valve located under sink



June 11, 2018

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

Re: Drinking Water Testing

KCI Job #1214634193

Location: Clopper Mill Elementary School

18501 Cinnamon Drive
Germantown, Maryland 20874

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 Clopper Mill Elementary School, located at 18501 Cinnamon Drive in Germantown, Maryland 20874.

SCOPE OF SERVICES

KCI conducted lead in water testing at Clopper Mill 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 4/24/2018 and 4/25/2018 to collect samples from 60 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 6/5/2018, four 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 four 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)
LW06199	Cooler - Hall Across From Rm 4	4/25/2018	31.3	6/5/2018	11.3
LW06204	Faucet - Classroom 6	4/25/2018	24.8	6/5/2018	1.9
M02277	Faucet - Admin Work Room	4/25/2018	21.2	6/5/2018	1.4
M02282	Faucet - Cafeteria	4/25/2018	26.0	6/5/2018	ND

The initial lead in water sample results (4/25/2018) and 30 second follow up results (6/5/2018) 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

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Lead in Water Test Summary Table

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Clopper Mill Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW06184		Kitchen Break Room		Faucet	1.1	Pass	Testing Complete
LW06185		Kitchen Cafeteria		Faucet	3.8	Pass	Testing Complete
LW06186		Kitchen Cafeteria		Faucet	3.4	Pass	Testing Complete
LW06187	K1	Classroom		Faucet	4.3	Pass	Testing Complete
LW06188	K1	Classroom		Bubbler - Indoor	1.4	Pass	Testing Complete
LW06189	K2	Classroom		Faucet	8.7	Pass	Testing Complete
LW06190	K2	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
LW06191	K3	Classroom		Faucet	5.8	Pass	Testing Complete
LW06192	K3	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete
LW06193	K4	Classroom		Faucet	3.1	Pass	Testing Complete
LW06194	K4	Classroom		Bubbler - Indoor	1.6	Pass	Testing Complete
LW06195	2	Classroom		Faucet	9.8	Pass	Testing Complete
LW06197	3	Classroom		Faucet	16.3	Pass	Testing Complete
LW06198	3	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW06199	4	Hallway	Across From	Cooler	31.3	Fail	Follow Up Testing Needed
LW06200	4	Hallway	Across From	Cooler	11.9	Pass	Testing Complete
LW06201	4	Classroom		Faucet	3.1	Pass	Testing Complete
LW06202	4	Classroom		Bubbler - Indoor	3.9	Pass	Testing Complete
LW06203	5B	Hallway	Next To	Cooler	<1.0	Pass	Testing Complete
LW06204	6	Classroom		Faucet	24.8	Fail	Follow Up Testing Needed
LW06205	6	Classroom		Bubbler - Indoor	10.4	Pass	Testing Complete
LW06206	7	Classroom		Faucet	15.8	Pass	Testing Complete
LW06207	7	Classroom		Bubbler - Indoor	4.8	Pass	Testing Complete
LW06208	8	Classroom		Faucet	2	Pass	Testing Complete
LW06210	9	Classroom		Faucet	5	Pass	Testing Complete
LW06211	9	Classroom		Bubbler - Indoor	3.6	Pass	Testing Complete
LW06212	10	Classroom		Faucet	6.1	Pass	Testing Complete
LW06213	10	Classroom		Bubbler - Indoor	2.3	Pass	Testing Complete
LW06214	11	Classroom		Faucet	1.9	Pass	Testing Complete
LW06215	11	Classroom		Bubbler - Indoor	1.9	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW06216	12	Classroom		Faucet	4.1	Pass	Testing Complete
LW06217	12	Classroom		Bubbler - Indoor	2.5	Pass	Testing Complete
LW06218	13	Classroom		Faucet	3.2	Pass	Testing Complete
LW06219	13	Classroom		Bubbler - Indoor	3.2	Pass	Testing Complete
LW06220	14	Classroom		Faucet	18.6	Pass	Testing Complete
LW06221	14	Classroom		Bubbler - Indoor	4.8	Pass	Testing Complete
LW06222	16	Classroom		Faucet	7.7	Pass	Testing Complete
LW06223	16	Classroom		Bubbler - Indoor	5.8	Pass	Testing Complete
LW06225	17	Hallway	Across From	Cooler	3.2	Pass	Testing Complete
LW06226	17	Classroom		Faucet	9.2	Pass	Testing Complete
LW06228	18	Classroom		Faucet	8.1	Pass	Testing Complete
LW06229	18	Classroom		Bubbler - Indoor	3.2	Pass	Testing Complete
LW06230	19	Classroom		Faucet	12.1	Pass	Testing Complete
LW06231	19	Classroom		Bubbler - Indoor	10.8	Pass	Testing Complete
LW06232	19	Hallway	Across From	Cooler	2.0	Pass	Testing Complete
LW06233	19	Hallway	Across From	Cooler	3.3	Pass	Testing Complete
LW06234	20	Classroom		Faucet	5.7	Pass	Testing Complete
LW06236	21	Classroom		Faucet	8.3	Pass	Testing Complete
LW06238	22	Classroom		Faucet	5.7	Pass	Testing Complete
LW06240	23	Classroom		Faucet	9.7	Pass	Testing Complete
LW06241	23	Classroom		Bubbler - Indoor	3.3	Pass	Testing Complete
LW06242	24	Classroom		Bubbler - Indoor	4.6	Pass	Testing Complete
M02277		Work Room Admin		Faucet	21.2	Fail	Follow Up Testing Needed
M02279		Health Administration		Faucet	6.6	Pass	Testing Complete
M02282		Kitchen Cafeteria		Faucet	26.0	Fail	Follow Up Testing Needed
M02293		Work Room Media Center		Faucet	5.3	Pass	Testing Complete
M02295	28	Hallway	Outside Of	Cooler	1.2	Pass	Testing Complete
M02296	28	Hallway	Outside Of	Cooler	<1.0	Pass	Testing Complete
M02298	24	Classroom		Faucet	10.3	Pass	Testing Complete
M02349	5B	Hallway	Next To	Cooler	1.4	Pass	Testing Complete

*PPB = parts per billion

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Results for Clopper Mill Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW06199	4	Hallway	Cooler	N/A	6.1	11.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW06204	6	Classroom	Faucet	N/A	10.5	1.9	Remediation required – replace fixture, in addition to supply line and valve located under sink
M02277		Work Room Admin	Faucet	N/A	14.2	1.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
M02282		Kitchen Cafeteria	Faucet	N/A	6.2	ND	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.