



Montgomery County Public Schools Lead in Drinking Water Testing 2018

May 11, 2018

Executive Summary:

Stonegate Elementary School

14811 Notley Road

Silver Spring, Maryland 20905

Round of Testing:	Initial
# of Outlets Tested:	54
# of Outlets ≥ 20 ppb:	5
Low Value (ppb):	<1.0
High Value (ppb):	163
Follow-Up Testing Required (Samples ≥ 20 ppb):	Classroom 24 (37.2 ppb) Classroom 15 (68.8 ppb) Classroom 23 (29.6 ppb) Work Room (25.2 ppb) Office Gymnasium (163 ppb)

Round of Testing:	Follow-Up - 30 sec draw
# of Outlets Tested:	5

Project Status:

Testing Complete: Remediation Plan

- Classroom 24 - Replace fixture (LW04970), in addition to supply line and valve located under sink
- Classroom 15 - Replace fixture (LW04988), in addition to supply line and valve located under sink
- Classroom 23 - Replace fixture (M13940), in addition to supply line and valve located under sink
- Work Room - Replace fixture (M13970), in addition to supply line and valve located under sink
- Office Gymnasium - Replace fixture (M45344), in addition to supply line and valve located under sink



May 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 #1214634191

Location: Stonegate Elementary School

14811 Notley Road
Silver Spring, Maryland 20905

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 Stonegate Elementary School, located at 14811 Notley Road in Silver Spring, Maryland 20905.

SCOPE OF SERVICES

KCI conducted lead in water testing at Stonegate 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 4/5/2018 and 4/6/2018 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. On 5/1/2018, five 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 five 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)
LW04970	Bubbler - Indoor - Classroom 24	4/6/2018	37.2	5/1/2018	1.3
LW04988	Bubbler - Indoor - Classroom 15	4/6/2018	68.8	5/1/2018	4.6
M13940	Faucet - Classroom 23	4/6/2018	29.6	5/1/2018	7.4
M13970	Faucet - Work Room	4/6/2018	25.2	5/1/2018	1.8
M45344	Faucet - Office Gymnasium	4/6/2018	163	5/1/2018	6.0

The initial lead in water sample results (4/6/2018) and 30 second follow up results (5/1/2018) 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 Stonegate Elementary School

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04958		Kitchen		Faucet	16.0	Pass	Testing Complete
LW04959		Kitchen		Faucet	4.0	Pass	Testing Complete
LW04960		Kitchen		Faucet	8.9	Pass	Testing Complete
LW04961	16	Classroom		Faucet	6.0	Pass	Testing Complete
LW04963	17	Classroom		Bubbler - Indoor	9.7	Pass	Testing Complete
LW04964	18	Classroom		Bubbler - Indoor	8.4	Pass	Testing Complete
LW04965	19	Classroom		Bubbler - Indoor	11.2	Pass	Testing Complete
LW04966	20	Classroom		Bubbler - Indoor	9.5	Pass	Testing Complete
LW04967	21	Classroom		Bubbler - Indoor	2.6	Pass	Testing Complete
LW04968	21	Classroom		Bubbler - Indoor	4.7	Pass	Testing Complete
LW04969	23	Classroom		Bubbler - Indoor	9.9	Pass	Testing Complete
LW04970	24	Classroom		Bubbler - Indoor	37.2	Fail	Follow Up Testing Needed
LW04971	25	Classroom		Bubbler - Indoor	5.7	Pass	Testing Complete
LW04972	26	Classroom		Bubbler - Indoor	10.3	Pass	Testing Complete
LW04973		Hallway	Next To Bldg Scvs 2nd Floor	Cooler	<1.0	Pass	Testing Complete
LW04974	1	Classroom		Bubbler - Indoor	12.9	Pass	Testing Complete
LW04976	3	Classroom		Faucet	8.2	Pass	Testing Complete
LW04977	3	Classroom		Bubbler - Indoor	8.2	Pass	Testing Complete
LW04978	4	Classroom		Bubbler - Indoor	8.7	Pass	Testing Complete
LW04980	6	Classroom		Bubbler - Indoor	16.4	Pass	Testing Complete
LW04981	10	Classroom		Faucet	2.1	Pass	Testing Complete
LW04982	11	Classroom		Faucet	10.7	Pass	Testing Complete
LW04983	11	Classroom		Bubbler - Indoor	9.0	Pass	Testing Complete
LW04984	12	Classroom		Bubbler - Indoor	8.2	Pass	Testing Complete
LW04985	13	Classroom		Bubbler - Indoor	7.0	Pass	Testing Complete

Barcode ID	Room #	Location	Location Notes	Equipment Type	Results (PPB)*	Pass/Fail	Status
LW04987	15	Classroom		Bubbler - Indoor	15.9	Pass	Testing Complete
LW04988	15	Classroom		Bubbler - Indoor	68.8	Fail	Follow Up Testing Needed
LW04989		Hallway	Next To 1st Floor Support Room	Cooler	<1.0	Pass	Testing Complete
LW04990		Hallway Gymnasium	Gym Lobby	Cooler	<1.0	Pass	Testing Complete
M13895	14	Classroom		Faucet	9.1	Pass	Testing Complete
M13897	13	Classroom		Faucet	7.0	Pass	Testing Complete
M13899	12	Classroom		Faucet	9.4	Pass	Testing Complete
M13905	6	Classroom		Faucet	15.6	Pass	Testing Complete
M13907	5	Classroom		Faucet	6.4	Pass	Testing Complete
M13909	4	Classroom		Faucet	4.2	Pass	Testing Complete
M13916	2	Classroom		Faucet	2.8	Pass	Testing Complete
M13917	1	Classroom		Faucet	11.4	Pass	Testing Complete
M13932	27	Classroom		Faucet	9.0	Pass	Testing Complete
M13934	26	Classroom		Faucet	6.8	Pass	Testing Complete
M13936	25	Classroom		Faucet	8.9	Pass	Testing Complete
M13938	24	Classroom		Faucet	4.5	Pass	Testing Complete
M13940	23	Classroom		Faucet	29.6	Fail	Follow Up Testing Needed
M13944	21	Classroom		Faucet	9.9	Pass	Testing Complete
M13946	20	Classroom		Faucet	19.6	Pass	Testing Complete
M13948	19	Classroom		Faucet	15.9	Pass	Testing Complete
M13950	18	Classroom		Faucet	12.2	Pass	Testing Complete
M13952	17	Classroom		Faucet	8.4	Pass	Testing Complete
M13957		Break Room		Faucet	7.8	Pass	Testing Complete
M13958		Hallway	Beside Staff Lounge	Cooler	2.2	Pass	Testing Complete
M13960		Media Center		Faucet	6.5	Pass	Testing Complete
M13970		Work Room	Front Office Work Room	Faucet	25.2	Fail	Follow Up Testing Needed
M45344		Office Gymnasium		Faucet	163	Fail	Follow Up Testing Needed

*PPB = parts per billion

Contractor: KCI Technologies, Inc.
Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Results for Stonegate Elementary School

Barcode ID	Room #	Location	Equipment Type	Initial Draw (2nd) (PPB)	Initial Draw (3rd) (PPB)	30 Second Draw (PPB)*	Status
LW04970	24	Classroom	Bubbler - Indoor	N/A	4.4	1.3	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW04988	15	Classroom	Bubbler - Indoor	N/A	18.2	4.6	Remediation required – replace fixture, in addition to supply line and valve located under sink
M13940	23	Classroom	Faucet	N/A	18.2	7.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
M13970		Work Room	Faucet	N/A	10.4	1.8	Remediation required – replace fixture, in addition to supply line and valve located under sink
M45344		Office Gymnasium	Faucet	N/A	64.5	6.0	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.