Montgomery County Public Schools Lead in Drinking Water Testing Report

Francis Scott Key Middle School 910 Schindler Drive Silver Spring, MD 20903

Report Date: April 7th, 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 | 11/04/2021 |
|----------------------|------------|
| # of Outlets Tested | 41 |
| # of Outlets ≥ 5 ppb | 6 |

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 <u>www.epa.gov/lead</u>.
- 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 Francis Scott Key MS

| Fixture Barcode | Fixture Location Fixture Type | | Initial Results (ppb) | Pass/Fail | Follow up Results (ppb) | Status |
|--------------------|--|-----------------------------|-----------------------------|-----------|-------------------------------|---------------------------------|
| LW05891 | In team room 139 | Teachers Lounge Sink | 3.7 | Pass | N/A | Testing Complete |
| LW05892 | In hallway adjacent to 128 | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW05893 | In girls locker room 128 | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW05894 | In boys locker room 116 | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW05895 | In boys locker room 116 | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW05896 | In health room 106 | Nurses Office Sink | 2.1 | Pass | N/A | Testing Complete |
| LW05897 | In administration work room 100A | Teachers Lounge Sink | 1.6 | Pass | N/A | Testing Complete |
| LW05898 | In media center work room 101B | Teachers Lounge Sink | <1 | Pass | N/A | Testing |
| LW05899 | In office 249 | Teachers Lounge Sink | 3.4 | Pass | N/A | Complete Testing Complete |
| LW05900 | In hallway adjacent to 201 | Drinking Fountain | <1 | Pass | N/A | Testing |
| LW05901 | In team room 212 | Teachers Lounge Sink | 1.8 | Pass | N/A | Complete Testing |
| LW10620 | In hallway adjacent to multipurpose | Bottle Filler | <1 | Pass | N/A | Complete Testing |
| M50134 | room 175 In hallway adjacent to girls locker room | Drinking Fountain | <1 | Pass | N/A | Complete Testing |
| M50137 | 128 In girls locker room 128 | Drinking Fountain | Drinking Fountain <1 | | N/A | Complete Testing |
| M50152 | In hallway adjacent to 117 | Drinking Fountain | <1 | Pass | N/A | Complete Testing |
| M50153 | In hallway adjacent to 117 | Drinking Fountain | <1 | Pass | N/A | Complete Testing |
| M50162 | In hallway adjacent to 174 | Drinking Fountain | <1 | Pass | N/A | Complete Testing |
| M50163 | In hallway adjacent to 174 | Drinking Fountain | <1 | Pass | N/A | Complete Testing |
| M50174 | In home economics 186 | Classroom Sink | 122 | Fail | <1 | Complete Testing |
| M50175 | In home economics 186 | Classroom Sink | 25.6 | Fail | 11.5 | Complete Testing |
| M50176 | In home economics 186 | Classroom Sink | 9.5 | Fail | 2.0 | Complete Testing |
| M50177 | In home economics 186 | Classroom Sink | 5.9 | Fail | <1 | Complete Testing |
| M50178 | In home economics 186 | Classroom Sink | 23.5 | Fail | <1 | Complete Testing |
| M50179 | In hallway adjacent to 173 | Drinking Fountain | <1 | Pass | N/A | Complete Testing |
| M50180 | | | <1 | Pass | N/A | Complete Testing |
| M50180 | | | <1 | Pass | N/A | Complete Testing |
| M50187 | In kitchen 187 Kitchen Sink | | 2.1 | Pass | N/A | Complete Testing |
| | | In kitchen 187 Kitchen Sink | | | | Complete Testing |
| M50191 | In kitchen 187 | | | Pass | N/A | Complete Testing |
| M50192 | In kitchen 187 Kitchen Sink | | 1.8 | Pass | N/A | Complete Testing |
| M50193 | In kitchen 187 | Kitchen Sink | <1 | Pass | N/A | Complete |

| M50194 | In kitchen 187 | Kitchen Sink | <1 | Pass | N/A | Testing Complete |
|--------|------------------------------------|---------------------------------------|-----|------|-----|---------------------|
| M50202 | In hallway adjacent to 175 | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| M50203 | In hallway adjacent to 175 | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| M50211 | In kitchen 187 | Ice Machine | <1 | Pass | N/A | Testing Complete |
| M50216 | In hallway adjacent to 201 | way adjacent to 201 Drinking Fountain | | Pass | N/A | Testing Complete |
| M50218 | In office 210 Teachers Lounge Sink | | 7.7 | Fail | <1 | Testing Complete |
| M50221 | In hallway adjacent to 234 | vay adjacent to 234 Drinking Fountain | | Pass | N/A | Testing Complete |
| M50222 | In hallway adjacent to 234 | 234 Drinking Fountain | | Pass | N/A | Testing Complete |
| M50225 | In team room 247 | n room 247 Teachers Lounge Sink | | Pass | N/A | Testing Complete |
| M50231 | In hallway adjacent to 262 | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| M50232 | In hallway adjacent to 262 | Drinking Fountain | <1 | Pass | N/A | Testing Complete |



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Montgomery County Public Schools Lead in Drinking Water Testing 2018

May 4, 2018

Executive Summary: Francis Scott Key Middle School 910 Schindler Drive Silver Spring, Maryland 20903

| Round of Testing: | Initial |
|-----------------------------|---------|
| # of Outlets Tested: | 47 |
| # of Outlets ≥ 20 ppb: | 0 |
| Low Value (ppb): | <1.0 |
| High Value (ppb): | 17.1 |

Project Status: Testing Complete: All results less than 20 ppb.



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May 4, 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: Francis Scott Key Middle School 910 Schindler Drive Silver Spring, Maryland 20903

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 lead in water testing at Francis Scott Key Middle School, located at 910 Schindler Drive in Silver Spring, Maryland 20903.

SCOPE OF SERVICES

KCI conducted lead in water testing at Francis Scott Key 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 4/9/2018 and 4/10/2018 to collect samples from 47 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.

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 are no results of the lead in water analysis at or above 20 parts per billion (ppb). The lead in water sample results for sample collection date 4/10/2018 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 Pleller

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.

Sample Results for Francis Scott Key Middle School

| Barcode ID | Room # | Location | Location Notes | Equipment Type | Results (PPB)* | Pass/Fail | Status |
|------------|--------|--------------------------|-----------------|----------------|-------------------|-----------|------------------|
| LW05890 | 137 | Team Room | | Faucet | 11.0 | Pass | Testing Complete |
| LW05891 | 139 | Team Room | | Faucet | 1.5 | Pass | Testing Complete |
| LW05892 | 128 | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| LW05893 | 128 | Locker Room - Girls | Inside Of | Cooler | <1.0 | Pass | Testing Complete |
| LW05894 | 116 | Locker Room - Boys | Inside Of | Cooler | <1.0 | Pass | Testing Complete |
| LW05895 | 116 | Locker Room - Boys | Inside Of | Cooler | <1.0 | Pass | Testing Complete |
| LW05896 | 106 | Health Room | | Faucet | 1.5 | Pass | Testing Complete |
| LW05897 | 100A | Work Room Administration | | Faucet | 1.5 | Pass | Testing Complete |
| LW05898 | 101B | Work Room Media Center | | Faucet | <1.0 | Pass | Testing Complete |
| LW05899 | 249 | Office | | Faucet | 2.9 | Pass | Testing Complete |
| LW05900 | 201 | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| LW05901 | 212 | Team Room | | Faucet | 1.5 | Pass | Testing Complete |
| M50134 | 128 | Hallway | Next to GLR 128 | Cooler | <1.0 | Pass | Testing Complete |
| M50137 | 128 | Girls Locker Room | Inside Of | Cooler | <1.0 | Pass | Testing Complete |
| M50147 | 116 | Locker Room - Boys | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| M50148 | 116 | Locker Room - Boys | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| M50149 | 141 | Office | | Faucet | 5.1 | Pass | Testing Complete |
| M50152 | 117 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| M50153 | 117 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| M50162 | 174 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| M50163 | 174 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| M50173 | 186 | Home Economics | | Faucet | 1.2 | Pass | Testing Complete |
| M50174 | 186 | Home Economics | | Faucet | 4.4 | Pass | Testing Complete |

| Barcode ID | Room # | Location | Location Notes | Equipment Type | Results (PPB)* | Pass/Fail | Status |
|------------|--------|-------------------|----------------|----------------|-------------------|-----------|------------------|
| M50175 | 186 | Home Economics | | Faucet | <1.0 | Pass | Testing Complete |
| M50176 | 186 | Home Economics | | Faucet | 3.2 | Pass | Testing Complete |
| M50177 | 186 | Home Economics | | Faucet | <1.0 | Pass | Testing Complete |
| M50178 | 186 | Home Economics | | Faucet | 3.7 | Pass | Testing Complete |
| M50179 | 173 | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| M50180 | 173 | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| M50187 | 187 | Kitchen Cafeteria | | Faucet | <1.0 | Pass | Testing Complete |
| M50188 | 187 | Kitchen Cafeteria | | Faucet | <1.0 | Pass | Testing Complete |
| M50189 | 187 | Kitchen Cafeteria | | Faucet | 17.1 | Pass | Testing Complete |
| M50190 | 187 | Kitchen Cafeteria | | Faucet | 1.6 | Pass | Testing Complete |
| M50191 | 187 | Kitchen Cafeteria | | Faucet | <1.0 | Pass | Testing Complete |
| M50192 | 187 | Kitchen Cafeteria | | Faucet | 1.5 | Pass | Testing Complete |
| M50193 | 187 | Kitchen Cafeteria | | Faucet | <1.0 | Pass | Testing Complete |
| M50194 | 187 | Kitchen Cafeteria | | Faucet | <1.0 | Pass | Testing Complete |
| M50202 | 175 | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| M50203 | 175 | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| M50211 | 187 | Kitchen Cafeteria | | Ice Maker | <1.0 | Pass | Testing Complete |
| M50216 | 201 | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| M50218 | 210 | Office | | Faucet | 2.2 | Pass | Testing Complete |
| M50221 | 234 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| M50222 | 234 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| M50225 | 247 | Team Room | | Faucet | 1.1 | Pass | Testing Complete |
| M50231 | 262 | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| M50232 | 262 | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |

*PPB = parts per billion