# Montgomery County Public Schools Lead in Drinking Water Testing Report

# Seven Locks Elementary School 9500 Seven Locks Road Bethesda, MD 20817

# Report Date: July 27th, 2023

# 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 State Action Level (AL) of 5 parts per billion (ppb). A summary of the lead in water initial samples collected by Inspection Experts Inc. is presented in the table below.

| Sampling Date        | 4/28/23 |
|----------------------|---------|
| # of Outlets Tested  | 44      |
| # of Outlets ≥ 5 ppb | 0       |

### NEXT STEPS

If an initial sample exceeds the AL (5 ppb), the outlet will be shut-down within 24 hours, 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 outlets, food, cosmetics, exposure in the workplace 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 forlead.

*Please refer to the attachment(s) for additional water sampling information.* 

# Attachment(s):

A - Lead in Water Sample Results Table

Lead in Water Sample Results Table

# Sampling Results for Seven Locks ES

| Outlet<br>Barcode | Outlet Location  | Outlet Type                                | Initials<br>Results (ppb) | Pass/Fail | Status           |
|-------------------|------------------|--------------------------------------------|---------------------------|-----------|------------------|
| M50712            | In hallway 149   | Drinking Fountain                          | <1.0                      | Pass      | Testing Complete |
| M50713            | In hallway 149   | Drinking Fountain                          | <1.0                      | Pass      | Testing Complete |
| M50716            | In kitchen 157   | Kitchen Sink                               | <1.0                      | Pass      | Testing Complete |
| M50717            | In kitchen 157   | Kitchen Sink                               | <1.0                      | Pass      | Testing Complete |
| M50718            | In kitchen 157   | Kitchen Sink                               | <1.0                      | Pass      | Testing Complete |
| M50719            | In art 144       | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50721            | In classroom 144 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50723            | In hallway 144   | Drinking Fountain                          | <1.0                      | Pass      | Testing Complete |
| M50724            | In hallway 144   | Drinking Fountain                          | <1.0                      | Pass      | Testing Complete |
| M50726            | In classroom 146 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50728            | In classroom 146 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50730            | In hallway 115   | Drinking Fountain                          | <1.0                      | Pass      | Testing Complete |
| M50731            | In hallway 115   | Drinking Fountain                          | <1.0                      | Pass      | Testing Complete |
| M50734            | In classroom 116 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50736            | In classroom 117 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50738            | In classroom 120 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50740            | In classroom 122 | Classroom Combination<br>Drinking Fountain | 1.4                       | Pass      | Testing Complete |
| M50744            | In classroom 126 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50750            | In classroom 134 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50754            | In classroom 138 | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |

| Outlet<br>Barcode | Outlet Location                   | Outlet Type                                | Initials<br>Results (ppb) | Pass/Fail | Status           |
|-------------------|-----------------------------------|--------------------------------------------|---------------------------|-----------|------------------|
| M50762            | In classroom 140                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50764            | In classroom 143                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50766            | In work room 200A by media center | Classroom Combination<br>Sink              | <1.0                      | Pass      | Testing Complete |
| M50768            | In classroom 238                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50770            | In classroom 205                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50772            | In classroom 208                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50774            | In classroom 209                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50776            | In classroom 210                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50781            | In classroom 213                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50784            | In classroom 216                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50788            | In classroom 222                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50791            | In classroom 226                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50796            | In classroom 229                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50798            | In classroom 230                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50800            | In classroom 233                  | Classroom Combination<br>Drinking Fountain | <1.0                      | Pass      | Testing Complete |
| M50802            | In break room 106                 | Teachers Lounge Sink                       | <1.0                      | Pass      | Testing Complete |
| M50804            | In health room 102                | Nurses Office Sink                         | <1.0                      | Pass      | Testing Complete |
| M50805            | In exam 102C by health            | Nurses Office Sink                         | <1.0                      | Pass      | Testing Complete |
| M50810            | In hallway 200                    | Drinking Fountain                          | <1.0                      | Pass      | Testing Complete |
| M50811            | In hallway 200                    | Drinking Fountain                          | <1.0                      | Pass      | Testing Complete |

| Outlet<br>Barcode | Outlet Location                        | Outlet Type          | Initials<br>Results (ppb) | Pass/Fail | Status           |
|-------------------|----------------------------------------|----------------------|---------------------------|-----------|------------------|
| LW12677           | In Hallway 149 BF                      | Drinking Fountain    | <1.0                      | Pass      | Testing Complete |
| LW12678           | Hallway Outside of<br>Classroom 115 BF | Drinking Fountain    | <1.0                      | Pass      | Testing Complete |
| LW12679           | In Hallway across 200                  | Drinking Fountain    | <1.0                      | Pass      | Testing Complete |
| M50760            | Office 139                             | Teachers Lounge Sink | <1.0                      | Pass      | Testing Complete |

# Montgomery County Public Schools Lead in Drinking Water Testing Report

Seven Locks Elementary School 9500 Seven Locks Road Bethesda, MD 20817

Report Date: April 2nd, 2020

# 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        | 3/11/2020 |
|----------------------|-----------|
| # of Outlets Tested  | 66        |
| # 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 <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

Lead in Water Sample Results Table

# Sampling Results for Seven Locks ES

| Fixture                       |                            |                                            | Initial          |           | Follow up        |                     |
|-------------------------------|----------------------------|--------------------------------------------|------------------|-----------|------------------|---------------------|
| Barcode Fixture Location Fixt |                            | Fixture Type                               | Results<br>(ppb) | Pass/Fail | Results<br>(ppb) | Status              |
| M50712                        | In hallway 149             | Drinking Fountain                          | <1               | Pass      | N/A              | Testing<br>Complete |
| M50713                        | In hallway 149             | Drinking Fountain                          | <1               | Pass      | N/A              | Testing<br>Complete |
| M50716                        | In kitchen 157 by kitchen  | Kitchen Sink                               | <1               | Pass      | N/A              | Testing<br>Complete |
| M50717                        | In kitchen 157 by kitchen  | Kitchen Sink                               | <1               | Pass      | N/A              | Testing<br>Complete |
| M50718                        | In kitchen 157 by kitchen  | Kitchen Sink                               | <1               | Pass      | N/A              | Testing<br>Complete |
| M50719                        | In art 144                 | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50720                        | In classroom 144           | Classroom Combination Sink                 | 1.4              | Pass      | N/A              | Testing<br>Complete |
| M50721                        | In classroom 144           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50723                        | In hallway 144 across from | Drinking Fountain                          | <1               | Pass      | N/A              | Testing<br>Complete |
| M50724                        | In hallway 144 across from | Drinking Fountain                          | <1               | Pass      | N/A              | Testing<br>Complete |
| M50725                        | In classroom 146           | Classroom Combination Sink                 | 1.7              | Pass      | N/A              | Testing<br>Complete |
| M50726                        | In classroom 146           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50727                        | In classroom 146           | Classroom Combination Sink                 | 1.4              | Pass      | N/A              | Testing<br>Complete |
| M50728                        | In classroom 146           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50730                        | In hallway 115 outside of  | Drinking Fountain                          | <1               | Pass      | N/A              | Testing<br>Complete |
| M50731                        | In hallway 115 outside of  | Drinking Fountain                          | <1               | Pass      | N/A              | Testing<br>Complete |
| M50733                        | In classroom 115           | Classroom Combination Sink                 | <1               | Pass      | N/A              | Testing<br>Complete |
| M50734                        | In classroom 116           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50735                        | In classroom 116           | Classroom Combination Sink                 | <1               | Pass      | N/A              | Testing<br>Complete |
| M50736                        | In classroom 117           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50737                        | In classroom 117           | Classroom Combination Sink                 | 1.8              | Pass      | N/A              | Testing<br>Complete |
| M50738                        | In classroom 120           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50739                        | In classroom 120           | Classroom Combination Sink                 | 1.5              | Pass      | N/A              | Testing<br>Complete |
| M50740                        | In classroom 122           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50741                        | In classroom 122           | Classroom Combination Sink                 | 1.2              | Pass      | N/A              | Testing<br>Complete |
| M50743                        | In classroom 126           | Classroom Combination Sink                 | 1.3              | Pass      | N/A              | Testing<br>Complete |
| M50744                        | In classroom 126           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |
| M50750                        | In classroom 134           | Classroom Combination Drinking<br>Fountain | <1               | Pass      | N/A              | Testing<br>Complete |

|        | 1                                 |                                                              |     |      |     | Testine             |
|--------|-----------------------------------|--------------------------------------------------------------|-----|------|-----|---------------------|
| M50751 | In classroom 134                  | Classroom Combination Sink                                   | 1.2 | Pass | N/A | Testing<br>Complete |
| M50753 | In classroom 138                  | Classroom Combination Sink                                   | 1.4 | Pass | N/A | Testing<br>Complete |
| M50754 | In classroom 138                  | Classroom Combination Drinking<br>Fountain                   | <1  | Pass | N/A | Testing<br>Complete |
| M50762 | In classroom 140                  | Classroom Combination Drinking                               | <1  | Pass | N/A | Testing             |
| M50763 | In classroom 140                  | Fountain<br>Classroom Combination Sink                       | 1.5 | Pass | N/A | Complete<br>Testing |
| M50764 | In classroom 143                  | Classroom Combination Drinking                               | <1  | Pass | N/A | Complete<br>Testing |
|        |                                   | Fountain                                                     |     |      | -   | Complete<br>Testing |
| M50766 | In work room 200A by media center | Classroom Combination Sink<br>Classroom Combination Drinking | <1  | Pass | N/A | Complete<br>Testing |
| M50768 | In classroom 238                  | Fountain                                                     | <1  | Pass | N/A | Complete            |
| M50769 | In classroom 238                  | Classroom Combination Sink                                   | 1.9 | Pass | N/A | Testing<br>Complete |
| M50770 | In classroom 205                  | Classroom Combination Drinking<br>Fountain                   | <1  | Pass | N/A | Testing<br>Complete |
| M50771 | In classroom 205                  | Classroom Combination Sink                                   | 2.2 | Pass | N/A | Testing<br>Complete |
| M50772 | In classroom 208                  | Classroom Combination Drinking<br>Fountain                   | 1.9 | Pass | N/A | Testing<br>Complete |
| M50773 | In classroom 208                  | Classroom Combination Sink                                   | <1  | Pass | N/A | Testing<br>Complete |
| M50774 | In classroom 209                  | Classroom Combination Drinking<br>Fountain                   | <1  | Pass | N/A | Testing<br>Complete |
| M50775 | In classroom 209                  | Classroom Combination Sink                                   | 1.7 | Pass | N/A | Testing<br>Complete |
| M50776 | In classroom 210                  | Classroom Combination Drinking<br>Fountain                   | <1  | Pass | N/A | Testing             |
| M50777 | In classroom 210                  | Classroom Combination Sink                                   | 1.7 | Pass | N/A | Testing             |
| M50781 | In classroom 213                  | Classroom Combination Drinking<br>Fountain                   | <1  | Pass | N/A | Testing             |
| M50782 | In classroom 213                  | Classroom Combination Sink                                   | 1.5 | Pass | N/A | Testing<br>Complete |
| M50784 | In classroom 216                  | Classroom Combination Drinking<br>Fountain                   | <1  | Pass | N/A | Testing             |
| M50785 | In classroom 216                  | Classroom Combination Sink                                   | <1  | Pass | N/A | Testing             |
| M50787 | In classroom 220                  | Classroom Combination Sink                                   | 2.6 | Pass | N/A | Complete<br>Testing |
| M50788 | In classroom 222                  | Classroom Combination Drinking                               | <1  | Pass | N/A | Complete<br>Testing |
| M50789 | In classroom 222                  | Fountain<br>Classroom Combination Sink                       | <1  | Pass | N/A | Complete<br>Testing |
| M50791 | In classroom 226                  | Classroom Combination Drinking                               | <1  | Pass | N/A | Complete<br>Testing |
| M50792 | In classroom 226                  | Fountain<br>Classroom Combination Sink                       | 2.9 | Pass | N/A | Complete<br>Testing |
|        |                                   | Classroom Combination Drinking                               |     |      |     | Complete<br>Testing |
| M50796 | In classroom 229                  | Fountain                                                     | <1  | Pass | N/A | Complete<br>Testing |
| M50797 | In classroom 229                  | Classroom Combination Sink<br>Classroom Combination Drinking | 1.7 | Pass | N/A | Complete<br>Testing |
| M50798 | In classroom 230                  | Fountain                                                     | <1  | Pass | N/A | Complete            |
| M50799 | In classroom 230                  | Classroom Combination Sink                                   | 2.5 | Pass | N/A | Testing<br>Complete |
| M50800 | In classroom 233                  | Classroom Combination Drinking<br>Fountain                   | <1  | Pass | N/A | Testing<br>Complete |

| M50801   | In classroom 233           | Classroom Combination Sink    | 1.1 | Pass | N/A  | Testing<br>Complete |
|----------|----------------------------|-------------------------------|-----|------|------|---------------------|
| M50802   | In break room 106          | Taachars Launga Sink          | -1  | Dass | NI/A | Testing             |
| 10150802 | In break room 106          | Teachers Lounge Sink          | <1  | Pass | N/A  | Complete            |
| M50804   | In health room 102         | Nurses Office Sink            | <1  | Pass | N/A  | Testing             |
| 10150804 | in health room 102         | Nurses Office Slifk           | <1  | Pass | N/A  | Complete            |
| M50805   | In exam 102C by health     | Nurses Office Sink            | <1  | Pass | N/A  | Testing             |
| 10130803 | In exam 102C by health     | Nulses Office Slifk           | ~1  | Pass | N/A  | Complete            |
| M50808   | In work room 106C by admin | Classroom Combination Sink    | <1  | Pass | N/A  | Testing             |
| 10130608 |                            | Classi bolli Combination sink | ~1  | Pass |      | Complete            |
| M50810   | In hallway 200 across from | Drinking Fountain             | <1  | Pass | N/A  | Testing             |
| 10130810 |                            | Drinking Fountain             | ~1  | Pass | N/A  | Complete            |
| M50811   | In hallway 200 across from | Drinking Fountain             | 1   | Dace |      | Testing             |
| 1180511  | in nanway 200 across from  | Drinking Fountain             | <1  | Pass | N/A  | Complete            |



# MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER POST-REMEDIATION FOLLOW-UP TESTING 2019

November 13, 2019

Executive Summary: Seven Locks Elementary School 9500 Seven Locks Road, Bethesda, MD 20817

| Round of Testing:     | Post-Remediation Follow-up |
|-----------------------|----------------------------|
| Sample Date           | 01/25/2019                 |
| # of Outlets Tested:  | 2                          |
| # of Outlets ≥ 5 ppb: | 1                          |
| Low Value (ppb):      | 4.9                        |
| High Value (ppb):     | 6.0                        |

#### **Project Status**

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

Classroom 220 – Outlet (M50786) will be removed from service. Classroom 220 – Outlet (M50787) will be placed back in service.



November 13, 2019

Mr. Brian Mullikin Environmental Team Leader Montgomery County Public Schools 8301 Turkey Thicket Drive Building A, First Floor Gaithersburg, Maryland 20879

Re: Lead in Water Post-Remediation Follow-up Testing Service

Location: Seven Locks Elementary School 9500 Seven Locks Road, Bethesda, MD 20817

Dear Mr. Mullikin:

Intertek-PSI, Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of post-remediation lead in water testing at Seven Locks Elementary School, located at 9500 Seven Locks Road, Bethesda, MD 20817.

### **Scope of Services:**

Two (2) drinking water outlets were remediated at Seven Locks Elementary School due to initial levels that exceeded the lead action level of 5 parts per billion (ppb). Intertek-PSI 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.

Intertek-PSI visited the site on 01/25/2019 to collect post-remediation follow-up samples from 2 of the outlets that have been replaced.

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:**

The initial, flush, and post-remediation follow-up results are highlighted in the summary table below:



| Barcode ID | Room<br>Number | Location  | Notes | Equipment<br>Type  | Initial<br>(ppb) | Flush<br>(ppb) | Post-<br>Remediation<br>Follow-up<br>(ppb) | Post-<br>Remediation<br>Follow-up<br>Pass/Fail | Status                                                                                         |
|------------|----------------|-----------|-------|--------------------|------------------|----------------|--------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------|
| M50786     | 220            | Classroom |       | Bubbler-<br>Indoor | 20.0             | 2.6            | 6.0                                        | Fail                                           | Post-remediation<br>follow-up testing<br>complete. Outlet will<br>be removed from<br>service   |
| M50787     | 220            | Classroom |       | Faucet             | 47.1             | 3.3            | 4.9                                        | Pass                                           | Post-remediation<br>follow-up testing<br>complete. Outlet will<br>be placed back in<br>service |

\*ppb = parts per billion

#### **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,

#### **PROFESSIONAL SERVICE INDUSTRIES, INC.**

Nan Lin Department Manager, Environmental Services <u>Nan.Lin@intertek.com</u>



936 RIDGEBROOK ROAD • SPARKS, MD 21152 • 410-316-7800 • (FAX) 410-316-7935

# Montgomery County Public Schools Lead in Drinking Water Testing 2018

April 30, 2018

Executive Summary: Seven Locks Elementary School 9500 Seven Locks Road Bethesda, Maryland 20817

| Round of Testing:           | Initial                  |
|-----------------------------|--------------------------|
| # of Outlets Tested:        | 70                       |
| # of Outlets $\geq 20$ ppb: | 2                        |
| Low Value (ppb):            | <1.0                     |
| High Value (ppb):           | 47.1                     |
| Follow-Up Testing Required  | Classroom 220 (20.0 ppb) |
| (Samples $\geq 20$ ppb):    | Classroom 220 (47.1 ppb) |
|                             |                          |

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

# Project Status: Testing Complete: Remediation Plan

Classroom 220 - Replace fixture (M50786), in addition to supply line and valve located under sink Classroom 220 - Replace fixture (M50787), 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 #1214634189

**Location: Seven Locks Elementary School** 9500 Seven Locks Road Bethesda, Maryland 20817

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 Seven Locks Elementary School, located at 9500 Seven Locks Road in Bethesda, Maryland 20817.

### SCOPE OF SERVICES

KCI conducted lead in water testing at Seven Locks 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 3/12/2018 and 3/13/2018 to collect samples from 70 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, 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:

|            |                        |           |              |           | 30 Second    |
|------------|------------------------|-----------|--------------|-----------|--------------|
|            |                        |           | Initial      |           | Follow Up    |
|            |                        | Date      | Sample       | Date      | Sample       |
| Barcode ID | Sample Location        | Collected | Result (ppb) | Collected | Result (ppb) |
| M50786     | Bubbler-Indoor -       | 3/13/2018 | 20.0         | 4/12/2018 | 2.6          |
|            | Classroom 220          |           |              |           |              |
| M50787     | Faucet - Classroom 220 | 3/13/2018 | 47.1         | 4/12/2018 | 3.3          |

The initial lead in water sample results (3/13/2018) 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 Melle-

Kamau McAbee MDE Certified Water Sampler #8281KM

Attachment:

A- Lead in Water Test Summary Table

Lead in Water Test Summary Table

# Lead in Water Test Summary Table

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

Initial Sample Results for Seven Locks Elementary School

| Barcode ID | Room # | Location  | Location Notes | Equipment Type   | Results<br>(PPB)* | Pass/Fail | Status           |
|------------|--------|-----------|----------------|------------------|-------------------|-----------|------------------|
| M50712     | 149    | Hallway   |                | Cooler           | <1.0              | Pass      | Testing Complete |
| M50713     | 149    | Hallway   | Cooler         |                  | <1.0              | Pass      | Testing Complete |
| M50716     | 157    | Kitchen   |                | Faucet           | 1.4               | Pass      | Testing Complete |
| M50717     | 157    | Kitchen   |                | Faucet           | <1.0              | Pass      | Testing Complete |
| M50718     | 157    | Kitchen   |                | Faucet           | <1.0              | Pass      | Testing Complete |
| M50719     | 144    | Art       |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50720     | 144    | Classroom |                | Faucet           | 2.5               | Pass      | Testing Complete |
| M50721     | 144    | Classroom |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50722     | 144    | Art       |                | Faucet           | 2.5               | Pass      | Testing Complete |
| M50723     | 144    | Hallway   | Across From    | Cooler           | <1.0              | Pass      | Testing Complete |
| M50724     | 144    | Hallway   | Across From    | Cooler           | <1.0              | Pass      | Testing Complete |
| M50725     | 146    | Classroom |                | Faucet           | 1.9               | Pass      | Testing Complete |
| M50726     | 146    | Classroom |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50727     | 146    | Classroom |                | Faucet           | 1.7               | Pass      | Testing Complete |
| M50728     | 146    | Classroom |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50730     | 115    | Hallway   | Outside Of     | Cooler           | <1.0              | Pass      | Testing Complete |
| M50731     | 115    | Hallway   | Outside Of     | Cooler           | <1.0              | Pass      | Testing Complete |
| M50733     | 115    | Classroom |                | Faucet           | <1.0              | Pass      | Testing Complete |
| M50734     | 116    | Classroom |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50735     | 116    | Classroom |                | Faucet           | <1.0              | Pass      | Testing Complete |
| M50736     | 117    | Classroom |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50737     | 117    | Classroom |                | Faucet           | 3.1               | Pass      | Testing Complete |
| M50738     | 120    | Classroom |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |

| Barcode ID | Room # | Location               | Location Notes | Equipment Type   | Results<br>(PPB)* | Pass/Fail | Status           |
|------------|--------|------------------------|----------------|------------------|-------------------|-----------|------------------|
| M50739     | 120    | Classroom              |                | Faucet           |                   | Pass      | Testing Complete |
| M50740     | 122    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50741     | 122    | Classroom              |                | Faucet           | 2.3               | Pass      | Testing Complete |
| M50743     | 126    | Classroom              |                | Faucet           | 2.4               | Pass      | Testing Complete |
| M50744     | 126    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50750     | 134    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50751     | 134    | Classroom              |                | Faucet           | 4.5               | Pass      | Testing Complete |
| M50753     | 138    | Classroom              |                | Faucet           | 1.9               | Pass      | Testing Complete |
| M50754     | 138    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50761     | 139    | Classroom              |                | Faucet           | 5.6               | Pass      | Testing Complete |
| M50762     | 140    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50763     | 140    | Classroom              |                | Faucet           | 2.7               | Pass      | Testing Complete |
| M50764     | 143    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50765     | 143    | Classroom              |                | Faucet           | 5.1               | Pass      | Testing Complete |
| M50766     | 200A   | Work Room Media Center |                | Faucet           | <1.0              | Pass      | Testing Complete |
| M50768     | 238    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50769     | 238    | Classroom              |                | Faucet           | 3.9               | Pass      | Testing Complete |
| M50770     | 205    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50771     | 205    | Classroom              |                | Faucet           | 3.0               | Pass      | Testing Complete |
| M50772     | 208    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50773     | 208    | Classroom              |                | Faucet           | 3.3               | Pass      | Testing Complete |
| M50774     | 209    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50775     | 209    | Classroom              |                | Faucet           | 2.8               | Pass      | Testing Complete |
| M50776     | 210    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50777     | 210    | Classroom              |                | Faucet           | 2.1               | Pass      | Testing Complete |
| M50781     | 213    | Classroom              |                | Bubbler - Indoor | <1.0              | Pass      | Testing Complete |
| M50782     | 213    | Classroom              |                | Faucet           | 2.4               | Pass      | Testing Complete |

| Barcode ID | Room # | Location        | Location Notes   | Equipment Type   | Results<br>(PPB)* | Pass/Fail | Status                   |
|------------|--------|-----------------|------------------|------------------|-------------------|-----------|--------------------------|
| M50784     | 216    | Classroom       | Bubbler - Indoor |                  | <1.0              | Pass      | Testing Complete         |
| M50785     | 216    | Classroom       |                  | Faucet           | 1.1               | Pass      | Testing Complete         |
| M50786     | 220    | Classroom       |                  | Bubbler - Indoor | 20.0              | Fail      | Follow-Up Testing Needed |
| M50787     | 220    | Classroom       |                  | Faucet           | 47.1              | Fail      | Follow-Up Testing Needed |
| M50788     | 222    | Classroom       |                  | Bubbler - Indoor | <1.0              | Pass      | Testing Complete         |
| M50789     | 222    | Classroom       |                  | Faucet           | <1.0              | Pass      | Testing Complete         |
| M50791     | 226    | Classroom       |                  | Bubbler - Indoor | <1.0              | Pass      | Testing Complete         |
| M50792     | 226    | Classroom       |                  | Faucet           | 3.1               | Pass      | Testing Complete         |
| M50796     | 229    | Classroom       |                  | Bubbler - Indoor | <1.0              | Pass      | Testing Complete         |
| M50797     | 229    | Classroom       |                  | Faucet           | 2.4               | Pass      | Testing Complete         |
| M50798     | 230    | Classroom       |                  | Bubbler - Indoor | <1.0              | Pass      | Testing Complete         |
| M50799     | 230    | Classroom       |                  | Faucet           | 3.8               | Pass      | Testing Complete         |
| M50800     | 233    | Classroom       |                  | Bubbler - Indoor | <1.0              | Pass      | Testing Complete         |
| M50801     | 233    | Classroom       |                  | Faucet           | 2.2               | Pass      | Testing Complete         |
| M50802     | 106    | Break Room      |                  | Faucet           | <1.0              | Pass      | Testing Complete         |
| M50804     | 102    | Health Room     |                  | Faucet           | <1.0              | Pass      | Testing Complete         |
| M50805     | 102C   | Exam Health     |                  | Faucet           | 2.6               | Pass      | Testing Complete         |
| M50808     | 106C   | Work Room Admin |                  | Faucet           | 3.5               | Pass      | Testing Complete         |
| M50810     | 200    | Hallway         | Across From      | Cooler           | <1.0              | Pass      | Testing Complete         |
| M50811     | 200    | Hallway         | Across From      | Cooler           | <1.0              | Pass      | Testing Complete         |

\*PPB = parts per billion

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

| Barcode ID | Room # | Location      | Equipment<br>Type | Initial Draw<br>(2nd) (PPB) | Initial Draw<br>(3rd) (PPB) | 30 Second<br>Draw (PPB)* | Status                                                             |
|------------|--------|---------------|-------------------|-----------------------------|-----------------------------|--------------------------|--------------------------------------------------------------------|
| M50786     | 220    | Classroom     | Bubbler - Indoor  | 6.3                         | 4.6                         | 2.6                      | Remediation required – replace fixture, in addition to supply line |
|            |        |               |                   |                             |                             |                          | and valve located under sink                                       |
| M50787     |        | 220 Classroom | Faucet            | 33.3                        | 22.9                        | 3.3                      | Remediation required – replace                                     |
|            | 220    |               |                   |                             |                             |                          | fixture, in addition to supply line                                |
|            |        |               |                   |                             |                             |                          | and valve located under sink                                       |

#### Follow UP Sample Results for Seven Locks Elementary School

\*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.