Montgomery County Public Schools Lead in Drinking Water Testing Report

Winston Churchill High School 11300 Gainsborough Road Potomac, MD 20854

Report Date: June 26, 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 | 4/27/23 |
|----------------------|---------|
| # of Outlets Tested | 43 |
| # of Outlets ≥ 5 ppb | 3 |

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 www.epa.gov/lead.
- 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 Winston Churchill HS

| Outlet Barcode | Outlet Location | Outlet Type | Initials Results (ppb) | Pass/Fail | Status |
|-------------------|-----------------------------|----------------------|---------------------------|-----------|----------------------------|
| LW04827 | In hallway 156 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04828 | In hallway 156 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04829 | In kitchen 158 by cafeteria | Kitchen Sink | 6.8 | Fail | Remediation Action Plan |
| LW04831 | In hallway 138A | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04836 | In hallway 238A | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04837 | In hallway 236 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04838 | In hallway 245 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04839 | In hallway 249 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04840 | In hallway 250 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04841 | In locker room - girls 139A | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04842 | In locker room - girls 139A | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04844 | In hallway 176 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04845 | In hallway 176 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04846 | In hallway 137A | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW04848 | In hallway 127G | Drinking Fountain | <1.0 | Pass | Testing Complete |

| Outlet Barcode | Outlet Location | Outlet Type | Initials Results (ppb) | Pass/Fail | Status |
|-------------------|----------------------------|-------------------------|---------------------------|-----------|---------------------|
| LW04849 | In hallway 127G | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW07750 | In hallway adjacent to 278 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW07751 | In hallway adjacent to 278 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW07752 | In hallway adjacent to 176 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW07753 | In hallway | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW07756 | In hallway adjacent to 146 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW07757 | In hallway adjacent to 146 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| M39539 | In kitchen 158 | Ice Machine | <1.0 | Pass | Testing Complete |
| M39796 | In health room 100 | Nurses Office Sink | <1.0 | Pass | Testing Complete |
| M39799 | In break room 232 | Teachers Lounge Sink | <1.0 | Pass | Testing Complete |
| M39839 | In hallway 264 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| M42491 | In hallway 136 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| M42492 | In hallway 150 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| M42799 | In hallway 132 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| M42800 | M42800 In hallway 132 | | <1.0 | Pass | Testing Complete |
| M45538 | In kitchen 158 | Kitchen Sink | <1.0 | Pass | Testing Complete |

| Outlet Barcode | Outlet Location | Outlet Type | Initials Results (ppb) | Pass/Fail | Status |
|-------------------|--------------------|----------------------|---------------------------|-----------|----------------------------|
| M45539 | In kitchen 158 | Kitchen Sink | 1.3 | Pass | Testing Complete |
| M45540 | In kitchen 158 | Kitchen Sink | 6.2 | Fail | Remediation Action Plan |
| M45541 | In kitchen | Kitchen Sink | <1.0 | Pass | Testing Complete |
| M45542 | In kitchen 158 | Kitchen Sink | <1.0 | Pass | Testing Complete |
| M45543 | In kitchen 158 | Kitchen Sink | <1.0 | Pass | Testing Complete |
| M45544 | In kitchen | Kitchen Sink | 5.4 | Fail | Remediation Action Plan |
| M45545 | In kitchen 158 | Kitchen Sink | <1.0 | Pass | Testing Complete |
| LW12631 | HW across 137A | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW12632 | HW next 138A | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW12633 | HW outside 156 | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW12634 | W12634 HW next 116 | | <1.0 | Pass | Testing Complete |
| LW12635 | HW next 236 | Drinking Fountain | <1.0 | Pass | Testing Complete |

Montgomery County Public Schools Lead in Drinking Water Testing Report

Winston Churchill High School 11300 Gainsborough Rd Potomac, MD 20854

Report Date: March 30th, 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 | 3/10/2020 |
|----------------------|-----------|
| # of Outlets Tested | 57 |
| # of Outlets ≥ 5 ppb | 1 |

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. Due to the Stay-at-Home Order to combat the spread of COVID-19 (coronavirus), no follow-up samples were collected. 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 www.epa.gov/lead.
- 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 Winston Churchill HS

| Fixture Barcode | Fixture Location | Fixture Type | Initial Results (ppb) | Pass/Fail | Follow up Results (ppb) | Status |
|--------------------|---|-------------------|-----------------------------|-----------|-------------------------------|---------------------|
| LW04827 | In hallway 156 across from | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04828 | In hallway 156 across from | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04829 | In kitchen 158 by cafeteria | Kitchen Sink | 1.9 | Pass | N/A | Testing Complete |
| LW04830 | In work room 107I by councelor | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| LW04831 | In hallway 138A next to | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04832 | In math 138 by office | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| LW04833 | In classroom 155 | Classroom Sink | 1.6 | Pass | N/A | Testing Complete |
| LW04834 | In classroom 155 | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| LW04835 | In office 239 | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| LW04836 | In hallway 238A next to | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04837 | In hallway 236 next to | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04838 | In hallway 245 across from | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04839 | In hallway 249 next to | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04840 | In hallway 250 across from | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04841 | In locker room - girls 139A across from | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04842 | In locker room - girls 139A | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04843 | In training room 137A | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| LW04844 | In hallway 176 next to | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04845 | In hallway 176 across from | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04846 | In hallway 137A outside of | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04848 | In hallway 127G outside of | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW04849 | In hallway 127G outside of | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| M39539 | In kitchen 158 by kitchen | Ice Machine | <1 | Pass | N/A | Testing Complete |
| M39540 | In classroom 154C | Classroom Sink | <1 | Pass | N/A | Testing Complete |

| | | | | 1 | | |
|----------|-------------------------------------|----------------------|---------|-------|----------|---------------------|
| M39595 | In office 132A | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| M39780 | In office 142 | Classroom Sink | <1 | Pass | N/A | Testing |
| | | | | | , | Complete Testing |
| M39793 | In work room 144J by administration | Classroom Sink | <1 | Pass | N/A | Complete |
| M39796 | In health room 100 | Nurses Office Sink | <1 | Pass | N/A | Testing |
| | | | | | | Complete Testing |
| M39799 | In break room 232 | Teachers Lounge Sink | <1 | Pass | N/A | Complete |
| M39801 | In english office 235 | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| M20920 | In hallway 364 pays to | Drinking Fountain | <1 | Doss | NI/A | Testing |
| M39839 | In hallway 264 next to | Drinking Fountain | <u></u> | Pass | N/A | Complete |
| M42491 | In hallway 136 next to | Drinking Fountain | 3.6 | Pass | N/A | Testing Complete |
| 1442402 | | 5 . 1 . 5 | .4 | - | 21/2 | Testing |
| M42492 | In hallway 150 across from CR 150 | Drinking Fountain | <1 | Pass | N/A | Complete |
| M42552 | In classroom 130 | Classroom Sink | <1 | Pass | N/A | Testing |
| | | | | | | Complete Testing |
| M42563 | In social studies 238 by office | Classroom Sink | <1 | Pass | N/A | Complete |
| M42591 | In copy room 242a | Classroom Sink | <1 | Pass | N/A | Testing |
| 17172331 | 111 COPY 100111 2420 | Clussi Goill Sillik | `` | 1 433 | 14/71 | Complete |
| M42616 | In office 203c | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| N442C71 | In Language office 202 by office | Classus are Sink | -11 | Dese | NI/A | Testing |
| M42671 | In Language office 262 by office | Classroom Sink | <1 | Pass | N/A | Complete |
| M42672 | In media center office 245A | Classroom Sink | <1 | Pass | N/A | Testing |
| | | | | | | Complete Testing |
| M42799 | In hallway 132 next to CR 132 | Drinking Fountain | <1 | Pass | N/A | Complete |
| M42800 | In hallway 132 next to CR 132 | Drinking Fountain | <1 | Pass | N/A | Testing |
| | , | J | | | , | Complete Testing |
| M45538 | In kitchen 158 by kitchen | Kitchen Sink | 4.5 | Pass | N/A | Complete |
| M45539 | In kitchen 158 by kitchen | Kitchen Sink | <1 | Pass | N/A | Testing |
| 17173333 | in kitchen 130 by kitchen | KITCH SIIIK | ~1 | 1 033 | NA | Complete |
| M45540 | In kitchen 158 by kitchen | Kitchen Sink | 4.2 | Pass | N/A | Testing Complete |
| N445542 | 1 1 1 1 1 1 1 | 1411 L C' L | .4 | - | 21/2 | Testing |
| M45542 | In kitchen 158 by cafeteria | Kitchen Sink | <1 | Pass | N/A | Complete |
| M45543 | In kitchen 158 by cafeteria | Kitchen Sink | <1 | Pass | N/A | Testing Complete |
| | | | | _ | | Testing |
| M45545 | In kitchen 158 by cafeteria | Kitchen Sink | <1 | Pass | N/A | Complete |
| M45546 | In kitchen 158 by cafeteria | Kitchen Sink | <1 | Pass | N/A | Testing |
| | , | | | | <u> </u> | Complete Testing |
| M45541 | In kitchen | Kitchen Sink | <1 | Pass | N/A | Complete |
| M45544 | In kitchen 7 of 10 LTR | Kitchen Sink | 193 | Fail | NC | Remediation |
| IVITUUTT | III RECEICH / OF TO LIK | RICHCH SHIR | 173 | Tall | 140 | Action Plan |
| Lw07756 | In hallway adjacent to 146 LTR | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| | L | 1 | | l | <u> </u> | Complete |

| Lw07757 | In hallway adjacent to 146 2 of 2 LTR | Drinking Fountain | <1 | Pass | N/A | Testing |
|---------|---|--------------------|-----------|---------|------|---------------------|
| | | | | | | Complete Testing |
| Lw07755 | In office 203A | Classroom Sink | <1 | Pass | N/A | Complete |
| Lw07753 | | Drinking Fountain | <1 | Docs | NI/A | Testing |
| | | | <1 | Pass | N/A | Complete |
| Lw07752 | In hallway adjacent to 176 | Drinking Fountain | <1 | Pass | N/A | Testing |
| LW07732 | in nanway adjacent to 170 | Diffiking Fountain | | | | Complete |
| Lw07750 | In hallway adjacent to 278 | Drinking Fountain | <1 | Pass | N/A | Testing |
| LW07730 | iii iialiway aujacent to 278 | Diffiking Fountain | /1 | | N/A | Complete |
| Lw07751 | In hallway adjacent to 278 2of 2 LTR | Deinking Fountain | -1 | <1 Pass | N/A | Testing |
| LW07731 | iii iiaiiway aujaceiit to 278 201 2 ETK | Drinking Fountain | | | | Complete |

NC - Not Collected (No follow-up sample collected due to COVID-19 (Coronavirus) Stay-at-Home Order.)



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

August 29, 2019

Executive Summary: Winston Churchill High School

11300 Gainsborough Road, Potomac, MD 20854

| Round of Testing: | Post-Remediation Follow-Up |
|-----------------------|----------------------------|
| Sample Date | 01/24/2019 |
| # of Outlets Tested: | 1 |
| # of Outlets ≥ 5 ppb: | 0 |
| Low Value (ppb): | <1.0 |
| High Value (ppb): | <1.0 |

Project Status

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

Training Room 137A: Outlet (LW04843) will be placed back into service



August 29, 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: Cannon Road Elementary School

901 Cannon Road, Silver Spring, MD 20904

Dear Mr. Mullikin:

Intertek-PSI Inc. 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 Winston Churchill High School, located at 11300 Gainsborough Road, Potomac, MD 20854.

Scope of Services:

One (1) drinking water outlet was remediated at Winston Churchill High School due to initial lead 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 01/23/2019 and 01/24/2019 to collect post-remediation follow-up sample from 1 drinking water outlet that had 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 Number | Location | Notes | Equipment Type | Initial (ppb) | Flush (ppb) | Post- remediation follow-up (ppb) | Post- remediation follow-up Pass/Fail | Status |
|------------|----------------|---------------|-------|-------------------|------------------|----------------|--|--|--|
| LW04843 | 137A | Training Room | | Faucet | 20.4 | 2.4 | <1.0 | Pass | Post-remediation follow-up testing complete. Outlet will be placed back into 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,

INTERTEK-PSI

Nan Lin

Department Manager, Environmental Services

nan.lin@intertek.com



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

Montgomery County Public Schools Lead in Drinking Water Testing 2018

April 27, 2018

Executive Summary: Winston Churchill High School

11300 Gainsborough Road Potomac, Maryland 20854

| Round of Testing: | Initial |
|----------------------------|--------------------------|
| # of Outlets Tested: | 52 |
| # of Outlets ≥20 ppb: | 1 |
| Low Value (ppb): | <1.0 |
| High Value (ppb): | 20.4 |
| Follow-Up Testing Required | Training Room (20.4 ppb) |
| (Samples ≥ 20 ppb): | |

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

Project Status:

Testing Complete: Remediation Plan

Training Room - Replace fixture (LW0483), 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: Winston Churchill High School

11300 Gainsborough Road Potomac, Maryland 20854

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 Winston Churchill High School, located at 11300 Gainsborough Road in Potomac, Maryland 20854.

SCOPE OF SERVICES

KCI conducted lead in water testing at Winston Churchill High 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 3/8/2018 and 3/9/2018 to collect samples from 52 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:

| | | Date | Initial Sample | Date | 30 Second Follow Up Sample |
|------------|-------------------|-----------|----------------|-----------|----------------------------------|
| Barcode ID | Sample Location | Collected | Result (ppb) | Collected | Result (ppb) |
| LW0483 | Faucet - Training | 3/9/2018 | 20.4 | 4/12/2018 | 2.0 |
| | Room | | | | |

The initial lead in water sample results (3/9/2018) 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

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 Winston Churchill High School

| Barcode ID | Room # | Location | Location Notes | Equipment Type | Results (PPB)* | Pass/Fail | Status |
|------------|--------|---------------------|----------------|----------------|----------------|-----------|------------------|
| LW04827 | 156 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| LW04828 | 156 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| LW04829 | 158 | Kitchen Cafeteria | | Faucet | 1.5 | Pass | Testing Complete |
| LW04830 | 1071 | Work Room Counselor | | Faucet | <1.0 | Pass | Testing Complete |
| LW04831 | 138A | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| LW04832 | 138 | Math Office | | Faucet | <1.0 | Pass | Testing Complete |
| LW04833 | 155 | Classroom | | Faucet | 2.0 | Pass | Testing Complete |
| LW04834 | 155 | Classroom | | Faucet | <1.0 | Pass | Testing Complete |
| LW04835 | 239 | Office | | Faucet | 2.1 | Pass | Testing Complete |
| LW04836 | 238A | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| LW04837 | 236 | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| LW04838 | 245 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| LW04839 | 249 | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| LW04840 | 250 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| LW04841 | 139A | Locker Room - Girls | Across From | Cooler | <1.0 | Pass | Testing Complete |
| LW04842 | 139A | Locker Room - Girls | | Cooler | <1.0 | Pass | Testing Complete |
| LW04843 | 137A | Training Room | | Faucet | 20.4 | Fail | Testing Complete |
| LW04844 | 176 | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| LW04845 | 176 | Hallway | Across From | Cooler | <1.0 | Pass | Testing Complete |
| LW04846 | 137A | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| LW04847 | 128A4 | Band Office | | Faucet | <1.0 | Pass | Testing Complete |
| LW04848 | 127G | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |
| LW04849 | 127G | Hallway | Outside Of | Cooler | <1.0 | Pass | Testing Complete |

| Barcode ID | Room # | Location | Location Notes | Equipment Type | Results (PPB)* | Pass/Fail | Status |
|------------|--------|--------------------------|-----------------------|----------------|----------------|-----------|------------------|
| M39539 | 158 | Kitchen | | Ice Maker | <1.0 | Pass | Testing Complete |
| M39540 | 154C | Classroom | | Faucet | <1.0 | Pass | Testing Complete |
| M39595 | 132A | Office | | Faucet | <1.0 | Pass | Testing Complete |
| M39780 | 142 | Office | | Faucet | <1.0 | Pass | Testing Complete |
| M39793 | 144J | Work Room Administration | | Faucet | <1.0 | Pass | Testing Complete |
| M39796 | 100 | Health Room | | Faucet | <1.0 | Pass | Testing Complete |
| M39799 | 232 | Break Room | | Faucet | <1.0 | Pass | Testing Complete |
| M39801 | 235 | English Office | | Faucet | <1.0 | Pass | Testing Complete |
| M39838 | 264 | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| M39839 | 264 | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| M42491 | 136 | Hallway | Next To | Cooler | <1.0 | Pass | Testing Complete |
| M42492 | 150 | Hallway | Across from CR 150 | Cooler | <1.0 | Pass | Testing Complete |
| M42552 | 130 | Classroom | | Faucet | 1.0 | Pass | Testing Complete |
| M42563 | 238 | Social Studies Office | | Faucet | <1.0 | Pass | Testing Complete |
| M42591 | 242a | Copy Room | | Faucet | 1.2 | Pass | Testing Complete |
| M42616 | 203c | Office | | Faucet | <1.0 | Pass | Testing Complete |
| M42671 | 262 | Language Office | | Faucet | <1.0 | Pass | Testing Complete |
| M42672 | 245A | Media Center Office | | Faucet | <1.0 | Pass | Testing Complete |
| M42799 | 132 | Hallway | Next to CR 132 | Cooler | <1.0 | Pass | Testing Complete |
| M42800 | 132 | Hallway | Next to CR 132 | Cooler | <1.0 | Pass | Testing Complete |
| M45538 | 158 | Kitchen | | Faucet | 1.1 | Pass | Testing Complete |
| M45539 | 158 | Kitchen | | Faucet | 1.0 | Pass | Testing Complete |
| M45540 | 158 | Kitchen | | Faucet | 1.2 | Pass | Testing Complete |
| M45541 | 158 | Kitchen Cafeteria | | Faucet | 6.2 | Pass | Testing Complete |
| M45542 | 158 | Kitchen Cafeteria | | Faucet | <1.0 | Pass | Testing Complete |
| M45543 | 158 | Kitchen Cafeteria | | Faucet | <1.0 | Pass | Testing Complete |

| Barcode ID | Room # | Location | Location Notes Equipment T | | Results (PPB)* | Pass/Fail | Status |
|------------|--------|-------------------|----------------------------|--------|----------------|-----------|------------------|
| M45544 | 158 | Kitchen Cafeteria | | Faucet | 7.7 | Pass | Testing Complete |
| M45545 | 158 | Kitchen Cafeteria | | Faucet | <1.0 | Pass | Testing Complete |
| M45546 | 158 | Kitchen Cafeteria | | Faucet | 1.7 | Pass | Testing Complete |

^{*}PPB = parts per billion

Contractor: KCI Technologies, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Result for Winston Churchill High School

| Barcode ID | Room # | Location | Equipment Type | Initial Draw (2nd) (PPB) | Initial Draw (3rd) (PPB) | 30 Second Draw (PPB)* | Status |
|------------|--------|---------------|-------------------|-----------------------------|-----------------------------|--------------------------|--|
| LW04843 | 137A | Training Room | Faucet | 2.4 | 333 | 2.0 | 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.