# Montgomery County Public Schools Lead in Drinking Water Testing Report 

Highland Elementary School<br>3100 Medway Street<br>Silver Spring, MD 20902

Report Date: July 24th, 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 | $5 / 4 / 23$ |
| :---: | :---: |
| \# of Outlets Tested | 20 |
| \# of Outlets $\geq 5 \mathrm{ppb}$ | 1 |

## 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

## ATTACHMENT A

## Lead in Water Sample Results Table

## Sampling Results for Highland ES

| Outlet Barcode | Outlet Location | Outlet Type | Initials Results (ppb) | Pass/Fail | Status |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LW00968 | In kitchen by all purpose room | Kitchen Sink | <1.0 | Pass | Testing Complete |
| LW00969 | In kitchen by all purpose room | Kitchen Sink | 1.1 | Pass | Testing Complete |
| LW00970 | In hallway outside of kitchen | Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW00974 | In break room across from Suite B | Teachers Lounge Sink | <1.0 | Pass | Testing Complete |
| LW00977 | In special ed 9A | Classroom Combination Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW00980 | In Preschool 8 | Classroom Combination Drinking Fountain | <1.0 | Pass | Testing Complete |
| LW00981 | In health room H104 | Nurses Office Sink | <1.0 | Pass | Testing Complete |
| LW01009 | In health room H107 inside of H104 | Nurses Office Sink | 5.5 | Fail | Remediation Action Plan |
| LW01010 | In lab H113 by health room ie. inside of H104 | Nurses Office Sink | <1.0 | Pass | Testing Complete |
| LW01011 | In health room H111 inside of H104 | Nurses Office Sink | <1.0 | Pass | Testing Complete |
| LW01012 | In health room H110 inside of H104 | Nurses Office Sink | 1.2 | Pass | Testing Complete |
| LW01024 | In classroom 14 | Classroom Combination Drinking Fountain | 2.3 | Pass | Testing Complete |
| LW01061 | In music 29 lower level | Classroom Combination Drinking Fountain | 2.3 | Pass | Testing Complete |
| LW01064 | In hallway across from gym | Drinking Fountain | <1.0 | Pass | Testing Complete |
| M03913 | In kitchen by all purpose room | Kitchen Sink | <1.0 | Pass | Testing Complete |


| Outlet Barcode | Outlet Location | Outlet Type | Initials <br> Results <br> (ppb) | Pass/Fail | Status |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LW00990 | In kindergarten 2 | Classroom Combination <br> Drinking Fountain | 1.6 | Pass | Testing <br> Complete |
| LW12894 | Hallway next to <br> Staff Lounge | Drinking Fountain | $<1.0$ | Pass | Testing <br> Complete |
| LW12895 | Hallway next to <br> Staff lounge | Drinking Fountain | $<1.0$ | Pass | Testing <br> Complete |
| LW12896 | In hallway outside <br> of kitchen | Drinking Fountain | $<1.0$ | Pass | Testing <br> Complete |
| M03914 | In kitchen by all <br> purpose room | Kitchen Sink | 1.1 | Pass | Testing <br> Complete |

# Montgomery County Public Schools Lead in Drinking Water Testing Report 

Highland Elementary School<br>3100 Medway Street<br>Wheaton, MD 20902

Report Date: March 29 ${ }^{\text {th }}, 2020$

## 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 | $2 / 12 / 2020$ |
| :---: | :---: |
| \# of Outlets Tested | 83 |
| \# of Outlets $\geq 5 \mathrm{ppb}$ | 6 |

## NEXT STEPS

If an initial sample exceeds the AL ( 5 ppb ), the outlet will be immediately shut-down, a followup sample collected, and a remedial plan of action developed for this outlet. Due to the Stay-atHome 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 leadcontaining 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

## ATTACHMENT A

## Lead in Water Sample Results Table

## Sampling Results for Highland ES

| Fixture <br> Barcode | Fixture Location | Fixture Type |  | Pass/Fail | Follow up Results (ppb) | Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW00968 | In kitchen by all purpose room | Kitchen Sink | <1 | Pass | N/A | Testing Complete |
| LW00969 | In kitchen by all purpose room | Kitchen Sink | <1 | Pass | N/A | Testing Complete |
| LW00970 | In hallway outside of kitchen | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW00971 | In math "math closet" | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| LW00972 | In Testing room Suite B Testing closetOld Hr | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW00973 | In administration main office | Drinking Fountain | 2.8 | Pass | N/A | Testing Complete |
| LW00974 | In break room across from Suite B | Teachers Lounge Sink | <1 | Pass | N/A | Testing Complete |
| LW00975 | In hallway next to staff lounge | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW00976 | In special ed 9A | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW00977 | In special ed 9A | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW00978 | In classroom 9 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW00979 | In Preschool 8 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW00980 | In Preschool 8 | Classroom Combination Drinking Fountain | 42.2 | Fail | NC | Remediation Action Plan |
| LW00981 | In health room H104 | Nurses Office Sink | 2.5 | Pass | N/A | Testing Complete |
| LW00983 | In kindergarten 1 | Classroom Combination Sink | 3.2 | Pass | N/A | Testing Complete |
| LW00985 | In kindergarten 1 | Classroom Combination Sink | 5.0 | Fail | NC | Remediation Action Plan |
| LW00987 | In kindergarten 3 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW00988 | In kindergarten 3 | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW00989 | In kindergarten 2 | Classroom Combination Sink | 1.5 | Pass | N/A | Testing Complete |
| LW00991 | In kindergarten 2 | Classroom Combination Sink | 3.1 | Pass | N/A | Testing Complete |
| LW00993 | In kindergarten 4 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW00994 | In kindergarten 4 | Classroom Combination Drinking Fountain | 2.4 | Pass | N/A | Testing Complete |
| LW00995 | In kindergarten 4 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW00997 | In kindergarten 5 | Classroom Combination Sink | 2.6 | Pass | N/A | Testing Complete |
| LW00999 | In kindergarten 5 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01000 | In kindergarten 5 | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01001 | In Preschool 6 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01002 | In Preschool 6 | Classroom Combination Drinking Fountain | 2.2 | Pass | N/A | Testing Complete |
| LW01003 | In Preschool 6 | Classroom Combination Sink | 6.1 | Fail | NC | Remediation Action Plan |


| LW01004 | In Preschool 6 | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW01005 | In classroom 7 head start | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01006 | In classroom 7 head start | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01007 | In classroom 7 head start | Classroom Combination Sink | 1.6 | Pass | N/A | Testing Complete |
| LW01008 | In classroom 7 head start | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01009 | In health room H107 inside of H104 | Nurses Office Sink | <1 | Pass | N/A | Testing Complete |
| LW01010 | In lab H113 by health room ie. inside of H104 | Nurses Office Sink | 2.7 | Pass | N/A | Testing Complete |
| LW01011 | In health room H111 by health ie. inside of H104 | Nurses Office Sink | 3.8 | Pass | N/A | Testing Complete |
| LW01012 | In health room H110 by health ie. inside of H104 | Nurses Office Sink | 5.4 | Fail | NC | Remediation Action Plan |
| LW01013 | In classroom 10 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01014 | In classroom 10 | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01016 | In classroom 11 | Classroom Combination Drinking Fountain | 3.7 | Pass | N/A | Testing Complete |
| LW01019 | In classroom 12 | Classroom Combination Sink | 2.2 | Pass | N/A | Testing Complete |
| LW01021 | In classroom 13 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01022 | In classroom 13 | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01023 | In classroom 14 | Classroom Combination Sink | 2.1 | Pass | N/A | Testing Complete |
| LW01024 | In classroom 14 | Classroom Combination Drinking Fountain | 3.3 | Pass | N/A | Testing Complete |
| LW01025 | In reading 13A | Classroom Combination Sink | 1.9 | Pass | N/A | Testing Complete |
| LW01026 | In reading 13A | Classroom Combination Drinking Fountain | 2.9 | Pass | N/A | Testing Complete |
| LW01027 | In ESOL 13B | Classroom Sink | 2.9 | Pass | N/A | Testing Complete |
| LW01028 | In classroom 14A | Classroom Sink | <1 | Pass | N/A | Testing Complete |
| LW01029 | In classroom MU | Classroom Sink | 2.2 | Pass | N/A | Testing Complete |
| LW01030 | In hallway across from elevator | Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01031 | In classroom 21 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01033 | In classroom 19 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01034 | In classroom 19 | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01035 | In classroom 20 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01036 | In classroom 20 | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01037 | In classroom 18 | Classroom Combination Sink | <1 | Pass | N/A | Testing Complete |
| LW01038 | In classroom 18 | Classroom Combination Drinking Fountain | <1 | Pass | N/A | Testing Complete |
| LW01039 | In classroom 17 | Classroom Combination Sink | 1.6 | Pass | N/A | Testing Complete |
| LW01041 | In classroom 16 | Classroom Combination Sink | 1.1 | Pass | N/A | Testing Complete |


| LW01043 | In classroom 15 | Classroom Combination Sink | $<1$ | Pass | N/A | Testing <br> Complete |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW01045 | In hallway across from elevator- lower | level |  |  |  |  |

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 30, 2019
Executive Summary:
Highland Elementary School
3100 Medway Street
Wheaton, Maryland 20902

| Round of Testing: | Post-Remediation Follow-up |
| :--- | :---: |
| Sample Date | $1 / 29 / 19$ |
| \# of Outlets Tested: | 1 |
| \# of Outlets $\geq 5 \mathrm{ppb}:$ | 0 |
| Low Value $(\mathrm{ppb}):$ | 1.5 |
| High Value $(\mathrm{ppb}):$ | 1.5 |

## Project Status

Testing Complete: Post-remediation follow-up testing completed for following rooms:
Classroom 12 - Outlet (LW01019) will be placed back into service

Engineers - Planners - Scientists - Construction Managers
936 Ridgebrook Road • Sparks, MD 21152 - 410-316-7800 - (Fax) 410-316-7935

August 30, 2019
Mr. Brian Mullikin, MS
Environmental Team Leader
Montgomery County Public Schools
8301 Turkey Thicket Dr., Bldg A, 1st Floor
Gaithersburg, Maryland 20879
Re: Lead in Water Post-Remediation Follow-up Testing Service

## Location: Highland Elementary School

3100 Medway Street
Wheaton, Maryland 20902
Dear Mr. Mullikin:

KCI Technologies, Inc. (KCI) 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 Highland Elementary School, located at 3100 Medway Street in Wheaton, Maryland 20902.

## SCOPE OF SERVICES

One drinking water outlet was remediated at Highland Elementary School due to initial lead levels that exceeded the lead action level of 5 parts per billion (ppb). KCI Technologies, Inc. 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.

KCI Technologies, Inc. visited the site on $1 / 29 / 19$ to collect a post-remediation follow-up sample from 1 drinking water outlet that had been replaced. The sample was 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 <br> ID | Room <br> Number | Location | Notes | Equipment <br> Type | Initial <br> (ppb) | Post- <br> Flush <br> (ppb) | Post- <br> Remediation <br> Follow-up <br> (ppb) | Remediation <br> Follow-up <br> Pass/Fail | Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW01019 | 12 | Classroom |  | Faucet | 75.5 | 1.0 | 1.5 | Pass | Post-remediation <br> follow-up testing <br> complete. Outlet will <br> be placed back into <br> 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, KCI Technologies, Inc.

Kamau McAbee
MDE Certified Water Sampler \#8281KM
KCI Job \#1214634186

# MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018 

May 3, 2018

Executive Summary:
Highland Elementary School
3100 Medway Street
Silver Spring, MD 20902

| Round of Testing: | Initial |
| :---: | :---: |
| \# of Outlets Tested: | 94 |
| \# of Outlets $\geq 20 \mathrm{ppb}:$ | 1 |
| Low Value (ppb): | $<1.0$ |
| High Value (ppb): | 75.5 |
| Follow-Up Testing Required <br> (Samples $\geq 20 \mathrm{ppb}):$ | Classroom 12 (75.5 ppb) |


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

Project Status
Testing Complete: Remediation Plan

Classroom 12 - Replace fixture (LW01019), in addition to supply line and valve located under sink

May 3, 2018

Mr. Brian Mullikin<br>Environmental Team Leader<br>Montgomery County Public Schools<br>8301 Turkey Thicket Drive<br>Building A, First Floor<br>Gaithersburg, Maryland 20879<br>Re: Lead in Water Testing Service<br>Location: Highland Elementary School<br>3100 Medway Street<br>Silver Spring, MD 20902

Dear Mr. Mullikin:

Professional Services Industries (PSI), Inc. is pleased to submit the following report to the Montgomery County Public Schools (MCPS) for completion of initial lead in water testing at Highland Elementary School, located at 3100 Medway Street in Silver Spring, MD 20902.

## Scope of Services:

PSI conducted lead in water testing at Highland 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.

PSI visited the site on $02 / 15 / 18,02 / 16 / 18,02 / 20 / 18$, and $02 / 21 / 18$ to collect samples from 94 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. One 30 second follow-up 30 second sample was collected on 4/12/18.

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 initial lead in water analysis at or above 20 parts per billion (ppb) and subsequent follow up 30 second results are highlighted in the summary table below:

| Barcode ID | Sample Location | Date Collected | Initial Sample <br> Result (ppb) | Date Collected | 30 Second Follow <br> Up Sample <br> Result (ppb) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LW01019 | Classroom 12 | $2 / 15 / 2018$ | 75.5 | $4 / 12 / 18$ | 1.0 |

The initial lead in water sample results ( $02 / 16 / 18$ and $02 / 21 / 18$ ) and 30 second follow up results $(4 / 12 / 18)$ 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,

## PROFESSIONAL SERVICE INDUSTRIES, INC.



Nand Kaushik, P.E.
Department Manager, Environmental Services
Nand.Kaushik@psiusa.com
Attachments: A - Lead in Water Test Summary Table

## ATTACHMENT A

## Highland ES Water Test Summary Table

Contractor: Professional Services Industries, Inc.
Certified Laboratory: Microbac Laboratories, Inc.
Initial Sample Results for Highland Elementary School (2/15/18)

| Barcode ID | Room \# | Location | Location Notes | Equipment Type | Results | Pass/Fail | Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW00968 |  | Kitchen |  | Faucet | 1.2 | Pass | Testing Complete |
| LW00969 |  | Kitchen |  | Faucet | 1.9 | Pass | Testing Complete |
| LW00970 |  | Hallway | Outside Of Kitchen | Cooler | <1.0 | Pass | Testing Complete |
| LW00971 |  | Math | Math Closet | Faucet | <1.0 | Pass | Testing Complete |
| LW00972 |  | Testing Room | Suite B Testing Closet- Old HR | Faucet | <1.0 | Pass | Testing Complete |
| LW00973 |  | Administration | Main Office | Cooler | <1.0 | Pass | Testing Complete |
| LW00974 |  | Break Room | Across From Suite B | Faucet | <1.0 | Pass | Testing Complete |
| LW00975 |  | Hallway | Next To Staff Lounge | Cooler | <1.0 | Pass | Testing Complete |
| LW00976 | 9A | Special Ed |  | Faucet | <1.0 | Pass | Testing Complete |
| LW00977 | 9A | Special Ed |  | Bubbler Indoor | 1.4 | Pass | Testing Complete |
| LW00978 | 9 | Classroom |  | Faucet | <1.0 | Pass | Testing Complete |
| LW00979 | 8 | Preschool |  | Faucet | 2.3 | Pass | Testing Complete |
| LW00980 | 8 | Preschool |  | Bubbler Indoor | 1.4 | Pass | Testing Complete |
| LW00981 | H104 | Health Room |  | Faucet | <1.0 | Pass | Testing Complete |
| LW00982 |  | Hallway | Right Of Room 1 | Cooler | <1.0 | Pass | Testing Complete |
| LW00983 | 1 | Kindergarten |  | Faucet | <1.0 | Pass | Testing Complete |
| LW00985 | 1 | Kindergarten |  | Faucet | 1.3 | Pass | Testing Complete |
| LW00987 | 3 | Kindergarten |  | Faucet | <1.0 | Pass | Testing Complete |
| LW00988 | 3 | Kindergarten |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW00989 | 2 | Kindergarten |  | Faucet | 1.9 | Pass | Testing Complete |
| LW00990 | 2 | Kindergarten |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |


| Barcode ID | Room \# | Location | Location Notes | Equipment Type | Results | Pass/Fail | Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW00991 | 2 | Kindergarten |  | Faucet | 4.8 | Pass | Testing Complete |
| LW00992 | 2 | Kindergarten |  | Bubbler Indoor | 5.0 | Pass | Testing Complete |
| LW00993 | 4 | Kindergarten |  | Faucet | <1.0 | Pass | Testing Complete |
| LW00994 | 4 | Kindergarten |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW00995 | 4 | Kindergarten |  | Faucet | 2.4 | Pass | Testing Complete |
| LW00997 | 5 | Kindergarten |  | Faucet | 1.5 | Pass | Testing Complete |
| LW00999 | 5 | Kindergarten |  | Faucet | <1.0 | Pass | Testing Complete |
| LW01000 | 5 | Kindergarten |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01001 | 6 | Preschool |  | Faucet | 1.8 | Pass | Testing Complete |
| LW01002 | 6 | Preschool |  | Bubbler Indoor | 4.1 | Pass | Testing Complete |
| LW01003 | 6 | Preschool |  | Faucet | 1.2 | Pass | Testing Complete |
| LW01004 | 6 | Preschool |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01005 | 7 | Classroom | Head Start | Faucet | 1.5 | Pass | Testing Complete |
| LW01006 | 7 | Classroom | Head Start | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01007 | 7 | Classroom | Head Start | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01008 | 7 | Classroom | Head Start | Bubbler Indoor | 1.2 | Pass | Testing Complete |
| LW01009 | H107 | Health Room | Inside Of H104 | Faucet | 2.9 | Pass | Testing Complete |
| LW01010 | H113 | Health Room | Inside Of H104 | Faucet | 1.4 | Pass | Testing Complete |
| LW01011 | H111 | Health Room | Inside Of H104 | Faucet | 1.2 | Pass | Testing Complete |
| LW01012 | H110 | Health Room | Inside Of H104 | Faucet | 1.7 | Pass | Testing Complete |
| LW01013 | 10 | Classroom |  | Faucet | 4.7 | Pass | Testing Complete |
| LW01014 | 10 | Classroom |  | Bubbler Indoor | 1.6 | Pass | Testing Complete |
| LW01015 | 11 | Classroom |  | Faucet | 5.1 | Pass | Testing Complete |
| LW01016 | 11 | Classroom |  | Bubbler Indoor | 1.9 | Pass | Testing Complete |
| LW01017 |  | Classroom | Grade 2 - Computer Lab | Faucet | 8.7 | Pass | Testing Complete |
| LW01018 |  | Classroom | Grade 2 - Computer Lab | Bubbler Indoor | 5.8 | Pass | Testing Complete |
| LW01019 | 12 | Classroom |  | Faucet | 75.5 | Fail | Follow-Up Testing Needed |


| Barcode ID | Room \# | Location | Location Notes | Equipment Type | Results | Pass/Fail | Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW01021 | 13 | Classroom |  | Faucet | 2.7 | Pass | Testing Complete |
| LW01022 | 13 | Classroom |  | Bubbler Indoor | 2.1 | Pass | Testing Complete |
| LW01023 | 14 | Classroom |  | Faucet | 4.9 | Pass | Testing Complete |
| LW01024 | 14 | Classroom |  | Bubbler Indoor | 2.9 | Pass | Testing Complete |
| LW01025 | 13A | Reading |  | Faucet | 3.4 | Pass | Testing Complete |
| LW01027 | 13B | ESOL |  | Faucet | 3.9 | Pass | Testing Complete |
| LW01028 | 14A | Classroom |  | Faucet | 4.6 | Pass | Testing Complete |
| LW01029 | MU | Classroom |  | Faucet | 3.6 | Pass | Testing Complete |
| LW01030 |  | Hallway | Across From Elevator | Cooler | <1.0 | Pass | Testing Complete |
| LW01031 | 21 | Classroom |  | Faucet | <1.0 | Pass | Testing Complete |
| LW01032 | 21 | Classroom |  | Bubbler Indoor | 1.4 | Pass | Testing Complete |
| LW01033 | 19 | Classroom |  | Faucet | <1.0 | Pass | Testing Complete |
| LW01034 | 19 | Classroom |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01035 | 20 | Classroom |  | Faucet | <1.0 | Pass | Testing Complete |
| LW01036 | 20 | Classroom |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01037 | 18 | Classroom |  | Faucet | 1.4 | Pass | Testing Complete |
| LW01038 | 18 | Classroom |  | Bubbler Indoor | 1.3 | Pass | Testing Complete |
| LW01039 | 17 | Classroom |  | Faucet | 1.6 | Pass | Testing Complete |
| LW01040 | 17 | Classroom |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01041 | 16 | Classroom |  | Faucet | 1.0 | Pass | Testing Complete |
| LW01042 | 16 | Classroom |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01043 | 15 | Classroom |  | Faucet | <1.0 | Pass | Testing Complete |
| LW01043 | 15 | Classroom |  | Faucet | <1.0 | Pass | Testing Complete |
| LW01044 | 15 | Classroom |  | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01045 |  | Hallway | Across From Elevator- Lower Level | Cooler | <1.0 | Pass | Testing Complete |
| LW01047 | 28 | Classroom | Lower Level | Bubbler Indoor | 2.8 | Pass | Testing Complete |
| LW01048 | 27 | Classroom | Lower Level | Faucet | 1.3 | Pass | Testing Complete |


| Barcode ID | Room \# | Location | Location Notes | Equipment Type | Results | Pass/Fail | Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW01049 | 27 | Classroom | Lower Level | Bubbler Indoor | 1.0 | Pass | Testing Complete |
| LW01050 | 26 | Classroom | Lower Level | Faucet | <1.0 | Pass | Testing Complete |
| LW01051 | 26 | Classroom | Lower Level | Bubbler Indoor | 1.0 | Pass | Testing Complete |
| LW01052 | 25 | Classroom | Lower Level | Faucet | 1.0 | Pass | Testing Complete |
| LW01053 | 25 | Classroom | Lower Level | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01054 | 24 | Classroom | Lower Level | Faucet | <1.0 | Pass | Testing Complete |
| LW01055 | 24 | Classroom | Lower Level | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01056 | 23 | Classroom | Lower Level | Faucet | 3.5 | Pass | Testing Complete |
| LW01057 | 23 | Classroom | Lower Level | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01058 | 22 | Classroom | Lower Level | Faucet | <1.0 | Pass | Testing Complete |
| LW01060 | 29 | Music | Lower Level | Faucet | 2.5 | Pass | Testing Complete |
| LW01061 | 29 | Music | Lower Level | Bubbler Indoor | <1.0 | Pass | Testing Complete |
| LW01062 | 30 | Classroom | Lower Level | Faucet | 1.7 | Pass | Testing Complete |
| LW01063 | 30 | Classroom | Lower Level | Bubbler Indoor | 2.7 | Pass | Testing Complete |
| LW01064 |  | Hallway | Across From Gym | Cooler | <1.0 | Pass | Testing Complete |
| M03911 |  | Work Room Admin |  | Faucet | 6.3 | Pass | Testing Complete |
| M03913 |  | Kitchen |  | Faucet | 2.0 | Pass | Testing Complete |
| M03914 |  | Kitchen All |  | Faucet | 11.1 | Pass | Testing Complete |
| M03986 |  | Work Room Media Center |  | Faucet | 2.5 | Pass | Testing Complete |

*ppb = parts per billion

Contractor: Professional Services Industries, Inc.
Certified Laboratory: Microbac Laboratories, Inc.
Follow Up Sample Results for Highland Elementary School (4/15/18)

| Barcode ID | Room <br> Number | Location | Equipment <br> Type | Initial draw <br> $\left(\mathbf{2}^{\text {nd }}\right)($ PPB $)$ | Initial draw <br> $\left(\mathbf{3}^{\text {rd }}\right)($ PPB $)$ | 30 Second <br> Draw (PPB) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LW01019 | 12 | Classroom | Faucet | 2.6 | 3.0 | 1.0 | | 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.

