**MONTGOMERY COUNTY PUBLIC SCHOOLS**
**LEAD IN DRINKING WATER TESTING 2019**

**Executive Summary:**
**Emory Grove Center**
18100 Washington Grove Lane
Gaithersburg, MD 20877

| | |
|---|---|
| Date of Testing Report: | 03/26/2019 |
| Round of Testing: | Initial |
| # of Outlets Tested: | 40 |
| # of Outlets ≥ 20 ppb: | 11 |
| Low Value (ppb): | <1.0 |
| High Value (ppb): | 121.0 |

**Project Status**
**Initial testing complete:** Follow up testing required for 11 samples ≥ 20 ppb.

Drinking Outlet results ≥ 20 ppb:

Classroom 104 (56.4 ppb), Classroom 105 (112.0 ppb), Classroom 103 (31.0 ppb), Classroom 103 (27.5 ppb), Classroom 101 (113.0 ppb), Classroom 101 (27.5 ppb), Classroom 141B (121.0 ppb), Classroom 140B (20.6 ppb), Hallway (23.7 ppb), Classroom 134 (27.6 ppb), Classroom 131 (20.7 ppb)

March 26, 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 Testing Service

Location: Emory Grove Center
18100 Washington Grove Lane
Gaithersburg, MD 20877

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 Emory Grove Center, located at 18100 Washington Grove Lane, Gaithersburg, MD 20877.

## Scope of Services:

PSI conducted lead in water testing at Emory Grove Center 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 2/27/19 and 2/28/19 to collect samples from 40 drinking water outlets in accordance with current criteria described by the Maryland Department of the Environment (MDE) Draft Lead in Drinking Water—Public and Nonpublic Schools, Title 26, Subtitle 16 Lead, Chapter 07.

Samples were submitted to a laboratory for lead in water analysis using current US EPA methodology. The laboratory has been certified by the Maryland Department of the Environment to analyze drinking water for lead.

## Results:

There were eleven (11) results of the initial lead in water analysis at or above 20 parts per billion (ppb) and the results are highlighted in the summary table below:

| Barcode ID | Sample Location | Date Collected | Initial Sample Result (ppb) |
|---|---|---|---|
| LW09754 | Faucet-Classroom 104 | 2/28/19 | 56.4 |
| LW09755 | Faucet-Classroom 105 | 2/28/19 | 112.0 |
| LW09758 | Faucet-Classroom 103 | 2/28/19 | 31.0 |
| LW09759 | Bubbler-Classroom 103 | 2/28/19 | 27.5 |
| LW09760 | Faucet-Classroom 101 | 2/28/19 | 113.0 |
| LW09761 | Bubbler-Classroom 101 | 2/28/19 | 35.2 |
| LW09763 | Bubbler-Classroom 141B | 2/28/19 | 121.0 |
| LW09765 | Faucet-Classroom 140B | 2/28/19 | 20.6 |
| LW09766 | Cooler-Hallway | 2/28/19 | 23.7 |
| LW09768 | Faucet-Classroom 134 | 2/28/19 | 27.6 |
| LW09777 | Bubbler-Classroom 131 | 2/28/19 | 20.7 |

*ppb = parts per billion

ND = Non Detect

The initial lead in water sample results (2/28/19) 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
B – Laboratory Analytical Results and Chain of Custody

# ATTACHMENT A

## Emory Grove Center Water Test Summary Table

**Contractor:** Professional Services Industries, Inc.
**Certified Laboratory:** Microbac Laboratories, Inc.

Initial Sample Results for Emory Grove Center (2/28/19)

| Barcode ID | Location | Location Notes | Equipment Type | Result (PPB)* | Pass/Fail | Status |
|---|---|---|---|---|---|---|
| LW09711 | 113 | Staff Lounge | Faucet | 2.1 | Pass | Testing Complete |
| LW09712 | 115 | | Faucet | 5.1 | Pass | Testing Complete |
| LW09713 | 100G | | Faucet | 2.1 | Pass | Testing Complete |
| LW09714 | 100H | | Faucet | 1.0 | Pass | Testing Complete |
| LW09753 | 100F | | Faucet | 1.2 | Pass | Testing Complete |
| LW09754 | 104 | | Faucet | 56.4 | Fail | Follow Up Test Needed |
| LW09755 | 105 | | Faucet | 112.0 | Fail | Follow Up Test Needed |
| LW09756 | 105 | | Bubbler-Indoor | 1.6 | Pass | Testing Complete |
| LW09757 | 102 | | Faucet | 3.5 | Pass | Testing Complete |
| LW09758 | 103 | | Faucet | 31.0 | Fail | Follow Up Test Needed |
| LW09759 | 103 | | Bubbler-Indoor | 27.5 | Fail | Follow Up Test Needed |
| LW09760 | 101 | | Faucet | 113.0 | Fail | Follow Up Test Needed |
| LW09761 | 101 | | Bubbler-Indoor | 35.2 | Fail | Follow Up Test Needed |
| LW09762 | Hallway | | Cooler | <1.0 | Pass | Testing Complete |
| LW09763 | 141B | | Bubbler-Faucet | 121.0 | Fail | Follow Up Test Needed |
| LW09764 | 140 | | Faucet | 4.2 | Pass | Testing Complete |
| LW09765 | 140B | | Faucet | 20.6 | Fail | Follow Up Test Needed |
| LW09766 | Hallway | | Cooler | 23.7 | Fail | Follow Up Test Needed |
| LW09767 | Hallway | | Cooler | 2.2 | Pass | Testing Complete |
| LW09768 | 134 | | Faucet | 27.6 | Fail | Follow Up Test Needed |
| LW09769 | 132 | | Faucet | 1.0 | Pass | Testing Complete |
| LW09770 | 132 | | Faucet | 1.1 | Pass | Testing Complete |

| Barcode ID | Location | Location Notes | Equipment Type | Result (PPB)* | Pass/Fail | Status |
|---|---|---|---|---|---|---|
| LW09771 | 132 | | Faucet | 2.9 | Pass | Testing Complete |
| LW09772 | Hallway | | Cooler | 11.8 | Pass | Testing Complete |
| LW09773 | Hallway | | Cooler | 2.6 | Pass | Testing Complete |
| LW09774 | 124A | | Faucet | 17.3 | Pass | Testing Complete |
| LW09775 | 124 | | Faucet | 14.8 | Pass | Testing Complete |
| LW09776 | 131 | | Faucet | 10.3 | Pass | Testing Complete |
| LW09777 | 131 | | Bubbler-Indoor | 20.7 | Fail | Follow Up Test Needed |
| LW09778 | 122 | | Faucet | 9.7 | Pass | Testing Complete |
| LW09779 | 122 | | Bubbler-Indoor | 11.5 | Pass | Testing Complete |
| LW09780 | 120 | | Faucet | 2.4 | Pass | Testing Complete |
| LW09781 | 125 | | Faucet | 12.0 | Pass | Testing Complete |
| LW09782 | Hallway | | Cooler | 2.3 | Pass | Testing Complete |
| LW09783 | 118 | | Faucet | 7.8 | Pass | Testing Complete |
| LW09784 | Kitchen | | Faucet | 3.2 | Pass | Testing Complete |
| LW09785 | 110 | | Faucet | 8.2 | Pass | Testing Complete |
| LW09786 | 110 | | Faucet | 1.8 | Pass | Testing Complete |
| LW09787 | 110 | | Faucet | 3.4 | Pass | Testing Complete |
| LW09788 | Hallway | | Cooler | <1.0 | Pass | Testing Complete |

*ppb = parts per billion