



MONTGOMERY COUNTY PUBLIC SCHOOLS DRINKING WATER TESTING 2018

July 19, 2018

Executive Summary:

Fairland Center

13313 Old Columbia Pike,
Silver Spring, MD 20904

Round of Testing:	Initial
# of Outlets Tested:	11
# of Outlets \geq 20 ppb:	3
Low Value (ppb):	< 1.0
High Value (ppb):	1410.0
Follow-Up Testing Required (Samples \geq 20 ppb):	Kitchen (29.6 ppb) Classroom 1 (115.0 ppb) Weight Rm. (1410.0 ppb)

Round of Testing:	Follow-Up – 30 sec draw
# of Outlets Tested:	3

Project Status

Testing Complete: Remediation Plan

Kitchen – Replace fixture (LW08135), in addition to supply line and valve located under sink
Classroom 1 – Replace fixture (LW08137), in addition to supply line and valve located under sink
Weight Room – Replace fixture (LW08142), in addition to supply line and valve located under sink



July 19, 2018

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: Fairland Center
13313 Old Columbia Pike,
Silver Spring, MD 20904

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 Fairland Center, located 13313 Old Columbia Pike, Silver Spring, MD 20904.

Scope of Services:

PSI conducted lead in water testing at Fairland 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 5/3/18 and 5/4/18 to collect samples from 11 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. Three 30 second follow-up samples were collected on 6/22/18.

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 were three results 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 Result (ppb)	Date Collected	30 Second Follow Up Sample Result (ppb)
LW08135	Kitchen	5/4/18	29.6	6/22/18	2.4
LW08137	Classroom 1	5/4/18	115.0	6/22/18	5.6
LW08142	Weight Room R3	5/4/18	1410.0	6/22/18	54.1

*ppb = parts per billion

The initial lead in water sample results (5/4/18) and 30 second follow up results (6/22/18) 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

Fairland Center Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Initial Sample Results for Fairland Center (5/4/18)

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW08125		Break Room		Faucet	3.1	Pass	Testing Complete
LW08128		Media Center	Library	Faucet	7.5	Pass	Testing Complete
LW08130	13	Classroom		Faucet	3.1	Pass	Testing Complete
LW08133		Kitchen		Faucet	<1.0	Pass	Testing Complete
LW08134		Kitchen		Faucet	2.0	Pass	Testing Complete
LW08135		Kitchen		Faucet	29.6	Fail	Follow-Up Testing Needed
LW08136		Health Room		Faucet	7.6	Pass	Testing Complete
LW08137	1	Classroom		Faucet	115.0	Fail	Follow-Up Testing Needed
LW08138	4	Classroom		Faucet	6.0	Pass	Testing Complete
LW08139	2	Classroom		Faucet	13.8	Pass	Testing Complete
LW08142	R3	Weight Room		Faucet	1410.0	Fail	Follow-Up Testing Needed

*ppb = parts per billion

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Follow Up Sample Results for Fairland Center (6/22/18)

Barcode ID	Room Number	Location	Equipment Type	Initial draw (2 nd) (PPB)	30 Second Draw (PPB)	Status
LW08135		Kitchen	Faucet	53.0	2.4	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW08137	1	Classroom	Faucet	127.0	5.6	Remediation required – replace fixture, in addition to supply line and valve located under sink
LW08142	R3	Weight Room	Faucet	2050.0	54.1	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 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.