

Montgomery County Public Schools Lead in Drinking Water Testing Report

Cashell Elementary School
17101 Cashell Road
Rockville, MD 20853

Report Date: February 18th, 2022

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	10/28/2021
# of Outlets Tested	57
# of Outlets \geq 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. 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



MONTGOMERY COUNTY PUBLIC SCHOOLS LEAD IN DRINKING WATER TESTING 2018

Executive Summary:
Cashell Elementary School
17101 Cashell Road
Rockville, MD 20853

Date of Test Report:	04/03/2018
Round of Testing:	Initial
# of Outlets Tested:	55
# of Outlets \geq 20 ppb:	0
Low Value (ppb):	< 1.0
High Value (ppb):	12.9

Project Status

Initial testing complete: All results less than 20 ppb.



April 3, 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: Cashell Elementary School
17101 Cashell Road
Rockville, MD 20853

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 Cashell Elementary School, located at 17101 Cashell Road, Rockville, MD 20853.

Scope of Services:

PSI conducted lead in water testing at Cashell 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 02/26/18 and 02/27/18 to collect samples from 55 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 no results of the lead in water analysis at or above 20 parts per billion (ppb).

The lead in water sample results < 20 ppb for sample collection date 02/27/18 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

Lead in Water Test Summary Table

Contractor: Professional Services Industries, Inc.

Certified Laboratory: Microbac Laboratories, Inc.

Sample Results for Cashell Elementary School

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW01398		Hallway	Next To Room 202	Cooler	<1.0	Pass	Testing Complete
LW01399		Hallway	Next To Room 202	Cooler	<1.0	Pass	Testing Complete
LW01400	211	Classroom		Faucet	2.1	Pass	Testing Complete
LW01401	211	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01402	215	Classroom		Faucet	2.2	Pass	Testing Complete
LW01403	215	Classroom		Bubbler - Indoor	1.3	Pass	Testing Complete
LW01404	217	Classroom		Faucet	1.7	Pass	Testing Complete
LW01405	222	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01406	226	Classroom		Faucet	1.8	Pass	Testing Complete
LW01407	226	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01408	102	Health Room Administration		Faucet	1.5	Pass	Testing Complete
LW01409		Kitchen		Faucet	1.2	Pass	Testing Complete
LW01410	142	Classroom		Faucet	2.4	Pass	Testing Complete
LW01411	142	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01412	107	Classroom		Faucet	<1.0	Pass	Testing Complete
LW01414	138	Classroom		Faucet	<1.0	Pass	Testing Complete
LW01415	138	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01416	103	Classroom		Faucet	<1.0	Pass	Testing Complete
LW01418	217	Classroom		Bubbler - Indoor	1.2	Pass	Testing Complete
LW01419	221	Classroom		Faucet	2.0	Pass	Testing Complete
LW01420	221	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01421	232	Classroom		Faucet	2.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
LW01422	232	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01423	130	Classroom		Faucet	1.4	Pass	Testing Complete
LW01424	130	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01425	120	Classroom		Faucet	1.2	Pass	Testing Complete
LW01426	120	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
LW01427	108	Break Room		Faucet	2.0	Pass	Testing Complete
LW01428	100H	Work Room		Faucet	<1.0	Pass	Testing Complete
LW01429		Hallway	In Front Of Room 176	Cooler	<1.0	Pass	Testing Complete
LW01430		Hallway	In Front Of Room 176	Bubbler - Indoor	<1.0	Pass	Testing Complete
M50411	222	Classroom		Faucet	1.1	Pass	Testing Complete
M50415	228	Classroom		Bubbler - Indoor	2.2	Pass	Testing Complete
M50416	228	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50440	202	Classroom		Faucet	1.3	Pass	Testing Complete
M50441	202	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50442	208	Classroom		Faucet	1.1	Pass	Testing Complete
M50443	208	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50447	126	Classroom		Faucet	1.6	Pass	Testing Complete
M50448	126	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50450	124	Classroom		Faucet	2.0	Pass	Testing Complete
M50451	124	Classroom		Bubbler - Indoor	<1.0	Pass	Testing Complete
M50456	118	Reading		Faucet	12.9	Pass	Testing Complete
M50472	168	Music		Faucet	2.7	Pass	Testing Complete
M50475		Hallway	Hallway Next to Room 162	Cooler	<1.0	Pass	Testing Complete
M50476		Hallway	Hallway Next to Room 162	Cooler	<1.0	Pass	Testing Complete
M50485	146	Classroom		Faucet	2.4	Pass	Testing Complete
M50488	146	Classroom		Bubbler - Indoor	1.0	Pass	Testing Complete
M50499		Hallway	Hallway Next to Room 194	Cooler	<1.0	Pass	Testing Complete
M50500		Hallway	Hallway Next to Room 194	Cooler	<1.0	Pass	Testing Complete

Barcode ID	Room Number	Location	Location Notes	Equipment Type	Result (PPB)*	Pass/Fail	Status
M50512	121	Kitchen		Faucet	2.8	Pass	Testing Complete
M50513	121	Kitchen		Faucet	1.9	Pass	Testing Complete
M50514	102A	Health Room		Faucet	1.8	Pass	Testing Complete
M50517	102B	Office Administration		Faucet	1.1	Pass	Testing Complete
M50521	178A	Office Media Center		Faucet	1.2	Pass	Testing Complete

*ppb = parts per billion

