

Frontier Schools – STEM High School Lead in Drinking Water Sampling and Testing Plan

Prepared For:

Frontier Schools 6800 Corporate Drive Kansas City, Jackson County, Missouri 64120

Prepared By:

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Plan Prepared:

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1.0 Purpose

Environmental Works, Inc. (EWI), on behalf of the Frontier Schools (Frontier), has prepared this Lead in Drinking Water Sampling and Testing (LDWST) Plan in response to the Missouri Revised Statues of Missouri (RSMo) Chapter 160 Section 077 (160.077). This LDWST Plan includes implementation procedures for inventorying and sampling outlets used for drinking water and water dispensed for cooking and cleaning of eating and cooking utensils at the Frontier STEM High School (STEM High School).

This Plan has been prepared to meet the requirements of the RSMo 160.077, the Environmental Protection Agencies (EPA) 3T's for Reducing Lead in Drinking Water and the EPA Safe Drinking Water Act (SDWA) and Missouri 10 CSR 20-7.031 Water Standards. Frontier has distributed this LDWST Plan to the public through the Frontier website (frontierschools.org) and made hard copies available at the facility. General information on the health effects of lead contamination and additional informational resources for employees and parents of children at each school will be provided upon request.

1.1 Regulatory Schedule Requirements (RMSo 160.077(4))

On or before January 1, 2024, Frontier will:

- Conduct an inventory of all drinking water outlets and all outlets that are used for dispensing water for consumption, cooking and cleaning of cooking and eating utensils;
- develop a plan for testing each outlet inventoried;
- the Plan will be made available to the public; and
- upon request, will provide general information on the health effects of lead contamination and additional informational resources for employees and parents of children at each school.

Before <u>August 1, 2024</u>, or on the first day students will be present in the building, whichever is later, Frontier will:

- Make all testing results and any lead remediation plans available on the school's website within two weeks of receiving final analytical test results;
- Remove and replace any drinking water coolers or drinking water outlets that the EPA has determined are not lead-free under the federal Lead Contamination Control Act of 1988.

2.0 School District Description and Contact Information

School District Information

School Name:	Frontier Schools		
School District:	Frontier School District		
School Type:	Charter		
Address:	6800 Corporate Dr. Kansas City, Jackson County, Missouri 64120		
Phone: Email:	(816) 683-8323 (O) and (816) 241-6201 (F) mvural@frontierschools.org		
Contact:	Matthew Mercer Maintenance Manager (816) 683-8323 (O)		

Building

The following table summarizes the school covered in this LDWST Plan. Detailed information on the school building is outlined in **Appendix A**.

Schools	Level	Grade	Address
Frontier STEM High School	Secondary	9th – 12th	6455 E Commerce Avenue Kansas City, MO 64120

3.0 Inventory

Frontier completed a building and outlet questionnaire and EWI completed a site visit to gather information pertaining to the following parameters:

- Date of building construction.
- Year and location of plumbing repairs
- Location of where water enters the building and flow.
- Identification of any known lead lines or plumbing components.
- Location of water pipes and piping material.
- Location of any tanks in the plumbing system.
- Identification of all faucets and fixtures used for drinking water and cooking.
- Identification of filters, aerators, signs of corrosion or banned water cooler tanks.

3.2 Outlet Identification and Prioritization

Drinking water and cooking outlets were identified from the questionnaire and site-visit in accordance with the Missouri RMOs 160.077.2 drinking water outlet definition, but is not limited to:

- a) A water fountain, faucet, or tap that is used or potentially used for drinking or food preparation; and
- b) Ice-making and hot drink machines

Frontier has prioritized buildings housing early childhood education programs, kindergartens, and elementary schools. Detailed information on the STEM High School building is attached in **Appendix A** and the outlets identified in the inventory are outlined in **Appendix B**. The building diagram is attached as **Appendix C**.

4.0 Sampling and Testing

4.1 Initial Sampling and Testing

The outlet inventory and prioritization schedule included in this plan will be used to conduct sampling for the Frontier facilities. Samples will be collected using proper sampling procedures. The sampler will wear nitrile gloves (PPE) and utilize laboratory prepared 250-milliliter (mL) unpreserved plastic containers to collect outlet water for analysis of lead by Method 200.8. Samples will be labeled, managed under a Chain of Custody, and sent to a certified laboratory for analysis. EWI personnel will collect samples from each identified outlet based on the following criteria:

First Draw Sampling

First draw samples will be immediately collected from the outlet from the first water after the outlet is turned on. Samples will be collected after a stagnation period of at least 8 hours but no greater than 18 hours.

All results will be summarized in a final report, submitted to the Missouri Department of Health and Senior Services, and published on the Frontier Schools website.

4.2 Subsequent Sampling and Testing

If initial testing finds lead above 5 ppb, Frontier will collect follow-up flush samples from 25% of outlets with elevated lead. If subsequent testing finds lead remains above 5 ppb, Frontier will implement remedial measures then test and sample remediated drinking water outlets by first draw and follow-up flush sampling annually.

If initial testing does not find a drinking water source with a lead concentration above 5 ppb, Frontier Schools will complete testing and sampling every five years.