



**Environmental  
Works, Inc.**

**Climax Springs R-IV School District  
Lead in Drinking Water  
Sampling and Testing Plan**

**Prepared For:**

Climax Springs R-IV School District  
571 Climax Ave  
Climax Springs, Missouri 65324

**Prepared By:**

Environmental Works, Inc.  
1455 E Chestnut Expressway  
Springfield, Missouri 65802

**Plan Prepared:**

January 29, 2024

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## 1.0 Purpose

Environmental Works, Inc. (EWI), on behalf of the Climax Springs R-IV School District (Climax Springs), has prepared this Lead in Drinking Water Sampling and Testing (LDWST) Plan in response to the Missouri Revised Statutes of Missouri (RSMo) Chapter 160 Section 077 (160.077). This LDWST Plan includes procedures for inventorying and sampling outlets used for drinking water and water dispensed for cooking and cleaning of eating and cooking utensils in each of the school buildings.

This Plan has been prepared to meet the requirements of the RSMo 160.077, the Environmental Protection Agency's (EPA) 3Ts for Reducing Lead in Drinking Water, and the EPA Safe Drinking Water Act (SDWA). The Climax Springs School District has distributed this LDWST Plan to the public through the District website ([cspringsr4.org](http://cspringsr4.org)). 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 (RSMo 160.077(4))

In accordance with RSMo 160.077, on or before January 1, 2024, each school 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;
- Provide the Plan to the public; and
- Upon request, provide general information on the health effects of lead contamination and additional informational resources for employees and parents of children at each school.

Before August 1, 2024, or on the first day students will be present in the building, whichever is later, each school will:

- Complete sampling in accordance with RSMo 160.077,
- Make all testing results and any lead remediation plans available on the school's website within two weeks of receiving final analytical test results, and
- 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

### 2.1 School District Information

**School District:** Climax Springs R-IV Schools

**School Type:** Public

**Address:** 571 Climax Ave  
Climax Springs, Camden County, Missouri 65324

**Phone:** (573) 347-2351 (O)

**Email:** jgriffith@cspringsr4.org

**Contact:** Mr. Joshua Griffith  
High School Principal  
(573) 347-2351 (O)

### 2.2 Buildings

The following table summarizes the schools covered in this LDWST Plan.

Schools	Level	Grade	Address
Climax Springs Preschool	Preschool	Pre-K	571 Climax Ave Climax Springs, MO 65324
Climax Springs Elementary	Primary	1st – 5th	571 Climax Ave Climax Springs, MO 65324
Climax Springs Jr. High	Secondary	6th – 8th	571 Climax Ave Climax Springs, MO 65324
Climax Springs High School	Secondary	9th – 12th	571 Climax Ave Climax Springs, MO 65324

### 3.0 Inventory

The Climax Springs R-IV School District completed a building and outlet questionnaire, and EWI completed a site visit to gather information such as:

- Date of building construction,
- Year and location of plumbing repairs,
- Location 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, and
- Identification of filters, aerators, signs of corrosion, or banned water cooler tanks.

#### 3.1 Outlet Identification and Prioritization

Drinking water and cooking outlets were identified from the questionnaire and site visit in accordance with the Missouri RSMo's 160.077.2 drinking water outlet definition, which includes but may not be 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.

Building diagrams are attached in **Appendix A**, detailed information on each building can be found in **Appendix B**, and the outlets identified in the inventory are outlined in **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 Climax Springs R-IV School District. Samples will be collected using proper sampling procedures. The sampler will 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.

#### **Flush Sampling**

Follow-up flush samples will be collected from at least 25% of inventoried drinking water outlets.

All results will be summarized in a final report, submitted to the Missouri Department of Health and Senior Services, and published on the Climax Springs R-IV School District website.

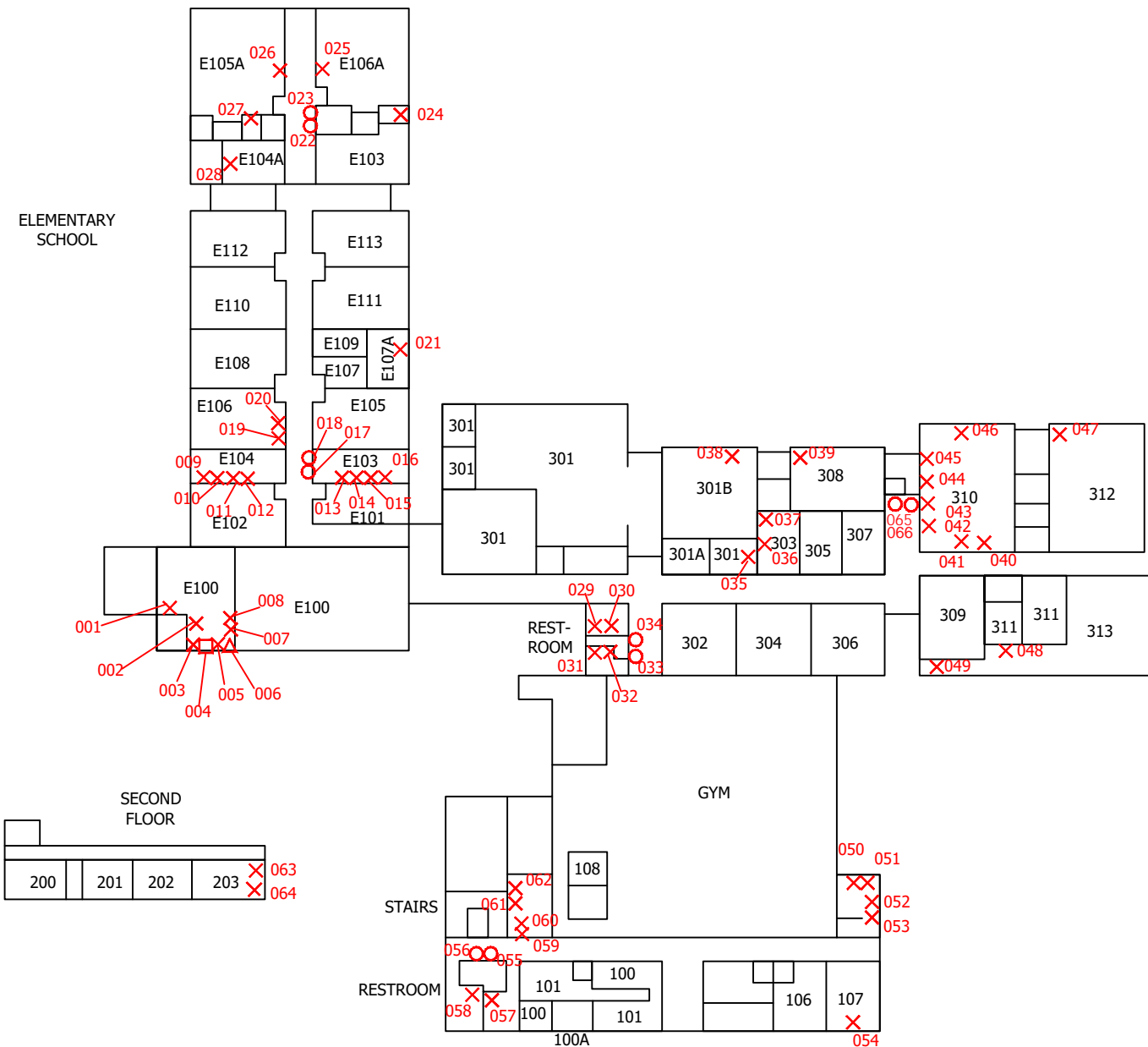
### 4.2 Subsequent Sampling and Testing

If initial testing finds lead above 5 ppb, the Climax Springs R-IV School District will implement remedial measures, then test and sample 25% of 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, Climax Springs R-IV School District will complete testing and sampling every five years.

## **APPENDIX A – Building Diagrams**

LEGEND	
✕	SINKS
○	FOUNTAINS
□	DISH WASHER
△	ICE MACHINE



ELEMENTARY SCHOOL

SECOND FLOOR

REST-ROOM

GYM

STAIRS

RESTROOM



CHECKED BY:  
T. FINN  
E.W.I. # 240225  
DRAWN BY: CRR  
Jan. 24, 2024

NOT TO SCALE



Springfield Office Location:  
1455 E. Chestnut Expressway  
Springfield, MO 65802  
Phone: (417) 890-9500

**MAIN BUILDING  
(BUILDING A)**

CLIMAX SPRINGS R-IV SCHOOLS  
CLIMAX SPRINGS, MISSOURI

FIGURE  
**1.0**



## **APPENDIX B – Building Summary**

School District: Climax Springs R-IV  
 Person Completing Questionnaire: Thaddaeus Finn

Date: 1/29/2024  
 Title: Associate Scientist

Building	Address	Original Construction Date	Outlet Count	Any Building Maps/Drawings		Any Building Additions?			Who Provides Water to the Building?
				Yes/No	Electronic/ Hard Copy <i>(see note below)</i>	Yes/No	Year of Addition	What Was Added?	
Climax Springs Main Office/Gym	571 Climax Ave, Climax Springs, MO 64834								
Office Area		1939	5	Yes	Hard Copy	No	N/A	N/A	Well
Second Floor		1939	2	Yes	Hard Copy	No	N/A	N/A	Well
Gym/Locker Rooms		1958	8	Yes	Hard Copy	No	N/A	N/A	Well
Climax Springs Elementary				Yes	Hard Copy	No	N/A	N/A	
Kitchen		2020	8	Yes	Hard Copy	No	N/A	N/A	Well
Main Hall		2020	13	Yes	Hard Copy	No	N/A	N/A	Well
Pre-K, K Pod		2020	7						Well
Climax Springs High School				Yes	Hard Copy	No	N/A	N/A	
Main Hall		1980s	13	Yes	Hard Copy	No	N/A	N/A	Well
Ag Room/Office Area		1990s	10	Yes	Hard Copy	No	N/A	N/A	Well
Ballfield Concessions		2023	3	No		No	N/A	N/A	Well
Bus Barn		Unknown	1	No		No	N/A	N/A	Well
^^ Enter New line above ^^									

**Total Outlets** **70**

## **APPENDIX C – Outlet Inventory**

**TABLE 1**  
**Summary of Outlet Inventory**  
**Climax Springs School District: Climax Springs Schools**

Map ID	Outlet Type <i>(see examples below)</i>	Location <i>(hall, room #, etc.)</i>	Sample Type	Initial Sample Date	Lead Results	Notes
					200.8 Method ug/L (ppb)	
1	Sink Faucet	E100 - Kitchen				
2	Kitchen Faucet	E100 - Kitchen				
3	Bathroom Faucet	E100 - Kitchen				
4	Dishwashing Machine	E100 - Kitchen				
5	Kitchen Faucet	E100 - Kitchen				
6	Ice Machine	E100 - Kitchen				
7	Tea Maker	E100 - Kitchen				
8	Coffee Maker	E100 - Kitchen				
9	Bathroom Faucet	Elementary Girl's Bathroom				
10	Bathroom Faucet	Elementary Girl's Bathroom				
11	Bathroom Faucet	Elementary Girl's Bathroom				
12	Bathroom Faucet	Elementary Girl's Bathroom				
13	Bathroom Faucet	Elementary Boy's Bathroom				
14	Bathroom Faucet	Elementary Boy's Bathroom				
15	Bathroom Faucet	Elementary Boy's Bathroom				
16	Bathroom Faucet	Elementary Boy's Bathroom				
17	Drinking Water Fountain	Elementary Area				
18	Bottle Filler	Elementary Area				
19	Bathroom Faucet	E106				
20	Classroom Faucet	E106				
21	Sink Faucet	E107A				
22	Drinking Water Fountain	Elementary Area				
23	Bottle Filler	Elementary Area				
24	Bathroom Faucet	E106A				
25	Classroom Faucet	E106A				
26	Classroom Faucet	E105A				
27	Bathroom Faucet	E105A				
28	Classroom Faucet	E104A				
29	Bathroom Faucet	High School Girl's Bathroom				
30	Bathroom Faucet	High School Girl's Bathroom				
31	Bathroom Faucet	High School Boy's Bathroom				
32	Bathroom Faucet	High School Boy's Bathroom				
33	Drinking Water Fountain	High School Area				
34	Bottle Filler	High School Area				
35	Sink Faucet	301				
36	Sink Faucet	303				
37	Bathroom Faucet	303				
38	Classroom Faucet	301B				
39	Classroom Faucet	308				
40	Sink Faucet	310				
41	Sink Faucet	310				
42	Sink Faucet	310				
43	Sink Faucet	310				
44	Sink Faucet	310				
45	Sink Faucet	310				
46	Sink Faucet	310				
47	Sink Faucet	312				
48	Classroom Faucet	313				
49	Bathroom Faucet	313				
50	Shower Head	Boy's Locker Room				
51	Shower Head	Boy's Locker Room				
52	Bathroom Faucet	Boy's Locker Room				
53	Bathroom Faucet	Boy's Locker Room				
54	Sink Faucet	107				
55	Drinking Water Fountain	Office Area				
56	Bottle Filler	Office Area				
57	Bathroom Faucet	Office Area Boy's Bathroom				
58	Bathroom Faucet	Office Area Girl's Bathroom				
59	Bathroom Faucet	Girl's Locker Room				
60	Bathroom Faucet	Girl's Locker Room				
61	Shower Head	Girl's Locker Room				
62	Shower Head	Girl's Locker Room				

63	Classroom Faucet	203				
64	Classroom Faucet	203				
65	Drinking Water Fountain	High School Area				
66	Bottle Filler	High School Area				
67	Bathroom Faucet	Ballfield Concession Stand				
68	Bathroom Faucet	Ballfield Concession Stand				
69	Sink Faucet	Ballfield Concession Stand				
70	Bathroom Faucet	Bus Barn				
^^ Enter New Line Above ^^						