LEAD-IN-WATER INSPECTION REPORT

November 18th, 2022

EIS Job No. 2022069

Prepared For:

Bandon School District C/O Chris Trevisiol, Director of Operations 455 9th St. SW Bandon, OR 97411 Coos County

Prepared By:

Environmental Inspection Services

Matthew C. Spear, Environmental Professional
11981 Fargo Road
Aurora, Oregon 97002
Cell: (503) 680-6398

E-mail: charles_a_spear@yahoo.com





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1.0 EXECUTIVE SUMMARY

Lead-in-Water Inspection Report

November 18th, 2022

Sampling Location(s):

(Bandon Highschool) 550 9th St. SW Bandon, OR 97411 Coos County

(Harbor Lights Middle School) 390 9th St. SW Bandon, OR 97411 Coos County

(Ocean Crest Elementary School) 1040 Allegheny Ave. SW Bandon, OR 97411 Coos County

Bandon School District C/O Chris Trevisiol, Director of Operations

Dear Mr. Chris Trevisiol.

Environmental Inspection Services conducted a comprehensive lead-in-water retest episode at the subject Bandon School District (BSD) buildings on Friday, November 4th, 2022. The drinking water samples were received by Alexin Analytical Laboratory on Monday, November 7th, 2022, and analytical test results were reported to EIS on Thursday, November 17th, 2022. No elevated-lead in-drinking water considerations were noted for the re-tested faucets and fountains of the subject buildings. Despite these results, EIS recommends replacing each of these re-tested fixtures based on the previous first-draw positive results. Per the Oregon Department of Education, the below action limit re-test results prove that the problematic Lead source is likely originating from the fixtures themselves, rather than the plumbing lines.



The EPA Maximum Contaminant Limit (MCL) for lead in public drinking water Systems is 15 parts per billion (ppb). The EPA action limit of 15 parts per billion (ppb) was utilized as the action limit for this water sampling and testing episode. The previous initial first draw drinking water sampling episode was conducted immediately following the stagnation of eight (8) hours the day after an active school day. This retest sampling episode was conducted on the day of an active school day, with a minimum flush time of 30 seconds per each sampled fixture. Plastic and sterile 250 ml. bottles were utilized for the drinking water sample collection.

A total of twenty-two (22) discreet water samples numbered No. 022, 030, 040, 041, 044, 050, 063, 069, 070, 072, 074, 081, 082, 083, 087, 093, 102, 103, 105, 107, 108, and No. 109 and were collected from the points of consumption throughout the subject buildings including cold water faucets and cold-water fountains positioned throughout the entire buildings. No drinking water sample collected from the school buildings exceeded the EPA Action limit for lead in drinking water of 15 parts per billion (ppb). The lead-in-water concentration test results varied between non-detect to five (5) parts per billion (ppb).

A unique sample location code was assigned for each drinking water outlet sample. The attached alphanumeric sequence code was assigned for each sample:

Example - the sampling code for sample No. 003 was as follows: 19000000-003BF22B - (A Water sample collected from district 1900, Building No. 0000, sample No. 098, bathroom faucet (BF), the year 2022, re-test: B.

In the opinion of EIS, we recommend that all fixtures that were initially tested over the 15-ppb action limit be replaced, regardless of their re-tested results. If there are questions concerning the lead-in-water analytical test results, contact EIS at (503) 680-6398.

Respectfully submitted, Matthew C. Spear Environmental Professional

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APPENDIXES

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APPENDIX 1.0

LEAD ANALYTICAL TEST RESULTS



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Tel.: (503) 639-9311 Fax: (503) 684-1588

Reported: 11/17/2022 Received: 11/07/2022 Sampled By: Matthew Spear Work Order: 2311021

Project: BSD Retest

Project #: -

Sample Type: Grab

Sampling Location: Bandon High School

Environmental Inspection Services

Attn: Matthew Spear 430 N. 1st Street Carlton OR, 97111

Phone: (503) 680-6398

	Code	Method	Result	Units	MRL	EPA MCL*	Analysis Date/ Time
2311021-01	Sample Name: 196902						Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	3	ppb	1	15 ppb	11/15/22 15:54
2311021-02	Sample Name: 196902	l8 - 041KF22B					Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	2	ppb	1	15 ppb	11/15/22 15:54
2311021-03	Sample Name: 196902	l8 - 044KF22B					Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	4	ppb	1	15 ppb	11/15/22 15:54
2311021-04	Sample Name: 196902	18 - 050BF22B					Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	1	ppb	1	15 ppb	11/15/22 15:54
2311021-05	Sample Name: 1969023	18 - 063BF22B					Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	5	ppb	1	15 ppb	11/15/22 15:54
2311021-06	Sample Name: 196902						Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	2	ppb	1	15 ppb	11/15/22 15:54
2311021-07	Sample Name: 1969023						Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	2	ppb	1	15 ppb	11/15/22 15:54
2311021-08	Sample Name: 1969023	l8 - 072BF22B					Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	1	ppb	1	15 ppb	11/15/22 15:54
2311021-09	Sample Name: 196902						Matrix: Drinking Water
	Sampled: 11/4/22 15:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	1	ppb	1	15 ppb	11/15/22 15:54

ND = None detected at the MRL

MRL = Minimum Reporting Limit

MCL = Maximum Contamination Limit

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13035 SW Pacific Hwy Tigard, OR 97223

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Tel.: (503) 639-9311 Fax: (503) 684-1588

ANALYSIS REPORT

Reported: 11/17/2022 Received: 11/07/2022 Sampled By: Matthew Spear Work Order: 2311021

Project: BSD Retest

Project #: -

Sample Type: Grab

Sampling Location: Bandon High School

Environmental Inspection Services

Attn: Matthew Spear 430 N. 1st Street Carlton OR, 97111

Phone: (503) 680-6398

Lab Number

* The EPA MCL for Lead in Public Drinking Water Systems is 15 ppb; this is a maximum contamination level for lead in samples, this is not an acceptance level for health based exposure.

Note: Please make sure to send your results to the appropriate agency; Alexin Analytical does not forward these results to any program or person other than the above listed client. It is your responsibilty to make sure these results get sent to whichever agency, city, or organization has requested them if these results are for compliance purposes.

Approved by:

Adriana Gonzalez-Gray Laboratory Director



Reported: 11/17/2022 Received: 11/07/2022 Sampled By: Mathew Spear Work Order: 2311022

Project: BSD Retest

Project #: -

Sample Type: Grab

С **Environmental Inspection Services** L

Attn: Matthew Spear 430 N. 1st Street Carlton OR, 97111 Phone: (503) 680-6398

Tel.: (503) 639-9311 Fax: (503) 684-1588

Sampling Location: Harbor Lights M/S

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<u>Lab Itamber</u>							
	Code	Method	Result	Units	MRL	EPA MCL*	Analysis Date/ Time
2311022-01	Sample Name: 1969021 Sampled: 11/4/22 16:00		omposition: Raw	Single			Matrix: Drinking Water
† <i>Lead</i>	1030	EPA 200.9	2	ppb	1	15 ppb	11/15/22 15:54
2311022-02	Sample Name: 1969021 Sampled: 11/4/22 16:00		omposition: Raw	Single			Matrix: Drinking Water
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54

ND = None detected at the MRL **MRL** = Minimum Reporting Limit

MCL = Maximum Contamination Limit

Note: Please make sure to send your results to the appropriate agency; Alexin Analytical does not forward these results to any program or person other than the above listed client. It is your responsibilty to make sure these results get sent to whichever agency, city, or organization has requested them if these results are for compliance purposes.

Approved by:

Adriana Gonzalez-Gray Laboratory Director

[†]All procedures for this analysis are in accordance with NELAP standards.

^{*} The EPA MCL for Lead in Public Drinking Water Systems is 15 ppb; this is a maximum contamination level for lead in samples, this is not an acceptance level for health based exposure.



Tigard, OR 97223

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Tel.: (503) 639-9311 Fax: (503) 684-1588

Reported: 11/17/2022 Received: 11/07/2022 Sampled By: Mathew Spear Work Order: 2311023

Project: BSD Retest

Project #: -

Sample Type: Grab

Sampling Location: Ocean Crest E/S

Environmental Inspection Services

L Attn: Matthew Spear
430 N. 1st Street
Carlton OR, 97111
Phone: (503) 680-6398

Lab Number							
	Code	Method	Result	Units	MRL	EPA MCL*	Analysis Date/ Time
2311023-01	Sample Name: 1969021						Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54
2311023-02	Sample Name: 1969021	7 - 082CF22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54
2311023-03	Sample Name: 1969021	7 - 083DW22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54
2311023-04	Sample Name: 1969021	7 - 087BF22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	4	ppb	1	15 ppb	11/15/22 15:54
2311023-05	Sample Name: 1969021	7 - 093CF22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54
2311023-06	Sample Name: 1969021	7 - 102DW2B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54
2311023-07	Sample Name: 1969021	7 - 103CF22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54
2311023-08	Sample Name: 1969021	7 - 105BF22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	v Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54
2311023-09	Sample Name: 1969021	7 - 107BF22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54
2311023-10	Sample Name: 1969021	7 - 108BF22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample Co	mposition: Rav	Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54



Reported: 11/17/2022 Received: 11/07/2022 Sampled By: Mathew Spear Work Order: 2311023

Project: BSD Retest

Project #: -

Sample Type: Grab

Environmental Inspection Services

Attn: Matthew Spear 430 N. 1st Street Carlton OR, 97111

Tel.: (503) 639-9311 Fax: (503) 684-1588

Phone: (503) 680-6398

Sampling Location: Ocean Crest E/S

Lab Number

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	Code	Method	Result	Units	MRL	EPA MCL*	Analysis Date/ Time
2311023-11	Sample Name: 196902	17 - 109CF22B					Matrix: Drinking Water
	Sampled: 11/4/22 16:30	Sample C	composition: Raw	/ Single			
† <i>Lead</i>	1030	EPA 200.9	ND	ppb	1	15 ppb	11/15/22 15:54

ND = None detected at the MRL **MRL** = Minimum Reporting Limit

MCL = Maximum Contamination Limit

†All procedures for this analysis are in accordance with NELAP standards.

Note: Please make sure to send your results to the appropriate agency; Alexin Analytical does not forward these results to any program or person other than the above listed client. It is your responsibilty to make sure these results get sent to whichever agency, city, or organization has requested them if these results are for compliance purposes.

Approved by:

Adriana Gonzalez-Gray Laboratory Director

^{*} The EPA MCL for Lead in Public Drinking Water Systems is 15 ppb; this is a maximum contamination level for lead in samples, this is not an acceptance level for health based exposure.

APPENDIX 2.0

SAMPLE TABLE

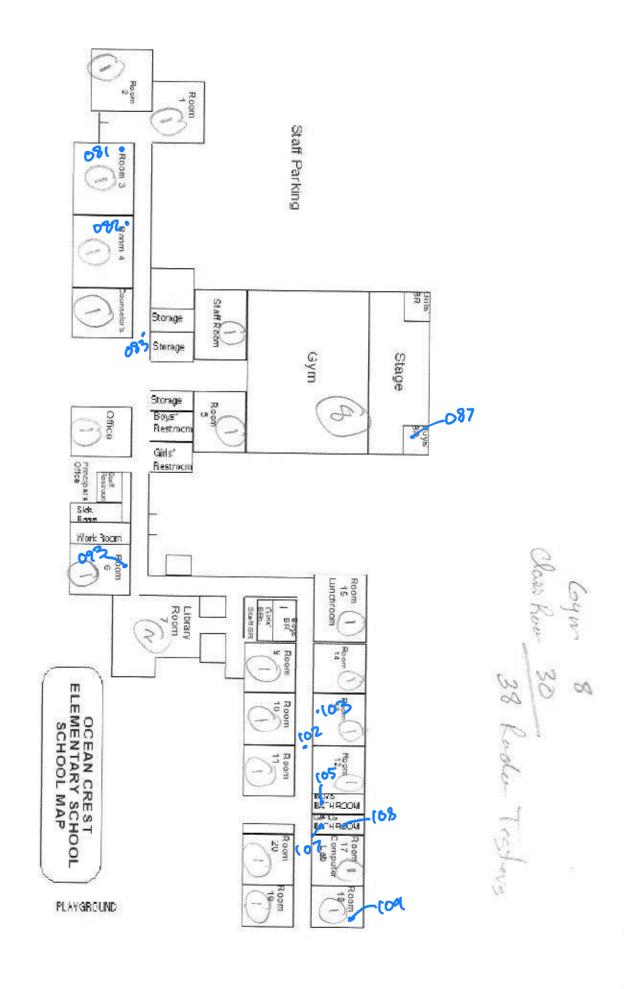
CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 040KF22B	2311021-01
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 041KF22B	2311021-02
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 044KF22B	2311021-03
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 050BF22B	2311021-04
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 063BF22B	2311021-05
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 069BF22B	2311021-06
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 070BF22B	2311021-07
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 072BF22B	2311021-08
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690218 - 074BF22B	2311021-09

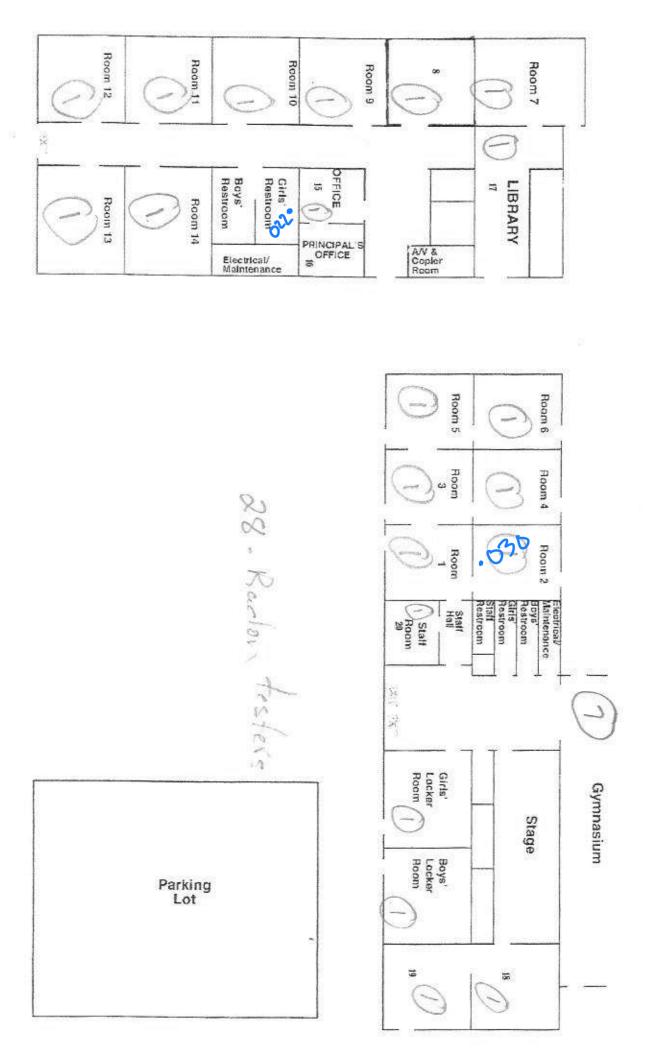
CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690216 - 022BF22B	2311022-01
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690216 - 030CF22B	2311022-02

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 081CF22B	2311023-01
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 082CF22B	2311023-02
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 083DW22B	2311023-03
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 087BF22B	2311023-04
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 093CF22B	2311023-05
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 102DW2B	2311023-06
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 103CF22B	2311023-07
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 105BF22B	2311023-08
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 107BF22B	2311023-09
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 108BF22B	2311023-10
Environmental Inspection Services	Lead School	-	Alexin Analytical Laboratories, Inc.	19690217 - 109CF22B	2311023-11

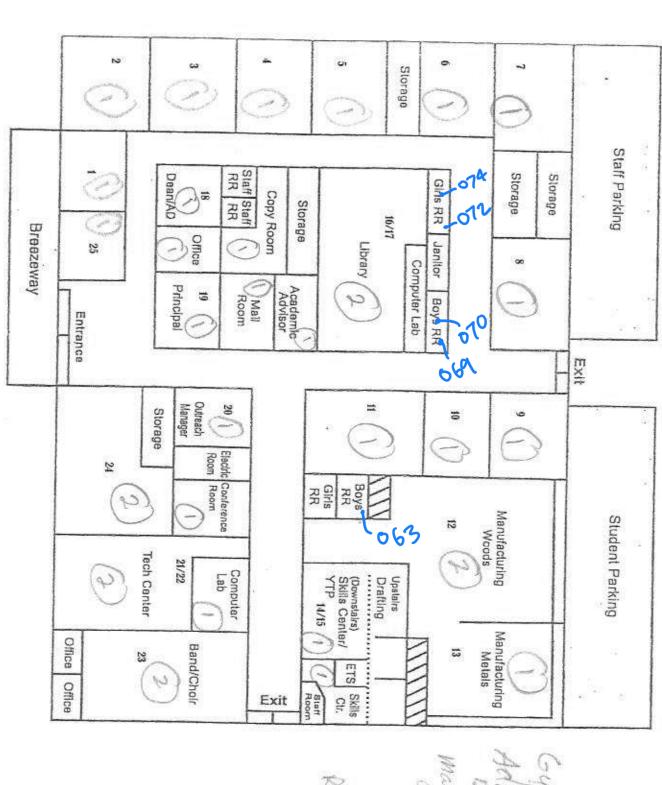
APPENDIX 3.0

SAMPLE LOCATIONS





Howbor Lights Middle Edward



Eighth St SW

High School

APPENDIX 4.0

LEAD-IN-WATER REGULATION

OREGON ADMINISTRATIVE RULES OREGON HEALTH AUTHORITY, PUBLIC HEALTH DIVISON CHAPTER 333

DIVISION 61

DRINKING WATER

333-061-0400

Reducing Lead in School Drinking Water

- (1) For the purposes of this rule, the following definitions apply:
 - (a) "School" means a school district, education service district, or public charter school.
 - (b) "Tap":
 - (A) Means any plumbing fixture in a building or on property owned or leased by a school where students or staff are present on a regular basis and where water is used for drinking or food preparation.
 - (B) Does not include any of the following classes of plumbing fixtures:
 - (i) Shower heads;
 - (ii) Pipes used to convey water to systems for building heat;
 - (iii) Dedicated eye wash stations and emergency showers;
 - (iv) Fixtures in areas with no student access used exclusively for building sanitation purposes by staff;
 - (v) Fixtures used exclusively for irrigation, unless it is reasonable to believe that students or staff will use water from that fixture for drinking; and
 - (vi) Fixtures in science and technical education classrooms that provide education to grades 6 through 12 exclusively where the fixtures:
 - (I) Have signs indicating they are not sources of drinking water; and
 - (II) Are not intended to be used for drinking or food preparation as part of the curriculum.
- (2) Initial testing.
 - (a) Schools must test for lead in the water from each tap at least once between January 1, 2016 and June 30, 2020, or prior to occupancy for taps added after these dates. Initial testing does not need to be repeated if:
 - (A) Testing was conducted and mitigation completed before November 1, 2018 according to EPA's 3Ts for Reducing Lead in Drinking Water in Schools, Revised Technical Guidance from October 2006, adopted by reference; or

- (B) Testing was conducted and mitigation completed on or after November 1, 2018 according to EPA's 3Ts for Reducing Lead in Drinking Water in Schools and Childcare Facilities, October 2018, adopted by reference.
- (b) Samples must be collected "first draw," before any water is used from that tap on the day it is tested.
- (3) On-going testing. Schools must collect a first draw sample as described in subsection (2)(b) of this rule and EPA's 3Ts for Reducing Lead in Drinking Water in Schools and Childcare Facilities, October 2018, from each tap at least once every six years starting on July 1, 2020 according to OAR 581-022-2223, unless the following exemption applies:
 - (a) The tap was installed after January 4, 2014 and meets the lead-free standard of no more than 0.25 percent lead by weight and the piping feeding the tap is a material other than copper or was installed after January 4, 2014 and the solder and flux meets the lead-free standard of no more than 0.2 percent lead; and
 - (b) The tap was tested as required in section (2) and no more than 1 part per billion (ppb) of lead was detected.
- (4) All samples must be collected using cold water and must meet the following criteria:
 - (a) Sample bottles must be 250 milliliters (mL) in volume.
 - (b) Sample bottles must be assigned a unique identification number and the following information about the sample must be recorded:
 - (A) The date and time of sample collection;
 - (B) The name of the person that collected the sample; and
 - (C) The location or a description of the tap from which the sample is collected.
 - (c) Samples must be collected on a day when school was in session the previous day.
 - (d) Samples must be analyzed by a laboratory accredited for lead analysis in drinking water by the Oregon Laboratory Accreditation Program according to OAR chapter 333, division 64.
- (5) If a test result from a sample shows 15 or more parts per billion (ppb) of lead:
 - (a) A school must prevent access to the tap as soon as possible after receiving the sample test result and in no case more than 48 hours after receiving the test results; and
 - (b) A school must prevent access to the tap until testing and mitigation is completed according to section (6) of this rule; or
 - (c) If the tap is primarily used for sanitation purposes, such as restroom sinks, access may continue as long as clear signage is posted to notify people that the tap is not to be used for drinking or food preparation until mitigation is complete. Mitigation must be completed within 30 days unless an alternate schedule is approved by the Department of Education.
- (6) Following receipt of results that show a tap has 15 or more ppb of lead, a school must:

- (a) Collect a flushed sample from that tap. This sample must meet all the criteria specified in section (4) of this rule and be collected after water has flowed from the tap for 30 seconds as described in Step 2 of Module 5 of EPA's 3Ts for Reducing Lead in Drinking Water in Schools and Childcare Facilities, October 2018; and
- (b) Complete an appropriate permanent mitigation in accordance with Module 6 of EPA's 3Ts for Reducing Lead in Drinking Water in Schools and Childcare Facilities, October 2018; and
- (c) Test the tap after mitigation is complete, demonstrating lead is less than 15 ppb before access to the tap is resumed. A first-draw sample as described in subsection (2)(b) must be collected and analyzed.
- (7) All test results must be made available as specified in ORS 332.334.

Stat. Auth.: Oregon Laws 2017, Chapter 700

Stats. Implemented: ORS 332.331, Oregon Laws 2017, Chapter 700