

Limited Lead-in-Water Assessment

Longview Public Schools Longview, Washington Northlake Elementary



Assessment Date(s): February 15, 2022

Report Date: March 10, 2022

Prepared for: Jason Reetz, Facilities Manager
Longview Public Schools

Facility Owner/Operator: Longview Public Schools



Prepared By:
Sterling Technologies, LLC
317 NE 144th Street
Vancouver, WA 98685



Limited Lead-in-Water Assessment

Introduction

Sterling Technologies (Sterling) has recently completed a limited lead-in-drinking water screening of the Northlake Elementary School, Longview School District, located at 2210 Olympia Way in Longview, Washington. The purpose of the investigation was to identify the levels of lead in the various sources of drinking water throughout the elementary school. Sample locations included drinking water fountains, classroom sink water faucets, restroom sink water faucets, and kitchen sink water faucets.

Background

The school district may be considered a water supply system from a water distribution perspective and may need to comply with the federal guidelines for water monitoring as specified in the Lead & Copper Rule (*Federal Register: June 30, 1994, Part 5. 40 CFR Parts 141 and 142; Drinking Water; Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper*) and may be compelled to monitor the drinking water within the district on an ongoing basis after an effective treatment approach is implemented (56FR 26460 – Lead Copper Rule). Within 30 days of learning the lead level results, all water systems (schools in this case) must provide individual lead tap results to the people who receive water from the sites that were sampled, *regardless of whether the results exceed the lead Action Level*, as required by 40 CFR 141.85(d).

Results Summary

Water samples were collected from 49 drinking water sources at the school.

48 samples were found to NOT contain elevated lead levels (below 15 ppb).

1 sample was found to contain elevated lead levels (above 15 ppb).

Sampling

The samples were collected by EPA accredited inspector provided by Sterling. Samples included representative amounts of water. The lead-in-water samples were analyzed by Apex Laboratories by EPA Method 200.8. The sampling guidelines followed were based on the federal school standard with emphasis on the Lead Copper Rule for sampling sites chosen.

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Assessment Results

Analytical Results: Lead-in-Drinking Water

Item	Sample ID.	Location	Result (µ/L)
1	NES-6-23	Portable #6, Classroom #23, Sink Faucet	ND
2	NES-6-24	Portable #6, Classroom #24, Sink Faucet	ND
3	NES-7-25	Portable #7, Classroom #25, Sink Faucet	0.607
4	NES-7-26-F1	Portable #7, Classroom #26, Sink Faucet #1	ND
5	NES-26.F2	Portable #7, Classroom #26, Sink Faucet #2	ND
6	NES-26-BA	Portable #7, Classroom #26, Bathroom Faucet	0.607
7	NES-8-27	Portable #8, Classroom #27, Sink Faucet	0.371
8	NES-8-28	Portable #8, Classroom #28, Sink Faucet	ND
9	NES-9-30	Portable #9, Classroom #30, Sink Faucet	ND
10	NES-9-31	Portable #9, Classroom #31, Sink Faucet	ND
11	NES-1	Classroom #1, Sink Faucet	0.405
12	NES-2	Classroom #2, Sink Faucet	1.94
13	NES-3	Classroom #3, Sink Faucet	ND
14	NES-8-F	Classroom #8, Sink Faucet	1.17
15	NES-8-N	Classroom #8, North Bathroom, Sink Faucet	0.465
16	NES-8-S	Classroom #8, South Bathroom, Sink Faucet	1.18
17	NES-9-F	Classroom #9, Sink Faucet	0.270
18	NES-10-F	Classroom #10, Sink Faucet	0.517
19	NES-10-BN	Classroom #10, North Bathroom, Sink Faucet	0.347
20	NES-10-BS	Classroom #10, South Bathroom, Sink Faucet	0.559
21	NES-11-F	Classroom #11, Sink Faucet	0.540
22	NES-12-F	Classroom # 12, Sink Faucet	0.293
23	NES-12-BN	Classroom #12, North Bathroom, Sink Faucet	ND
24	NES-13-F	Classroom #13 Sink Faucet	0.282
25	NES-13-BS	Classroom #13, South Bathroom, Sink Faucet	0.388
26	NES-16-F	Classroom #16, Sink Faucet	33.7
27	NES-19-F	Classroom #19, Sink Faucet	ND
28	NES-19-BN	Classroom #19, North Bathroom, Sink Faucet	0.692
29	NES-19-BS	Classroom #19, South Bathroom, Sink Faucet	0.773
30	NES-20-F	Classroom #20, Sink Faucet	0.254
31	NES-20-BN	Classroom # 20, North Bathroom, Sink Faucet	1.01
32	NES-21-F	Classroom #21, Sink Faucet	0.982

ND = Non-Detect

Analytical Results continued on the next page...



Analytical Results: Lead-in-Drinking Water (continued)

Item	Sample ID.	Location	Result (µ/L)
33	NES-21-BS	Classroom #21, South Bathroom, Sink Faucet	1.00
34	NES-22-F	Classroom #22, Sink Faucet	0.348
35	NES-32-F	Classroom # 32, Sink Faucet	0.243
36	NES-32-BB	Classroom #32, Boys Bathroom, Sink Faucet	1.33
37	NES-32-BG	Classroom #32, Girls Bathroom, Sink Faucet	0.446
38	NES-N-F1	Nurses Room, Sink Faucet	2.18
39	NES-N-B	Nurses Room, Bathroom Sink Faucet	0.539
40	NES-L	Library, Sink Faucet	2.85
41	NES-T-B-1	Teachers Bathroom #1, Sink Faucet	0.362
42	NES-T-B-2	Teachers Bathroom #2, Sink Faucet	0.435
43	NES-MRR	Hallway, Boys Bathroom, Sink Faucet	3.58
44	NES-LRR	Hallway, Girls Bathroom, Sink Faucet	3.38
45	NES-K	Kitchen, Sink Faucet	0.938
46	NES-FR-S	Furnace Room, Sink Faucet	1.60
47	NES-FAC	Faculty Room, Sink Faucet	0.577
48	NES-H-15-DF	Hall Drinking Fountain by Room #15	1.75
49	NES-H-DW-5	Hall Drinking Fountain by Room #5	0.205

ND = Non-Detect

As highlighted () in the above table, the lab results for 1 of the 49 drinking water samples collected was found to be at or above the 15 ppb action level for lead in drinking water. The remaining 48 drinking water samples were found to be below the 15 ppb action level.

Note: Drinking water sources with lead levels above an approximate background level of 2.0 ppb have also been highlighted ().

Conclusions and Recommendations

One site was noted to have elevated lead-in-drinking water; the sink faucet in classroom #16. No elevated lead-in-drinking water levels were noted in the other locations sampled, and the results were below lead-in-drinking water EPA standard under the Safe Drinking Water Act of 15 parts per billion. Several sink faucet locations did have residual lead levels above a background lead level: 2.0 ppb.

It is our recommendation that the Longview School District consider the installation of a combination drinking fountain and motion sensor water filling system using an ANSI 53 certified filter by the National Science Foundation (NSF). The Elkay EZH20 is a popular fixture and is advertised online for about \$1,500 per unit. Note that fixtures with refrigeration jump in price to around \$4,000. These systems have proven effective for the removal of lead particulates with our other school district clients.

Given the age of the school plumbing systems (school built in 1954) and the slight residual levels of lead noted in the drinking water sources throughout, Sterling recommends that the district consider replacement of all the water fountains in the Northlake Elementary School with



fixtures that include a suitable lead filtration system. As the existing drinking water fountains do not have an electrical source, a mechanical system would be preferable. With the mechanical fixtures, required filter changes are noted on a counter that is based on the volume of water passed through the filter.

The district might also consider instituting an administrative policy that only those drinking water sources that include a lead filtration system be used for drinking water; discourage use of unfiltered water sources (e.g., classroom sink water faucets).

Limitations

This report is for the exclusive use of the client, applies only to the specific subject property detailed above, and shall not be relied upon by any other party without the prior written consent of the undersigned.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices in this area at the time this report was prepared. No other hazardous materials/wastes were investigated. No other conditions, expressed or implied, should be understood.

Recordkeeping

Additional copies of this report are available from Sterling Technologies upon request. Unless otherwise requested, samples will be retained for a period of 30 days, after which they will be discarded. If you have any questions about these results or would like additional information, please feel free to call our office.

Sterling Technologies thanks you for this opportunity to be of service.

Sincerely,



Thomas Nadermann, M.S., Principal
AHERA Inspector #155212, Lead Risk Assessor #0493



Appendix A

Inspector's Certification



STATE OF WASHINGTON

Department of Commerce
Lead-Based Paint Abatement Program

Thomas Heinrich Nadermann

*Has fulfilled the certification requirements of
WAC 365-230
and has been certified to conduct lead-based
paint activities as a
Risk Assessor*

<u>Certification #</u>	<u>Issuance Date</u>	<u>Expiration Date</u>
0493	02/08/2021	10/22/2023

STATE OF WASHINGTON

Department of Commerce
Lead-Based Paint Abatement Program

Edwin L Wilson

*Has fulfilled the certification requirements of
WAC 365-230
and has been certified to conduct lead-based
paint activities as a
Risk Assessor*

<u>Certification #</u>	<u>Issuance Date</u>	<u>Expiration Date</u>
8040	08/26/2021	07/22/2024



Appendix B

Field Data

Laboratory Results

