

November 23, 2016

Mr. Shawn Liddle
District Clerk
Albion Central School District
324 East Avenue
Albion, NY 14411

**Re: Lead in Water Sampling Report
Albion Central School District
Bergerson Middle School**

Dear Mr. Liddle:

At your request, Sienna Environmental Technologies conducted water sampling, screening for lead contaminants at the above referenced properties in accordance with 1370-a and 1110, Subpart 67-4 of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York, and US EPA guidelines

If you have any questions, or if we can be of assistance in any other way, please do not hesitate to call. Thank you for the opportunity to be of service to Albion Central School District.

Sincerely,
Sienna Environmental Technologies, LLC

Raymond Cich
Operations Manager

**Lead in Water Sampling
In Accordance with
NYCRR Title 10, Subpart 67-4**

OF THE:

**Albion Central School District
Bergerson Middle School**

PREPARED BY:



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PREPARED FOR:

**Albion Central School District
324 East Avenue
Albion, NY 14411**

CONDITIONS AS OF:

October 21, 2016



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1. Lead in Water Sampling

1.1 Introduction

Sienna Environmental Technologies performed client directed sampling of potable water outlets. The sampling event was conducted on September 13, 2016 and October 21, 2016 prior to the facilities opening in the morning and before any water was used; known as a “first-draw” sample. The outlets tested were reported to be out of service for a minimum of 8 hours, but not more than 18 hours, prior to sample collection. Sampling was conducted at outlets specified by the client at the following school:

- Bergerson Middle School

Sienna Environmental Technologies was charged with:

1. Collecting a “first-draw” sample volume of 250 milliliters (mL), collected from cold water outlets after not being used for 8-18 hours. Sample locations were client directed.
2. Sending samples to an independent laboratory for lead analysis by ICP Method 200.8 in conformance with NYS and US EPA guidelines.
3. Providing a report of the sampling and analysis of the potable water for lead contamination to the School District.

1.2 Summary of Non-Compliant Water Analysis

NYCRR Title 10, Subpart 67-4 recommends that any water fountains and/or outlets be taken out of service if analysis indicates lead levels which exceed 15 parts per billion (ppb) based on a 250 mL first-draw sample. 15 ppb is equivalent to 15 micrograms per liter (µg/L). The following is a list of outlets in excess of 15 ppb. For a comprehensive list of outlets sampled, see appendix B.

Sample Date	Client ID Sample No.	Sample Description		Result (µg/L)
		Location of Outlet	Type of Outlet	
Bergerson Middle School				
9-13-2016	ALL SAMPLES <15 µg/L			
10-21-2016	MS-R333-CFC-102	Room 333 Sink 1	Classroom Faucet Cold	21.3
10-21-2016	MS-3FGR-CSC-106	Slop Sink 3rd Floor Girl's Room	Custodial Slop Sink cold	42.3
10-21-2016	MS-R311-1-CFC-87	Room 311 Resource Room - 1	Classroom Faucet Cold	36.0
10-21-2016	MS-R311-2-CFC-88	Room 311 Resource Room - 2	Classroom Faucet Cold	35.1
10-21-2016	MS-R311-3-CFC-107	Room 311 Resource Room - 3	Classroom Faucet Cold	76.3
10-21-2016	MS-R311-4-CFC-108	Room 311 Resource Room - 4	Classroom Faucet Cold	39.2
10-21-2016	MS-R311-6-CFC-110	Room 311 Resource Room - 5	Classroom Faucet Cold	30.1
10-21-2016	MS-2FGR-CSC-111	Slop Sink 2 nd Floor Girl's Room	Custodial Slop Sink cold	26.0



Sample Date	Client ID Sample No.	Sample Description		Result (µg/L)
		Location of Outlet	Type of Outlet	
10-21-2016	MS-R206-1-CFC-78	Science Room 206 Sink	Classroom Faucet Cold	55.4
10-21-2016	MS-R206-2-CFC-79	Science Room 206 Sink	Classroom Faucet Cold	123
10-21-2016	MS-R206-3-CFC-112	Science Room 206 Sink	Classroom Faucet Cold	23.0
10-21-2016	MS-R207-1-CFC-44	Science Room 207 Sink	Classroom Faucet Cold	73.4
10-21-2016	MS-R208-1-CFC-42	Science Room 208 Sink	Classroom Faucet Cold	101
10-21-2016	MS-R208-2-CFC-43	Science Room 208 Sink	Classroom Faucet Cold	15.1
10-21-2016	MS-R208-3-CFC-114	Science Room 208 Sink	Classroom Faucet Cold	15.3
10-21-2016	MS-2FFR-BFC-76	2 nd Floor Faculty Bathroom Sink	Bathroom Faucet Cold	15.3
10-21-2016	MS-BR7G-CSC-51	7 th Grade Boy's Room Slop Sink	Custodial Slop Sink cold	23.5
10-21-2016	MS-GR7G-CSC-67	7 th Grade Girls Room Slop Sink	Custodial Slop Sink cold	15.6
10-21-2016	MS-PCO-BFC-16	Pool Coaches Office Bathroom Sink	Bathroom Faucet Cold	28.4
10-21-2016	MS-PBLR-1-BFC-19	Pool Boy's Locker Room North Sink West	Bathroom Faucet Cold	24.4
10-21-2016	MS-BLRE-BFC-28	Boy's Locker Room Elcove Bathroom Autosink	Bathroom Faucet Cold	15.8
10-21-2016	MS-GLRCG-CSC-59	Girl's Locker Room Corridor Girl's Room Slop Sink	Custodial Slop Sink cold	16.4
10-21-2016	MS-GLR-1-BFC-29	Girl's Locker Room Sink South Wall East Sink	Bathroom Faucet Cold	36.4
10-21-2016	MS-BASE-HBC-06	Boiler Room Hose Spigot East Wall	Hose Bib Cold	18.7
10-21-2016	MS-EWS-1-HBC-92	Exterior Water Spigot by Student Drop Off	Hose Bib Cold	30.9
10-21-2016	MS-EWS-3-HBC-94	Exterior Water Spigot by Edge of Mulch NW Corner	Hose Bib Cold	24.4
10-21-2016	MS-EWS-7-HBC-98	Exterior Water Spigot by Entrance 7	Hose Bib Cold	47.8
10-21-2016	MS-EWS-11-HBC-116	Exterior Water Spigot by Entrance 11	Hose Bib Cold	21.3

1.3 Discussion and Recommendations

The testing provided is representative of the water that may be consumed at the beginning of the day or after infrequent use. It consists of water that has been in contact with the fixture and the plumbing connecting the faucet or the lateral pipes. Section 67-4.4 "Response" should be followed as your next steps to comply with NYCRR Title 10, Subpart 67-4.

Once section 67-4.4 has been completed, Sienna recommends the following actions for samples that exceed the action limit:

- Collect an additional first draw sample for analysis.
- Collect a follow-up flush sample. This sample is collected after the first draw sample is collected and the faucet is allowed to run for 30 seconds and is representative of the water that is in the plumbing upstream from the faucet.

This testing protocol will aid in identifying the potential source of the elevated lead level. If the lead level in the first draw sample is higher than that in the follow-up flush sample, the source of lead is the water faucet and/or the plumbing upstream from the faucet. If the lead level in follow-up flush sample is very low, i.e. close to 5 ppb, very little lead is coming from the plumbing upstream from the faucet. The majority or all of the lead in the water is from the faucet and/or the plumbing connecting the faucet to the lateral. If the lead level in the follow-up flush sample significantly exceeds 5 ppb (i.e. close to 10 ppb), lead from the plumbing upstream from the faucet may be contributing to these results.

In Addition, NYCRR Title 10, Subpart 67-4 states that you may find the United States Environmental Protection Agency's guidance document helpful, titled "3Ts for Reducing Lead in Drinking Water in Schools, Revised Technical Guidance".

https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf

This document includes sample notifications letters, press releases, and provides guidance through the process of reducing lead exposure.



Appendix A General Conditions of Sampling

1. Sienna Environmental Technologies, LLC neither accepts nor implies any liability for the implementation of the recommendations found within this report.
2. The results of the laboratory analytical reports that may be contained herein are the product of the knowledge, experience and expertise of the laboratory retained to perform such services. Sienna Environmental Technologies neither accepts nor implies any liability for sample analysis reports compiled by others.
3. This report is based on the condition and contents present at the site on the day of the inspection. Sienna Environmental Technologies, LLC is not liable for materials, chemicals or other substances of concern that may have been removed or introduced to the site, prior to the inspection date or subsequent to that date.



Appendix B Chains of Custody and Laboratory Reports



Appendix C Sample Location Maps and Client Supplied Sample List



Appendix D NYCRR Title 10, Subpart 67-4