BNF

BEDFORD CENTRAL SCHOOL DISTRICT
FOX LANE CAMPUS
P.O. BOX 180
MOUNT KISCO, NY 10549

LEAD WATER TESTING

For

Fox Lane High School
Fox Lane Campus
Mount Kisco, NY 10549

Date of Assessment: March 23, 2017

Date of Report: March 31, 2017

Completed By: Justin Joe, PhD, CSP
Industrial Hygienist / Building Inspector
BNF Consulting, Inc.
152 Route 202, #404
Lincolndale, NY 10540
bnfjustin@gmail.com

The information, suggestions and recommendations contained herein are for general informational purposes only. This information has been compiled from sources believed to be reliable. No warranty, guarantee, or representation, either expressed or implied, is made as to the correctness or sufficiency of any representation contained herein.

EXECUTIVE SUMMARY

On March 23, 2017, the 2nd lead water retesting was completed for Fox Lane High School, a building of the Bedford Central School District (BCSD), located at Fox Lane Campus, Mount Kisco, NY 10549. This clearance testing for lead in water was performed after repair of fixtures, which exceeded the NYS lead action level from the initial testing on October 20, 2016, and then the 1st retest was performed on February 11, 2017. Primarily assisting in the completion of this study was Mr. Robert Gimigliano, Director of Buildings and Grounds, and the maintenance staff at Fox Lane High School.

The purpose of this survey is to comply to 10 NYCRR SUBPART 67-4: Lead Testing in School Drinking Water. This subpart requires all school districts and boards of cooperative education services, including those already classified as a public water system under 10 NYCRR Subpart 5-1, to test portable water for lead contamination and to develop and implement a lead remediation plan when applicable. Action Level used in the Subpart means 15 micrograms per liter (µg/L) or parts per billion (ppb). Exceedance of the action level requires a response to implement a lead remediation plan.

First-draw water samples were collected from all available water outlets including faucets, sinks and water fountains in and around the building. These areas included conference rooms, restrooms, hallways, the kitchen, custodial closets, the boiler room and the exterior. The sampled water was motionless in the pipes for a minimum of 8 hours, but not more than 18 hours before the sample collection according to the guideline from the Subpart. The first-draw samples were collected from a cold water outlet before any water was used. The samples were sent to Phoenix Environmental Laboratories, Inc., which is approved to perform lead analyses by the Department's Environmental Laboratory Approval Program (ELAP#: 11715).

Lab results indicate that:

- 2 out of 5 water samples were above the action level.
- No water fountains or kitchen sinks were above the action level.
- The following water outlets are listed as being above the action level:

    1. Sink in the custodial closet by Rm C-213
    2. Garage

RECOMMENDATIONS

The following is recommendations from this survey.

2017-03-01 Install carbon filters to reduce the lead content from the water outlet fixtures tested above the action level, or the allowable limits.

2017-03-02 Check for plumbing work. If copper pipes are joined with lead solder that has been installed, notify a qualified plumber to replace the lead solder with lead-free solder. Lead solder looks dull gray and when scratched with a key, looks shiny.

2017-03-03 Check type of piping used to connect to water main. Determine whether or not the service line that connects the building to the water line is made of lead.

CONCLUSION

This survey revealed that most of the lead testing from water source fixtures indicated low or non-detectable exposures. However, 2 out of 5 samples were above the Action Level, 15 micrograms per liter (µg/L) or parts per billion (ppb), listed in the report. No water fountains or kitchen sinks were above the action level.

The recommendations in this report are intended to achieve the goal of a safer and more healthful environment. If the recommendations are completed, future health issues should be prevented.

If there are any questions regarding the contents of this report or further assistance is needed for recommendation completion, please feel free to contact Dr. Justin Joe, who can be reached via the following:

Justin H. Joe, PhD, CSP
BNF Consulting, Inc.
152 Route 202, #404
Lincolndale, NY 10540
bnfjustin@gmail.com

A closing Thank You is extended to all who assisted or participated in completion of this Survey.

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APPENDIX A

LEAD WATER TESTING LAB RESULTS

PHOENIX
Environmental Laboratories, Inc.

Tuesday, March 28, 2017

Attn: Justin Joe
BNF Consulting
152 Route 202 #404
Lincolndale, NY 10540-0404

Project ID: BCSD
Sample ID#s: BX92574 - BX92578

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 28, 2017

FOR: Attn: Justin Joe
BNF Consulting
152 Route 202 #404
Lincolndale, NY 10540-0404

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/23/17	8:15
Location Code:	BNFCNSLT	Received by:	SW	03/23/17	16:42
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBX92574
Phoenix ID: BX92574

Project ID: BCSD
Client ID: FLHS-01

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Lead	0.0208	0.0005	1	mg/L	0.015			03/27/17	LK	200.8 5.4
***** Lead exceeds Action Level of 0.015 *****										
Total Metal Digestion	Completed							03/23/17	AG/BF	E200.8

RL/PQL=Reporting/Practical Quantitation Level DIL=Dilution (analysis required diluting to evaluate) ND=Not Detected
BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal

Comments:

Maximum Contaminant Level (MCL) (Lower of): 40 CFR Part 141; Public Health Law, Section 225 Part 5. The highest level of a contaminant that is allowed in drinking water. MCLs are enforceable standards.

Action Level (AL): (Lower of): 40 CFR Part 141.80; Public Health Law, Section 225 Part 5.

Secondary DW Maximum Contaminant Level Goal (MCLG): (Lower of): 40 CFR Part 141; 40 CFR Part 143. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are non-enforceable public health goals.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
March 28, 2017
Reviewed and Released by: Bobbi Aloisa, Vice President

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Analysis Report

March 28, 2017

FOR: Attn: Justin Joe
BNF Consulting
152 Route 202 #404
Lincolndale, NY 10540-0404

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/23/17	8:18
Location Code:	BNFCNSLT	Received by:	SW	03/23/17	16:42
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBX92574
Phoenix ID: BX92575

Project ID: BCSD
Client ID: FLHS-02

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Lead	0.0627	0.0005	1	mg/L	0.015			03/27/17	LK	200.8 5.4
***** Lead exceeds Action Level of 0.015 *****										
Total Metal Digestion	Completed							03/23/17	AG/BF	E200.8

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BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal

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Action Level (AL): (Lower of): 40 CFR Part 141.80; Public Health Law, Section 225 Part 5.

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March 28, 2017

FOR: Attn: Justin Joe
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152 Route 202 #404
Lincolndale, NY 10540-0404

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/23/17	8:20
Location Code:	BNFCNSLT	Received by:	SW	03/23/17	16:42
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBX92574
Phoenix ID: BX92576

Project ID: BCSD
Client ID: FLHS-03

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Lead	0.0045	0.0005	1	mg/L	0.015			03/27/17	LK	200.8 5.4
Total Metal Digestion	Completed							03/23/17	AG/BF	E200.8

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BRL=Below Reporting Level (less than the reporting level, the lowest amount the laboratory can detect and report.)
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Action Level (AL): (Lower of): 40 CFR Part 141.80; Public Health Law, Section 225 Part 5.

Secondary DW Maximum Contaminant Level Goal (MCLG): (Lower of): 40 CFR Part 141; 40 CFR Part 143. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are non-enforceable public health goals.

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Analysis Report

March 28, 2017

FOR: Attn: Justin Joe
BNF Consulting
152 Route 202 #404
Lincolndale, NY 10540-0404

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/23/17	8:21
Location Code:	BNFCNSLT	Received by:	SW	03/23/17	16:42
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBX92574
Phoenix ID: BX92577

Project ID: BCSD
Client ID: FLHS-04

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Lead	0.0056	0.0005	1	mg/L	0.015			03/27/17	LK	200.8 5.4
Total Metal Digestion	Completed							03/23/17	AG/BF	E200.8

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152 Route 202 #404
Lincolndale, NY 10540-0404

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		03/23/17	8:22
Location Code:	BNFCNSLT	Received by:	SW	03/23/17	16:42
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBX92574
Phoenix ID: BX92578

Project ID: BCSD
Client ID: FLHS-05

Parameter	Result	RL/ PQL	DIL	Units	AL	MCL	MCLG	Date/Time	By	Reference
Lead	0.0073	0.0005	1	mg/L	0.015			03/27/17	LK	200.8 5.4
Total Metal Digestion	Completed							03/23/17	AG/BF	E200.8

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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

March 28, 2017

QA/QC Data

SDG I.D.: GBX92574

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 380340A (mg/L), QC Sample No: BX92571 (BX92574, BX92575, BX92576, BX92577, BX92578)													
ICP MS Metals - Aqueous													
Lead	BRL	0.001				90.8						85 - 115	20

Comment:

This batch does not include a duplicate.

Additional: LCS acceptance range is 85-115% MS acceptance range 70-130%.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
March 28, 2017

Tuesday, March 28, 2017

Criteria: None

State: NY

Sample Criteria Exceedances Report

GBX92574 - BNFCNSLT

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BX92574	PB-DW-MS	Lead	EPA / 40 CFR 141 DW / 141.80 Lead & Copper ALs	0.0208	0.0005	0.015	0.001	mg/L
BX92574	PB-DW-MS	Lead	NY / NY Residential DW / Lead & Copper Als	0.0208	0.0005	0.015	0.015	mg/L
BX92575	PB-DW-MS	Lead	EPA / 40 CFR 141 DW / 141.80 Lead & Copper ALs	0.0627	0.0005	0.015	0.001	mg/L
BX92575	PB-DW-MS	Lead	NY / NY Residential DW / Lead & Copper Als	0.0627	0.0005	0.015	0.015	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

March 28, 2017

SDG I.D.: GBX92574

The samples in this delivery group were received at 3°C.
(Note acceptance criteria is above freezing up to 6°C)

3 work lp

BCSD Lead Water Sampling COC

NO	Flushed at Date	Flushed at Time	Drew at Date	Drew at Time	Location	Remark
92574 FLHS - 01	3/22	2200	3/23	✓0815	See the floor plan	Sink in Costodial closet by Rm C-213
92575 FLHS - 02	3/22	2200	3/23	✓0818	See the floor plan	Garage
92576 FLHS - 03	3/22	2200	3/23	✓0820	See the floor plan	Sink in Rm G-11 Girls Green Rm (Right)
92577 FLHS - 04	3/22	2200	3/23	✓0821	See the floor plan	Sink in Rm F-113 Boys Green Rm (Right)
92578 FLHS - 05	3/22	2200	3/23	✓0822	See the floor plan	Sink in Rm F-113 Boys Green Rm (Left)
Total 5 samples						

3/23/17 1255

BNF Consulting, Inc

B Dark 3-23-17 15:05

3/23/17 16:42

3 work lp

BCSD Lead Water Sampling COC

NO	Flushed at Date	Flushed at Time	Drew at Date	Drew at Time	Location	Remark
92574 FLHS - 01	3/22	2200	3/23	✓0815	See the floor plan	Sink in Costodial closet by Rm C-213
92575 FLHS - 02	3/22	2200	3/23	✓0818	See the floor plan	Garage
92576 FLHS - 03	3/22	2200	3/23	✓0820	See the floor plan	Sink in Rm G-11 Girls Green Rm (Right)
92577 FLHS - 04	3/22	2200	3/23	✓0821	See the floor plan	Sink in Rm F-113 Boys Green Rm (Right)
92578 FLHS - 05	3/22	2200	3/23	✓0822	See the floor plan	Sink in Rm F-113 Boys Green Rm (Left)
Total 5 samples						

3/23/17 1255

BNF Consulting, Inc

B Dark 3-23-17 1520

3/23/17 16:42