August 29, 2024

Mr. Clark Mathes
Voorhees Township Public Schools
329 Route 73
Voorhees, New Jersey 08043

RE: Lead in Drinking Water Sampling
Edward T. Hamilton Elementary School
23 Northgate Drive
IEC Project # 2024.184.2

Dear Mr. Mathes:

Indoor Environmental Concepts, LLC (IEC) was retained by Voorhees Township Public Schools to perform testing of the drinking water outlets servicing 23 Northgate Drive for the presence of lead (Pb). The lead in water testing was performed pursuant to the regulations and guidance documents from the New Jersey Safe Drinking Water Act (NJAC 6 7:10-1 et seq.) having principal responsibility to administer the programs and activities of the Federal Safe Drinking Water Act (40 CFR 141, 142 & 143) and the United States Environmental Protection Agency (EPA) protocols as recommended in their publication 3Ts for Reducing Lead in Drinking Water in Schools, Revised Technical Guidance. The EPA developed the 3Ts for Reducing Lead in Drinking Water in Schools, Revised Technical Guidance.

Background

Federal studies indicate that children under the age of six are at the highest risk for harmful lead exposure, and children can be exposed to lead from a variety of sources, including drinking water, paint, soil and even some consumer products. Lead is a toxic metal that can be harmful to human health when ingested or inhaled. Even small doses of lead can be harmful. Unlike most other contaminants, lead is stored in our bones and can be later released into the bloodstream. The groups most vulnerable to lead include fetuses and young children. Drinking water and ingested dust are two likely routes of entry for lead exposure.

Even though water delivered from your community's public water supply must meet Federal and State standards for lead, a facility may have elevated concentrations of lead due to plumbing and water use patterns in the building. The physical/chemical interaction that occurs between the water and plumbing is referred to as corrosion. The extent of which corrosion occurs depends on various factors such as the lead content of the building's plumbing and piping system, water velocity, temperature, alkalinity, chlorine levels, the age and condition of plumbing, and the amount of time water is in contact with the plumbing.

Therefore, the critical issue is that even though your public water supplier may send you water that meets all Federal and State public health standards for lead, you may end up with too much lead

in your drinking water because of the plumbing in your facility. The only way to be certain that lead is not a problem in your school building is to test various drinking water outlets (i.e., taps, bubblers, coolers, etc.) for the substance. That is why testing the water from your drinking water outlets for lead is so important.

IEC collected samples based on previous sampling reports and outlets identified during the work such as kitchen food preparation areas.

Lead Sampling Collection and Analytical Results

Trained technicians collected first draw samples from designated outlets on August 2, 2024. Samples were delivered after each sampling event to a laboratory certified by the New Jersey Department of Environmental Protection (NJ DEP) for analysis. The samples were collected after an 8-to-18-hour stagnation period. All samples were taken before the facility opened and before any water was used by building occupants. Where practical and feasible, samples were first collected at drinking water outlets that were as close as possible to the building water main. Cold water lines were sampled when possible. All water samples were collected in laboratory supplied, pre-cleaned 250 milliliter (mL) bottles. The bottles were labeled with a unique sample identification number and the sample location and time sampled were recorded on the chain of custody form. All samples were sealed immediately after collection and delivered to Eurofins/iATL in Mount Laurel. Analysis was performed for lead content via AAS Graphite Furnace by ASTM Method D3559-15D.

As indicated on the attached laboratory report from Eurofins/iATL, all results were below the NJAC 6A:26112.4 (e) action limit of 15 µ/L**, which is equivalent to 15 ppb**. Therefore, all outlets are acceptable for human consumption.

It should be noted that this sampling was performed in accordance with current guidelines. Should the guidelines change, or legislation dictate other criteria, these results may need to be reevaluated. If you need any further assistance, please do not hesitate to contact our office.

Thank you for the opportunity to provide you with our services. You may contact me if you have any questions or would like to discuss this matter further.

Sincerely,
Indoor Environmental Concepts, LLC

Michael P. Menz, CIH, CHMM
Principle

IEC
Indoor Environmental Concepts, LLC

003731981

Project Name: E.T. Hamilton File #: 2024.1842

Laboratory: Eurofins/iATL Analysis: Lead in Drinking Water ASTM D3559

Turnaround Time: [X] 2 week

Collected by: [illegible] Date: 8/2/24

Transmitted by: mpm Date: 8/2/24 10:20 AM

Received by: _____ Date: _____

Sample #	Location	Fixture Type	Time sampled
B1	chiller across gym entrance	C	9:19
B2	bottle filler across gym	BF	9:13
B3	chiller o/s room 14	C	9:15
B4	bottle filler o/s room 14	BF	9:15
B5	teachers dining	S	9:17
B6	chiller o/s room 12	C	9:18
B7	bottle filler o/s room 12	BF	9:19
B8	chiller by media center boys lav.	C	9:21
B9	bottle filler " " " "	BF	9:22
B10	chiller o/s main office	C	9:24
B11	bottle filler o/s main office	BF	9:25
B12	main office ~~kitchenette~~ kitchenette	S	9:26
B13	Nurse's office	S	9:28
B14	kitchen food prep sink	S	9:29
B15	kitchen ice make	I.M	9:30
B16	men's faculty lav. across room 1	S	9:34
B17	women faculty lavatory across room 1	S	9:36
B18	K room 1 bathroom sink	S	9:37

RECEIVED
AUG - 2

Email results to:
labresults@indoorenvconcepts.com

Page 1 of 2

ATL - By _____

IEC
Indoor Environmental Concepts, LLC

Project Name: E.T. Hamilton File #: 2024.184,2

Laboratory: Eurofins/iATL Analysis: Lead in Drinking Water ASTM D3559

Turnaround Time: [X] 2 week

Collected by: Mark Cheney Date: 8/2/24

Transmitted by: mpm Date: 8/2/24 10:20 am

Received by: _____ Date: _____

Sample #	Location	Fixture Type	Time sampled
B19	K room 2 laundry sink	S	9:47
B20	K room 11 lavatory sink	S	9:42
B21	K room 12 lav. sink	S	9:44
B22	boys lav. o/s gym	S	9:49
B23	girls lav. o/s gym	S	9:50

Email results to:
labresults@indoorenvconcepts.com

117 N. Black Horse Pike ● Runnemede, NJ 08078 ● (856) 463-0777 ● www.indoorenvconcepts.com

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iATL

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Indoor Environmental Concepts, LLC
117 N Black Horse Pike
Runnemede NJ 08078

Client: IND601

Report Date: 8/13/2024
Report No.: 703264 - Lead Water
Project: E.T. Hamilton
Project No.: 2024.184.2

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7778155 **Client No.:**B1	**Location:**Chiller Across Gym Entrance * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778156 **Client No.:**B2	**Location:**Bottle Filler Across Gym * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778157 **Client No.:**B3	**Location:**Chiller O/S Room 14 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778158 **Client No.:**B4	**Location:**Bottle Biller O/S Room 114 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778159 **Client No.:**B5	**Location:**Teachers Dining * Sample acidified to pH <2.	**Result(ppb):**1.10
Lab No.:7778160 **Client No.:**B6	**Location:**Chiller O/S Room 12 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778161 **Client No.:**B7	**Location:**Bottle Filler O/S Room 12 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778162 **Client No.:**B8	**Location:**Chiller By Media Center Boys Lav * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778163 **Client No.:**B9	**Location:**Bottle Filler Media Center By Boy's Lav * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778164 **Client No.:**B10	**Location:**Chiller O/S Main Office * Sample acidified to pH <2.	**Result(ppb):**<1.00

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/2/2024
Date Analyzed: 08/13/2024
Signature:
Analyst: Mark Stewart

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

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Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
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CERTIFICATE OF ANALYSIS

Client: Indoor Environmental Concepts, LLC
117 N Black Horse Pike
Runnemede NJ 08078

Client: IND601

Report Date: 8/13/2024
Report No.: 703264 - Lead Water
Project: E.T. Hamilton
Project No.: 2024.184.2

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7778165 **Client No.:**B11	**Location:**Bottle Filler O/S Main Office * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778166 **Client No.:**B12	**Location:**Main Office Kitchenette * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778167 **Client No.:**B13	**Location:**Nurse's Office * Sample acidified to pH <2.	**Result(ppb):**1.20
Lab No.:7778168 **Client No.:**B14	**Location:**Kitchen Food Prep Sink * Sample acidified to pH <2.	**Result(ppb):**2.80
Lab No.:7778169 **Client No.:**B15	**Location:**Kitchen Ice Make * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7778170 **Client No.:**B16	**Location:**Men's Faculty Lav Across Room 1 * Sample acidified to pH <2.	**Result(ppb):**1.00
Lab No.:7778171 **Client No.:**B17	**Location:**Women Faculty Lavatory Across Room 1 * Sample acidified to pH <2.	**Result(ppb):**2.00
Lab No.:7778172 **Client No.:**B18	**Location:**K Room 1 Bathroom Sink * Sample acidified to pH <2.	**Result(ppb):**1.50
Lab No.:7778173 **Client No.:**B19	**Location:**K Room 2 Lavatory Sink * Sample acidified to pH <2.	**Result(ppb):**1.40
Lab No.:7778174 **Client No.:**B20	**Location:**K Room 11 Lavatory Sink * Sample acidified to pH <2.	**Result(ppb):**<1.00

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/2/2024
Date Analyzed: 08/13/2024
Signature:
Analyst: Mark Stewart

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

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CERTIFICATE OF ANALYSIS

Client: Indoor Environmental Concepts, LLC
117 N Black Horse Pike
Runnemede NJ 08078

Client: IND601

Report Date: 8/13/2024
Report No.: 703264 - Lead Water
Project: E.T. Hamilton
Project No.: 2024.184.2

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7778175 **Location:**K Room 12 Lav Sink **Result(ppb):**2.40
Client No.:B21 * Sample acidified to pH <2.

Lab No.:7778176 **Location:**Boy's Lav O/S Gym **Result(ppb):**<1.00
Client No.:B22 * Sample acidified to pH <2.

Lab No.:7778177 **Location:**Girl's Lav O/S Gym **Result(ppb):**<1.00
Client No.:B23 * Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 8/2/2024
Date Analyzed: 08/13/2024
Signature: Mark Stewart
Analyst: Mark Stewart

Approved By: Frank E. Ehrenfeld, III
Laboratory Director

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CERTIFICATE OF ANALYSIS

Client:	Indoor Environmental Concepts, LLC	Report Date:	8/13/2024
	117 N Black Horse Pike	Report No.:	703264 - Lead Water
	Runnemede NJ 08078	Project:	E.T. Hamilton
		Project No.:	2024.184.2
Client:	IND601		

Appendix to Analytical Report:

Customer Contact: Lab Results
Analysis: AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com
iATL OfficeManager: ?wchampion@iatl.com
iATL Account Representative: Shirley Clark
Sample Login Notes: See Batch Sheet Attached
Sample Matrix: Water
Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and ir our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

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Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:
- ASTM D3559-15D

Certification:
- NYS-DOH No. 11021
- NJDEP No. 03863

Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B
- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample
- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

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Client:	Indoor Environmental Concepts, LLC	Report Date:	8/13/2024
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	Runnemede NJ 08078	Project:	E.T. Hamilton
		Project No.:	2024.184.2
Client:	IND601		

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com.**

Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.