

Environmental Logic, LLC
11 Princess Road, Suite B
Lawrenceville, NJ 08648
(609) 910-0720
www.env-logic.com



April 5, 2022

Mr. Louis Alfano
Business Administrator/Board Secretary
Cliffside Park Board of Education
Cliffside Park, New Jersey 07010

RE: Lead in Water Follow Up Sampling
Cliffside Park Schools
64 Riverview Avenue
Cliffside Park, New Jersey
EL Project #21-0042

Dear Mr. Alfano:

On December 29, 2021, Environmental Logic (EL), collected, potable drinking water samples from all identified drinking water outlets in Cliffside Park Schools No.3, No. 4, No. 5, No. 6, and Cliffside Park High School. First draw samples were initially collected from all sampling locations, in accordance with the USEPA and NJDEP protocols. Samples were analyzed for Total Lead using USEPA test method 200.8 by Alpha Analytical, Inc. in Westborough, Massachusetts. The NJDEP/EPA 15 µg/l action level was exceeded in two (2) initial samples from Cliffside Park School No. 3 and in three (3) initial samples from Cliffside Park School Number 6. It is our understanding that these specific drinking water outlets were taken out of service immediately following receipt of the unsatisfactory results.

On March 10, 2022, based on the initial first draw sampling results, follow up flush samples were collected the outlets and fountains where the December 2021 first draw sample results exceeded the NJDEP/EPA action level. The purpose of the flush sampling is to evaluate if the elevated lead results are from the water outlets/drinking fixtures themselves or from the interior piping up-stream from the outlets. The follow up samples were collected after running the affected outlets as prescribed in NJDEP and EPA guidance; namely running refrigerated fountains for 15 minutes prior to sample collection and running non-refrigerated outlets for 30-60 seconds prior to sample collection.

Results for the follow up flushed samples are presented on the table below. For ease of comparison, the prior 2017 first draw and 2021 first draw sample results have been included on the table below. All exceedances of the 15 µg/l action level are listed in **bold**. Laboratory data summary sheets for the follow up samples are attached for reference.



Innovation | Remediation | Closure

Cliffside Park High School Sampling Results					
2017 Sample ID	2021 Sample ID	Sample Location	2017 First Draw Concentration (Micrograms per Liter - µg/l)	December 29 2021 First Draw Concentration (Micrograms per Liter - µg/l)	March 10 2022 Follow Up Flush Sample Concentration (Micrograms per Liter - µg/l)
09-S3-BY203-CF	CPS3-9	Fountain Near Room 203	2.79	28.48	0.5007
10-S3-BY204-CF	CPS3-10	Fountain Near Room 204	1.39	25.63	5.936
09-6S-BYNURSE-CF	CPS6-10	Fountain Near Nurse's Office	3.41	58.5	1.149
15-6S-RM216-WF	CPS6-16	Fountain Outside Room 218	1.91	25.42	0.4554
19-6S-ARTBMT-CF	CPS6-20	Fountain Basement Art Room	28.6	23.63	0.6256

BOLD=exceeds 15 µg/l action limit.

As noted above, it is our understanding that these drinking water fountains are currently out of service. Based on the results of the 2021/2022 sampling program, Environmental Logic (EL) makes the following recommendations consistent with the EPA guidance document "3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities. Specifically for the fountains listed on the table above EL recommends one of the following courses of action:

- **Shut Off Problem Outlets:** The outlet can be shut off or disconnected until the problem is resolved. Shutting off problem outlets can also provide a permanent solution. If the outlet is not used regularly, this may be a viable option; however, if the outlet is frequently used, this is probably not a practical long-term solution.
- **Provide Filters at Problem Taps:** Point-of-use (POU) units are commercially available and can be effective in removing lead. There are a number of POU cartridge filter units on the market that effectively remove lead, their effectiveness varies, and they may be vulnerable to vandalism. Filters need routine maintenance (e.g., cartridge filter units need to be replaced periodically) to remain effective. When doing this, facilities should be sure to create maintenance schedules and identify a point of contact to be in charge of making sure they are properly maintained.

Cliffside Park School District has installed such filters on fountains and sinks where elevated lead was been detected in the past. Based on the current sampling results, these filtration units remain effective.

- **Provide Bottled Water:** This can be an expensive alternative but might be warranted if you are aware of widespread contamination and other remediation is not a near-term option. If you use bottled water, be aware that it is not regulated by EPA but rather by the Food and Drug



Administration (FDA). States may also regulate bottled water, and in some instances, these standards may be more stringent than the federal requirements. EPA recommends that you request a written statement from the bottled water distributor guaranteeing that the bottled water meets FDA and state standards. A copy of this letter should be recorded.

- Replacement of Problem Outlets:** Replacing these identified outlets and any identified upstream plumbing components (e.g., valves, leaded solder) permanently address the problem, compared with other solutions that have long-term costs and risks. If the sources of lead contamination are localized and limited to a few outlets, replacement may also be the most cost-effective option in the short-term.

EPA's revised March 2015 guidance, How to Identify Lead-Free Certification Marks for Drinking Water System & Plumbing Products, can be a useful resource selecting lead-free plumbing. Follow-up testing is also recommended, as with the other remedies, to ensure that the efforts result in reduced lead levels at the fixture outlets.

As previously discussed, nurses' office sink in Cliffside Park School No. 4 has consistently had lead results close to but not exceeding the 15 µg/l action level. While this result is below the action level, EL does not recommend that this water outlet be used as a potable water source.

While not required by current guidance, we recommend this sink only be used for purposes other than ingestion (e.g, hand washing) and should be labeled "Not for Drinking/Cooking" unless remediated with one of the options recommended above. As noted in EPA guidance, if a problem outlet is routinely used for purposes other than human ingestion (e.g., hand-washing), clear signage can be posted to notify people that the outlet is not to be used for drinking or cooking.

2017 Sample ID	2021 Sample ID	Sample Location	2017 First Draw Concentration (Micrograms per Liter - µg/l)	December 29 2021 First Draw Concentration (Micrograms per Liter - µg/l)	March 10 2022 Follow Up Flush Sample Concentration (Micrograms per Liter - µg/l)
01-S4-NURSE-SK	CPS4-1	Nurse's Office	13.6	14.99	No Sample Collected

If you have any questions or comments, please do not hesitate to contact me at (609) 910-0720.

Sincerely,



Gary Weissberger
 Project Manager

Enclosures



Sample Results Summary

Form 1 METALS

Client : Environmental Logic, LLC
Project Name : CLIFFSIDE PARK BOE
Lab ID : L2212944-01
Client ID : CPS3-9-FL
Sample Location : SCHOOL #3
Sample Matrix : DW
Analytical Method : 3,200.8
Lab File ID : WG1617716.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2212944
Project Number : 21-0042
Date Collected : 03/10/22 07:45
Date Received : 03/11/22
Date Analyzed : 03/20/22 20:14
Dilution Factor : 1
Analyst : WP
Instrument ID : ICPMSRQ
%Solids : NA
Date Digested : 03/18/22

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
7439-92-1	Lead, Total	0.5007	1.000	0.3430	J



Form 1 METALS

Client : Environmental Logic, LLC
Project Name : CLIFFSIDE PARK BOE
Lab ID : L2212944-02
Client ID : CPS3-10-FL
Sample Location : SCHOOL #3
Sample Matrix : DW
Analytical Method : 3,200.8
Lab File ID : WG1617716.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2212944
Project Number : 21-0042
Date Collected : 03/10/22 07:40
Date Received : 03/11/22
Date Analyzed : 03/20/22 21:14
Dilution Factor : 1
Analyst : WP
Instrument ID : ICPMSRQ
%Solids : NA
Date Digested : 03/18/22

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
7439-92-1	Lead, Total	5.936	1.000	0.3430	



Form 1 METALS

Client : Environmental Logic, LLC
Project Name : CLIFFSIDE PARK BOE
Lab ID : L2212942-01
Client ID : CPS6-10-FL
Sample Location : SCHOOL #6
Sample Matrix : DW
Analytical Method : 3,200.8
Lab File ID : WG1617716.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2212942
Project Number : 21-0042
Date Collected : 03/10/22 06:53
Date Received : 03/11/22
Date Analyzed : 03/20/22 19:59
Dilution Factor : 1
Analyst : WP
Instrument ID : ICPMSRQ
%Solids : NA
Date Digested : 03/18/22

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
7439-92-1	Lead, Total	1.149	1.000	0.3430	



Form 1 METALS

Client : Environmental Logic, LLC
 Project Name : CLIFFSIDE PARK BOE
 Lab ID : L2212942-02
 Client ID : CPS6-16-FL
 Sample Location : SCHOOL #6
 Sample Matrix : DW
 Analytical Method : 3,200.8
 Lab File ID : WG1617716.pdf
 Sample Amount : 50ml
 Digestion Method : EPA 3005A

Lab Number : L2212942
 Project Number : 21-0042
 Date Collected : 03/10/22 06:57
 Date Received : 03/11/22
 Date Analyzed : 03/20/22 20:04
 Dilution Factor : 1
 Analyst : WP
 Instrument ID : ICPMSRQ
 %Solids : NA
 Date Digested : 03/18/22

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
7439-92-1	Lead, Total	0.4554	1.000	0.3430	J



Form 1 METALS

Client : Environmental Logic, LLC
Project Name : CLIFFSIDE PARK BOE
Lab ID : L2212942-03
Client ID : CPS6-20-FL
Sample Location : SCHOOL #6
Sample Matrix : DW
Analytical Method : 3,200.8
Lab File ID : WG1617716.pdf
Sample Amount : 50ml
Digestion Method : EPA 3005A

Lab Number : L2212942
Project Number : 21-0042
Date Collected : 03/10/22 06:45
Date Received : 03/11/22
Date Analyzed : 03/20/22 20:09
Dilution Factor : 1
Analyst : WP
Instrument ID : ICPMSRQ
%Solids : NA
Date Digested : 03/18/22

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
7439-92-1	Lead, Total	0.6256	1.000	0.3430	J

