



ENVIRONMENTAL CONSULTANTS

4169 Allendale Parkway
Buffalo, New York 14219
(P) 716-312-0070 (F) 716-312-8092
www.stohlenvironmental.com

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February 23, 2017

David Spacone
City School District of the City of Niagara Falls
Director of Facilities
630 – 66th Street
Niagara Falls, NY 14304

Re: Follow-Up Sampling of Drinking Water for Lead Concentrations

Dear Mr. Spacone:

Included with this letter is Stohl Environmental LLC's report for the follow-up Water Sampling performed at the educational buildings of the City School District of the City of Niagara Falls:

- Niagara Falls Community Education Center, 6040 Lindbergh Avenue, Niagara Falls, NY

This report is prepared to assist the District in complying with the requirements of NYS regulations, *SUBPART 67-4: Lead Testing in School Drinking Water*, by identifying the sources of potable water with lead concentrations greater than the NYS "Action Level of 15 parts per billion (ppb)".

Initial Sampling and Analysis: In Compliance with NYS regulations, initial first draw water sampling was completed on 10/15/2016 and 7 samples were identified as containing lead concentrations above the NYS Action Level of 15 ppb.

Mitigation by District and Follow-up Sampling by Stohl Environmental LLC:

- Following the receipt of initial sampling results, in accordance with guidance received from NYS, the District is reported to have prohibited use of the outlets analyzed as above the NYS Action Level of 15 ppb until "(1) a lead remediation plan is implemented... and (2) test results indicate that the lead levels are at or below the action level".
- Subsequent to reported mitigation by the District, Stohl Environmental LLC was requested to perform follow-up sampling and laboratory analysis.
- Follow-up sampling was performed by Stohl Environmental LLC in accordance with the requirements and protocols outlined in NYS regulations, as well as USEPA Technical Guidance Document "3-T's for Reducing Lead in Drinking Water in Schools".

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Results of Follow-up Sampling: As further detailed in Section 1.2 (*Executive Summary*) of the accompanying report, based upon the follow-up sampling and analysis performed, the following is reported:

- **Follow-up First Draw Samples:** Following remediation by the District, or for confirmatory purposes, 7 outlets were re-sampled on 2/8/2017 and analyzed by a certified and independent laboratory. **Of the 7 samples collected, all 7 contained lead concentrations above the action level.**

Interpretation of First Draw Sampling Results: Under NYSDOH regulations Section 67-4.4, for the one outlet that continues to have First Draw test results above the NYS action level, the District must “prohibit use of the outlet until lead remediation is implemented and (First Draw) test results indicate that lead levels are at or below the action level.”


- **Flush Samples:** As additional confirmation of lead concentrations, and in an attempt to determine whether lead concentrations above the action level result from the outlet/fixture or from the plumbing to the outlet, 7 flush samples were also collected from these same outlets on 2/8/2017 and submitted to and analyzed by a certified and independent laboratory. **Of the 7 samples collected, 1 contained lead concentrations above the action level.**

Interpretation of Flush Sampling Results: As detailed in EPA guidance (“3T’s for Reducing Lead in Drinking Water in Schools”), *“If initial test results reveal lead concentrations greater than (the action level) for a given outlet, follow-up flush testing... is recommended to determine if the lead contamination results are from the fixture or from the plumbing.”*

Based upon this guidance, 6 outlets tested on 2/8/2017 continue to have First Draw Sample lead concentrations above the action level; the Flush Sample results infer that the source of lead at these outlets is in the fixture, rather than the plumbing to the fixture. In addition, 1 outlet tested on 2/8/2017 continues to have concentrations above the action level for both the Follow-up First Draw and Flush Samples. Results infer that the source of lead at this outlet is possibly the fixture and plumbing.

Thank you for the opportunity to be of service to City School District of the City of Niagara Falls.

Sincerely,
Stohl Environmental, LLC.



William K. Sisco
Senior Project Manager

**Follow-Up Investigation and Sampling
Of Sources of Potable Water
For Lead Concentrations**

Prepared for:

**David Spacone
City School District of the City of Niagara Falls
Director of Facilities
630 – 66th Street
Niagara Falls, NY 14304**

Prepared by:



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4169 ALLENDALE PKWY. BUFFALO, NEW YORK 14219

☎ (716) 312-0070 📠 (716) 312-8092

www.stohlenvironmental.com

Conditions as of February 8, 2017



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Buffalo, New York 14219
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Summary Tabulation

Lead in Drinking Water Investigation

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1.1 Sampling Protocol and Summary of Results:

Stohl Environmental was retained by City School District of the City of Niagara Falls to perform follow-up sampling and analysis of potable water outlets that were identified in report dated 12/9/2016 as having lead concentrations greater than the NYS action level of 15 ppb. Sampling was performed in the following buildings:

- Niagara Falls Community Education Center, 6040 Lindbergh Avenue, Niagara Falls, NY

Scope of Work:

Stohl Environmental was charged with collecting follow-up water samples from outlets which previously were analyzed as having lead concentrations above 15 ppb in the Niagara Falls Community Education Center Building. Outlets are defined in NYS regulations as: "a potable water fixture currently or potentially used for drinking or cooking purposes, including but not limited to a bubbler, drinking fountain, or faucets".

Sampling Protocol:

In accordance with NYS regulations, **Subpart 67-4: Lead Testing in School Drinking Water**, and the EPA guidance document, **'3Ts for Reducing Lead in Drinking Water in Schools'**, Stohl Environmental's protocol can be summarized as follows:

- **Follow-up Samples** were collected to verify initial findings of lead contaminations, to assist in problem assessment to determine remediation, and/or verify that lead levels are at or below action level post-remediation. Confirmatory samples were collected as follows:
 - **Follow-up First-Draw samples** of 250 milliliters (mL) were collected from cold water outlets before any water was used. Sampling was coordinated with District representatives to assure that water was motionless in the pipes for a minimum of 8 hours, but not more than 18 hours before sample collection.
 - **To supplement follow-up first draw samples, in some instances, Flush samples** of 250 mL were collected from cold water outlets after the outlet was run for 30 seconds before any water was used or following a second first-draw sample at the same outlet. Sampling was coordinated with District representatives to assure that water was motionless in the pipes for a minimum of 8 hours, but not more than 18 hours before sample collection.
 - **Laboratory Analysis:** Samples were submitted following strict chain-of-custody protocols to an independent laboratory approved by the NYS Department of Health's Environmental Laboratory Approval Program (ELAP).

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1.2 Executive Summary of Sampling and Analysis:

Total Number of Samples Collected by Building Classified by Initial First Draw & Follow-up Samples

Building Name	Date of Sample Events	Total Number Samples Collected	Initial First Draw Samples		Follow-up Samples			
			Analyzed at or Below Action Level of 15 ppb	Analyzed Above Action Level of 15 ppb	First Draw Samples		Flush Samples	
					Analyzed at or Below Action Level of 15 ppb	Analyzed Above Action Level of 15 ppb	Analyzed at or Below Action Level of 15 ppb	Analyzed Above Action Level of 15 ppb
Community Education Center Building	10/15/16, and 2/3/17	68	47	7	0	7	6	1

** Follow-up samples are samples collected subsequent to "Step 1" First Draw samples to verify initial findings of lead contamination, to assist in problem assessment to determine remediation and/or verify that lead levels are at or below action level post-remediation.



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Sample Results: Initial First Draw, Follow-up First Draw and Flush Samples

Sample #	Sample Type (Initial First Draw, Follow-up First Draw or Flush)	Sample Location	Fixture/Outlet type	Laboratory Analysis in ppb
111.14-8	First Draw	Men's Lavatory Sink Across the Hall from Office 144	Sink	28.5
111.14-8R	Follow-Up First Draw	Men's Lavatory Sink Across the Hall from Office 144	Sink	27.0
111.14-8F	Flush	Men's Lavatory Sink Across the Hall from Office 144	Sink	4.00
111.14-20	First Draw	Room 104 Sink	Sink	299
111.14-20R	Follow-Up First Draw	Room 104 Sink	Sink	19.5
111.14-20F	Flush	Room 104 Sink	Sink	5.20
111.14-21	First Draw	Room 104 Bubblers	Bubbler	142
111.14-21R	Follow-Up First Draw	Room 104 Bubblers	Bubbler	28.2
111.14-21F	Flush	Room 104 Bubblers	Bubbler	2.90
111.14-30	First Draw	Room 109 Left Sink	Sink	18.6
111.14-30R	Follow-Up First Draw	Room 109 Left Sink	Sink	19.6
111.14-30F	Flush	Room 109 Left Sink	Sink	3.20
111.14-52	First Draw	Storage Closet Next to Room 102 Sink	Sink	47.7
111.14-52R	Follow-Up First Draw	Storage Closet Next to Room 102 Sink	Sink	26.6
111.14-52F	Flush	Storage Closet Next to Room 102 Sink	Sink	6.80
111.14-53	First Draw	Room 201 Library Sink	Sink	17.6
111.14-53R	Follow-Up First Draw	Room 201 Library Sink	Sink	158
111.14-53F	Flush	Room 201 Library Sink	Sink	94.0
111.14-54	First Draw	Basement Slop Sink	Slop Sink	53.4
111.14-54R	Follow-Up First Draw	Basement Slop Sink	Slop Sink	122
111.14-54F	Flush	Basement Slop Sink	Slop Sink	11.3

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1.3 Response Actions Required Under NYS Regulations, Section 67-4.4:

For outlets analyzed with a lead concentration in excess of the NYS Action Level, regulations require:

- (a) Prohibit use of the outlet until:
 - (1) a lead remediation plan is implemented to mitigate the lead level of such outlet; and
 - (2) test results indicate that the lead levels are at or below the action level;
- (b) Provide building occupants with an adequate supply of potable water for drinking and cooking until remediation is performed;
- (c) Report the test results to the local health department as soon as practicable, but no more than 1 business day after the school received the laboratory report; and
- (d) Notify all staff and all persons in parental relation to students of the test results, in writing, as soon as practicable but no more than 10 business days after the school received the laboratory report.



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1.4 Laboratory Analytical Reports by Building



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1.5 Laboratory Certifications



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1.6 Chains of Custody