October 23, 2023

Mr. John Condon
Director of Facilities
Pelham Union Free School District
575 Colonial Avenue
Pelham, NY 10803

Subject: **Lead Testing of School Drinking Water at Colonial Elementary School**
Project Number: 31406992.005

Dear Mr. Condon:

At your request on behalf of the Pelham Union Free School District, WSP USA Inc. (WSP) has conducted a testing program for lead in water. WSP's team of industrial hygienists performed water sampling on October 4, 2023. In addition to this final report, WSP has provided the following New York State Department of Health (NYS DOH) required documentation: Laboratory Results, Exceedance Table when exceedances occurred, and when applicable a draft Parents Notification Letter and Notification of exceedances to the County Department of Health. As requested, WSP provided your staff with the information necessary to complete the NYS Health Electronic Response Data System (HERDS).

BACKGROUND

On September 6, 2016, the Governor signed legislation requiring all school districts in NYS to test potable water systems for lead contamination and to take responsive actions. To implement this new law, the DOH issued emergency regulations, titled Lead Testing in School Drinking Water. On May 9, 2018, the Lead Testing in School Drinking Water final regulation was published in the State Register, replacing the emergency regulation. This law was amended and signed into law on December 23, 2021, requiring significant changes to Subpart 67-4 Public Health Law PHL §1110. The following revisions went into effect on December 22, 2022:

- All school buildings serving children in pre-K through grade 12 are required to collect a sample from each applicable outlet for testing every 3 years.
- Previously deemed "lead-free" buildings are no longer exempt.
- Schools must complete initial first-draw sampling for Compliance Period January 1, 2023-December 31, 2025.
- **Action Level** was lowered from 15 ppb to **5 ppb**.
- All water provided to staff/students in response to an outlet being taken out of service must be free of charge.
- Schools must now include copies of lab reports of the lead testing results on their websites and every 3 years thereafter or at an earlier time as determined by the Commissioner of Health.
- Compliance testing will occur on a triennial (every 3 years) schedule.

KEY DEFINITIONS IN THE LAW/REGULATIONS

- Outlet means a potable water fixture currently or potentially used for drinking or cooking purposes, including but not limited to a bubbler, drinking fountain, hose bib, sinks or faucets.
- "Applicable" outlets: Outlets that should be sampled may be located anywhere on school property including external outlets (hose bibs) if the outlet may be used for drinking or cooking (including food preparation).

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Superintendents or their designees have the responsibility to identify which outlets on a school property meet the regulation requirements for sampling ("applicable outlets"). If a Superintendent or their designee determines that they have outlets that fall outside of the scope of the regulation (outlets not used or potentially used for drinking or cooking), the school must remediate or/and have a remedial action plan that includes details on how those outlets will not be accessed and/or utilized for drinking or cooking purposes ("non-applicable outlets").

- "Non-applicable" outlets: The Rule of Thumb is that generally, any outlet in a room or office within a school that is not used by students (pre-kindergarten through grade 12) and does not provide water for drinking or cooking does not require sampling. This includes dishwashing sinks; bus garage; point of entry; science/art sink; hot, tempered, or bathroom outlets designated non-applicable with education and signage.
- "First-draw" sample is defined as a sample taken from a cold water outlet before any water is used from that outlet and in which water is motionless in pipes for a minimum of 8-18 hours before sample collection.
- Action level means 5 parts per billion (ppb). Lead test results greater than 5 ppb exceeds the lead action level and requires the outlet to be taken out of service and a remediation action plan be implemented.

- For additional guidance regarding applicable vs. non-applicable outlets, and other requirements please see the Appendices for NYS DOH Lead Testing in School Drinking Water Program Updates 2023 and NYS Senate Law
  https://www.health.ny.gov/environmental/water/drinking/lead/lead_testing_of_school_drinking_water.htm
  https://www.nysenate.gov/legislation/laws/PBH/1110

SAMPLING METHODOLOGY

1 The NYS DOH Emergency Regulation, Section 67-4.3 – Monitoring states:

- First-draw samples shall be collected from all "applicable" outlets. A first-draw sample volume shall be 250 milliliters (mL), collected from a cold-water outlet before any water is used. The water shall be motionless in the pipes for a minimum of 8 hours, but no more than 18 hours, before sample collection. Note: The NYS DOH requires that for outlets which do not have regular use and water remains motionless in the pipes for greater than 18 hours, the outlets were to be sampled as well (to represent "normal use patterns").
- All first-draw samples shall be analyzed by a laboratory approved to perform such analyses by the Department's Environmental Laboratory Approval Program (ELAP).

Although not required by the NYS DOH Emergency Regulation, WSP also followed additional methodologies included in Environmental Protection Agency (EPA) document entitled "3Ts for Reducing Lead in Drinking Water in Schools".

2 Sampling Plan

- In developing a sampling plan before sample collection took place at the School, WSP determined the location of the water service line. Sampling at the School started from a location closest to the service line entrance and proceeded outwards from that point.
- A map, depicting the location of the service line entrance, and arrows indicating the direction of sampling was provided to and used by the sampling team. The sampling team verified the location of the service line entrance prior to sampling.

3 Laboratory Analysis: Samples were submitted to York Analytical (Stratford, CT) and/or EMSL (Cinnaminson, NJ) for analysis under chain-of-custody. The laboratories are certified through the NYS DOH Environmental Laboratory Approval Program (ELAP) and are approved for analysis of lead in potable water.

4 Re-sampling can be performed provided corrective action or remediation options, as reviewed in the Recommendation section, are complete. Proper flushing of new equipment (e.g. pipes, faucets etc.) is recommended.

5 Flushing Program and Resampling: when routine flushing programs are implemented, the school plumbing system should be flushed according to an establish protocol. After flushing and before sampling or resampling, a period of 3-4 days of normal use is recommended. First-draw lead water sampling can be performed after the required hold time of 8-18 hours is completed.

6 In accordance with the NYS DOH, the following post-remediation testing requirements apply:

- Follow-up samples collected after an outlet has been remediated must also be "first-draw" samples. Schools may choose to perform additional sampling (i.e., 30-second flush, etc.) to determine the contribution of lead from plumbing to guide remediation decisions.

- Only those outlets that exceed the Action Level need to be resampled (following remediation).
- All remediated outlets will likely require flushing before being placed back into service.
- Post-remediation tests results need to be reported in the Department's HERDS application on HCS, and on the school website within the same reporting timeframes/requirements as specified for the initial sampling.

RESULTS DISCUSSION

The Assessment Results Exceedance Table provides details on the date of sampling, sample identification, location and laboratory results that exceeded 5 ppb. A copy of the full laboratory results and the chain of custody are presented at the end of this report in Appendix A. Laboratory approvals can be found in Appendix B.

- Of the **20** samples collected at Colonial Elementary School, **10 (50%)** had lead concentrations that exceeded 5 ppb. The table below details the sample locations and the laboratory results.

Colonial Elementary School				
Sample Date	**Sample ID**	**Floor**	**Location**	**Lead Level (ppb)**
10/4/2023	001-17-CF-P-01	Ground	Room 17, CF, 1	5.64
10/4/2023	02-Hall-DW-P-02	1st Floor	Hallway by room 104, WB, 2	9.08
10/4/2023	02-107-CF-P-04	1st Floor	Room 107, CF, 4	5.39
10/4/2023	02-106-CF-P-05	1st Floor	Room 106, CF, 5	12.4
10/4/2023	03-205-CF-P-08	2nd Floor	Room 205, CF, 8	7.15
10/4/2023	03-204-CF-P-09	2nd Floor	Room 204, CF, 9	8.1
10/4/2023	03-200-CF-P-10	2nd Floor	Room 200, CF, 10	17.8
10/4/2023	03-211-CF-P-11	2nd Floor	Room 211, CF, 11	5.68
10/4/2023	03-209-CF-P-12	2nd Floor	Room 209, CF, 12	9.42
10/4/2023	03-208-CF-P-21	2nd Floor	Room 208, CF, 21	32

Upon receipt of the results, WSP made the following recommendations to the district as required by Subpart 67-4 of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York:

- Review the Exceedance Table, Laboratory Results and Notification Letter, indicating lead water sample results exceeding the NYSDOH Action Level of 5 ppb, and require the outlet to be taken out of service and a remediation action plan be implemented.

RECOMMENDATIONS

If lead concentrations exceeded 5 ppb, WSP offers the following recommendations for remediation:

In accordance with Subpart 67-4, Section 67-4.4 Response, the following immediate Response Actions are necessary:

- Prohibit the use of the outlet immediately (take outlet out of service or turn off) until:
  1. A lead remedial action plan is implemented to mitigate the lead level at the outlet, and
  2. Post-remediation test results indicate that the lead levels are at or below the action level;
- Provide building occupants with an adequate supply of water for drinking and cooking until remediation is performed;

- 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 **(Notification issued by WSP);**
- 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 **(See Attached Draft Letter for issuance by District).**

If an outlet tested above the "action level", it can still be used for cleaning and handwashing. However, please note:

- Signage must be placed at such outlets stating that the water should not be used for drinking (only handwashing and cleaning).
- Pictures should be used if there are small children using the water outlets, and staff should ensure the children understand what the signs mean and monitor the outlets to ensure they are not used for drinking.

Corrective Actions / Remediation Options

- Permanent removal of an outlet
- Outlet replacement with "lead-free" plumbing materials
- Pipe replacement with "lead-free" plumbing materials
- Remove other sources of lead (lead pipe, lead solder joints, and brass plumbing components with "lead-free" materials)
- Flushing (systematic flushing program)
- Point of Use (POU) Filters*
- Supervision
- Engineering controls
- Education
- Signage. Signage used at outlets are considered to be a temporary measure and cannot be used as a permanent measure.
- Install Tempered outlets*

Non-applicable Outlets

- Tempered Outlets. These outlets are not required to be sampled. However, all tempered water outlets should be clearly posted with signs ("Do Not Drink" or equivalent), provide awareness education to students and staff and implement appropriate remedial actions to prevent drinking from these outlets.
- Science/Art sinks: as noted by NYSDOL, typically these classroom settings prohibit eating and/or drinking. The school Superintendent has the authority to determine whether these outlets may be used for drinking or cooking or whether they require sampling. Management controls such as restricted/secured access (e.g., locked doors), signage, required supervision and other management controls are part of the overall safety and health program elements that should be in place.

LIMITATIONS, EXCEPTIONS AND ASSUMPTIONS

Opinions and recommendations presented in this report apply to site conditions and features as they existed at the time of WSP's site visits, and those reasonably foreseeable. They cannot necessarily apply to conditions and features of which WSP is unaware and has not had the opportunity to evaluate. The conclusions presented in this report are professional opinions based solely upon WSP's visual observations of accessible areas and sampling data. These conclusions are intended exclusively for the purpose state herein, at the sites indicated, and for the project indicated. No expressed or implied representation or warranty is included or intended in our reports, except that our services were performed, within the limits prescribed by our client, with the customary thoroughness and competence of our profession.

If you have any questions concerning this information, please feel free to contact us at 212-612-7900. We look forward to working with you in the future.

Report Completed by:

Patrick Gaughan

Patrick Gaughan
Industrial Hygienist

Report Completed by:

Joseph Kapp

Joseph Kapp, CIH, CSP
Assistant Vice President

Appendix A – Laboratory Results & Chain of Custody
Appendix B - Laboratory ELAP Certifications
Appendix C - NYS DOH Lead Testing in School Drinking Water Program Review and Updates 2023

CC : Alexander Smolyar

APPENDIX A

Laboratory Results & Chain of Custody

Technical Report

prepared for:

WSP USA (New York, NY)
One Penn Plaza, 2nd Floor
New York NY, 10119
Attention: Joseph Kapp

Report Date: 10/12/2023
Client Project ID: 31406992.005 Pelham Union Free School District
York Project (SDG) No.: 23J0240

Report Date: 10/12/2023
Client Project ID: 31406992.005 Pelham Union Free School District
York Project (SDG) No.: 23J0240

WSP USA (New York, NY)
One Penn Plaza, 2nd Floor
New York NY, 10119
Attention: Joseph Kapp

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on October 04, 2023 and listed below. The project was identified as your project: **31406992.005 Pelham Union Free School District**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
23J0240-01	001-17-CF-P-01	Drinking Water	10/04/2023	10/04/2023
23J0240-02	01-Hall-WB-P-01	Drinking Water	10/04/2023	10/04/2023
23J0240-03	01-Hall-DW-P-01	Drinking Water	10/04/2023	10/04/2023
23J0240-04	02-Hal-WB-P-02	Drinking Water	10/04/2023	10/04/2023
23J0240-05	02-Hal-DW-P-02	Drinking Water	10/04/2023	10/04/2023
23J0240-06	02-104-CF-P-02	Drinking Water	10/04/2023	10/04/2023
23J0240-07	02-103-CF-P-03	Drinking Water	10/04/2023	10/04/2023
23J0240-08	02-Nurse-NS-P-01	Drinking Water	10/04/2023	10/04/2023
23J0240-09	02-107-CF-P-04	Drinking Water	10/04/2023	10/04/2023
23J0240-10	02-106-CF-P-05	Drinking Water	10/04/2023	10/04/2023
23J0240-11	03-Hall-WB-P-03	Drinking Water	10/04/2023	10/04/2023
23J0240-12	03-Hall-DW-P-03	Drinking Water	10/04/2023	10/04/2023
23J0240-13	03-207-CF-P-06	Drinking Water	10/04/2023	10/04/2023
23J0240-14	03-206-CF-P-07	Drinking Water	10/04/2023	10/04/2023
23J0240-15	03-205-CF-P-08	Drinking Water	10/04/2023	10/04/2023
23J0240-16	03-204-CF-P-09	Drinking Water	10/04/2023	10/04/2023
23J0240-17	03-200-CF-P-10	Drinking Water	10/04/2023	10/04/2023
23J0240-18	03-211-CF-P-11	Drinking Water	10/04/2023	10/04/2023
23J0240-19	03-209-CF-P-12	Drinking Water	10/04/2023	10/04/2023
23J0240-20	03-208-CF-P-21	Drinking Water	10/06/2023	10/04/2023

General Notes for York Project (SDG) No.: 23J0240

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 10/12/2023

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: 001-17-CF-P-01 **York Sample ID:** 23J0240-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:24 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**5.64**		ug/L	1.00	1	EPA 200.8	10/10/2023 10:26	10/10/2023 15:38	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 01-Hall-WB-P-01 **York Sample ID:** 23J0240-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:26 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		ug/L	1.00	1	EPA 200.8	10/10/2023 10:26	10/10/2023 15:40	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-044		

Sample Information

Client Sample ID: 01-Hall-DW-P-01 **York Sample ID:** 23J0240-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:27 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		ug/L	1.00	1	EPA 200.8	10/10/2023 10:26	10/10/2023 15:41	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-044		

Sample Information

Client Sample ID: 02-Hal-WB-P-02 **York Sample ID:** 23J0240-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:30 am	10/04/2023

Sample Information

Client Sample ID: 02-Hal-WB-P-02 **York Sample ID:** 23J0240-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:30 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		ug/L	1.00	1	EPA 200.8	10/10/2023 10:26	10/10/2023 15:42	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-044		

Sample Information

Client Sample ID: 02-Hal-DW-P-02 **York Sample ID:** 23J0240-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:32 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**9.08**		ug/L	1.00	1	EPA 200.8	10/10/2023 10:26	10/10/2023 15:44	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 02-104-CF-P-02 **York Sample ID:** 23J0240-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:34 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**4.54**		ug/L	1.00	1	EPA 200.8	10/10/2023 10:26	10/10/2023 15:45	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 02-103-CF-P-03 **York Sample ID:** 23J0240-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:36 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: 02-103-CF-P-03 **York Sample ID:** 23J0240-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:36 am	10/04/2023

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**2.98**		ug/L	1.00	1	EPA 200.8	10/10/2023 10:26	10/10/2023 15:46	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 02-Nurse-NS-P-01 **York Sample ID:** 23J0240-08

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:38 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**2.76**		ug/L	1.00	1	EPA 200.8	10/10/2023 10:26	10/10/2023 15:48	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 02-107-CF-P-04 **York Sample ID:** 23J0240-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:39 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**5.39**		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:11	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 02-106-CF-P-05 **York Sample ID:** 23J0240-10

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:41 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: 02-106-CF-P-05 **York Sample ID:** 23J0240-10

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:41 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**12.4**		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:14	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 03-Hall-WB-P-03 **York Sample ID:** 23J0240-11

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:42 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:15	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-044		

Sample Information

Client Sample ID: 03-Hall-DW-P-03 **York Sample ID:** 23J0240-12

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:44 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:16	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-044		

Sample Information

Client Sample ID: 03-207-CF-P-06 **York Sample ID:** 23J0240-13

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:45 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: 03-207-CF-P-06 **York Sample ID:** 23J0240-13

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:45 am	10/04/2023

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**2.84**		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:18	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 03-206-CF-P-07 **York Sample ID:** 23J0240-14

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:46 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**3.22**		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:19	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 03-205-CF-P-08 **York Sample ID:** 23J0240-15

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:48 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**7.15**		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:20	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 03-204-CF-P-09 **York Sample ID:** 23J0240-16

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:50 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: 03-204-CF-P-09 **York Sample ID:** 23J0240-16

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:50 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**8.10**		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:29	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 03-200-CF-P-10 **York Sample ID:** 23J0240-17

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:51 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**17.8**	M-PbE X	ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:31	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 03-211-CF-P-11 **York Sample ID:** 23J0240-18

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:53 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**5.68**		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:32	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 03-209-CF-P-12 **York Sample ID:** 23J0240-19

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:55 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: 03-209-CF-P-12 **York Sample ID:** 23J0240-19

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 4, 2023 7:55 am	10/04/2023

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**9.42**		ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:33	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample Information

Client Sample ID: 03-208-CF-P-21 **York Sample ID:** 23J0240-20

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
23J0240	31406992.005 Pelham Union Free School District	Drinking Water	October 6, 2023 7:08 am	10/04/2023

Lead by EPA 200.8 **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 200.8

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**32.0**	M-PbEX	ug/L	1.00	1	EPA 200.8	10/11/2023 09:52	10/11/2023 13:35	cw
							Certifications:	CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-04		

Sample and Data Qualifiers Relating to This Work Order

M-PbEX Lead result exceeds regulatory limit

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon current NELAC/TNI Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Corrective Action: Lab did not receive the last sample on COC labeled 03-208-CF-P21.
Analysis removed from that sample. Sample received on 10/06/2023.

REC Lab - ZZ 10/4/23 20:30 17.6°C

Lead (Pb) Chain of Custody

23T0240

Client: Pelham Union Free School District

Location Sampled: Colonial Elementary School

Date: 10/04/2023 | **Address:** 315 Highbrook Ave, Pelham, NY 10803

Report To (Name): Joseph Kapp | **Sampled By:** M. Douglas, P. Gaughan

Email Address: Joseph.Kapp@wsp.com; LB.LabResults@wsp.com;

Project Number: 31406992.005

Turnaround Time (TAT) Options* - Please Check

3 Hour	6 Hour	24 Hour	48 Hour	72 Hour	X 120 Hour	1 Week	2 Week

Drinking Water Preserved with HNO_3 pH < 2

Sample ID	Lab ID	Sample Description	Volume	Date/Time Sampled
Ex. 003-312-DW-P-015		Floor, Room Name, Room Number, Type, Type Number	250 mL	
001-17-CF-P-01	C1	Ground, Room 17, CF, 1	250 mL	724
01-Hall-WB-P-01	C2	Ground, Hallway by 17, WB, 1	250 mL	726
01-Hall-DW-P-01	C3	Ground, Hallway by 17, DW, 1	250 mL	727
02-Hall-WB-P-02	C4	1st FL, Hallway by 104, WB 2	250 mL	730
02-Hall-DW-P-02	C5	1st FL, Hallway by 104, DW, 2	250 mL	732
~~02-104~~	~~C6~~	Not Connected	250 mL	—
02-104-CF-P-02	C7	1st FL, Room 104, CF, 2	250 mL	734
02-103-CF-P-03	C8	1st FL, Room 103, CF, 3	250 mL	736
02-Nurse-NS-P-01	C9	1st FL, Room Nurse's, NS, 1	250 mL	738
02-	~~C10~~	1st FL,	250 mL	—
02-107-CF-P-04	C10	1st Fl, Room 107, CF, 4	250 mL	739
02-106-CF-P-05	C11	1st Fl, Room 106, CF, 5	250 mL	741
03-Hall-WB-P-03	C12	2nd Fl, Hallway by, WB, 3	250 mL	742
03-Hall-DW-P-03	C13	2nd Fl, Hallway by DW, 3	250 mL	744
03-207-CF-P-06	C14	2nd Fl, Room 207, CF, 6	250 mL	745
03-206-CF-P-07	C15	2nd Fl, Room 206, CF, 7	250 mL	746
03-205-CF-P-08	C16	2nd FL, Room 205, CF, 8	250 mL	748
03-204-CF-P-09	C17	2nd FL, Room 204, CF, 9	250 mL	750
03-200-CF-P-10	C18	2nd FL, Room 200, CF, 10	250 mL	751
03-211-CF-P-11	C19	2nd FL, Room 211, CF, 11	250 mL	753
03-209-CF-P-12	C20	2nd FL, Room 209, CF, 12	250 mL	755

Relinquished by:		Patrick Gaughan	**Date:**	10/4/2023	**Time:** 9:57	
Received by:		Andrew Keehan	**Date:**	10/4/2023	**Time:** 0957	21.4°C

Comments: A first draw sample (P) was taken at a drinking water fountain (DW) on the 3rd floor (003) outside of room 312 (312) and is the 15th outlet counted (015). DW= drinking water fountain. WB= Water Bottle Filler. CF= Classroom Sink Faucet. KF= Kitchen Faucet. BF= Bathroom Sink Faucet. NS= Nurse's Office Faucet.

Relinquished Rec Ronkon Andrew Keehan 10/4/2023 10/4/2023 Rec'd Ronkon Lab 1808

23J0240

Sample ID	Lab ID	Sample Description	Volume	Date/Time Sampled
03-208-CF-P-21	C21	2nd Floor, Room 208, CF, 21	250 mL	756
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	

Relinquished by:	Patrick Gaughan	Date:	10/4/2023	Time:	9:57	
Received by:	Andrew Redson	Date:	10/4/2023	Time:	09:57	21.4°C

Comments:
Relinquished Andrew Redson 10/4/2023
Rec: Ramon yard cool 1800
Rel: Ramon yard cool

Lead (Pb) Chain of Custody

23J0240

Client: Pelham Union Free School District

Location Sampled: Colonial Elementary School

Date: 10/6/2023 | Address: 315 Highbrook Ave, Pelham, NY 10803

Report To (Name): Joseph Kapp | Sampled By: P. Gaughan, M. Douglas

Email Address: Joseph.Kapp@wsp.com; LB.LabResults@wsp.com;

Project Number: 31406992.005

Turnaround Time (TAT) Options* - Please Check

3 Hour	6 Hour	24 Hour	48 Hour	72 Hour	X 120 Hour	1 Week	2 Week

Drinking Water Preserved with HNO_3 pH < 2

Sample ID	Lab ID	Sample Description	Volume	Date/Time Sampled
Ex. 003-312-DW-P-015		Floor, Room Name, Room Number, Type, Type Number	250 mL	
003-208-CF-P-21	C21	2nd Floor, Room 208, CF, 21	250 mL	7:08
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
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			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	
			250 mL	

Relinquished by:		Patrick Gaughan	Date:	10/6/2023	Time:	
Received by:		Jeff York	Date:	10/6	Time:	2:01

Comments: A first draw sample (P) was taken at a drinking water fountain (DW) on the 3rd floor (003) outside of room 312 (312) and is the 15th outlet counted (015). DW= drinking water fountain. WB= Water Bottle Filler. CF= Classroom Sink Faucet. KF= Kitchen Faucet. BF= Bathroom Sink Faucet. NS= Nurse's Office Faucet.

Sample replaces C21, ID 03-208-CF-P-21 on COC 23J0240 from 10/4/2023

APPENDIX B

Laboratory ELAP Certifications

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2024
Issued April 01, 2023
Revised April 04, 2023

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. CATHERINE L. MOSHER
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD, CT 06615

NY Lab Id No: 10854

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Fuel Additives

Methyl tert-butyl ether	EPA 524.2
Naphthalene	EPA 524.2

Metals I

Arsenic, Total	EPA 200.8 Rev. 5.4
Barium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Cadmium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Chromium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Copper, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Iron, Total	EPA 200.7 Rev. 4.4
Lead, Total	EPA 200.8 Rev. 5.4
Manganese, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Mercury, Total	EPA 245.1 Rev. 3.0
Silver, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Zinc, Total	EPA 200.7 Rev. 4.4

Metals II

Aluminum, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Antimony, Total	EPA 200.8 Rev. 5.4
Beryllium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4

Serial No.: 67728

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WADSWORTH CENTER

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Metals II

Molybdenum, Total	EPA 200.8 Rev. 5.4
Nickel, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Thallium, Total	EPA 200.8 Rev. 5.4
Vanadium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4

Metals III

Calcium, Total	EPA 200.7 Rev. 4.4
Magnesium, Total	EPA 200.7 Rev. 4.4
Potassium, Total	EPA 200.7 Rev. 4.4
Sodium, Total	EPA 200.7 Rev. 4.4

Miscellaneous

1,4-Dioxane	EPA 522
Turbidity	EPA 180.1 Rev. 2.0

Non-Metals

Alkalinity	SM 21-23 2320B (-97)
Calcium Hardness	EPA 200.7 Rev. 4.4
Chloride	EPA 300.0 Rev. 2.1
Color	SM 21-23 2120B (-01)
Fluoride, Total	EPA 300.0 Rev. 2.1
Orthophosphate (as P)	SM 19, 21-23 4500-P E (-99)
Solids, Total Dissolved	SM 21-23 2540C (-97)
Specific Conductance	EPA 120.1 Rev. 1982
Sulfate (as SO4)	EPA 300.0 Rev. 2.1

Trihalomethanes

Bromodichloromethane	EPA 524.2

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All approved analytes are listed below:

Trihalomethanes

Bromoform	EPA 524.2
Chloroform	EPA 524.2
Dibromochloromethane	EPA 524.2

Volatile Aromatics

1,2,3-Trichlorobenzene	EPA 524.2
1,2,4-Trichlorobenzene	EPA 524.2
1,2,4-Trimethylbenzene	EPA 524.2
1,2-Dichlorobenzene	EPA 524.2
1,3,5-Trimethylbenzene	EPA 524.2
1,3-Dichlorobenzene	EPA 524.2
1,4-Dichlorobenzene	EPA 524.2
2-Chlorotoluene	EPA 524.2
4-Chlorotoluene	EPA 524.2
Benzene	EPA 524.2
Bromobenzene	EPA 524.2
Chlorobenzene	EPA 524.2
Ethyl benzene	EPA 524.2
Hexachlorobutadiene	EPA 524.2
Isopropylbenzene	EPA 524.2
n-Butylbenzene	EPA 524.2
n-Propylbenzene	EPA 524.2
p-Isopropyltoluene (P-Cymene)	EPA 524.2
sec-Butylbenzene	EPA 524.2
Styrene	EPA 524.2
tert-Butylbenzene	EPA 524.2
Toluene	EPA 524.2
Total Xylenes	EPA 524.2

Serial No.: 67728

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

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All approved analytes are listed below:

Volatile Halocarbons

1,1,1,2-Tetrachloroethane	EPA 524.2
1,1,1-Trichloroethane	EPA 524.2
1,1,2-Trichloroethane	EPA 524.2
1,1-Dichloroethane	EPA 524.2
1,1-Dichloroethene	EPA 524.2
1,1-Dichloropropene	EPA 524.2
1,2,3-Trichloropropane	EPA 524.2
1,2-Dichloroethane	EPA 524.2
1,2-Dichloropropane	EPA 524.2
1,3-Dichloropropane	EPA 524.2
2,2-Dichloropropane	EPA 524.2
Bromochloromethane	EPA 524.2
Bromomethane	EPA 524.2
Carbon tetrachloride	EPA 524.2
Chloroethane	EPA 524.2
Chloromethane	EPA 524.2
cis-1,2-Dichloroethene	EPA 524.2
cis-1,3-Dichloropropene	EPA 524.2
Dibromomethane	EPA 524.2
Dichlorodifluoromethane	EPA 524.2
Methylene chloride	EPA 524.2
Tetrachloroethene	EPA 524.2
trans-1,2-Dichloroethene	EPA 524.2
trans-1,3-Dichloropropene	EPA 524.2
Trichloroethene	EPA 524.2
Trichlorofluoromethane	EPA 524.2
Vinyl chloride	EPA 524.2

Serial No.: 67728

APPENDIX C

NYS DOH Lead Testing in School Drinking Water Program Reviews and Updates 2023

NEW YORK STATE | Department of Health

Lead Testing in School Drinking Water

10 NYCRR Subpart 67-4

Program Review and Updates

2023

Bureau of Water Supply Protection
NYS Department of Health

Background

- On September 6, 2016, Governor Cuomo signed into law a bill passed by the New York State Legislature (A10740/S8158).

- The law requires the New York State Department of Health (NYS DOH) to develop regulations to require all public school districts and Boards of Cooperative Educational Services (BOCES) - collectively, "schools" - to test all potable water outlets for lead contamination, and to take action if lead levels exceed 15 micrograms per liter.

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Regulatory History

- The NYS DOH established a regulation to conform with the law - introduced as an emergency regulation, effective on September 6, 2016
- Title: ***Lead Testing in School Drinking Water***
  10 NYCRR Subpart 67-4 (Subpart 67-4)
- The regulation was adopted on May 9, 2018
- Public Health Law Section 1110 was amended by Governor Hochul on December 23, 2021, requiring changes to Subpart 67-4
- Revisions to the Public Health Law (PHL) Section 1110 went into effect on December 22, 2022

Summary of PHL Revisions

Monitoring

- Action Level lowered from 15 ppb to **5 ppb**
- Compliance monitoring will be every **3 years** (previously every 5 years)
- "**Lead-free" buildings no longer exempt** from testing requirements

Response

- All water provided to school staff/students in response to an outlet being taken out of service must be **free** of charge

Reporting

- Schools must now include copies of **lab reports** of the lead testing results on their websites

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"Lead-Free" Buildings *No Longer Exempt*

The original legislation for 67-4 had an exemption from sampling for any school building, facility, addition, or wing with internal plumbing that met the new definition of "lead-free" (as defined by Section 1417 of the Federal Safe Drinking Water Act) from sampling.

A building was deemed lead-free if:

- The building was built after January 4, 2014, - OR -
- A NYS Professional Engineer or Architect certifies the building to be lead-free.

- The revisions to Public Health Law removes this exemption.
- All buildings will be required to conduct lead testing at all applicable outlets.

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Changes to Key elements of Subpart 67-4

- **Action Level – now 5 ppb**
- **Sampling requirements – no change**
- **Response** - must supply water **free** of charge when appropriate
- **Public Notification –** no change
- **Reporting – must include lab reports on school website**
- **Recordkeeping – no change**

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Compliance Period 2023 - 2025

Schools must complete *initial first-draw* sampling for the 2023-2025 Compliance Period between:

January 1, 2023 – December 31, 2025

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Sampling Locations

"Applicable" sampling locations requiring sampling may be located anywhere on school property including external outlets (hose bibs) if the outlet may be used for drinking or cooking (including food preparation). Samples must be collected at all outlets used or potentially used for drinking or cooking.

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“Applicable” vs. “Non-applicable” outlets

Superintendents or their designees have the responsibility to identify which outlets on a school property meet the regulation requirements for sampling (“applicable outlets”).

If a Superintendent or their designee determines they have some “non-applicable” outlets, the school must develop a plan that details how those outlets will not be accessed and/or utilized for drinking or cooking purposes.

Examples "Applicable“ Outlets

- bubblers/drinking fountains
- classroom sinks
- classroom combination sinks and drinking fountains
- kitchen sinks
- kitchen kettle filler outlets
- ice machines
- family and consumer sciences room sinks
- teachers’ lounge sinks
- nurse’s office sinks
- athletic field outlets
- Any other sink known to be or potentially used for consumption (e.g., used to make coffee in the office, etc.)

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"Non-applicable outlets"

Rule of Thumb:

In general, any outlet in a room or office within a school that is not used by students (pre-kindergarten through grade 12) *and* does not provide water for drinking or cooking does not require sampling.

Examples of possible "Non-applicable outlets"

- **Dishwashing sinks:** If an outlet is designated for dish washing only and involves no opportunity for drinking or cooking (including food preparation), the outlet does not require sampling
- **Bus garage:** Outlets in bus garage buildings do not require sampling for lead unless the building is occupied by students (e.g., BOCES classes)
- **Point of entry:** Samples from the point of entry are not required under Subpart 67-4. Point of entry is the location where water *enters* the building from the distribution system of a public water system
- **Science/Art sinks:** Typically, classrooms in these settings prohibit eating and/or drinking. The school Superintendent has the authority to determine whether these outlets may be used for drinking or cooking and whether they require sampling

Guidance on Bathroom Sinks

Lavatory / Bathroom Sinks

Toilet rooms and bathrooms are building environments that can present unique challenges to water potability. These challenges are reflected in various code provisions that prohibit the installation of drinking facilities, drinking fountains, water coolers and water dispensers within toilet rooms and bathrooms.

NYS DOH would not object to designating these outlets nonapplicable where controls (e.g. education and signage) exist to prevent the consumption of water.

The school should include these outlets in the Remedial Action Plan with details on how their potential use will be mitigated.

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Guidance for Classroom Sinks

Classroom sinks: If the outlet is used for drinking and/or cooking, it must be sampled.

However, if the school has controls in place to prevent the consumption of water, these outlets may be excluded from sampling. Superintendents, or their designees, have the responsibility to identify which outlets meet the regulation requirements for testing ("applicable outlets"). If a Superintendent or their designee determines that a school has outlets that fall outside the scope of the regulation (outlets not used or potentially used for drinking or cooking ("nonapplicable outlets"), the school must develop a Remedial Action Plan that includes details on how those outlets will not be accessed and utilized for drinking or cooking purposes.

Guidance on Tempered Outlets "Non-applicable outlets"

Tempered outlet: an outlet that provides water with a temperature between 80 -110°F; generally, applies to bathroom fixtures in schools, gymnasiums, hotels, airports, bus and railroad stations.

The DOH and the US EPA recommend that hot or tempered water ***not*** be used for drinking or cooking as warm or hot water increase the leaching of lead into the water.

Tempered outlets are not required to be sampled. However, all tempered water outlets should be clearly posted with signs ("Do Not Drink" or equivalent), education should be provided to the students and staff to ensure awareness, and the remedial action plan should address, document, and describe continued management of the controls in place for these outlets.

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"First-draw" Samples

Any sample collected for compliance under Subpart 67-4 must be a "first-draw" sample.

First-draw sample:

- A water sample collected from a cold water outlet before any water is used from that outlet
- Water must be motionless in pipes for a minimum of 8 - 18 hours before sample collection
  - This timeframe represents water that would be consumed during normal operating conditions on any school day.
- Recommended sampling times
  - While school is in session; not during or immediately after weekends, vacations or routine flushing programs;
  - following normal operation of school (e.g. Tuesday – Saturday mornings)

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Lead Action Level

The action level for lead in school drinking water is **5 micrograms per liter** (µg/L) or parts per billion (ppb).

- Lead test results ≤ 5 ppb do *not* exceed the lead action level, and therefore do not require further testing or remediation until the next compliance cycle.

- Lead test results > 5 ppb (i.e., 5.1 ppb, or greater) *exceeds* the lead action level, and will require the outlet to be taken out of service and a remediation action plan to be implemented.

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Guidance for outlets with test results > 5 ppb from previous compliance testing

Sampling at outlets where results from previous compliance testing (prior to December 22,2022) have exceeded 5 ppb should be a priority.

First-draw tap testing at these outlets should be completed as soon as practicable and mitigation/remediation commenced where levels are detected above the new action level of 5 ppb.

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Corrective Actions / Remediation Options

- Permanent removal of an outlet
- Outlet replacement with “lead-free” plumbing materials
- Pipe replacement with “lead-free” plumbing materials
- Remove other sources of lead (lead pipe, lead solder joints, and brass plumbing components with “lead-free” materials)
- Flushing (systematic flushing program)
- Point of Use (POU) Filters*
- Supervision
- Engineering controls
- Education
- Signage

If an outlet tested above the “action level”, can it still be used for cleaning and handwashing?

- Yes
- Signage must be placed at such outlets stating that the water should not be used for drinking (only handwashing and cleaning)
- Pictures should be used if there are small children using the water outlets, and staff should ensure the children understand what the signs mean and monitor the outlets to ensure they are not used for drinking

Corrective Actions / Remediation Options

Signage

Post-Remediation Testing

- Follow-up samples collected after an outlet has been remediated must also be “first-draw” samples. Schools may choose to perform additional sampling (i.e., 30-second flush, etc.) to determine the contribution of lead from plumbing to guide remediation decisions.

- Post-remediation tests results need to be reported:
  - In the DOH’s HERDS application on HCS
  - On the school’s website within the same reporting timeframes/ requirements as specified for the initial sampling

Public Notification Requirements

- Within 1 business day of receipt of laboratory reports:
  - ✓ Report all exceedances (lead result greater than 5 ppb) to the local health department
- Within 10 business days of receipt of laboratory reports:
  - ✓ Report all exceedances to all staff, parents, and guardians in writing.
  - ✓ Report test results (including post-remediation results) in the DOH's electronic reporting system, HERDS accessed through HCS. This information is posted on the DOH's's website for the public
- Within 6 weeks of receipt of laboratory reports:
  - ✓ Post copies of **lab reports** of test results and information about remediation actions taken to address outlets where lead exceeded the action level on the school's website. This should remain posted on the school's website for the duration of the compliance period (i.e. 2023-25)

Recordkeeping Requirements

- Per Subpart 67-4, schools must retain records for 10 years following document creation.

  Note: other agencies may have additional records retention requirements (i.e., SED, NYS Department of Labor)

- Copies of documents must be provided to the DOH, the SED, or the local health department upon request

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Best Management Practices to Reduce Lead in Drinking Water

- Aerator cleaning
- Routine flushing practices (after vacations and long weekends)
- Use only certified lead-free materials when performing plumbing work
- Follow the manufacturer's recommendations for water softener settings to ensure an appropriate level of hardness
- Educating staff and students of the benefits of running water at a tap briefly prior to using it for drinking or food preparation. Letting the water run for 30-60 seconds or until the water feels cold can reduce the potential levels of lead in the drinking water

Electronic Reporting in HCS/HERDS

- Within 10 business days of receipt of laboratory reports
  Summary of data and sampling information must be reported in the DOH's electronic reporting system, **HERDS**, accessed through HCS. Summary data includes:
  - General information, website address
  - Number of outlets sampled, sampling information
  - Summary of Lead analysis results
  - Response and remediation status

- A new HERDS reporting form for the 2023-2025 compliance period is now live.

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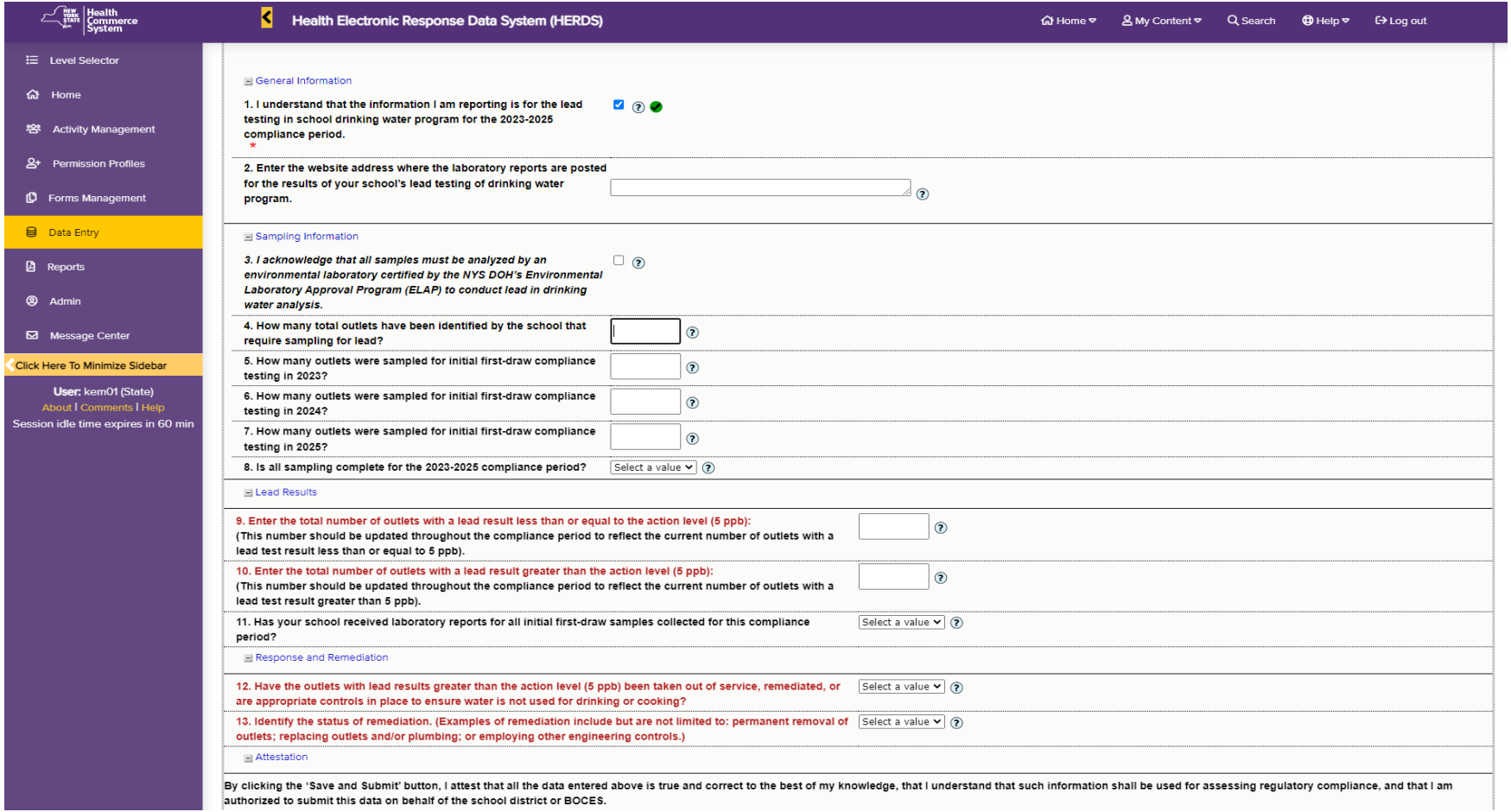
Health Commerce System
Health Electronic Response Data System (HERDS)
Home
My Content
Search
Help
Log out
Level Selector
Home
Activity Management
Permission Profiles
Forms Management
Data Entry
Reports
Admin
Message Center
Click Here To Minimize Sidebar
User: kem01 (State)
About | Comments | Help
Session idle time expires in 60 min
General Information
1. I understand that the information I am reporting is for the lead testing in school drinking water program for the 2023-2025 compliance period. *
2. Enter the website address where the laboratory reports are posted for the results of your school's lead testing of drinking water program.
Sampling Information
3. I acknowledge that all samples must be analyzed by an environmental laboratory certified by the NYS DOH's Environmental Laboratory Approval Program (ELAP) to conduct lead in drinking water analysis.
4. How many total outlets have been identified by the school that require sampling for lead?
5. How many outlets were sampled for initial first-draw compliance testing in 2023?
6. How many outlets were sampled for initial first-draw compliance testing in 2024?
7. How many outlets were sampled for initial first-draw compliance testing in 2025?
8. Is all sampling complete for the 2023-2025 compliance period?
Select a value
Lead Results
9. Enter the total number of outlets with a lead result less than or equal to the action level (5 ppb):
(This number should be updated throughout the compliance period to reflect the current number of outlets with a lead test result less than or equal to 5 ppb).
10. Enter the total number of outlets with a lead result greater than the action level (5 ppb):
(This number should be updated throughout the compliance period to reflect the current number of outlets with a lead test result greater than 5 ppb).
11. Has your school received laboratory reports for all initial first-draw samples collected for this compliance period?
Response and Remediation
12. Have the outlets with lead results greater than the action level (5 ppb) been taken out of service, remediated, or are appropriate controls in place to ensure water is not used for drinking or cooking?
13. Identify the status of remediation. (Examples of remediation include but are not limited to: permanent removal of outlets; replacing outlets and/or plumbing; or employing other engineering controls.)
Attestation
By clicking the 'Save and Submit' button, I attest that all the data entered above is true and correct to the best of my knowledge, that I understand that such information shall be used for assessing regulatory compliance, and that I am authorized to submit this data on behalf of the school district or BOCES.

Tying up Loose Ends

- **Report lead data for the 2020-21 compliance period *if not already done*.**
- **Update data in HERDS to reflect the current status**
- **Update Roles in HCS to reflect current staff assignments for reporting Lead data:**
  - **School Lead in Drinking Water Reporter role**
  - **HPN/HCS Coordinator**
- **The new 2023-25 compliance period is here!**
  - **Be sure to report data on School website with required timeframes**
- **Future webinars and outreach activities coming soon...**

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Questions?

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