



Lead Testing in School Drinking Water



Location:

Olean High School
Olean Intermediate Middle School
East View Elementary School
Washington West Elementary School
Bus Garage Complex
Storage Building

Prepared for:

Olean City School District
410 West Sullivan Street
Olean, New York 14760

LaBella Project No. 2232612.01

January 2024



I. BACKGROUND

Under Subpart 67-4 of the New York Codes, Rules and Regulations, Title X, “all school districts and boards of cooperative educational services are required to test potable water for lead contamination, and to develop and implement a lead remediation plan, where applicable.”

The Subpart 67-4 testing requirement was first promulgated under emergency legislation in 2016, and was subsequently signed into permanent law. Public Health Law PHL Section 1110 was amended on December 23, 2021 and these revisions to Subpart 67-4 went into effect on December 22, 2022. Notable revisions include 1) Action Level lowered from 15 ppb to 5 ppb, 2) Compliance monitoring will be every 3 years (previously every 5 years) and 3) Lead-free” buildings are no longer exempt from testing requirements. The comply with these new testing requirements sampling must be performed between January 1, 2023 and December 31, 2025.

Lead is a toxic metal that can be harmful to human health when ingested. Young children, especially those 6 years and younger, are at particular risk for lead exposure because they have frequent hand-to-mouth activity and absorb lead more easily than do adults. Children’s nervous systems are still undergoing development and thus are more susceptible to the effects of toxicants. Therefore, emphasis may be placed on assessment of lead exposure in schools and early childhood education facilities, where concentrations of a vulnerable population are regularly congregated.

Lead can be introduced into potable water by being present in the source water or, more commonly, by interaction of the water with fixtures and plumbing materials containing lead. Common sources of lead in potable water include solder, fluxes, pipes and pipe fittings, fixtures, and sediments. It is possible that different water outlets in a given building could have dissimilar concentrations of lead. It is also possible that, due to temporal fluctuations in water chemistry and physical conditions that may affect the integrity of the plumbing and the water being conveyed, the result obtained from a test at a given time may differ from the result obtained from a test at another time, even if the sampling procedures are identical.

II. PROJECT DESCRIPTION

LaBella Associates assisted the District with sample analysis and reporting in accordance with sections 1370-a and 1110, Subpart 67-4 of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York and United States Environmental Protection Agency (EPA) Guidelines. The Olean City School District self-performed all sample collection from the following buildings:

Olean High School
410 W Sullivan Street
Olean, New York 14760

Olean Intermediate Middle School
410 W Sullivan Street
Olean, New York 14760

East View Elementary School
690 E Spring Street
Olean, New York 14760



Washington West Elementary School
1626 Washington Street
Olean, New York 14760

Bus Garage Complex
410 W Sullivan Street
Olean, New York 14760

Storage Building
410 W Sullivan Street
Olean, New York 14760

III. SAMPLING PROCEDURES AND SUMMARY OF RESULTS

Water conditions were reported to be representative of normal consumption patterns with building occupancy controlled during stagnation and sampling periods. District staff conducted sampling of target outlets on November 14, 2023 (Olean High School), November 15, 2023 (Olean Intermediate Middle School), November 21, 2023 (East View and Washington West Elementary School) and November 22, 2024 (Bus Garage Complex and Storage Building).

LaBella personnel picked the samples up from the District and shipped to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) accredited laboratory. Samples were analyzed utilizing EPA environmental analysis method 200.9 Rev 2.2 for lead in potable water. Results of the laboratory analysis were compiled and summarized.

Building	Total Number of Outlets	Total number of outlets at or below EPA action level (5 ppb)	Total number of outlets above EPA action level (5 ppb)
Olean High School	137	127	10
Olean Intermediate Middle School	82	65	17
East View Elementary School	81	76	5
Washington West Elementary School	91	67	24
Bus Garage Complex	8	7	1
Storage Building	3	3	0
Total	402	345	57

Based on laboratory analyses of the samples collected, the following outlets were determined to exceed the NYS Action level of 5 parts per billion (ppb) or equivalent 5 micrograms per liter (µg/L). However, the following table does not include all of the outlets sampled during this inspection; for a full list of outlets sampled see Appendix A immediately following this report.

Sample Number	Sample Location	Outlet Type	Result (µg/L)
Olean High School			
OHS-24	Room 330 3 rd Floor	Sink	11.0
OHS-28	Room 329 Teachers	Sink	5.04
OHS-33	Room 125 Women's	Sink	8.39



Sample Number	Sample Location	Outlet Type	Result (µg/L)
OHS-39	Front 3 rd St Slop Room	Sink	17.4
OHS-42	Room 125 IA Art Room Bathroom	Sink	5.92
OHS-48	Room 126 Women's Sink 3 2 nd Floor	Sink	12.9
OHS-61	4 th St Front Slop Room	Sink	8.27
OHS-84	Shop Sink	Sink	5.71
OHS-134	1 st Fl Front Hall Coffee	Sink	8.18
OHS-135	1 st Fl Front Hall Staff	Sink	5.43
Olean Intermediate Middle School			
MS-17	3 rd Fl Room 306 C	Sink	10.3
MS-28	3 rd Fl Room 306 B	Sink	15.9
MS-38	1 st Fl Room 110 Music 17	Sink	5.02
MS-51	4 th Fl Student B BR	Sink	15.1
MS-54	2 nd Fl Room 235 Sink 1 Wall	Sink	26.0
MS-61	2 nd Fl Teach Desk Room 231	Sink	54.3
MS-63	4 th Fl Room 418 Sink C	Sink	11.5
MS-64	4 th Fl Room 406 Sink D	Sink	53.6
MS-67	2 nd Fl Room 231 1 Sink Wall	Sink	5.76
MS-70	1 st Fl Teach Sink L Gym	Sink	5.26
MS-72	1 st Fl Water Fountain Elevator	Fountain	400
MS-74	1 st Fl Women's Bathroom Room 163	Sink	27.6
MS-75	4 th Fl Room 418 Sink A	Sink	18.9
MS-78	2 nd Fl Bottle Filler Bathroom BR	Filler	5.99
MS-79	2 nd Fl Boy's Bathroom Room 231	Sink	6.71
MS-80	2 nd Fl Girl's Bathroom Room 231	Sink	6.25
MS-82	4 th Fl Rm 406 Sink A	Sink	17.3



Sample Number	Sample Location	Outlet Type	Result (µg/L)
East View Elementary School			
EV-12	Room 253 Art Room by Window	Sink	9.18
EV-19	Main Lobby Boys Bath	Sink	5.69
EV-54	Kitchen Bath	Sink	6.97
EV-71	Kitchen Handwashing Sink	Sink	17.9
EV-78	Room 253 Art Room A by Hall	Sink	10.7
Washington West Elementary School			
WW-3	Girl's Bathroom Sink 3	Sink	5.18
WW-6	Room 107	Sink	5.47
WW-10	Room 104 Bottle Filler	Filler	6.67
WW-17	Library Sink	Sink	30.0
WW-22	Room 105 Bottle Filler	Filler	5.77
WW-23	Room 105 Sink	Sink	6.63
WW-24	Room 101 Bottle Filler	Filler	7.31
WW-26	Room 138 Sink	Sink	5.46
WW-27	Room 106 Bottle Filler	Filler	6.76
WW-29	Room 111 Sink	Sink	5.59
WW-31	Room 121 Sink	Sink	10.7
WW-34	Room 123 Sink	Sink	12.2
WW-44	Boys Bathroom Sink 1	Sink	13.7
WW-46	Room 129 Fitness	Sink	22.7
WW-52	Room 130 Fitness	Sink	16.9
WW-54	Room 122 Sink	Sink	7.84
WW-58	Room 127 Fitness	Sink	21.0
WW-62	Room 101 Class Sink	Sink	8.37
WW-64	Room 140 Bottle Filler	Sink	13.5
WW-65	Café Sink 4	Sink	20.1
WW-68	Café Sink 3	Sink	6.98



Sample Number	Sample Location	Outlet Type	Result (µg/L)
WW-69	Café Sink 1	Sink	7.12
WW-73	Café B Room Sink	Sink	29.9
WW-80	Gym Bathroom Sink	Sink	5.94
Bus Garage Complex			
C-2	Coach's Office	Sink	24.4

IV. Response and RECOMMENDATIONS

According to section Subpart 67-4.4 "Response" of the regulation, school districts shall prohibit the use of all outlets which exceed the 5 ppb action level. The outlet shall remain out of service until a lead remediation plan is implemented to reduce the level of lead and resampling indicates lead levels that are at or below the action level. While the outlet is out of service the district must supply an appropriate amount of potable water for drinking or cooking to building occupants.

LaBella would provide the following recommendations for outlets in exceedance of the action level:

1. Follow up testing – This may include an additional first draw sample, or second draw sample to further investigate and evaluate the condition of the plumbing system upstream of the affected outlets. Sample results may provide some insight on trends, issues with certain portions of the plumbing system or links to specific outlets types and models.
2. Remedial Measures – The school district may elect to commence remediation of affected outlets with or without additional testing. Temporary remediation could include isolating outlets and providing alternate sources of potable drinking or cooking water. Permanent remediation could include replacing outlets, permanently isolating outlets, adding water filtration, or renovations to the plumbing system.

V. Reporting and Record Keeping

In accordance with Subpart 67-4 the district shall:

- 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
- Notify all staff and all persons in parental relation to children or 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.
- The school shall make available, on the school's website, the results of all lead testing performed and lead remediation plans implemented pursuant to this Subpart, as soon as practicable, but no more than 6 weeks after the school received the laboratory reports.



- As soon as practicable, but no more than 10 business days after the school received the laboratory reports, the school shall report data relating to test results to the Department, local health department, and State Education Department, through the Department's designated statewide electronic reporting system.
- The school shall retain all records of test results, lead remediation plans, determinations that a building is lead-free, and waiver requests, for ten years following the creation of such documentation. Copies of such documentation shall be immediately provided to the Department, local health department, or State Education Department, upon request.