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Mold Assessment  
and Remediation

September 4, 2024

Health/Safety and  
Environmental  
Regulatory  
Compliance

Mr. Norbert Molina  
Supervisor of Buildings and Grounds  
Bound Brook Board of Education  
130 West Maple Avenue  
Bound Brook, NJ 08805

Right-To-Know

re: **Water Sampling for Compliance with N.J.A.C. 6A:26-12.4  
Final Report: Lead in Drinking Water**

OSHA/EPA/DOT  
Training Programs

Dear Mr. Molina,

Asbestos and Lead  
Management

We enclose the following documents and related information for compliance with the new NJ Department of Education Regulation related to Lead in Drinking Water in school buildings:

Industrial Hygiene/  
OSHA Compliance

Sampling Report Narrative	3 pages
Water Sampling Logs and Results	7 pages
Laboratory Analytical Report (digital copy only)	139 pages

Indoor Air Quality

On August 02, 2024, a total of 78 drinking and cooking water samples were collected for Lead analysis in the District's buildings. All sample results were compliant with the referenced regulation and no sample result exceeded the 0.015 mg/L standard.

Underground/  
Aboveground  
Storage Tanks

In fact, 69 of the 78 water samples showed no measurable Lead content. These results are shown as ND which means that no Lead was detected at or above the laboratory sensitivity limit of 0.002 mg/L.

Environmental  
Site Assessment

This report along with the attached sample logs and results should be posted to the School District's website as noted in this report.

Hazardous/  
Medical Waste  
Management

If you have any questions, please don't hesitate to call us.

Sincerely,

Environmental  
Audits

  
Patrick D. McGuinness, MS, P.E.  
Vice President

Expert Witness/  
Litigation Support

PDM/

Customized  
Software

(file .... \Reports\Watertest\Allamuchy-241)

**Sampling Report - Lead in Drinking Water**  
**Bound Brook School District**

**1. Sampling Results Summary**

Sample Collection Date	August 02, 2024
Number of Building(s) Sampled	7
Total Number of Samples Collected	78
Number of Samples with No Detectible Lead	69
Number of Samples Exceeding 5 ppb (but < 15 ppb)	0
Number of Samples Exceeding 15 ppb (0.015 mg/L) Standard	0

**2. Water Sampling Procedures**

Sampling protocols and procedures follow the EPA “3-T’s Program” that was developed in 2006 for schools and Child Care centers. They recognize that the typical school building is actually a conglomeration of an original building with one or more additions, each of which typically having different plumbing system materials.

In addition, building sections constructed before 1986 likely have plumbing systems that used leaded solders on copper water lines. Very old buildings and public water supply systems may also still have lead piping. Other potential sources of Lead in drinking water systems include brass faucets, fittings, along with valve seats and stems that are used in the municipal and building piping distribution systems. It is important to note that “Lead-Free” plumbing components used since 1986 may actually contain up to 8% Lead by weight. In January 2014, this limit was lowered from 8% to 0.2% Lead.

The sampling protocol requires that water be collected as a “First-Draw” to ensure that the water sample has been standing for at least 8 hours. This is intended to replicate a “worst-case” situation since the Lead levels are usually lowered significantly after running the water even for a few moments.

All samples were collected in 250 ml contaminant-free containers. Laboratory analysis of the water samples was performed by Pace Analytical Services, LLC of Fairfield, NJ and Ewing, NJ (NJ DEP Certification Nos. NJ 07010 and NJ 11005). The analytical method is per EPA Method 200.8 via atomic absorption, induction coupled plasma technique.

**3. Sample Results and Discussion**

Sampling results are discussed below and the sampling logs are appended to this report. All results are expressed as milligrams of Lead per liter of water (mg/L) and compared against the current 0.015 mg/L Action Level.

It is important to note that the laboratory results are reported in terms of micrograms per liter ( $\mu\text{g/L}$ ). This is essentially equivalent to parts of Lead per billion (ppb) parts of water. The Action level also translates to 15 ppb.

A total of 78 water samples were collected on August 02, 2024 and analyzed for total Lead content. There were no sample locations where the laboratory results exceeded the 0.015 mg/L Action Level for Lead. On the other hand, 69 of the samples had no detectible levels of Lead present.

#### **4. Additional Recommendations and Future Work**

All water sample results showed acceptable results for Lead content. The following responses include those required by N.J.A.C. 6A:26-12.4 and our recommendations to maintain the drinking water quality as it relates to Lead contamination.

The NJ Dept of Education regulations require that:

- These sampling results are made publically available at the school building and on the School District's website.
- The School District shall collect drinking water samples and analyze for Lead at any drinking water outlet that has been replaced or after any alterations to the plumbing or service lines to the outlet. Do not consume or cook with water from the affected outlet until acceptable Lead results are obtained.
- Repeat water sampling within 3 school years or before June 30, 2028.

In addition, we suggest that the following responses to minimize the potential for Lead contamination of drinking water:

#### **Administrative Responses:**

- There are several factors that influence the potential for Lead corrosion in drinking water piping systems. These include the chemistry of the water supplied being supplied to the building, water temperature and velocity through the piping, the age and condition of the plumbing, and the amount of time the water sits "stagnant" in contact with piping and drinking water fixtures. This last factor is the only one that a building owner has any control of.
- School building codes require a minimum of one (1) drinking water tap for every 100 students of building capacity. Wherever a larger number of water taps exists, the usage factor for each tap decreases. This, in turn, increases the "stagnation time" along with the increased potential for Lead corrosion. It is recommended that the need for all the water taps be investigated and reduced where appropriate while maintaining the minimum of 1 tap per 100 students.

- Consider implementing a program to shut-off and replace (if needed) any drinking water fixture or appliance that is more than 35 years old (was installed before the 1986 Lead Ban took effect).

Operational and Maintenance Responses:

- EPA recommends that any water tap where the measured Lead content exceeds 5 parts per billion (PPB) or 5 µg/L be inspected and cleaned of line sediment to eliminate potential sources of Lead contamination. There was of 1 water sample above this level.
- Use cold water only for drinking or cooking. Higher water temperatures will increase the water's corrosion potential.
- The accumulation of line sediment on aerators and screens at the water taps is frequently the source of high levels of Lead. It is recommended that a program be established to regularly inspect for the presence of line sediment at all drinking water taps. Initially, an annual inspection is suggested. The inspection frequency should then be adjusted depending upon the amounts of sediment that is found and where it is found. Higher usage taps may accumulate sediment more quickly and need to be cleaned more often.
- It is known that flushing water through drinking water taps will reduce the levels of Lead present in the drinking water. It is also recommended that a program be established to run water at all drinking or cooking taps for at least one minute before students and staff return to school after long breaks, especially after Summer recesses.

Report prepared by:



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Patrick D. McGuinness, MS, P.E.  
Vice President

# Water Sampling Log

Name of Building  
Building Owner

Bound Brook High School  
Bound Brook Board of Education

Date Collected  
Sample Collected by

02-Aug-24  
S. Stasiulaitis

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Description	Time	Lead Results	
							mg/L	%AL
080224-01	1	1st	Chiller	Elkay	Hallway Fountain by Room 18	07:46	ND	-
080224-02	2	1st	Chiller	Elkay	Hallway Fountain by Room 21A	07:48	ND	-
080224-03	3	1st	Chiller	Elkay	Hallway Fountain outside of Gym Door	07:49	ND	-
080224-04	4	1st	Chiller	Elkay	Hallway Fountain by Room 30	07:50	ND	-
080224-05	5	1st	Bubbler	---	In Gym outside Girl's Locker Room 23A (Out of Service)	--		-
080224-06	6	1st	Faucet	---	Kitchen Sink Faucet along outside wall	07:55	ND	-
080224-07	7	1st	Ice Machine	---	Kitchen water line into Ice Machine (Removed)	--		-
080224-08	8	1st	Faucet	---	Kitchen Sink Faucet btwn outside wall & ice maker	07:56	ND	-
080224-09	9	1st	Bottle Filler	Elkay	Cafeteria Fountain next to Kitchen Door	07:58	ND	-
080224-10	10	1st	Chiller	Elkay	Hallway Fountain by Room 113	08:01	ND	-
080224-11	11	1st	Chiller	Elkay	Hallway Fountain by Room 116	08:03	ND	-
080224-12	12	1st	Chiller	Elkay	Hallway Fountain by Room 104	08:04	ND	-
080224-13	13	1st	Chiller	Elkay	Hallway Fountain by Room 216	08:07	ND	-
080224-14	14	1st	Chiller	Elkay	Hallway Fountain by Room 204	08:09	ND	-
080224-15	15	1st	Chiller	Elkay	Hallway Fountain by Room 310	08:11	ND	-
								-
								-
								-
								-
								-

Sample Type: **1st:** First Draw sample collected after water sat in pipe between 8 and 18 hours  
**FL:** Water flushed through tap for at least 2 minutes  
**ND:** means Not Detected at or above the Reliability Detection Limit (RDL) of 0.0020 mg/L for Lead.

# Water Sampling Log

Name of Building  
Building Owner

Community School  
Bound Brook Board of Education

Date Collected  
Sample Collected by

02-Aug-24  
S. Stasiulaitis

Sample No.	Tap No.	Sample Type	Type of Outlet	Mfg/Model Serial No.	Location	Time	Lead Results	
							mg/L	%AL
080224-21	1	1st	Faucet		Kitchen Sink - Front	10:11	ND	-
080224-22	2	1st	Faucet		Kitchen Faucet - Side	10:11	ND	-
080224-23	3	1st	Bottle Filler	Elkay	Hallway Fountain outside Room 119 (left)	10:17	ND	-
080224-24	4	1st	Bottle Filler	Elkay	Hallway Fountain outside Room 119 (right)	10:17	ND	-
080224-25	5	1st	Bottle Filler	Elkay	Hallway Fountain outside Room 213 (left)	10:19	ND	-
080224-26	6	1st	Bottle Filler	Elkay	Hallway Fountain outside Room 213 (right)	10:19	ND	-
080224-27	7	1st	Chiller	Elkay	Gym outside Men's Room (left) <b>(Removed)</b>	--		-
080224-28	8	1st	Chiller	Elkay	Gym outside Men's Room (right)	10:21	ND	-
080224-29	9	1st	Faucet		Kitchen Sink (next to Gym)	10:22	0.00470	31%
080224-30	10	1st	Bottle Filler	Elkay	Cafeteria	10:14	ND	-
								-
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Sample Type: **1st:** First Draw sample collected after water sat in pipe between 8 and 18 hours  
**FL:** Water flushed through tap for at least 2 minutes  
**ND:** means Not Detected at or above the Reliability Detection Limit (RDL) of 0.0020 mg/L for Lead.

# Water Sampling Log

Name of Building Field House Date Collected 02-Aug-24  
 Building Owner Bound Brook Board of Education Sample Collected by S. Stasiulaitis

Sample No.	Tap No.	Sample Type	Type of Outlet	Mfg/Model Serial No.	Location	Time	Lead Results	
							mg/L	%AL
080224-31	1	1st			Not Used	--		-
080224-32	2	1st	Chiller	Halsey Taylor	Fountain in Locker Room	08:55	ND	-
080224-33	3	1st	Ice Machine	Scotsman	Training Room Ice Machine	08:56	ND	-
								-
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Sample Type: **1st:** First Draw sample collected after water sat in pipe between 8 and 18 hours  
**FL:** Water flushed through tap for at least 2 minutes  
**ND:** means Not Detected at or above the Reliability Detection Limit (RDL) of 0.0020 mg/L for Lead.

# Water Sampling Log

Name of Building LaMonte Annex Date Collected 02-Aug-24  
 Building Owner Bound Brook Board of Education Sample Collected by S. Stasiulaitis

Sample No.	Tap No.	Sample Type	Type of Outlet	Mfg/Model Serial No.	Location	Time	Lead Results	
							mg/L	%AL
080224-41	1	1st	Chiller	Elkay	Stairwell Fountain outside Cafeteria	11:17	ND	-
080224-42	2	1st	Faucet		Kitchen Faucet - Rear	11:19	0.00230	15%
080224-43	3	1st	Faucet		Kitchen Faucet - Side	11:19	ND	-
080224-44	4	1st	Chiller	Elkay	Hallway Fountain outside Room 17	11:22	ND	-
080224-45	5	1st	Chiller	Elkay	Hallway Fountain outside Room 15	11:24	ND	-
080224-46	6	1st	Chiller	Elkay	Hallway Fountain outside Room 23	11:27	ND	-
080224-47	7	1st	Chiller	Elkay	Hallway Fountain outside Room 21	11:27	ND	-
080224-48	8	1st	Sink		Nurse's Office	11:41	ND	-
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								-
								-
								-
								-
								-
								-
								-
								-
								-
								-

Sample Type: **1st:** First Draw sample collected after water sat in pipe between 8 and 18 hours  
**FL:** Water flushed through tap for at least 2 minutes  
**ND:** means Not Detected at or above the Reliability Detection Limit (RDL) of 0.0020 mg/L for Lead.



# Water Sampling Log

Name of Building  
Building Owner

LaMonte School  
Bound Brook Board of Education

Date Collected  
Sample Collected by

02-Aug-24  
S. Stasiulaitis

Sample No.	Tap No.	Sample Type	Type of Outlet	Mfg/Model Serial No.	Location	Time	Lead Results	
							mg/L	%AL
080224-51	1	1st	Chiller	Elkay	Hallway Fountain outside Boiler Room	10:28	ND	-
080224-52	2	1st	Chiller	Elkay	Hallway Fountain outside Cafeteria (Not Operational)	--		-
080224-53	3	1st	Faucet		Kitchen Faucet next to Outside Wall	10:32	ND	-
080224-54	4	1st	Chiller	Elkay	Hallway Fountain outside Room 14	10:34	ND	-
080224-55	5	1st	Chiller	Elkay	Hallway Fountain outside Room 12	10:35	ND	-
080224-56	6	1st	Chiller	Elkay	Hallway Fountain outside Room 21	10:36	ND	-
080224-57	7	1st	Chiller	Elkay	Hallway Fountain outside Room 24/25	10:37	ND	-
080224-58	8	1st	Sink		Nurse's Office	10:39	ND	-
080224-59	9	1st	Bottle Filler	Elkay	Cafeteria	10:31	ND	-
080224-60	10	1st	Bubbler		Fountain in Room 10	10:43	ND	-
080224-101	11	1st	Bubbler		Fountain in Room 20	10:44	ND	-
080224-102	12	1st	Bubbler		Fountain in Room 21	10:45	ND	-
080224-103	13	1st	Bubbler		Fountain in Room 22	10:47	ND	-
080224-104	14	1st	Bubbler		Fountain in Room 23	10:48	ND	-
080224-105	15	1st	Bubbler		Fountain in Room 24	10:49	ND	-
080224-106	16	1st	Bubbler		Fountain in Room 25	10:50	ND	-
								-
								-
								-
								-

Sample Type: **1st:** First Draw sample collected after water sat in pipe between 8 and 18 hours  
**FL:** Water flushed through tap for at least 2 minutes  
**ND:** means Not Detected at or above the Reliability Detection Limit (RDL) of 0.0020 mg/L for Lead.

# Water Sampling Log

Name of Building Smalley School Date Collected 02-Aug-24  
 Building Owner Bound Brook Board of Education Sample Collected by S. Stasiulaitis

Sample No.	Tap No.	Sample Type	Type of Outlet	Mfg/Model Serial No.	Location	Time	Lead Results	
							mg/L	%AL
080224-61	1	1st	Faucet		Kitchen Sink by Storage Room	08:20	ND	-
080224-62	2	1st	Faucet		Kitchen Sink by Exit Door	08:21	ND	-
080224-63	3	1st	Faucet		Faculty Room Sink	08:21	ND	-
080224-64	4	1st	Chiller		Fountain across from Gym in Hall, left side	08:24	ND	-
080224-65	5	1st	Chiller		Fountain next to Faculty Bathroom in hall	08:26	ND	-
080224-66	6	1st	Chiller		Fountain in hall across from Rooms 8 & 7	08:27	ND	-
080224-67	7	1st	Chiller		Fountain in hall next to Room 9	08:28	ND	-
080224-68	8	1st	Bubbler		Fountain in Room 14	08:29	ND	-
080224-69	9	1st	Bubbler		Fountain in Room 16	08:30	0.00362	24%
080224-70	10	1st	Chiller	Elkay	Left fountain, between bathrooms, 2nd floor	08:40	ND	-
080224-71	11	1st	Bottle Filler	Elkay	Hallway across fom Gym, right side	08:25	ND	-
080224-72	12	1st	Bottle Filler	Elkay	Cafeteria	08:36	ND	-
080224-73	13	1st	Bottle Filler	Elkay	Right fountain, between bathrooms, 2nd floor	08:45	ND	-
080224-74	14	1st	Chiller	Elkay	Fountain in Hallway outside Cafeteria	08:47	ND	-

Sample Type: **1st:** First Draw sample collected after water sat in pipe between 8 and 18 hours  
**FL:** Water flushed through tap for at least 2 minutes  
**ND:** means Not Detected at or above the Reliability Detection Limit (RDL) of 0.0020 mg/L for Lead.

# Water Sampling Log

Name of Building  
Building Owner

Lafayette School  
Bound Brook Board of Education

Date Collected  
Sample Collected by

02-Aug-24  
S. Stasiulaitis

Sample No.	Tap No.	Sample Type	Type of Outlet	Mfg/Model Serial No.	Location	Time	Lead Results	
							mg/L	%AL
080224-81	1	1st	Chiller	Elkay	Fountain next to Main Entrance	09:15	ND	-
080224-82	2	1st	Chiller	Elkay	Fountain in Gym	09:17	ND	-
080224-83	3	1st	Faucet		Kitchen Sink by Exit <b>(Removed)</b>	--		-
080224-84	4	1st	Faucet		Kitchen Sink in Center <b>(Removed)</b>	--		-
080224-85	5	1st	Faucet		Nurse's Office Sink	09:26	ND	-
080224-86	6	1st	Chiller	Elkay	Hall Fountain across from Room 102	09:27	ND	-
080224-87	7	1st	Bubbler		Room 101 Sink Fountain	09:29	ND	-
080224-88	8	1st	Bubbler		Room 102 Sink Fountain	09:30	ND	-
080224-89	9	1st	Bubbler		Room 104 Sink Fountain	09:32	ND	-
080224-90	10	1st	Bubbler		Room 210 Sink Fountain <b>(Not Operational)</b>	--		-
080224-91	11	1st	Bubbler		Room 208 Sink Fountain	09:38	0.00265	18%
080224-92	12	1st	Bubbler		Room 209 Sink Fountain	09:39	0.00285	19%
080224-93	13	1st	Bubbler		Room 206 Sink Fountain	09:40	0.00211	14%
080224-94	14	1st	Bubbler		Room 207 Sink Fountain	09:42	0.00244	16%
080224-95	15	1st	Chiller		Hall Fountain across from Room 207	09:43	ND	-
080224-96	16	1st	Chiller		Hall Fountain across from Room 203	09:44	0.00287	19%
080224-97	17	1st	Bubbler		Room 203 Sink Fountain	09:46	ND	-
080224-98	18	1st	Bubbler		Room 202 Sink Fountain	09:47	ND	-
080224-99	19	1st	Bubbler		Room 201 Sink Fountain	09:48	ND	-
080224-100	20	1st	Faucet		Kitchen - Food Prep Sink	09:50	0.00469	31%

Sample Type: **1st:** First Draw sample collected after water sat in pipe between 8 and 18 hours

**FL:** Water flushed through tap for at least 2 minutes

**ND:** means Not Detected at or above the Reliability Detection Limit (RDL) of 0.0020 mg/L for Lead.