

Sampling Report - Lead in Drinking Water
Ocean County Vacation Technical School District

1. Sampling Results Summary

<u>Sample Collection Date</u>	May 7, 2024
<u>Number of Buildings Sampled</u>	10
<u>Total Number of Samples Collected</u>	85
<u>Number of Samples with No Detectible Lead</u>	69
<u>Number of Samples Exceeding 5 ppb</u>	4
<u>Number of Samples Exceeding 15 ppb (0.015 mg/L) Standard</u>	2
<u>Jackson Center</u> <u>Boiler Room Spigot</u>	280 ppb
<u>Waretown Center</u> <u>Boiler Room Spigot</u>	16 ppb

2. Required Response for Sample Results Exceeding 15 PPB Standard

The rules promulgated under the new NJDOE “Safe Drinking Water” regulation N.J.A.C. 6A:26-12.4 require certain actions by the School District when the measured Lead content in any sample results exceeds the 0.015 mg/L standard. As indicated in the summary above, this level is equivalent to 15 parts per billion (ppb) and *two samples had results in excess of this level.*

Within 24 hours after the District has reviewed the sample results, the District shall provide written notification to the parents and guardians of all students attending the affected facilities.

The notification must include the following:

- A description of the measures taken by the School District to immediately end use of each affected water outlet;
- If necessary, measures taken to provide alternate drinking water;
- Information regarding health effects of Lead.

Appended to this report is a sample notification letter. It was taken from a template created by the NJDOE and has been modified to include our recommended responses as shown below:

Sample Location	Results (µg/l or ppb)	Remedial Action - Recommended
<u>Jackson Center</u> <u>Boiler Room Spigot</u>	280	<i>The outlet will be flushed and inspected for line sediment. This is not a source of drinking water and therefore no remediation is required.</i>
<u>Waretown Center</u> <u>Boiler Room Spigot</u>	16	<i>The outlet will be flushed and inspected for line sediment. This is not a source of drinking water and therefore no remediation is required.</i>

3. Water Sampling Procedures

Sampling protocols and procedures follow the EPA “3-T’s Program” that was developed 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 both the Lead levels are usually lowered significantly after running the water even for a few moments.

Drinking water samples were collected early on a weekday (not Monday) or Saturday morning before staff and students arrived for classes to represent water that has sat idle in the building piping system overnight.

Laboratory analysis of the water samples was performed for Lead since it could be sourced from the building plumbing and is an indicator of system corrosion.

All samples were collected in 250 ml contaminant-free containers. Laboratory analysis of the water samples was performed by *IATL-Eurofins Built Environment of Mr. Laurel, NJ (NJ DEP Certification Nos. 03863)*. The analytical method is per EPA Method 200.9 via atomic absorption, induction coupled plasma technique.

4. 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 or Copper 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 85 water samples were collected on May 7, 2024 and analyzed for total Lead content. In general the sample results were very good with 69 of the 84 samples collected showing no detectible levels of Lead present.

As noted above, there were two drinking water locations where the measured Lead content in the samples exceeded the 0.015 mg/L Action Level. However, since these are not drinking water delivery points, it is not a compliance issue. They were first draw water that were intended to be flushed water samples from the potable water supply entry point.

5. Additional Recommendations and Future Work

All but 2 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 publicly 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 years or before *May 2027*.

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.

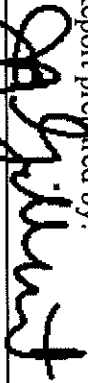
- Consider implementing a program to shut-off and replace (if needed) any drinking water fixture of appliance that is more than 35 years old (was installed before the 1986 Lead Ban took effect).

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 were only 2 water samples above this level.*
Waretown Center - culinary kitchen coffee line - 10 ppb
Atlantis - kitchen kettle filler - 6 ppb
- 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 both Lead and Copper 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 the Summer recess.

Report prepared by:



Jonathan Gilbert
Project Manager

Water Sampling Log

Name of Building: Toms River Center
 Building Owner: Ocean County Vo Tech

Date Collected: 07-May-24
 Sample Collected by: Jon Gilbert

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Location	Time	Results (mg/L)	
							Pb	
sample no. not used	1	1st	Hose Spigot		Near water meter		not in service	
RK-050724-02	2	1st	Water Fountain	Elkay	Btwn Mens & Ladies Room - Cosmetology	06:15	7755293	7755293
RK-050724-03	3	1st	Tap/Coffee Machine	-	Supermarket	06:18	7755294	7755294
RK-050724-04	4	1st	Ice Machine	Hoshizaki American	Supermarket (A&B)	06:20	7755295	7755295
RK-050724-05	5	1st	Prep Sink (left)	NSF	Room TR28	06:24	7755296	7755296
RK-050724-06	6	1st	Prep Sink (right)	NSF	Room TR28	06:25	7755297	7755297
RK-050724-07	7	1st	Water Cooler	XDS H2O Solutions	Isolation Room TR8B	06:28	7755298	7755298
RK-050724-08	8	1st	Sink	Moen	Nurse's Office	06:30	7755299	7755299
RK-050724-09	9	1st	Sink		Main Office - Copy Room	06:35	7755300	7755300
RK-050724-10	10	1st	Water Cooler	Alpine	Main Office - Copy Room	06:38	7755301	7755301
RK-050724-11	11	1st	Water Cooler	Pure Water Tech	Adult Evening School Office	06:40	7755302	7755302
RK-050724-12	12	1st	Water Fountain	Elkay	Next to Room TR17	06:42	7755303	7755303
sample no. not used	13	1st	Dental Chair	DCI Equip	Room TR39 Left		not in service	
sample no. not used	14	1st	Dental Chair	DCI Equip	Room TR39 Right		not in service	
RK-050724-15	15	1st	Water Cooler	Alpine	Room TR40	06:45	7755304	7755304
RK-050724-16	16	1st	Water Fountain	Elkay	Room TR43	06:48	7755305	7755305

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
<: 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: _____

Toms River Campus
 Ocean County Vo Tech

Date Collected: 07-May-24
 Sample Collected by: Jon Gilbert

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Location	Time	Results (mg/L)	
							Pb	
RK-050724-21	1	1st	Kitchen sink	American Standard	Common area	06:50	7755306	
<i>sample no. not used</i>	2	1st	Spigot		Inside warehouse by Bay Door		not in service	
RK-050724-23	3	1st	Water Cooler	Oasis	GB Office	06:51	7755307	
					Student Services Bldg			
<i>sample no. not used</i>	1	1st	Slop Sink		Basement		not in service	
RK-050724-26	2	1st	Sink		Office Area	08:15	7755308	
RK-050724-27	3	1st	Water Cooler	Pure Water Tech	Office Area	08:16	7755309	
					Administration Bldg			
RK-050724-29	1	1st	Water Cooler	Oasis	Upstairs by reception desk	07:15	7755310	
RK-050724-30	2	1st	Water Fountain	Elkay	Lower Hallway outside Custodial Room	07:10	7755311	
RK-050724-31	3	1st	Sink		Downstairs Breakroom	07:12	7755312	

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
 <: 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:

Waretown Center
Ocean County Vo Tech

Date Collected:
Sample Collected by:

07-May-24
Jon Gilbert

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Location	Time	Results (mg/L)	
							Pb	
RK-050724-41	1	1st	Spigot	T & S Brass	Tap A - left of exit door	09:38	7755313	
RK-050724-42	2	1st	Sink	Pure Water Tech	Nurse's Office	09:40	7755314	
RK-050724-43	3	1st	Chiller	Pure Water Tech	Faculty Room	09:43	7755315	
RK-050724-44	4	1st	Chiller	Pure Water Tech	Main Office Hall	09:45	7755316	
RK-050724-45	5	1st	Ice Machine	Manitowac	Culinary Classroom-Equipment #20	09:47	7755317	
RK-050724-46	6	1st	2 Bay Prep Sinks	Eagle	Culinary Classroom	09:50	7755318	
RK-050724-47	7	1st	Coffee Machine	Tap	Culinary Classroom Next to Unox Oven	09:55	7755319	
RK-050724-48	8	1st	Chiller	Pure Water Tech	Room W14 Weight Room	09:57	7755320	
RK-050724-49	9	1st	Chiller	Pure Water Tech	Room W18B Hall	10:00	7755321	

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

Water Sampling Log

Name of Building: MATES Academy
 Building Owner: Ocean County Vo Tech

MATES Academy
Ocean County Vo Tech

Date Collected: 07-May-24
 Sample Collected by: Adam Simon

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Location	Time	Results (mg/L)	
							Pb	Service
RK-050724-51	1	1st	Backflow Prev.	Advance Tabco	Room 166 - at Main Kitchen	09:57	7755322	
RK-050724-52	2	1st	Faucet		Main Kitchen next to Reach-in Refrigerator #21	09:58	7755323	
RK-050724-53	3	1st	Ice Machine	Hoshizaki America Inc	Main Kitchen #8	09:59	7755324	
RK-050724-54	4	1st	Bottle Filler	Elkay	Between Bathrooms 127 & 129 A-wing - Left	09:53	7755325	
Sample # Not Used	5	1st	Chiller	Elkay	Between Bathrooms 127 & 129 A-wing - right	Not	In	Service
RK-050724-56	6	1st	Chiller	Elkay	Fitness Center	10:04	7755326	
RK-050724-57	7	1st	Bottle Filler	Elkay	Hall Next to Room 141 - Left	09:51	7755327	
Sample # Not Used	8	1st	Chiller	Elkay	Hall Next to Room 141 - Right	Not	In	Service
RK-050724-59	9	1st	Faucet		Nurses Office Rm 162 Sink	09:48	7755328	
RK-050724-60	10	1st	Chiller	Pure Water Tech	Main Office Rm 110	09:45	7755329	
RK-050724-61	11	1st	Chiller	Elkay	2nd Floor Outside Elevator	09:36	7755330	
RK-050724-62	12	1st	Bottle Filler	Elkay	2nd Floor Next to Lockers	09:35	7755331	
RK-050724-63	13	1st	Chiller	Pure Water Tech	2nd Floor Faculty Room	09:40	7755332	
RK-050724-64	14	1st	Sink		2nd Floor Faculty Room	09:41	7755333	

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

Water Sampling Log

Name of Building: Brick Center
 Building Owner: Ocean County Vo Tech

Date Collected: 07-May-24
 Sample Collected by: Adam Simon

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Location	Time	Results (mg/L)	
							In	Pb Service
sample no. not used	1	1st	Spigot			Not	In	Service
RK-050724-102	2	1st	Bottle Filler	Elkay	Off of the main custodial closet, outside Child Care	07:29	7755334	7755335
RK-050724-103	3	1st	Kitchen Sink		Outside Child Care (Q0082889)	07:32	7755335	7755335
RK-050724-104	4	1st	Kitchen Sink		Child Care	07:33	7755335	7755335
RK-050724-105	5	1st	Sink In back		Service OCC, door side	07:39	7755337	7755337
RK-050724-106	6	1st	Bottle Filler	Elkay	Attendance Office	07:44	7755338	7755338
sample no. not used	7	1st	Double Sink	Pure Water Tech	2nd flr outside Cometology (Q0089292)	Not	In	Service
RK-050724-108	8	1st	Water Cooler		Bakery Classroom - In closet	07:55	7755339	7755339
RK-050724-109	9	1st	Bottle Filler	Elkay	Faculty Room - B5 (Q0078801)	07:54	7755340	7755340
RK-050724-110	10	1st	Nurse's sink	Pure Water Tech	Outside B23 (Q0082890)	08:15	7755341	7755341
RK-050724-111	11	1st	Water Cooler		Nurse's Office - B3	08:16	7755342	7755342
RK-050724-112	12	1st	Bar Sink		Nurse's Office - B3 (Q0078802)	08:10	7755343	7755343
sample no. not used	13	1st	Coffee Machine		Dining Room		not in service	
sample no. not used	14	1st	Coffee station		Dining Room, downstream of filter		not in service	
RK-050724-115	15	1st	Prep Sink		Main Kitchen, upstream of filter	08:00	7755344	7755344
sample no. not used	16	1st	Spigot		Across from main line cooling-station 31		not in service	
RK-050724-117	17	1st	Ice machine		Equipment #33 kettle	08:12	7755345	7755345
RK-050724-118	18	1st	Prep Sink		#71 Main Kitchen	08:06	7755346	7755346
sample no. not used	19	1st	Prep Sink		Across from ice machine - Main Kitchen		not in service	
sample no. not used	20	1st	Chiller		Next to piece #150 - smoker		not in service	
					Main kitchen next to blast chiller (Q0078806)		not in service	

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

Water Sampling Log

Name of Building: Brick Center
 Building Owner: Ocean County Vo Tech

Date Collected: 07-May-24
 Sample Collected by: Adam Simon

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Location	Time	Results (mg/L)	
							Pb	Service
sample no. not used	21	1st	Water Faucet		Work station #34		not in service	
sample no. not used	22	1st	Water Fill		Equipment #18 tilt-in skillet - L/R composite		not in service	
RK-050724-123	23	1st	Prep Sink		Bakery - marked as Equipment U	08:30	7755347	
RK-050724-124	24	1st	Water Cooler	Pure Water Tech	Bakery Fundamentals Shop (Q0078807)	08:31	7755348	
RK-050724-125	25	1st	Ice machine		Baking Fundamentals-Equipment #80	08:32	7755349	
RK-050724-126	26	1st	Spigot		Annex Kitchen-Equipment #61 tilting skillet	08:36	7755350	
RK-050724-127	27	1st	Prep Sink		Annex Kitchen-nest to piece #65 Reach in freezer	08:37	7755351	
sample no. not used	28	1st	Coffee Machine		Deli store, B15	Not	In	Service
RK-050724-129	29	1st	Bottle Filler	Elkay	Hallway - Outside Careers	08:45	7755352	
RK-050724-130	30	1st	Kitchen Sink		Service OCO, window side	08:40	7755353	
RK-050724-131	31	1st	Kitchen Sink		2nd Floor Teachers Lounge - B76, Hot/Cold comp.	07:48	7755354	
RK-050724-132	32	1st	Sink		Main Office	08:17	7755355	
RK-050724-133	33	1st	Bottle Filler	Elkay	Outside B76	07:47	7755356	

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
 <: 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:

Jackson Center
Ocean County Vo Tech

Date Collected : 07-May-24
Sample Collected by: Jon Gilbert

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Location	Time	Results (mg/L)	
							Pb	Cd
RK-050724-151	1	1st	Spigot		Boiler Room	08:42	775	5357
<i>sample no. not used</i>	2	1st	Kitchen Sink		Life Skills - J6 (REMOVED)		Not In Service	
RK-050724-153	3	1st	Water Cooler	Pure Water Tech	Faculty Room - J5A	08:45	775	5358
RK-050724-154	4	1st	Sink		Nurse's Office	08:47	775	5353
RK-050724-155	5	1st	Bottle Filler	Elkay	Main hallway by Counselor's Office (Q0090846)	08:50	775	5360
RK-050724-156	6	1st	Bottle Filler		Outside of J32 bathroom	08:53	775	5361

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
 <: 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:

Performing Arts Academy
Ocean County Vo Tech

Date Collected :
Sample Collected by:

07-May-24
Jon Gilbert

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer		Time	Results (mg/L)	
							Pb	
RK-050724-201	1	1st	Bottle Filler	Eikay	Next to 115	07:36	7755362	
RK-050724-202	2	1st	Bottle Filler	Eikay	Lobby Right	07:38	7755363	
RK-050724-203	3	1st	Cooler	Pure Water Tech	Main Office Conference Room	07:42	7755364	
RK-050724-204	4	1st	Bottle Filler	Eikay	Across Elevator Right - 2nd Floor	07:45	7755365	
RK-050724-205	5	1st	Cooler	Pure Water Tech	Faculty Room 212	07:47	7755366	
RK-050724-206	6	1st	Bottle Filler	Eikay	Next to 216 Storage	07:52	7755367	
RK-050724-207	7	1st	Bottle Filler	Eikay	Across Elevator Right - 3rd Floor	07:55	7755368	
Sample # not used	8	1st	Chiller	Eikay	Across Elevator Left	Not	In	Service
RK-050724-209	9	1st	Bottle Filler	Eikay	Next to 316	07:57	7755369	

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
 <: 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:

Atlantis Country Club-Cuisine on the Green
Ocean County Vo Tech

Date Collected : 07-May-24
Sample Collected by: JG & AS

Sample No.	Tap No.	Sample Type	Type of Outlet	Manufacturer	Location	Time	Results (mg/L)	
							Pb	
RK-050724-401	1	1st	Sink/faucet		Bar Sink	10:41	7755370	
RK-050724-402	2	1st	Spigot		Kitchen - Coffee Machine	10:42	7755371	
RK-050724-403	3	1st	Spigot		Kitchen - Left Kettle faucet	10:43	7755372	
RK-050724-404	4	1st	Faucet		Kitchen - Right Kettle faucet	10:44	7755373	
RK-050724-405	5	1st	Faucet		Kitchen - left prep sink	10:45	7755374	
RK-050724-406	6	1st	Faucet		Kettle Right prep sink	10:46	7755375	
RK-050724-407	7	1st	Sink/faucet		Prep sink in classroom	10:47	7755376	
						11:30	7755377	* ASL

** Additional sample received
RK-050724-118*

Lead sampled 1 day class sink

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