

EXECUTIVE SUMMARY:

The South Plainfield Township Board of Education requested lead in water testing of potable water outlets at South Plainfield High School, 200 Lake Street, South Plainfield, NJ 07080.

Previous Testing

No information related to previous testing was available.

Recent Testing (11/10/16)

In order to assess the building water outlets a full testing of all potable outlets was performed on November 10, 2016.

Reportedly the outlets were not flushed or used on the day of testing.

First draw and flush samples (30 second) were collected of 12 water fountains and sinks.

Results of most first draw samples analyzed were below the Lead and Copper Rule action level of 15 ppb. Two first draw sample were above 15 ppb.

See Section 3 Discussion of Results

1 RESULTS TABLE:

Sample #	Location	1 st draw (FD) or flush (FL)	Results (ppb)	LCR Action Level ⁽¹⁾ (ppb)
1	LIFE Program Kitchen Faucet	FD	2.7	15
2	LIFE Program Kitchen Faucet	FD	5.1	15
3	Water Cooler at Exit 10 (L)	FD	3.2	15
4	Water Cooler at Exit 10 (C)	FD	<1.0	15
5	Water Cooler at Exit 10 (R)	FD	<1.0	15
6	Water Cooler at Exit 8 (L)	FD	<1.0	15
7	Water Cooler at Exit 8 (R)	FD	<1.0	15
8	Water Cooler at Exit 7 (L)	FD	13.2	15
9	Water Cooler at Exit 7 (R)	FD	15.4	15
10	Drinking Water Girl's Locker Room	FD	Out of Order	15
11	Drinking Water Girl's Locker Room	FD	Out of Order	15
12	Drinking Water Trainer's Room	FD	6.2	15
13	Trainer's Room	FD	<1.0	15
14	Boys Locker	FD	<1.0	15
15	@ Exit 14 (L)	FD	<1.0	15
16	@ Exit 14 (R)	FD	<1.0	15
17	Staff Café	FD	1.3	15
18	Pot Fillers (L)	FD	4.6	15
19	Pot Fillers (R)	FD	106	15
20	Cook Sink	FD	3.0	15
21	Fryer Sink	FD	<1.0	15
22	Salad Sink	FD	<1.0	15
23	Café C/D	FD	4.6	15
24	Café A/B	FD	6.5	15
25	@ Nurse's Office	FD	<1.0	15
26	@ Nurse's Office	FD	<1.0	15
27	@ Nurse's Office	FD	1.1	15
28	Nurse's Office	FD	1.8	15
29	Main Office	FD	4.9	15
30	Guidance Office	FD	2.5	15
31	Information Center	FD	10.9	15
32	Metal Shop	FD	2.7	15
33	Wood Shop	FD	3.9	15
34	Graphic Arts	FD	Out of Order	15
35	Electric Shop	FD	2.3	15
36	Home Economics	FD	<1.0	15
37	Home Economics	FD	1.3	15
38	Home Economics	FD	1.4	15

39	Home Economics	FD	1.5	15
40	Home Economics	FD	1.7	15
41	Home Economics	FD	1.4	15
42	Home Economics	FD	2.2	15
43	@ 299A (L)	FD	<1.0	15
44	@ 299A (C)	FD	<1.0	15
45	@ 299A (R)	FD	3.1	15
46	@ 251 (L)	FD	<1.0	15
47	@ 251 (C)	FD	<1.0	15
48	@ 251 (R)	FD	Out of Order	15
49	Field Blank	FD	<1.0	15

⁽¹⁾ EPA Lead in Copper Rule (1991) Action Level for water suppliers (municipalities and private wells) and March 2016 Newark Public Schools Lead Water Testing Sampling Plan.

FD – First Draw Sample

FL – Flush Sample (30 sec)

NA – Not Analyzed

2 SAMPLING METHODOLOGY:

First Draw Samples - Without allowing any water to spill until sample collection, samples were collected with a relatively slow flow rate in 250 mL bottles prepared with Nitric Acid (HNO₃) as a preservative.

Flush Samples – After collection of first draw samples the water was allowed to flow at a relatively slow rate for thirty second to flush the fixture and close piping. The flush samples are intended to test the plumbing further upstream from the fixture (behind walls).

The samples were packaged in a cooler and shipped to Pace Analytical, Melville, NY for total lead in potable water analysis (method E200.8 IOC).

3 DISCUSSION OF RESULTS:

Two first draw sample result were above 15 ppb.

4 RECOMMENDATIONS:

Short term:

- Take any outlets with elevated results out of service.
- Conduct further evaluation and testing of outlets with elevated results.

Long Term:

- If additional testing shows similar results (first draw results above 15 ppb) consider replacing the spout of the fountains (may contain brass, adding to lead levels), installing filters (if practical), or fixture replacement.
- Repeat full building testing on an annual basis. Generally this should be performed in August prior to the start of the school season.
- Develop a Lead in Water Management Plan in accordance with the 2006 EPA 3Ts for Reducing Lead in Drinking Water in Schools.