



January 19, 2017

Ms. Melissa Engelhardt
Business Administrator
Somerdale Board of Education
301 Grace Street
Somerdale, New Jersey 08083

via e-mail: mengelhardt@somerdale-park.org

Re: Summary Report
Lead in Water Testing and Analysis

Facility: Somerdale Park School
301 Grace Street
Somerdale, NJ 08083

EC Project #: 16322-01

Environmental Connection, Inc., (EC) was contracted by the Somerdale Board of Education to collect and provide laboratory analysis of representative water samples from the Somerdale Park School, located at 301 Grace Street in Somerdale, New Jersey. Sampling was completed on January 7, 2017, between the hours of 7:00 AM and 9:30 AM. Samples were collected between 8 and 18 hours after the last known usage of the water and during a period when the building was unoccupied.

Samples were collected from 37 locations, as follows:

Somerdale Park School, Locations of Lead in Water Tests, January 7, 2017	
1. Cooler Water Fountain in Hallway by E1	20. Bubbler Water Fountain in Music Room
2. Cooler Water Fountain in Hallway by MS1	21. Sink in Faculty Room
3. Sink in Main Office	22. Ice Machine in Kitchen
4. Sink in Nurse's Office	23. Sink in Kitchen
5. Sink in E1	24. Cooler Water Fountain in Hallway by Gym
6. Bubbler Water Fountain in Classroom B4	25. Bubbler Water Fountain in Classroom C2
7. Bubbler Water Fountain in Classroom B6	26. Bubbler Water Fountain in Classroom C1
8. Bubbler Water Fountain in Classroom B5	27. Bubbler Water Fountain in Classroom C3
9. Bubbler Water Fountain in Classroom B7	28. Bubbler Water Fountain in Classroom C4
10. Bubbler Water Fountain in Classroom B8	29. Bubbler Water Fountain in Classroom C6
11. Cooler Water Fountain in Hallway by Classroom B9	30. Bubbler Water Fountain in Classroom C5
12. Bubbler Water Fountain in Classroom A2	31. Bubbler Water Fountain in Classroom C8
13. Bubbler Water Fountain in Classroom A4	32. Bubbler Water Fountain in Classroom C7
14. Bubbler Water Fountain in Classroom A3	33. Cooler Water Fountain in Hallway by MS#3
15. Bubbler Water Fountain in Classroom A5	34. Bubbler Water Fountain in Classroom C10
16. Cooler Water Fountain in Hallway by A8	35. Bubbler Water Fountain in Classroom C11
17. Bubbler Water Fountain in Classroom A8	36. Cooler Water Fountain in Hallway on the Left by Gym



Somerdale Park School, Locations of Lead in Water Tests, January 7, 2017	
18. Cooler Water Fountain in Hallway by A7	37. Cooler Water Fountain in Hallway on the Right by Gym
19. Sink in Classroom D2	

Samples were collected in sterile 250 milliliter bottles, pre-treated with nitric acid solution (HNO₃). At each location, a “first draw” sample was collected prior to any known usage of the fixture, immediately after which the fixture was flushed for 30 seconds and a second draw sample was collected. The samples were hand delivered to International Asbestos Testing Laboratories (IATL) of Mount Laurel, New Jersey, on July 27, 2016. IATL is certified by the State of New Jersey, Department of Environmental Protection (NJDEP), for drinking water analysis.

Analysis was completed in accordance with United States Environmental Protection Agency (USEPA) Method 200.9. The USEPA and NJDEP Action Level of 15 parts per billion (ppb) or micrograms per liter (µg/L) was used to determine if further testing and/or remediation is warranted. Where levels above 15 ppb or µg/L were detected, analysis of the second draw sample was performed in accordance with USEPA protocol.

Results of analysis are summarized in Table 1 below:

TABLE 1 – LEAD IN WATER ANALYSIS, SOMERDALE PARK SCHOOL, JANUARY 7, 2017				
Sample Location	Parameter	Results of 1 st Draw Sample (ppb)	Results of 2 nd Draw Sample (ppb)	USEPA and NJDEP Action Level (ppb)
Cooler Water Fountain in Hallway by E1	Lead in Water	<2.00	-	15
Cooler Water Fountain in Hallway by MS1	Lead in Water	<2.00	-	15
Sink in Main Office	Lead in Water	<2.00	Not Analyzed	15
Sink in Nurse’s Office	Lead in Water	<2.00	Not Analyzed	15
Sink in E1	Lead in Water	9.40	Not Analyzed	15
Bubbler Water Fountain in Classroom B4	Lead in Water	9.60	Not Analyzed	15
Bubbler Water Fountain in Classroom B6	Lead in Water	2.00	Not Analyzed	15
Bubbler Water Fountain in Classroom B5	Lead in Water	<2.00	Not Analyzed	15
Bubbler Water Fountain in Classroom B7	Lead in Water	<2.00	Not Analyzed	15



TABLE 1 – LEAD IN WATER ANALYSIS, SOMERDALE PARK SCHOOL, JANUARY 7, 2017					
Sample Location	Parameter	Results of 1 st Draw Sample (ppb)	Results of 2 nd Draw Sample (ppb)	USEPA and NJDEP Action Level (ppb)	
Bubbler Water Fountain in Classroom B8	Lead in Water	2.50	Not Analyzed	15	
Cooler Water Fountain in Hallway by Classroom B9	Lead in Water	<2.00	-	15	
Bubbler Water Fountain in Classroom A2	Lead in Water	85.0	16.4	15	
Bubbler Water Fountain in Classroom A4	Lead in Water	6.30	Not Analyzed	15	
Bubbler Water Fountain in Classroom A3	Lead in Water	3.30	Not Analyzed	15	
Bubbler Water Fountain in Classroom A5	Lead in Water	2.60	Not Analyzed	15	
Cooler Water Fountain in Hallway by A8	Lead in Water	<2.00	-	15	
Bubbler Water Fountain in Classroom A8	Lead in Water	10.2	Not Analyzed	15	
Cooler Water Fountain in Hallway by A7	Lead in Water	3.30	Not Analyzed	15	
Sink in Classroom D2	Lead in Water	<2.00	Not Analyzed	15	
Bubbler Water Fountain in Music Room	Lead in Water	<2.00	Not Analyzed	15	
Sink in Faculty Room	Lead in Water	<2.00	Not Analyzed	15	
Ice Machine in Kitchen	Lead in Water	<2.00	-	15	
Sink in Kitchen	Lead in Water	<2.00	Not Analyzed	15	
Cooler Water Fountain in Hallway by Gym	Lead in Water	<2.00	-	15	
Bubbler Water Fountain in Classroom C2	Lead in Water	<2.00	Not Analyzed	15	
Bubbler Water Fountain in Classroom C1	Lead in Water	<2.00	Not Analyzed	15	



TABLE 1 – LEAD IN WATER ANALYSIS, SOMERDALE PARK SCHOOL, JANUARY 7, 2017					
Sample Location	Parameter	Results of 1 st Draw Sample (ppb)	Results of 2 nd Draw Sample (ppb)	USEPA and NJDEP Action Level (ppb)	
Bubbler Water Fountain in Classroom C3	Lead in Water	<2.00	Not Analyzed	15	
Bubbler Water Fountain in Classroom C4	Lead in Water	<2.00	Not Analyzed	15	
Bubbler Water Fountain in Classroom C6	Lead in Water	<2.00	Not Analyzed	15	
Bubbler Water Fountain in Classroom C5	Lead in Water	<2.00	Not Analyzed	15	
Bubbler Water Fountain in Classroom C8	Lead in Water	<2.00	Not Analyzed	15	
Bubbler Water Fountain in Classroom C7	Lead in Water	<2.00	Not Analyzed	15	
Cooler Water Fountain in Hallway by MS #3	Lead in Water	Not Analyzed	-	15	
Bubbler Water Fountain in Classroom C10	Lead in Water	<2.00	Not Analyzed	15	
Bubbler Water Fountain in Classroom C11	Lead in Water	<2.00	Not Analyzed	15	
Cooler Water Fountain in Hallway on the Left by Gym	Lead in Water	<2.00	-	15	
Cooler Water Fountain in Hallway on the Right by Gym	Lead in Water	<2.00	-	15	

Detected lead levels exceeded the USEPA and NJDEP Action Level of 15 ppb at one (1) location: Bubbler Water Fountain in Classroom A2. At a minimum, this location should not be used for drinking until remediation is completed.

In this one (1) location, running the water for 30 seconds resulted in a level of lead higher than the Action Level when the second draw sample was analyzed. This indicates supply piping as a potential source for lead.

Based on the detected concentrations multiple remediation options are possible, including:

- Replacement of the fixtures and associated supply piping with “lead free” plumbing components, in accordance with the United States Safe Drinking Water Act (SDWA).
- Filtration utilizing NSF certified filters. NSF certifies filters for up to 150 ppb lead in water. If filtration is the chosen remediation option, ensure filters are replaced in accordance with the manufacturer’s recommended schedule.
- Daily flushing. If flushing is the chosen remediation option, EC recommends that a daily checklist be maintained recording the date, time and person performing flush. Flushing should be completed every morning prior to occupancy, for a period of no less than five (5) minutes.

At the completion of the chosen remediation option(s), re-testing should be performed at the remediated fixtures to determine the effectiveness of the remedial measures.

Should you have any questions or require additional information, please contact the undersigned at your convenience.

Respectfully Submitted:
ENVIRONMENTAL CONNECTION, INC.



Roland C. Jones, CIH
Vice President

Attachment 1: Analytical Report and Chain of Custody for Lead in Water Sampling

ATTACHMENT I

Analytical Report and Chain of Custody for Lead in Water Sampling