



January 19, 2017

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Business Administrator  
Somerdale Board of Education  
301 Grace Street  
Somerdale, New Jersey 08083

via e-mail: [mengelhardt@somerdale-park.org](mailto: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 (HNO<sub>3</sub>). 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 <sup>st</sup> Draw Sample (ppb) | Results of 2 <sup>nd</sup> 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 <sup>st</sup> Draw Sample (ppb) | Results of 2 <sup>nd</sup> 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                                 |  |
| <b>Bubbler Water Fountain in Classroom A2</b>                            | <b>Lead in Water</b> | <b>85.0</b>                                  | <b>16.4</b>                                  | <b>15</b>                          |  |
| 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 <sup>st</sup> Draw Sample (ppb) | Results of 2 <sup>nd</sup> 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.

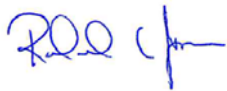
Based on the detected concentrations multiple remediation options are possible, including:

- 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**