



May 6, 2013

Mr. Joseph T. Martella II, Senior Engineer
Rhode Island Department of Environmental Management
Office of Waste Management
Site Remediation Program
235 Promenade Street
Providence, Rhode Island 02908

**RE: Air Monitoring Report
First Quarter, 2013
Retail Complex, Active Sub-Slab Depressurization System
Former Gorham Manufacturing Facility
333 Adelaide Avenue, Providence, Rhode Island
AMEC Project No. 3650080114**

Dear Mr. Martella:

This letter report presents the results of quarterly compliance sampling and analysis conducted by AMEC E&I, Inc. at the retail complex located at the Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island (the Site). The reporting period is from January 2013 through March 2013 and includes one quarterly compliance sampling event (March 15, 2013).

The sampling and analysis and this reporting were conducted consistent with the Short Term Response Action Order of Approval dated July 24, 2008 and the Addendum to the Order of Approval dated August 7, 2008 (collectively referred to as the Orders of Approval).

Background

The active sub-slab depressurization (ASD) system, also called a vapor mitigation system, in the large retail space consists of four extraction wells connected to a 3 hp Rotron regenerative blower. The blower is located in an enclosure located at the north, or rear, of the large retail space.

The small retail spaces consist of the eastern, central, and western retail spaces (Figure 1). The mitigation systems in the small retail spaces consist of one extraction well in each space connected to an individual radon-type fan, located at the north, or rear, of each small retail space.

Small Retail Spaces

The quarterly monitoring event for the three small retail spaces, consistent with the requirements of the Orders of Approval, was completed on March 15, 2013.

Table 1 summarizes the analytical results at the small retail spaces for the baseline sampling event conducted prior to system start-up and all subsequent sampling events conducted after system start-up. Results of the indoor air samples were compared to the Draft Connecticut Industrial/Commercial Indoor Target Air Concentrations (TAC), which were identified as action levels in the Orders of Approval. The laboratory report (13C0484) associated with the March 15, 2013 quarterly sampling event is provided in Appendix A of this letter report. The analytical laboratory's detection limits are provided in Appendix B.

The sampling event included an indoor air sample from each of the small retail spaces (locations IA-5, IA-6, and IA-7), one outdoor air reference sample (location AA-1), and one air sample collected from each of the three vapor extraction wells (EW-5, EW-6, and EW-7). The sampling locations are shown in Figure 1. The outdoor reference air sample (AA-1) was located north of the property, upwind of the small retail space. Sub-slab vacuum monitoring (pressure differential measurements) was also conducted at locations VMW-5, VMW-6, and VMW-7 in conjunction with the quarterly air sampling program. The vacuum monitoring results are tabulated in Table 2.

The following conclusions are based on Site observations and the data from Table 1.

- Indoor air sample results were in compliance with action levels for the March 2013 quarterly sampling event in the small retail space (sample locations IA-5 through IA-7).
- The eastern small retail space (indoor air sample location IA-5) was occupied during the month of March for approximate two weeks as temporary storage space for the western small retail tenant.
- The center small retail space (sample location IA-6) remains unoccupied.
- The western small retail space (sample location IA-7) is intermittently occupied.
- The mitigation systems are functioning as designed.

Large Retail Space

The quarterly monitoring event for the large retail space, consistent with the requirements of the Orders of Approval, was completed on March 15, 2013. Table 3 summarizes the analytical results for the large retail space for the baseline sampling event conducted prior to system start-up and all subsequent sampling events conducted after system start-up. Results of the indoor air samples were compared to the Draft Connecticut Industrial/Commercial Indoor Target Air Concentrations (TAC), which were identified as



action levels in the Orders of Approval. The laboratory report (13C0484) associated with the March 15, 2013 quarterly sampling event is provided in Appendix A of this letter report. The analytical laboratory's detection limits are provided in Appendix B.

The sampling event included collection of samples from each of the indoor air sampling points in the large retail space (locations IA-1 through IA-4), one outdoor air reference sample (location AA-1), and one air sample collected from the manifold where air from the four vapor extraction wells is collected (EW-Combined). The sampling locations are shown in Figure 1. The outdoor reference air sample (AA-1) was located at an upwind location. Sub-slab vacuum monitoring (pressure differential measurements) was also conducted at locations VMW-1 through VMW-4 in conjunction with the air sampling program. The vacuum monitoring results for the large retail space are tabulated in Table 4.

The following conclusions are based on Site observations and the data from Table 3.

- Indoor air sample results were in compliance with action levels for the March 15, 2013 quarterly sampling event in the large retail space (sample locations IA-1 through IA-4). The mitigation system is functioning as designed and is achieving desired results with respect to indoor air quality in the large retail space.
- The large retail space was subdivided into two spaces. The eastern large space retail space contains an occupancy of a health fitness club which opened on January 07, 2013. This space includes indoor air sample locations IA-2 and IA-4 and sub-slab vacuum monitoring well VMW-2. The western side of the large retail space remains vacant until further notice and includes indoor air locations IA-1 and IA-3, vapor extraction well (EW-5) and sub-slab vacuum monitoring VMW-1, VMW-3, and VMW-4.

ASD System Monitoring

The ASD system performance is monitored and maintained monthly by Clean Harbors Environmental Services. There was a low flow condition on radon fan 1 on March 26th. The alarm was reset remotely and all fans were operational.

Next Reporting Period

The next quarterly report (second quarter 2013 will include monitoring from April 2013 through June 2013. The report will be prepared and submitted to the Rhode Island Department of Environmental Management (RIDEM) in July 2013.



Please contact the undersigned at (978) 692-9090 if we can provide additional information or answer any questions concerning these monitoring events and system adjustments.

Sincerely,
AMEC Environment & Infrastructure, Inc.

A handwritten signature in black ink, appearing to read "Mark Maggiore".

Mark Maggiore
Environmental Scientist

A handwritten signature in black ink, appearing to read "Charles Collet".

Charles Collet, P.E.
Senior Principal/Senior Project Manager

- Enclosures:
- Table 1. Summary of Analytical Results – Air Sampling for Small Retail Spaces
 - Table 2. Vacuum Monitoring Results – Small Retail Spaces
 - Table 3. Summary of Analytical Results – Air Sampling for Large Retail Space
 - Table 4. Vacuum Monitoring Results – Large Retail Space
 - Figure 1 Vapor Mitigation Sample Locations
 - Appendix A – Laboratory Reports
 - Appendix B – Analytical Laboratory Detection Limits

cc: Stuart MacDonald, City of Providence
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AMEC Project File

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Textron, Inc.
Former Gorham Manufacturing Facility, Providence, RI
Retail Complex, Active Sub-Slab Depressurization System
Air Monitoring Report, First Quarter, 2013
May 6, 2013



TABLES

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Outdoor Air Reference Locations																
	AA-1 011609 1/16/2009	AA-1- 020309 2/3/2009	AA-1- 021109 2/11/2009	AA-1- 021809 2/18/2009	AA-1- 022609 2/26/2009	AA-1- 030609 3/6/2009	AA-1- 033109 3/31/2009	AA-1- 041409 4/14/2009	AA-1- 042409 4/24/2009	AA-1- 051509 5/15/2009	AA-1- 061109 6/11/2009	AA-1- 091709 9/17/2009	AA-1- 092409 9/24/2009	AA-1- 100109 10/1/2009	AA-1- 100809 10/8/2009	AA-1- 122909 12/29/2009	AA-1- 012810 1/28/2010
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.28	0.52	1.8	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.29	0.3	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.5	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.17	1.3	0.11 U	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.53	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane																	
2-Butanone	0.58	1.2	2.4	3.2	1.6	0.67	1.7	0.11 U	1.6	1.6	1.1	1.7	0.84	1.2	1.2	2	0.81
2-Hexanone	0.2 U	0.22	0.57	0.35	0.2 U	0.2 U	0.2 U	0.14 U	0.26	0.39	0.2 U	0.34	0.2 U	0.33	0.23	0.2 U	0.2 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.6	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.27	0.63	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	7.3	8	15	22	8.4	5.9	12	1.1	27	9.5	10	10	9.6	5.4	17	11	3.5
Benzene	0.69	0.62	1.3	4.7	0.43	0.69	0.46	0.12 U	0.3	0.4	0.49	0.38	0.35	0.25	0.2	0.42	0.79
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.28
Carbon tetrachloride	0.38	0.44	0.52	0.56	0.43	0.61	0.47	0.22 U	0.41	0.78	0.43	0.4	0.4	0.43	0.46	0.39	0.42
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.1	0.9	1.4	1.5	1.1	1.1	1.3	1.1	1.2	1.1	1.2	0.85	1.1	0.97	0.96	1.6	1.1
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.35	1.1	0.17 U	0.17 U	0.17 U	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2	2.2	2.6	2.7	2.6	2.6	2.8	2	2.5	2.7	2.6	2.1	2.1	2.2	2.1	2.1	2.3
Ethanol	4	5.4	10	47	4.3	3.5	4.7	0.81	4.9	4.8	8.6	6.6	4.6	3.9	4.9	3.8	5.4
Ethyl acetate	0.37 U	0.37 U	0.18 U	0.31	0.37 U	0.18 U	0.18 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.25	0.52	2	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.24	0.22 U	0.23	0.22 U	0.22 U	0.22 U	0.22 U
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U
Hexane	1.5	0.75	1.1	2.9	0.38	2.8	2.2	0.13 U	0.56	0.37	0.59	0.48	1.4	0.45	4.5	0.62	0.36
Isopropyl alcohol	1.4	1.4	1.8	4.3	1.4	0.67	1.4	0.18 U	14	1	2.5	2.8	0.87	0.63	0.25 U	0.54	0.56
m,p-Xylene	0.43 U	0.72	1.4	6.4	0.44	0.43 U	0.43 U	0.31 U	0.43 U	0.49	0.73	0.62	0.59	0.43 U	0.43 U	0.43 U	0.43 U

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Parameter (ug/m ³)	Outdoor Air Reference Locations																
	AA-1 011609 1/16/2009	AA-1- 020309 2/3/2009	AA-1- 021109 2/11/2009	AA-1- 021809 2/18/2009	AA-1- 022609 2/26/2009	AA-1- 030609 3/6/2009	AA-1- 033109 3/31/2009	AA-1- 041409 4/14/2009	AA-1- 042409 4/24/2009	AA-1- 051509 5/15/2009	AA-1- 061109 6/11/2009	AA-1- 091709 9/17/2009	AA-1- 092409 9/24/2009	AA-1- 100109 10/1/2009	AA-1- 100809 10/8/2009	AA-1- 122909 12/29/2009	AA-1- 012810 1/28/2010
Methyl methacrylate																	
Methylene chloride	5.5	3.1	0.65	1.5	0.78	7.4	15	2.1	2.8	1.7	1.9	0.7 U	4.2	0.7 U	23	4.6	1.3
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.2 U	0.27	0.92	1.6	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.4	0.23	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26
o-Xylene	0.22 U	0.27	0.53	2.2	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.24	0.27	0.23	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Propylene (Propene)	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.09 U	0.13 U	0.18 U	0.09 U	0.09 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U
Styrene	0.21 U	0.21 U	0.21 U	0.28	0.21 U	0.21 U	0.21 U	0.15 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	0.34 U	0.34 U	0.73	0.77	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.52	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.11 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	1.2	0.15 U	0.15 U	0.15 U
Toluene	0.94	1.5	3.2	14	0.71	0.99	0.82	0.14 U	0.72	2.6	2.1	1.9	2	0.61	0.5	0.78	0.94
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.39	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	1.3	1.2	1.7	2.4	1.5	2	1.7	0.92	1.3	1.5	2	1.1	1.4	1.2	1.5	2.2	1.2
Trichlorotrifluoroethane	0.68	0.53	0.5	0.47	0.64	0.48	0.51	0.27 U	0.64	0.67	0.56	0.47	0.49	0.45	0.46	0.54	0.49
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.18 U	0.5 U	0.71 U	0.18 U	0.18 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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Parameter (ug/m ³)	Outdoor Air Reference Locations																		
	AA-1-020510 2/5/2010	AA-1-021210 2/12/2010	AA-1-021910 2/19/2010	AA-1-032610 3/26/2010	AA-1-043010 4/30/2010	AA-1-052810 5/28/2010	AA-1-070110 7/1/2010	AA-1-091610 9/16/2010	AA-1-120710 12/7/2010	AA-1-021711 2/17/2011	AA-1-060211 6/2/2011	AA-1-091511 9/15/2011	AA-1-120811 12/8/2011	AA-1-030812 3/8/2012	AA-1-061412 6/14/2012	AA-1-091312 9/13/2012	AA-1-010313 1/3/2013	AA-1-031513 3/15/2013	
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.29	0.082 U	0.1	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.21 U	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.063	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	0.62	0.45 U	0.12	0.52 U	0.52 U	0.52 U
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.94	0.25 U	1.1	0.25 U	0.25 U	0.16	0.15 U	0.15 U	0.26	0.17 U	0.069
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.34	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.066	0.061 U	0.046	0.14 U	0.14 U	0.057
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.069 U	0.14 U	0.16 U	0.16 U	0.16 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U									
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.28	0.25 U	0.33	0.25 U	0.25 U	0.068	0.15 U	0.15 U	0.16	0.17 U	0.17 U
1,3-Butadiene	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.29	0.11 U	0.11 U	0.11 U	0.11 U	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	0.078 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.21 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.21 U
1,4-Dioxane												0.18 U							
2-Butanone	1.6	1.6	0.88	1.5	1.4	2.4	2.3	2.7	0.37	1.8 B	2.9 U	5.9 U	0.35	1.4	1.1	2	0.89	1.9	1.9
2-Hexanone	0.32	0.2 U	0.2 U	0.29	0.29	0.49	0.49	0.41	0.2 U	0.2 U	4.1 U	0.67	0.12 U	0.34	0.14	0.27	0.14 U	0.13	0.13
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.3	0.25 U	0.34	0.25 U	0.25 U	0.053	0.15 U	0.15 U	0.093	0.17 U	0.17 U	0.17 U
4-Methyl-2-pentanone	0.2 U	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.8	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.12 U	0.23	0.1	0.14 U	0.083	0.083
Acetone	7.6	5	3.7	9.5	12	20	13	14	5.7 B	19 B	8.7 B	20	4.9	9.4	10	12	8.7	18	18
Benzene	0.68	0.63	0.41	0.69	0.35	0.19	0.16 U	1.2	0.28	2.3	0.16 U	0.19	0.4	0.29	0.2	0.68	0.42	1	1
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.44	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.38	0.16 U	0.16 U	1.6 U	0.058	0.93 U	0.11	1.1 U	1.1 U	0.052	0.052
Carbon tetrachloride	0.39	0.31 U	0.43	0.49	0.47	0.52	0.51	0.43	0.42	0.48	0.53	0.48	0.49	0.43	0.43	0.36	0.52	0.41	0.41
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.14 U	0.14 U	0.16 U	0.16 U	0.16 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.094	0.073 U	0.067	0.096	0.17 U	0.21
Chloromethane	1.2	1.3	1.1	1.4	0.78	1.1	0.96	0.99	0.94	1	0.96	1.4	0.062 U	1.1	1.5	1.1	1	1.6	1.6
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12	0.059 U	0.12 U	0.14 U	0.14 U	0.092	0.092
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.46	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.26 U	0.13 U	0.26 U	0.3 U	0.3 U	0.3 U
Dichlorodifluoromethane	2.4	2.5	2.9	1.8	2.1	2.5	2.4	2.9	1.9	3.1	1.9	1.7	2.5	2	2.4	2.8	2.5	1.7	1.7
Ethanol	5.1	7.2	1.2	4.9	4	3.3	4	14	2.3	12	2.7	5.8	1.5	4.1	7.4	5.2	2.7	1.2	1.2
Ethyl acetate	0.18 U	0.18 U	1.1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.46	0.56	0.43	0.67	0.35	1.1	1.1
Ethylbenzene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.82	1.4	0.22 U	1.1	0.22 U	0.22 U	0.31	0.13 U	0.065	0.19	0.15 U	0.12	0.12
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U
Hexane	0.53	0.91	0.24	0.23	1.1	0.51	0.37	1.2	0.35 U	3.3	0.88	7.0 U	0.47	0.54	1.3	0.67	1.4	1.3	1.3
Isopropyl alcohol	2.7	1.5	0.8	0.73	0.69	1.6	0.79	0.25 U	0.29	2.4	1.2 U	4.9 U	0.6	0.88	2.9 U	0.58	0.47	0.52	0.52
m,p-Xylene	0.5	0.47	0.43 U	0.49	0.43 U	0.43 U	2.2	3.7	0.43 U	3.3	0.43 U	0.43 U	0.41	0.17	0.18	0.64	0.3 U	0.34	0.34

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Outdoor Air Reference Locations																	
	AA-1-020510 2/5/2010	AA-1-021210 2/12/2010	AA-1-021910 2/19/2010	AA-1-032610 3/26/2010	AA-1-043010 4/30/2010	AA-1-052810 5/28/2010	AA-1-070110 7/1/2010	AA-1-091610 9/16/2010	AA-1-120710 12/7/2010	AA-1-021711 2/17/2011	AA-1-060211 6/2/2011	AA-1-091511 9/15/2011	AA-1-120811 12/8/2011	AA-1-030812 3/8/2012	AA-1-061412 6/14/2012	AA-1-091312 9/13/2012	AA-1-010313 1/3/2013	AA-1-031513 3/15/2013
Methyl methacrylate									0.2 U	0.48	0.2 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U
Methylene chloride	1.9	1.7	0.7 U	0.7 U	0.7 U	0.35 U	1.1	1.1	0.66	3	2.3	1.7 U	1.5	1.6	3	2.1	4.4	2.9
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.11 U	0.11 U	0.11 U	0.13 U	0.13 U	0.13 U
n-Heptane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.91	0.2 U	0.95	0.2 U	0.20 U	0.12	0.089	0.11	0.18	0.14 U	0.12
o-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.46	1.2	0.22 U	1.1	0.22 U	0.22 U	0.22	0.086	0.078	0.31	0.15 U	0.12
Propylene (Propene)	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 U	1.9	0.86 U	0.86 U	0.86 U	3.4 U	2.1 U	2.1 U	0.77	1.3	2.4 U	2.4 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.37	0.13 U	0.1	0.13	0.15 U	0.039
Tetrachloroethene	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.49	0.34 U	5.3	0.34 U	0.34 U	0.73	0.1 U	0.2 U	0.87	0.24 U	0.9
Tetrahydrofuran	0.15 U	0.15 U	0.19	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.057	0.088 U	0.088 U	0.43	0.1 U	0.1 U
Toluene	0.64	0.97	0.46	1.1	0.75	0.63	0.57	10	0.19 U	5.3	0.52	0.47	0.56	0.37	0.42	0.81	0.48	0.74
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U
Trichloroethene	0.27 U	0.3	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.67	0.081 U	0.045	0.091	0.19 U	0.26
Trichlorofluoromethane	1.2	1.6	1.5	1.5	1.2	1.4	1.3	11	1.2	1.7	1.5	1.5	1.7	1.1	1.7	1.5	1.5	1.3
Trichlorotrifluoroethane	0.55	0.54	0.54	0.62	0.45	0.58	0.56	0.44	0.56	0.66	0.69	0.58	0.89	0.43	0.53	0.59	0.58	0.66
Vinyl acetate	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.35 U	0.18 U	3.5 U	0.18 U	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.09 U	0.09 U	0.09 U

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Eastern Small Retail Space																	
	EW-5-020309 2/3/2009	EW-5-021109 2/11/2009	EW-5-021809 2/18/2009	EW-5-022609 2/26/2009	EW-5-030609 3/6/2009	EW-5-041409 4/14/2009	EW-5-051509 5/15/2009	EW-5-061109 6/11/2009	EW-5-091709 9/17/2009	EW-5-122909 12/29/2009	EW-5-032610 3/26/2010	EW-5-070110 7/1/2010	EW-5-091610 9/16/2010	EW-5-120710 12/7/2010	EW-5-021711 2/17/2011	EW-5-060211 6/2/2011	EW-5-091511 9/15/2011	EW-5-120811 12/8/2011
1,1,1-Trichloroethane	190000	41000	17000	7100	1800	2600	3100	1900	3500	920	540	550	460	210 D	400 D	340 D	430	130
1,1,2,2-Tetrachloroethane	6.8 U	6.8 U	6.8 U	6.8 U	1.7 U	6.8 U	3.4 U	3.4 U	3.4 U	3.4 U	6.8 U	3.4 U	6.8 U	1.4 UD	1.4 UD	6.9 UD	14 U	3.4 U
1,1,2-Trichloroethane	5.4 U	5.4 U	5.4 U	5.4 U	1.4 U	5.4 U	2.7 U	2.7 U	2.7 U	2.7 U	5.4 U	2.7 U	5.4 U	1.1 UD	1.1 UD	5.5 UD	11 U	2.7 U
1,1-Dichloroethane	11000	1900	890	770	190	360	450	430	230	100	50	53	42	29 D	34 D	33 D	44	16
1,1-Dichloroethene	2500	290	130	190	61	160	160	160	98	30	18	21	15	13 D	15 D	11 D	14	5
1,2,4-Trichlorobenzene	7.4 U	7.4 U	7.4 U	7.4 U	1.9 U	7.4 U	3.7 U	3.7 U	3.7 U	7.5 U	15 U	3.7 U	7.4 U	1.5 UD	1.5 UD	7.4 UD	30 U	7.4 U
1,2,4-Trimethylbenzene	5 U	5 U	5 U	5 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	5 U	0.98 UD	0.98 UD	4.9 UD	9.8 U	2.5 U
1,2-Dibromoethane (EDB)	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	76 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U	3.8 U	7.6 U	1.5 UD	1.5 UD	7.7 UD	15 U	3.8 U
1,2-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	60 U	3 U	3 U	3 U	3 U	6 U	3 U	6 U	1.2 UD	1.2 UD	6 UD	12 U	3 U
1,2-Dichloroethane	4 U	4 U	4 U	4 U	1 U	40 U	2 U	2 U	2 U	2 U	4 U	2 U	4 U	0.81 UD	0.81 UD	4 UD	8.1 U	2 U
1,2-Dichloropropane	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	46 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U	2.3 U	4.6 U	0.92 UD	0.92 UD	4.6 UD	9.2 U	2.3 U
1,2-Dichlorotetrafluoroethane	7 U	7 U	7 U	7 U	1.8 U	70 U	3.5 U	3.5 U	3.5 U	3.5 U	7 U	3.5 U	7 U					
1,3,5-Trimethylbenzene	5 U	5 U	5 U	5 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	5 U	0.98 UD	0.98 UD	4.9 UD	9.8 U	2.5 U
1,3-Butadiene	2.2 U	2.2 U	2.2 U	2.2 U	0.55 U	22 U	1.1 U	1.1 U	2.3 U	1.1 U	2.2 U	1.1 U	2.2 U	0.44 UD	0.44 UD	2.2 UD	4.4 U	1.1 U
1,3-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	60 U	3 U	3 U	3 U	3 U	6 U	3 U	6 U	1.2 UD	1.2 UD	6 UD	12 U	3 U
1,4-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	60 U	3 U	3 U	3 U	3 U	6 U	3 U	6 U	1.2 UD	1.2 UD	6 UD	12 U	3 U
1,4-Dioxane																	7.2 U	
2-Butanone	6.3	89	75	170	3700	64000	100000	230000	110000	7800	18000	28000	15000	4000 D	7200 BD	17000 D	13000	2700
2-Hexanone	4 U	4 U	4 U	4 U	1 U	40 U	2.7	2 U	2 U	2 U	4 U	2 U	4 U	0.82 UD	0.82 UD	82 UD	8.2 U	2 U
4-Ethyltoluene	5 U	5 U	5 U	5 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	5 U	0.98 UD	0.98 UD	4.9 UD	9.8 U	2.5 U
4-Methyl-2-pentanone	4 U	4 U	4 U	4 U	1 U	40 U	2 U	2 U	2 U	2 U	4 U	2 U	4 U	0.82 UD	0.82 UD	4.1 UD	8.2 U	2 U
Acetone	530	32	52	29	460	5600	14000	6900	9200	1700	3200	6000	4500	2000 BD	1800 BD	2200 BD	3400	710
Benzene	13	12	6.2	4.8	5.6	32 U	11	7.1	11	6.3	5.5	8.2	5	4.2 D	4.5 D	4.2 D	6.4 U	2.8
Benzyl chloride	5.2 U	5.2 U	5.2 U	5.2 U	1.3 U	52 U	2.6 U	2.6 U	2.6 U	2.6 U	5.2 U	2.6 U	5.2 U	1 UD	1 UD	5.2 UD	10 U	2.6 U
Bromodichloromethane	6.6 U	6.6 U	6.6 U	6.6 U	1.7 U	66 U	3.3 U	3.3 U	3.3 U	3.3 U	6.6 U	3.3 U	6.6 U	1.3 UD	1.3 UD	6.7 UD	13 U	3.4 U
Bromoform	11 U	11 U	11 U	11 U	2.6 U	110 U	5.1 U	5.1 U	5.1 U	5.1 U	11 U	5.1 U	11 U	2.1 UD	2.1 UD	10 UD	21 U	5.2 U
Bromomethane	3.8 U	3.8 U	3.8 U	3.8 U	0.95 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	1.9 U	3.8 U	0.78 UD	0.78 UD	3.9 UD	7.8 U	1.9 U
Carbon disulfide	3.2 U	3.2 U	3.2 U	3.2 U	0.8 U	230	4	5.4	8.2	2.9	5.7	12	14	8 D	15 D	22 D	62 U	13
Carbon tetrachloride	6.2 U	6.2 U	6.2 U	6.2 U	1.6 U	62 U	3.1 U	3.1 U	3.1 U	3.1 U	6.2 U	3.1 U	6.2 U	1.3 UD	1.3 UD	6.3 UD	13 U	1.2
Chlorobenzene	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	46 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U	2.3 U	4.6 U	0.92 UD	0.92 UD	4.6 UD	9.2 U	2.3 U
Chloroethane	260	23	16	11	4.5	26 U	11	15	7	6.5	3.5	3.6	5.5	3.1 D	3.4 D	2.6 UD	7.5	1.3 U
Chloroform	83	32	20	16	2.8	48 U	7.2	6.5	5.8	2.6	4.8 U	2.4 U	4.8 U	1.1 D	1.2 D	4.9 UD	9.8 U	1.1
Chloromethane	2 U	2 U	2 U	2 U	0.5 U	20 U	1 U	1 U	1 U	1 U	2 U	1 U	2 U	0.41 UD	0.41 UD	2.1 UD	4.1 U	1 U
cis-1,2-Dichloroethene	2900	710	400	410	100	150	270	250	170	58	32	43	31	17 D	27 D	27 D	35	11
cis-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U	4.4 U	0.91 UD	0.91 UD	4.5 UD	9.1 U	2.3 U
Cyclohexane	3.4 U	3.4 U	3.4 U	3.4 U	0.85 U	34 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	1.7 U	3.4 U	0.69 UD	0.69 UD	3.4 UD	6.9 U	1.7 U
Dibromochloromethane	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	86 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U	4.3 U	8.6 U	1.7 UD	1.7 UD	8.5 UD	17 U	4.3 U
Dichlorodifluoromethane	5 U	5 U	5 U	5 U	2.7	50 U	3	3.2	2.5 U	2.5 U	5 U	2.5	5 U	2.4 D	3.7 D	4.9 UD	9.9 U	2.8
Ethanol	320	36	46	33	22	130	30	26	3.8 U	45	28	68	89	23 D	19 D	24 UD	150 U	12
Ethyl acetate	7.3 U	3.6 U	3.6 U	7.3 U	0.9 U	73 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	6.8	3.4 D	0.72 UD	3.8 D	7.2 U	3.6
Ethylbenzene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U	4.4 U	0.87 UD	0.87 UD	4.3 UD	8.7 U	2.2 U
Hexachlorobutadiene	22 U	22 U	22 U	22 U	5.4 U	220 U	11 U	11 U	5.3 U	11 U	22 U	5.3 U	11 U	2.1 UD	2.1 UD	11 UD	21 U	4.2
Hexane	5	3.6 U	3.6 U	3.6 U	2.3	36 U	3.3	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	7.1 U	1.4 UD	0.7 UD	3.5 UD	280 U	70 U
Isopropyl alcohol	190	5.1	4.6	5 U	4.6	290	24	57	35	2.5 U	20	54	59	11 D	13 D	25 UD	200 U	49 U
m,p-Xylene	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	86 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U	4.3 U	8.6 U	1.7 UD	1.7 UD	8.7 UD	17 U	4.3 U

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Eastern Small Retail Space																	
	EW-5-020309 2/3/2009	EW-5-021109 2/11/2009	EW-5-021809 2/18/2009	EW-5-022609 2/26/2009	EW-5-030609 3/6/2009	EW-5-041409 4/14/2009	EW-5-051509 5/15/2009	EW-5-061109 6/11/2009	EW-5-091709 9/17/2009	EW-5-122909 12/29/2009	EW-5-032610 3/26/2010	EW-5-070110 7/1/2010	EW-5-091610 9/16/2010	EW-5-120710 12/7/2010	EW-5-021711 2/17/2011	EW-5-060211 6/2/2011	EW-5-091511 9/15/2011	EW-5-120811 12/8/2011
Methyl methacrylate															0.82 UD	4.1 UD	8.2 U	2 U
Methylene chloride	7.8	7 U	9.6	7 U	12	720	21	15	7 U	25	14 U	8.6	7 U	1.4 UD	2 D	6.9 UD	69 U	4.2
Methyl-t-butyl ether	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	36 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	3.6 U	0.72 UD	0.72 UD	3.6 UD	7.2 U	1.8 U
n-Heptane	4 U	4 U	4 U	4 U	1 U	40 U	2 U	2 U	2 U	2 U	4 U	2 U	4 U	0.82 UD	0.82 UD	4.1 UD	8.2 U	2 U
o-Xylene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U	4.4 U	0.87 UD	0.87 UD	4.3 UD	8.7 U	2.2 U
Propylene (Propene)	3.5 U	1.8 U	1.8 U	3.5 U	0.45 U	35 U	0.9 U	0.9 U	3.5 U	3.5 U	6.9 U	8.7 U	6.9 U	1.4 UD	3.4 UD	17 UD	140 U	4.1
Styrene	4.2 U	17	4.2 U	4.2 U	1.7	42 U	2.2	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	4.2 U	0.85 UD	0.85 UD	4.3 UD	8.5 U	2.1 U
Tetrachloroethene	210	310	190	97	8	68 U	21	25	19	8.9	6.8 U	6.7	6.8 U	4 D	4100 D	6.8 UD	14 U	3.5
Tetrahydrofuran	16	110	69	140	2200	42000	61000	150000	94000	9700	23000	37000	29000	8200 D	11000 D	30000 D	41000	11000
Toluene	13	4.7	3.8 U	3.8 U	0.95 U	38 U	2.2	3.4	1.9 U	1.9 U	3.8 U	1.9 U	3.8 U	0.75 UD	1.6 D	3.8 UD	7.5 U	0.9
trans-1,2-Dichloroethene	26	6.1	4 U	4.7	1 U	40 U	2.6	2.8	2 U	2 U	4 U	2 U	4 U	0.79 UD	0.79 UD	4 UD	7.9 U	2 U
trans-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U	4.4 U	0.91 UD	0.91 UD	4.5 UD	9.1 U	2.3 U
Trichloroethene	51000	20000	14000	8900	2400	3800	4400	2700	6800	1600	1100	1200	1100	410 D	660 D	790 D	940	290
Trichlorofluoromethane	3500	200	120	67	16	56 U	27	41	2.8 U	53	7	7.4	5.8	5.1 D	5.8 D	5.6 UD	11 U	3.4
Trichlorotrifluoroethane	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	76 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U	3.8 U	7.6 U	1.5 UD	1.5 UD	7.7 UD	15 U	3.8 U
Vinyl acetate	15 U	3.6 U	3.6 U	15 U	0.9 U	150 U	1.8 U	1.8 U	7.1 U	3.6 U	7.1 U	1.8 U	7.1 U	1.4 UD	0.7 UD	70 UD	7.0 U	1.8 U
Vinyl chloride	2.6 U	2.6 U	2.6 U	2.6 U	0.65 U	26 U	1.3 U	5.3	1.3 U	3	3.4	3.1	4.3	2.4 D	3.7 D	3.3 D	6.2	1.3 U

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Eastern Small Retail Space					Extraction Well - Center Small Retail Space												
	EW-5-030812 3/8/2012	EW-5-061412 6/14/2012	EW-5-091312 9/13/2012	EW-5-010313 1/3/2013	EW-5-031513 3/15/2013	EW-6-020309 2/3/2009	EW-6-021109 2/11/2009	EW-6-021809 2/18/2009	EW-6-022609 2/26/2009	EW-6-030609 3/6/2009	EW-6-041409 4/14/2009	EW-6-051509 5/15/2009	EW-6-061109 6/11/2009	EW-6-091709 9/17/2009	EW-6-122909 12/29/2009	EW-6-070110 7/1/2010	EW-6-091610 9/16/2010	EW-6-120710 12/7/2010
1,1,1-Trichloroethane	81	100	190	0.55 U	0.55 U	69000	32000	21000	16000	16000	5600	8200	5700	5400	1100	430	390	130 D
1,1,2,2-Tetrachloroethane	3.4 U	0.69 U	0.69 U	0.69 U	0.69 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	68 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	6.8 U	0.69 UD
1,1,2-Trichloroethane	2.7 U	0.55 U	0.55 U	0.55 U	0.55 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	54 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	5.4 U	0.55 UD
1,1-Dichloroethane	11	12	21	0.40 U	0.4 U	5200	2500	2100	2200	1600	780	1200	1100	930	580	47	38	21 D
1,1-Dichloroethene	4.5	4.5	6.9	0.40 U	0.4 U	850	210	100	110	55	74	87	83	80	6.4	3.5	4 U	0.4 UD
1,2,4-Trichlorobenzene	15 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	74 U	3.7 U	3.7 U	3.7 U	7.5 U	3.7 U	7.4 U	0.74 UD
1,2,4-Trimethylbenzene	4.9 U	0.2	0.63	0.49 U	0.49 U	5 U	5 U	5 U	16	6.2	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.49 UD
1,2-Dibromoethane (EDB)	3.8 U	0.77 U	0.77 U	0.77 U	0.77 U	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	76 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U	0.77 UD
1,2-Dichlorobenzene	6 U	0.6 U	0.6 U	0.60 U	0.6 U	6 U	6 U	6 U	6 U	6 U	60 U	3 U	3 U	3 U	3 U	3 U	6 U	0.6 UD
1,2-Dichloroethane	2 U	0.17	0.4 U	0.40 U	0.4 U	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U	4 U	0.4 UD
1,2-Dichloropropane	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	46 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U	0.46 UD
1,2-Dichlorotetrafluoroethane						7 U	7 U	7 U	7 U	7 U	70 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	7 U	
1,3,5-Trimethylbenzene	4.9 U	0.49 U	0.19	0.49 U	0.49 U	5 U	5 U	5 U	7.3	5 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.49 UD
1,3-Butadiene	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	22 U	1.1 U	1.1 U	2.3 U	1.1 U	1.1 U	2.2 U	0.22 UD
1,3-Dichlorobenzene	6 U	0.6 U	0.6 U	0.60 U	0.6 U	6 U	6 U	6 U	6 U	6 U	60 U	3 U	3 U	3 U	3 U	3 U	6 U	0.6 UD
1,4-Dichlorobenzene	6 U	0.6 U	0.6 U	0.60 U	0.6 U	6 U	6 U	6 U	6 U	6 U	60 U	3 U	3 U	3 U	3 U	3 U	6 U	0.6 UD
1,4-Dioxane																		
2-Butanone	1800	870	840	9.5	1.7	120	280	300	130	97	160	37	65	8.7	23	1800	110	20 D
2-Hexanone	4.1 U	0.43	0.41 U	0.41 U	0.41 U	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U	4 U	0.41 UD
4-Ethyltoluene	4.9 U	0.49 U	0.18	0.49 U	0.49 U	5 U	5 U	5 U	5 U	5 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.49 UD
4-Methyl-2-pentanone	4.1 U	0.27	0.34	0.41 U	0.41 U	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U	4 U	0.41 UD
Acetone	400	440	670	11	8.5	580	64	81	33	22	410	16	20	4.8 U	27	490	70	15 BD
Benzene	2	1.1	3.7	0.54	0.47	5.2	5.2	4.1	3.2 U	3.2 U	32 U	1.7	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	0.92 D
Benzyl chloride	5.2 U	0.52 U	0.52 U	0.52 U	0.52 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	52 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	5.2 U	0.52 UD
Bromodichloromethane	3.4 U	0.67 U	0.67 U	0.67 U	0.67 U	6.6 U	6.6 U	6.6 U	6.6 U	6.6 U	66 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	6.6 U	0.67 UD
Bromoform	10 U	1 U	1 U	1.0 U	1 U	11 U	11 U	11 U	11 U	11 U	110 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	11 U	1 UD
Bromomethane	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	0.39 UD
Carbon disulfide	11	25	49	3.1 U	3.1 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	180	1.6 U	1.6 U	1.6 U	1.6 U	8	12	0.66 D
Carbon tetrachloride	3.1 U	0.4	0.38	0.63 U	0.39	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	62 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	6.2 U	0.63 UD
Chlorobenzene	4.6 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	46 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U	0.46 UD
Chloroethane	2.6 U	2.9	5.3	0.26 U	0.26 U	140	50	34	18	13	26 U	13	14	11	4	1.3 U	2.8	0.26 UD
Chloroform	2.4 U	0.98	1.1	0.49 U	0.49 U	42	24	19	29	21	50	14	12	12	7.2	3.7	4.8 U	2.4 D
Chloromethane	2.1 U	0.21 U	0.21 U	1	1.1	2 U	2 U	2 U	2 U	2 U	34	1 U	1 U	1 U	1 U	38	40	0.21 UD
cis-1,2-Dichloroethene	6.9	8.6	14	0.40 U	0.4 U	700	360	220	250	150	120	190	170	130	36	11	7.9	2.3 D
cis-1,3-Dichloropropene	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	0.45 UD
Cyclohexane	3.4 U	0.34 U	0.34 U	0.34 U	0.34 U	3.4 U	5.3	3.4 U	3.4 U	3.4 U	34 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	0.34 UD
Dibromochloromethane	4.3 U	0.85 U	0.85 U	0.85 U	0.85 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	86 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U	0.85 UD
Dichlorodifluoromethane	4.9 U	2.9	2.6	2.5	2.5	5 U	5 U	5 U	5 U	5 U	50 U	3.6	3.9	2.7	2.5 U	2.5 U	5 U	2.3 D
Ethanol	290	14	100	9.9	3.5	360	38	73	38	25	110	18	14	6.7	18	15	19 U	4.6 D
Ethyl acetate	26	4.2	30	0.36 U	1.2	7.3 U	3.6 U	3.6 U	7.3 U	3.6 U	73 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	0.36 UD
Ethylbenzene	4.3 U	0.12	0.69	0.43 U	0.43 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	0.43 UD
Hexachlorobutadiene	11 U	1.1 U	1.1 U	1.1 U	1.1 U	22 U	22 U	22 U	22 U	22 U	220 U	11 U	11 U	5.3 U	11 U	5.3 U	11 U	1.1 UD
Hexane	9.4	4.3	2	0.74	2.2	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	36 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	7.1 U	0.7 UD
Isopropyl alcohol	13	9.8 U	11	1.1	9.8 U	210	18	33	15	10	230	8.2	11	20	2.5 U	1.2 U	9.4	0.49 UD
m,p-Xylene	5.4	0.87 U	1.9	0.75	0.87 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	86 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U	0.87 UD

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Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Eastern Small Retail Space					Extraction Well - Center Small Retail Space													
	EW-5-030812 3/8/2012	EW-5-061412 6/14/2012	EW-5-091312 9/13/2012	EW-5-010313 1/3/2013	EW-5-031513 3/15/2013	EW-6-020309 2/3/2009	EW-6-021109 2/11/2009	EW-6-021809 2/18/2009	EW-6-022609 2/26/2009	EW-6-030609 3/6/2009	EW-6-041409 4/14/2009	EW-6-051509 5/15/2009	EW-6-061109 6/11/2009	EW-6-091709 9/17/2009	EW-6-122909 12/29/2009	EW-6-070110 7/1/2010	EW-6-091610 9/16/2010	EW-6-120710 12/7/2010	
Methyl methacrylate	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U														
Methylene chloride	15	11	2.5	1.8	6.9	7 U	7 U	7.5	7 U	7 U	780	12	15	7 U	27	10	7 U	1.3 D	
Methyl-t-butyl ether	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	36 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	0.36 UD	
n-Heptane	4.1 U	0.41 U	0.52	0.41 U	0.41 U	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U	4 U	0.41 UD	
o-Xylene	4.3 U	0.14	0.73	0.43 U	0.43 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	0.43 UD	
Propylene (Propene)	15	6.9 U	3.9	6.9 U	6.9 U	3.5 U	1.8 U	1.8 U	3.5 U	1.8 U	35 U	0.9 U	0.9 U	3.5 U	3.5 U	8.7 U	6.9 U	0.69 UD	
Styrene	4.3 U	0.46	0.38	0.43 U	0.43 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	42 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	0.43 UD	
Tetrachloroethene	3.4 U	0.92	2.1	0.68 U	0.68 U	330	290	130	290	190	300	190	210	250	68	34	23	8.1 D	
Tetrahydrofuran	4500	7700	1000	0.29 U	0.29 U	75	480	260	730	570	130	110	87	9.1	31	42000	53000	480 D	
Toluene	37	0.58	5.6	0.66	0.4	12	3.8 U	3.8 U	3.8 U	3.8 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	0.38 UD	
trans-1,2-Dichloroethene	2 U	0.4 U	0.18	0.40 U	0.4 U	12	6.3	4.2	6.4	4 U	40 U	2.6	2.7	2	2.1	2 U	4 U	0.4 UD	
trans-1,3-Dichloropropene	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	0.45 UD	
Trichloroethene	170	220	400	0.54 U	0.54 U	12000	6900	4200	4400	4800	3900	5400	4700	6100	2000	730	650	250 D	
Trichlorofluoromethane	5.6 U	4.9	8.5	2.4	1.4	2300	870	630	350	250	150	230	440	700	320	6.7	25	28 D	
Trichlorotrifluoroethane	3.8 U	0.77 U	0.57	0.77 U	0.61	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	76 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U	0.77 UD	
Vinyl acetate	7 U	0.7 U	0.7 U	0.70 U	0.7 U	15 U	3.6 U	3.6 U	15 U	3.6 U	150 U	1.8 U	1.8 U	7.1 U	3.6 U	1.8 U	7.1 U	0.7 UD	
Vinyl chloride	1.3 U	2.9	4.7	0.26 U	0.26 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	26 U	1.3 U	1.3 U	1.3 U	1.3 U	1.7	2.9	0.26 UD	

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Center Small Retail Space										Extraction Well - Western Small Retail Space								
	EW-6-021711 2/17/2011	EW-6-060211 6/2/2011	EW-6-091511 9/15/2011	EW-6-120811 12/8/2011	EW-6-030812 3/8/2012	EW-6-061412 6/14/2012	EW-6-0913412 9/13/2012	EW-6-010313 1/3/2013	EW-6-031513 3/15/2013	EW-7-020309 2/3/2009	EW-7-021109 2/11/2009	EW-7-021809 2/18/2009	EW-7-022609 2/26/2009	EW-7-030609 3/6/2009	EW-7-041409 4/14/2009	EW-7-051509 5/15/2009	EW-7-061109 6/11/2009	EW-7-091709 9/17/2009	
1,1,1-Trichloroethane	0.55 UD	80	230	33	0.27 U	75	0.55 U	0.55 U	0.55 U	5600	8500	7800	8200	8100	1600	3600	2600	1400	
1,1,2,2-Tetrachloroethane	0.69 UD	6.9 U	14 U	3.4 U	0.34 U	0.69 U	0.69 U	0.69 U	0.69 U	6.8 U	1.4 U	1.7 U	1.7 U	1.7 U	6.8 U	3.4 U	3.4 U	3.4 U	
1,1,2-Trichloroethane	0.55 UD	5.5 U	11 U	2.7 U	0.27 U	0.55 U	0.55 U	0.55 U	0.55 U	5.4 U	1.1 U	1.4 U	1.4 U	1.4 U	5.4 U	2.7 U	2.7 U	2.7 U	
1,1-Dichloroethane	0.4 UD	12	27	6.4	0.2 U	9.6	0.4 U	0.40 U	0.4 U	1700	1800	1600	2100	1700	590	1000	1100	970	
1,1-Dichloroethene	0.4 UD	4 U	7.9 U	2 U	0.2 U	0.84	0.4 U	0.40 U	0.4 U	14	15	8.5	9.4	6.6	4 U	4.2	4.2	4.5	
1,2,4-Trichlorobenzene	0.74 UD	7.4 U	30 U	7.4 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	1.5 U	1.9 U	1.9 U	1.9 U	7.4 U	3.7 U	3.7 U	3.7 U	
1,2,4-Trimethylbenzene	0.49 UD	4.9 U	9.8 U	2.5 U	0.49 U	0.26	0.6	0.49 U	0.49 U	5 U	1 U	1.3 U	1.3 U	1.3 U	5 U	2.5 U	2.5 U	2.5 U	
1,2-Dibromoethane (EDB)	0.77 UD	7.7 U	15 U	3.8 U	0.38 U	0.77 U	0.77 U	0.77 U	0.77 U	7.6 U	1.6 U	1.9 U	1.9 U	1.9 U	7.6 U	3.8 U	3.8 U	3.8 U	
1,2-Dichlorobenzene	0.6 UD	6 U	12 U	3 U	0.6 U	0.6 U	0.6 U	0.60 U	0.6 U	6 U	1.2 U	1.5 U	1.5 U	1.5 U	6 U	3 U	3 U	3 U	
1,2-Dichloroethane	0.4 UD	4 U	8.1 U	2 U	0.2 U	0.4 U	0.4 U	0.40 U	0.4 U	4 U	0.8 U	1 U	1 U	1 U	4 U	2 U	2 U	2 U	
1,2-Dichloropropane	0.46 UD	4.6 U	9.2 U	2.3 U	0.23 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	0.92 U	1.2 U	1.2 U	1.2 U	4.6 U	2.3 U	2.3 U	2.3 U	
1,2-Dichlorotetrafluoroethane										7 U	1.4 U	1.8 U	1.8 U	1.8 U	7 U	3.5 U	3.5 U	3.5 U	
1,3,5-Trimethylbenzene	0.49 UD	4.9 U	9.8 U	2.5 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	5 U	1 U	1.3 U	1.3 U	1.3 U	5 U	2.5 U	2.5 U	2.5 U	
1,3-Butadiene	0.22 UD	2.2 U	4.4 U	1.1 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	0.44 U	0.55 U	0.55 U	0.55 U	2.2 U	1.1 U	1.1 U	2.3 U	
1,3-Dichlorobenzene	0.6 UD	6 U	12 U	3 U	0.6 U	0.6 U	0.6 U	0.60 U	0.6 U	6 U	1.2 U	1.5 U	1.5 U	1.5 U	6 U	3 U	3 U	3 U	
1,4-Dichlorobenzene	0.6 UD	6 U	12 U	3 U	0.6 U	0.6 U	0.6 U	0.60 U	0.6 U	6 U	1.2 U	1.5 U	1.5 U	1.5 U	6 U	3 U	3 U	3 U	
1,4-Dioxane			7.2 U																
2-Butanone	1.9 BD	59 U	240 U	13	2.1	200	3.7	0.84	1.9	8.7	12	7.3	8.5	5.5	4.5	7.1	16	4.9	
2-Hexanone	0.41 UD	82 U	8.2 U	2 U	0.41 U	0.7	0.52	0.41 U	0.41 U	4 U	0.8 U	1 U	1 U	1 U	4 U	2 U	2 U	2 U	
4-Ethyltoluene	0.49 UD	4.9 U	9.8 U	2.5 U	0.49 U	0.49 U	0.28	0.49 U	0.49 U	5 U	1 U	1.3 U	1.3 U	1.3 U	5 U	2.5 U	2.5 U	2.5 U	
4-Methyl-2-pentanone	0.41 UD	4.1 U	8.2 U	2 U	0.41 U	0.35	0.41 U	0.41 U	0.41 U	4 U	0.8 U	1 U	1 U	1 U	4 U	2 U	2 U	2 U	
Acetone	15 BD	48 U	190 U	21	9.9	36	25	6.4	6.3	580	38	58	30	24	15	24	24	7.9	
Benzene	1.1 D	3.2 U	6.4 U	1.6 U	0.31	1.2	0.77	0.39	0.4	3.2 U	3.9	4.5	1.9	2.3	3.2 U	2.6	2.8	3	
Benzyl chloride	0.52 UD	5.2 U	10 U	2.6 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	5.2 U	1.1 U	1.3 U	1.3 U	1.3 U	5.2 U	2.6 U	2.6 U	2.6 U	
Bromodichloromethane	0.67 UD	6.7 U	13 U	3.4 U	0.34 U	0.67 U	0.67 U	0.67 U	0.67 U	6.6 U	1.4 U	1.7 U	1.7 U	1.7 U	6.6 U	3.3 U	3.3 U	3.3 U	
Bromoform	1 UD	10 U	21 U	5.2 U	1 U	1 U	1 U	1.0 U	1 U	11 U	2.1 U	2.6 U	2.6 U	2.6 U	11 U	5.1 U	5.1 U	5.1 U	
Bromomethane	0.39 UD	3.9 U	7.8 U	1.9 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	3.8 U	0.76 U	0.95 U	0.95 U	0.95 U	3.8 U	1.9 U	1.9 U	1.9 U	
Carbon disulfide	0.31 UD	11 D	62 U	7.1	3.1 U	29	3.1 U	3.1 U	3.1 U	5.7	3.4	2.7	3.7	3.3	3.2 U	3.2	2.7	2.1	
Carbon tetrachloride	0.63 UD	6.3 UD	13 U	3.1 U	0.39	0.34	0.4	0.63 U	0.23	6.2 U	1.3 U	1.6 U	1.6 U	1.6 U	6.2 U	3.1 U	3.1 U	3.1 U	
Chlorobenzene	0.46 UD	4.6 UD	9.2 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	0.92 U	1.2 U	1.2 U	1.2 U	4.6 U	2.3 U	2.3 U	2.3 U	
Chloroethane	0.26 UD	2.6 UD	5.3 U	1.3 U	0.26 U	1.4	0.26 U	0.26 U	0.26 U	170	150	88	41	33	7.1	9.6	10	8.1	
Chloroform	0.49 UD	4.9 UD	9.8 U	1	0.36	0.92	0.21	0.49 U	0.49 U	4.8 U	1	1.2 U	1.3	1.2 U	4.8 U	2.7	2.6	4.6	
Chloromethane	1 D	16 D	45	2.9	1.5	7.8	1.3	1.1	1.2	2 U	0.4 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	1 U	
cis-1,2-Dichloroethene	0.4 UD	4 UD	7.9 U	0.83	0.2 U	2.8	0.4 U	0.40 U	0.4 U	1100	1300	1200	1700	1200	520	1100	1200	1300	
cis-1,3-Dichloropropene	0.45 UD	4.5 UD	9.1 U	2.3 U	0.23 U	0.45 U	0.45 U	0.45 U	0.45 U	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	2.2 U	2.2 U	
Cyclohexane	0.34 UD	3.4 UD	6.9 U	1.7 U	0.34 U	0.34 U	0.49	0.34 U	0.34 U	3.4 U	5.6	5	3.7	2.1	3.4 U	1.7 U	1.7 U	1.7 U	
Dibromochloromethane	0.85 UD	8.5 UD	17 U	4.3 U	0.43 U	0.85 U	0.85 U	0.85 U	0.85 U	8.6 U	1.8 U	2.2 U	2.2 U	2.2 U	8.6 U	4.3 U	4.3 U	4.3 U	
Dichlorodifluoromethane	3.6 D	4.9 UD	9.9 U	3	2.2	2.9	2.9	2.6	2.5	5 U	2.5	3.2	770	2.6	5 U	2.9	3.3	2.5 U	
Ethanol	11 D	38 UD	150 U	38 U	29	5.8	68	8.6	3.5	350	26	29	17	15	3.8 U	19	18	12	
Ethyl acetate	0.36 UD	3.6 UD	7.2 U	1.8 U	0.52	1.2	24	0.36 U	0.36 U	7.3 U	0.72 U	0.9 U	1.9 U	0.9 U	7.3 U	1.8 U	1.8 U	1.8 U	
Ethylbenzene	0.43 UD	4.3 UD	8.7 U	2.2 U	0.43 U	0.18	0.66	0.43 U	0.43 U	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	2.2 U	2.2 U	
Hexachlorobutadiene	1.1 UD	11 UD	21 U	5.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	22 U	4.3 U	5.4 U	5.4 U	5.4 U	22 U	11 U	11 U	5.3 U	
Hexane	1.3 D	3.5 UD	280 U	70 U	1.4	1.2	7.6	14. U	0.6	10	10	7.6	5.5	3.1	3.6 U	4	2.1	1.8 U	
Isopropyl alcohol	2.9 D	25 UD	200 U	49 U	1.3	9.8 U	7.6	0.69	9.8 U	210	18	21	12	8.5	5 U	12	17	2.5 U	
m,p-Xylene	0.94 D	8.7 UD	17 U	4.3 U	0.87 U	0.24	1.9	0.87 U	0.87 U	8.6 U	1.8 U	2.2 U	2.2 U	2.2 U	8.6 U	4.3 U	4.3 U	4.3 U	

Table 1.
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Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Center Small Retail Space										Extraction Well - Western Small Retail Space								
	EW-6-021711 2/17/2011	EW-6-060211 6/2/2011	EW-6-091511 9/15/2011	EW-6-120811 12/8/2011	EW-6-030812 3/8/2012	EW-6-061412 6/14/2012	EW-6-0913412 9/13/2012	EW-6-010313 1/3/2013	EW-6-031513 3/15/2013	EW-7-020309 2/3/2009	EW-7-021109 2/11/2009	EW-7-021809 2/18/2009	EW-7-022609 2/26/2009	EW-7-030609 3/6/2009	EW-7-041409 4/14/2009	EW-7-051509 5/15/2009	EW-7-061109 6/11/2009	EW-7-091709 9/17/2009	
Methyl methacrylate	0.41 UD	4.1 UD	8.2 U	2 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U										
Methylene chloride	2.8 D	6.9 UD	69 U	3.6	4.8	2.5	14	2.1	1.4	9.3	2.6	8	1.8	1.8 U	20	29	16	7 U	
Methyl-t-butyl ether	0.36 UD	3.6 UD	7.2 U	1.8 U	0.36 U	0.36 U	0.13	0.36 U	0.36 U	3.6 U	3.5	2.9	4.9	3.1	3.6 U	1.8 U	1.8 U	1.8 U	
n-Heptane	0.41 UD	4.1 UD	8.2 U	2 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	4 U	1.4	1 U	1 U	1 U	4 U	2 U	2 U	2 U	
o-Xylene	0.43 UD	4.3 UD	8.7 U	2.2 U	0.43 U	0.16	0.73	0.43 U	0.43 U	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	2.2 U	2.2 U	
Propylene (Propene)	1.7 UD	17 UD	140 U	3.8	6.9 U	2.8	6.9 U	6.9 U	6.9 U	3.5 U	160	110	0.87 U	0.45 U	3.5 U	0.9 U	0.9 U	3.5 U	
Styrene	0.43 UD	4.3 UD	8.5 U	2.1 U	0.43 U	0.2	0.35	0.43 U	0.43 U	4.2 U	0.84 U	1.1 U	1.1 U	1.1 U	4.2 U	2.1 U	2.1 U	2.1 U	
Tetrachloroethene	1.2 D	6.8 UD	17	2.4	0.76	4.6	0.88	0.68 U	0.68 U	66	69	56	84	69	40	140	230	410	
Tetrahydrofuran	0.29 UD	13000 D	32000	3900	3.7	8100	0.29 U	0.29 U	0.27	41	23	12	14	7.5	3 U	5.6	15	4.1	
Toluene	2.4 D	3.8 UD	9.8	1.9 U	0.36	0.7	5.3	0.46	0.31	14	2.9	3.6	1.7	0.95 U	3.8 U	1.9 U	1.9 U	1.9 U	
trans-1,2-Dichloroethene	0.4 UD	4 UD	7.9 U	2 U	0.2 U	0.4 U	0.4 U	0.40 U	0.4 U	150	140	90	90	80	48	120	140	150	
trans-1,3-Dichloropropene	0.45 UD	4.5 UD	9.1 U	2.3 U	0.23 U	0.45 U	0.45 U	0.45 U	0.45 U	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	2.2 U	2.2 U	
Trichloroethene	0.54 UD	190 D	390	66	0.27 U	180	0.21	0.54 U	0.54 U	230	210	180	180	200	110	330	420	920	
Trichlorofluoromethane	1.7 D	11 D	34	11	1	15	2	1.9	1.3	1800	1400	900	690	640	190	310	660	1400	
Trichlorotrifluoroethane	0.86 D	7.7 UD	15 U	3.8 U	0.38 U	0.77 U	0.6	0.77 U	0.63	7.6 U	1.6 U	1.9 U	1.9 U	1.9 U	7.6 U	3.8 U	3.8 U	3.8 U	
Vinyl acetate	0.35 UD	70 UD	7.0 U	1.8 U	0.7 U	0.7 U	0.7 U	0.70 U	0.7 U	15 U	0.72 U	0.9 U	3.6 U	0.9 U	15 U	1.8 U	1.8 U	7.1 U	
Vinyl chloride	0.26 UD	2.6 UD	5.1 U	1.3 U	0.13 U	1.5	0.26 U	0.26 U	0.26 U	280	370	180	48	21	2.6 U	2.7	3.2	1.3 U	

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Western Small Retail Space														CT IACTIND 2003 (ug/m ³)
	EW-7-122909 12/29/2009	EW-7-032610 3/26/2010	EW-7-070110 7/1/2010	EW-7-091610 9/16/2010	EW-7-120710 12/7/2010	EW-7-021711 2/17/2011	EW-7-060211 6/2/2011	EW-7-091511 9/15/2011	EW-7-120811 12/8/2011	EW-7-030812 3/8/2012	EW-7-061412 6/14/2012	EW-7-091312 9/13/2012	EW-7-010313 1/3/2013	EW-7-031513 3/15/2013	
1,1,1-Trichloroethane	340	51	250	290	160 D	110 D	5.5 UD	110	66	11	47	95	0.55 U	3.1	500
1,1,2,2-Tetrachloroethane	3.4 U	0.68 U	0.68 U	0.68 U	0.69 UD	0.69 UD	6.9 UD	1.4 U	0.69 U	3.4 U	0.69 U	0.69 U	0.69 U	0.69 U	0.14
1,1,2-Trichloroethane	2.7 U	0.54 U	0.54 U	0.54 U	0.55 UD	0.55 UD	5.5 UD	1.1 U	0.55 U	2.7 U	0.55 U	0.55 U	0.55 U	0.55 U	12
1,1-Dichloroethane	470	85	320	340	220 D	150 D	45 D	150	80	6.4	42	100	0.40 U	2	430
1,1-Dichloroethene	2 U	0.4 U	0.81	0.94	0.63 D	0.4 UD	4 UD	0.79 U	0.13	2 U	0.4 U	0.4 U	0.40 U	0.4 U	20
1,2,4-Trichlorobenzene	7.5 U	1.5 U	0.74 U	0.74 U	0.74 UD	0.74 UD	7.4 UD	3.0 U	1.5 U	15 U	1.5 U	1.5 U	1.5 U	1.5 U	NA
1,2,4-Trimethylbenzene	2.5 U	2.5	0.5 U	0.5 U	0.49 UD	0.49 UD	4.9 UD	0.98 U	0.32	4.9 U	0.32	0.97	0.92	0.3	52
1,2-Dibromoethane (EDB)	3.8 U	0.76 U	0.76 U	0.76 U	0.77 UD	0.77 UD	7.7 UD	1.5 U	0.77 U	3.8 U	0.77 U	0.77 U	0.77 U	0.77 U	0.038
1,2-Dichlorobenzene	3 U	0.6 U	0.6 U	0.6 U	0.6 UD	0.6 UD	6 UD	1.2 U	0.6 U	6 U	0.6 U	0.6 U	0.60 U	0.6 U	410
1,2-Dichloroethane	2 U	0.4 U	0.4 U	0.4 U	0.4 UD	0.4 UD	4 UD	0.81 U	0.4 U	2 U	0.4 U	0.4 U	0.40 U	0.4 U	0.31
1,2-Dichloropropane	2.3 U	0.46 U	0.46 U	0.46 U	0.46 UD	0.46 UD	4.6 UD	0.92 U	0.46 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	0.42
1,2-Dichlorotetrafluoroethane	3.5 U	0.7 U	0.7 U	0.7 U											NA
1,3,5-Trimethylbenzene	2.5 U	1.1	0.5 U	0.5 U	0.49 UD	0.49 UD	4.9 UD	0.98 U	0.49 U	4.9 U	0.49 U	0.5	0.49 U	0.49 U	52
1,3-Butadiene	1.1 U	0.22 U	0.22 U	0.22 U	0.22 UD	0.22 UD	2.2 UD	0.44 U	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	NA
1,3-Dichlorobenzene	3 U	0.6 U	0.6 U	0.6 U	0.6 UD	0.6 UD	6 UD	1.2 U	0.6 U	6 U	0.6 U	0.6 U	0.60 U	0.6 U	410
1,4-Dichlorobenzene	3 U	0.6 U	0.6 U	0.6 U	0.6 UD	0.6 UD	6 UD	1.2 U	0.6 U	6 U	0.6 U	0.6 U	0.60 U	0.6 U	24
1,4-Dioxane								0.72 U							NA
2-Butanone	3.5	31	3.8	1.8	4.1 D	5.3 BD	59 UD	24 U	6.2	100	14	3.6	18	210	500
2-Hexanone	2 U	0.4 U	1	0.4 U	0.41 UD	0.41 UD	82 UD	0.82 U	0.14	4.1 U	0.28	0.64	0.41 U	0.39	NA
4-Ethyltoluene	2.5 U	0.5 U	0.5 U	0.5 U	0.49 UD	0.49 UD	4.9 UD	0.98 U	0.49 U	4.9 U	0.49 U	0.21	0.49 U	0.49 U	NA
4-Methyl-2-pentanone	2 U	0.4 U	0.4 U	0.4 U	0.41 UD	0.41 UD	4.1 UD	0.82 U	0.13	4.1 U	1.6	0.31	0.55	0.41 U	200
Acetone	49	26	25	12	42 BD	35 BD	48 UD	23	12	46	31	17	23	55	500
Benzene	2.2	1.5	1.7	2.1	1.4 D	1.6 D	3.2 UD	2.5	1.6	3.2 U	1.5	1.2	0.89	0.54	3.3
Benzyl chloride	2.6 U	0.52 U	0.52 U	0.52 U	0.52 UD	0.52 UD	5.2 UD	1.0 U	0.52 U	5.2 U	0.52 U	0.52 U	0.52 U	0.52 U	NA
Bromodichloromethane	3.3 U	0.66 U	0.66 U	0.66 U	0.67 UD	0.67 UD	6.7 UD	1.3 U	0.67 U	3.4 U	3.2	0.67 U	0.67 U	0.67 U	0.46
Bromoform	5.1 U	1.1 U	1.1 U	1.1 U	1 UD	1 UD	10 UD	2.1 U	1 U	10 U	1 U	1 U	1.0 U	1 U	7.3
Bromomethane	1.9 U	0.38 U	0.38 U	0.38 U	0.39 UD	0.39 UD	3.9 UD	0.78 U	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	NA
Carbon disulfide	1.6 U	1.5	0.93	0.9	0.78 D	0.31 UD	3.1 UD	6.2 U	3.1 U	31 U	0.41	3.1 U	3.1 U	0.57	NA
Carbon tetrachloride	3.1 U	0.62 U	0.62 U	0.62 U	0.63 UD	0.63 UD	6.3 UD	1.3 U	0.34	3.1 U	0.3	0.33	0.78	0.47	0.54
Chlorobenzene	2.3 U	0.46 U	0.46 U	0.46 U	0.46 UD	0.46 UD	4.6 UD	0.92 U	0.46 U	4.6 U	0.46 U	0.46 U	0.46 U	0.46 U	200
Chloroethane	6.5	1.6	2.2	3.6	2 D	0.26 UD	2.6 UD	1.9	0.26 U	2.6 U	0.82	0.26 U	0.26 U	0.26 U	500
Chloroform	2.7	1.1	4.2	4.4	3.9 D	3 D	4.9 UD	5	3.8	2.4 U	3.1	4.1	0.49 U	0.36	0.5
Chloromethane	1 U	0.2 U	0.2 U	0.2 U	0.21 UD	0.21 UD	2.1 UD	0.41 U	0.21 U	2.1 U	0.21 U	0.21 U	1.4	0.21 U	80
cis-1,2-Dichloroethene	680	120	660	490	350 D	250 D	65 D	210	99	5.1	53	120	0.40 U	1.4	100
cis-1,3-Dichloropropene	2.2 U	0.44 U	0.44 U	0.44 U	0.45 UD	0.45 UD	4.5 UD	0.91 U	0.45 U	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	2.9
Cyclohexane	1.7 U	0.34 U	0.34 U	0.41	0.34 UD	0.34 UD	3.4 UD	0.69 U	0.34 U	3.4 U	0.34 U	0.34 U	0.34 U	0.34 U	NA
Dibromochloromethane	4.3 U	0.86 U	0.86 U	0.86 U	0.85 UD	0.85 UD	8.5 UD	1.7 U	0.85 U	4.3 U	0.85 U	0.85 U	0.85 U	0.85 U	NA
Dichlorodifluoromethane	2.5 U	1.5	2.2	1.5	2.1 D	0.49 UD	4.9 UD	2.7	2.6	4.9 U	3	0.49 U	2.7	2.5	500
Ethanol	18	37	31	1.9 U	1.9 UD	18 D	38 UD	22	23	160	31	140	1200	27	NA
Ethyl acetate	1.8 U	0.36 U	0.36 U	0.36 U	0.36 UD	0.36 UD	3.6 UD	0.72 U	0.36 U	3.6 U	11	0.63	0.36 U	3	NA
Ethylbenzene	2.2 U	0.57	0.44 U	0.44 U	0.43 UD	0.43 UD	4.3 UD	0.87 U	0.26	4.3 U	0.21	0.47	0.44	0.13	290
Hexachlorobutadiene	11 U	2.2 U	1.1 U	1.1 U	1.1 UD	1.1 UD	11 UD	2.1 U	1.1 U	11 U	1.1 U	1.1 U	1.1 U	1.1 U	NA
Hexane	1.8 U	0.36 U	0.97	0.71 U	0.87 D	0.35 UD	3.5 UD	28 U	14 U	4	0.55	14 U	1.5	3.5	NA
Isopropyl alcohol	2.5 U	80	2.2	2.6	2.8 D	0.25 UD	25 UD	30	9.8 U	98 U	14	9.8 U	12	9.8 U	NA
m,p-Xylene	4.3 U	1.4	0.93	1	0.87 UD	0.87 UD	8.7 UD	1.7 U	0.82	8.7 U	0.45	1.3	1.5	0.33	500

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Western Small Retail Space														CT IACTIND 2003 (ug/m ³)
	EW-7-122909 12/29/2009	EW-7-032610 3/26/2010	EW-7-070110 7/1/2010	EW-7-091610 9/16/2010	EW-7-120710 12/7/2010	EW-7-021711 2/17/2011	EW-7-060211 6/2/2011	EW-7-091511 9/15/2011	EW-7-120811 12/8/2011	EW-7-030812 3/8/2012	EW-7-061412 6/14/2012	EW-7-091312 9/13/2012	EW-7-010313 1/3/2013	EW-7-031513 3/15/2013	
Methyl methacrylate						0.41 UD	4.1 UD	0.82 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U	NA
Methylene chloride	27	1.4 U	2.4	0.81	1.9 D	2.4 D	6.9 UD	6.9 U	1.5	33	2.1	5.4	5.6	10	17
Methyl-t-butyl ether	1.8 U	0.36 U	0.36 U	0.36 U	0.36 UD	0.36 UD	3.6 UD	0.72 U	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	190
n-Heptane	2 U	0.4 U	0.4 U	0.4 U	0.41 UD	0.41 UD	4.1 UD	0.82 U	0.22	4.1 U	0.49	0.75	0.41 U	0.41 U	NA
o-Xylene	2.2 U	0.65	0.44 U	0.44 U	0.43 UD	0.43 UD	4.3 UD	0.87 U	0.38	4.3 U	0.18	0.52	0.51	0.15	500
Propylene (Propene)	3.5 U	0.69 U	1.8 U	0.69 U	0.69 UD	1.7 UD	17 UD	14 U	6.9 U	13	6.9 U	6.9 U	6.9 U	6.9 U	NA
Styrene	2.1 U	0.42 U	0.67	0.47	0.43 UD	0.43 UD	4.3 UD	0.85 U	0.49	4.3 U	0.66	0.41	0.43 U	0.14	290
Tetrachloroethene	130	74	510	610	190 D	110 D	120 D	450	170	5.6	130	200	1.3	3	5
Tetrahydrofuran	1.5 U	2800	0.7	18	6.1 D	2.7 D	3900 D	7.9	9.9	1000	13	1.1	8.2	120	NA
Toluene	1.9 U	5.4	4.8	2.2	0.47 D	0.88 D	3.8 UD	1.9	1.1	8.1	1.1	1.9	1.6	0.63	500
trans-1,2-Dichloroethene	84	22	120	110	78 D	58 D	4 UD	82	54	3.8	37	45	0.40 U	2.1	200
trans-1,3-Dichloropropene	2.2 U	0.44 U	0.44 U	0.44 U	0.45 UD	0.45 UD	4.5 UD	0.91 U	0.45 U	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	2.9
Trichloroethene	420	190	690	730	440 D	310 D	260 D	680	310	53	320	450	1.1	17	1
Trichlorofluoromethane	620	210	690	700	530 D	740 D	330 D	2500	1000	180	1300	2000	3.5	91	500
Trichlorotrifluoroethane	3.8 U	0.76 U	0.76 U	0.76 U	0.89 D	0.77 UD	7.7 UD	1.5 U	1	3.8 U	0.78	0.57	0.77 U	0.71	NA
Vinyl acetate	3.6 U	0.71 U	0.36 U	0.71 U	0.7 UD	0.35 UD	70 UD	0.70 U	0.35 U	7 U	2.2	0.7 U	0.70 U	0.7 U	NA
Vinyl chloride	1.6	1	0.26 U	1.6	0.41 D	0.26 UD	2.6 UD	0.51 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	1.9

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Eastern Small Retail Space																	
	IA-5 011609 1/16/2009	IA-5- 020309 2/3/2009	IA-5- 021109 2/11/2009	IA-5- 021809 2/18/2009	IA-5- 022609 2/26/2009	IA-5- 030609 3/6/2009	IA-5- 041409 4/14/2009	IA-5- 051509 5/15/2009	IA-5- 061109 6/11/2009	IA-5- 091709 9/17/2009	IA-5- 122909 12/29/2009	IA-5- 032610 3/26/2010	IA-5- 070110 7/1/2010	IA-5- 091610 9/16/2010	IA-5- 120810 12/8/2010	IA-5- 021711 2/17/2011	IA-5- 060211 6/2/2011	IA-5- 091511 9/15/2011
1,1,1-Trichloroethane	48	0.92	0.27 U	0.27 U	0.27 U	0.27 U	0.98	0.27 U	0.27 U	0.27 U	0.27 U	0.38	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	1.8	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
1,1-Dichloroethene	0.58	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.75 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U
1,2,4-Trimethylbenzene	0.25 U	0.32	0.33	0.36	0.25 U	0.25 U	0.2	0.25 U	0.35	0.25 U	0.25 U	0.25 U	0.25 U	0.73	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U			
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.11 U	0.25	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U
1,4-Dioxane																0.18 U		0.18 U
2-Butanone	7.2	2.4	2.7	2.6	0.75	0.45	3.8	1.9	5.3	2.1	0.79	1.5	2.1	1.4	0.78	0.78 B	3.6	5.9 U
2-Hexanone	0.2 U	0.48	0.38	0.27	0.2 U	0.2 U	0.47	0.45	1.1	0.48	0.2 U	0.23	0.44	0.2 U	0.2 U	0.2 U	4.1 U	0.20 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.18	0.2 U	0.68	0.23	0.2 U	0.2 U	0.2 U	1.1	0.2 U	0.2 U	0.31	0.20 U
Acetone	32	11	21	20	9.5	6.5	14	14	46	16	15	11	18	17	6.4 B	9.5 B	24 B	15
Benzene	0.79	0.6	0.99	1.6	0.41	0.55	0.62	0.49	0.53	0.35	0.45	0.65	0.16 U	1.1	0.26	1.1	0.33	0.29
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.23	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.27	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.33	0.44	0.5	0.55 [a]	0.47	0.61 [a]	0.44	0.64 [a]	0.46	0.39	0.41	0.48	0.53	0.44	0.54	0.6	0.59	0.48
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.55	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.1	1	1.5	1.4	1.1	1.1	1.1	1	1.4	1	2	1.2	1	1	0.76	0.96	1.1	1.3
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U
Cyclohexane	0.17 U	0.17 U	0.38	0.41	0.17 U	0.17 U	0.12 U	0.17 U	0.4	0.17 U	0.17 U	0.17 U	0.17 U	0.45	0.17 U	0.17 U	0.46	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2	2.2	2.5	2.7	2.6	2.6	1.9	2.5	2.2	2.1	1.9	1.8	2.4	1.9	2.3	3.1	1.7	2
Ethanol	590	12	23	140	85	32	41	180	500	62	51	25	58	150	2.4	14	7.7	7.9
Ethyl acetate	0.75	0.37 U	0.18 U	0.18 U	0.37 U	0.18 U	0.26 U	0.18 U	0.31	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.25	0.33	0.43	0.22 U	0.22 U	0.24	0.22 U	0.3	0.23	0.22 U	0.22 U	0.44	0.91	0.22 U	0.3	0.36	0.22 U
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Hexane	0.84	0.54	1.1	0.99	0.39	0.5	0.71	0.58	1	0.52	0.57	0.43	0.48	1	0.3	1.3	1.7	7.0 U
Isopropyl alcohol	3.8	3.5	580	2.9	3	1.3	1.7	2	19	3.5	3.8	3.8	1.9	8.2	0.12 U	1.7	1.2 U	6.4
m,p-Xylene	0.6	0.74	0.91	1.2	0.43 U	0.43 U	0.68	0.51	0.88	0.59	0.43 U	0.46	1.2	2.4	0.43 U	0.85	0.57	0.53

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Eastern Small Retail Space																		
	IA-5 011609 1/16/2009	IA-5- 020309 2/3/2009	IA-5- 021109 2/11/2009	IA-5- 021809 2/18/2009	IA-5- 022609 2/26/2009	IA-5- 030609 3/6/2009	IA-5- 041409 4/14/2009	IA-5- 051509 5/15/2009	IA-5- 061109 6/11/2009	IA-5- 091709 9/17/2009	IA-5- 122909 12/29/2009	IA-5- 032610 3/26/2010	IA-5- 070110 7/1/2010	IA-5- 091610 9/16/2010	IA-5- 120810 12/8/2010	IA-5- 021711 2/17/2011	IA-5- 060211 6/2/2011	IA-5- 091511 9/15/2011	
Methyl methacrylate																0.2 U	0.2 U	0.2 U	0.20 U
Methylene chloride	2	3.6	5.2	1.1	1.2	0.74	2.5	2.9	2	0.7 U	4.3	2.2	1.3	0.75	0.65	2.8	4.2	7.7	
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
n-Heptane	0.2 U	0.2 U	0.36	0.35	0.2 U	0.2 U	0.23	0.38	0.48	0.2 U	0.2 U	0.2 U	0.2 U	2.1	0.2 U	0.33	0.2 U	0.20 U	
o-Xylene	0.23	0.27	0.35	0.47	0.22 U	0.22 U	0.23	0.32	0.32	0.22 U	0.22 U	0.22 U	0.31	0.87	0.22 U	0.3	0.26	0.22 U	
Propylene (Propene)	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.13 U	0.09 U	0.09 U	0.35 U	0.35 U	0.35 U	0.87 U	0.35 U	0.86 U	0.86 U	0.86 U	3.4 U	
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.15 U	0.21 U	1.5	0.3	0.21 U	0.35	0.32	0.58	0.21 U	0.21 U	0.21 U	0.21 U	
Tetrachloroethene	0.39	0.34 U	0.43	0.43	0.34 U	0.34 U	0.24 U	0.47	0.34 U	0.41	0.34 U	0.34 U	0.34 U	0.34 U	0.39	2.4	0.34 U	0.58	
Tetrahydrofuran	3.2	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.11 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
Toluene	1.3	1.1	3	3.3	0.65	0.51	1.5	2.8	2.8	1.5	0.54	1.5	0.7	6.2	0.19 U	1.8	0.9	0.97	
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	
Trichloroethene	5.5	0.39	0.27 U	0.27 U	0.27 U	0.27 U	0.22	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.28	0.27 U	0.27 U	0.27 U	0.27 U	
Trichlorofluoromethane	3	1.3	1.7	1.8	1.5	1.7	1.2	1.3	2	1.2	1.8	1.4	1.5	6.3	1.3	1.7	1.4	1.7	
Trichlorotrifluoroethane	0.62	0.54	0.48	0.45	0.64	0.48	0.53	0.61	0.54	0.5	0.54	0.55	0.55	0.43	0.52	0.66	0.69	0.63	
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.5 U	0.18 U	0.18 U	0.71 U	0.36 U	0.36 U	0.18 U	0.36 U	0.43	0.18 U	3.5 U	0.18 U	
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	

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Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Eastern Small Retail Space						Indoor Air - Center Small Retail Space											
	IA-5-120811 12/8/2011	IA-5-030812 3/8/2012	IA-5-061412 6/14/2012	IA-5-091312 9/13/2012	IA-5-010313 1/3/2013	IA-5-031513 3/15/2013	IA-6-011609 1/16/2009	IA-6-020309 2/3/2009	IA-6-021109 2/11/2009	IA-6-021809 2/18/2009	IA-6-022609 2/26/2009	IA-6-030609 3/6/2009	IA-6-041409 4/14/2009	IA-6-051509 5/15/2009	IA-6-061109 6/11/2009	IA-6-091709 9/17/2009	IA-6-122909 12/29/2009	IA-6-032610 3/26/2010
1,1,1-Trichloroethane	0.15	0.082 U	0.065	0.19 U	0.19 U	0.19 U	110	3.9	0.27 U	0.29	0.27 U	0.27 U	1.6	0.27 U	0.27 U	0.27 U	0.27 U	0.35
1,1,2,2-Tetrachloroethane	0.16	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.14	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	3.9	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	1.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	22	0.45 U	0.45 U	0.52 U	0.52 U	0.52 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.75 U	0.75 U
1,2,4-Trimethylbenzene	1.3	0.15 U	0.16	0.29	0.17 U	0.072	0.75	0.32	0.29	1.5	0.25 U	0.25 U	0.18 U	0.25 U	0.29	0.34	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	23	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.066	0.061 U	0.044	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.14 U	0.069 U	0.067	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane							0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.39	0.15 U	0.077	0.11	0.17 U	0.17 U	0.25 U	0.25 U	0.25 U	0.38	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	0.11 U	0.11 U	0.11 U	1.1	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U	0.23 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.076	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.37	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.41	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane																		
2-Butanone	0.98	2	0.94	2.3	1.3	1.3	120	10	3.2	2.9	2.4	2.3	1	2.5	4.1	2.4	1.8	1.4
2-Hexanone	0.13	0.32	0.081	0.17	0.16	0.16	0.2 U	0.42	0.37	0.34	0.2 U	0.37	0.14 U	0.62	0.72	0.7	0.2 U	0.26
4-Ethyltoluene	0.25	0.15 U	0.053	0.097	0.17 U	0.17 U	0.25 U	0.25 U	0.25 U	0.47	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.13	0.18	0.34	0.22	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.36	0.2 U	0.2 U	0.14 U	0.34	0.7	0.29	0.2 U	0.2 U
Acetone	6.6	11	13	13	9	9.7	44	14	14	25	11	8.5	6.1	11	28	20	14	6.5
Benzene	0.38	0.34	0.2	0.53	0.53	0.8	1	0.6	0.98	4.1 [a]	0.41	0.7	0.59	0.47	0.43	0.31	0.4	0.55
Benzyl chloride	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.93 U	0.93 U	0.93 U	0.11	1.1 U	1.1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.49	0.46	0.42	0.38	0.58	0.37	0.39	0.42	0.52	0.59 [a]	0.47	0.6 [a]	0.42	0.77 [a]	0.45	0.42	0.4	0.43
Chlorobenzene	0.48	0.14 U	0.14 U	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.079 U	0.079 U	0.079 U	0.059	0.093 U	0.093 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.49	0.073 U	0.14	0.17	0.17 U	0.069	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1	1.1	1.4	1.2	1	1.2	1.3	0.9	1.4	1.5	1	1.1	1.1	1.1	1.9	0.97	1.8	1.4
cis-1,2-Dichloroethene	0.18	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.1 U	0.1 U	0.12	0.21	0.12 U	0.12 U	0.17 U	0.17 U	0.25	0.91	0.17 U	0.17 U	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.26 U	0.13 U	0.26 U	0.3 U	0.30 U	0.3 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.6	2	2.9	2.8	2.8	1.6	2	2.1	2.6	2.8	2.6	2.6	2	2.7	2.5	2.2	1.9	1.6
Ethanol	5.4	14	43	11	3.9	1.9	41	23	12	40	13	12	8.6	51	31	12	10	7.1
Ethyl acetate	0.11 U	0.48	0.21	0.66	0.59	0.13 U	0.37 U	0.37 U	0.18 U	0.22	0.37 U	0.18 U	0.26 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	1.2	0.13 U	0.16	0.31	0.15	0.091	0.29	0.25	0.33	1.6	0.22 U	0.22 U	0.21	0.22 U	0.24	0.23	0.22 U	0.22 U
Hexachlorobutadiene	0.17	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U
Hexane	0.36	0.48	0.57	1.2	0.95	1.1	1.2	0.78	0.7	2.6	0.33	0.4	0.63	0.38	0.68	0.45	0.18 U	0.22
Isopropyl alcohol	2.9 U	2.9 U	2.9 U	3.3	0.75	3.4 U	4.7	6.6	3.2	4.9	1.7	1.6	0.18 U	4.5	22	7	1.4	4.9
m,p-Xylene	3	0.12	0.36	0.97	0.6	0.24	0.82	0.72	0.84	4.9	0.43 U	0.43 U	0.51	0.43 U	0.67	0.62	0.43 U	0.51

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Methyl methacrylate	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U													
Methylene chloride	1.6	1.6	1.1	2.3	5.2	2	2.5	5.2	0.59	1.6	0.83	0.69	2	2	2.6	0.7 U	2.9	0.7 U	
Methyl-t-butyl ether	0.039	0.11 U	0.11 U	0.18	0.13 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
n-Heptane	0.081	0.089	0.18	0.32	0.14 U	0.14 U	0.27	0.2 U	0.32	1.3	0.2 U	0.2 U	0.21	0.2 U	0.26	0.2 U	0.2 U	0.2 U	
o-Xylene	1	0.13 U	0.14	0.35	0.19	0.1	0.36	0.26	0.34	1.8	0.22 U	0.22 U	0.19	0.22 U	0.25	0.23	0.22 U	0.22 U	
Propylene (Propene)	2.1 U	2.1 U	2.1 U	1.4	2.4 U	2.4 U	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.13 U	0.09 U	0.09 U	0.35 U	0.35 U	0.35 U	
Styrene	1	0.13 U	0.76	0.24	0.15 U	0.15 U	0.21 U	0.21 U	0.21 U	0.28	0.21 U	0.21 U	0.15 U	0.25	0.21 U	0.23	0.21 U	0.21 U	
Tetrachloroethene	5.7	0.15	0.15	1.6	0.24 U	0.12	1.2	0.34 U	0.45	1.2	0.34 U	0.34 U	0.72	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	
Tetrahydrofuran	0.1	0.088 U	0.1	0.1 U	0.10 U	0.1 U	77	2.8	0.32	0.15 U	0.15 U	0.15 U	0.22	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
Toluene	1.9	0.28	0.78	2	0.56	0.61	1.8	1.3	2.5	11	0.65	0.71	1.3	0.81	2	1.1	0.49	1.6	
trans-1,2-Dichloroethene	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
trans-1,3-Dichloropropene	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
Trichloroethene	0.63	0.081 U	0.045	0.1	0.19 U	0.19 U	13	1.7	0.27 U	0.34	0.27 U	0.27 U	0.6	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
Trichlorofluoromethane	1.1	0.98	1.7	1.6	1.8	1.3	4.8	1.3	1.7	2.5	1.5	1.7	1.4	1.2	2.2	1.2	1.7	1.3	
Trichlorotrifluoroethane	0.69	0.46	0.53	0.6	0.61	0.6	0.64	0.51	0.48	0.45	0.64	0.48	0.53	0.74	0.63	0.48	0.51	0.55	
Vinyl acetate	0.11 U	0.21 U	0.55	0.25 U	0.25 U	0.25 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.5 U	0.18 U	0.18 U	0.71 U	0.36 U	0.36 U	
Vinyl chloride	0.077 U	0.038 U	0.077 U	0.09 U	0.090 U	0.09 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Center Small Retail Space												Indoor Air - Western Small Retail Space					
	IA-6-070110 7/1/2010	IA-6-091610 9/16/2010	IA-6-120710 12/7/2010	IA-6-021711 2/17/2011	IA-6-060211 6/2/2011	IA-6-091511 9/15/2011	IA-6-120811 12/8/2011	IA-6-030812 3/8/2012	IA-6-061412 6/14/2012	IA-6-091312 9/13/2012	IA-6-010313 1/3/2013	IA-6-031513 3/15/2013	IA-7-011609 1/16/2009	IA-7-020309 2/3/2009	IA-7-021109 2/11/2009	IA-7-021809 2/18/2009	IA-7-022609 2/26/2009	IA-7-030609 3/6/2009
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.085	0.082 U	0.072	0.19 U	0.19 U	0.19 U	44	2.4	0.4	1.3	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.21 U	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	1.3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.52	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	0.45 U	0.45 U	2.8	0.52 U	0.52 U	0.52 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.33	0.25 U	0.35	0.25 U	0.25	0.16	0.15 U	0.21	0.17 U	0.17 U	0.076	0.25 U	0.34	0.34	0.99	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	1.7	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.056	0.061 U	0.056	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.069 U	0.061	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U											0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.059	0.15 U	0.091	0.17 U	0.17 U	0.17 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	0.11 U	0.11 U	0.14	0.97	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.13	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane						0.18 U												
2-Butanone	1.1	0.89	0.87	1.9 B	2.9 U	5.9 U	1.3	0.63	1.4	2.8	1.4	1.4	70	6.5	3.9	5.2	2.2	1.3
2-Hexanone	0.2 U	0.2 U	0.2 U	0.22	4.1 U	0.6	0.15	0.12 U	0.2	0.27	0.14 U	0.2	0.2 U	0.29	0.2 U	0.91	0.2 U	0.2 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.15 U	0.15 U	0.08	0.17 U	0.17 U	0.17 U	0.25 U	0.25 U	0.25 U	0.27	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.4	0.2 U	0.2 U	0.28	0.31	0.13	0.12 U	0.92	0.25	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.42	0.2 U	0.2 U
Acetone	14	13	11 B	14 B	19 B	26	10	7.4	15	18	11	10	29	12	13	32	7.8	6.6
Benzene	0.19	0.6	0.44	1.3	0.29	0.31	0.42	0.39	0.2	0.49	0.48	0.8	0.95	0.75	1.1	3.2	0.67	0.73
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	0.93 U	0.93 U	0.93 U	0.2	1.1 U	1.1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.55	0.44	0.46	0.57	0.64	0.52	0.46	0.48	0.44	0.37	0.55	0.42	0.32	0.44	0.52	0.56 [a]	0.48	0.6 [a]
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.14 U	0.45	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.36	0.36	0.24 U	0.24 U	0.24 U	0.24 U	0.1	0.073 U	0.24	0.17	0.17 U	0.075	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1	1.1	0.95	0.92	1.1	1.4	1.3	1.2	1.4	1.2	1.1	1.4	1.7	0.98	1.4	1.5	1	1.2
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.098	0.059 U	0.052	0.042	0.14 U	0.14 U	0.29	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.29	0.17 U	0.1 U	0.1 U	0.1 U	0.2	0.12 U	0.12 U	0.17 U	0.17 U	0.32	0.7	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.26 U	0.13 U	0.26 U	0.3 U	0.30 U	0.3 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.4	1.6	1.9	3.1	1.8	1.9	2.9	2	2.9	2.8	2.7	1.7	2.1	2.2	2.6	2.7	2.6	2.6
Ethanol	18	36	5.9	10	7.7	14	24	41	67	23	8.4	2.9	7.3	16	11	26	7.9	8.4
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.48	0.69	0.31	1	0.42	0.34	0.37 U	0.37 U	0.18 U	0.21	0.37 U	0.18 U
Ethylbenzene	0.22 U	0.43	0.22 U	0.45	0.22 U	0.22 U	0.15	0.22	0.71	0.23	0.16	0.11	0.23	0.29	0.36	0.95	0.24	0.22 U
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	1.3	0.69	0.39	1.5	0.41	7.0 U	0.41	0.48	0.73	1	0.64	0.76	0.9	0.87	0.91	2	1.1	0.6
Isopropyl alcohol	1	3.2	1.1	2.8	1.2 U	11	2.9 U	2.9 U	2.9 U	6.7	3.4 U	3.4 U	3.7	6.2	3.6	8.3	0.25 U	2.7
m,p-Xylene	0.58	1.1	0.43 U	1.2	0.48	0.59	0.45	0.54	0.73	0.38	0.58	0.31	0.61	0.82	0.94	2.8	0.73	0.43 U

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Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Center Small Retail Space												Indoor Air - Western Small Retail Space					
	IA-6-070110 7/1/2010	IA-6-091610 9/16/2010	IA-6-120710 12/7/2010	IA-6-021711 2/17/2011	IA-6-060211 6/2/2011	IA-6-091511 9/15/2011	IA-6-120811 12/8/2011	IA-6-030812 3/8/2012	IA-6-061412 6/14/2012	IA-6-091312 9/13/2012	IA-6-010313 1/3/2013	IA-6-031513 3/15/2013	IA-7-011609 1/16/2009	IA-7-020309 2/3/2009	IA-7-021109 2/11/2009	IA-7-021809 2/18/2009	IA-7-022609 2/26/2009	IA-7-030609 3/6/2009
Methyl methacrylate			0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U						
Methylene chloride	4.5	0.64	0.94	3	1	1.7 U	1.5	1.8	1.5	2.2	1.6	1.1	1.9	5.7	0.92	1.5	6.3	1.4
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.11 U	0.11 U	0.11 U	0.14	0.13 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	1.4	0.47	0.2 U	0.35	0.2 U	0.2	0.11	0.15	0.25	0.31	0.095	0.1	0.2	0.2 U	0.37	1.2	0.2 U	0.2 U
o-Xylene	0.22 U	0.42	0.22 U	0.4	0.22 U	0.22	0.17	0.13	0.29	0.12	0.18	0.13	0.24	0.31	0.39	0.97	0.24	0.22 U
Propylene (Propene)	0.87 U	0.35 U	0.86 U	0.86 U	0.86 U	3.4 U	2.1 U	2.1 U	2.1 U	1.4	2.4 U	2.4 U	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U
Styrene	0.24	0.29	0.21 U	0.21 U	0.27	0.22	0.13	0.13 U	1.2	0.054	0.15 U	0.15 U	0.21 U	0.21 U	0.21 U	0.26	0.21 U	0.21 U
Tetrachloroethene	0.34 U	0.34 U	0.34 U	1.6	0.34 U	0.58	0.68	0.15	0.57	2.6	0.24 U	0.12	1.6	0.34 U	0.65	0.63	0.34 U	0.34 U
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15	0.12	0.088 U	0.088 U	0.1 U	0.10 U	0.1 U	45	2.1	0.74	0.43	0.15 U	0.15 U
Toluene	1.7	2.6	0.4	2.9	0.93	1.2	1.2	1.4	1.1	1.5	0.56	0.65	1.5	1.6	2.7	7.5	1.5	0.76
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.27 U	0.3	0.27 U	0.27 U	0.27 U	0.27 U	0.19	0.081 U	0.24	0.2	0.19 U	0.072	4.6	1.1	0.28	0.58	0.27 U	0.27 U
Trichlorofluoromethane	1.5	3.1	1.1	1.6	1.1	1.7	1.4	1	1.6	1.7	2	1.3	4.7	1.4	1.7	3.1	1.6	1.7
Trichlorotrifluoroethane	0.55	0.42	0.52	0.69	0.67	0.56	0.68	0.44	0.57	0.62	0.61	0.65	0.62	0.57	0.47	0.44	0.66	0.45
Vinyl acetate	0.18 U	0.36 U	0.35 U	0.18 U	3.5 U	0.18 U	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.09 U	0.090 U	0.33	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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Former Gorham Manufacturing Site
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Parameter (ug/m ³)	Indoor Air - Western Small Retail Space																		
	IA-7-041409 4/14/2009	IA-7-051509 5/15/2009	IA-7-061109 6/11/2009	IA-7-091709 9/17/2009	IA-7-122909 12/29/2009	IA-7-032610 3/26/2010	IA-7-070110 7/1/2010	IA-7-091610 9/16/2010	IA-7-120710 12/7/2010	IA-7-021711 2/17/2011	IA-7-060211 6/2/2011	IA-7-091511 9/15/2011	IA-7-120811 12/8/11	IA-7-030812 3/8/2012	IA-7-061412 6/14/2012	IA-7-091312 9/13/2012	IA-7-010313 1/3/2013	IA-7-031513 3/15/2013	
1,1,1-Trichloroethane	0.87	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.069	0.082 U	0.088	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.21 U	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U
1,1-Dichloroethene	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U
1,2,4-Trichlorobenzene	0.26 U	0.37 U	0.37 U	0.37 U	0.75 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	0.45 U	0.45 U	0.17	0.52 U	0.52 U	0.52 U
1,2,4-Trimethylbenzene	0.18 U	0.25 U	0.29	0.39	0.25 U	0.35	0.36	0.36	0.25 U	0.25 U	0.56	0.41	0.32	0.36	0.21	0.46	0.17 U	0.1	
1,2-Dibromoethane (EDB)	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U
1,2-Dichlorobenzene	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U
1,2-Dichloroethane	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.07	0.061 U	0.051	0.14 U	0.14 U	0.14 U
1,2-Dichloropropane	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.3	0.23 U	0.23 U	0.23 U	0.63	0.23 U	0.14 U	0.069 U	0.14 U	0.094	0.16 U	0.16 U	0.16 U
1,2-Dichlorotetrafluoroethane	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U										
1,3,5-Trimethylbenzene	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.1	0.15	0.083	0.26	0.17 U	0.17 U	0.17 U
1,3-Butadiene	0.08 U	0.11 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	0.078 U
1,3-Dichlorobenzene	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.21 U
1,4-Dichlorobenzene	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.065	0.063	0.21 U	0.21 U	0.21 U
1,4-Dioxane												0.18 U							
2-Butanone	1.3	2.3	7.3	2.2	0.49	2.1	4.3	1.8	0.42	1.7 B	4.7	5.9 U	2.1	0.97	1.1	2.8	1.9	1.9	1.9
2-Hexanone	0.14 U	0.53	1.5	0.53	0.2 U	0.2 U	0.82	0.55	0.2 U	0.2 U	1.4 J	0.73	0.12 U	0.081	0.23	0.41	0.2	0.35	0.35
4-Ethyltoluene	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.074	0.097	0.065	0.16	0.17 U	0.17 U	0.17 U
4-Methyl-2-pentanone	0.14 U	0.22	0.79	0.24	0.2 U	0.2 U	0.43	0.61	0.2 U	0.2 U	0.53	0.36	0.15	0.13	1.4	0.29	0.18	0.14 U	0.14 U
Acetone	6.5	10	31	22	31	12	41	27	12 B	15 B	48 B	38	17	13	18	24	14	15	15
Benzene	0.42	0.35	0.52	0.43	0.52	0.53	0.27	0.56	0.45	1.1	0.41	0.34	0.44	0.36	0.2	0.49	0.58	0.87	0.87
Benzyl chloride	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U	0.18 U
Bromodichloromethane	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Bromoform	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U	0.36 U
Bromomethane	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.26	0.16 U	0.16 U	0.26	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.27	1.6 U	0.93 U	0.93 U	0.93 U	0.09	1.1 U	1.1 U	1.1 U
Carbon tetrachloride	0.43	0.65 [a]	0.43	0.42	0.44	0.43	0.5	0.47	0.45	0.56	0.69	0.5	0.45	0.46	0.43	0.38	0.51	0.39	0.39
Chlorobenzene	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.14 U	0.14 U	0.16 U	0.16 U	0.16 U	0.16 U
Chloroethane	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U
Chloroform	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.38	0.24 U	0.24 U	0.24 U	0.34	0.12	0.073 U	0.13	0.2	0.17 U	0.082	0.082
Chloromethane	1.1	0.93	1.8	1.2	2.1	1.2	1.3	1.4	0.99	1	1.6	1.6	1.3	1.6	1.2	1.3	1.1	1.1	1.4
cis-1,2-Dichloroethene	0.14	0.2 U	0.2 U	0.2 U	0.27	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.064	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,3-Dichloropropene	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.16 U
Cyclohexane	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.23	0.12 U	0.12 U	0.12 U
Dibromochloromethane	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.26 U	0.13 U	0.26 U	0.3 U	0.30 U	0.3 U	0.3 U
Dichlorodifluoromethane	2	2.4	2.7	2.3	2.1	1.8	2.7	1.7	2	3.1	2.5	1.8	2.8	2.1	2.7	2.9	2.6	1.7	1.7
Ethanol	7.1	11	14	11	10	13	39	240	13	14	28	76	60	70	110	60	52	11	11
Ethyl acetate	0.26 U	0.18 U	0.24	2.6	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.7	0.21	1.8	0.94	0.39	0.57	0.77	0.13 U	0.13 U
Ethylbenzene	0.16 U	0.22 U	0.25	0.32	0.68	0.32	0.45	0.45	0.22 U	0.22 U	0.68	0.45	0.24	0.12	0.24	0.45	0.19	0.14	0.14
Hexachlorobutadiene	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U	0.37 U
Hexane	0.69	0.33	1.5	0.88	0.25	0.33	0.7	0.64	0.5	1.3	0.58	7.0 U	3.9	0.8	0.67	0.97	0.86	0.87	0.87
Isopropyl alcohol	0.18 U	7	14	4	1.9	18	5.8	28	2.8	11	1.2 U	77	2.9 U	2.9 U	48	22	3.3	3.4 U	3.4 U
m,p-Xylene	0.31 U	0.43 U	0.72	0.86	2.8	0.82	1.2	1.2	0.43 U	0.43 J	1.5	1.1	0.72	0.3	0.54	1.4	0.71	0.4	0.4

Table 1.
Summary of Analytical Results - Air Sampling for Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Western Small Retail Space																	
	IA-7-041409 4/14/2009	IA-7-051509 5/15/2009	IA-7-061109 6/11/2009	IA-7-091709 9/17/2009	IA-7-122909 12/29/2009	IA-7-032610 3/26/2010	IA-7-070110 7/1/2010	IA-7-091610 9/16/2010	IA-7-120710 12/7/2010	IA-7-021711 2/17/2011	IA-7-060211 6/2/2011	IA-7-091511 9/15/2011	IA-7-120811 12/8/11	IA-7-030812 3/8/2012	IA-7-061412 6/14/2012	IA-7-091312 9/13/2012	IA-7-010313 1/3/2013	IA-7-031513 3/15/2013
Methyl methacrylate									0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U
Methylene chloride	4.2	2.3	5.7	0.7 U	2.9	0.7 U	1.3	0.6	1.3	2.5	1.1	1.7 U	13	2.8	1.4	2.3	2.6	1.4
Methyl-t-butyl ether	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.11 U	0.11 U	0.11 U	0.11	0.13 U	0.13 U
n-Heptane	0.17	0.2 U	0.34	0.37	0.2 U	0.29	0.5	0.68	0.33	0.47	2	1.1	0.46	0.47	0.65	0.99	0.14 U	0.16
o-Xylene	0.16 U	0.22 U	0.25	0.31	0.6	0.28	0.43	0.43	0.22 U	0.22 U	0.69	0.41	0.3	0.17	0.2	0.56	0.24	0.15
Propylene (Propene)	0.13 U	0.09 U	0.09 U	0.35 U	0.35 U	0.35 U	0.87 U	0.35 U	0.86 U	0.86 U	0.86 U	3.4 U	2.1 U	2.1 U	2.1 U	2.4 U	2.4 U	2.4 U
Styrene	0.15 U	0.21 U	0.29	0.39	0.21 U	0.26	0.7	0.39	0.21 U	0.21 U	0.97	0.63	0.18	0.097	0.26	0.89	0.15 U	0.081
Tetrachloroethene	0.48	0.34 U	0.34 U	0.34 U	1	0.34 U	0.34 U	0.36	0.34 U	1.7	0.34 U	0.62	0.66	0.14	0.15	1.7	0.24 U	0.15
Tetrahydrofuran	0.27	0.15 U	0.15 U	0.51	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.24	0.18	0.088 U	0.088 U	0.088	0.1 U	0.10 U	0.1 U
Toluene	0.48	0.61	2.3	4	0.57	7.2	8.4	3.5	0.48	1.6	6.6	3.7	1.2	0.48	1.4	2.4	0.99	1
trans-1,2-Dichloroethene	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U
trans-1,3-Dichloropropene	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U
Trichloroethene	0.3	0.27 U	0.27 U	0.27 U	0.4	0.27 U	0.27 U	0.77	0.27 U	0.27 U	0.27 U	0.27 U	0.16	0.081 U	0.077	0.15	0.19 U	0.068
Trichlorofluoromethane	1.3	1.1	1.9	1.3	1.7	1.3	1.3	2.9	1.2	1.6	1.3	1.6	1.3	1.1	1.7	1.8	1.8	1.5
Trichlorotrifluoroethane	0.54	0.69	0.57	0.51	0.54	0.64	0.54	0.43	0.55	0.67	0.76	0.54	0.67	0.44	0.53	0.58	0.6	0.87
Vinyl acetate	0.5 U	0.18 U	0.18 U	0.71 U	0.36 U	0.36 U	0.18 U	0.36 U	0.35 U	0.18 U	3.5 U	0.18 U	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U
Vinyl chloride	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.09 U	0.090 U	0.09 U

Notes:

[a] Benzene and carbon tetrachloride are above the target air concentration, but are not compliance violations as indoor air concentrations are consistent with outdoor air concentrations that were sampled on the same day.

Prepared by / Date: EYM 4/3/12

Checked by / Date:

NA - not available

U - Not detected, value is the detection limit

B - Compounds detected in method blank as well as field sample

D - Result from diluted analyses

ug/m³ - micrograms per cubic meter

5 Bolded and shaded values are above the CT target indoor air concentration for industrial/commercial scenarios

Table 2.
Vacuum Monitoring Results - Small Retail Spaces
Former Gorham Manufacturing Site
Providence, Rhode Island

Date	Pressure Differential (inches of water)		
	VMW-5	VMW-6	VMW-7
2/3/2009	-0.25	-0.17	0.00
2/18/2009	-0.212	-0.155	-0.011
2/26/2009	-0.230	-0.120	-0.025
3/6/2009	-0.200	-0.086	-0.012
4/14/2009	-0.108	-0.054	-0.014
5/15/2009	-0.081	-0.073	-0.016
6/11/2009	-0.090	-0.076	-0.098
9/17/2009	-0.110	-0.102	+0.074
12/29/2009**	-0.011	-0.010	-0.061
3/26/2010	-0.245	-0.142	-0.018
7/1/2010	-0.542	-0.114	-0.176
9/16/2010	-0.247	-0.874	-0.013
12/7/2010	-0.044	-0.028	+0.022
2/17/2011	-0.212	-0.599	-0.337
6/2/2011	-0.277	-0.236	-0.138**
9/15/2011	-0.234	-0.212	-0.010
12/8/2011	-0.609	-0.115	-0.009
3/8/2012	-0.003	-0.246	-0.114
6/14/2012	-0.237	-0.103	-0.132
9/13/2012	-0.243	-0.119	-0.210
1/3/2013	-0.150	-0.060	-0.052
3/15/2013	-0.228	-0.354	-0.002

** ASD system offline.

Prepared by/Date: MAM 04/12/13

Checked by/Date: DLC 4/17/13

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Outdoor Air Reference Locations																	
	AA-1 011609 1/16/2009	AA-1- 020309 2/3/2009	AA-1- 021109 2/11/2009	AA-1- 021809 2/18/2009	AA-1- 022609 2/26/2009	AA-1- 030609 3/6/2009	AA-1- 033109 3/31/2009	AA-1- 041409 4/14/2009	AA-1- 042409 4/24/2009	AA-1- 051509 5/15/2009	AA-1- 061109 6/11/2009	AA-1- 091709 9/17/2009	AA-1- 092409 9/24/2009	AA-1- 100109 10/1/2009	AA-1- 100809 10/8/2009	AA-1- 122909 12/29/2009	AA-1- 012810 1/28/2010	AA-1- 020510 2/5/2010
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.28	0.52	1.8	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.29	0.3	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.5	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.17	1.3	0.11 U	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.23 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.53	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane																		
2-Butanone	0.58	1.2	2.4	3.2	1.6	0.67	1.7	0.11 U	1.6	1.6	1.1	1.7	0.8	1.2	1.2	2	0.81	1.6
2-Hexanone	0.2 U	0.22	0.57	0.35	0.2 U	0.2 U	0.2 U	0.14 U	0.26	0.39	0.2 U	0.34	0.2 U	0.33	0.23	0.2 U	0.2 U	0.32
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.6	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.27	0.63	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	7.3	8	15	22	8.4	5.9	12	1.1	27	9.5	10	10	9.6	5.4	17	11	3.5	7.6
Benzene	0.69	0.62	1.3	4.7	0.43	0.69	0.46	0.12 U	0.3	0.4	0.49	0.38	0.35	0.25	0.2	0.42	0.79	0.68
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.28	0.16 U
Carbon tetrachloride	0.38	0.44	0.52	0.56	0.43	0.61	0.47	0.22 U	0.41	0.78	0.43	0.4	0.4	0.43	0.46	0.39	0.42	0.39
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.1	0.9	1.4	1.5	1.1	1.1	1.3	1.1	1.2	1.1	1.2	0.85	1.1	0.97	0.96	1.6	1.1	1.2
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.35	1.1	0.17 U	0.17 U	0.17 U	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2	2.2	2.6	2.7	2.6	2.6	2.8	2	2.5	2.7	2.6	2.1	2.1	2.2	2.1	2.1	2.3	2.4
Ethanol	4	5.4	10	47	4.3	3.5	4.7	0.81	4.9	4.8	8.6	6.6	4.6	3.9	4.9	3.8	5.4	5.1
Ethyl acetate	0.37 U	0.37 U	0.18 U	0.31	0.37 U	0.18 U	0.18 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.25	0.52	2	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.24	0.22 U	0.23	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U
Hexane	1.5	0.75	1.1	2.9	0.38	2.8	2.2	0.13 U	0.56	0.37	0.59	0.48	1.4	0.45	4.5	0.62	0.36	0.53
Isopropyl alcohol	1.4	1.4	1.8	4.3	1.4	0.67	1.4	0.18 U	14	1	2.5	2.8	0.87	0.63	0.25 U	0.54	0.56	2.7
m,p-Xylene	0.43 U	0.72	1.4	6.4	0.44	0.43 U	0.43 U	0.31 U	0.43 U	0.49	0.73	0.62	0.59	0.43 U	0.43 U	0.43 U	0.43 U	0.50
Methyl methacrylate																		

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Outdoor Air Reference Locations																		
	AA-1 011609 1/16/2009	AA-1- 020309 2/3/2009	AA-1- 021109 2/11/2009	AA-1- 021809 2/18/2009	AA-1- 022609 2/26/2009	AA-1- 030609 3/6/2009	AA-1- 033109 3/31/2009	AA-1- 041409 4/14/2009	AA-1- 042409 4/24/2009	AA-1- 051509 5/15/2009	AA-1- 061109 6/11/2009	AA-1- 091709 9/17/2009	AA-1- 092409 9/24/2009	AA-1- 100109 10/1/2009	AA-1- 100809 10/8/2009	AA-1- 122909 12/29/2009	AA-1- 012810 1/28/2010	AA-1- 020510 2/5/2010	
Methylene chloride	5.5	3.1	0.65	1.5	0.78	7.4	15	2.1	2.8	1.7	1.9	0.7 U	4.2	0.7 U	23	4.6	1.3	1.9	
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
n-Heptane	0.2 U	0.27	0.92	1.6	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.4	0.23	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26	0.2 U
o-Xylene	0.22 U	0.27	0.53	2.2	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.24	0.27	0.23	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Propylene (Propene)	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.09 U	0.13 U	0.18 U	0.09 U	0.09 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Styrene	0.21 U	0.21 U	0.21 U	0.28	0.21 U	0.21 U	0.21 U	0.15 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	0.34 U	0.34 U	0.73	0.77	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.52	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.11 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	1.2	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	0.94	1.5	3.2	14	0.71	0.99	0.82	0.14 U	0.72	2.6	2.1	1.9	2	0.61	0.5	0.78	0.94	0.64	
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.39	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	1.3	1.2	1.7	2.4	1.5	2	1.7	0.92	1.3	1.5	2	1.1	1.4	1.2	1.5	2.2	1.2	1.2	
Trichlorotrifluoroethane	0.68	0.53	0.5	0.47	0.64	0.48	0.51	0.27 U	0.64	0.67	0.56	0.47	0.49	0.45	0.46	0.54	0.49	0.55	
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.18 U	0.5 U	0.71 U	0.18 U	0.18 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.71 U	
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	

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Providence, Rhode Island

Parameter (ug/m ³)	Outdoor Air Reference Locations																	
	AA-1-021210 2/12/2010	AA-1-021910 2/19/2010	AA-1-032610 3/26/2010	AA-1-043010 4/30/2010	AA-1-052810 5/28/2010	AA-1-070110 7/1/2010	AA-1-091610 9/16/2010	AA-1-120710 12/7/2010	AA-1-021711 2/17/2011	AA-1-060211 6/6/2011	AA-1-091511 9/15/2011	AA-1-120811 12/8/2011	AA-1-030812 3/8/2012	AA-1-061412 6/14/2012	AA-1-091312 9/13/2012	AA-1-010313 1/3/2013	AA-1-031513 3/15/2013	
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.29	0.082 U	0.1	0.19 U	0.19 U	0.19 U	
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.21 U	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U	
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.063	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	0.62	0.45 U	0.12	0.52 U	0.52 U	0.52 U	
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.94	0.25 U	1.1	0.25 U	0.25 U	0.16	0.15 U	0.15 U	0.26	0.17 U	0.069
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.34	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.066	0.061 U	0.046	0.14 U	0.14 U	0.057	
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.069 U	0.14 U	0.16 U	0.16 U	0.16 U	
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U											
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.28	0.25 U	0.33	0.25 U	0.25 U	0.068	0.15 U	0.15 U	0.16	0.17 U	0.17 U	
1,3-Butadiene	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.29	0.11 U	0.11 U	0.11 U	0.11 U	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U
1,4-Dioxane											0.18 U							
2-Butanone	1.6	0.88	1.5	1.4	2.4	2.3	2.7	0.37	1.8 B	2.9 U	5.9 U	0.35	1.4	1.1	2	0.89	1.9	
2-Hexanone	0.2 U	0.2 U	0.29	0.29	0.49	0.49	0.41	0.2 U	0.2 U	4.1 U	0.67	0.12 U	0.34	0.14	0.27	0.14 U	0.13	
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.3	0.25 U	0.34	0.25 U	0.25 U	0.053	0.15 U	0.15 U	0.093	0.17 U	0.17 U	
4-Methyl-2-pentanone	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.8	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.12 U	0.23	0.1	0.14 U	0.083	
Acetone	5.0	3.7	9.5	12	20	13	14	5.7 B	19 B	8.7 B	20	4.9	9.4	10	12	8.7	18	
Benzene	0.63	0.41	0.69	0.35	0.19	0.16 U	1.2	0.28	2.3	0.16 U	0.19	0.4	0.29	0.2	0.68	0.42	1	
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U	
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U	
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U	
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	
Carbon disulfide	0.16 U	0.44	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.38	0.16 U	0.16 U	1.6 U	0.058	0.93 U	0.11	1.1 U	1.1 U	0.052	
Carbon tetrachloride	0.31 U	0.43	0.49	0.47	0.52	0.51	0.43	0.42	0.48	0.53	0.48	0.49	0.43	0.43	0.36	0.52	0.41	
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.14 U	0.14 U	0.16 U	0.16 U	0.16 U	
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U	
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.094	0.073 U	0.067	0.096	0.17 U	0.21	
Chloromethane	1.3	1.1	1.4	0.78	1.1	0.96	0.99	0.94	1	0.96	1.4	0.062 U	1.1	1.5	1.1	1	1.6	
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12	0.059 U	0.12 U	0.14 U	0.14 U	0.092	
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.46	0.17 U	0.17 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.26 U	0.13 U	0.26 U	0.3 U	0.3 U	0.3 U	
Dichlorodifluoromethane	2.5	2.9	1.8	2.1	2.5	2.4	2.9	1.9	3.1	1.9	1.7	2.5	2	2.4	2.8	2.5	1.7	
Ethanol	7.2	1.2	4.9	4	3.3	4	14	2.3	12	2.7	5.8	1.5	4.1	7.4	5.2	2.7	1.2	
Ethyl acetate	0.18 U	1.1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.46	0.56	0.43	0.67	0.35	1.1	
Ethylbenzene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.82	1.4	0.22 U	1.1	0.22 U	0.22 U	0.31	0.13 U	0.065	0.19	0.15 U	0.12	
Hexachlorobutadiene	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U	
Hexane	0.91	0.24	0.23	1.1	0.51	0.37	1.2	0.35 U	3.3	0.88	7.0 U	0.47	0.54	1.3	0.67	1.4	1.3	
Isopropyl alcohol	1.5	0.8	0.73	0.69	1.6	0.79	0.25 U	0.29	2.4	1.2 U	4.9 U	0.6	0.88	2.9 U	0.58	0.47	0.52	
m,p-Xylene	0.47	0.43 U	0.49	0.43 U	0.43 U	2.2	3.7	0.43 U	3.3	0.43 U	0.43 U	0.41	0.17	0.18	0.64	0.3 U	0.34	
Methyl methacrylate								0.2 U	0.48	0.2 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	

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	AA-1-021210 2/12/2010	AA-1-021910 2/19/2010	AA-1-032610 3/26/2010	AA-1-043010 4/30/2010	AA-1-052810 5/28/2010	AA-1-070110 7/1/2010	AA-1-091610 9/16/2010	AA-1-120710 12/7/2010	AA-1-021711 2/17/2011	AA-1-060211 6/6/2011	AA-1-091511 9/15/2011	AA-1-120811 12/8/2011	AA-1-030812 3/8/2012	AA-1-061412 6/14/2012	AA-1-091312 9/13/2012	AA-1-010313 1/3/2013	AA-1-031513 3/15/2013
Methylene chloride	1.7	0.7 U	0.7 U	0.7 U	0.35 U	1.1	1.1	0.66	3	2.3	1.7 U	1.5	1.6	3	2.1	4.4	2.9
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.11 U	0.11 U	0.11 U	0.13 U	0.13 U	0.13 U
n-Heptane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.91	0.2 U	0.95	0.2 U	0.20 U	0.12	0.089	0.11	0.18	0.14 U	0.12
o-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.46	1.2	0.22 U	1.1	0.22 U	0.22 U	0.22	0.086	0.078	0.31	0.15 U	0.12
Propylene (Propene)	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 U	1.9	0.86 U	0.86 U	0.86 U	3.4 U	2.1 U	2.1 U	0.77	1.3	2.4 U	2.4 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.37	0.13 U	0.1	0.13	0.15 U	0.039
Tetrachloroethene	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.49	0.34 U	5.3	0.34 U	0.34 U	0.73	0.1 U	0.2 U	0.87	0.24 U	0.9
Tetrahydrofuran	0.15 U	0.19	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.057	0.088 U	0.088 U	0.43	0.1 U	0.1 U
Toluene	0.97	0.46	1.1	0.75	0.63	0.57	10	0.19 U	5.3	0.52	0.47	0.56	0.37	0.42	0.81	0.48	0.74
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U
Trichloroethene	0.30	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.67	0.081 U	0.045	0.091	0.19 U	0.26
Trichlorofluoromethane	1.6	1.5	1.5	1.2	1.4	1.3	11	1.2	1.7	1.5	1.5	1.7	1.1	1.7	1.5	1.5	1.3
Trichlorotrifluoroethane	0.54	0.54	0.62	0.45	0.58	0.56	0.44	0.56	0.66	0.69	0.58	0.89	0.43	0.53	0.59	0.58	0.66
Vinyl acetate	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.35 U	0.18 U	3.5 U	0.18 U	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.09 U	0.09 U	0.09 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Large Retail Space																
	EW-Combined-020309 2/3/2009	EW-COMBINE D-021109 2/11/2009	EW-COMBINE D-021809 2/18/2009	EW-COMBINE D-022609 2/26/2009	EW-COMBINE D-041409 4/14/2009	EW-COMBINE D-042409 4/24/2009	EW-COMBINE D-091709 9/17/2009	EW-COMBINE D-092409 9/24/2009	EW-COMBINE D-100109 10/1/2009	EW-COMBINE D-100809 10/8/2009	EW-COMBINE D-012810 1/28/2010	EW-COMBINE D-020510 2/5/2010	EW-COMBINE D-021210 2/12/2010	EW-COMBINE D-021910 2/19/2010	EW-COMBINE D-043010 4/30/2010	EW-COMBINE D-052810 5/28/2010	EW-COMBINE D-070110 7/1/2010
1,1,1-Trichloroethane	19000	91000	73000	32000	3500	19000	11000	8100	7900	6800	1500	2500	150	1200	1400	1700	2000
1,1,2,2-Tetrachloroethane	6.8 U	6.8 U	14 U	14 U	6.8 U	0.34 U	3.4 U	6.8 U	14 U	14 U	0.68 U	6.8 U	0.34 U	0.68 U	0.68 U	6.8 U	0.68 U
1,1,2-Trichloroethane	5.4 U	5.4 U	11 U	11 U	5.4 U	0.65	2.7 U	5.4 U	11 U	11 U	0.54 U	5.4 U	0.27 U	0.54 U	0.54 U	5.4 U	0.54 U
1,1-Dichloroethane	19000	7800	5300	4800	390	2200	1600	1900	1900	1700	280	370	31	310	200	270	290
1,1-Dichloroethene	7800	1800	1000	630	73	420	310	250	260	280	52	66	7.3	62	30	40	52
1,2,4-Trichlorobenzene	7.4 U	7.4 U	15 U	15 U	7.4 U	0.37 U	3.7 U	7.4 U	15 U	15 U	0.74 U	7.4 U	0.37 U	0.74 U	0.74 U	7.4 U	0.74 U
1,2,4-Trimethylbenzene	5 U	5 U	10 U	10 U	5 U	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U	0.5 U	5 U	0.5 U
1,2-Dibromoethane (EDB)	7.6 U	7.6 U	16 U	16 U	7.6 U	0.38 U	3.8 U	7.6 U	16 U	16 U	0.76 U	7.6 U	0.38 U	0.76 U	0.76 U	7.6 U	0.76 U
1,2-Dichlorobenzene	6 U	6 U	12 U	12 U	6 U	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U	0.6 U	6 U	0.6 U
1,2-Dichloroethane	4 U	4 U	8 U	8 U	4 U	0.2 U	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U	0.4 U	4 U	0.4 U
1,2-Dichloropropane	4.6 U	4.6 U	9.2 U	9.2 U	4.6 U	0.23 U	2.3 U	4.6 U	9.2 U	9.2 U	0.46 U	4.6 U	0.23 U	0.46 U	0.46 U	4.6 U	0.46 U
1,2-Dichlorotetrafluoroethane	7 U	7 U	14 U	14 U	7 U	0.35 U	3.5 U	7 U	14 U	14 U	0.7 U	7 U	0.35 U	0.7 U	0.7 U	7 U	0.7 U
1,3,5-Trimethylbenzene	5 U	5 U	10 U	10 U	5 U	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U	0.5 U	5 U	0.5 U
1,3-Butadiene	2.2 U	2.2 U	4.4 U	4.4 U	2.2 U	0.11 U	2.3 U	4.5 U	8.9 U	8.9 U	0.45 U	4.5 U	0.23 U	0.45 U	0.45 U	2.2 U	0.22 U
1,3-Dichlorobenzene	6 U	6 U	12 U	12 U	6 U	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U	0.6 U	6 U	0.6 U
1,4-Dichlorobenzene	6 U	6 U	12 U	12 U	6 U	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U	0.6 U	6 U	0.6 U
1,4-Dioxane																	
2-Butanone	37	32	48	60	21	40	7.8	31	30	21	4	11	10	9	12.0	22.0	22.0
2-Hexanone	4 U	4 U	8 U	8 U	4 U	0.5	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U	0.4 U	4 U	0.4 U
4-Ethyltoluene	5 U	5 U	10 U	10 U	5 U	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U	0.5 U	5 U	0.5 U
4-Methyl-2-pentanone	4 U	4 U	8 U	8 U	4 U	0.59	2 U	4 U	8 U	8 U	0.4 U	4 U	0.28	0.4 U	0.4 U	4 U	0.4 U
Acetone	1600	31	75	63	4.8 U	0.24 U	20	9.6 U	20 U	20 U	31	9.6 U	13	0.96 U	16	24	16
Benzene	14	7.3	8.4	6.4 U	3.2 U	2.5	2.7	3.2 U	6.4 U	6.4 U	0.61	3.2 U	0.63	0.43	0.74	5.5	0.84
Benzyl chloride	5.2 U	5.2 U	11 U	11 U	5.2 U	0.26 U	2.6 U	5.2 U	11 U	11 U	0.52 U	5.2 U	0.26 U	0.52 U	0.52 U	5.2 U	0.52 U
Bromodichloromethane	6.6 U	6.6 U	14 U	14 U	6.6 U	0.33 U	3.3 U	6.6 U	14 U	14 U	0.66 U	6.6 U	0.33 U	0.66 U	0.66 U	6.6 U	0.66 U
Bromoform	11 U	11 U	21 U	21 U	11 U	0.51 U	5.1 U	11 U	21 U	21 U	1.1 U	11 U	0.51 U	1.1 U	1.1 U	11 U	1.1 U
Bromomethane	3.8 U	3.8 U	7.6 U	7.6 U	3.8 U	0.19 U	1.9 U	3.8 U	7.6 U	7.6 U	0.38 U	3.8 U	0.19 U	0.38 U	0.38 U	3.8 U	0.38 U
Carbon disulfide	3.2 U	63	32	20	3.2 U	4.6	1.6 U	3.2 U	6.4 U	6.4 U	4.3	3.2 U	0.17	3.8	0.77	3.2 U	1.1
Carbon tetrachloride	6.2 U	6.2 U	13 U	13 U	6.2 U	0.57	3.1 U	6.2 U	13 U	13 U	0.62 U	6.2 U	0.38	0.62 U	0.62 U	6.2 U	0.73
Chlorobenzene	4.6 U	4.6 U	9.2 U	9.2 U	4.6 U	0.23 U	2.3 U	4.6 U	9.2 U	9.2 U	0.46 U	4.6 U	0.23 U	0.46 U	0.46 U	7.2	0.46 U
Chloroethane	3400	1700	1200	450	42	220	110	94	92	88	9.8	11	1.3	9.9	4.8	7.2	9.4
Chloroform	27	17	20	17	4.8 U	8.8	12	14	11	11	4.1	5.8	0.49	6.2	6	7.9	8
Chloromethane	2 U	2 U	4 U	4 U	2 U	8.2	1 U	2 U	4 U	4 U	0.2 U	2 U	0.1 U	0.2 U	0.2 U	2 U	0.2 U
cis-1,2-Dichloroethene	14000	4700	6300	4200	300	1600	1600	1500	1300	1200	190	280	21	240	180	260	260
cis-1,3-Dichloropropene	4.4 U	4.4 U	8.8 U	8.8 U	4.4 U	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U	0.44 U	4.4 U	0.44 U
Cyclohexane	3.4 U	3.4 U	6.8 U	6.8 U	3.4 U	0.17 U	1.7 U	3.4 U	6.8 U	6.8 U	0.34 U	3.4 U	0.17 U	0.34 U	0.34 U	3.4 U	0.34 U
Dibromochloromethane	8.6 U	8.6 U	18 U	18 U	8.6 U	0.43 U	4.3 U	8.6 U	18 U	18 U	0.86 U	8.6 U	0.43 U	0.86 U	0.86 U	8.6 U	0.86 U
Dichlorodifluoromethane	5 U	5 U	10 U	110	5 U	2.8	2.5 U	5 U	10 U	10 U	2.4	5 U	2.2	2.7	1.7	5 U	2.5
Ethanol	960	81	120	120	17	21	200	96	32	33	39	60	23	62	10	19 U	15
Ethyl acetate	7.3 U	3.6 U	7.2 U	15 U	7.3 U	0.37 U	1.8 U	3.6 U	7.2 U	7.2 U	0.36 U	3.6 U	0.18 U	0.36 U	0.36 U	3.6 U	0.36 U
Ethylbenzene	9.4	4.4 U	8.8 U	8.8 U	4.4 U	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U	0.44 U	4.4 U	0.44 U
Hexachlorobutadiene	22 U	22 U	43 U	43 U	22 U	1.1 U	5.3 U	11 U	22 U	22 U	1.1 U	11 U	0.53 U	1.1 U	1.1 U	11 U	1.1 U
Hexane	16	4.9	270	7.2 U	3.6 U	2.3	1.9	3.6 U	7.2 U	7.2 U	0.36 U	3.6 U	0.74	0.36 U	0.92	3.6 U	0.44
Isopropyl alcohol	610	2.4 U	15	9.9 U	5 U	0.25 U	22	5 U	9.9 U	9.9 U	2.3	5 U	1.0	0.5 U	2.6	2.4 U	0.24 U
m,p-Xylene	25	8.6 U	18 U	18 U	8.6 U	0.43 U	4.3 U	8.6 U	18 U	18 U	0.86 U	8.6 U	0.49	0.86 U	0.86 U	8.6 U	0.86 U
Methyl methacrylate																	

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Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Large Retail Space																
	EW-Combined-020309 2/3/2009	EW-COMBINE D-021109 2/11/2009	EW-COMBINE D-021809 2/18/2009	EW-COMBINE D-022609 2/26/2009	EW-COMBINE D-041409 4/14/2009	EW-COMBINE D-042409 4/24/2009	EW-COMBINE D-091709 9/17/2009	EW-COMBINE D-092409 9/24/2009	EW-COMBINE D-100109 10/1/2009	EW-COMBINE D-100809 10/8/2009	EW-COMBINE D-012810 1/28/2010	EW-COMBINE D-020510 2/5/2010	EW-COMBINE D-021210 2/12/2010	EW-COMBINE D-021910 2/19/2010	EW-COMBINE D-043010 4/30/2010	EW-COMBINE D-052810 5/28/2010	EW-COMBINE D-070110 7/1/2010
Methylene chloride	12	7 U	14 U	14 U	19	2.6	7 U	14 U	28 U	28 U	1.4 U	14 U	2.6	1.4 U	1.4 U	7 U	2.1
Methyl-t-butyl ether	3.6 U	3.6 U	7.2 U	7.2 U	3.6 U	0.18 U	1.8 U	3.6 U	7.2 U	7.2 U	0.36 U	3.6 U	0.18 U	0.36 U	0.36 U	3.6 U	0.36 U
n-Heptane	4 U	4 U	8 U	8 U	4 U	0.2 U	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U	0.4 U	4 U	0.4 U
o-Xylene	8.4	4.4 U	8.8 U	8.8 U	4.4 U	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U	0.44 U	4.4 U	0.44 U
Propylene (Propene)	3.5 U	100	3.6 U	6.9 U	3.5 U	0.18 U	3.5 U	6.9 U	6.9 U	14 U	0.69 U	6.9 U	0.35 U	0.69 U	0.69 U	18 U	1.8 U
Styrene	4.2 U	4.2 U	8.4 U	8.4 U	4.2 U	0.21 U	2.1 U	4.2 U	8.4 U	8.4 U	0.42 U	4.2 U	0.21 U	0.42 U	0.42 U	4.2 U	0.42 U
Tetrachloroethene	140	60	430	540	47	110	110	260	67	72	4.6	200	4.8	45	450	1300	640
Tetrahydrofuran	77	77	150	180	66	110	1.5 U	96	85	67	15	32	28	43	34	54	65
Toluene	36	3.8 U	7.6 U	7.6 U	3.8 U	0.59	3.4	4.7	7.6 U	7.6 U	0.38 U	3.8 U	3.6	0.38 U	0.75	3.8 U	0.41
trans-1,2-Dichloroethene	110	61	47	47	4.6	33	29	34	30	26	3.4	4.6	0.36	4.1	3	4.6	5.5
trans-1,3-Dichloropropene	4.4 U	4.4 U	8.8 U	8.8 U	4.4 U	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U	0.44 U	4.4 U	0.44 U
Trichloroethene	36000	17000	26000	13000	1400	6200	4000	3600	4000	4300	390	1400	58	460	1200	2000	1700
Trichlorofluoromethane	9900	2300	1800	1000	98	600	1800	1400	1500	1500	260	230	29	230	210	300	440
Trichlorotrifluoroethane	7.6 U	7.6 U	16 U	16 U	7.6 U	0.74	3.8 U	7.6 U	16 U	16 U	0.76 U	7.6 U	0.53	0.76 U	0.76 U	7.6 U	0.76 U
Vinyl acetate	15 U	3.6 U	7.2 U	29 U	15 U	0.71 U	7.1 U	15 U	29 U	29 U	1.5 U	15 U	0.71 U	1.5 U	1.5 U	3.6 U	0.36 U
Vinyl chloride	110	20	10	5.2 U	2.6 U	3.4	1.3 U	2.6 U	5.2 U	5.2 U	0.26 U	2.6 U	0.13 U	0.26 U	0.26 U	2.6 U	0.26 U

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Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Large Retail Space																	
	EW-COMBINE D-091610 9/16/2010	EW-COMBINE D-120710 12/7/2010	EW-COMBINE D-021711 2/17/2011	EW-COMBINE D 091511 9/15/2011	EW-Combined-120811 12/8/2011	EW-Combined-030812 3/8/2012	EW-Combined-061412 6/14/2012	EW-Combined-091312 9/13/2012	EW-Combine d-010313 1/13/2013	EW-Combined-031513 3/15/2013	EW-1-030609 3/6/2009	EW-1-033109 3/31/2009	EW-2-030609 3/6/2009	EW-2-033109 3/31/2009	EW-3-030609 3/6/2009	EW-3-033109 3/31/2009	EW-4-030609 3/6/2009	EW-4-033109 3/31/2009
1,1,1-Trichloroethane	4700	280 D	2500 D	2400	340	1100	1800	2800	1800	610	59000	66000	26000	30000	54000	72000	11000	14000
1,1,2,2-Tetrachloroethane	0.68 U	0.69 UD	0.69 UD	1.4 U	0.69 U	3.4 U	0.69 U	0.69 U	0.69 U	0.69 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	1.7 U	6.8 U
1,1,2-Trichloroethane	0.55	0.55 UD	0.55 UD	1.1 U	0.55 U	2.7 U	0.55 U	0.26	0.55 U	0.55 U	6.4	10	5.4 U	5.4 U	5.4 U	5.4 U	1.4 U	5.4 U
1,1-Dichloroethane	330	36 D	170 D	200	70	78	130	200	99	59	4100	4400	5700	7000	1600	2300	690	1400
1,1-Dichloroethene	81	7.3 D	58 D	44	21	34	42	15	28	24	570	1200	330	640	340	560	97	210
1,2,4-Trichlorobenzene	0.74 U	0.74 UD	0.74 UD	3.0 U	1.5 U	3800	1.5 U	1.5 U	1.5 U	1.5 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	1.9 U	7.4 U
1,2,4-Trimethylbenzene	0.5 U	0.49 UD	0.49 UD	0.98 U	1.2	4.9 U	0.57	0.24	0.49 U	14	5 U	5 U	5 U	5 U	5 U	5 U	1.3 U	5 U
1,2-Dibromoethane (EDB)	0.76 U	0.77 UD	0.77 UD	1.5 U	0.77 U	3.8 U	0.77 U	0.77 U	0.77 U	0.77 U	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U
1,2-Dichlorobenzene	0.6 U	0.6 UD	0.6 UD	1.2 U	0.6 U	7.3	0.6 U	0.6 U	0.60 U	0.6 U	6 U	6 U	6 U	6 U	6 U	6 U	1.5 U	6 U
1,2-Dichloroethane	0.4 U	0.4 UD	0.4 UD	0.81 U	0.4 U	2 U	0.4 U	0.4 U	0.40 U	0.4 U	4 U	4 U	4 U	4 U	4 U	4 U	1 U	4 U
1,2-Dichloropropane	0.46 U	0.46 UD	0.46 UD	0.92 U	0.46 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	4.6 U
1,2-Dichlorotetrafluoroethane	0.7 U										7 U	7 U	7 U	7 U	7 U	7 U	1.8 U	7 U
1,3,5-Trimethylbenzene	0.5 U	0.49 UD	0.49 UD	0.98 U	0.29	4.9 U	0.15	0.49 U	0.49 U	3.9	5 U	5 U	5 U	5 U	5 U	5 U	1.3 U	5 U
1,3-Butadiene	0.22 U	0.22 UD	0.22 UD	0.44 U	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.55 U	2.2 U
1,3-Dichlorobenzene	0.6 U	0.6 UD	0.6 UD	1.2 U	0.6 U	6 U	0.6 U	0.6 U	0.60 U	1.1	6 U	6 U	6 U	6 U	6 U	6 U	1.5 U	6 U
1,4-Dichlorobenzene	0.6 U	0.6 UD	0.6 UD	1.2 U	0.6 U	6 U	0.6 U	0.6 U	0.60 U	0.64	6 U	6 U	6 U	6 U	6 U	6 U	1.5 U	6 U
1,4-Dioxane				0.72 U														
2-Butanone	10.0	4.5 D	4.5 BD	24 U	1.3	120 U	110	16	2.9	22	3.5	8.9	12.0	11	36	10	36	6.4
2-Hexanone	0.4 U	0.41 UD	0.41 UD	0.82 U	0.16	4.1 U	0.31	0.41 U	0.41 U	1.4	4 U	4 U	4 U	4 U	4 U	4 U	1 U	4 U
4-Ethyltoluene	0.5 U	0.49 UD	0.49 UD	0.98 U	0.27	4.9 U	0.49 U	0.49 U	0.49 U	3.4	5 U	5 U	5 U	5 U	5 U	5 U	1.3 U	5 U
4-Methyl-2-pentanone	0.4 U	0.41 UD	0.41 UD	0.82 U	0.16	4.1 U	0.38	0.41 U	0.41 U	8.7	4 U	4 U	4 U	4 U	4 U	4 U	1 U	4 U
Acetone	6.6	11 BD	6.3 BD	19 U	6.6	22	19	14	10	75	35	16	9.6 U	9.6 U	53	24	26	12
Benzene	1.7	0.5 D	0.72 D	0.77	0.56	3.2 U	1	0.96	0.45	5	5.3	11	5.6	7.8	3.2 U	6.8	1.4	3.2 U
Benzyl chloride	0.52 U	0.52 UD	0.52 UD	1.0 U	0.52 U	5.2 U	0.52 U	0.52 U	0.52 U	0.52 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	1.3 U	5.2 U
Bromodichloromethane	0.66 U	0.67 UD	0.67 UD	1.3 U	0.67 U	3.4 U	10	0.67 U	0.67 U	0.67 U	6.6 U	6.6 U	6.6 U	6.6 U	6.6 U	6.6 U	1.7 U	6.6 U
Bromoform	1.1 U	1 UD	1 UD	2.1 U	1 U	10 U	1 U	1 U	1.0 U	1 U	11 U	11 U	11 U	11 U	11 U	11 U	2.6 U	11 U
Bromomethane	0.38 U	0.39 UD	0.39 UD	0.78 U	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	0.95 U	3.8 U
Carbon disulfide	1.3	0.31 UD	0.73 D	6.2 U	3.1 U	31 U	1.7	3.6	0.43	0.82	3.2 U	3.2 U	27	25	3.2 U	3.2 U	1.8	3.2 U
Carbon tetrachloride	1.1	0.63 UD	0.63 D	1.3 U	0.48	3.1 U	0.5	0.74	0.63 U	0.63 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	1.6 U	6.2 U
Chlorobenzene	0.46 U	0.46 UD	0.46 UD	0.92 U	0.46 U	4.6 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	4.6 U
Chloroethane	17	1 D	3.6 D	6.7	2.1	2.6 U	3	5.3	1.5	1.1	170	250	700	590	41	44	17	33
Chloroform	8.3	1.6 D	6.9 D	7.6	2.7	3.2	6.3	8.5	4.7	3.5	20	34	9.6	15	13	23	3.6	7.5
Chloromethane	0.2 U	0.21 UD	0.21 UD	0.41 U	0.21 U	2.1 U	20	0.21 U	0.21 U	0.21 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U
cis-1,2-Dichloroethene	360	28 D	120 D	160	38	47	75	150	66	30	2000	2200	6100	7600	610	1200	560	1300
cis-1,3-Dichloropropene	0.44 U	0.45 UD	0.45 UD	0.91 U	0.45 U	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U
Cyclohexane	0.55	0.34 UD	0.34 UD	0.69 U	0.34 U	3.4 U	0.34 U	0.34 U	0.34 U	21	3.4 U	5.7	8.4	8.8	3.4 U	3.4 U	0.85 U	3.4 U
Dibromochloromethane	0.86 U	0.85 UD	0.85 UD	1.7 U	0.85 U	4.3 U	0.85 U	0.85 U	0.85 U	0.85 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	8.6 U
Dichlorodifluoromethane	1.6	3 D	4.1 D	2.9	2.9	4.9 U	2.9	2.9	2.4	2.5	5 U	170	5 U	5 U	5.4	7	2.6	5 U
Ethanol	1.9 U	8.2 D	17 D	15 U	9.2	75 U	7.2	12	19	320	33	40	12	8.3	39	1.8 U	8.6	1.8 U
Ethyl acetate	0.36 U	0.36 UD	0.36 UD	0.72 U	1.2	3.6 U	1.3	0.36 U	0.36 U	110	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U
Ethylbenzene	0.58	0.43 UD	0.43 UD	0.87 U	0.58	4.3 U	0.28	0.21	0.43 U	13	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U
Hexachlorobutadiene	1.1 U	1.1 UD	1.1 UD	2.1 U	1.1 U	11 U	1.1 U	1.1 U	1.1 U	1.1 U	22 U	22 U	22 U	22 U	22 U	22 U	5.4 U	22 U
Hexane	0.71 U	0.7 UD	0.8 D	28 U	0.66	140 U	0.91	1.5	0.53	6.8	3.6 U	3.6 U	3.6 U	6.6	3.6 U	3.6 U	3.2	3.6 U
Isopropyl alcohol	0.5 U	0.84 D	0.25 UD	20 U	9.8 U	98 U	3.1	2.9	9.8 U	27	28	2.4 U	2.4 U	2.4 U	26	5.9	7.5	7.1
m,p-Xylene	1.6	0.87 UD	0.87 UD	1.7 U	1.6	8.7 U	0.51	0.59	0.87 U	34	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	8.6 U
Methyl methacrylate			0.41 UD	0.82 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	3.5								

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Extraction Well - Large Retail Space																	
	EW-COMBINE D-091610 9/16/2010	EW-COMBINE D-120710 12/7/2010	EW-COMBINE D-021711 2/17/2011	EW-COMBINE D 091511 9/15/2011	EW-Combined-120811 12/8/2011	EW-Combined-030812 3/8/2012	EW-Combined-061412 6/14/2012	EW-Combined-091312 9/13/2012	EW-Combinde d-010313 1/13/2013	EW-Combined-031513 3/15/2013	EW-1-030609 3/6/2009	EW-1-033109 3/31/2009	EW-2-030609 3/6/2009	EW-2-033109 3/31/2009	EW-3-030609 3/6/2009	EW-3-033109 3/31/2009	EW-4-030609 3/6/2009	EW-4-033109 3/31/2009
Methylene chloride	0.9	0.78 D	2.9 D	6.9 U	2.2	8.1	2.3	2.2	2.2	2.4	7 U	19	7 U	17	7 U	13	19	12
Methyl-t-butyl ether	0.36 U	0.36 UD	0.36 UD	0.72 U	0.24	3.6 U	1.1	0.17	0.36 U	0.36 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U
n-Heptane	0.4 U	0.41 UD	0.41 UD	0.82 U	0.23	4.1 U	0.41 U	0.41 U	0.41 U	4.4	4 U	4 U	4 U	4 U	4 U	4 U	1 U	4 U
o-Xylene	0.56	0.43 UD	0.43 UD	0.87 U	0.69	4.3 U	0.28	0.25	0.43 U	16	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U
Propylene (Propene)	0.69 U	1.8 D	1.7 UD	14 U	6.9 U	13	3.8	6.9 U	6.9 U	6.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.45 U	1.8 U
Styrene	0.42 U	0.43 UD	0.43 UD	0.85 U	0.21	4.3 U	0.54	0.39	0.43 U	14	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	1.1 U	4.2 U
Tetrachloroethene	750	160 D	920 D	440	8.1	170	530	910	850	60	600	1200	2300	2500	73	310	31	170
Tetrahydrofuran	31	11 D	11 D	21	0.27	8.3	3800	110	1.8	4.1	6.3	21	19	3 U	32	14	37	5.1
Toluene	3.5	0.38 D	1.4 D	0.75 U	2.5	3.8 U	1.4	0.87	0.38 U	74	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	1.4	3.8 U
trans-1,2-Dichloroethene	6.6	0.6 D	1.9 D	3.5	1.1	2 U	1.7	1.9	1	0.86	9.2	23	69	180	4 U	8.8	2.5	8
trans-1,3-Dichloropropene	0.44 U	0.45 UD	0.45 UD	0.91 U	0.45 U	2.3 U	0.45 U	0.45 U	0.45 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	
Trichloroethene	3200	240 D	1800 D	1900	97	730	1500	2600	2000	380	31000	42000	25000	25000	8600	19000	2700	5500
Trichlorofluoromethane	410	71 D	200 D	610	200	150	260	100	230	130	520	540	1300	1800	430	840	240	370
Trichlorotrifluoroethane	0.76 U	0.77 UD	0.77 UD	1.5 U	0.89	3.8 U	0.77 U	0.37	0.77 U	0.92	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U
Vinyl acetate	0.71 U	0.7 UD	0.35 UD	0.70 U	0.35 U	7 U	1.4	0.7 U	0.70 U	0.7 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U
Vinyl chloride	0.4	0.26 UD	0.26 UD	0.51 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	2.7	4.8	9.4	8.1	2.6 U	2.6 U	0.65	2.6 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Post Treatment - Large Retail Space							CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space										
	Post carbon- 020309 2/3/2009	POST CARBON- 021109 2/11/2009	POST CARBON- 021809 2/18/2009	POST CARBON- 022609 2/26/2009	POST CARBON- 041409 4/14/2009	POST CARBON- 100809 10/8/2009	Post- Carbon- 010810 1/8/2010		IA-1 011609 1/16/2009	IA-1- 020309 2/3/2009	IA-1- 021109 2/11/2009	IA-1- 021809 2/18/2009	IA-1- 022609 2/26/2009	IA-1- 030609 3/6/2009	IA-1- 033109 3/31/2009	IA-1- 041409 4/14/2009	IA-1- 042409 4/24/2009	IA-1- 091709 9/17/2009	
1,1,1-Trichloroethane	1	15	45	1.9	13000	0.56	450	500	10	0.56	1.1	0.99	0.35	1.8	1.5	1.4	2	0.27 U	
1,1,2,2-Tetrachloroethane	0.34 U	1.7 U	0.68 U	0.68 U	68 U	0.34 U	0.34 U	0.14	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	
1,1,2-Trichloroethane	0.27 U	1.4 U	0.54 U	0.54 U	54 U	0.27 U	0.27 U	12	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U		
1,1-Dichloroethane	0.2 U	1 U	5.4	11000	490	370	610	430	0.71	0.2 U	0.2 U	0.2 U	0.27	0.32	0.2 U	0.14 U	0.2 U	0.2 U	
1,1-Dichloroethene	0.2 U	1 U	0.4 U	6400	96	78	87	20	0.38	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	
1,2,4-Trichlorobenzene	0.37 U	1.9 U	0.74 U	0.74 U	74 U	0.37 U	0.37 U	NA	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U		
1,2,4-Trimethylbenzene	0.25 U	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U	52	0.25 U	0.36	0.7	0.77	0.25 U	0.25 U	0.25 U	0.18 U	0.48	0.29	
1,2-Dibromoethane (EDB)	0.38 U	1.9 U	0.76 U	0.76 U	76 U	0.38 U	0.38 U	0.038	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	
1,2-Dichlorobenzene	0.3 U	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U	410	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U		
1,2-Dichloroethane	0.2 U	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U	0.31	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U		
1,2-Dichloropropane	0.23 U	1.2 U	0.46 U	0.46 U	46 U	0.23 U	0.23 U	0.42	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U		
1,2-Dichlorotetrafluoroethane	0.35 U	1.8 U	0.7 U	0.7 U	70 U	0.35 U	0.35 U	NA	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U		
1,3,5-Trimethylbenzene	2.1	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U	52	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U		
1,3-Butadiene	0.11 U	0.55 U	0.22 U	0.22 U	22 U	0.23 U	0.23 U	NA	0.11 U	0.11 U	0.34	0.84	0.11 U	0.11 U	0.08 U	0.11 U	0.23 U		
1,3-Dichlorobenzene	2.9	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U	410	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U		
1,4-Dichlorobenzene	0.3 U	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U	24	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U		
1,4-Dioxane								NA											
2-Butanone	10	6.3	9.4	5.5	330	1.9	2.0	500	20	3.1	5.8	3.4	2.6	2.2	1.3	1.2	4.4	2	
2-Hexanone	0.2 U	1 U	0.4 U	0.4 U	13000	0.27	0.34	NA	0.2 U	0.2 U	0.6	0.42	0.2 U	0.23	0.2 U	0.14 U	0.48	0.43	
4-Ethyltoluene	2.1	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U	NA	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U		
4-Methyl-2-pentanone	5	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U	200	0.2 U	0.2 U	0.43	0.3	0.2 U	0.2 U	0.14 U	0.52	0.21		
Acetone	1200	11	19	12	430	3.6	5.7	500	18	7.7	19	21	10	8.7	14	12	310	11	
Benzene	1.3	0.8 U	0.32 U	0.32 U	32 U	0.16 U	0.16 U	3.3	1	0.68	1.9	3	0.69	0.87	0.71	0.56	0.78	0.49	
Benzyl chloride	0.26 U	1.3 U	0.52 U	0.52 U	52 U	0.26 U	0.26 U	NA	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U		
Bromodichloromethane	0.33 U	1.7 U	0.66 U	0.66 U	66 U	0.33 U	0.33 U	0.46	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U		
Bromoform	0.51 U	2.6 U	1.1 U	1.1 U	110 U	0.51 U	0.51 U	7.3	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U		
Bromomethane	0.19 U	0.95 U	0.38 U	0.38 U	38 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U		
Carbon disulfide	0.16 U	0.8 U	4.1	27	250	0.16 U	0.20	NA	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U		
Carbon tetrachloride	0.38	1.6 U	0.62 U	0.62 U	62 U	0.31 U	0.31 U	0.54	0.35	0.41	0.52	0.55	0.46	0.59	0.53	0.31	0.43	0.48	
Chlorobenzene	0.23 U	1.2 U	0.46 U	0.46 U	46 U	0.23 U	0.23 U	200	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U		
Chloroethane	0.13 U	5100	1800	480	64	19	10	500	0.13 U	0.13 U	0.42	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U		
Chloroform	0.24 U	1.2 U	0.48 U	0.67	48 U	0.24 U	6.8	0.5	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U		
Chloromethane	0.59	0.5 U	0.2 U	0.2 U	23	0.1 U	0.1 U	80	1.1	1	1.4	1.5	1	1	1.2	1.1	1.3	1.1	
cis-1,2-Dichloroethene	0.27	1 U	3.9	5200	820	230	570	100	2	0.2 U	1	1.1	0.73	1.3	0.5	0.6	1.3	0.2 U	
cis-1,3-Dichloropropene	0.22 U	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U	2.9	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U		
Cyclohexane	0.93	0.85 U	0.34 U	0.34 U	34 U	0.17 U	0.17 U	NA	0.17 U	0.17 U	0.49	0.61	0.17 U	0.17 U	0.12 U	0.34	0.18 U		
Dibromochloromethane	0.43 U	2.2 U	0.86 U	0.86 U	86 U	0.43 U	0.43 U	NA	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U		
Dichlorodifluoromethane	0.76	4.1	3	2.4	50 U	1.7	1.9	500	1.8	2.1	2.6	2.8	2.6	3.1	2	8.3	2.4		
Ethanol	740	36	25	9.8	110	0.38 U	2.8	NA	5.7	8.3	14	20	9.8	7.5	18	5	39	6.2	
Ethyl acetate	0.37 U	0.9 U	0.36 U	0.73 U	73 U	0.18 U	0.18 U	NA	0.37 U	0.37 U	0.18 U	0.18 U	0.37 U	0.18 U	0.18 U	0.26 U	0.37 U	0.32	
Ethylbenzene	10	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U	290	0.26	0.28	0.66	0.85	0.23	0.22 U	0.22 U	0.16 U	0.94	0.23	
Hexachlorobutadiene	1.1 U	5.4 U	2.2 U	2.2 U	220 U	0.53 U	0.53 U	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	0.53 U		
Hexane	3	0.9 U	46	0.36 U	36 U	0.18 U	0.23	NA	0.92	0.74	1.2	1.6	1	0.51	0.53	0.65	1.7	0.99	
Isopropyl alcohol	450	2.9	3.1	47	290	0.25 U	1.4	NA	3.4	3.1	5.3	5.8	3.8	2	9.1	0.18 U	240	5.2	
m,p-Xylene	27	2.2 U	0.86 U	0.86 U	86 U	0.43 U	0.43 U	500	0.76	0.87	2.1	2.8	0.8	0.43 U	0.63	0.31 U	2.5	0.79	
Methyl methacrylate								NA											

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Post Treatment - Large Retail Space							CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space									
	Post carbon- 020309 2/3/2009	POST CARBON- 021109 2/11/2009	POST CARBON- 021809 2/18/2009	POST CARBON- 022609 2/26/2009	POST CARBON- 041409 4/14/2009	POST CARBON- 100809 10/8/2009	Post- Carbon- 010810 1/8/2010		IA-1 011609 1/16/2009	IA-1- 020309 2/3/2009	IA-1- 021109 2/11/2009	IA-1- 021809 2/18/2009	IA-1- 022609 2/26/2009	IA-1- 030609 3/6/2009	IA-1- 033109 3/31/2009	IA-1- 041409 4/14/2009	IA-1- 042409 4/24/2009	IA-1- 091709 9/17/2009
Methylene chloride	20	76	17	3	810	0.7 U	0.72	17	2.3	33	2.3	1.8	4.4	1.1	6.7	3.5	4.8	1.6
Methyl-t-butyl ether	0.18 U	0.9 U	0.36 U	0.36 U	36 U	0.18 U	0.18 U	190	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U
n-Heptane	1.8	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U	NA	0.23	0.2 U	0.59	0.75	0.2 U	0.2 U	0.14 U	0.67	0.2 U	0.2 U
o-Xylene	9.5	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U	500	0.26	0.33	0.76	0.99	0.3	0.22 U	0.22 U	0.16 U	0.7	0.31
Propylene (Propene)	0.18 U	98	0.18 U	0.35 U	35 U	0.35 U	0.35 U	NA	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.09 U	0.13 U	0.18 U	0.35 U
Styrene	3.4	1.1 U	0.42 U	0.42 U	42 U	0.21 U	0.21 U	290	0.21 U	0.21 U	0.21	0.28	0.21 U	0.21 U	0.21 U	0.24	0.21 U	0.21 U
Tetrachloroethene	0.72	1.7 U	1.1	0.68 U	68 U	0.52	1.9	5	6.6	0.57	4.2	3.2	2.6	4.9	1.5	1.9	6.1	0.34 U
Tetrahydrofuran	6.8	22	40	18	210	4.1	6.5	NA	12	1.2	1.3	0.48	0.32	0.15 U	0.15 U	0.23	0.4	0.15 U
Toluene	29	0.95 U	0.65	0.38 U	38 U	0.19 U	0.36	500	1.7	1.4	4	5.7	2.3	0.93	1.7	0.72	5.7	1.3
trans-1,2-Dichloroethene	0.2 U	1 U	0.4 U	28	40 U	7.7	15	200	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U	2.9	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U
Trichloroethene	2	11	16	2.7	54 U	1	1.0	1	4.2	0.46	1.6	1.4	0.65	1.5	0.57	0.74	1.6	0.27 U
Trichlorofluoromethane	0.71	1.4 U	23	6700	84	180	210	500	2.1	1.4	1.7	3.1	1.6	1.7	1.2	1.2	1.5	1.4
Trichlorotrifluoroethane	1.3	1.9 U	0.76 U	0.76 U	76 U	0.38 U	0.51	NA	0.65	0.64	0.47	0.46	0.67	0.48	0.59	0.54	1.7	0.48
Vinyl acetate	0.71 U	0.9 U	0.36 U	1.5 U	150 U	0.71 U	0.71 U	NA	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.18 U	0.5 U	0.71 U	0.71 U
Vinyl chloride	0.13 U	30	13	4.5	26 U	0.13 U	0.13 U	1.9	0.26	0.13 U	0.22	0.21	0.13 U	0.19	0.13 U	0.1 U	0.16	0.13 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space																		
	IA-1-092409 9/24/2009	IA-1-100109 10/1/2009	IA-1-100809 10/8/2009	IA-1-120209 12/2/2009	IA-1-010810 1/8/2010	IA-1-012810 1/28/2010	IA-1-020510 2/5/2010	IA-1-021210 2/12/2010	IA-1-021910 2/19/2010	IA-1-032610 3/26/2010	IA-1-043010 4/30/2010	IA-1-052810 5/28/2010	IA-1-070110 7/1/2010	IA-1-091610 9/16/2010	IA-1-120710 12/7/2010	IA-1-021711 2/17/2011	IA-1-060211 6/2/2011	IA-1-091511 9/15/2011	
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.24	0.27 U	0.27 U	0.76	0.30	0.88	0.27 U	1.2	0.33	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.52 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	
1,2,4-Trimethylbenzene	0.35	0.28	0.51	0.52	0.37	0.25 U	0.26	0.25 U	0.25 U	0.25 U	0.25 U	0.4	0.43	0.56	0.25 U	0.55	0.25 U	0.25 U	
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.18	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,3-Butadiene	0.23 U	0.23 U	0.23 U	0.17	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	
1,4-Dioxane																		0.18 U	
2-Butanone	2.6	2.7	1.3	2.7	1.6	0.3 U	2.4	1.1	1.2	1.3	0.78	2.6	3.3	0.85	0.68	1.7 B	2.9 U	5.9 U	
2-Hexanone	0.52	0.73	0.31	0.71	0.36	0.2 U	0.47	0.2 U	0.27	0.27	0.2 U	0.67	0.75	0.2 U	0.2 U	0.2 U	4.1 U	0.62	
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.18	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
4-Methyl-2-pentanone	0.35	0.32	0.2 U	0.34	0.2 U	0.2 U	0.2 U	0.22	0.2 U	0.2 U	0.2 U	0.28	0.35	0.35	0.2 U	0.2 U	0.2 U	0.23	
Acetone	18	13	10	13	12	2.0	19	7.3	8.5	7	6.5	18	18	11	12 B	15 B	11 B	18	
Benzene	0.47	0.39	0.48	1.1	1.2	0.16 U	0.98	0.64	0.53	0.59	0.64	0.5	0.46	0.8	0.49	1.5	0.25	0.32	
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U	
Bromoform	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	
Bromomethane	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.33	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	
Carbon tetrachloride	0.38	0.42	0.43	0.48	0.43	0.31 U	0.40	0.31 U	0.45	0.44	0.48	0.55	0.52	0.5	0.46	0.47	0.53	0.57	
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	
Chloroethane	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
Chloroform	0.24 U	0.24 U	0.24 U	0.17 U	0.26	0.24 U	0.47	0.43	0.24 U	0.24 U	0.25	0.24 U	0.24 U	3.8	0.24 U	0.24 U	0.24 U	0.24 U	
Chloromethane	1.1	0.98	0.95	1.3	1.1	1.4	1.3	1.3	1.2	1.3	0.79	1.2	1.2	1.1	0.97	1	0.92	1.3	
cis-1,2-Dichloroethene	0.2 U	0.83	0.44	0.57	0.2 U	0.2 U	0.2 U	0.2 U	0.56	0.2 U	1.3	0.2 U	0.5	0.2 U	1.7	0.2 U	0.2 U	0.20 U	
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	
Cyclohexane	0.17 U	0.17 U	0.17 U	0.28	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.22	0.17 U	0.17 U	0.17 U	0.17 U	
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	
Dichlorodifluoromethane	2	2.3	2.1	1.6	3.1	2.4	2.4	2.6	3.0	1.6	2.2	2.3	2.7	1.7	2	3.1	1.5	2	
Ethanol	7	6.5	8.8	10	8.4	7.0	29	19	43	4.6	4.4	6	6.5	9	2.7	9	2.8	6.4	
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
Ethylbenzene	0.23	0.22 U	0.28	0.46	0.40	0.22 U	0.32	0.22 U	0.22 U	0.22 U	0.23	0.29	0.27	0.51	0.22 U	0.54	0.22 U	0.22 U	
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	0.75 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	
Hexane	1.3	0.41	0.77	0.78	0.74	0.18 U	0.82	1.3	0.45	0.2	1.1	0.8	0.46	0.61	0.35 U	1.9	0.43	7.0 U	
Isopropyl alcohol	5.2	0.25 U	2.7	1.8	2.4	0.25 U	9.4	0.25 U	1.6	0.65	3.4	0.12 U	0.74	1.4	0.25 U	1.7	1.2 U	4.9 U	
m,p-Xylene	0.91	0.73	1	1.4	1.1	0.43 U	1.0	0.43 U	0.43 U	0.5	0.77	1.1	1.2	1.7	0.43 U	1.6	0.42 J	0.51	
Methyl methacrylate															0.2 U	0.2 U	0.2 U	0.20 U	

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Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-1-092409 9/24/2009	IA-1-100109 10/1/2009	IA-1-100809 10/8/2009	IA-1-120209 12/2/2009	IA-1-010810 1/8/2010	IA-1-012810 1/28/2010	IA-1-020510 2/5/2010	IA-1-021210 2/12/2010	IA-1-021910 2/19/2010	IA-1-032610 3/26/2010	IA-1-043010 4/30/2010	IA-1-052810 5/28/2010	IA-1-070110 7/1/2010	IA-1-091610 9/16/2010	IA-1-120710 12/7/2010	IA-1-021711 2/17/2011	IA-1-060211 6/2/2011	IA-1-091511 9/15/2011
Methylene chloride	3.6	0.7 U	0.7 U	2.9	0.7 U	1.4	1.5	1.9	0.7 U	0.7 U	0.7 U	0.35 U	1.2	0.56	0.56	4.8	1.3	1.7 U
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.2 U	0.2 U	0.26	0.42	0.35	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.36	0.2 U	0.5	0.2 U	0.20 U
o-Xylene	0.4	0.28	0.4	0.52	0.44	0.22 U	0.38	0.22 U	0.22 U	0.22 U	0.28	0.46	0.51	0.69	0.22 U	0.56	0.22 U	0.22 U
Propylene (Propene)	0.35 U	0.18 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 U	0.35 U	0.86 U	0.86 U	0.86 U	3.4 U
Styrene	0.21 U	0.21 U	0.21 U	0.19	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.25	0.31	0.24	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	0.34 U	2	1.1	3.2	0.34 U	0.34 U	0.34 U	0.34 U	1.2	0.34 U	4.5	0.55	1.1	0.34 U	3.3	5.6 [a]	0.34 U	0.47
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.11 U	0.15 U	0.15 U	0.15 U	0.15 U	0.22	0.15 U	0.15 U	0.15 U	0.24	0.16	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	1.1	0.78	1.2	2.8	2.1	0.19 U	0.82	0.69	0.58	0.8	1.3	0.91	0.99	2.5	0.44	3	0.58	0.93
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U
Trichloroethene	0.27 U	1.1	0.56	0.69	0.27 U	0.27 U	0.27 U	0.31	0.39	0.27 U	1.5	0.27 U	0.4	0.27 U	1.7	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	1.3	1.2	1.2	1.3	2.5	0.81	1.3	1.5	1.5	1.4	1.2	1.3	1.4	2.7	1.2	1.7	1.1	1.8
Trichlorotrifluoroethane	0.44	0.45	0.51	0.52	0.63	0.38 U	0.71	0.63	0.55	0.55	0.48	0.59	0.53	0.48	0.57	0.64	0.67	0.59
Vinyl acetate	0.71 U	0.71 U	0.71 U	0.25 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.35 U	0.18 U	3.5 U
Vinyl chloride	0.13 U	0.17	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14	0.13 U	0.13 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-1-120811 12/8/2011	IA-1-030812 3/8/2012	IA-1-061412 6/14/2012	IA-1-091312 9/13/2012	IA-1-010313 1/3/2013	IA-1-031513 3/15/2013	IA-2-011609 1/16/2009	IA-2-020309 2/3/2009	IA-2-021109 2/11/2009	IA-2-021809 2/18/2009	IA-2-022609 2/26/2009	IA-2-041409 4/14/2009	IA-2-042409 4/24/2009	IA-2-091709 9/17/2009	IA-2-092409 9/24/2009	IA-2-100109 10/1/2009	IA-2-100809 10/8/2009	IA-2-012810 1/28/2010
1,1,1-Trichloroethane	0.12	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	9.9	0.63	1.1	1.1	0.44	1.4	2.1	0.27 U	0.27 U	0.27 U	0.27 U	0.44
1,1,2,2-Tetrachloroethane	0.21 U	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.72	0.2 U	0.2 U	0.2 U	0.32	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.41	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.45 U	0.45 U	0.45 U	0.52 U	0.52 U	0.52 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.1	0.15 U	0.16	0.55	0.17 U	0.17 U	0.25 U	0.37	0.7	0.65	0.3	0.18 U	0.25 U	0.29	0.39	0.27	0.52	0.55
1,2-Dibromoethane (EDB)	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.056	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.14 U	0.069 U	0.14 U	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane							0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.044	0.15 U	0.059	0.32	0.17 U	0.17 U	0.25 U	0.25 U	0.25	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.59
1,3-Butadiene	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	0.11 U	0.11 U	0.3	0.66	0.11 U	0.08 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,3-Dichlorobenzene	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.34
1,4-Dioxane																		
2-Butanone	1.8	1.2	1.4	3	0.87	0.64	21	4.1	4.6	3	2.9	0.95	1.6	1.1	2.3	0.81	1	2.1
2-Hexanone	0.22	0.26	0.12 U	0.28	0.14 U	0.14 U	0.2 U	0.2 U	0.35	0.26	0.2 U	0.14 U	0.2 U	0.25	0.54	0.2 U	0.26	0.51
4-Ethyltoluene	0.15 U	0.15 U	0.071	0.19	0.17 U	0.17 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.39	0.13	0.093	0.26	0.14 U	0.14 U	0.2 U	0.2 U	0.35	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.39	0.2 U	0.2 U	0.2 U
Acetone	8	6	12	16	7	5	17	9.6	14	18	9.7	13	39	6.2	17	11	8.8	17
Benzene	0.47	0.34	0.19	0.67	0.51	0.72	1	0.67	1.8	3	0.77	0.58	0.44	0.41	0.47	0.39	0.54	1.2
Benzyl chloride	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.93 U	0.93 U	0.93 U	1.1 U	1.1 U	1.1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.49	0.46	0.46	0.39	0.54	0.44	0.33	0.41	0.55	0.57	0.48	0.41	0.41	0.44	0.4	0.46	0.42	0.31 U
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U	0.13 U	0.13 U	0.42	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.085	0.073 U	0.097	0.19	0.17 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.25	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	0.93	1.3	1.6	1.3	0.99	1.1	1.1	1	1.3	1.3	1	1.1	1.2	0.91	1.1	0.96	0.98	1.2
cis-1,2-Dichloroethene	0.15	0.059 U	0.12 U	0.045	0.14 U	0.14 U	2.1	0.24	1.1	1.1	0.95	0.59	1.6	0.2 U	0.2 U	0.79	0.48	0.58
cis-1,3-Dichloropropene	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.1 U	0.1 U	0.1 U	0.27	0.12 U	0.12 U	0.17 U	0.17 U	0.44	0.61	0.17 U	0.12 U	0.22	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.26 U	0.13 U	0.26 U	0.3 U	0.30 U	0.3 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.6	2.1	2.7	2.7	2.5	1.7	1.8	2.2	2.6	2.9	2.7	2.1	2.9	2	2.1	2.3	2.1	2.2
Ethanol	2.2	3.2	4.4	8.5	3.1	2	5.5	8.8	12	17	7.9	4.9	7.5	4.8	6.7	7.8	6.2	14
Ethyl acetate	0.11 U	0.92	0.26	0.57	0.4	0.21	0.37 U	0.37 U	0.18 U	0.18 U	0.37 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.14	0.1	0.11	0.47	0.18	0.15 U	0.26	0.28	0.65	0.79	0.3	0.18	0.22 U	0.22 U	0.22	0.22 U	0.31	0.42
Hexachlorobutadiene	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Hexane	0.39	0.72	0.55	1.3	0.67	0.64	0.88	0.57	1.3	1.6	0.69	0.72	0.74	0.41	0.42	0.71	1	0.61
Isopropyl alcohol	2.9 U	0.64	2.9 U	1.9	3.4 U	0.36	3.7	3.1	4.5	4.5	4.7	5.6	28	340	5.7	3.3	0.25 U	0.25 U
m,p-Xylene	0.41	0.22	0.36	1.7	0.79	0.3	0.76	0.88	2	2.6	0.93	0.61	0.63	0.71	0.93	0.78	1.1	1.3
Methyl methacrylate	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U												

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-1-120811 12/8/2011	IA-1-030812 3/8/2012	IA-1-061412 6/14/2012	IA-1-091312 9/13/2012	IA-1-010313 1/3/2013	IA-1-031513 3/15/2013	IA-2-011609 1/16/2009	IA-2-020309 2/3/2009	IA-2-021109 2/11/2009	IA-2-021809 2/18/2009	IA-2-022609 2/26/2009	IA-2-041409 4/14/2009	IA-2-042409 4/24/2009	IA-2-091709 9/17/2009	IA-2-092409 9/24/2009	IA-2-100109 10/1/2009	IA-2-100809 10/8/2009	IA-2-012810 1/28/2010
Methylene chloride	1.6	3.3	1.2	1.8	1.3	1.9	2	30	4	1.6	1.8	4	4.2	0.7 U	0.7 U	0.7 U	0.7 U	1.4
Methyl-t-butyl ether	0.11 U	0.11 U	0.11 U	0.13 U	0.13 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.079	0.12 U	0.093	0.44	0.14 U	0.14 U	0.23	0.2 U	0.58	0.73	0.22	0.15	0.2 U	0.2 U	0.2 U	0.2 U	0.34	0.83
o-Xylene	0.15	0.096	0.14	0.66	0.25	0.15 U	0.3	0.34	0.76	0.89	0.34	0.22	0.22	0.27	0.42	0.3	0.44	0.46
Propylene (Propene)	2.1 U	2.1 U	1.1	1.7	2.4 U	2.4 U	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.13 U	0.18 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U
Styrene	0.85	0.13 U	0.038	0.14	0.15 U	0.15 U	0.21 U	0.21 U	0.21 U	0.23	0.21 U	0.15 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41
Tetrachloroethene	0.84	0.21	0.065	2.7	0.24 U	0.24 U	7.5	0.64	4.2	3.2	3.3	2.2	7.6	0.34 U	0.35	1.7	1	2.3
Tetrahydrofuran	0.14	0.088 U	0.088 U	0.1 U	0.10 U	0.1 U	12	1.2	1.2	0.49	0.41	0.21	0.28	0.15 U	0.15 U	0.15 U	0.15 U	1.6
Toluene	1.6	0.3	0.64	2.8	0.47	0.49	1.7	1.3	4	5.5	2.3	1	1.2	1.1	1.1	1.2	1.5	2.4
trans-1,2-Dichloroethene	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.25	0.081 U	0.16 U	0.21	0.19 U	0.19 U	4.4	0.56	1.6	1.4	0.91	0.77	1.9	0.27 U	0.27 U	0.99	0.57	0.79
Trichlorofluoromethane	1	0.89	1.8	1.7	1.6	1.3	2	1.2	1.7	2.8	1.6	1.3	1.3	1.2	1.2	1.2	1.2	1.2
Trichlorotrifluoroethane	0.69	0.4	0.59	0.57	0.55	0.79	0.69	0.58	0.49	0.46	0.64	0.56	0.74	0.5	0.47	0.46	0.54	0.46
Vinyl acetate	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.5 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
Vinyl chloride	0.077 U	0.038 U	0.077 U	0.09 U	0.090 U	0.09 U	0.27	0.13 U	0.18	0.2	0.13 U	0.1 U	0.18	0.13 U	0.13 U	0.16	0.13 U	0.13 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-2-020510 2/5/2010	IA-2-021210 2/12/2010	IA-2-021910 2/19/2010	IA-2-032610 3/26/2010	IA-2-043010 4/30/2010	IA-2-091610 9/16/2010	IA-2-070110 7/1/2010	IA-2-091610 9/16/2010	IA-2-120710 12/7/2010	IA-2-021711 2/17/2011	IA-2-060211 6/2/2011	IA-2-091511 9/15/2011	IA-2-120811 12/8/2011	IA-2-030812 3/8/2012	IA-2-061412 6/14/2012	IA-2-091312 9/13/2012	IA-2-010313 1/3/2013	IA-2-031513 3/15/2013
1,1,1-Trichloroethane	0.73	0.27 U	0.27 U	0.27 U	1	0.27 U	0.28	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.13	0.082 U	0.16 U	0.08	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.21 U	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.12 U	0.061 U	0.12 U	0.043	0.14 U	0.14 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.12 U	0.059 U	0.12 U	0.045	0.14 U	0.14 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	0.45 U	0.45 U	0.45 U	0.52 U	0.52 U	0.52 U
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.31	0.35	0.48	0.52	0.25 U	0.52	0.25 U	0.25 U	0.088	0.15 U	0.19	0.48	0.98	0.13
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.063	0.061 U	0.051	0.08	0.16	0.14 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.069 U	0.14 U	0.16 U	0.16 U	0.11
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U										
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.15 U	0.15 U	0.08	0.26	0.28	0.17 U
1,3-Butadiene	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.08	0.21 U	0.21 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.093	0.21 U	0.21 U
1,4-Dioxane												0.18 U						
2-Butanone	0.70	0.44	0.3 U	0.96	1.3	3.1	3.4	0.96	0.36	1.9 B	2.9 U	5.9 U	0.93	0.84	1.4	2.8	5.1	2.4
2-Hexanone	0.2 U	0.2 U	0.2 U	0.2 U	0.26	0.84	0.68	0.2 U	0.2 U	0.24	4.1 U	0.5	0.12 U	0.16	0.15	0.32	0.17	0.22
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.15 U	0.15 U	0.086	0.19	0.24	0.17 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28	0.49	0.34	0.2 U	0.2 U	0.2 U	0.24	0.1	0.11	0.12	0.19	3.6	0.14 U
Acetone	7.8	3.1	0.48 U	6.3	8.2	18	20	11	9.8 B	15 B	8.9 B	18	6.2	5.4	14	17	19	46
Benzene	0.86	0.67	0.16 U	0.58	0.63	0.47	0.48	0.72	0.48	1.5	0.26	0.3	0.39	0.36	0.24	0.62	0.65	0.91
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.22	0.19 U	0.19 U	0.19 U	0.19 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	0.93 U	0.93 U	0.93 U	1.1 U	1.9	0.47
Carbon tetrachloride	0.40	0.31 U	0.31 U	0.43	0.47	0.5	0.52	0.5	0.48	0.31 U	0.62	0.52	0.49	0.48	0.45	0.43	0.56	0.45
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.14 U	0.14 U	0.16 U	0.58	0.16 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.14
Chloroform	0.47	0.40	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	3.4	0.24 U	0.24 U	0.24 U	0.24 U	0.085	0.073 U	0.14	0.25	0.17 U	0.15
Chloromethane	1.3	1.3	1.4	1.3	0.8	1.2	1.2	1.1	0.96	0.97	0.95	1.2	0.93	1	1.4	1.3	1	2.7
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	1	0.2 U	0.61	0.2 U	1.7	0.2 U	0.2 U	0.20 U	0.17	0.059 U	0.12 U	0.064	0.14 U	0.14 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.2	0.17 U	0.17 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.26	1.9	0.12 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.26 U	0.13 U	0.26 U	0.3 U	0.30 U	0.3 U
Dichlorodifluoromethane	2.5	2.6	3.0	1.6	2.0	2.4	2.6	1.7	1.9	3.2	1.6	2	2.7	2.1	2.7	2.8	2.6	1.7
Ethanol	35	17	20	4.4	4.9	5	7.6	9	2.7	10	2.5	8.5	2.1	2.1	10	9.8	8.1	380
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.22	0.24	3.5	0.71	0.59	2
Ethylbenzene	0.34	0.22 U	0.22 U	0.22 U	0.23	0.24	0.29	0.46	0.22 U	0.5	0.22 U	0.22 U	0.13	0.13 U	0.13 U	0.41	4.1	0.25
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U
Hexane	0.64	1.4	0.18 U	0.27	1.6	0.51	0.49	0.53	0.35 U	1.6	0.31	7.0 U	0.32	0.34	2.6	2.4	15	2.3
Isopropyl alcohol	3.6	0.25 U	0.25 U	0.63	3.2	0.12 U	1.2	0.25 U	0.25 U	2	1.2 U	4.9 U	2.9 U	0.76	2.9 U	2.8	3.4 U	3.6
m,p-Xylene	1.1	0.43 U	0.43 U	0.47	0.75	0.96	1.3	1.5	0.43 U	1.5	0.36 J	0.57	0.39	0.18	0.38	1.3	17	0.92
Methyl methacrylate									0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-2-020510 2/5/2010	IA-2-021210 2/12/2010	IA-2-021910 2/19/2010	IA-2-032610 3/26/2010	IA-2-043010 4/30/2010	IA-2-091610 9/16/2010	IA-2-070110 7/1/2010	IA-2-091610 9/16/2010	IA-2-120710 12/7/2010	IA-2-021711 2/17/2011	IA-2-060211 6/2/2011	IA-2-091511 9/15/2011	IA-2-120811 12/8/2011	IA-2-030812 3/8/2012	IA-2-061412 6/14/2012	IA-2-091312 9/13/2012	IA-2-010313 1/3/2013	IA-2-031513 3/15/2013
Methylene chloride	0.90	1.9	0.7 U	0.7 U	0.7 U	0.35 U	1.3	0.53	0.61	4.2	1	7.5	1.1	1.2	6.6	6.4	1.1	3.6
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.11 U	0.11 U	0.11 U	0.18	0.13 U	0.13 U
n-Heptane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8	0.34	0.2 U	0.48	0.2 U	0.20 U	0.091	0.12 U	0.11	0.4	3.1	0.33
o-Xylene	0.40	0.22 U	0.22 U	0.22 U	0.29	0.44	0.57	0.63	0.22 U	0.56	0.22 U	0.23	0.14	0.083	0.17	0.55	5.1	0.33
Propylene (Propene)	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 U	0.35 U	0.86 U	0.86 U	0.86 U	3.4 U	2.1 U	2.1 U	2.1 U	2.4 U	2.4 U	2.4 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.25	0.36	0.24	0.21 U	0.21 U	0.21 U	0.21 U	0.059	0.13 U	0.097	0.19	0.45	0.12
Tetrachloroethene	0.34 U	0.34 U	0.34 U	0.34 U	3.6	0.43	1.4	0.34 U	3.2	5.2 [a]	0.34 U	0.45	0.92	0.23	0.09	2	0.24	0.18
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.27	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.097	0.088 U	0.048	0.1 U	0.24	0.1 U
Toluene	0.93	0.64	0.19 U	0.8	1.3	0.91	1.3	2.2	0.41	2.9	0.55	0.99	1.6	0.24	0.9	2.6	5.6	1.5
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	1.2	0.27 U	0.53	0.27 U	1.7	0.27 U	0.27 U	0.27 U	0.27	0.081 U	0.16 U	0.2	0.19 U	0.053
Trichlorofluoromethane	1.3	1.4	1.1	1.4	1.3	1.3	1.6	2.5	1.2	1.8	1.2	1.9	1.1	0.94	1.8	2.6	2.7	1.3
Trichlorotrifluoroethane	0.53	0.61	0.38 U	0.51	0.44	0.53	0.94	0.45	0.59	0.71	0.71	0.61	0.71	0.42	0.57	0.64	0.56	0.7
Vinyl acetate	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.35 U	0.18 U	3.5 U	0.18 U	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.09 U	0.090 U	0.09 U

**Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island**

Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-3 011609 1/16/2009	IA-3- 020309 2/3/2009	IA-3- 021109 2/11/2009	IA-3- 021809 2/18/2009	IA-3- 022609 2/26/2009	IA-3- 041409 4/14/2009	IA-3- 042409 4/24/2009	IA-3- 091709 9/17/2009	IA-3- 092409 9/24/2009	IA-3- 100109 10/1/2009	IA-3- 100809 10/8/2009	IA-3- 012810 1/28/2010	IA-3- 020510 2/5/2010	IA-3- 021210 2/12/2010	IA-3- 021910 2/19/2010	IA-3- 032610 3/26/2010	IA-3- 043010 4/30/2010	IA-3- 052810 5/28/2010
1,1,1-Trichloroethane	9.8	0.57	1.1	1.1	0.28	1.5	2.2	0.27 U	0.27 U	0.27 U	0.27 U	0.45	0.71	0.29	0.86	0.27 U	1.2	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.68	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.35	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.36	0.68	0.61	0.25 U	0.18 U	0.25 U	0.29	0.4	0.25 U	0.39	0.44	0.25 U	0.25 U	0.25 U	0.25 U	0.26	0.34
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.42	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.3	0.77	0.11 U	0.08 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane																		
2-Butanone	20	4.2	4.6	4	1.7	1.6	2.5	2	2.6	0.7	1.5	1.9	2	1.2	1.6	0.51	1	2.2
2-Hexanone	0.2 U	0.26	0.33	0.3	0.2 U	0.14 U	0.38	0.51	0.58	0.2 U	0.37	0.52	0.39	0.22	0.39	0.2 U	0.29	0.52
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.29	0.34	0.2 U	0.14 U	0.22	0.2 U	0.42	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	18	12	17	24	9.7	7.5	50	11	19	6.7	11	14	21	6.7	7.3	3.8	7.7	15
Benzene	1	0.71	1.9	3.1	0.69	0.6	0.46	0.41	0.5	0.39	0.46	1.3	0.86	0.67	0.53	0.6	0.67	0.47
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.34	0.45	0.52	0.6	0.43	0.22 U	0.42	0.4	0.43	0.4	0.42	0.31 U	0.42	0.31 U	0.43	0.43	0.49	0.54
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.43	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.53	0.48	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.1	0.98	1.2	1.4	1.1	1.2	1.2	0.91	1.1	0.97	1	1.2	2.9	1.3	1.2	1.1	0.85	1.2
cis-1,2-Dichloroethene	1.9	0.2 U	1.1	1.1	0.55	0.61	1.5	0.2 U	0.2 U	0.94	0.49	0.59	0.2 U	0.2 U	0.59	0.2 U	1.3	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.46	0.6	0.17 U	0.15	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	1.9	2.3	2.5	2.9	2.6	2	2.9	2.1	2.1	2.2	2.2	2.3	2.5	2.5	3	1.6	2.1	2.5
Ethanol	5.5	9.2	13	18	7.9	4.2	9	6.2	7.5	4.5	5	13	40	17	38	3.6	5.3	5.5
Ethyl acetate	0.37 U	0.37 U	0.18 U	0.18 U	0.37 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.25	0.29	0.64	0.77	0.22 U	0.16	0.22 U	0.22 U	0.23	0.22 U	0.24	0.43	0.22 U	0.22 U	0.22 U	0.22 U	0.26	0.23
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U
Hexane	0.94	0.87	1.3	1.9	3.7	0.37	0.77	0.96	0.47	0.37	0.71	0.55	0.44	1	0.29	0.19	1.4	0.55
Isopropyl alcohol	3.5	4.1	5.5	4.9	3.1	0.18 U	33	180	5.9	0.25 U	0.25 U	0.25 U	9.9	0.25 U	2	0.64	3.4	0.12 U
m,p-Xylene	0.75	0.9	2	2.6	0.65	0.57	0.66	0.7	0.99	0.65	0.87	1.2	0.69	0.43 U	0.43 U	0.46	0.8	0.99
Methyl methacrylate																		

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space																		
	IA-3 011609 1/16/2009	IA-3- 020309 2/3/2009	IA-3- 021109 2/11/2009	IA-3- 021809 2/18/2009	IA-3- 022609 2/26/2009	IA-3- 041409 4/14/2009	IA-3- 042409 4/24/2009	IA-3- 091709 9/17/2009	IA-3- 092409 9/24/2009	IA-3- 100109 10/1/2009	IA-3- 100809 10/8/2009	IA-3- 012810 1/28/2010	IA-3- 020510 2/5/2010	IA-3- 021210 2/12/2010	IA-3- 021910 2/19/2010	IA-3- 032610 3/26/2010	IA-3- 043010 4/30/2010	IA-3- 052810 5/28/2010	
Methylene chloride	2.2	31	3.1	3.5	33	1.2	3.6	2.4	0.7 U	0.7 U	0.7 U	1.4	0.7 U	2.3	0.7 U	0.7 U	0.7 U	0.35 U	
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
n-Heptane	0.22	0.2 U	0.61	0.77	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24	0.73	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.36	0.2 U
o-Xylene	0.28	0.33	0.79	0.86	0.23	0.22	0.24	0.26	0.45	0.27	0.34	0.44	0.26	0.22 U	0.22 U	0.22 U	0.22 U	0.32	0.43
Propylene (Propene)	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.13 U	0.18 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.15 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.40	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23
Tetrachloroethene	6.1	0.56	4.3	3.3	1.9	2.2	7.1	0.34 U	0.34 U	2	1.1	2.2	0.34 U	0.34 U	1.3	0.34 U	4.8	0.35	
Tetrahydrofuran	12	1.1	1.3	0.49	0.15 U	0.24	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.40	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16	
Toluene	1.7	1.5	4.7	5.8	2.1	1	1.2	1.2	1.1	0.73	1.1	2.5	0.78	0.61	0.46	0.81	1.5	0.93	
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
Trichloroethene	3.9	0.49	1.7	1.5	0.53	0.77	1.8	0.27 U	0.27 U	1.1	0.54	0.75	0.27 U	0.27 U	0.4	0.27 U	1.5	0.27 U	
Trichlorofluoromethane	1.9	1.3	1.8	2.8	1.8	1.2	1.3	1.4	1.2	1.2	1.2	1.2	1.3	1.4	1.6	1.3	1.2	1.3	
Trichlorotrifluoroethane	0.6	0.58	0.49	0.44	0.69	0.53	0.74	0.51	0.46	0.49	0.47	0.49	0.52	0.57	0.52	0.57	0.45	0.52	
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.5 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	
Vinyl chloride	0.23	0.13 U	0.19	0.21	0.13 U	0.1 U	0.17	0.13 U	0.13 U	0.18	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14	0.13 U	

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
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Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-3-070110 7/1/2010	IA-3-091610 9/16/2010	IA-3-120710 12/7/2010	IA-3-021711 2/17/2011	IA-3-060211 6/2/2011	IA-3-091511 9/15/2011	IA-3-120811 12/8/2011	IA-3-030812 3/8/2012	IA-3-061412 6/14/2012	IA-3-091312 9/13/2012	IA-3-010313 1/3/2013	IA-3-031513 3/15/2013	IA-4-011609 1/16/2009	IA-4-020309 2/3/2009	IA-4-021109 2/11/2009	IA-4-021809 2/18/2009	IA-4-022609 2/26/2009	IA-4-041409 4/14/2009
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.11	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	10	0.62	1.1	1.1	0.45	1.5
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.21 U	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.73	0.2 U	0.2 U	0.2 U	0.31	0.14 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.42	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	0.45 U	0.45 U	0.45 U	0.52 U	0.52 U	0.52 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U
1,2,4-Trimethylbenzene	0.46	0.6	0.25 U	0.49	0.25 U	0.25 U	0.071	0.1	0.19	0.47	0.17 U	0.076	0.26	0.37	0.74	0.65	0.29	0.18 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.056	0.061 U	0.051	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.069 U	0.14 U	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U											0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.15 U	0.15 U	0.074	0.22	0.17 U	0.17 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U
1,3-Butadiene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	0.11 U	0.11 U	0.33	0.77	0.11 U	0.08 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.18 U	0.18 U	0.18 U	0.059	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U
1,4-Dioxane						0.18 U												
2-Butanone	3.3	0.95	0.39	0.76 B	2.9 U	5.9 U	1.2	0.45	2.4	2.7	0.93	2.2	21	4.4	6	3.2	2.5	1.1
2-Hexanone	0.67	0.2 U	0.2 U	0.2 U	4.1 U	0.24	0.093	0.12 U	0.33	0.22	0.14 U	0.32	0.2 U	0.33	0.73	0.39	0.2 U	0.14 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.15 U	0.15 U	0.074	0.15	0.17 U	0.17 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U
4-Methyl-2-pentanone	0.38	0.34	0.2 U	0.2 U	0.2 U	0.20 U	0.084	0.12 U	0.19	0.21	0.14 U	0.14 U	0.2 U	0.2 U	0.43	0.28	0.2 U	0.14 U
Acetone	21	11	9.7 B	9.7 B	11 B	13	7.2	3.9	13	12	6.7	12	17	10	15	20	7.8	7.9
Benzene	0.51	0.72	0.47	1.4	0.29	0.3	0.39	0.35	0.23	0.66	0.53	0.75	1.1	0.68	1.8	3	0.76	0.59
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U
Bromodichloromethane	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U
Bromoform	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.12 U	0.12 U	0.31	0.14 U	0.14 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	0.93 U	0.93 U	0.93 U	1.1 U	1.1 U	1.1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U
Carbon tetrachloride	0.57	0.41	0.45	0.6	0.64	0.51	0.5	0.49	0.43	0.38	0.32	0.39	0.4	0.43	0.5	0.58	0.46	0.22 U
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.14 U	0.14 U	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U	0.13 U	0.13 U	0.41	0.13 U	0.13 U	0.1 U
Chloroform	0.24 U	3.7	0.24 U	0.24 U	0.24 U	0.24 U	0.079	0.073 U	0.15	0.19	0.17 U	0.075	0.24 U	0.24 U	0.24 U	0.24 U	0.26	0.17 U
Chloromethane	1.2	1.1	0.98	0.97	1.2	1.4	0.84	1.1	1.4	1.3	0.95	1.3	1.2	0.99	1.4	1.3	1	1.1
cis-1,2-Dichloroethene	0.51	0.2 U	1.7	0.2 U	0.2 U	0.20 U	0.17	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	2.4	0.2 U	1.1	1.1	0.98	0.61
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U
Cyclohexane	0.17 U	0.18	0.17 U	0.17 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.27	0.12 U	0.12 U	0.17 U	0.17 U	0.44	0.64	0.17 U	0.12 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.26 U	0.13 U	0.26 U	0.3 U	0.30 U	0.3 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U
Dichlorodifluoromethane	2.7	1.5	2.1	3.1	2.1	1.8	2.6	2.1	2.8	2.8	2.5	1.8	1.9	2.2	2.5	2.8	2.6	2.1
Ethanol	7	8	2.4	9.4	3.6	5.8	2.1	2.2	4.4	6.6	2.7	2.5	5.3	8.9	12	18	8	5.2
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.11 U	0.73	0.37	0.51	0.68	0.44	0.37 U	0.37 U	0.18 U	0.19	0.37 U	0.26 U
Ethylbenzene	0.29	0.47	0.22 U	0.47	0.36	0.22 U	0.12	0.11	0.14	0.42	0.27	0.098	0.25	0.29	0.65	0.78	0.29	0.16
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U
Hexane	0.45	0.58	0.35 U	1.5	2.6	7.0 U	0.35	0.37	0.74	1.4	0.89	1	0.9	0.66	1.2	1.7	0.66	0.43
Isopropyl alcohol	0.76	8.8	1.1	1.7	1.2 U	4.9 U	2.9 U	0.56	2.9 U	1.7	0.57	0.62	3.5	3.3	4.7	4.8	3.9	0.18 U
m,p-Xylene	1.3	1.6	0.43 U	1.4	0.55	0.54	0.38	0.24	0.4	1.5	1	0.31	0.76	0.89	2.1	2.6	0.89	0.58
Methyl methacrylate			0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U						

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Methylene chloride	1.2	0.57	0.55	4.6	8	1.7 U	1.5	1.1	1.3	2.7	3.3	2.1	2.3	29	1.7	2.5	1.3	1.9
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.11 U	0.11 U	0.11 U	0.22	0.13 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U
n-Heptane	0.2 U	0.32	0.2 U	0.44	0.2 U	0.20 U	0.074	0.12 U	0.11	0.41	0.14 U	0.083	0.23	0.2 U	0.58	0.79	0.21	0.14 U
o-Xylene	0.58	0.64	0.22 U	0.48	0.23	0.23	0.13	0.11	0.16	0.57	0.35	0.13	0.27	0.33	0.78	0.87	0.33	0.22
Propylene (Propene)	0.87 U	0.35 U	0.86 U	0.86 U	0.86 U	3.4 U	2.1 U	2.1 U	1.3	1.8	2.4 U	1.1	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.13 U
Styrene	0.34	0.26	0.21 U	0.21 U	0.21 U	0.21 U	0.041	0.13 U	0.1	0.14	0.15 U	0.15 U	0.21 U	0.21 U	0.22	0.23	0.21 U	0.15 U
Tetrachloroethene	1.1	0.76	3.2	5.2 [a]	0.34 U	0.47	0.91	0.23	0.16	2.3	0.25	0.095	7.3	0.58	4.4	3.4	3.4	2.4
Tetrahydrofuran	0.24	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.08	0.088 U	0.088 U	0.072	0.10 U	0.1 U	13	1.2	1.3	0.47	0.34	0.21
Toluene	1.1	2.3	0.41	2.7	0.58	0.95	1.5	0.27	0.72	2.8	0.62	0.56	1.8	1.3	4.3	5.8	2.3	1
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U
Trichloroethene	0.47	0.27 U	1.7	0.27 U	0.27 U	0.27 U	0.25	0.081 U	0.16 U	0.17	0.19 U	0.19 U	4.7	0.48	1.7	1.5	0.88	0.78
Trichlorofluoromethane	1.5	2.8	1.2	1.7	1.6	1.7	1	0.92	1.6	1.5	1.2	1.3	2	1.3	1.6	3	1.7	1.3
Trichlorotrifluoroethane	0.54	0.45	0.55	0.67	0.74	0.54	0.69	0.44	0.56	0.54	0.59	0.65	0.72	0.59	0.51	0.45	0.57	0.54
Vinyl acetate	0.18 U	0.36 U	0.35 U	0.18 U	3.5 U	0.18 U	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.5 U
Vinyl chloride	0.13 U	0.13 U	0.13	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.09 U	0.090 U	0.09 U	0.29	0.13 U	0.2	0.22	0.13 U	0.1 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-4-042409 4/24/2009	IA-4-091709 9/17/2009	IA-4-092409 9/24/2009	IA-4-100109 10/1/2009	IA-4-100809 10/8/2009	IA-4-012810 1/28/2010	IA-4-020510 2/5/2010	IA-4-021210 2/12/2010	IA-4-021910 2/19/2010	IA-4-032610 3/26/2010	IA-4-043010 4/30/2010	IA-4-052810 5/28/2010	IA-4-070110 7/1/2010	IA-4-091610 9/16/2010	IA-4-120710 12/7/2010	IA-4-021711 2/17/2011	IA-4-060211 6/2/2011	IA-4-091511 9/15/2011
1,1,1-Trichloroethane	2.2	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.76	0.29	0.89	0.27 U	1.1	0.28	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.41	0.28	0.41	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.34	0.41	0.44	0.25 U	0.49	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U
1,4-Dioxane																		0.18 U
2-Butanone	1.6	1.5	2	1.30	1.20	0.3 U	0.69	1.2	0.50	1.60	1.50	2.20	4.8	2.4	0.96	1 B	2.9 U	5.9 U
2-Hexanone	0.2 U	0.29	0.45	0.32	0.27	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.39	0.54	1	0.59	0.2 U	0.2 U	0.21 J	0.35
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.32	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43	0.45	0.2 U	0.2 U	0.2 U	0.20 U
Acetone	20	9.3	16	9.3	10	2.3	4.9	5.9	2.5	6.9	8.7	15	31	19	13 B	12 B	12 B	15
Benzene	0.44	0.4	0.43	0.37	0.48	0.16 U	0.88	0.66	0.54	0.57	0.64	0.48	0.47	0.66	0.49	1.4	0.31	0.3
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.31	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U
Carbon tetrachloride	0.45	0.41	0.4	0.46	0.4	0.31 U	0.43	0.31 U	0.42	0.43	0.47	0.52	0.48	0.44	0.46	0.57	0.68	0.52
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.46	0.39	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	3.3	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.2	0.9	1.1	1	1	1.3	1.3	1.3	1.2	1.1	0.77	1.2	1.2	1	0.95	0.95	1.1	1.5
cis-1,2-Dichloroethene	1.7	0.2 U	0.2 U	0.84	0.48	0.2 U	0.2 U	0.2 U	0.59	0.2 U	1.3	0.2 U	0.44	0.2 U	1.8	0.2 U	0.2 U	0.20 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.4	2.1	2	2.2	2.2	2.4	2.5	2.6	3.0	1.7	2.1	2.5	2.6	1.5	2	3.2	1.8	1.7
Ethanol	5.5	6	6.5	4.9	5.6	7.7	34	17	31	3.9	4.9	6.1	8.7	9.8	3.4	8.9	5.3	7
Ethyl acetate	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.26	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.22 U	0.27	0.22 U	0.26	0.22 U	0.26	0.22 U	0.22 U	0.22 U	0.25	0.25	0.29	0.44	0.22 U	0.49	0.22 U	0.22 U
Hexachlorobutadiene	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Hexane	0.34	0.42	2.2	0.49	0.93	0.18 U	0.37	1.3	0.49	0.19	1.3	0.55	2.8	0.61	0.38	1.7	1	7.0 U
Isopropyl alcohol	13	5.6	5.2	0.25 U	0.25 U	0.96	0.25 U	0.25 U	1.9	0.66	3.4	4.4	1.8	8.3	0.48	1.7	1.2 U	4.9 U
m,p-Xylene	0.49	0.61	0.93	0.69	1	0.43 U	0.81	0.43 U	0.43 U	0.49	0.8	0.98	1.1	1.4	0.43 U	1.4	0.41 J	0.53
Methyl methacrylate															0.2 U	0.2 U	0.2 U	0.20 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space																	
	IA-4-042409 4/24/2009	IA-4-091709 9/17/2009	IA-4-092409 9/24/2009	IA-4-100109 10/1/2009	IA-4-100809 10/8/2009	IA-4-012810 1/28/2010	IA-4-020510 2/5/2010	IA-4-021210 2/12/2010	IA-4-021910 2/19/2010	IA-4-032610 3/26/2010	IA-4-043010 4/30/2010	IA-4-052810 5/28/2010	IA-4-070110 7/1/2010	IA-4-091610 9/16/2010	IA-4-120710 12/7/2010	IA-4-021711 2/17/2011	IA-4-060211 6/2/2011	IA-4-091511 9/15/2011
Methylene chloride	2.2	0.7 U	9.7	0.7 U	0.7 U	1.5	0.7 U	1.9	0.71	0.7 U	0.7 U	0.35 U	7.7	0.68	0.79	5.1	3.2	1.7 U
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.2 U	0.2 U	0.2 U	0.2 U	0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22	0.32	0.2 U	0.51	0.2 U	0.20 U
o-Xylene	0.22 U	0.22 U	0.42	0.28	0.4	0.22 U	0.31	0.22 U	0.22 U	0.22 U	0.22 U	0.3	0.44	0.5	0.57	0.22 U	0.53	0.22 U
Propylene (Propene)	0.18 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	1.1	0.35 U	0.86 U	0.86 U	0.86 U
Styrene	0.21 U	0.21 U	0.21	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.22	0.29	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	7.9	0.75	0.34 U	2	1.1	0.34 U	0.34 U	0.34 U	1.4	0.34 U	4.4	0.44	1.1	0.34 U	3.4	5	0.34 U	0.45
Tetrahydrofuran	0.25	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.19	0.24	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	1	1.1	1.3	0.76	1.2	0.19 U	0.79	0.63	0.47	0.83	1.4	0.98	1	2	0.43	2.7	0.56	0.95
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	1.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	0.23 U
Trichloroethene	2	0.27 U	0.27 U	1.10	0.57	0.27 U	0.27 U	0.27 U	0.40	0.27 U	1.4	0.27 U	0.44	0.27 U	1.8	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	1.3	1.2	1.5	1.2	1.2	0.93	1.3	1.4	1.6	1.5	1.3	1.3	1.9	2.4	1.2	1.8	1.4	1.8
Trichlorotrifluoroethane	0.61	0.49	0.48	0.47	0.5	0.38 U	0.55	0.58	0.55	1.3	0.48	0.51	0.59	0.43	0.54	0.7	0.71	0.52
Vinyl acetate	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.38	0.18 U	3.5 U	0.18 U
Vinyl chloride	0.2	0.13 U	0.13 U	0.16	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.16	0.13 U	0.13 U	0.13 U

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space															
	IA-4-120811 12/8/2011	IA-4-030812 3/8/2012	IA-4-061412 6/14/2012	IA-4-091312 9/13/2012	IA-4-010313 1/3/2013	IA-4-031513 3/15/2013	LRAIR01 5/15/2009	LRAIR02 5/15/2009	LRAIR03 5/15/2009	LRAIR04 5/15/2009	LRAIR05 5/15/2009	LRAIR06 5/15/2009	LRAIR07 5/15/2009	LRAIR08 5/15/2009	LRAIR09 5/15/2009	LRAIR10 5/15/2009
1,1,1-Trichloroethane	0.14	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.45	0.52	0.65	0.57	0.51	0.44	0.69	0.5	0.49	0.53
1,1,2,2-Tetrachloroethane	0.21 U	0.1 U	0.21 U	0.24 U	0.24 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.45 U	0.45 U	0.45 U	0.52 U	0.52 U	0.52 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.094	0.15 U	0.19	0.38	0.9	0.13	0.25 U	0.25 U	0.25 U	0.29	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.18 U	0.18	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.063	0.061 U	0.12 U	0.14 U	0.16	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.14 U	0.069 U	0.14 U	0.16 U	0.16 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane							0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.15 U	0.15 U	0.08	0.12	0.27	0.17 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane																
2-Butanone	1	1.5	0.97	2.3	4.7	2.3	3.3	3.4	2.1	2.6	2	1.6	3.1	2.5	2.6	1.4
2-Hexanone	0.086	0.32	0.098	0.18	0.19	0.25	0.73	0.66	0.38	0.51	0.37	0.38	0.61	0.48	0.43	0.29
4-Ethyltoluene	0.15 U	0.15 U	0.068	0.12	0.22	0.17 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.098	0.15	0.13	0.14 U	3.3	0.28	0.42	0.39	0.32	0.36	0.54	0.27	0.32	0.3	0.61	0.23
Acetone	7.4	6.8	9.1	12	17	44	12	13	10	11	8.5	7.7	13	11	9.8	6.9
Benzene	0.38	0.35	0.23	0.64	0.67	0.82	0.54	0.6	0.67	0.55	0.56	0.51	0.53	0.6	0.51	0.57
Benzyl chloride	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.2 U	0.1 U	0.2 U	0.24 U	0.24 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.12 U	0.12 U	0.24	0.14 U	0.14 U	0.13	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.93 U	0.93 U	0.052	1.1 U	1.6	0.52	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.48	0.47	0.43	0.36	0.54	0.41	0.7	0.68	0.71	0.68	0.68	0.63	0.68	0.7	0.64	0.66
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.16 U	0.47	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.085	0.073 U	0.13	0.19	0.17 U	0.11	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.4	1	1.3	1.3	1.1	1.3	1	0.98	1	0.95	1	1	0.92	1.1	0.91	1.2
cis-1,2-Dichloroethene	0.19	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.1 U	0.1 U	0.1 U	0.26	2.1	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.26 U	0.13 U	0.26 U	0.3 U	0.30 U	0.3 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.8	2	2.9	2.8	2.8	1.7	2.5	2.3	2.6	2.4	2.7	2.4	2.4	2.8	2.3	2.7
Ethanol	2.4	2.5	9.4	7.3	7.5	46	65	9	6.5	5.9	6	5.6	5.9	14	44	14
Ethyl acetate	0.16	0.21	0.38	2.4	0.13 U	0.73	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.16	0.17	0.14	0.38	4.1	0.32	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.27	0.22 U
Hexachlorobutadiene	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	0.35	0.55	0.47	5	17	0.89	1.1	0.21	0.18 U	0.18	0.24	0.18 U	0.19	0.21	0.2	0.18 U
Isopropyl alcohol	2.9 U	2.9 U	2.9 U	1.4	2.6	3.4 U	3.3	3.4	3.7	3.5	3.6	3.4	4.4	3.6	2.8	3.2
m,p-Xylene	0.41	0.27	0.38	1.2	17	1.1	0.58	0.57	0.58	0.55	0.49	0.5	0.48	0.53	1	0.5
Methyl methacrylate	0.12 U	0.12 U	0.13	0.14 U	0.14 U	0.14 U										

Table 3.
Summary of Analytical Results - Air Sampling for Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island

Parameter (ug/m ³)	Indoor Air - Large Retail Space															
	IA-4-120811 12/8/2011	IA-4-030812 3/8/2012	IA-4-061412 6/14/2012	IA-4-091312 9/13/2012	IA-4-010313 1/3/2013	IA-4-031513 3/15/2013	LRAIR01 5/15/2009	LRAIR02 5/15/2009	LRAIR03 5/15/2009	LRAIR04 5/15/2009	LRAIR05 5/15/2009	LRAIR06 5/15/2009	LRAIR07 5/15/2009	LRAIR08 5/15/2009	LRAIR09 5/15/2009	LRAIR10 5/15/2009
Methylene chloride	1.5	2	0.72	12	1.3	0.97	5.9	1.5	1.5	1.6	1.9	1.6	1.5	1.6	1.6	1.4
Methyl-t-butyl ether	0.11 U	0.11 U	0.11 U	0.19	0.13 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.071	0.12 U	0.11	0.41	1.6	0.32	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.15	0.11	0.17	0.41	5.1	0.43	0.28	0.28	0.27	0.27	0.25	0.26	0.25	0.27	0.34	0.26
Propylene (Propene)	2.1 U	2.1 U	2.1 U	1.7	2.4 U	2.4 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Styrene	0.077	0.092	0.55	0.093	0.52	0.099	0.23	0.21 U	0.21 U	0.22	0.21 U	0.21 U	0.37	0.21 U	0.21 U	0.21 U
Tetrachloroethene	1.2	0.31	0.12	1.7	0.18	0.21	0.47	0.47	0.54	0.66	0.64	0.6	0.73	0.53	0.46	0.46
Tetrahydrofuran	0.076	0.088 U	0.055	0.1 U	0.28	0.1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.2	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	1.6	0.32	0.8	2.9	4.8	1.5	0.73	0.7	0.58	0.59	0.51	0.53	0.57	0.53	0.54	0.47
trans-1,2-Dichloroethene	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.35	0.15	0.052	0.12	0.19 U	0.057	0.27 U	0.28	0.27	0.29	0.34	0.27	0.28	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	1.3	0.87	1.5	1.7	2.8	1.2	1.3	1.3	1.2	1.1	1.4	1.3	1.1	1.4	1	1.4
Trichlorotrifluoroethane	0.71	0.44	0.56	0.59	0.6	0.66	0.63	0.6	0.65	0.62	0.64	0.57	0.59	0.68	0.62	0.58
Vinyl acetate	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Vinyl chloride	0.077 U	0.038 U	0.077 U	0.09 U	0.090 U	0.09 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

Notes:

[a] Tetrachloroethene are above the target air concentration, but are not compliance violations as indoor air concentrations are consistent with outdoor air concentrations that were sampled on the same day.

NA - not available

U - Not detected, value is the detection limit

B - Compounds detected in method blank as well as field sample

D - Result from diluted analyses

ug/m³ - micrograms per cubic meter

5 Bolded and shaded values are above the CT target indoor air concentration for industrial/commercial scenarios

Prepared by/Date: EYM 4/3/12

Checked by/Date:

**Table 4.
Vacuum Monitoring Results - Large Retail Space
Former Gorham Manufacturing Site
Providence, Rhode Island**

Date	Pressure Differential (inches of water)			
	VMW-1	VMW-2	VMW-3	VMW-4
2/3/2009	-0.20	-0.62	-0.15	-0.12
2/18/2009	-0.509	-0.738	-0.650	-0.253
2/26/2009	-0.511	-0.710	-0.665	-0.273
3/6/2009	-0.507	-0.610	-0.715	-0.251
3/6/2009*	-0.120	-0.195	-0.230	-0.028
3/31/2009	-0.148	-0.221	-0.244	-0.072
4/14/2009	-0.140	-0.210	-0.215	-0.081
5/15/2009	-0.133	-0.193	-0.208	-0.087
9/17/2009	-0.132	-0.172	-0.209	-0.087
9/24/2009	-0.146	-0.189	-0.254	-0.094
10/1/2009	-0.181	-0.232	-0.233	-0.097
10/8/2009	-0.197	-0.212	-0.255	-0.087
12/29/2009**	-0.021	-0.020	-0.160	-0.023
1/28/2010	-0.947	-0.642	-0.709	-0.237
2/5/2010	-0.497	-0.714	-0.510	-0.258
2/12/2010	-0.509	-0.706	-0.537	-0.261
2/19/2010	-0.526	-0.733	-0.667	-0.242
3/26/2010	-0.636	-0.860	-0.671	-0.331
4/30/2010	-0.519	-0.713	-0.378	-0.287
5/28/2010	-0.546	-0.727	+1.371	-0.279
7/1/2010	-0.505	-0.678	+1.568	-0.272
9/16/2010	-0.496	-0.654	+0.980	-0.272
12/7/2010	-0.126	-0.202	-0.155	-0.052
2/17/2011	-0.491	-0.683	-0.737	-0.263
6/2/2011	-0.561	-0.767	-0.393	-0.290
9/15/2011	-0.517	-0.710	+1.071	-0.260
12/8/2011	-0.609	-0.826	+1.502	-0.313
3/8/2012	-0.422	-0.680	+0.329	-0.288
6/14/2012	-0.372	-0.767	+2.389	-0.280
9/13/2012	-0.543	-1.021	-0.665	-0.283
1/3/2013	-0.495	-0.628	-1.141	-0.674
3/15/2013	-0.539	-0.636	-0.754	-0.254

* vacuum reduced at extraction wells

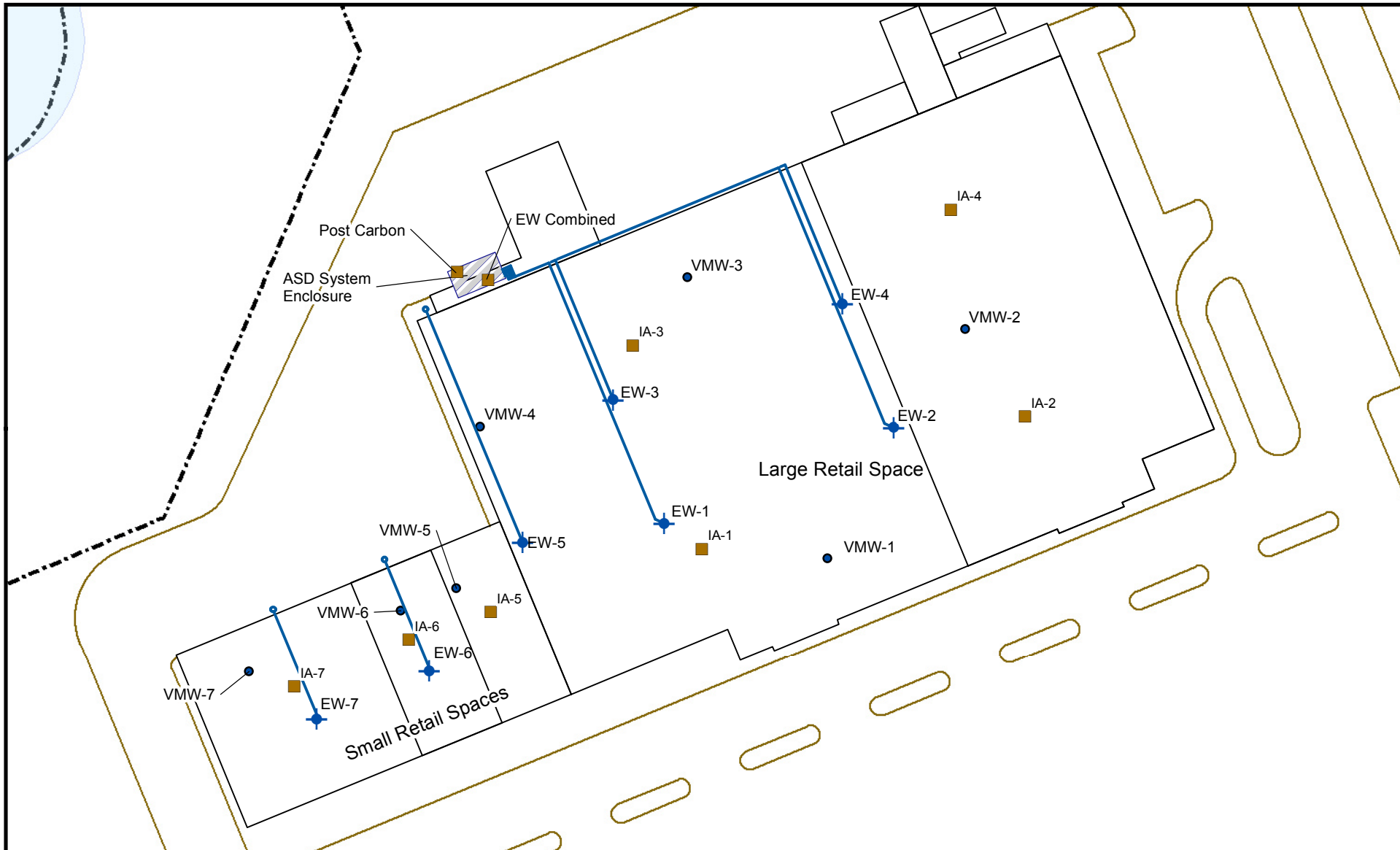
** ASD system offline

Prepared by/Date: MAM 4/12/13

Checked by/Date: DLC 4/17/13



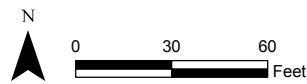
FIGURES



All locations are approximate

Legend

- Air Sample Location
- Vacuum Monitoring Well
- ◆ Extraction Well
- Extraction Well Piping
- Current Building
- Pavement Outline
- Effluent Location



Prepared/Date: BJR 04/15/13 | Checked/Date: MAM 04/15/13

Figure 1
Vapor Mitigation
Sample Locations

Former Gorham Manufacturing Facility
333 Adelaide Avenue
Providence, Rhode Island

Textron, Inc.
Former Gorham Manufacturing Facility, Providence, RI
Retail Complex, Active Sub-Slab Depressurization System
Air Monitoring Report, First Quarter, 2013
May 6, 2013



APPENDIX A

Laboratory Reports

March 25, 2013

Kelly Chatterton
AMEC E&I, Inc.
107 Audubon Rd., Bldg. 2, Suite 301
Wakefield, MA 01880

Project Location: Providence, RI
Client Job Number:
Project Number: 3650080114
Laboratory Work Order Number: 13C0484

Enclosed are results of analyses for samples received by the laboratory on March 15, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James M. Georgantas". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James M. Georgantas
Project Manager



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

AMEC E&I, Inc.
107 Audubon Rd., Bldg. 2, Suite 301
Wakefield, MA 01880
ATTN: Kelly Chatterton

REPORT DATE: 3/25/2013

PURCHASE ORDER NUMBER: C012600896

PROJECT NUMBER: 3650080114

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13C0484

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Providence, RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
IA-1-031513	13C0484-01	Indoor air		EPA TO-15	
IA-2-031513	13C0484-02	Indoor air		EPA TO-15	
IA-3-031513	13C0484-03	Indoor air		EPA TO-15	
IA-4-031513	13C0484-04	Indoor air		EPA TO-15	
IA-5-031513	13C0484-05	Indoor air		EPA TO-15	
IA-6-031513	13C0484-06	Indoor air		EPA TO-15	
IA-7-031513	13C0484-07	Indoor air		EPA TO-15	
AA-1-031513	13C0484-08	Ambient Air		EPA TO-15	
EW-5-031513	13C0484-09	Sub Slab		EPA TO-15	
EW-6-031513	13C0484-10	Sub Slab		EPA TO-15	
EW-7-031513	13C0484-11	Sub Slab		EPA TO-15	
EW-Combined-031513	13C0484-12	Sub Slab		EPA TO-15	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

2-Hexanone (MBK), Ethanol, Isopropanol

13C0484-01[IA-1-031513], 13C0484-02[IA-2-031513], 13C0484-03[IA-3-031513], 13C0484-04[IA-4-031513], 13C0484-05[IA-5-031513], 13C0484-06[IA-6-031513], 13C0484-07[IA-7-031513], 13C0484-08[AA-1-031513], 13C0484-09[EW-5-031513], 13C0484-10[EW-6-031513], 13C0484-11[EW-7-031513], 13C0484-12[EW-Combined-031513], B069616-BLK1, B069616-BS1, B069616-DUP1, 13C0484-02RE1[IA-2-031513], 13C0484-12RE1[EW-Combined-031513], B069616-DUP2

Duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result.

Analyte & Samples(s) Qualified:

Isopropanol

13C0484-02[IA-2-031513], B069616-DUP1

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

2-Hexanone (MBK), Ethanol, Isopropanol, Vinyl Acetate

13C0484-01[IA-1-031513], 13C0484-02[IA-2-031513], 13C0484-03[IA-3-031513], 13C0484-04[IA-4-031513], 13C0484-05[IA-5-031513], 13C0484-06[IA-6-031513], 13C0484-07[IA-7-031513], 13C0484-08[AA-1-031513], 13C0484-09[EW-5-031513], 13C0484-10[EW-6-031513], 13C0484-11[EW-7-031513], 13C0484-12[EW-Combined-031513], B069616-BLK1, B069616-BS1, B069616-DUP1, 13C0484-02RE1[IA-2-031513], 13C0484-12RE1[EW-Combined-031513], B069616-DUP2

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Michael A. Erickson
Laboratory Director

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-1-031513
Sample ID: 13C0484-01
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 08:05

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1158
 Canister Size: 6 liter
 Flow Controller ID: 4178
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	MDL		Results	RL			
Acetone	2.1	1.4	0.16		5.0	3.3	0.702	3/22/13 0:06	WSD
Benzene	0.23	0.035	0.018		0.72	0.11	0.702	3/22/13 0:06	WSD
Benzyl chloride	ND	0.035	0.0063		ND	0.18	0.702	3/22/13 0:06	WSD
Bromodichloromethane	ND	0.035	0.0098		ND	0.24	0.702	3/22/13 0:06	WSD
Bromoform	ND	0.035	0.0091		ND	0.36	0.702	3/22/13 0:06	WSD
Bromomethane	ND	0.035	0.034		ND	0.14	0.702	3/22/13 0:06	WSD
1,3-Butadiene	ND	0.035	0.020		ND	0.078	0.702	3/22/13 0:06	WSD
2-Butanone (MEK)	0.22	1.4	0.027	J	0.64	4.1	0.702	3/22/13 0:06	WSD
Carbon Disulfide	ND	0.35	0.0098		ND	1.1	0.702	3/22/13 0:06	WSD
Carbon Tetrachloride	0.070	0.035	0.0098		0.44	0.22	0.702	3/22/13 0:06	WSD
Chlorobenzene	ND	0.035	0.029		ND	0.16	0.702	3/22/13 0:06	WSD
Chloroethane	ND	0.035	0.020		ND	0.093	0.702	3/22/13 0:06	WSD
Chloroform	ND	0.035	0.013		ND	0.17	0.702	3/22/13 0:06	WSD
Chloromethane	0.55	0.035	0.018		1.1	0.072	0.702	3/22/13 0:06	WSD
Cyclohexane	ND	0.035	0.034		ND	0.12	0.702	3/22/13 0:06	WSD
Dibromochloromethane	ND	0.035	0.0084		ND	0.30	0.702	3/22/13 0:06	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0098		ND	0.27	0.702	3/22/13 0:06	WSD
1,2-Dichlorobenzene	ND	0.035	0.018		ND	0.21	0.702	3/22/13 0:06	WSD
1,3-Dichlorobenzene	ND	0.035	0.0098		ND	0.21	0.702	3/22/13 0:06	WSD
1,4-Dichlorobenzene	ND	0.035	0.0091		ND	0.21	0.702	3/22/13 0:06	WSD
Dichlorodifluoromethane (Freon 12)	0.34	0.035	0.015		1.7	0.17	0.702	3/22/13 0:06	WSD
1,1-Dichloroethane	ND	0.035	0.011		ND	0.14	0.702	3/22/13 0:06	WSD
1,2-Dichloroethane	ND	0.035	0.012		ND	0.14	0.702	3/22/13 0:06	WSD
1,1-Dichloroethylene	ND	0.035	0.011		ND	0.14	0.702	3/22/13 0:06	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.0098		ND	0.14	0.702	3/22/13 0:06	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.012		ND	0.14	0.702	3/22/13 0:06	WSD
1,2-Dichloropropane	ND	0.035	0.014		ND	0.16	0.702	3/22/13 0:06	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13 0:06	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13 0:06	WSD
Ethanol	1.0	1.4	0.17	L-03, V-05, J	2.0	2.6	0.702	3/22/13 0:06	WSD
Ethyl Acetate	0.060	0.035	0.018		0.21	0.13	0.702	3/22/13 0:06	WSD
Ethylbenzene	ND	0.035	0.0098		ND	0.15	0.702	3/22/13 0:06	WSD
4-Ethyltoluene	ND	0.035	0.013		ND	0.17	0.702	3/22/13 0:06	WSD
Heptane	ND	0.035	0.012		ND	0.14	0.702	3/22/13 0:06	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	3/22/13 0:06	WSD
Hexane	0.18	1.4	0.031	J	0.64	4.9	0.702	3/22/13 0:06	WSD
2-Hexanone (MBK)	ND	0.035	0.011	L-03, V-05	ND	0.14	0.702	3/22/13 0:06	WSD
Isopropanol	0.15	1.4	0.021	L-03, V-05, J	0.36	3.4	0.702	3/22/13 0:06	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-1-031513
Sample ID: 13C0484-01
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 08:05

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1158
 Canister Size: 6 liter
 Flow Controller ID: 4178
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analyzed		
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.0098		ND	0.13	0.702	3/22/13	0:06	WSD
Methylene Chloride	0.54	0.35	0.045		1.9	1.2	0.702	3/22/13	0:06	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	3/22/13	0:06	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.011		ND	0.14	0.702	3/22/13	0:06	WSD
Propene	ND	1.4	0.027		ND	2.4	0.702	3/22/13	0:06	WSD
Styrene	ND	0.035	0.0077		ND	0.15	0.702	3/22/13	0:06	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	3/22/13	0:06	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.012		ND	0.24	0.702	3/22/13	0:06	WSD
Tetrachloroethylene	ND	0.035	0.011		ND	0.24	0.702	3/22/13	0:06	WSD
Tetrahydrofuran	ND	0.035	0.011		ND	0.10	0.702	3/22/13	0:06	WSD
Toluene	0.13	0.035	0.0098		0.49	0.13	0.702	3/22/13	0:06	WSD
1,2,4-Trichlorobenzene	ND	0.070	0.013		ND	0.52	0.702	3/22/13	0:06	WSD
1,1,1-Trichloroethane	ND	0.035	0.012		ND	0.19	0.702	3/22/13	0:06	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	3/22/13	0:06	WSD
Trichloroethylene	ND	0.035	0.0098		ND	0.19	0.702	3/22/13	0:06	WSD
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.022		1.3	0.20	0.702	3/22/13	0:06	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.10	0.035	0.012		0.79	0.27	0.702	3/22/13	0:06	WSD
1,2,4-Trimethylbenzene	ND	0.035	0.012		ND	0.17	0.702	3/22/13	0:06	WSD
1,3,5-Trimethylbenzene	ND	0.035	0.011		ND	0.17	0.702	3/22/13	0:06	WSD
Vinyl Acetate	ND	0.070	0.018	V-05	ND	0.25	0.702	3/22/13	0:06	WSD
Vinyl Chloride	ND	0.035	0.018		ND	0.090	0.702	3/22/13	0:06	WSD
m&p-Xylene	0.068	0.070	0.018	J	0.30	0.30	0.702	3/22/13	0:06	WSD
o-Xylene	ND	0.035	0.0091		ND	0.15	0.702	3/22/13	0:06	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	3/22/13 0:06
4-Bromofluorobenzene (2)	99.9	70-130	3/22/13 0:06

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-2-031513
Sample ID: 13C0484-02
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 10:30

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1133
 Canister Size: 6 liter
 Flow Controller ID: 4188
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -26
 Final Vacuum(in Hg): -3
 Receipt Vacuum(in Hg): -3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Date/Time		Analyst
	Results	RL	MDL		Results	RL	Dilution	Analyzed	
Acetone	20	1.4	0.16		46	3.3	0.702	3/22/13 11:50	WSD
Benzene	0.29	0.035	0.018		0.91	0.11	0.702	3/22/13 11:50	WSD
Benzyl chloride	ND	0.035	0.0063		ND	0.18	0.702	3/22/13 11:50	WSD
Bromodichloromethane	ND	0.035	0.0098		ND	0.24	0.702	3/22/13 11:50	WSD
Bromoform	ND	0.035	0.0091		ND	0.36	0.702	3/22/13 11:50	WSD
Bromomethane	ND	0.035	0.034		ND	0.14	0.702	3/22/13 11:50	WSD
1,3-Butadiene	ND	0.035	0.020		ND	0.078	0.702	3/22/13 11:50	WSD
2-Butanone (MEK)	0.80	1.4	0.027	J	2.4	4.1	0.702	3/22/13 11:50	WSD
Carbon Disulfide	0.15	0.35	0.0098	J	0.47	1.1	0.702	3/22/13 11:50	WSD
Carbon Tetrachloride	0.071	0.035	0.0098		0.45	0.22	0.702	3/22/13 11:50	WSD
Chlorobenzene	ND	0.035	0.029		ND	0.16	0.702	3/22/13 11:50	WSD
Chloroethane	0.053	0.035	0.020		0.14	0.093	0.702	3/22/13 11:50	WSD
Chloroform	0.031	0.035	0.013	J	0.15	0.17	0.702	3/22/13 11:50	WSD
Chloromethane	1.3	0.035	0.018		2.7	0.072	0.702	3/22/13 11:50	WSD
Cyclohexane	ND	0.035	0.034		ND	0.12	0.702	3/22/13 11:50	WSD
Dibromochloromethane	ND	0.035	0.0084		ND	0.30	0.702	3/22/13 11:50	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0098		ND	0.27	0.702	3/22/13 11:50	WSD
1,2-Dichlorobenzene	ND	0.035	0.018		ND	0.21	0.702	3/22/13 11:50	WSD
1,3-Dichlorobenzene	ND	0.035	0.0098		ND	0.21	0.702	3/22/13 11:50	WSD
1,4-Dichlorobenzene	ND	0.035	0.0091		ND	0.21	0.702	3/22/13 11:50	WSD
Dichlorodifluoromethane (Freon 12)	0.33	0.035	0.015		1.7	0.17	0.702	3/22/13 11:50	WSD
1,1-Dichloroethane	ND	0.035	0.011		ND	0.14	0.702	3/22/13 11:50	WSD
1,2-Dichloroethane	ND	0.035	0.012		ND	0.14	0.702	3/22/13 11:50	WSD
1,1-Dichloroethylene	ND	0.035	0.011		ND	0.14	0.702	3/22/13 11:50	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.0098		ND	0.14	0.702	3/22/13 11:50	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.012		ND	0.14	0.702	3/22/13 11:50	WSD
1,2-Dichloropropane	0.023	0.035	0.014	J	0.11	0.16	0.702	3/22/13 11:50	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13 11:50	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13 11:50	WSD
Ethanol	200	20	2.4	L-03, V-05	380	38	10	3/22/13 11:04	WSD
Ethyl Acetate	0.56	0.035	0.018		2.0	0.13	0.702	3/22/13 11:50	WSD
Ethylbenzene	0.058	0.035	0.0098		0.25	0.15	0.702	3/22/13 11:50	WSD
4-Ethyltoluene	ND	0.035	0.013		ND	0.17	0.702	3/22/13 11:50	WSD
Heptane	0.081	0.035	0.012		0.33	0.14	0.702	3/22/13 11:50	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	3/22/13 11:50	WSD
Hexane	0.64	1.4	0.031	J	2.3	4.9	0.702	3/22/13 11:50	WSD
2-Hexanone (MBK)	0.054	0.035	0.011	L-03, V-05	0.22	0.14	0.702	3/22/13 11:50	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
 Field Sample #: IA-2-031513
 Sample ID: 13C0484-02
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 10:30

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1133
 Canister Size: 6 liter
 Flow Controller ID: 4188
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -26
 Final Vacuum(in Hg): -3
 Receipt Vacuum(in Hg): -3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL		Analized		
Isopropanol	1.5	1.4	0.021	L-03, R-01, V-05	3.6	3.4	0.702	3/22/13 11:50	WSD	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.0098		ND	0.13	0.702	3/22/13 11:50	WSD	
Methylene Chloride	1.0	0.35	0.045		3.6	1.2	0.702	3/22/13 11:50	WSD	
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	3/22/13 11:50	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.011		ND	0.14	0.702	3/22/13 11:50	WSD	
Propene	ND	1.4	0.027		ND	2.4	0.702	3/22/13 11:50	WSD	
Styrene	0.027	0.035	0.0077	J	0.12	0.15	0.702	3/22/13 11:50	WSD	
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	3/22/13 11:50	WSD	
1,1,2,2-Tetrachloroethane	ND	0.035	0.012		ND	0.24	0.702	3/22/13 11:50	WSD	
Tetrachloroethylene	0.027	0.035	0.011	J	0.18	0.24	0.702	3/22/13 11:50	WSD	
Tetrahydrofuran	ND	0.035	0.011		ND	0.10	0.702	3/22/13 11:50	WSD	
Toluene	0.39	0.035	0.0098		1.5	0.13	0.702	3/22/13 11:50	WSD	
1,2,4-Trichlorobenzene	ND	0.070	0.013		ND	0.52	0.702	3/22/13 11:50	WSD	
1,1,1-Trichloroethane	ND	0.035	0.012		ND	0.19	0.702	3/22/13 11:50	WSD	
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	3/22/13 11:50	WSD	
Trichloroethylene	0.0098	0.035	0.0098	J	0.053	0.19	0.702	3/22/13 11:50	WSD	
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.022		1.3	0.20	0.702	3/22/13 11:50	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.091	0.035	0.012		0.70	0.27	0.702	3/22/13 11:50	WSD	
1,2,4-Trimethylbenzene	0.027	0.035	0.012	J	0.13	0.17	0.702	3/22/13 11:50	WSD	
1,3,5-Trimethylbenzene	ND	0.035	0.011		ND	0.17	0.702	3/22/13 11:50	WSD	
Vinyl Acetate	ND	0.070	0.018	V-05	ND	0.25	0.702	3/22/13 11:50	WSD	
Vinyl Chloride	ND	0.035	0.018		ND	0.090	0.702	3/22/13 11:50	WSD	
m&p-Xylene	0.21	0.070	0.018		0.92	0.30	0.702	3/22/13 11:50	WSD	
o-Xylene	0.076	0.035	0.0091		0.33	0.15	0.702	3/22/13 11:50	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/22/13 11:04
4-Bromofluorobenzene (1)	90.6	70-130	3/22/13 11:50
4-Bromofluorobenzene (2)	87.4	70-130	3/22/13 11:50

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-3-031513
Sample ID: 13C0484-03
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 08:06

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1747
 Canister Size: 6 liter
 Flow Controller ID: 4179
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL		Analyzed		
Acetone	5.0	1.4	0.16		12	3.3	0.702	3/22/13	1:33	WSD
Benzene	0.23	0.035	0.018		0.75	0.11	0.702	3/22/13	1:33	WSD
Benzyl chloride	ND	0.035	0.0063		ND	0.18	0.702	3/22/13	1:33	WSD
Bromodichloromethane	ND	0.035	0.0098		ND	0.24	0.702	3/22/13	1:33	WSD
Bromoform	ND	0.035	0.0091		ND	0.36	0.702	3/22/13	1:33	WSD
Bromomethane	ND	0.035	0.034		ND	0.14	0.702	3/22/13	1:33	WSD
1,3-Butadiene	ND	0.035	0.020		ND	0.078	0.702	3/22/13	1:33	WSD
2-Butanone (MEK)	0.76	1.4	0.027	J	2.2	4.1	0.702	3/22/13	1:33	WSD
Carbon Disulfide	ND	0.35	0.0098		ND	1.1	0.702	3/22/13	1:33	WSD
Carbon Tetrachloride	0.062	0.035	0.0098		0.39	0.22	0.702	3/22/13	1:33	WSD
Chlorobenzene	ND	0.035	0.029		ND	0.16	0.702	3/22/13	1:33	WSD
Chloroethane	ND	0.035	0.020		ND	0.093	0.702	3/22/13	1:33	WSD
Chloroform	0.015	0.035	0.013	J	0.075	0.17	0.702	3/22/13	1:33	WSD
Chloromethane	0.62	0.035	0.018		1.3	0.072	0.702	3/22/13	1:33	WSD
Cyclohexane	ND	0.035	0.034		ND	0.12	0.702	3/22/13	1:33	WSD
Dibromochloromethane	ND	0.035	0.0084		ND	0.30	0.702	3/22/13	1:33	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0098		ND	0.27	0.702	3/22/13	1:33	WSD
1,2-Dichlorobenzene	ND	0.035	0.018		ND	0.21	0.702	3/22/13	1:33	WSD
1,3-Dichlorobenzene	ND	0.035	0.0098		ND	0.21	0.702	3/22/13	1:33	WSD
1,4-Dichlorobenzene	ND	0.035	0.0091		ND	0.21	0.702	3/22/13	1:33	WSD
Dichlorodifluoromethane (Freon 12)	0.36	0.035	0.015		1.8	0.17	0.702	3/22/13	1:33	WSD
1,1-Dichloroethane	ND	0.035	0.011		ND	0.14	0.702	3/22/13	1:33	WSD
1,2-Dichloroethane	ND	0.035	0.012		ND	0.14	0.702	3/22/13	1:33	WSD
1,1-Dichloroethylene	ND	0.035	0.011		ND	0.14	0.702	3/22/13	1:33	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.0098		ND	0.14	0.702	3/22/13	1:33	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.012		ND	0.14	0.702	3/22/13	1:33	WSD
1,2-Dichloropropane	ND	0.035	0.014		ND	0.16	0.702	3/22/13	1:33	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13	1:33	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13	1:33	WSD
Ethanol	1.3	1.4	0.17	L-03, V-05, J	2.5	2.6	0.702	3/22/13	1:33	WSD
Ethyl Acetate	0.12	0.035	0.018		0.44	0.13	0.702	3/22/13	1:33	WSD
Ethylbenzene	0.022	0.035	0.0098	J	0.098	0.15	0.702	3/22/13	1:33	WSD
4-Ethyltoluene	ND	0.035	0.013		ND	0.17	0.702	3/22/13	1:33	WSD
Heptane	0.020	0.035	0.012	J	0.083	0.14	0.702	3/22/13	1:33	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	3/22/13	1:33	WSD
Hexane	0.28	1.4	0.031	J	1.00	4.9	0.702	3/22/13	1:33	WSD
2-Hexanone (MBK)	0.079	0.035	0.011	L-03, V-05	0.32	0.14	0.702	3/22/13	1:33	WSD
Isopropanol	0.25	1.4	0.021	L-03, V-05, J	0.62	3.4	0.702	3/22/13	1:33	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-3-031513
Sample ID: 13C0484-03
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 08:06

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1747
 Canister Size: 6 liter
 Flow Controller ID: 4179
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analyzed		
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.0098		ND	0.13	0.702	3/22/13	1:33	WSD
Methylene Chloride	0.62	0.35	0.045		2.1	1.2	0.702	3/22/13	1:33	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	3/22/13	1:33	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.011		ND	0.14	0.702	3/22/13	1:33	WSD
Propene	0.66	1.4	0.027	J	1.1	2.4	0.702	3/22/13	1:33	WSD
Styrene	ND	0.035	0.0077		ND	0.15	0.702	3/22/13	1:33	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	3/22/13	1:33	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.012		ND	0.24	0.702	3/22/13	1:33	WSD
Tetrachloroethylene	0.014	0.035	0.011	J	0.095	0.24	0.702	3/22/13	1:33	WSD
Tetrahydrofuran	ND	0.035	0.011		ND	0.10	0.702	3/22/13	1:33	WSD
Toluene	0.15	0.035	0.0098		0.56	0.13	0.702	3/22/13	1:33	WSD
1,2,4-Trichlorobenzene	ND	0.070	0.013		ND	0.52	0.702	3/22/13	1:33	WSD
1,1,1-Trichloroethane	ND	0.035	0.012		ND	0.19	0.702	3/22/13	1:33	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	3/22/13	1:33	WSD
Trichloroethylene	ND	0.035	0.0098		ND	0.19	0.702	3/22/13	1:33	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.035	0.022		1.3	0.20	0.702	3/22/13	1:33	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035	0.012		0.65	0.27	0.702	3/22/13	1:33	WSD
1,2,4-Trimethylbenzene	0.015	0.035	0.012	J	0.076	0.17	0.702	3/22/13	1:33	WSD
1,3,5-Trimethylbenzene	ND	0.035	0.011		ND	0.17	0.702	3/22/13	1:33	WSD
Vinyl Acetate	ND	0.070	0.018	V-05	ND	0.25	0.702	3/22/13	1:33	WSD
Vinyl Chloride	ND	0.035	0.018		ND	0.090	0.702	3/22/13	1:33	WSD
m&p-Xylene	0.072	0.070	0.018		0.31	0.30	0.702	3/22/13	1:33	WSD
o-Xylene	0.030	0.035	0.0091	J	0.13	0.15	0.702	3/22/13	1:33	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	3/22/13 1:33
4-Bromofluorobenzene (2)	105	70-130	3/22/13 1:33

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
 Field Sample #: IA-4-031513
 Sample ID: 13C0484-04
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 10:27

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1448
 Canister Size: 6 liter
 Flow Controller ID: 4189
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Date/Time		Analyst
	Results	RL	MDL		Results	RL	Dilution	Analyzed	
Acetone	19	1.4	0.16		44	3.3	0.702	3/22/13 2:17	WSD
Benzene	0.26	0.035	0.018		0.82	0.11	0.702	3/22/13 2:17	WSD
Benzyl chloride	ND	0.035	0.0063		ND	0.18	0.702	3/22/13 2:17	WSD
Bromodichloromethane	ND	0.035	0.0098		ND	0.24	0.702	3/22/13 2:17	WSD
Bromoform	ND	0.035	0.0091		ND	0.36	0.702	3/22/13 2:17	WSD
Bromomethane	0.034	0.035	0.034	J	0.13	0.14	0.702	3/22/13 2:17	WSD
1,3-Butadiene	ND	0.035	0.020		ND	0.078	0.702	3/22/13 2:17	WSD
2-Butanone (MEK)	0.76	1.4	0.027	J	2.3	4.1	0.702	3/22/13 2:17	WSD
Carbon Disulfide	0.17	0.35	0.0098	J	0.52	1.1	0.702	3/22/13 2:17	WSD
Carbon Tetrachloride	0.066	0.035	0.0098		0.41	0.22	0.702	3/22/13 2:17	WSD
Chlorobenzene	ND	0.035	0.029		ND	0.16	0.702	3/22/13 2:17	WSD
Chloroethane	ND	0.035	0.020		ND	0.093	0.702	3/22/13 2:17	WSD
Chloroform	0.023	0.035	0.013	J	0.11	0.17	0.702	3/22/13 2:17	WSD
Chloromethane	0.64	0.035	0.018		1.3	0.072	0.702	3/22/13 2:17	WSD
Cyclohexane	ND	0.035	0.034		ND	0.12	0.702	3/22/13 2:17	WSD
Dibromochloromethane	ND	0.035	0.0084		ND	0.30	0.702	3/22/13 2:17	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0098		ND	0.27	0.702	3/22/13 2:17	WSD
1,2-Dichlorobenzene	ND	0.035	0.018		ND	0.21	0.702	3/22/13 2:17	WSD
1,3-Dichlorobenzene	ND	0.035	0.0098		ND	0.21	0.702	3/22/13 2:17	WSD
1,4-Dichlorobenzene	ND	0.035	0.0091		ND	0.21	0.702	3/22/13 2:17	WSD
Dichlorodifluoromethane (Freon 12)	0.35	0.035	0.015		1.7	0.17	0.702	3/22/13 2:17	WSD
1,1-Dichloroethane	ND	0.035	0.011		ND	0.14	0.702	3/22/13 2:17	WSD
1,2-Dichloroethane	ND	0.035	0.012		ND	0.14	0.702	3/22/13 2:17	WSD
1,1-Dichloroethylene	ND	0.035	0.011		ND	0.14	0.702	3/22/13 2:17	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.0098		ND	0.14	0.702	3/22/13 2:17	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.012		ND	0.14	0.702	3/22/13 2:17	WSD
1,2-Dichloropropane	ND	0.035	0.014		ND	0.16	0.702	3/22/13 2:17	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13 2:17	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13 2:17	WSD
Ethanol	25	1.4	0.17	L-03, V-05	46	2.6	0.702	3/22/13 2:17	WSD
Ethyl Acetate	0.20	0.035	0.018		0.73	0.13	0.702	3/22/13 2:17	WSD
Ethylbenzene	0.073	0.035	0.0098		0.32	0.15	0.702	3/22/13 2:17	WSD
4-Ethyltoluene	ND	0.035	0.013		ND	0.17	0.702	3/22/13 2:17	WSD
Heptane	0.077	0.035	0.012		0.32	0.14	0.702	3/22/13 2:17	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	3/22/13 2:17	WSD
Hexane	0.25	1.4	0.031	J	0.89	4.9	0.702	3/22/13 2:17	WSD
2-Hexanone (MBK)	0.060	0.035	0.011	L-03, V-05	0.25	0.14	0.702	3/22/13 2:17	WSD
Isopropanol	ND	1.4	0.021	L-03, V-05	ND	3.4	0.702	3/22/13 2:17	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-4-031513
Sample ID: 13C0484-04
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 10:27

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1448
 Canister Size: 6 liter
 Flow Controller ID: 4189
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analyzed		
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.0098		ND	0.13	0.702	3/22/13	2:17	WSD
Methylene Chloride	0.28	0.35	0.045	J	0.97	1.2	0.702	3/22/13	2:17	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	3/22/13	2:17	WSD
4-Methyl-2-pentanone (MIBK)	0.069	0.035	0.011		0.28	0.14	0.702	3/22/13	2:17	WSD
Propene	ND	1.4	0.027		ND	2.4	0.702	3/22/13	2:17	WSD
Styrene	0.023	0.035	0.0077	J	0.099	0.15	0.702	3/22/13	2:17	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	3/22/13	2:17	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.012		ND	0.24	0.702	3/22/13	2:17	WSD
Tetrachloroethylene	0.032	0.035	0.011	J	0.21	0.24	0.702	3/22/13	2:17	WSD
Tetrahydrofuran	ND	0.035	0.011		ND	0.10	0.702	3/22/13	2:17	WSD
Toluene	0.40	0.035	0.0098		1.5	0.13	0.702	3/22/13	2:17	WSD
1,2,4-Trichlorobenzene	ND	0.070	0.013		ND	0.52	0.702	3/22/13	2:17	WSD
1,1,1-Trichloroethane	ND	0.035	0.012		ND	0.19	0.702	3/22/13	2:17	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	3/22/13	2:17	WSD
Trichloroethylene	0.011	0.035	0.0098	J	0.057	0.19	0.702	3/22/13	2:17	WSD
Trichlorofluoromethane (Freon 11)	0.22	0.035	0.022		1.2	0.20	0.702	3/22/13	2:17	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.086	0.035	0.012		0.66	0.27	0.702	3/22/13	2:17	WSD
1,2,4-Trimethylbenzene	0.027	0.035	0.012	J	0.13	0.17	0.702	3/22/13	2:17	WSD
1,3,5-Trimethylbenzene	ND	0.035	0.011		ND	0.17	0.702	3/22/13	2:17	WSD
Vinyl Acetate	ND	0.070	0.018	V-05	ND	0.25	0.702	3/22/13	2:17	WSD
Vinyl Chloride	ND	0.035	0.018		ND	0.090	0.702	3/22/13	2:17	WSD
m&p-Xylene	0.25	0.070	0.018		1.1	0.30	0.702	3/22/13	2:17	WSD
o-Xylene	0.099	0.035	0.0091		0.43	0.15	0.702	3/22/13	2:17	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	103	70-130	3/22/13 2:17
4-Bromofluorobenzene (2)	104	70-130	3/22/13 2:17

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-5-031513
Sample ID: 13C0484-05
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 08:20

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1272
 Canister Size: 6 liter
 Flow Controller ID: 4081
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL		Analyzed		
Acetone	4.1	1.4	0.16		9.7	3.3	0.702	3/22/13	3:03	WSD
Benzene	0.25	0.035	0.018		0.80	0.11	0.702	3/22/13	3:03	WSD
Benzyl chloride	ND	0.035	0.0063		ND	0.18	0.702	3/22/13	3:03	WSD
Bromodichloromethane	ND	0.035	0.0098		ND	0.24	0.702	3/22/13	3:03	WSD
Bromoform	ND	0.035	0.0091		ND	0.36	0.702	3/22/13	3:03	WSD
Bromomethane	ND	0.035	0.034		ND	0.14	0.702	3/22/13	3:03	WSD
1,3-Butadiene	ND	0.035	0.020		ND	0.078	0.702	3/22/13	3:03	WSD
2-Butanone (MEK)	0.43	1.4	0.027	J	1.3	4.1	0.702	3/22/13	3:03	WSD
Carbon Disulfide	ND	0.35	0.0098		ND	1.1	0.702	3/22/13	3:03	WSD
Carbon Tetrachloride	0.058	0.035	0.0098		0.37	0.22	0.702	3/22/13	3:03	WSD
Chlorobenzene	ND	0.035	0.029		ND	0.16	0.702	3/22/13	3:03	WSD
Chloroethane	ND	0.035	0.020		ND	0.093	0.702	3/22/13	3:03	WSD
Chloroform	0.014	0.035	0.013	J	0.069	0.17	0.702	3/22/13	3:03	WSD
Chloromethane	0.60	0.035	0.018		1.2	0.072	0.702	3/22/13	3:03	WSD
Cyclohexane	ND	0.035	0.034		ND	0.12	0.702	3/22/13	3:03	WSD
Dibromochloromethane	ND	0.035	0.0084		ND	0.30	0.702	3/22/13	3:03	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0098		ND	0.27	0.702	3/22/13	3:03	WSD
1,2-Dichlorobenzene	ND	0.035	0.018		ND	0.21	0.702	3/22/13	3:03	WSD
1,3-Dichlorobenzene	ND	0.035	0.0098		ND	0.21	0.702	3/22/13	3:03	WSD
1,4-Dichlorobenzene	ND	0.035	0.0091		ND	0.21	0.702	3/22/13	3:03	WSD
Dichlorodifluoromethane (Freon 12)	0.32	0.035	0.015		1.6	0.17	0.702	3/22/13	3:03	WSD
1,1-Dichloroethane	ND	0.035	0.011		ND	0.14	0.702	3/22/13	3:03	WSD
1,2-Dichloroethane	ND	0.035	0.012		ND	0.14	0.702	3/22/13	3:03	WSD
1,1-Dichloroethylene	ND	0.035	0.011		ND	0.14	0.702	3/22/13	3:03	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.0098		ND	0.14	0.702	3/22/13	3:03	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.012		ND	0.14	0.702	3/22/13	3:03	WSD
1,2-Dichloropropane	ND	0.035	0.014		ND	0.16	0.702	3/22/13	3:03	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13	3:03	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13	3:03	WSD
Ethanol	0.99	1.4	0.17	L-03, V-05, J	1.9	2.6	0.702	3/22/13	3:03	WSD
Ethyl Acetate	ND	0.035	0.018		ND	0.13	0.702	3/22/13	3:03	WSD
Ethylbenzene	0.021	0.035	0.0098	J	0.091	0.15	0.702	3/22/13	3:03	WSD
4-Ethyltoluene	ND	0.035	0.013		ND	0.17	0.702	3/22/13	3:03	WSD
Heptane	ND	0.035	0.012		ND	0.14	0.702	3/22/13	3:03	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	3/22/13	3:03	WSD
Hexane	0.30	1.4	0.031	J	1.1	4.9	0.702	3/22/13	3:03	WSD
2-Hexanone (MBK)	0.040	0.035	0.011	L-03, V-05	0.16	0.14	0.702	3/22/13	3:03	WSD
Isopropanol	ND	1.4	0.021	L-03, V-05	ND	3.4	0.702	3/22/13	3:03	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-5-031513
Sample ID: 13C0484-05
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 08:20

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1272
 Canister Size: 6 liter
 Flow Controller ID: 4081
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Date/Time		Analyst
		RL	MDL		Results	RL	Dilution	Analyzed	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.0098		ND	0.13	0.702	3/22/13 3:03	WSD
Methylene Chloride	0.59	0.35	0.045		2.0	1.2	0.702	3/22/13 3:03	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	3/22/13 3:03	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.011		ND	0.14	0.702	3/22/13 3:03	WSD
Propene	ND	1.4	0.027		ND	2.4	0.702	3/22/13 3:03	WSD
Styrene	ND	0.035	0.0077		ND	0.15	0.702	3/22/13 3:03	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	3/22/13 3:03	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.012		ND	0.24	0.702	3/22/13 3:03	WSD
Tetrachloroethylene	0.018	0.035	0.011	J	0.12	0.24	0.702	3/22/13 3:03	WSD
Tetrahydrofuran	ND	0.035	0.011		ND	0.10	0.702	3/22/13 3:03	WSD
Toluene	0.16	0.035	0.0098		0.61	0.13	0.702	3/22/13 3:03	WSD
1,2,4-Trichlorobenzene	ND	0.070	0.013		ND	0.52	0.702	3/22/13 3:03	WSD
1,1,1-Trichloroethane	ND	0.035	0.012		ND	0.19	0.702	3/22/13 3:03	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	3/22/13 3:03	WSD
Trichloroethylene	ND	0.035	0.0098		ND	0.19	0.702	3/22/13 3:03	WSD
Trichlorofluoromethane (Freon 11)	0.22	0.035	0.022		1.3	0.20	0.702	3/22/13 3:03	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.078	0.035	0.012		0.60	0.27	0.702	3/22/13 3:03	WSD
1,2,4-Trimethylbenzene	0.015	0.035	0.012	J	0.072	0.17	0.702	3/22/13 3:03	WSD
1,3,5-Trimethylbenzene	ND	0.035	0.011		ND	0.17	0.702	3/22/13 3:03	WSD
Vinyl Acetate	ND	0.070	0.018	V-05	ND	0.25	0.702	3/22/13 3:03	WSD
Vinyl Chloride	ND	0.035	0.018		ND	0.090	0.702	3/22/13 3:03	WSD
m&p-Xylene	0.056	0.070	0.018	J	0.24	0.30	0.702	3/22/13 3:03	WSD
o-Xylene	0.023	0.035	0.0091	J	0.10	0.15	0.702	3/22/13 3:03	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	3/22/13 3:03
4-Bromofluorobenzene (2)	107	70-130	3/22/13 3:03

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-6-031513
Sample ID: 13C0484-06
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 09:15

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1652
 Canister Size: 6 liter
 Flow Controller ID: 4181
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Date/Time			Analyst
	Results	RL	MDL		Results	RL	Dilution	Analyzed		
Acetone	4.3	1.4	0.16		10	3.3	0.702	3/22/13	3:48	WSD
Benzene	0.25	0.035	0.018		0.80	0.11	0.702	3/22/13	3:48	WSD
Benzyl chloride	ND	0.035	0.0063		ND	0.18	0.702	3/22/13	3:48	WSD
Bromodichloromethane	ND	0.035	0.0098		ND	0.24	0.702	3/22/13	3:48	WSD
Bromoform	ND	0.035	0.0091		ND	0.36	0.702	3/22/13	3:48	WSD
Bromomethane	ND	0.035	0.034		ND	0.14	0.702	3/22/13	3:48	WSD
1,3-Butadiene	ND	0.035	0.020		ND	0.078	0.702	3/22/13	3:48	WSD
2-Butanone (MEK)	0.48	1.4	0.027	J	1.4	4.1	0.702	3/22/13	3:48	WSD
Carbon Disulfide	ND	0.35	0.0098		ND	1.1	0.702	3/22/13	3:48	WSD
Carbon Tetrachloride	0.067	0.035	0.0098		0.42	0.22	0.702	3/22/13	3:48	WSD
Chlorobenzene	ND	0.035	0.029		ND	0.16	0.702	3/22/13	3:48	WSD
Chloroethane	ND	0.035	0.020		ND	0.093	0.702	3/22/13	3:48	WSD
Chloroform	0.015	0.035	0.013	J	0.075	0.17	0.702	3/22/13	3:48	WSD
Chloromethane	0.66	0.035	0.018		1.4	0.072	0.702	3/22/13	3:48	WSD
Cyclohexane	ND	0.035	0.034		ND	0.12	0.702	3/22/13	3:48	WSD
Dibromochloromethane	ND	0.035	0.0084		ND	0.30	0.702	3/22/13	3:48	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0098		ND	0.27	0.702	3/22/13	3:48	WSD
1,2-Dichlorobenzene	ND	0.035	0.018		ND	0.21	0.702	3/22/13	3:48	WSD
1,3-Dichlorobenzene	ND	0.035	0.0098		ND	0.21	0.702	3/22/13	3:48	WSD
1,4-Dichlorobenzene	ND	0.035	0.0091		ND	0.21	0.702	3/22/13	3:48	WSD
Dichlorodifluoromethane (Freon 12)	0.34	0.035	0.015		1.7	0.17	0.702	3/22/13	3:48	WSD
1,1-Dichloroethane	ND	0.035	0.011		ND	0.14	0.702	3/22/13	3:48	WSD
1,2-Dichloroethane	ND	0.035	0.012		ND	0.14	0.702	3/22/13	3:48	WSD
1,1-Dichloroethylene	ND	0.035	0.011		ND	0.14	0.702	3/22/13	3:48	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.0098		ND	0.14	0.702	3/22/13	3:48	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.012		ND	0.14	0.702	3/22/13	3:48	WSD
1,2-Dichloropropane	ND	0.035	0.014		ND	0.16	0.702	3/22/13	3:48	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13	3:48	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13	3:48	WSD
Ethanol	1.6	1.4	0.17	L-03, V-05	2.9	2.6	0.702	3/22/13	3:48	WSD
Ethyl Acetate	0.095	0.035	0.018		0.34	0.13	0.702	3/22/13	3:48	WSD
Ethylbenzene	0.025	0.035	0.0098	J	0.11	0.15	0.702	3/22/13	3:48	WSD
4-Ethyltoluene	ND	0.035	0.013		ND	0.17	0.702	3/22/13	3:48	WSD
Heptane	0.025	0.035	0.012	J	0.10	0.14	0.702	3/22/13	3:48	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	3/22/13	3:48	WSD
Hexane	0.21	1.4	0.031	J	0.76	4.9	0.702	3/22/13	3:48	WSD
2-Hexanone (MBK)	0.048	0.035	0.011	L-03, V-05	0.20	0.14	0.702	3/22/13	3:48	WSD
Isopropanol	ND	1.4	0.021	L-03, V-05	ND	3.4	0.702	3/22/13	3:48	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-6-031513
Sample ID: 13C0484-06
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 09:15

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1652
 Canister Size: 6 liter
 Flow Controller ID: 4181
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analyzed		
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.0098		ND	0.13	0.702	3/22/13	3:48	WSD
Methylene Chloride	0.31	0.35	0.045	J	1.1	1.2	0.702	3/22/13	3:48	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	3/22/13	3:48	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.011		ND	0.14	0.702	3/22/13	3:48	WSD
Propene	ND	1.4	0.027		ND	2.4	0.702	3/22/13	3:48	WSD
Styrene	ND	0.035	0.0077		ND	0.15	0.702	3/22/13	3:48	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	3/22/13	3:48	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.012		ND	0.24	0.702	3/22/13	3:48	WSD
Tetrachloroethylene	0.018	0.035	0.011	J	0.12	0.24	0.702	3/22/13	3:48	WSD
Tetrahydrofuran	ND	0.035	0.011		ND	0.10	0.702	3/22/13	3:48	WSD
Toluene	0.17	0.035	0.0098		0.65	0.13	0.702	3/22/13	3:48	WSD
1,2,4-Trichlorobenzene	ND	0.070	0.013		ND	0.52	0.702	3/22/13	3:48	WSD
1,1,1-Trichloroethane	ND	0.035	0.012		ND	0.19	0.702	3/22/13	3:48	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	3/22/13	3:48	WSD
Trichloroethylene	0.013	0.035	0.0098	J	0.072	0.19	0.702	3/22/13	3:48	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.035	0.022		1.3	0.20	0.702	3/22/13	3:48	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035	0.012		0.65	0.27	0.702	3/22/13	3:48	WSD
1,2,4-Trimethylbenzene	0.015	0.035	0.012	J	0.076	0.17	0.702	3/22/13	3:48	WSD
1,3,5-Trimethylbenzene	ND	0.035	0.011		ND	0.17	0.702	3/22/13	3:48	WSD
Vinyl Acetate	ND	0.070	0.018	V-05	ND	0.25	0.702	3/22/13	3:48	WSD
Vinyl Chloride	0.13	0.035	0.018		0.33	0.090	0.702	3/22/13	3:48	WSD
m&p-Xylene	0.072	0.070	0.018		0.31	0.30	0.702	3/22/13	3:48	WSD
o-Xylene	0.029	0.035	0.0091	J	0.13	0.15	0.702	3/22/13	3:48	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	3/22/13 3:48
4-Bromofluorobenzene (2)	108	70-130	3/22/13 3:48

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-7-031513
Sample ID: 13C0484-07
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 11:10

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1061
 Canister Size: 6 liter
 Flow Controller ID: 4183
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Date/Time		Analyst
	Results	RL	MDL		Results	RL	Dilution	Analyzed	
Acetone	6.5	1.4	0.16		15	3.3	0.702	3/22/13 4:33	WSD
Benzene	0.27	0.035	0.018		0.87	0.11	0.702	3/22/13 4:33	WSD
Benzyl chloride	ND	0.035	0.0063		ND	0.18	0.702	3/22/13 4:33	WSD
Bromodichloromethane	ND	0.035	0.0098		ND	0.24	0.702	3/22/13 4:33	WSD
Bromoform	ND	0.035	0.0091		ND	0.36	0.702	3/22/13 4:33	WSD
Bromomethane	ND	0.035	0.034		ND	0.14	0.702	3/22/13 4:33	WSD
1,3-Butadiene	ND	0.035	0.020		ND	0.078	0.702	3/22/13 4:33	WSD
2-Butanone (MEK)	0.65	1.4	0.027	J	1.9	4.1	0.702	3/22/13 4:33	WSD
Carbon Disulfide	ND	0.35	0.0098		ND	1.1	0.702	3/22/13 4:33	WSD
Carbon Tetrachloride	0.062	0.035	0.0098		0.39	0.22	0.702	3/22/13 4:33	WSD
Chlorobenzene	ND	0.035	0.029		ND	0.16	0.702	3/22/13 4:33	WSD
Chloroethane	ND	0.035	0.020		ND	0.093	0.702	3/22/13 4:33	WSD
Chloroform	0.017	0.035	0.013	J	0.082	0.17	0.702	3/22/13 4:33	WSD
Chloromethane	0.67	0.035	0.018		1.4	0.072	0.702	3/22/13 4:33	WSD
Cyclohexane	ND	0.035	0.034		ND	0.12	0.702	3/22/13 4:33	WSD
Dibromochloromethane	ND	0.035	0.0084		ND	0.30	0.702	3/22/13 4:33	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0098		ND	0.27	0.702	3/22/13 4:33	WSD
1,2-Dichlorobenzene	ND	0.035	0.018		ND	0.21	0.702	3/22/13 4:33	WSD
1,3-Dichlorobenzene	ND	0.035	0.0098		ND	0.21	0.702	3/22/13 4:33	WSD
1,4-Dichlorobenzene	ND	0.035	0.0091		ND	0.21	0.702	3/22/13 4:33	WSD
Dichlorodifluoromethane (Freon 12)	0.35	0.035	0.015		1.7	0.17	0.702	3/22/13 4:33	WSD
1,1-Dichloroethane	ND	0.035	0.011		ND	0.14	0.702	3/22/13 4:33	WSD
1,2-Dichloroethane	ND	0.035	0.012		ND	0.14	0.702	3/22/13 4:33	WSD
1,1-Dichloroethylene	ND	0.035	0.011		ND	0.14	0.702	3/22/13 4:33	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.0098		ND	0.14	0.702	3/22/13 4:33	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.012		ND	0.14	0.702	3/22/13 4:33	WSD
1,2-Dichloropropane	ND	0.035	0.014		ND	0.16	0.702	3/22/13 4:33	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13 4:33	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13 4:33	WSD
Ethanol	6.0	1.4	0.17	L-03, V-05	11	2.6	0.702	3/22/13 4:33	WSD
Ethyl Acetate	ND	0.035	0.018		ND	0.13	0.702	3/22/13 4:33	WSD
Ethylbenzene	0.032	0.035	0.0098	J	0.14	0.15	0.702	3/22/13 4:33	WSD
4-Ethyltoluene	ND	0.035	0.013		ND	0.17	0.702	3/22/13 4:33	WSD
Heptane	0.039	0.035	0.012		0.16	0.14	0.702	3/22/13 4:33	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	3/22/13 4:33	WSD
Hexane	0.25	1.4	0.031	J	0.87	4.9	0.702	3/22/13 4:33	WSD
2-Hexanone (MBK)	0.086	0.035	0.011	L-03, V-05	0.35	0.14	0.702	3/22/13 4:33	WSD
Isopropanol	ND	1.4	0.021	L-03, V-05	ND	3.4	0.702	3/22/13 4:33	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: IA-7-031513
Sample ID: 13C0484-07
 Sample Matrix: Indoor air
 Sampled: 3/15/2013 11:10

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1061
 Canister Size: 6 liter
 Flow Controller ID: 4183
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Date/Time		Analyst
		RL	MDL		Results	RL	Dilution	Analyzed	
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.0098		ND	0.13	0.702	3/22/13 4:33	WSD
Methylene Chloride	0.39	0.35	0.045		1.4	1.2	0.702	3/22/13 4:33	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	3/22/13 4:33	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.011		ND	0.14	0.702	3/22/13 4:33	WSD
Propene	ND	1.4	0.027		ND	2.4	0.702	3/22/13 4:33	WSD
Styrene	0.019	0.035	0.0077	J	0.081	0.15	0.702	3/22/13 4:33	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	3/22/13 4:33	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.012		ND	0.24	0.702	3/22/13 4:33	WSD
Tetrachloroethylene	0.022	0.035	0.011	J	0.15	0.24	0.702	3/22/13 4:33	WSD
Tetrahydrofuran	ND	0.035	0.011		ND	0.10	0.702	3/22/13 4:33	WSD
Toluene	0.28	0.035	0.0098		1.0	0.13	0.702	3/22/13 4:33	WSD
1,2,4-Trichlorobenzene	ND	0.070	0.013		ND	0.52	0.702	3/22/13 4:33	WSD
1,1,1-Trichloroethane	ND	0.035	0.012		ND	0.19	0.702	3/22/13 4:33	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	3/22/13 4:33	WSD
Trichloroethylene	0.013	0.035	0.0098	J	0.068	0.19	0.702	3/22/13 4:33	WSD
Trichlorofluoromethane (Freon 11)	0.27	0.035	0.022		1.5	0.20	0.702	3/22/13 4:33	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.11	0.035	0.012		0.87	0.27	0.702	3/22/13 4:33	WSD
1,2,4-Trimethylbenzene	0.021	0.035	0.012	J	0.10	0.17	0.702	3/22/13 4:33	WSD
1,3,5-Trimethylbenzene	ND	0.035	0.011		ND	0.17	0.702	3/22/13 4:33	WSD
Vinyl Acetate	ND	0.070	0.018	V-05	ND	0.25	0.702	3/22/13 4:33	WSD
Vinyl Chloride	ND	0.035	0.018		ND	0.090	0.702	3/22/13 4:33	WSD
m&p-Xylene	0.092	0.070	0.018		0.40	0.30	0.702	3/22/13 4:33	WSD
o-Xylene	0.034	0.035	0.0091	J	0.15	0.15	0.702	3/22/13 4:33	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	107	70-130	3/22/13 4:33
4-Bromofluorobenzene (2)	110	70-130	3/22/13 4:33

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: AA-1-031513
Sample ID: 13C0484-08
 Sample Matrix: Ambient Air
 Sampled: 3/15/2013 10:19

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1238
 Canister Size: 6 liter
 Flow Controller ID: 4083
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL		Analyzed		
Acetone	7.6	1.4	0.16		18	3.3	0.702	3/22/13	5:18	WSD
Benzene	0.32	0.035	0.018		1.0	0.11	0.702	3/22/13	5:18	WSD
Benzyl chloride	ND	0.035	0.0063		ND	0.18	0.702	3/22/13	5:18	WSD
Bromodichloromethane	ND	0.035	0.0098		ND	0.24	0.702	3/22/13	5:18	WSD
Bromoform	ND	0.035	0.0091		ND	0.36	0.702	3/22/13	5:18	WSD
Bromomethane	ND	0.035	0.034		ND	0.14	0.702	3/22/13	5:18	WSD
1,3-Butadiene	ND	0.035	0.020		ND	0.078	0.702	3/22/13	5:18	WSD
2-Butanone (MEK)	0.63	1.4	0.027	J	1.9	4.1	0.702	3/22/13	5:18	WSD
Carbon Disulfide	0.017	0.35	0.0098	J	0.052	1.1	0.702	3/22/13	5:18	WSD
Carbon Tetrachloride	0.066	0.035	0.0098		0.41	0.22	0.702	3/22/13	5:18	WSD
Chlorobenzene	ND	0.035	0.029		ND	0.16	0.702	3/22/13	5:18	WSD
Chloroethane	ND	0.035	0.020		ND	0.093	0.702	3/22/13	5:18	WSD
Chloroform	0.044	0.035	0.013		0.21	0.17	0.702	3/22/13	5:18	WSD
Chloromethane	0.77	0.035	0.018		1.6	0.072	0.702	3/22/13	5:18	WSD
Cyclohexane	ND	0.035	0.034		ND	0.12	0.702	3/22/13	5:18	WSD
Dibromochloromethane	ND	0.035	0.0084		ND	0.30	0.702	3/22/13	5:18	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0098		ND	0.27	0.702	3/22/13	5:18	WSD
1,2-Dichlorobenzene	ND	0.035	0.018		ND	0.21	0.702	3/22/13	5:18	WSD
1,3-Dichlorobenzene	ND	0.035	0.0098		ND	0.21	0.702	3/22/13	5:18	WSD
1,4-Dichlorobenzene	ND	0.035	0.0091		ND	0.21	0.702	3/22/13	5:18	WSD
Dichlorodifluoromethane (Freon 12)	0.34	0.035	0.015		1.7	0.17	0.702	3/22/13	5:18	WSD
1,1-Dichloroethane	ND	0.035	0.011		ND	0.14	0.702	3/22/13	5:18	WSD
1,2-Dichloroethane	0.014	0.035	0.012	J	0.057	0.14	0.702	3/22/13	5:18	WSD
1,1-Dichloroethylene	ND	0.035	0.011		ND	0.14	0.702	3/22/13	5:18	WSD
cis-1,2-Dichloroethylene	0.023	0.035	0.0098	J	0.092	0.14	0.702	3/22/13	5:18	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.012		ND	0.14	0.702	3/22/13	5:18	WSD
1,2-Dichloropropane	ND	0.035	0.014		ND	0.16	0.702	3/22/13	5:18	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13	5:18	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0070		ND	0.16	0.702	3/22/13	5:18	WSD
Ethanol	0.65	1.4	0.17	L-03, V-05, J	1.2	2.6	0.702	3/22/13	5:18	WSD
Ethyl Acetate	0.30	0.035	0.018		1.1	0.13	0.702	3/22/13	5:18	WSD
Ethylbenzene	0.028	0.035	0.0098	J	0.12	0.15	0.702	3/22/13	5:18	WSD
4-Ethyltoluene	ND	0.035	0.013		ND	0.17	0.702	3/22/13	5:18	WSD
Heptane	0.029	0.035	0.012	J	0.12	0.14	0.702	3/22/13	5:18	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	3/22/13	5:18	WSD
Hexane	0.38	1.4	0.031	J	1.3	4.9	0.702	3/22/13	5:18	WSD
2-Hexanone (MBK)	0.032	0.035	0.011	L-03, V-05, J	0.13	0.14	0.702	3/22/13	5:18	WSD
Isopropanol	0.21	1.4	0.021	L-03, V-05, J	0.52	3.4	0.702	3/22/13	5:18	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: AA-1-031513
Sample ID: 13C0484-08
 Sample Matrix: Ambient Air
 Sampled: 3/15/2013 10:19

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1238
 Canister Size: 6 liter
 Flow Controller ID: 4083
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analized		
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.0098		ND	0.13	0.702	3/22/13	5:18	WSD
Methylene Chloride	0.83	0.35	0.045		2.9	1.2	0.702	3/22/13	5:18	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	3/22/13	5:18	WSD
4-Methyl-2-pentanone (MIBK)	0.020	0.035	0.011	J	0.083	0.14	0.702	3/22/13	5:18	WSD
Propene	ND	1.4	0.027		ND	2.4	0.702	3/22/13	5:18	WSD
Styrene	0.0091	0.035	0.0077	J	0.039	0.15	0.702	3/22/13	5:18	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	3/22/13	5:18	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.012		ND	0.24	0.702	3/22/13	5:18	WSD
Tetrachloroethylene	0.13	0.035	0.011		0.90	0.24	0.702	3/22/13	5:18	WSD
Tetrahydrofuran	ND	0.035	0.011		ND	0.10	0.702	3/22/13	5:18	WSD
Toluene	0.20	0.035	0.0098		0.74	0.13	0.702	3/22/13	5:18	WSD
1,2,4-Trichlorobenzene	ND	0.070	0.013		ND	0.52	0.702	3/22/13	5:18	WSD
1,1,1-Trichloroethane	ND	0.035	0.012		ND	0.19	0.702	3/22/13	5:18	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	3/22/13	5:18	WSD
Trichloroethylene	0.048	0.035	0.0098		0.26	0.19	0.702	3/22/13	5:18	WSD
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.022		1.3	0.20	0.702	3/22/13	5:18	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.086	0.035	0.012		0.66	0.27	0.702	3/22/13	5:18	WSD
1,2,4-Trimethylbenzene	0.014	0.035	0.012	J	0.069	0.17	0.702	3/22/13	5:18	WSD
1,3,5-Trimethylbenzene	ND	0.035	0.011		ND	0.17	0.702	3/22/13	5:18	WSD
Vinyl Acetate	ND	0.070	0.018	V-05	ND	0.25	0.702	3/22/13	5:18	WSD
Vinyl Chloride	ND	0.035	0.018		ND	0.090	0.702	3/22/13	5:18	WSD
m&p-Xylene	0.079	0.070	0.018		0.34	0.30	0.702	3/22/13	5:18	WSD
o-Xylene	0.027	0.035	0.0091	J	0.12	0.15	0.702	3/22/13	5:18	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/22/13 5:18
4-Bromofluorobenzene (2)	111	70-130	3/22/13 5:18

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: EW-5-031513
Sample ID: 13C0484-09
 Sample Matrix: Sub Slab
 Sampled: 3/15/2013 08:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1822
 Canister Size: 6 liter
 Flow Controller ID: 4082
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL		Analyzed		
Acetone	3.6	4.0	0.46	J	8.5	9.5	2	3/22/13	13:58	WSD
Benzene	0.15	0.10	0.052		0.47	0.32	2	3/22/13	13:58	WSD
Benzyl chloride	ND	0.10	0.018		ND	0.52	2	3/22/13	13:58	WSD
Bromodichloromethane	ND	0.10	0.028		ND	0.67	2	3/22/13	13:58	WSD
Bromoform	ND	0.10	0.026		ND	1.0	2	3/22/13	13:58	WSD
Bromomethane	ND	0.10	0.096		ND	0.39	2	3/22/13	13:58	WSD
1,3-Butadiene	ND	0.10	0.058		ND	0.22	2	3/22/13	13:58	WSD
2-Butanone (MEK)	0.57	4.0	0.076	J	1.7	12	2	3/22/13	13:58	WSD
Carbon Disulfide	ND	1.0	0.028		ND	3.1	2	3/22/13	13:58	WSD
Carbon Tetrachloride	0.062	0.10	0.028	J	0.39	0.63	2	3/22/13	13:58	WSD
Chlorobenzene	ND	0.10	0.084		ND	0.46	2	3/22/13	13:58	WSD
Chloroethane	ND	0.10	0.056		ND	0.26	2	3/22/13	13:58	WSD
Chloroform	ND	0.10	0.036		ND	0.49	2	3/22/13	13:58	WSD
Chloromethane	0.53	0.10	0.050		1.1	0.21	2	3/22/13	13:58	WSD
Cyclohexane	ND	0.10	0.096		ND	0.34	2	3/22/13	13:58	WSD
Dibromochloromethane	ND	0.10	0.024		ND	0.85	2	3/22/13	13:58	WSD
1,2-Dibromoethane (EDB)	ND	0.10	0.028		ND	0.77	2	3/22/13	13:58	WSD
1,2-Dichlorobenzene	ND	0.10	0.052		ND	0.60	2	3/22/13	13:58	WSD
1,3-Dichlorobenzene	ND	0.10	0.028		ND	0.60	2	3/22/13	13:58	WSD
1,4-Dichlorobenzene	ND	0.10	0.026		ND	0.60	2	3/22/13	13:58	WSD
Dichlorodifluoromethane (Freon 12)	0.50	0.10	0.042		2.5	0.49	2	3/22/13	13:58	WSD
1,1-Dichloroethane	ND	0.10	0.030		ND	0.40	2	3/22/13	13:58	WSD
1,2-Dichloroethane	ND	0.10	0.034		ND	0.40	2	3/22/13	13:58	WSD
1,1-Dichloroethylene	ND	0.10	0.032		ND	0.40	2	3/22/13	13:58	WSD
cis-1,2-Dichloroethylene	ND	0.10	0.028		ND	0.40	2	3/22/13	13:58	WSD
trans-1,2-Dichloroethylene	ND	0.10	0.034		ND	0.40	2	3/22/13	13:58	WSD
1,2-Dichloropropane	ND	0.10	0.040		ND	0.46	2	3/22/13	13:58	WSD
cis-1,3-Dichloropropene	ND	0.10	0.020		ND	0.45	2	3/22/13	13:58	WSD
trans-1,3-Dichloropropene	ND	0.10	0.020		ND	0.45	2	3/22/13	13:58	WSD
Ethanol	1.9	4.0	0.47	L-03, V-05, J	3.5	7.5	2	3/22/13	13:58	WSD
Ethyl Acetate	0.34	0.10	0.052		1.2	0.36	2	3/22/13	13:58	WSD
Ethylbenzene	ND	0.10	0.028		ND	0.43	2	3/22/13	13:58	WSD
4-Ethyltoluene	ND	0.10	0.036		ND	0.49	2	3/22/13	13:58	WSD
Heptane	ND	0.10	0.034		ND	0.41	2	3/22/13	13:58	WSD
Hexachlorobutadiene	ND	0.10	0.036		ND	1.1	2	3/22/13	13:58	WSD
Hexane	0.62	4.0	0.088	J	2.2	14	2	3/22/13	13:58	WSD
2-Hexanone (MBK)	ND	0.10	0.030	L-03, V-05	ND	0.41	2	3/22/13	13:58	WSD
Isopropanol	ND	4.0	0.060	L-03, V-05	ND	9.8	2	3/22/13	13:58	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: EW-5-031513
Sample ID: 13C0484-09
 Sample Matrix: Sub Slab
 Sampled: 3/15/2013 08:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1822
 Canister Size: 6 liter
 Flow Controller ID: 4082
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analized		
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.028		ND	0.36	2	3/22/13	13:58	WSD
Methylene Chloride	2.0	1.0	0.13		6.9	3.5	2	3/22/13	13:58	WSD
Methyl methacrylate	ND	0.10	0.030		ND	0.41	2	3/22/13	13:58	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.030		ND	0.41	2	3/22/13	13:58	WSD
Propene	ND	4.0	0.076		ND	6.9	2	3/22/13	13:58	WSD
Styrene	ND	0.10	0.022		ND	0.43	2	3/22/13	13:58	WSD
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	3/22/13	13:58	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.034		ND	0.69	2	3/22/13	13:58	WSD
Tetrachloroethylene	ND	0.10	0.030		ND	0.68	2	3/22/13	13:58	WSD
Tetrahydrofuran	ND	0.10	0.032		ND	0.29	2	3/22/13	13:58	WSD
Toluene	0.11	0.10	0.028		0.40	0.38	2	3/22/13	13:58	WSD
1,2,4-Trichlorobenzene	ND	0.20	0.038		ND	1.5	2	3/22/13	13:58	WSD
1,1,1-Trichloroethane	ND	0.10	0.034		ND	0.55	2	3/22/13	13:58	WSD
1,1,2-Trichloroethane	ND	0.10	0.032		ND	0.55	2	3/22/13	13:58	WSD
Trichloroethylene	ND	0.10	0.028		ND	0.54	2	3/22/13	13:58	WSD
Trichlorofluoromethane (Freon 11)	0.26	0.10	0.062		1.4	0.56	2	3/22/13	13:58	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.080	0.10	0.034	J	0.61	0.77	2	3/22/13	13:58	WSD
1,2,4-Trimethylbenzene	ND	0.10	0.034		ND	0.49	2	3/22/13	13:58	WSD
1,3,5-Trimethylbenzene	ND	0.10	0.030		ND	0.49	2	3/22/13	13:58	WSD
Vinyl Acetate	ND	0.20	0.050	V-05	ND	0.70	2	3/22/13	13:58	WSD
Vinyl Chloride	ND	0.10	0.050		ND	0.26	2	3/22/13	13:58	WSD
m&p-Xylene	ND	0.20	0.052		ND	0.87	2	3/22/13	13:58	WSD
o-Xylene	ND	0.10	0.026		ND	0.43	2	3/22/13	13:58	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	104	70-130	3/22/13 13:58
4-Bromofluorobenzene (2)	104	70-130	3/22/13 13:58

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: EW-6-031513
Sample ID: 13C0484-10
 Sample Matrix: Sub Slab
 Sampled: 3/15/2013 09:24

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1227
 Canister Size: 6 liter
 Flow Controller ID: 4180
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -2
 Receipt Vacuum(in Hg): -1
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL		Analyzed		
Acetone	2.6	4.0	0.46	J	6.3	9.5	2	3/22/13	13:19	WSD
Benzene	0.13	0.10	0.052		0.40	0.32	2	3/22/13	13:19	WSD
Benzyl chloride	ND	0.10	0.018		ND	0.52	2	3/22/13	13:19	WSD
Bromodichloromethane	ND	0.10	0.028		ND	0.67	2	3/22/13	13:19	WSD
Bromoform	ND	0.10	0.026		ND	1.0	2	3/22/13	13:19	WSD
Bromomethane	ND	0.10	0.096		ND	0.39	2	3/22/13	13:19	WSD
1,3-Butadiene	ND	0.10	0.058		ND	0.22	2	3/22/13	13:19	WSD
2-Butanone (MEK)	0.65	4.0	0.076	J	1.9	12	2	3/22/13	13:19	WSD
Carbon Disulfide	ND	1.0	0.028		ND	3.1	2	3/22/13	13:19	WSD
Carbon Tetrachloride	0.036	0.10	0.028	J	0.23	0.63	2	3/22/13	13:19	WSD
Chlorobenzene	ND	0.10	0.084		ND	0.46	2	3/22/13	13:19	WSD
Chloroethane	ND	0.10	0.056		ND	0.26	2	3/22/13	13:19	WSD
Chloroform	ND	0.10	0.036		ND	0.49	2	3/22/13	13:19	WSD
Chloromethane	0.57	0.10	0.050		1.2	0.21	2	3/22/13	13:19	WSD
Cyclohexane	ND	0.10	0.096		ND	0.34	2	3/22/13	13:19	WSD
Dibromochloromethane	ND	0.10	0.024		ND	0.85	2	3/22/13	13:19	WSD
1,2-Dibromoethane (EDB)	ND	0.10	0.028		ND	0.77	2	3/22/13	13:19	WSD
1,2-Dichlorobenzene	ND	0.10	0.052		ND	0.60	2	3/22/13	13:19	WSD
1,3-Dichlorobenzene	ND	0.10	0.028		ND	0.60	2	3/22/13	13:19	WSD
1,4-Dichlorobenzene	ND	0.10	0.026		ND	0.60	2	3/22/13	13:19	WSD
Dichlorodifluoromethane (Freon 12)	0.51	0.10	0.042		2.5	0.49	2	3/22/13	13:19	WSD
1,1-Dichloroethane	ND	0.10	0.030		ND	0.40	2	3/22/13	13:19	WSD
1,2-Dichloroethane	ND	0.10	0.034		ND	0.40	2	3/22/13	13:19	WSD
1,1-Dichloroethylene	ND	0.10	0.032		ND	0.40	2	3/22/13	13:19	WSD
cis-1,2-Dichloroethylene	ND	0.10	0.028		ND	0.40	2	3/22/13	13:19	WSD
trans-1,2-Dichloroethylene	ND	0.10	0.034		ND	0.40	2	3/22/13	13:19	WSD
1,2-Dichloropropane	ND	0.10	0.040		ND	0.46	2	3/22/13	13:19	WSD
cis-1,3-Dichloropropene	ND	0.10	0.020		ND	0.45	2	3/22/13	13:19	WSD
trans-1,3-Dichloropropene	ND	0.10	0.020		ND	0.45	2	3/22/13	13:19	WSD
Ethanol	1.8	4.0	0.47	L-03, V-05, J	3.5	7.5	2	3/22/13	13:19	WSD
Ethyl Acetate	ND	0.10	0.052		ND	0.36	2	3/22/13	13:19	WSD
Ethylbenzene	ND	0.10	0.028		ND	0.43	2	3/22/13	13:19	WSD
4-Ethyltoluene	ND	0.10	0.036		ND	0.49	2	3/22/13	13:19	WSD
Heptane	ND	0.10	0.034		ND	0.41	2	3/22/13	13:19	WSD
Hexachlorobutadiene	ND	0.10	0.036		ND	1.1	2	3/22/13	13:19	WSD
Hexane	0.17	4.0	0.088	J	0.60	14	2	3/22/13	13:19	WSD
2-Hexanone (MBK)	ND	0.10	0.030	L-03, V-05	ND	0.41	2	3/22/13	13:19	WSD
Isopropanol	ND	4.0	0.060	L-03, V-05	ND	9.8	2	3/22/13	13:19	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: EW-6-031513
Sample ID: 13C0484-10
 Sample Matrix: Sub Slab
 Sampled: 3/15/2013 09:24

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1227
 Canister Size: 6 liter
 Flow Controller ID: 4180
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -2
 Receipt Vacuum(in Hg): -1
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analyzed		
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.028		ND	0.36	2	3/22/13 13:19	WSD	
Methylene Chloride	0.42	1.0	0.13	J	1.4	3.5	2	3/22/13 13:19	WSD	
Methyl methacrylate	ND	0.10	0.030		ND	0.41	2	3/22/13 13:19	WSD	
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.030		ND	0.41	2	3/22/13 13:19	WSD	
Propene	ND	4.0	0.076		ND	6.9	2	3/22/13 13:19	WSD	
Styrene	ND	0.10	0.022		ND	0.43	2	3/22/13 13:19	WSD	
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	3/22/13 13:19	WSD	
1,1,2,2-Tetrachloroethane	ND	0.10	0.034		ND	0.69	2	3/22/13 13:19	WSD	
Tetrachloroethylene	ND	0.10	0.030		ND	0.68	2	3/22/13 13:19	WSD	
Tetrahydrofuran	0.090	0.10	0.032	J	0.27	0.29	2	3/22/13 13:19	WSD	
Toluene	0.082	0.10	0.028	J	0.31	0.38	2	3/22/13 13:19	WSD	
1,2,4-Trichlorobenzene	ND	0.20	0.038		ND	1.5	2	3/22/13 13:19	WSD	
1,1,1-Trichloroethane	ND	0.10	0.034		ND	0.55	2	3/22/13 13:19	WSD	
1,1,2-Trichloroethane	ND	0.10	0.032		ND	0.55	2	3/22/13 13:19	WSD	
Trichloroethylene	ND	0.10	0.028		ND	0.54	2	3/22/13 13:19	WSD	
Trichlorofluoromethane (Freon 11)	0.23	0.10	0.062		1.3	0.56	2	3/22/13 13:19	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.082	0.10	0.034	J	0.63	0.77	2	3/22/13 13:19	WSD	
1,2,4-Trimethylbenzene	ND	0.10	0.034		ND	0.49	2	3/22/13 13:19	WSD	
1,3,5-Trimethylbenzene	ND	0.10	0.030		ND	0.49	2	3/22/13 13:19	WSD	
Vinyl Acetate	ND	0.20	0.050	V-05	ND	0.70	2	3/22/13 13:19	WSD	
Vinyl Chloride	ND	0.10	0.050		ND	0.26	2	3/22/13 13:19	WSD	
m&p-Xylene	ND	0.20	0.052		ND	0.87	2	3/22/13 13:19	WSD	
o-Xylene	ND	0.10	0.026		ND	0.43	2	3/22/13 13:19	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/22/13 13:19
4-Bromofluorobenzene (2)	106	70-130	3/22/13 13:19

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: EW-7-031513
Sample ID: 13C0484-11
 Sample Matrix: Sub Slab
 Sampled: 3/15/2013 11:12

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1509
 Canister Size: 6 liter
 Flow Controller ID: 4182
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL		Analyzed		
Acetone	23	4.0	0.46		55	9.5	2	3/22/13 14:37	WSD	
Benzene	0.17	0.10	0.052		0.54	0.32	2	3/22/13 14:37	WSD	
Benzyl chloride	ND	0.10	0.018		ND	0.52	2	3/22/13 14:37	WSD	
Bromodichloromethane	ND	0.10	0.028		ND	0.67	2	3/22/13 14:37	WSD	
Bromoform	ND	0.10	0.026		ND	1.0	2	3/22/13 14:37	WSD	
Bromomethane	ND	0.10	0.096		ND	0.39	2	3/22/13 14:37	WSD	
1,3-Butadiene	ND	0.10	0.058		ND	0.22	2	3/22/13 14:37	WSD	
2-Butanone (MEK)	72	4.0	0.076		210	12	2	3/22/13 14:37	WSD	
Carbon Disulfide	0.18	1.0	0.028	J	0.57	3.1	2	3/22/13 14:37	WSD	
Carbon Tetrachloride	0.074	0.10	0.028	J	0.47	0.63	2	3/22/13 14:37	WSD	
Chlorobenzene	ND	0.10	0.084		ND	0.46	2	3/22/13 14:37	WSD	
Chloroethane	ND	0.10	0.056		ND	0.26	2	3/22/13 14:37	WSD	
Chloroform	0.074	0.10	0.036	J	0.36	0.49	2	3/22/13 14:37	WSD	
Chloromethane	ND	0.10	0.050		ND	0.21	2	3/22/13 14:37	WSD	
Cyclohexane	ND	0.10	0.096		ND	0.34	2	3/22/13 14:37	WSD	
Dibromochloromethane	ND	0.10	0.024		ND	0.85	2	3/22/13 14:37	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	0.028		ND	0.77	2	3/22/13 14:37	WSD	
1,2-Dichlorobenzene	ND	0.10	0.052		ND	0.60	2	3/22/13 14:37	WSD	
1,3-Dichlorobenzene	ND	0.10	0.028		ND	0.60	2	3/22/13 14:37	WSD	
1,4-Dichlorobenzene	ND	0.10	0.026		ND	0.60	2	3/22/13 14:37	WSD	
Dichlorodifluoromethane (Freon 12)	0.51	0.10	0.042		2.5	0.49	2	3/22/13 14:37	WSD	
1,1-Dichloroethane	0.51	0.10	0.030		2.0	0.40	2	3/22/13 14:37	WSD	
1,2-Dichloroethane	ND	0.10	0.034		ND	0.40	2	3/22/13 14:37	WSD	
1,1-Dichloroethylene	ND	0.10	0.032		ND	0.40	2	3/22/13 14:37	WSD	
cis-1,2-Dichloroethylene	0.35	0.10	0.028		1.4	0.40	2	3/22/13 14:37	WSD	
trans-1,2-Dichloroethylene	0.54	0.10	0.034		2.1	0.40	2	3/22/13 14:37	WSD	
1,2-Dichloropropane	ND	0.10	0.040		ND	0.46	2	3/22/13 14:37	WSD	
cis-1,3-Dichloropropene	ND	0.10	0.020		ND	0.45	2	3/22/13 14:37	WSD	
trans-1,3-Dichloropropene	ND	0.10	0.020		ND	0.45	2	3/22/13 14:37	WSD	
Ethanol	14	4.0	0.47	L-03, V-05	27	7.5	2	3/22/13 14:37	WSD	
Ethyl Acetate	0.82	0.10	0.052		3.0	0.36	2	3/22/13 14:37	WSD	
Ethylbenzene	0.030	0.10	0.028	J	0.13	0.43	2	3/22/13 14:37	WSD	
4-Ethyltoluene	ND	0.10	0.036		ND	0.49	2	3/22/13 14:37	WSD	
Heptane	ND	0.10	0.034		ND	0.41	2	3/22/13 14:37	WSD	
Hexachlorobutadiene	ND	0.10	0.036		ND	1.1	2	3/22/13 14:37	WSD	
Hexane	1.0	4.0	0.088	J	3.5	14	2	3/22/13 14:37	WSD	
2-Hexanone (MBK)	0.094	0.10	0.030	L-03, V-05, J	0.39	0.41	2	3/22/13 14:37	WSD	
Isopropanol	ND	4.0	0.060	L-03, V-05	ND	9.8	2	3/22/13 14:37	WSD	

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: EW-7-031513
Sample ID: 13C0484-11
 Sample Matrix: Sub Slab
 Sampled: 3/15/2013 11:12

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1509
 Canister Size: 6 liter
 Flow Controller ID: 4182
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time Analyzed	Analyst
		RL	MDL		Results	RL			
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.028		ND	0.36	2	3/22/13 14:37	WSD
Methylene Chloride	2.9	1.0	0.13		10	3.5	2	3/22/13 14:37	WSD
Methyl methacrylate	ND	0.10	0.030		ND	0.41	2	3/22/13 14:37	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.030		ND	0.41	2	3/22/13 14:37	WSD
Propene	ND	4.0	0.076		ND	6.9	2	3/22/13 14:37	WSD
Styrene	0.034	0.10	0.022	J	0.14	0.43	2	3/22/13 14:37	WSD
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	3/22/13 14:37	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.034		ND	0.69	2	3/22/13 14:37	WSD
Tetrachloroethylene	0.44	0.10	0.030		3.0	0.68	2	3/22/13 14:37	WSD
Tetrahydrofuran	42	0.10	0.032		120	0.29	2	3/22/13 14:37	WSD
Toluene	0.17	0.10	0.028		0.63	0.38	2	3/22/13 14:37	WSD
1,2,4-Trichlorobenzene	ND	0.20	0.038		ND	1.5	2	3/22/13 14:37	WSD
1,1,1-Trichloroethane	0.56	0.10	0.034		3.1	0.55	2	3/22/13 14:37	WSD
1,1,2-Trichloroethane	ND	0.10	0.032		ND	0.55	2	3/22/13 14:37	WSD
Trichloroethylene	3.1	0.10	0.028		17	0.54	2	3/22/13 14:37	WSD
Trichlorofluoromethane (Freon 11)	16	0.10	0.062		91	0.56	2	3/22/13 14:37	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.092	0.10	0.034	J	0.71	0.77	2	3/22/13 14:37	WSD
1,2,4-Trimethylbenzene	0.062	0.10	0.034	J	0.30	0.49	2	3/22/13 14:37	WSD
1,3,5-Trimethylbenzene	ND	0.10	0.030		ND	0.49	2	3/22/13 14:37	WSD
Vinyl Acetate	ND	0.20	0.050	V-05	ND	0.70	2	3/22/13 14:37	WSD
Vinyl Chloride	ND	0.10	0.050		ND	0.26	2	3/22/13 14:37	WSD
m&p-Xylene	0.076	0.20	0.052	J	0.33	0.87	2	3/22/13 14:37	WSD
o-Xylene	0.034	0.10	0.026	J	0.15	0.43	2	3/22/13 14:37	WSD

Surrogates	% Recovery	% REC Limits	Date/Time Analyzed
4-Bromofluorobenzene (1)	109	70-130	3/22/13 14:37
4-Bromofluorobenzene (2)	111	70-130	3/22/13 14:37

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: EW-Combined-031513
Sample ID: 13C0484-12
 Sample Matrix: Sub Slab
 Sampled: 3/15/2013 10:12

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1611
 Canister Size: 6 liter
 Flow Controller ID: 4084
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -8
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL		Analyzed		
Acetone	32	4.0	0.46		75	9.5	2	3/22/13 15:15	WSD	
Benzene	1.6	0.10	0.052		5.0	0.32	2	3/22/13 15:15	WSD	
Benzyl chloride	ND	0.10	0.018		ND	0.52	2	3/22/13 15:15	WSD	
Bromodichloromethane	ND	0.10	0.028		ND	0.67	2	3/22/13 15:15	WSD	
Bromoform	ND	0.10	0.026		ND	1.0	2	3/22/13 15:15	WSD	
Bromomethane	ND	0.10	0.096		ND	0.39	2	3/22/13 15:15	WSD	
1,3-Butadiene	ND	0.10	0.058		ND	0.22	2	3/22/13 15:15	WSD	
2-Butanone (MEK)	7.6	4.0	0.076		22	12	2	3/22/13 15:15	WSD	
Carbon Disulfide	0.26	1.0	0.028	J	0.82	3.1	2	3/22/13 15:15	WSD	
Carbon Tetrachloride	ND	0.10	0.028		ND	0.63	2	3/22/13 15:15	WSD	
Chlorobenzene	ND	0.10	0.084		ND	0.46	2	3/22/13 15:15	WSD	
Chloroethane	0.40	0.10	0.056		1.1	0.26	2	3/22/13 15:15	WSD	
Chloroform	0.72	0.10	0.036		3.5	0.49	2	3/22/13 15:15	WSD	
Chloromethane	ND	0.10	0.050		ND	0.21	2	3/22/13 15:15	WSD	
Cyclohexane	6.2	0.10	0.096		21	0.34	2	3/22/13 15:15	WSD	
Dibromochloromethane	ND	0.10	0.024		ND	0.85	2	3/22/13 15:15	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	0.028		ND	0.77	2	3/22/13 15:15	WSD	
1,2-Dichlorobenzene	ND	0.10	0.052		ND	0.60	2	3/22/13 15:15	WSD	
1,3-Dichlorobenzene	0.18	0.10	0.028		1.1	0.60	2	3/22/13 15:15	WSD	
1,4-Dichlorobenzene	0.11	0.10	0.026		0.64	0.60	2	3/22/13 15:15	WSD	
Dichlorodifluoromethane (Freon 12)	0.51	0.10	0.042		2.5	0.49	2	3/22/13 15:15	WSD	
1,1-Dichloroethane	15	0.10	0.030		59	0.40	2	3/22/13 15:15	WSD	
1,2-Dichloroethane	ND	0.10	0.034		ND	0.40	2	3/22/13 15:15	WSD	
1,1-Dichloroethylene	6.0	0.10	0.032		24	0.40	2	3/22/13 15:15	WSD	
cis-1,2-Dichloroethylene	7.5	0.10	0.028		30	0.40	2	3/22/13 15:15	WSD	
trans-1,2-Dichloroethylene	0.22	0.10	0.034		0.86	0.40	2	3/22/13 15:15	WSD	
1,2-Dichloropropane	ND	0.10	0.040		ND	0.46	2	3/22/13 15:15	WSD	
cis-1,3-Dichloropropene	ND	0.10	0.020		ND	0.45	2	3/22/13 15:15	WSD	
trans-1,3-Dichloropropene	ND	0.10	0.020		ND	0.45	2	3/22/13 15:15	WSD	
Ethanol	170	80	9.5	L-03, V-05	320	150	40	3/22/13 7:47	WSD	
Ethyl Acetate	30	0.10	0.052		110	0.36	2	3/22/13 15:15	WSD	
Ethylbenzene	3.1	0.10	0.028		13	0.43	2	3/22/13 15:15	WSD	
4-Ethyltoluene	0.69	0.10	0.036		3.4	0.49	2	3/22/13 15:15	WSD	
Heptane	1.1	0.10	0.034		4.4	0.41	2	3/22/13 15:15	WSD	
Hexachlorobutadiene	ND	0.10	0.036		ND	1.1	2	3/22/13 15:15	WSD	
Hexane	1.9	4.0	0.088	J	6.8	14	2	3/22/13 15:15	WSD	
2-Hexanone (MBK)	0.35	0.10	0.030	L-03, V-05	1.4	0.41	2	3/22/13 15:15	WSD	
Isopropanol	11	4.0	0.060	L-03, V-05	27	9.8	2	3/22/13 15:15	WSD	

ANALYTICAL RESULTS

Project Location: Providence, RI
 Date Received: 3/15/2013
Field Sample #: EW-Combined-031513
Sample ID: 13C0484-12
 Sample Matrix: Sub Slab
 Sampled: 3/15/2013 10:12

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1611
 Canister Size: 6 liter
 Flow Controller ID: 4084
 Sample Type: 30 min

Work Order: 13C0484
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -8
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analized		
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.028		ND	0.36	2	3/22/13	15:15	WSD
Methylene Chloride	0.70	1.0	0.13	J	2.4	3.5	2	3/22/13	15:15	WSD
Methyl methacrylate	0.86	0.10	0.030		3.5	0.41	2	3/22/13	15:15	WSD
4-Methyl-2-pentanone (MIBK)	2.1	0.10	0.030		8.7	0.41	2	3/22/13	15:15	WSD
Propene	ND	4.0	0.076		ND	6.9	2	3/22/13	15:15	WSD
Styrene	3.3	0.10	0.022		14	0.43	2	3/22/13	15:15	WSD
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	3/22/13	15:15	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.034		ND	0.69	2	3/22/13	15:15	WSD
Tetrachloroethylene	8.9	0.10	0.030		60	0.68	2	3/22/13	15:15	WSD
Tetrahydrofuran	1.4	0.10	0.032		4.1	0.29	2	3/22/13	15:15	WSD
Toluene	20	0.10	0.028		74	0.38	2	3/22/13	15:15	WSD
1,2,4-Trichlorobenzene	ND	0.20	0.038		ND	1.5	2	3/22/13	15:15	WSD
1,1,1-Trichloroethane	110	2.0	0.68		610	11	40	3/22/13	7:47	WSD
1,1,2-Trichloroethane	ND	0.10	0.032		ND	0.55	2	3/22/13	15:15	WSD
Trichloroethylene	70	0.10	0.028		380	0.54	2	3/22/13	15:15	WSD
Trichlorofluoromethane (Freon 11)	22	0.10	0.062		130	0.56	2	3/22/13	15:15	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.12	0.10	0.034		0.92	0.77	2	3/22/13	15:15	WSD
1,2,4-Trimethylbenzene	2.8	0.10	0.034		14	0.49	2	3/22/13	15:15	WSD
1,3,5-Trimethylbenzene	0.80	0.10	0.030		3.9	0.49	2	3/22/13	15:15	WSD
Vinyl Acetate	ND	0.20	0.050	V-05	ND	0.70	2	3/22/13	15:15	WSD
Vinyl Chloride	ND	0.10	0.050		ND	0.26	2	3/22/13	15:15	WSD
m&p-Xylene	7.8	0.20	0.052		34	0.87	2	3/22/13	15:15	WSD
o-Xylene	3.6	0.10	0.026		16	0.43	2	3/22/13	15:15	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	105	70-130	3/22/13 7:47
4-Bromofluorobenzene (1)	107	70-130	3/22/13 15:15
4-Bromofluorobenzene (2)	110	70-130	3/22/13 15:15

Sample Extraction Data

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
13C0484-01 [IA-1-031513]	B069616	1	1	N/A	1000	400	570	03/21/13
13C0484-02 [IA-2-031513]	B069616	1	1	N/A	1000	400	570	03/21/13
13C0484-02RE1 [IA-2-031513]	B069616	1	1	N/A	1000	400	40	03/21/13
13C0484-03 [IA-3-031513]	B069616	1	1	N/A	1000	400	570	03/21/13
13C0484-04 [IA-4-031513]	B069616	1	1	N/A	1000	400	570	03/21/13
13C0484-05 [IA-5-031513]	B069616	1	1	N/A	1000	400	570	03/21/13
13C0484-06 [IA-6-031513]	B069616	1	1	N/A	1000	400	570	03/21/13
13C0484-07 [IA-7-031513]	B069616	1	1	N/A	1000	400	570	03/21/13
13C0484-08 [AA-1-031513]	B069616	1	1	N/A	1000	400	570	03/21/13
13C0484-09 [EW-5-031513]	B069616	2	1	N/A	1000	400	400	03/21/13
13C0484-10 [EW-6-031513]	B069616	2	1	N/A	1000	400	400	03/21/13
13C0484-11 [EW-7-031513]	B069616	2	1	N/A	1000	400	400	03/21/13
13C0484-12 [EW-Combined-031513]	B069616	2	1	N/A	1000	400	400	03/21/13
13C0484-12RE1 [EW-Combined-031513]	B069616	2	1	N/A	1000	400	20	03/21/13

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B069616 - TO-15 Prep

Blank (B069616-BLK1)

Prepared & Analyzed: 03/21/13

Acetone	ND	1.0								
Benzene	ND	0.025								
Benzyl chloride	ND	0.025								
Bromodichloromethane	ND	0.025								
Bromoform	ND	0.025								
Bromomethane	ND	0.025								
1,3-Butadiene	ND	0.025								
2-Butanone (MEK)	ND	1.0								
Carbon Disulfide	ND	0.25								
Carbon Tetrachloride	ND	0.025								
Chlorobenzene	ND	0.025								
Chloroethane	ND	0.025								
Chloroform	ND	0.025								
Chloromethane	ND	0.025								
Cyclohexane	ND	0.025								
Dibromochloromethane	ND	0.025								
1,2-Dibromoethane (EDB)	ND	0.025								
1,2-Dichlorobenzene	ND	0.025								
1,3-Dichlorobenzene	ND	0.025								
1,4-Dichlorobenzene	ND	0.025								
Dichlorodifluoromethane (Freon 12)	ND	0.025								
1,1-Dichloroethane	ND	0.025								
1,2-Dichloroethane	ND	0.025								
1,1-Dichloroethylene	ND	0.025								
cis-1,2-Dichloroethylene	ND	0.025								
trans-1,2-Dichloroethylene	ND	0.025								
1,2-Dichloropropane	ND	0.025								
cis-1,3-Dichloropropene	ND	0.025								
trans-1,3-Dichloropropene	ND	0.025								
Ethanol	ND	1.0								L-03, V-05
Ethyl Acetate	ND	0.025								
Ethylbenzene	ND	0.025								
4-Ethyltoluene	ND	0.025								
Heptane	ND	0.025								
Hexachlorobutadiene	ND	0.025								
Hexane	0.11	1.0								J
2-Hexanone (MBK)	ND	0.025								L-03, V-05
Isopropanol	ND	1.0								V-05, L-03
Methyl tert-Butyl Ether (MTBE)	ND	0.025								
Methylene Chloride	0.055	0.25								J
Methyl methacrylate	ND	0.025								
4-Methyl-2-pentanone (MIBK)	ND	0.025								
Propene	ND	1.0								
Styrene	ND	0.025								
1,1,1,2-Tetrachloroethane	ND	0.046								
1,1,2,2-Tetrachloroethane	ND	0.025								

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit		

Batch B069616 - TO-15 Prep

Blank (B069616-BLK1)

Prepared & Analyzed: 03/21/13

Tetrachloroethylene	ND	0.025									
Tetrahydrofuran	ND	0.025									
Toluene	ND	0.025									
1,2,4-Trichlorobenzene	ND	0.050									
1,1,1-Trichloroethane	ND	0.025									
1,1,2-Trichloroethane	ND	0.025									
Trichloroethylene	ND	0.025									
Trichlorofluoromethane (Freon 11)	ND	0.025									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.025									
1,2,4-Trimethylbenzene	ND	0.025									
1,3,5-Trimethylbenzene	ND	0.025									
Vinyl Acetate	ND	0.050									V-05
Vinyl Chloride	ND	0.025									
m&p-Xylene	ND	0.050									
o-Xylene	ND	0.025									
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.01</i>				<i>8.00</i>		<i>100</i>	<i>70-130</i>			
<i>Surrogate: 4-Bromofluorobenzene (2)</i>	<i>8.17</i>				<i>8.00</i>		<i>102</i>	<i>70-130</i>			

LCS (B069616-BS1)

Prepared & Analyzed: 03/21/13

Acetone	5.90				5.00		118	70-130			
Benzene	4.14				5.00		82.8	70-130			
Benzyl chloride	3.96				5.00		79.2	70-130			
Bromodichloromethane	4.31				5.00		86.2	70-130			
Bromoform	4.92				5.00		98.3	70-130			
Bromomethane	5.52				5.00		110	70-130			
1,3-Butadiene	4.80				5.00		96.0	70-130			
2-Butanone (MEK)	3.89				5.00		77.8	70-130			
Carbon Disulfide	4.50				5.00		90.1	70-130			
Carbon Tetrachloride	4.15				5.00		83.1	70-130			
Chlorobenzene	4.51				5.00		90.2	70-130			
Chloroethane	4.86				5.00		97.3	70-130			
Chloroform	5.00				5.00		100	70-130			
Chloromethane	4.34				5.00		86.9	70-130			
Cyclohexane	3.94				5.00		78.7	70-130			
Dibromochloromethane	4.62				5.00		92.4	70-130			
1,2-Dibromoethane (EDB)	4.58				5.00		91.5	70-130			
1,2-Dichlorobenzene	4.78				5.00		95.6	70-130			
1,3-Dichlorobenzene	4.86				5.00		97.3	70-130			
1,4-Dichlorobenzene	4.71				5.00		94.1	70-130			
Dichlorodifluoromethane (Freon 12)	5.04				5.00		101	70-130			
1,1-Dichloroethane	4.87				5.00		97.3	70-130			
1,2-Dichloroethane	4.48				5.00		89.5	70-130			
1,1-Dichloroethylene	4.49				5.00		89.9	70-130			
cis-1,2-Dichloroethylene	4.87				5.00		97.4	70-130			
trans-1,2-Dichloroethylene	4.65				5.00		93.0	70-130			
1,2-Dichloropropane	4.24				5.00		84.7	70-130			

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit		
Batch B069616 - TO-15 Prep											
LCS (B069616-BS1)					Prepared & Analyzed: 03/21/13						
cis-1,3-Dichloropropene	4.38				5.00		87.6	70-130			
trans-1,3-Dichloropropene	3.93				5.00		78.5	70-130			
Ethanol	1.13				5.00		22.6 *	70-130			L-03, V-05
Ethyl Acetate	4.49				5.00		89.8	70-130			
Ethylbenzene	4.35				5.00		87.0	70-130			
4-Ethyltoluene	4.35				5.00		87.1	70-130			
Heptane	3.75				5.00		74.9	70-130			
Hexachlorobutadiene	4.47				5.00		89.4	70-130			
Hexane	4.28				5.00		85.6	70-130			
2-Hexanone (MBK)	3.37				5.00		67.3 *	70-130			L-03, V-05
Isopropanol	1.27				5.00		25.3 *	70-130			L-03, V-05
Methyl tert-Butyl Ether (MTBE)	4.55				5.00		91.0	70-130			
Methylene Chloride	4.37				5.00		87.4	70-130			
Methyl methacrylate	4.28				5.00		85.6	70-130			
4-Methyl-2-pentanone (MIBK)	3.99				5.00		79.9	70-130			
Propene	4.89				5.00		97.8	70-130			
Styrene	4.48				5.00		89.6	70-130			
1,1,1,2-Tetrachloroethane	0.881				0.910		96.8	70-130			
1,1,2,2-Tetrachloroethane	4.82				5.00		96.4	70-130			
Tetrachloroethylene	4.62				5.00		92.3	70-130			
Tetrahydrofuran	4.16				5.00		83.2	70-130			
Toluene	4.32				5.00		86.4	70-130			
1,2,4-Trichlorobenzene	4.99				5.00		99.9	70-130			
1,1,1-Trichloroethane	3.97				5.00		79.5	70-130			
1,1,2-Trichloroethane	4.54				5.00		90.9	70-130			
Trichloroethylene	4.36				5.00		87.3	70-130			
Trichlorofluoromethane (Freon 11)	5.06				5.00		101	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.12				5.00		102	70-130			
1,2,4-Trimethylbenzene	4.45				5.00		89.1	70-130			
1,3,5-Trimethylbenzene	4.46				5.00		89.1	70-130			
Vinyl Acetate	4.85				5.00		97.0	70-130			V-05
Vinyl Chloride	4.95				5.00		99.0	70-130			
m&p-Xylene	8.87				10.0		88.7	70-130			
o-Xylene	4.45				5.00		89.0	70-130			
Surrogate: 4-Bromofluorobenzene (1)	8.44				8.00		105	70-130			
Surrogate: 4-Bromofluorobenzene (2)	8.20				8.00		102	70-130			

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC Limits	RPD	RPD Limit	Flag
	Results	RL	Results	RL						
Batch B069616 - TO-15 Prep										
Duplicate (B069616-DUP1)										
Source: 13C0484-12 Prepared: 03/21/13 Analyzed: 03/22/13										
Acetone	28	4.0	66	9.5		32		13.3	25	
Benzene	1.5	0.10	4.8	0.32		1.6		3.80	25	
Benzyl chloride	0.072	0.10	0.37	0.52		ND			25	J
Bromodichloromethane	ND	0.10	ND	0.67		ND			25	
Bromoform	ND	0.10	ND	1.0		ND			25	
Bromomethane	ND	0.10	ND	0.39		ND			25	
1,3-Butadiene	ND	0.10	ND	0.22		ND			25	
2-Butanone (MEK)	7.3	4.0	22	12		7.6		4.10	25	
Carbon Disulfide	0.27	1.0	0.84	3.1		0.26		2.25	25	J
Carbon Tetrachloride	0.16	0.10	1.0	0.63		ND			25	
Chlorobenzene	ND	0.10	ND	0.46		ND			25	
Chloroethane	0.40	0.10	1.1	0.26		0.40		1.50	25	
Chloroform	0.82	0.10	4.0	0.49		0.72		13.0	25	
Chloromethane	ND	0.10	ND	0.21		ND			25	
Cyclohexane	5.8	0.10	20	0.34		6.2		6.56	25	
Dibromochloromethane	ND	0.10	ND	0.85		ND			25	
1,2-Dibromoethane (EDB)	ND	0.10	ND	0.77		ND			25	
1,2-Dichlorobenzene	ND	0.10	ND	0.60		ND			25	
1,3-Dichlorobenzene	0.19	0.10	1.1	0.60		0.18		4.40	25	
1,4-Dichlorobenzene	0.11	0.10	0.66	0.60		0.11		3.70	25	
Dichlorodifluoromethane (Freon 12)	0.51	0.10	2.5	0.49		0.51		1.57	25	
1,1-Dichloroethane	16	0.10	63	0.40		15		5.79	25	
1,2-Dichloroethane	ND	0.10	ND	0.40		ND			25	
1,1-Dichloroethylene	6.1	0.10	24	0.40		6.0		1.02	25	
cis-1,2-Dichloroethylene	8.0	0.10	32	0.40		7.5		6.45	25	
trans-1,2-Dichloroethylene	0.23	0.10	0.91	0.40		0.22		6.28	25	
1,2-Dichloropropane	ND	0.10	ND	0.46		ND			25	
cis-1,3-Dichloropropene	ND	0.10	ND	0.45		ND			25	
trans-1,3-Dichloropropene	ND	0.10	ND	0.45		ND			25	
Ethyl Acetate	31	0.10	110	0.36		30		2.28	25	
Ethylbenzene	3.1	0.10	14	0.43		3.1		1.10	25	
4-Ethyltoluene	0.70	0.10	3.4	0.49		0.69		1.73	25	
Heptane	0.96	0.10	4.0	0.41		1.1		9.86	25	
Hexachlorobutadiene	ND	0.10	ND	1.1		ND			25	
Hexane	1.9	4.0	6.8	14		1.9		0.313	25	J
2-Hexanone (MBK)	0.38	0.10	1.6	0.41		0.35		9.84	25	L-03, V-05
Isopropanol	5.4	4.0	13	9.8		11		68.4	25	V-05, L-03, R-01
Methyl tert-Butyl Ether (MTBE)	ND	0.10	ND	0.36		ND			25	
Methylene Chloride	0.65	1.0	2.2	3.5		0.70		7.74	25	J
Methyl methacrylate	0.80	0.10	3.3	0.41		0.86		7.00	25	
4-Methyl-2-pentanone (MIBK)	1.9	0.10	7.7	0.41		2.1		11.4	25	
Propene	ND	4.0	ND	6.9		ND			25	
Styrene	3.5	0.10	15	0.43		3.3		5.27	25	
1,1,1,2-Tetrachloroethane	ND	0.18	ND	1.2		ND			25	
1,1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.69		ND			25	
Tetrachloroethylene	9.2	0.10	62	0.68		8.9		3.34	25	

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC Limits	RPD	RPD Limit	Flag
	Results	RL	Results	RL						
Batch B069616 - TO-15 Prep										
Duplicate (B069616-DUP1)		Source: 13C0484-12				Prepared: 03/21/13 Analyzed: 03/22/13				
Tetrahydrofuran	1.3	0.10	3.9	0.29		1.4		6.38	25	
Toluene	20	0.10	74	0.38		20		1.15	25	
1,2,4-Trichlorobenzene	ND	0.20	ND	1.5		ND			25	
1,1,2-Trichloroethane	ND	0.10	ND	0.55		ND			25	
Trichloroethylene	66	0.10	350	0.54		70		6.81	25	
Trichlorofluoromethane (Freon 11)	24	0.10	130	0.56		22		6.62	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.14	0.10	1.1	0.77		0.12		14.0	25	
1,2,4-Trimethylbenzene	2.7	0.10	13	0.49		2.8		2.71	25	
1,3,5-Trimethylbenzene	0.80	0.10	3.9	0.49		0.80		0.00	25	
Vinyl Acetate	ND	0.20	ND	0.70		ND			25	V-05
Vinyl Chloride	ND	0.10	ND	0.26		ND			25	
m&p-Xylene	7.8	0.20	34	0.87		7.8		0.128	25	
o-Xylene	3.5	0.10	15	0.43		3.6		2.32	25	
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	8.65				8.00		108	70-130		
<i>Surrogate: 4-Bromofluorobenzene (2)</i>	9.43				8.00		118	70-130		
Duplicate (B069616-DUP2)		Source: 13C0484-12RE1				Prepared: 03/21/13 Analyzed: 03/22/13				
Ethanol	170	80	320	150		170		0.566	25	L-03, V-05
1,1,1-Trichloroethane	110	2.0	600	11		110		1.47	25	
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	8.35				8.00		104	70-130		

FLAG/QUALIFIER SUMMARY

- * QC result is outside of established limits.
 - † Wide recovery limits established for difficult compound.
 - ‡ Wide RPD limits established for difficult compound.
 - # Data exceeded client recommended or regulatory level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
- J Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
 - L-03 Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
 - R-01 Duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result.
 - V-05 Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA
Benzene	AIHA,FL,NJ,NY,VA
Benzyl chloride	AIHA,FL,NJ,NY,VA
Bromodichloromethane	AIHA,NJ,VA
Bromoform	AIHA,NJ,VA
Bromomethane	AIHA,FL,NJ,NY
1,3-Butadiene	AIHA,NJ,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,VA
Carbon Disulfide	AIHA,NJ,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,VA
Chlorobenzene	AIHA,FL,NJ,NY,VA
Chloroethane	AIHA,FL,NJ,NY,VA
Chloroform	AIHA,FL,NJ,NY,VA
Chloromethane	AIHA,FL,NJ,NY,VA
Cyclohexane	AIHA,NJ,VA
Dibromochloromethane	AIHA,NY
1,2-Dibromoethane (EDB)	AIHA,NJ,NY
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,VA
1,3-Dichlorobenzene	AIHA,NJ,NY
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY
1,1-Dichloroethane	AIHA,FL,NJ,NY,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,VA
trans-1,3-Dichloropropene	AIHA,NY
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,VA
Hexachlorobutadiene	AIHA,NJ,NY,VA
Hexane	AIHA,FL,NJ,NY,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,VA
Methylene Chloride	AIHA,FL,NJ,NY,VA
Methyl methacrylate	AIHA,NJ,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,VA
Tetrachloroethylene	AIHA,FL,NJ,NY,VA
Tetrahydrofuran	AIHA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Toluene	AIHA,FL,NJ,NY,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,VA
Trichloroethylene	AIHA,FL,NJ,NY,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY
1,3,5-Trimethylbenzene	AIHA,NJ,NY
Vinyl Acetate	AIHA,FL,NJ,NY,VA
Vinyl Chloride	AIHA,FL,NJ,NY,VA
m&p-Xylene	AIHA,FL,NJ,NY,VA
o-Xylene	AIHA,FL,NJ,NY,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2013
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2013
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2014
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2013
FL	Florida Department of Health	E871027 NELAP	06/30/2013
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2013
WA	State of Washington Department of Ecology	C2065	02/23/2014
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2012



Phone: 413-525-2332
 Fax: 413-525-6405
 Email: info@contestlabs.com
 www.contestlabs.com

13C0484
RECORD

39 SPRUCE ST
 EAST LONGMEADOW, MA 01028

Page 1 of 2

Company Name: AMEC
 Address: 107 Audubon Rd Suite 3e1
Wakefield, MA 01880

Attention: Miranda Lin Cinnivich

Project Location: Providence JRI
 Sampled By: Mark Maguire

Proposal Provided? (For Billing purposes)

yes no proposal date

Telephone: (339) 927-3797
 Project # 3650080111
 Client PO # C01266089L

DATA DELIVERY (check one):
 FAX EMAIL WEBSITE CLIENT

Fax #: _____
 Email: Kelly.Chapman@amec.com
 Format: EXCEL PDF GIS KEY OTHER

Field ID	Sample Description	Media	Lab #	Date Sampled		Total Minutes Sampled	Flow Rate M ³ /Min. or L/Min.	Volume Liters or M ³	Matrix Code*	ANALYSIS REQUESTED	"Hg	Please fill out completely, sign, date and retain the yellow copy for your records. Summa canisters returned within 14 days of receipt or rental will apply. Summa canisters retained for a minimum of 14 days after sampling date prior to cleaning.	
				Start Date Time	Stop Date Time								
IA-1-031513	S	-01	3-15-13 0735	3-15-13 0805	30	0.2	6	IA	X			1158	417
IA-2-031513	S	-02	3-15-13 1000	3-15-13 1030	30	0.2	6	IA	X			1133	418
IA-3-031513	S	-03	3-15-13 0736	3-15-13 0806	30	0.2	6	IA	X			1747	411
IA-4-031513	S	-04	3-15-13 0957	3-15-13 1027	30	0.2	6	IA	X			1448	411
IA-5-031513	S	-05	3-15-13 0750	3-15-13 0820	30	0.2	6	IA	X			1272	410
IA-6-031513	S	-06	3-15-13 0845	3-15-13 0915	30	0.2	6	IA	X			1652	411
IA-7-031513	S	-07	3-15-13 1040	3-15-13 1110	30	0.2	6	IA	X			1061	4185
AA-1-031513	S	-08	3-15-13 0949	3-15-13 1019	30	0.2	6	AA	X			1238	4083

Laboratory Comments:

CLIENT COMMENTS:

Relinquished by: (signature) [Signature] Date/Time: 3/15/13 14:10

Received by: (signature) [Signature] Date/Time: 3/15/13 19:10

Relinquished by: (signature) [Signature] Date/Time: 3/15/13 17:45

Received by: (signature) [Signature] Date/Time: 3/15/13 1745

Turnaround **
 7-Day
 10-Day
 Other _____

RUSH *
 *24-Hr *48-Hr
 *72-Hr *4-Day

Approval Required

Special Requirements
 Regulations: CT Target Industrial
 Data Enhancement/RCP? Y N
 Enhanced Data Package Y N
 (Surcharge Applies)
 Required Detection Limits: CT Target
 Other: Environmental

*Matrix Code:
 SG= SOIL GAS
 IA= INDOOR AIR
 AMB=AMBIENT
 SS= SUB SLAB
 D= DUP
 BL= BLANK
 O= other

**Media Codes:
 S=summa can
 TB=tedar bag
 P=PUF
 T=tube
 F= filter
 C=cassette
 O= Other

** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

AIHA, NELAP & WBE/DBE Certified



39 Spruce St.
 East Longmeadow, MA.
 01028
 P: 413-525-2332
 F: 413-525-6405

AIR Only Receipt Checklist

CLIENT NAME: AMEC RECEIVED BY: CEC DATE: 3/15/13

- 1) Was the chain(s) of custody relinquished and signed? Yes No
- 2) Does the chain agree with the samples?
 If not, explain: Yes No
- 3) Are all the samples in good condition?
 If not, explain: Yes No
- 4) Are there any samples "On Hold"? Yes No Stored where:
- 5) Are there any RUSH or SHORT HOLDING TIME samples?
 Who was notified _____ Date _____ Time _____ Yes No

6) Location where samples are stored: 1A-1-166

Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved
 Client Signature: _____

Containers received at Con-Test

	# of Containers	Types (Size, Duration)
Summa Cans	13	6L
Tedlar Bags		
Tubes		
Regulators	13	30 min
Restrictors		
Tubing		
Other		

Unused Summas: 1470

Unused Regulators: 4098

- 1) Was all media (used & unused checked into the WASP?
- 2) Were all returned summa cans, Restrictors, & Regulators documented as returned in the Air Lab Inbound/Outbound Excel Spreadsheet?

Laboratory Comments:

1158	1652	1227	4178	4081	4082
1133	1061	1509	4188	4181	4180
1747	1238	1611	4179	4183	4182
1448	1822		4184	4083	4083
1272					



APPENDIX B

Analytical Laboratory Detection Limits



39 Spruce Street, 2nd Floor
 East Longmeadow, MA 01028
 413.525.2332
 413.525.6405 (fax)

Analyte:

TO-14 / TO-15	PPBv	UG/M3	PPBv	UG/M3	MW NIST	UG/M3	PPBv
1,1,1-Trichloroethane	ND	ND	0.050	0.27	133.40	1	0.18
1,1,2,2-Tetrachloroethane	ND	ND	0.050	0.34	167.85	1	0.15
1,1,2-Trichloroethane	ND	ND	0.050	0.27	133.40	1	0.18
1,1,2-Trichlorotrifluoroethane (freon 113)	ND	ND	0.050	0.38	187.37	1	0.13
1,1-Dichloroethane	ND	ND	0.050	0.20	98.96	1	0.25
1,1-Dichloroethene	ND	ND	0.050	0.20	96.94	1	0.25
1,2,4-Trichlorobenzene	ND	ND	0.050	0.37	181.45	1	0.13
1,2,4-Trimethylbenzene	ND	ND	0.050	0.25	120.19	1	0.20
1,2-Dibromoethane	ND	ND	0.050	0.38	187.86	1	0.13
1,2-Dichlorobenzene	ND	ND	0.050	0.30	147.00	1	0.17
1,2-Dichloroethane	ND	ND	0.050	0.20	98.96	1	0.25
1,2-Dichloropropane	ND	ND	0.050	0.23	112.99	1	0.22
1,2-Dichlorotetrafluoroethane (freon 114)	ND	ND	0.050	0.35	170.92	1	0.14
1,3 - Butadiene	ND	ND	0.050	0.11	54.09	1	0.45
1,3,5-Trimethylbenzene	ND	ND	0.050	0.25	120.19	1	0.20
1,3-Dichlorobenzene	ND	ND	0.050	0.30	147.00	1	0.17
1,4-Dichlorobenzene	ND	ND	0.050	0.30	147.00	1	0.17
1,4-Dioxane	ND	ND	0.050	0.18	88.11	1	0.28
2-Butanone (MEK)	ND	ND	0.050	0.15	72.11	1	0.34
2-Hexanone (MBK)	ND	ND	0.050	0.20	100.16	1	0.24
4-Ethyltoluene	ND	ND	0.050	0.25	120.19	1	0.20
4-Methyl-2-pentanone(MIBK)	ND	ND	0.050	0.20	100.16	1	0.24
Acetone	ND	ND	0.050	0.12	58.08	1	0.42
Acrolein	ND	ND	0.050	0.11	56.06	1	0.44
Benzene	ND	ND	0.050	0.16	78.11	1	0.31
Benzyl Chloride	ND	ND	0.050	0.26	126.58	1	0.19
Bromodichloromethane	ND	ND	0.050	0.34	163.83	1	0.15
Bromoform	ND	ND	0.050	0.52	252.73	1	0.10
Bromomethane	ND	ND	0.050	0.19	94.94	1	0.26
Carbon Disulfide	ND	ND	0.050	0.16	76.14	1	0.32
Carbon Tetrachloride	ND	ND	0.050	0.31	153.82	1	0.16



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Chlorobenzene	ND	ND	0.050	0.23	112.56	1	0.22
Chloroethane	ND	ND	0.050	0.13	64.51	1	0.38
Chloroform	ND	ND	0.050	0.24	119.38	1	0.20
Chloromethane	ND	ND	0.050	0.10	50.49	1	0.48
cis-1,2-Dichloroethene	ND	ND	0.050	0.20	96.94	1	0.25
cis-1,3-Dichloropropene	ND	ND	0.050	0.23	110.97	1	0.22
Cyclohexane	ND	ND	0.050	0.17	84.16	1	0.29
Dibromochloromethane	ND	ND	0.050	0.43	208.28	1	0.12
Dichlorodifluoromethane (freon 12)	ND	ND	0.050	0.25	120.91	1	0.20
Ethanol	ND	ND	0.050	0.09	46.07	1	0.53
Ethyl Acetate	ND	ND	0.050	0.18	88.11	1	0.28
Ethylbenzene	ND	ND	0.050	0.22	106.17	1	0.23
Heptane	ND	ND	0.050	0.20	100.20	1	0.24
Hexachlorobutadiene	ND	ND	0.050	0.53	260.76	1	0.09
Hexane	ND	ND	0.050	0.18	86.18	1	0.28
Isopropyl Alcohol	ND	ND	0.050	0.12	60.10	1	0.41
M/P Xylenes	ND	ND	0.050	0.22	106.17	1	0.23
Methylene Chloride	ND	ND	0.050	0.17	84.93	1	0.29
Methylmethacrylate	ND	ND	0.050	0.20	100.12	1	0.24
MTBE	ND	ND	0.050	0.18	88.15	1	0.28
O-Xylene	ND	ND	0.050	0.22	106.17	1	0.23
Propene	ND	ND	0.050	0.09	42.08	1	0.58
Styrene	ND	ND	0.050	0.21	104.15	1	0.23
Tetrachloroethene	ND	ND	0.050	0.34	165.83	1	0.15
Tetrahydrofuran	ND	ND	0.050	0.15	72.11	1	0.34
Toluene	ND	ND	0.050	0.19	92.14	1	0.27
trans-1,2-Dichloroethene	ND	ND	0.050	0.20	96.94	1	0.25
trans-1,3-Dichloropropene	ND	ND	0.050	0.23	110.97	1	0.22
Trichloroethene	ND	ND	0.050	0.27	131.39	1	0.19
Trichlorofluoromethane (freon 11)	ND	ND	0.050	0.28	137.37	1	0.18
Vinyl Acetate	ND	ND	0.050	0.18	86.09	1	0.28
Vinyl Chloride	ND	ND	0.050	0.13	62.50	1	0.39



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APH COMPOUNDS

1,2,3-Trimethylbenzene	ND	ND	0.94	4.62	120.19	1	0.20
1,3 Butadiene	ND	ND	0.94	2.08	54.09	1	0.45
1,3,5-Trimethylbenzene	ND	ND	0.94	4.62	120.19	1	0.20
1-Ethyl-3-Methylbenzene	ND	ND	0.94	4.62	120.19	1	0.20
1-Methylnaphthalene	ND	ND	0.94	5.47	142.20	1	0.17
2,3-Dimethylheptane	ND	ND	0.94	4.93	128.26	1	0.19
2,3-Dimethylpentane	ND	ND	0.94	3.85	100.20	1	0.24
2-Methylnaphthalene	ND	ND	0.94	5.47	142.20	1	0.17
Benzene	ND	ND	0.94	3.00	78.11	1	0.31
Butyl Cyclohexane	ND	ND	0.94	5.39	140.27	1	0.17
Cyclohexane	ND	ND	0.94	3.24	84.16	1	0.29
Decane	ND	ND	0.94	5.47	142.28	1	0.17
Dodecane	ND	ND	0.94	6.55	170.33	1	0.14
Ethylbenzene	ND	ND	0.94	4.08	106.17	1	0.23
Heptane	ND	ND	0.94	3.85	100.20	1	0.24
Hexane	ND	ND	0.94	3.31	86.18	1	0.28
Hexyl Cyclohexane	ND	ND	0.94	6.47	168.32	1	0.15
Indene	ND	ND	0.94	4.47	116.16	1	0.21
Isopentane	ND	ND	0.94	2.77	72.15	1	0.34
Isopropylbenzene(Cumene)	ND	ND	0.94	4.62	120.19	1	0.20
m/p -Xylenes	ND	ND	0.94	4.08	106.17	1	0.23
Methyl-tert-butylether	ND	ND	0.94	3.39	88.15	1	0.28
Naphthalene	ND	ND	0.94	4.93	128.17	1	0.19
Nonane	ND	ND	0.94	4.93	128.26	1	0.19
Octane	ND	ND	0.94	4.39	114.23	1	0.21
o-Xylene	ND	ND	0.94	4.08	106.17	1	0.23
P-Iso-Propyl Toluene	ND	ND	0.94	5.16	134.22	1	0.18
Toluene	ND	ND	0.94	3.54	92.14	1	0.27
Toluene-D8	ND	ND	0.94	3.85	100.19	1	0.24
Undecane	ND	ND	0.94	6.01	156.31	1	0.16



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EXTRA COMPOUNDS

1,1,1,2-tetrachloroethane	ND	ND	0.091	0.6247	167.85	1	0.15
1,2-Dibromo-3-chloropropane	ND	ND	0.065	0.6283	236.33	1	0.10
1,3-Dichloropropane	ND	ND	0.135	0.6238	112.99	1	0.22
1-Methylnaphthalene	ND	ND	0.107	0.6223	142.20	1	0.17
2,2,4-Trimethylpentane	ND	ND	0.134	0.6260	114.23	1	0.21
2-Methylnaphthalene	ND	ND	0.107	0.6223	142.20	1	0.17
Acrylonitrile	ND	ND	0.288	0.6250	53.06	1	0.46
Butylbenzene	ND	ND	0.114	0.6258	134.22	1	0.18
Cumene	ND	ND	0.127	0.6243	120.19	1	0.20
Hexylcyclohexane	ND	ND	0.091	0.6265	168.32	1	0.15
Indane	ND	ND	0.129	0.6235	118.18	1	0.21
Indene	ND	ND	0.132	0.6271	116.16	1	0.21
Metyl Acetate	ND	ND	0.206	0.6241	74.08	1	0.33
Methylcyclohexane	ND	ND	0.156	0.6265	98.19	1	0.25
Naphthalene	ND	ND	0.119	0.6238	128.17	1	0.19
P-cymene	ND	ND	0.114	0.6258	134.22	1	0.18
Propylbenzene	ND	ND	0.127	0.6243	120.19	1	0.20
Sec-butylbenzene	ND	ND	0.114	0.6258	134.22	1	0.18
Tert-butylbenzene	ND	ND	0.114	0.6258	134.22	1	0.18
Thiophene	ND	ND	0.182	0.6263	84.14	1	0.29

OTHER COMPOUNDS

2-Chloro-pyridine	ND	ND	0.20	0.93	113.54	1	0.22
2,6-Dichloro-pyridine	ND	ND	0.20	1.19	144.97	1	0.17
tert-Butyl Alcohol	ND	ND	0.20	0.61	74.10	1	0.33