



May 18, 2015

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, 2015
Retail Complex, Active Sub-Slab Depressurization System
Former Gorham Manufacturing Facility
333 Adelaide Avenue, Providence, Rhode Island
AMEC Project No. 3652150005**

Dear Mr. Martella:

This letter report presents the results of quarterly compliance sampling and analysis conducted by AMEC Foster Wheeler (Formerly AMEC) at the retail complex located at the Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island (Site). The reporting period is from January 2015 through March 2015 and includes one quarterly compliance sampling event (March 27, 2015).

The sampling, analysis and reporting are being 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 27, 2015.

Table 1 summarizes the analytical results at the small retail spaces for the baseline sampling event conducted prior to system start-up in February 2009 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 (15C1165) associated with the March 27, 2015 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 retail building. 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 for the March 27, 2015 quarterly sampling event in the small retail spaces (sample locations IA-5 through IA-7) were in compliance with action levels.
- The eastern small retail space (indoor air sample location IA-5) remains unoccupied
- The center small retail space (sample location IA-6) remains unoccupied.
- The western small retail space (sample location IA-7) is intermittently occupied for church functions.
- 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 27, 2015. 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 TAC, which were identified as action levels in the Orders of Approval. The laboratory report (15C1165) associated with March 27, 2015 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 north of the property upwind of the retail building. 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 are in compliance with action levels for the 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 has been subdivided into two spaces. The eastern section is currently occupied by a health fitness club which opened in January of 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 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/Maintenance

The ASD system performance is monitored and maintained monthly by Clean Harbors Environmental Services. There were no system shutdowns during the reporting period.

Next Reporting Period

The next quarterly report (second quarter 2015) will cover the monitoring period from April 2015 through June 2015. The report will be prepared and submitted to the Rhode Island Department of Environmental Management (RIDEM) in July 2015.

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.



Mark Maggioro
Environmental Scientist



David E. Heislein
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: Don Gralnek, Executive Director - Providence Redevelopment Agency
G. Simpson, Textron, Inc. (Electronic)
Knight Memorial Library Repository
Shane Brackett, Paolino Properties (including tenants)
Joseph P. Salvetti, Norfolk Ram Group, LLC
AMEC Project File

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	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	0.19 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
1,1,1,2-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	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.37 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	0.30	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	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.17 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	0.50	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	0.080 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	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.53	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.81	1.6
2-Hexanone	0.20 U	0.22	0.57	0.35	0.20 U	0.20 U	0.20 U	0.14 U	0.26	0.39	0.20 U	0.34	0.20 U	0.33	0.23	0.20 U	0.20 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	0.20 U	0.20 U	0.27	0.63	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.34
Acetone	7.3	8.0	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	0.30	0.40	0.49	0.38	0.35	0.25	0.20	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	0.40	0.40	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	0.10 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	0.90	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	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.16 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	2.0	2.2	2.6	2.7	2.6	2.6	2.8	2.0	2.5	2.7	2.6	2.1	2.1	2.2	2.1	2.3	2.4	2.5
Ethanol	4.0	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	7.2
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	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	1.1 U	0.53 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	0.91
Isopropyl alcohol	1.4	1.4	1.8	4.3	1.4	0.67	1.4	0.18 U	14	1.0	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	0.47

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	AA-1- 020510 2/5/2010	AA-1- 021210 2/12/2010
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	0.70 U	4.2	0.70 U	23	4.6	1.3	1.9	1.7
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	0.18 U
n-Heptane	0.20 U	0.27	0.92	1.6	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.40	0.23	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.26	0.20 U	0.20 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	0.090 U	0.090 U	0.18 U	0.090 U	0.090 U	0.13 U	0.18 U	0.090 U	0.090 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	0.61	0.50	0.78	0.94	0.64	0.97
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.16 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	0.30
Trichlorofluoromethane	1.3	1.2	1.7	2.4	1.5	2.0	1.7	0.92	1.3	1.5	2.0	1.1	1.4	1.2	1.5	2.2	1.2	1.2	1.6
Trichlorotrifluoroethane	0.68	0.53	0.50	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	0.54
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.18 U	0.50 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	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	0.10 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

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-1-021910 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	AA-1-060713 6/7/2013	AA-1-090613 9/6/2013	AA-1-100313 10/3/2013	AA-1-121313 12/13/2013	AA-1-030714 3/7/2014	AA-1-061314 6/13/2014	AA-1-091214 9/12/2014	AA-1-121914 12/19/2014	AA-01-032715 3/27/2015		
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	0.29	0.082 U	0.10	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	
1,1,1,2-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	0.21 U	0.10 U	0.21 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.23 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.069 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	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.11 U	0.19 U	0.19 U
1,1-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.063	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U
1,1-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U	0.14 U	0.16	0.04 U	0.14 U	0.14 U
1,2,4-Trichlorobenzene	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	0.62	0.45 U	0.12	0.52 U	0.52 U	0.52 U	0.26 U	0.26 U	0.25 U	0.26 U	0.26 U	0.26 U	0.26 U	0.15 U	0.26 U	0.26 U	0.26 U
1,2,4-Trimethylbenzene	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	0.21	0.17 U	0.19	0.17 U	0.17 U	0.51	0.069 J	0.17 U	0.2	
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	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.27 U	0.27 U	0.27 U	0.27 U	0.077 U	0.27 U	0.27 U	0.27 U
1,2-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.34	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U	0.21 U
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.066	0.061 U	0.046	0.14 U	0.14 U	0.057	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.037 J	0.14 U	0.14 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	0.23 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	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.046 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																					
1,3,5-Trimethylbenzene	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	0.17 U	0.17 U	0.047	0.17 U	0.17 U	0.18	0.098 U	0.17 U	0.062 J	0.17 U	0.17 U
1,3-Butadiene	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	0.078 U	0.075 U	0.078 U	0.078 U	0.078 U	0.044 U	0.078 U	0.078 U	0.078 U	0.078 U
1,3-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U	0.21 U
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U	0.21 U
1,4-Dioxane										0.18 U																	
2-Butanone	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	0.89	1.9	3.9	3.7	0.94	0.82	1.4	2.2	1.1 J	1.2 J	0.96 J	1.2 J	0.96 J
2-Hexanone	0.20 U	0.29	0.29	0.49	0.49	0.41	0.20 U	0.20 U	0.20 U	4.1 U	0.67	0.12 U	0.34	0.14	0.27	0.14 U	0.13	0.49	0.32	0.14 U	0.14 U	0.26	0.34	0.16	0.14 U	0.17	0.17
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.30	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	0.17 U	0.063	0.17 U	0.17 U	0.18	0.098 U	0.17 U	0.079 J	0.17 U	0.079 J
4-Methyl-2-pentanone	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	2.8	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.12 U	0.23	0.10	0.14 U	0.083	0.24	0.14 U	0.14 U	0.14 U	0.14 U	0.2	0.036 J	0.14 U	0.092 J	0.14 U	0.092 J
Acetone	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	28	16	12	26	9.3	22	25	10	8.7	10	8.7
Benzene	0.41	0.69	0.35	0.19	0.16 U	1.2	0.28	2.3	0.16 U	0.19	0.40	0.29	0.20	0.68	0.42	1.0	0.31	0.70	0.95	0.43	1.0	0.9	0.2	0.6	0.67	0.6	0.67
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	0.16 U	0.16 U	0.16 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	0.052 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	0.34 U	0.34 U	0.34 U	0.34 U	0.20 U	0.10 U	0.20 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.23 U	0.24 U	0.24 U	0.24 U	0.067 U	0.24 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	0.52 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	0.36 U	0.35 U	0.36 U	0.36 U	0.36 U	0.21 U	0.36 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	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U	0.078 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	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	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.098 J	1.1 U	0.057 J	1.1 U	0.057 J
Carbon tetrachloride	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	0.55	0.47	0.43	0.45	0.22	0.42	0.45	0.36	0.36	0.34	0.34
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	0.14 U	0.14 U	0.14 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	0.046 U	0.16 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	0.093 U	0.089 U	0.093 U	0.093 U	0.093 U	0.11	0.093 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	0.094	0.073 U	0.067	0.096	0.17 U	0.21	0.17 U	0.17 U	0.10	0.17 U	0.17 U	0.17 U	0.08	0.082 J	0.082 J	0.082 J	0.082 J
Chloromethane	1.1	1.4	0.78	1.1	0.96	0.99	0.94	1.0	0.96	1.4	0.062 U	1.1	1.5	1.1	1.0	1.6	1.4	1.1	0.96	1.1	1.3	1.4	0.64	0.96	1.1	1.1	1.1
cis-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12	0.059 U	0.12 U	0.14 U	0.14 U	0.092	0.14 U	0.16	0.13 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U	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	0.23 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	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 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	0.46	0.17 U	0.17 U	0.17 U	0.17 U	0.10 U	0.10 U	0.10 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.31	0.069 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	0.26 U	0.13 U	0.26 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.29 U	0.30 U	0.30 U	0.30 U	0.085 U	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorodifluoromethane	2.9	1.8	2.1	2.5	2.4	2.9	1.9	3.1	1.9	1.7	2.5	2.0	2.4	2.8	2.5	1.7	3.0	2.0	1.8	2.7	1.4	2	2.2	2.1	1.4	1.4	1.4
Ethanol	1.2	4.9	4.0	3.3	4.0	14	2.3	12	2.7	5.8	1.5	4.1	7.4	5.2	2.7	1.2	6.1	6.7	6.7	5.4	9.0	17.0	2.9	2.7	2.7	2.7	2.7
Ethyl acetate	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	0.56	17	0.12 U	0.13 U	0.18	0.13 U	0.17	0.13 U	0.17	0.17	0.17
Ethylbenzene	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	0.16	0.15 U	0.21	0.15 U	0.16	0.44	0.047 J	0.046 J	0.19	0.19	0.19
Hexachlorobutadiene	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	0.37 U	0.37 U	0.36 U	0.37 U	0.37 U	0.37 U	0.21 U	0.37 U	0.37 U	0.37 U	0.37 U
Hexane	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													

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-1-021910 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	AA-1-060713 6/7/2013	AA-1-090613 9/6/2013	AA-1-100313 10/3/2013	AA-1-121313 12/13/2013	AA-1-030714 3/7/2014	AA-1-061314 6/13/2014	AA-1-091214 9/12/2014	AA-1-121914 12/19/2014	AA-01-032715 3/27/2015	
Methyl methacrylate						0.20 U	0.48	0.20 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Methylene chloride	0.70 U	0.70 U	0.70 U	0.35 U	1.1	1.1	0.66	3.0	2.3	1.7 U	1.5	1.6	3.0	2.1	4.4	2.9	2.3	9.1	1.0	0.76	0.55	1.20	0.54 J	0.47 J	0.44 J	
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	0.11 U	0.11 U	0.11 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
n-Heptane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.91	0.20 U	0.95	0.20 U	0.20 U	0.12	0.089	0.11	0.18	0.14 U	0.12	0.21	0.15	0.18	0.14 U	0.21	0.62	0.054 J	0.14 U	0.19	
o-Xylene	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	0.20	0.15 U	0.24	0.15 U	0.17	0.5	0.054 J	0.046 J	0.25	
Propylene (Propene)	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	2.4 U	2.4 U	2.3 U	2.4 U	2.4 U	1.3	1.4 U	2.4 U	2.4 U	
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.37	0.13 U	0.10	0.13	0.15 U	0.039	0.15 U	0.15 U	0.052	0.15 U	0.15 U	0.16	0.085 U	0.15 U	0.15 U	
Tetrachloroethene	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	0.10 U	0.20 U	0.87	0.24 U	0.90	0.24 U	0.24 U	0.30	0.24 U	0.24 U	0.4	0.071	0.09 J	0.22 J	
Tetrahydrofuran	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	0.10 U	0.10 U	0.10 U	1.4	0.10 U	0.10 U	0.23	0.10 U	0.059 U	0.1 U	0.1 U	
Toluene	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	1.2	1.4	1.3	0.35	1.2	2.6	0.33	0.35	1.3	
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U	0.04 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	0.23 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	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	0.064 J	
Trichloroethene	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	0.19 U	0.19 U	0.11	0.19 U	0.19 U	0.19 U	0.052 J	0.19 U	0.19 U	
Trichlorofluoromethane	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	1.8	11	3.3	1.5	1.1	1.4	1.3	1.3	1.1	
Trichlorotrifluoroethane	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	1.0	0.60	0.55	0.55	0.46	0.54	0.57	0.63	0.49 J	
Vinyl acetate	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	2.5 U	2.5 U	2.4 U	2.5 U	2.5 U	2.5 U	1.4 U	2.5 U	2.5 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	0.077 U	0.038 U	0.077 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.087 U	0.090 U	0.090 U	0.090 U	0.026 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	400	340	430	130
1,1,1,2-Tetrachloroethane																	25 U	
1,1,2,2-Tetrachloroethane	6.8 U	6.8 U	6.8 U	6.8 U	1.7 U	68 U	3.4 U	3.4 U	3.4 U	3.4 U	6.8 U	3.4 U	6.8 U	1.4 U	1.4 U	6.9 U	14 U	3.4 U
1,1,2-Trichloroethane	5.4 U	5.4 U	5.4 U	5.4 U	1.4 U	54 U	2.7 U	2.7 U	2.7 U	2.7 U	5.4 U	2.7 U	5.4 U	1.1 U	1.1 U	5.5 U	11 U	2.7 U
1,1-Dichloroethane	11000	1900	890	770	190	360	450	430	230	100	50	53	42	29	34	33	44	16
1,1-Dichloroethene	2500	290	130	190	61	160	160	160	98	30	18	21	15	13	15	11	14	5.0
1,2,4-Trichlorobenzene	7.4 U	7.4 U	7.4 U	7.4 U	1.9 U	74 U	3.7 U	3.7 U	3.7 U	7.5 U	15 U	3.7 U	7.4 U	1.5 U	1.5 U	7.4 U	30 U	7.4 U
1,2,4-Trimethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	0.98 U	0.98 U	4.9 U	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 U	1.5 U	7.7 U	15 U	3.8 U
1,2-Dichlorobenzene	6.0 U	6.0 U	6.0 U	6.0 U	1.5 U	60 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U	3.0 U	6.0 U	1.2 U	1.2 U	6.0 U	12 U	3.0 U
1,2-Dichloroethane	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	0.81 U	0.81 U	4.0 U	8.1 U	2.0 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 U	0.92 U	4.6 U	9.2 U	2.3 U
1,2-Dichlorotetrafluoroethane	7.0 U	7.0 U	7.0 U	7.0 U	1.8 U	70 U	3.5 U	3.5 U	3.5 U	3.5 U	7.0 U	3.5 U	7.0 U					
1,3,5-Trimethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	0.98 U	0.98 U	4.9 U	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	1.1 U	1.1 U	2.2 U	1.1 U	2.2 U	0.44 U	0.44 U	2.2 U	4.4 U	1.1 U
1,3-Dichlorobenzene	6.0 U	6.0 U	6.0 U	6.0 U	1.5 U	60 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U	3.0 U	6.0 U	1.2 U	1.2 U	6.0 U	12 U	3.0 U
1,4-Dichlorobenzene	6.0 U	6.0 U	6.0 U	6.0 U	1.5 U	60 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U	3.0 U	6.0 U	1.2 U	1.2 U	6.0 U	12 U	3.0 U
1,4-Dioxane																	7.2 U	
2-Butanone	6.3	89	75	170	3700	64000	100000	230000	110000	7800	18000	28000	15000	4000	7200 B	17000	13000	2700
2-Hexanone	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	0.82 U	0.82 U	4.0 U	8.2 U	2.0 U
4-Ethyltoluene	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	0.98 U	0.98 U	4.9 U	9.8 U	2.5 U
4-Methyl-2-pentanone	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	0.82 U	0.82 U	4.1 U	8.2 U	2.0 U
Acetone	530	32	52	29	460	5600	14000	6900	9200	1700	3200	6000	4500	2000 B	1800 B	2200 B	3400	710
Benzene	13	12	6.2	4.8	5.6	32 U	11	7.1	11	6.3	5.5	8.2	5.0	4.2	4.5	4.2	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	1.0 U	1.0 U	5.2 U	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 U	1.3 U	6.7 U	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 U	2.1 U	10 U	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 U	0.78 U	3.9 U	7.8 U	1.9 U
Carbon disulfide	3.2 U	3.2 U	3.2 U	3.2 U	0.80 U	230	4.0	5.4	8.2	2.9	5.7	12	14	8	15	22	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 U	1.3 U	6.3 U	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 U	0.92 U	4.6 U	9.2 U	2.3 U
Chloroethane	260	23	16	11	4.5	26 U	11	15	7.0	6.5	3.5	3.6	5.5	3.1	3.4	2.6 U	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	1.2	4.9 U	9.8 U	1.1
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	0.41 U	0.41 U	2.1 U	4.1 U	1.0 U
cis-1,2-Dichloroethene	2900	710	400	410	100	150	270	250	170	58	32	43	31	17	27	27	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 U	0.91 U	4.5 U	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 U	0.69 U	3.4 U	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 U	1.7 U	8.5 U	17 U	4.3 U
Dichlorodifluoromethane	5.0 U	5.0 U	5.0 U	5.0 U	2.7 U	50 U	3.0	3.2	2.5 U	2.5 U	5.0 U	2.5	5.0 U	2.4	3.7	4.9 U	9.9 U	2.8
Ethanol	320	36	46	33	22	130	30	26	3.8 U	45	28	68	89	23	19	24 J	150 U	12
Ethyl acetate	7.3 U	3.6 U	3.6 U	7.3 U	0.90 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	0.72 U	3.8	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 U	0.87 U	4.3 U	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 U	2.1 U	11 U	21 U	4.2
Hexane	5.0	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 U	0.70 U	3.5 U	280 U	70 U
Isopropyl alcohol	190	5.1	4.6	5.0 U	4.6	290	24	57	35	2.5 U	20	54	59	11	13	25 U	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 U	1.7 U	8.7 U	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 U	4.1 U	8.2 U	2.0 U
Methylene chloride	7.8	7.0 U	9.6	7.0 U	12	720	21	15	7.0 U	25	14 U	8.6	7.0 U	1.4 U	2	6.9 U	69 U	4.2
Methyl-t-butyl ether	3.6 U	3.6 U	3.6 U	3.6 U	0.90 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 U	0.72 U	3.6 U	7.2 U	1.8 U
n-Heptane	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	0.82 U	0.82 U	4.1 U	8.2 U	2.0 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 U	0.87 U	4.3 U	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	0.90 U	0.90 U	3.5 U	3.5 U	6.9 U	8.7 U	6.9 U	1.4 U	3.4 U	17 U	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 U	0.85 U	4.3 U	8.5 U	2.1 U
Tetrachloroethene	210	310	190	97	8.0	68 U	21	25	19	8.9	6.8 U	6.7	6.8 U	4	4100	6.8 U	14 U	3.5
Tetrahydrofuran	16	110	69	140	2200	42000	61000	150000	94000	9700	23000	37000	29000	8200	11000	30000	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 U	1.6	3.8 U	7.5 U	0.90
trans-1,2-Dichloroethene	26	6.1	4.0 U	4.7	1.0 U	40 U	2.6	2.8	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	0.79 U	0.79 U	4.0 U	7.9 U	2.0 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 U	0.91 U	4.5 U	9.1 U	2.3 U
Trichloroethene	51000	20000	14000	8900	2400	3800	4400	2700	6800	1600	1100	1200	1100	410	660	790	940	290
Trichlorofluoromethane	3500	200	120	67	16	56 U	27	41	2.8 U	53	7.0	7.4	5.8	5.1	5.8	5.6 U	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 U	1.5 U	7.7 U	15 U	3.8 U
Vinyl acetate	15 U	3.6 U	3.6 U	15 U	0.90 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 U	0.70 U	70 U	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	3.0	3.4	3.1	4.3	2.4	3.7	3.3	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-5-060713 6/7/2013	EW-5-090613 9/6/2013	EW-5-121313 12/13/2013	EW-5-030714 3/7/2014	EW-5-061314 6/13/2014	EW-5-091214 9/12/2014	EW-5-121914 12/19/2014	EW-5-032715 3/27/2015	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			
1,1,1-Trichloroethane	81	100	190	0.55 U	0.55 U	59	180	40	68	54	74	25	14	69000	32000	21000	16000	16000	5600	8200	5700	5400	1100	430	390			
1,1,1,2-Tetrachloroethane	12 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.39 J	1.2 U	1.2 U	1.2 U	2.5 U	1.2 U	1.2 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	6.8 U		
1,1,2,2-Tetrachloroethane	3.4 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.32 U	0.69 U	0.69 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	6.8 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	6.8 U		
1,1,2-Trichloroethane	2.7 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.26 U	0.55 U	0.55 U	0.55 U	1.1 U	0.55 U	0.55 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	5.4 U		
1,1-Dichloroethane	11	12	21	0.40 U	0.40 U	6.4	20	4.8	7.0	7.4	9.3	4.2	2.9	5200	2500	2100	2200	1600	780	1200	1100	930	580	47	38			
1,2-Dichloroethane	4.5	4.5	6.9	0.40 U	0.40 U	1.7	4.7	1.5	1.8	2	2.4	1	0.9	850	210	100	110	55	74	87	83	80	6.4	3.5	4.0 U			
1,2,4-Trichlorobenzene	15 U	1.5 U	1.5 U	1.5 U	1.5 U	0.74 U	0.35 U	0.74 U	0.74 U	0.74 U	1.5 U	0.74 U	0.74 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	7.4 U			
1,2,4-Trimethylbenzene	4.9 U	0.20	0.63	0.49 U	0.49 U	0.49 U	0.37	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.16 J	5.0 U	5.0 U	5.0 U	16	6.2	50	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U			
1,2-Dibromoethane (EDB)	3.8 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.36 U	0.77 U	0.77 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	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U			
1,2-Dichlorobenzene	6.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.28 U	0.60 U	0.60 U	0.60 U	1.2 U	0.6 U	0.6 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U			
1,2-Dichloroethane	2.0 U	0.17	0.40 U	0.40 U	0.40 U	0.40 U	0.19 U	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U			
1,2-Dichloropropane	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.22 U	0.46 U	0.46 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	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U			
1,2-Dichlorotetrafluoroethane														7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	7.0 U			
1,3,5-Trimethylbenzene	4.9 U	0.49 U	0.19	0.49 U	0.49 U	0.49 U	0.23 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.49 U	5.0 U	5.0 U	5.0 U	7.3	5.0 U	50	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U			
1,3-Butadiene	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.10 U	0.22 U	0.22 U	0.22 U	0.44 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	1.1 U	1.1 U	2.3 U	1.1 U	1.1 U	2.2 U			
1,3-Dichlorobenzene	6.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.28 U	0.60 U	0.60 U	0.60 U	1.2 U	0.6 U	0.6 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U			
1,4-Dichlorobenzene	6.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.28 U	0.60 U	0.60 U	0.60 U	1.2 U	0.6 U	0.6 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U			
1,4-Dioxane																												
2-Butanone	1800	870	840	9.5	1.7	1900	31000	680	1200	2100	3800	260	91	120	280	300	130	97	160	37	65	8.7	23	1800	110			
2-Hexanone	4.1 U	0.43	0.41 U	0.41 U	0.41 U	0.41 U	0.49	0.41 U	0.53	0.41 U	0.82 U	0.41 U	0.16 J	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U			
4-Ethyltoluene	4.9 U	0.49 U	0.18	0.49 U	0.49 U	0.49 U	0.23 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.49 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U			
4-Methyl-2-pentanone	4.1 U	0.27	0.34	0.41 U	0.41 U	0.41 U	0.56	0.41 U	0.41 U	0.41 U	0.46	0.82 U	0.41 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U			
Acetone	400	440	670	11	8.5	610	6800	210	380	610	500	98	49	580	64	81	33	22	410	16	20	4.8 U	27	490	70			
Benzene	2.0	1.1	3.7	0.54	0.47	1.0	7.1	2.4	3.8	3	2.7	3.4	3.1	5.2	5.2	4.1	3.2 U	3.2 U	3.2 U	1.7	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U			
Benzyl chloride	5.2 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.24 U	0.52 U	0.52 U	0.52 U	1.0 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	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	5.2 U			
Bromodichloromethane	3.4 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.31 U	0.67 U	0.67 U	0.67 U	1.3 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	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	6.6 U			
Bromoforn	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 U	1.0 U	1.0 U	1.0 U	2.1 U	1 U	1 U	11 U	11 U	11 U	11 U	11 U	11 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	11 U			
Bromomethane	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.18 U	0.39 U	0.39 U	0.39 U	0.78 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	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U			
Carbon disulfide	11	25	49	3.1 U	3.1 U	19	77	8.9	26	35	46	13	7.4	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	1.8 U	1.6 U	1.6 U	1.6 U	1.6 U	8.0			
Carbon tetrachloride	3.1 U	0.40	0.38	0.63 U	0.39	0.63 U	0.47	0.63 U	0.63 U	0.63 U	0.63 U	0.33 J	0.31 J	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	6.2 U			
Chlorobenzene	4.6 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.22 U	0.46 U	0.46 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	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U			
Chloroethane	2.6 U	2.9	5.3	0.26 U	0.26 U	1.5	4.0	0.86	1.9	1.9	1.6	1.0	0.26 U	140	50	34	18	13	26 U	13	14	11	4.0	1.3 U	2.8			
Chloroform	2.4 U	0.98	1.1	0.49 U	0.49 U	0.59	1.6	0.49 U	0.59	0.76	0.82	0.53	0.18 J	42	24	19	29	21	50	14	12	12	7.2	3.7	4.8 U			
Chloromethane	2.1 U	0.21 U	0.21 U	1.0	1.1	0.41 U	0.19 U	0.41 U	0.41 U	0.41 U	61	0.41 U	0.41 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	38			
cis-1,2-Dichloroethane	6.9	8.6	14	0.40 U	0.40 U	4.3	13	1.9	4.1	4.3	5	1.4	0.78	700	360	220	250	150	120	190	170	130	36	11	7.9			
cis-1,3-Dichloropropene	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.21 U	0.45 U	0.45 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	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U			
Cyclohexane	3.4 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.16 U	0.34 U	0.34 U	0.34 U	0.69 U	0.34 U	0.34 U	3.4 U	5.3	3.4 U	3.4 U	3.4 U	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U			
Dibromochloromethane	4.3 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.40 U	0.85 U	0.85 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	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U			
Dichlorodifluoromethane	4.9 U	2.9	2.6	2.5	2.5	2.1	1.7	2.5	2.1	2	2.3	2.5	2.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.6	3.9	2.7	2.5 U	2.5 U	5.0 U			
Ethanol	290	14	100	9.9	3.5	13	3.5 U	39	43	32	15	33	31	360	38	73	38	25	110	18	14	6.7	18	15	19 U			
Ethyl acetate	26	4.2	30	0.36 U	1.2	2.6	0.17 U	5.5	4.8	3.4	3.6	3.6	2.6	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			
Ethylbenzene	4.3 U	0.12	0.69	0.43 U	0.43 U	0.43 U	0.41	0.43 U	0.43 U	0.43 U	0.87 U	0.43 U	0.16 J	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U			
Hexachlorobutadiene	11 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.50 U	1.1 U	1.1 U	1.1 U	2.1 U	1.1 U	1.1 U	22 U	22 U	22 U	22 U	22 U	22 U	11 U	11 U	5.3 U	11 U	5.3 U	11 U			
Hexane	9.4	4.3	2.0	0.74	2.2	14 U	6.6 U	14 U	14 U	14 U	28 U	14 U	7.4 J	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	7.1 U			
Isopropyl alcohol	13	9.8 U	11	1.1	9.8 U	9.8 U	4.6 U	2.9	6.0	11.0	8.4 J	2 J	9.8 J	210	18	33	15	10	230	8.2	11	20	2.5 U	1.2 U	9.4			
m,p-Xylene	5.4	0.87 U	1.9	0.75	0.87 U	0.87 U	1.2	0.87 U	0.56	0.81	1.7 U	0.24 J	0.39 J	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 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-5-060713 6/7/2013	EW-5-090613 9/6/2013	EW-5-121313 12/13/2013	EW-5-030714 3/7/2014	EW-5-061314 6/13/2014	EW-5-091214 9/12/2014	EW-5-121914 12/19/2014	EW-05-032715 3/27/2015	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	
Methyl methacrylate	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.19 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U													
Methylene chloride	15	11	2.5	1.8	6.9	1.1	3.4	1.1	0.79	0.99	1.6 J	3.5 U	0.44 J	7.0 U	7.0 U	7.5	7.0 U	7.0 U	780	12	15	7.0 U	27	10	7.0 U	
Methyl-t-butyl ether	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.17 U	0.36 U	0.36 U	0.36 U	0.72 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	
n-Heptane	4.1 U	0.41 U	0.52	0.41 U	0.41 U	0.41 U	0.19 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	
o-Xylene	4.3 U	0.14	0.73	0.43 U	0.43 U	0.43 U	0.50	0.43 U	0.43 U	0.43 U	0.87 U	0.43 U	0.15 J	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	
Propylene (Propene)	15	6.9 U	3.9	6.9 U	6.9 U	6.9 U	2.3	6.9 U	6.9 U	6.9 U	14 U	6.9 U	6.9 U	3.5 U	1.8 U	1.8 U	3.5 U	1.8 U	35 U	0.90 U	0.90 U	3.5 U	3.5 U	8.7 U	6.9 U	
Styrene	4.3 U	0.46	0.38	0.43 U	0.43 U	0.43 U	0.35	0.43 U	0.43 U	0.43 U	0.85 U	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	
Tetrachloroethene	3.4 U	0.92	2.1	0.68 U	0.68 U	0.71	1.7	0.68 U	0.69	1.2	1.2	0.46 J	0.68 U	330	290	130	290	190	300	190	210	250	68	34	23	
Tetrahydrofuran	4500	7700	1000	0.29 U	0.29 U	2300	26000	1000	2900	2600	3300	460	320	75	480	260	730	570	130	110	87	9.1	31	42000	53000	
Toluene	37	0.58	5.6	0.66	0.40	0.43	4.2	0.44	1.4	1.7	1.1	0.36 J	0.55	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	
trans-1,2-Dichloroethene	2.0 U	0.40 U	0.18	0.40 U	0.40 U	0.40 U	0.19 U	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U	12	6.3	4.2	6.4	4.0 U	40 U	2.6	2.7	2.0	2.1	2.0 U	4.0 U	
trans-1,3-Dichloropropene	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.21 U	0.45 U	0.45 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	
Trichloroethene	170	220	400	0.54 U	0.54 U	150	770	80	190	160	200	66	38	12000	6900	4200	4400	4800	3900	5400	4700	6100	2000	730	650	
Trichlorofluoromethane	5.6 U	4.9	8.5	2.4	1.4	2.9	4.6	3.6	2.7	3.4	4.1	3.1	1.9 J	2300	870	630	350	250	150	230	440	700	320	6.7	25	
Trichlorotrifluoroethane	3.8 U	0.77 U	0.57	0.77 U	0.61	0.77 U	0.64	0.77 U	0.77 U	1.5 U	0.63 J	0.44 J	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	3.8 U	7.6 U	
Vinyl acetate	7.0 U	0.70 U	0.70 U	0.70 U	0.70 U	7.0 U	3.3 U	7.0 U	7.0 U	7 U	14 U	7 U	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	
Vinyl chloride	1.3 U	2.9	4.7	0.26 U	0.26 U	0.26 U	3.5	0.26 U	1.1	1.3	0.26 U	0.28	0.15 J	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	

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-6-120710 12/7/2010	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-6-060713 6/7/2013	EW-6-090613 9/6/2013	EW-6-121313 12/13/2013	EW-6-030714 3/7/2014	EW-6-061314 6/13/2014	EW-6-091214 9/12/2014	EW-6-121914 12/19/2014	EW-6-032715 3/27/2015	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	
Methyl methacrylate		0.41 U	4.1 U	8.2 U	2.0 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.14 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U								
Methylene chloride	1.3	2.8	6.9 U	69 U	3.6	4.8	2.5	14	2.1	1.4	3.8	0.84	0.99	0.89	1.2	1.6 J	3.5 U	0.43 J	9.3	2.6	8.0	1.8	1.8 U	20	29	
Methyl-t-butyl ether	0.36 U	0.36 U	3.6 U	7.2 U	1.8 U	0.36 U	0.36 U	0.13	0.36 U	0.36 U	0.36 U	0.13 U	0.36 U	0.36 U	0.36 U	0.72 U	0.36 U	0.36 U	3.6 U	3.5	2.9	4.9	3.1	3.6 U	1.8 U	
n-Heptane	0.41 U	0.41 U	4.1 U	8.2 U	2.0 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.45	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U	4.0 U	1.4	1.0 U	1.0 U	1.0 U	4.0 U	2.0 U	
o-Xylene	0.43 U	0.43 U	4.3 U	8.7 U	2.2 U	0.43 U	0.16	0.73	0.43 U	0.43 U	0.43 U	0.37	0.43 U	0.43 U	0.43 U	0.87 U	0.43 U	0.16 J	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	
Propylene (Propene)	0.69 U	1.7 U	17 U	140 U	3.8	6.9 U	2.8	6.9 U	6.9 U	6.9 U	6.9 U	2.4 U	6.9 U	6.9 U	1	2.1 J	0.84 J	0.91 J	3.5 U	160	110	0.87 U	0.45 U	3.5 U	0.90 U	
Styrene	0.43 U	0.43 U	4.3 U	8.5 U	2.1 U	0.43 U	0.20	0.35	0.43 U	0.43 U	0.43 U	0.28	0.43 U	0.43 U	0.43 U	0.85 U	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	
Tetrachloroethene	8.1	1.2	6.8 U	17	2.4	0.76	4.6	0.88	0.68 U	0.68 U	0.68 U	8.3	1.5	1.1	3.3	5.9	3.1	1.4	66	69	56	84	69	40	140	
Tetrahydrofuran	480	0.29 U	13000	32000	3900	3.7	8100	0.29 U	0.29 U	0.27	58	35000	650	54	1200	4100	260	680	41	23	12	14	7.5	3.0 U	5.6	
Toluene	0.38 U	2.4	3.8 U	9.8	1.9 U	0.36	0.70	5.3	0.46	0.31	0.50	2.5	0.38 U	1.0	1.0	0.68 J	0.25 J	0.5	14	2.9	3.6	1.7	0.95 U	3.8 U	1.9 U	
trans-1,2-Dichloroethene	0.4 U	0.40 U	4.0 U	7.9 U	2.0 U	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.14 U	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U	150	140	90	90	80	48	120	
trans-1,3-Dichloropropene	0.45 U	0.45 U	4.5 U	9.1 U	2.3 U	0.23 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.16 U	0.45 U	0.45 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	
Trichloroethene	250	0.54 U	190	390	66	0.27 U	180	0.21	0.54 U	0.54 U	5.7	150	36	28	60	110	44	33	230	210	180	180	200	110	330	
Trichlorofluoromethane	28	1.7	11	34	11	1.0	15	2.0	1.9	1.3	4.7	6.2	12	6.9	14	21	15	8.6	1800	1400	900	690	640	190	310	
Trichlorotrifluoroethane	0.77 U	0.86	7.7 U	15 U	3.8 U	0.38 U	0.77 U	0.60	0.77 U	0.63	0.77 U	0.72	0.77 U	0.77 U	0.77 U	1.5 U	0.63 J	0.41 J	7.6 U	1.6 U	1.9 U	1.9 U	1.9 U	7.6 U	3.8 U	
Vinyl acetate	0.7 U	0.35 U	70 U	7.0 U	1.8 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	7.0 U	2.5 U	7.0 U	7.0 U	7.0 U	2.1 J	7 U	7 U	15 U	0.72 U	0.90 U	3.6 U	0.90 U	15 U	1.8 U	
Vinyl chloride	0.26 U	0.26 U	2.6 U	5.1 U	1.3 U	0.13 U	1.5	0.26 U	0.26 U	0.26 U	0.26 U	2.2	0.26 U	0.26 U	0.65	1.3	0.26 U	0.26 U	280	370	180	48	21	2.6 U	2.7	

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																								
	EW-7-061109 6/11/2009	EW-7-091709 9/17/2009	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	EW-7-060713 6/7/2013	EW-7-090613 9/6/2013	EW-7-100313 10/3/2013	EW-7-121313 12/13/2013	EW-7-030714 3/7/2014	EW-7-061314 6/13/2014	EW-7-091214 9/12/2014	EW-7-121914 12/19/2014	EW-07-032715 3/27/2015
Methyl methacrylate							0.41 U	4.1 U	0.82 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.14 U	0.41 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U
Methylene chloride	16	7.0 U	27	1.4 U	2.4	0.81	1.9	2.4	6.9 U	6.9 U	1.5	33	2.1	5.4	5.6	10	1.5	1.7	1.7	1.1	0.82	0.85	1.3 J	3.5 U	0.49 J
Methyl-t-butyl ether	1.8 U	1.8 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U	0.72 U	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	0.13 U	0.36 U	0.36 U	0.36 U	0.36 U	0.72 U	0.36 U	0.36 U
n-Heptane	2.0 U	2.0 U	2.0 U	0.40 U	0.40 U	0.40 U	0.41 U	0.41 U	4.1 U	0.82 U	0.22	4.1 U	0.49	0.75	0.41 U	0.41 U	0.41 U	0.59	1.1	0.41 U	0.44	2.2	0.57 J	4.4	0.43
o-Xylene	2.2 U	2.2 U	2.2 U	0.65	0.44 U	0.44 U	0.43 U	0.43 U	4.3 U	0.87 U	0.38	4.3 U	0.18	0.52	0.51	0.15	0.43 U	0.40	0.73	0.43 U	0.43 U	0.43 U	0.87 U	0.43 U	0.57
Propylene (Propene)	0.90 U	3.5 U	3.5 U	0.69 U	1.8 U	0.69 U	0.69 U	1.7 U	17 U	14 U	6.9 U	13	6.9 U	6.9 U	6.9 U	6.9 U	2.4 U	6.9 U	6.9 U	6.9 U	6.9 U	1.1	14 U	6.9 U	0.96 J
Styrene	2.1 U	2.1 U	2.1 U	0.42 U	0.67	0.47	0.43 U	0.43 U	4.3 U	0.85 U	0.49	4.3 U	0.66	0.41	0.43 U	0.14	0.43 U	0.41	0.45	0.43 U	0.43 U	0.45	0.85 U	0.43 U	0.34 J
Tetrachloroethene	230	410	130	74	510	610	190	110	120	450	170	5.6	130	200	1.3	3.0	100	410	150	140	81	110	370	18	81
Tetrahydrofuran	15	4.1	1.5 U	2800	0.70	18	6.1	2.7	3900	7.9	9.9	1000	13	1.1	8.2	120	2000	10	4.6	2100	1400	2100	4.6	350	660
Toluene	1.9 U	1.9 U	1.9 U	5.4	4.8	2.2	0.47	0.88	3.8 U	1.9	1.1	8.1	1.1	1.9	1.6	0.63	1.1	3.1	6.5	1.0	1.2	1.4	0.59 J	0.63	0.7
trans-1,2-Dichloroethene	140	150	84	22	120	110	78	58	4.0 U	82	54	3.8	37	45	0.40 U	2.1	7.1	64	32	13	9.2	7.7	28	1.9	6.7
trans-1,3-Dichloropropene	2.2 U	2.2 U	2.2 U	0.44 U	0.44 U	0.44 U	0.45 U	0.45 U	4.5 U	0.91 U	0.45 U	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	0.16 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	
Trichloroethene	420	920	420	190	690	730	440	310	260	680	310	53	320	450	1.1	17	170	740	350	280	210	190	440	46	180
Trichlorofluoromethane	660	1400	620	210	690	700	530	740	330	2500	1000	180	1300	2000	3.5	91	280	1500	990	1100	690	300	1100	200	460
Trichlorotrifluoroethane	3.8 U	3.8 U	3.8 U	0.76 U	0.76 U	0.76 U	0.89	0.77 U	7.7 U	1.5 U	1.0	3.8 U	0.78	0.57	0.77 U	0.71	0.77 U	1.1	1.1	0.9	0.77 U	0.77 U	1 J	0.78	0.8 J
Vinyl acetate	1.8 U	7.1 U	3.6 U	0.71 U	0.36 U	0.71 U	0.70 U	0.35 U	70 U	0.70 U	0.35 U	7.0 U	2.2	0.70 U	0.70 U	0.70 U	7.0 U	2.5 U	7.0 U	7.0 U	7.0 U	7 U	1.2 J	7 U	7 U
Vinyl chloride	3.2	1.3 U	1.6	1.0	0.26 U	1.6	0.41	0.26 U	2.6 U	0.51 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	0.90	0.090 U	0.26 U	0.26 U	1.5	1.8	0.26 U	0.16 J	0.82

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

Parameter (ug/m ³)	CT IACTIND 2003 (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	500	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	
1,1,1,2-Tetrachloroethane	1.1																			0.62 U
1,1,2,2-Tetrachloroethane	0.14	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	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	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	430	1.8	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,1-Dichloroethene	20	0.58	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2,4-Trichlorobenzene	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	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	52	0.25 U	0.32	0.33	0.36	0.25 U	0.25 U	0.20	0.25 U	0.35	0.25 U	0.25 U	0.25 U	0.73	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,2-Dibromoethane (EDB)	0.038	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	410	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,2-Dichloroethane	0.31	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloropropane	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	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	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	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	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	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	NA	0.11 U	0.11 U	0.11 U	0.25	0.11 U	0.11 U	0.080 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	410	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dichlorobenzene	24	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dioxane	NA															0.18 U			0.18 U	
2-Butanone	500	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	NA	0.20 U	0.48	0.38	0.27	0.20 U	0.20 U	0.47	0.45	1.1	0.48	0.20 U	0.23	0.44	0.20 U	0.20 U	0.20 U	4.1 U	0.20 U	
4-Ethyltoluene	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	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	200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.18	0.20 U	0.68	0.23	0.20 U	0.20 U	0.20 U	1.1	0.20 U	0.20 U	0.31	0.20 U	
Acetone	500	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	3.3	0.79	0.60	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	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	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	0.46	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	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	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	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	NA	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	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	0.27	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.6 U	
Carbon tetrachloride	0.54	0.33	0.44	0.50	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 [a]	0.59 [a]	0.48	
Chlorobenzene	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	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	500	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.10 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	0.5	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.55	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	80	1.1	1.0	1.5	1.4	1.1	1.1	1.1	1.0	1.4	1.0	2.0	1.2	1.0	1.0	0.76	0.96	1.1	1.3	
cis-1,2-Dichloroethene	100	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
cis-1,3-Dichloropropene	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	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	
Cyclohexane	NA	0.17 U	0.17 U	0.38	0.41	0.17 U	0.17 U	0.12 U	0.17 U	0.40	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	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	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	500	2.0	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	2.0	
Ethanol	NA	590	12	23	140	85	32	41	180	500	62	51	25	58	150	2.4	14	7.7	7.9	
Ethyl acetate	NA	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	290	0.22 U	0.25	0.33	0.43	0.22 U	0.22 U	0.24	0.22 U	0.30	0.23	0.22 U	0.22 U	0.44	0.91	0.22 U	0.30	0.36	0.22 U	
Hexachlorobutadiene	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	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	NA	0.84	0.54	1.1	0.99	0.39	0.5	0.71	0.58	1.0	0.52	0.57	0.43	0.48	1.0	0.30	1.3	1.7	7.0 U	
Isopropyl alcohol	NA	3.8	3.5	580	2.9	3.0	1.3	1.7	2.0	19	3.5	3.8	3.8	1.9	8.2	0.12 U	1.7	1.2 U	6.4	
m,p-Xylene	500	0.60	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)	CT IACTIND 2003 (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	NA															0.20 U	0.20 U	0.20 U	0.20 U
Methylene chloride	17	2.0	3.6	5.2	1.1	1.2	0.74	2.5	2.9	2.0	0.70 U	4.3	2.2	1.3	0.75	0.65	2.8	4.2	7.7
Methyl-t-butyl ether	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	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	NA	0.20 U	0.20 U	0.36	0.35	0.20 U	0.20 U	0.23	0.38	0.48	0.20 U	0.20 U	0.20 U	0.20 U	2.1	0.20 U	0.33	0.20 U	0.20 U
o-Xylene	500	0.23	0.27	0.35	0.47	0.22 U	0.22 U	0.23	0.23	0.32	0.22 U	0.22 U	0.22 U	0.31	0.87	0.22 U	0.30	0.26	0.22 U
Propylene (Propene)	NA	0.18 U	0.18 U	0.090 U	0.090 U	0.18 U	0.090 U	0.13 U	0.090 U	0.090 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	290	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	0.30	0.21 U	0.35	0.32	0.58	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	5	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	NA	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	500	1.3	1.1	3.0	3.3	0.65	0.51	1.5	2.8	2.8	1.5	0.54	1.5	0.70	6.2	0.19 U	1.8	0.90	0.97
trans-1,2-Dichloroethene	200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
trans-1,3-Dichloropropene	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	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	1	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	500	3.0	1.3	1.7	1.8	1.5	1.7	1.2	1.3	2.0	1.2	1.8	1.4	1.5	6.3	1.3	1.7	1.4	1.7
Trichlorotrifluoroethane	NA	0.62	0.54	0.48	0.45	0.64	0.48	0.53	0.61	0.54	0.50	0.54	0.55	0.55	0.43	0.52	0.66	0.69	0.63
Vinyl acetate	NA	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.50 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	1.9	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.10 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

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														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-5-060713 6/7/2013	IA-5-090613 9/6/2013	IA-5-121313 12/13/2013	IA-5-030714 3/7/2014	IA-5-061314 6/13/2014	IA-5-091214 9/12/2014	IA-5-121914 12/19/2014	IA-05-032715 3/27/2015	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	
Methyl methacrylate	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U												
Methylene chloride	1.6	1.6	1.1	2.3	5.2	2.0	3.0	1.1	0.83	0.67	0.73	0.28 J	0.28 J	1 J	2.5	5.2	0.59	1.6	0.83	0.69	2.0	2.0	2.6	0.70 U	2.9	
Methyl-t-butyl ether	0.039	0.11 U	0.11 U	0.18	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	0.18 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	0.18	0.46	0.14 U	0.75	0.56	0.14 U	0.14 U	0.17	0.27	0.20 U	0.32	1.3	0.20 U	0.20 U	0.21	0.20 U	0.26	0.20 U	0.20 U	
o-Xylene	1.0	0.13 U	0.14	0.35	0.19	0.10	0.17	0.33	0.15 U	0.75	0.32	0.13 J	0.13 J	0.18	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	
Propylene (Propene)	2.1 U	2.1 U	2.1 U	1.4	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	1.1	2.4 U	2.4 U	2.4 U	0.18 U	0.18 U	0.090 U	0.090 U	0.18 U	0.090 U	0.13 U	0.090 U	0.090 U	0.35 U	0.35 U	
Styrene	1.0	0.13 U	0.76	0.24	0.15 U	0.15 U	0.15 U	0.20	0.15 U	0.18	0.15 U	0.15 U	0.15 U	0.036 J	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	
Tetrachloroethene	5.7	0.15	0.15	1.6	0.24 U	0.12	0.24 U	0.24 U	0.24 U	0.39	0.54	0.13 J	0.13 J	0.39	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	
Tetrahydrofuran	0.10	0.088 U	0.10	0.10 U	0.10 U	0.10 U	0.14	0.10 U	0.10 U	0.10 U	0.10 U	0.1 U	0.1 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	
Toluene	1.9	0.28	0.78	2.0	0.56	0.61	0.95	2.6	0.89	3.8	2.2	0.78	0.78	0.74	1.8	1.3	2.5	11	0.65	0.71	1.3	0.81	2.0	1.1	0.49	
trans-1,2-Dichloroethene	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	
trans-1,3-Dichloropropene	0.14 U	0.068 U	0.14 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	0.22 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	
Trichloroethene	0.63	0.081 U	0.045	0.10	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.23	0.19 U	0.19 U	0.19 U	0.083 J	13	1.7	0.27 U	0.34	0.27 U	0.27 U	0.60	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	2.1	1.6	1.6	1.7	1.4	1.3	1.3	1.1	4.8	1.3	1.7	2.5	1.5	1.7	1.4	1.2	2.2	1.2	1.7	
Trichlorotrifluoroethane	0.69	0.46	0.53	0.60	0.61	0.60	1.4	0.63	0.54	0.47	0.58	0.64	0.64	0.49 J	0.64	0.51	0.48	0.45	0.64	0.48	0.53	0.74	0.63	0.48	0.51	
Vinyl acetate	0.11 U	0.21 U	0.55	0.25 U	0.25 U	0.25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.50 U	0.18 U	0.18 U	0.71 U	0.36 U	
Vinyl chloride	0.077 U	0.038 U	0.077 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.09 U	0.09 U	0.09 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.10 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																				
	IA-6-032610 3/26/2010	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-6-060713 6/7/2013	IA-6-090613 9/6/2013	IA-6-121313 12/13/2013	IA-6-030714 3/7/2014	IA-6-061314 6/13/2014	IA-6-091214 9/12/2014	IA-6-121914 12/19/2014	IA-06-032715 3/27/2015
1,1,1-Trichloroethane	0.35	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	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,1,2-Tetrachloroethane									0.37 U	0.37 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.25 U	0.44 U	0.44 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	0.21 U	0.10 U	0.21 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	0.069 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	0.16 U	0.082 U	0.16 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	0.11 U	0.19 U	0.19 U
1,1-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U
1,1-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U
1,2,4-Trichlorobenzene	0.75 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	2.8	0.52 U	0.52 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.15 U	0.26 U	0.26 U
1,2,4-Trimethylbenzene	0.25 U	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	0.21	0.27	0.17 U	0.55	0.21	0.29	0.17 U	0.13 J
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	0.23 U	0.12 U	0.23 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	0.077 U	0.27 U	0.27 U
1,2-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	1.7	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.056	0.061 U	0.056	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.039 J	0.14 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	0.23 U	0.14 U	0.069 U	0.061	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.046 U	0.16 U	0.16 U
1,2-Dichlorotetrafluoroethane	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	0.059	0.15 U	0.091	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.071 J	0.17 U	0.038 J
1,3-Butadiene	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	0.078 U	0.078 U	0.59	0.078 U	0.044 U	0.078 U	0.061 J
1,3-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.13	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U
1,4-Dioxane								0.18 U													
2-Butanone	1.4	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	0.91	2.8	2.2	1.6	3.1	0.66 J	0.81 J	1 J
2-Hexanone	0.26	0.20 U	0.20 U	0.20 U	0.22	4.1 U	0.60	0.15	0.12 U	0.20	0.27	0.14 U	0.20	0.14 U	0.48	0.14 U	0.29	0.41	0.043 J	0.14 U	0.18
4-Ethyltoluene	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	0.080	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.073 J	0.17 U	0.045 J
4-Methyl-2-pentanone	0.20 U	0.20 U	0.40	0.20 U	0.20 U	0.28	0.31	0.13	0.12 U	0.92	0.25	0.14 U	0.14 U	0.14 U	0.30	0.14 U	0.22	0.24	0.09	0.14 U	0.12 J
Acetone	6.5	14	13	11 B	14 B	19 B	26	10	7.4	15	18	11	10	20	29	27	12	26	9.2	8.2	9.2
Benzene	0.55	0.19	0.60	0.44	1.3	0.29	0.31	0.42	0.39	0.20	0.49	0.48	0.80	0.23	0.70	0.53	2.4	0.7	0.3	0.4	0.53
Benzyl chloride	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	0.18 U	0.18 U	0.18 U	0.18 U	0.052 U	0.18 U	0.18 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U	0.20 U	0.10 U	0.20 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	0.067 U	0.24 U	0.24 U
Bromoform	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	0.36 U	0.36 U	0.36 U	0.36 U	0.21 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	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.078 U	0.14 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	0.20	1.1 U	1.1 U	1.1 U	0.13	1.1 U	1.1 U	0.23	0.057 J	1.1 U	0.039 J	
Carbon tetrachloride	0.43	0.55 [a]	0.44	0.46	0.57 [a]	0.64 [a]	0.52	0.46	0.48	0.44	0.37	0.55 [a]	0.42	0.58 [a]	0.47	0.45	0.45	0.43	0.42	0.33	0.31
Chlorobenzene	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	0.45	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.046 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	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.2	0.053 U	0.093 U
Chloroform	0.24 U	0.36	0.36	0.24 U	0.24 U	0.24 U	0.24 U	0.10	0.073 U	0.24	0.17	0.17 U	0.075	0.17 U	0.19	0.17 U	0.17 U	0.25	0.11	0.082 J	0.069 J
Chloromethane	1.4	1.0	1.1	0.95	0.92	1.1	1.4	1.3	1.2	1.4	1.2	1.1	1.4	1.5	1.1	1.2	1.3	1.9	1	0.88	0.95
cis-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098	0.059 U	0.052	0.042	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U
cis-1,3-Dichloropropene	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	0.16 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	0.16 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.29	0.17 U	0.10 U	0.10 U	0.10 U	0.20	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.34	0.16	0.069 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	0.26 U	0.13 U	0.26 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.3 U	0.085 U	0.3 U	0.3 U
Dichlorodifluoromethane	1.6	2.4	1.6	1.9	3.1	1.8	1.9	2.9	2.0	2.9	2.8	2.7	1.7	3.4	1.9	2.5	1.5	2.1	2.1	1.9	1.4
Ethanol	7.1	18	36	5.9	10	7.7	14	24	41	67	23	8.4	2.9	20	21	6.1	20	38	160	9.4	17
Ethyl acetate	0.18 U	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	0.42	0.34	0.64	0.42	0.13 U	0.17	0.34	1.7	0.13 U	0.3
Ethylbenzene	0.22 U	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	0.18	0.29	0.15 U	0.56	0.2	0.18	0.088 J	0.18
Hexachlorobutadiene	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	0.37 U	0.37 U	0.37 U	0.37 U	0.21 U	0.37 U	0.37 U
Hexane	0.22	1.3	0.69	0.39	1.5	0.41	7.0 U	0.41	0.48	0.73	1.0	0.64	0.76	0.83	0.85	0.38	1.2	0.69	0.35 J	0.29 J	4.9 J
Isopropyl alcohol	4.9	1.0	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	3.4 U	3.4 U	0.85	1.7	8.1	3.4	0.52 J	3.1 J
m,p-Xylene	0.51	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	0.54	0.81	0.20	1.6	0.6	0.4	0.3	0.44

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																					
	IA-6-032610 3/26/2010	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-6-060713 6/7/2013	IA-6-090613 9/6/2013	IA-6-121313 12/13/2013	IA-6-030714 3/7/2014	IA-6-061314 6/13/2014	IA-6-091214 9/12/2014	IA-6-121914 12/19/2014	IA-06-032715 3/27/2015	
Methyl methacrylate				0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
Methylene chloride	0.70 U	4.5	0.64	0.94	3.0	1.0	1.7 U	1.5	1.8	1.5	2.2	1.6	1.1	1.3	1.1	0.71	0.64	0.83	0.64 J	0.28 J	0.49 J	
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	0.11 U	0.11 U	0.11 U	0.14	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.072 U	0.13 U	0.13 U
n-Heptane	0.20 U	1.4	0.47	0.20 U	0.35	0.20 U	0.20	0.11	0.15	0.25	0.31	0.095	0.10	0.14	0.47	0.14 U	0.71	1.1	0.16	0.14 U	0.15	
o-Xylene	0.22 U	0.22 U	0.42	0.22 U	0.40	0.22 U	0.22	0.17	0.13	0.29	0.12	0.18	0.13	0.21	0.32	0.15 U	0.64	0.24	0.14	0.085 J	0.18	
Propylene (Propene)	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	1.4	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.81	1.4 U	2.4 U	2.4 U	
Styrene	0.21 U	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	0.15 U	0.22	0.15 U	0.16	0.15 U	0.077 J	0.15 U	0.036 J	
Tetrachloroethene	0.34 U	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	0.24 U	0.24 U	0.24 U	0.24	0.32	0.49	0.12 J	0.72	
Tetrahydrofuran	0.15 U	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	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.17	0.046 J	0.1 U	0.1 U	
Toluene	1.6	1.7	2.6	0.40	2.9	0.93	1.2	1.2	1.4	1.1	1.5	0.56	0.65	1.1	2.6	0.49	3.4	1.3	0.72	0.5	0.76	
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U	
trans-1,3-Dichloropropene	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	0.16 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	0.16 U	
Trichloroethene	0.27 U	0.27 U	0.30	0.27 U	0.27 U	0.27 U	0.27 U	0.19	0.081 U	0.24	0.20	0.19 U	0.072	0.19 U	0.19 U	0.19 U	0.21	0.19 U	0.12	0.19 U	0.075 J	
Trichlorofluoromethane	1.3	1.5	3.1	1.1	1.6	1.1	1.7	1.4	1.0	1.6	1.7	2.0	1.3	2.1	1.7	1.5	1.7	1.3	1.3	1.3	1	
Trichlorotrifluoroethane	0.55	0.55	0.42	0.52	0.69	0.67	0.56	0.68	0.44	0.57	0.62	0.61	0.65	1.0	0.66	0.58	0.46	0.53	0.54	0.64	0.47 J	
Vinyl acetate	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	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.4 U	2.5 U	2.5 U	
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.090 U	0.090 U	0.33	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.084	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)	Indoor Air - Western Small Retail Space																				
	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	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 12/8/2011	IA-7- 030812 3/8/2012	IA-7- 061412 6/14/2012
1,1,1-Trichloroethane	44	2.4	0.40	1.3	0.27 U	0.27 U	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	0.27 U	
1,1,1,2-Tetrachloroethane																		0.62 U	0.069	0.082 U	0.088
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	0.21 U	0.10 U	0.21 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	0.27 U	0.16 U	0.16 U
1,1-Dichloroethane	1.3	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.061 U	0.12 U
1,1-Dichloroethene	0.52	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 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	0.45 U	0.45 U	0.17
1,2,4-Trimethylbenzene	0.25 U	0.34	0.34	0.99	0.25 U	0.25 U	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
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	0.23 U	0.12 U	0.23 U
1,2-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.18 U
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.070	0.061 U	0.051
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	0.30	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.069 U	0.14 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	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	0.10	0.15	0.083
1,3-Butadiene	0.11 U	0.11 U	0.14	0.97	0.11 U	0.11 U	0.080 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
1,3-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.18 U
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.065
1,4-Dioxane																		0.18 U			
2-Butanone	70	6.5	3.9	5.2	2.2	1.3	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-Hexanone	0.20 U	0.29	0.20 U	0.91	0.20 U	0.20 U	0.14 U	0.53	1.5	0.53	0.20 U	0.20 U	0.82	0.55	0.20 U	0.20 U	1.4 J	0.73	0.12 U	0.081	0.23
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.27	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	0.074	0.097	0.065
4-Methyl-2-pentanone	0.20 U	0.20 U	0.20 U	0.42	0.20 U	0.20 U	0.14 U	0.22	0.79	0.24	0.20 U	0.20 U	0.43	0.61	0.20 U	0.20 U	0.53	0.36	0.15	0.13	1.4
Acetone	29	12	13	32	7.8	6.6	6.5	10	31	22	31	12	41	27	12 B	15 B	48 B	38	17	13	18
Benzene	0.95	0.75	1.1	3.2	0.67	0.73	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	0.20
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	0.16 U	0.16 U	0.16 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	0.33 U	0.34 U	0.34 U	0.34 U	0.20 U	0.10 U	0.20 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	0.51 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	0.31 U
Bromomethane	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	0.19 U	0.12 U	0.12 U	0.12 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	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
Carbon tetrachloride	0.32	0.44	0.52	0.56 [a]	0.48	0.6 [a]	0.43	0.65 [a]	0.43	0.42	0.44	0.43	0.50	0.47	0.45	0.56 [a]	0.69 [a]	0.50	0.45	0.46	0.43
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	0.14 U	0.14 U	0.14 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	0.079 U	0.079 U	0.079 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	0.24 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	
Chloromethane	1.7	0.98	1.4	1.5	1.0	1.2	1.1	0.93	1.8	1.2	2.1	1.2	1.3	1.4	0.99	1.0	1.6	1.6	1.3	1.6	1.2
cis-1,2-Dichloroethene	0.29	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14	0.20 U	0.20 U	0.20 U	0.27	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.064	0.059 U	0.12 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	0.14 U	0.068 U	0.14 U
Cyclohexane	0.17 U	0.17 U	0.32	0.70	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	0.17 U	0.10 U	0.10 U	0.10 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	0.26 U	0.13 U	0.26 U
Dichlorodifluoromethane	2.1	2.2	2.6	2.7	2.6	2.6	2.0	2.4	2.7	2.3	2.1	1.8	2.7	1.7	2.0	3.1	2.5	1.8	2.8	2.1	2.7
Ethanol	7.3	16	11	26	7.9	8.4	7.1	11	14	11	10	13	39	240	13	14	28	76	60	70	110
Ethyl acetate	0.37 U	0.37 U	0.18 U	0.21	0.37 U	0.18 U	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	0.70	0.21	1.8	0.94	0.39
Ethylbenzene	0.23	0.29	0.36	0.95	0.24	0.22 U	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
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	0.32 U	0.32 U	0.32 U
Hexane	0.90	0.87	0.91	2.0	1.1	0.60	0.69	0.33	1.5	0.88	0.25	0.33	0.70	0.64	0.50	1.3	0.58	7.0 U	3.9	0.80	0.67
Isopropyl alcohol	3.7	6.2	3.6	8.3	0.25 U	2.7	0.18 U	7.0	14	4.0	1.9	18	5.8	28	2.8	11	1.2 U	77	2.9 U	2.9 U	48
m,p-Xylene	0.61	0.82	0.94	2.8	0.73	0.43 U	0.31 U	0.43 U	0.72	0.86	2.8	0.82	1.2	1.2	0.43 U	0.43 U	1.5	1.1	0.72	0.30	0.54

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 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	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 12/8/2011	IA-7- 030812 3/8/2012	IA-7- 061412 6/14/2012
Methyl methacrylate														0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.12 U	0.12 U	
Methylene chloride	1.9	5.7	0.92	1.5	6.3	1.4	4.2	2.3	5.7	0.70 U	2.9	0.70 U	1.3	0.60	1.3	2.5	1.1	1.7 U	13	2.8	1.4
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 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
n-Heptane	0.20	0.20 U	0.37	1.2	0.20 U	0.20 U	0.17	0.20 U	0.34	0.37	0.20 U	0.29	0.50	0.68	0.33	0.47	2.0	1.1	0.46	0.47	0.65
o-Xylene	0.24	0.31	0.39	0.97	0.24	0.22 U	0.16 U	0.22 U	0.25	0.31	0.60	0.28	0.43	0.43	0.22 U	0.22 U	0.69	0.41	0.30	0.17	0.20
Propylene (Propene)	0.18 U	0.18 U	0.090 U	0.090 U	0.18 U	0.090 U	0.13 U	0.090 U	0.090 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
Styrene	0.21 U	0.21 U	0.21 U	0.26	0.21 U	0.21 U	0.15 U	0.21 U	0.29	0.39	0.21 U	0.26	0.70	0.39	0.21 U	0.21 U	0.97	0.63	0.18	0.097	0.26
Tetrachloroethene	1.6	0.34 U	0.65	0.63	0.34 U	0.34 U	0.48	0.34 U	0.34 U	0.34 U	1.0	0.34 U	0.34 U	0.36	0.34 U	1.7	0.34 U	0.62	0.66	0.14	0.15
Tetrahydrofuran	45	2.1	0.74	0.43	0.15 U	0.15 U	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 U
Toluene	1.5	1.6	2.7	7.5	1.5	0.76	0.48	0.61	2.3	4.0	0.57	7.2	8.4	3.5	0.48	1.6	6.6	3.7	1.2	0.48	1.4
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 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	0.14 U	0.068 U	0.14 U
Trichloroethene	4.6	1.1	0.28	0.58	0.27 U	0.27 U	0.30	0.27 U	0.27 U	0.27 U	0.40	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 U
Trichlorofluoromethane	4.7	1.4	1.7	3.1	1.6	1.7	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
Trichlorotrifluoroethane	0.62	0.57	0.47	0.44	0.66	0.45	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
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.50 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
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.10 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	0.077 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 - Western Small Retail Space											
	IA-7-091312 9/13/2012	IA-7-010313 1/3/2013	IA-7-031513 3/15/2013	IA-7-060713 6/7/2013	IA-7-090613 9/6/2013	IA-7-100313 10/3/2013	IA-7-121313 12/13/2013	IA-7-030714 3/7/2014	IA-7-061314 6/13/2014	IA-7-091214 9/12/2014	IA-7-121914 12/19/2014	IA-07-032715 3/27/2015
1,1,1-Trichloroethane	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	0.055 U	0.19 U	0.19 U
1,1,1,2-Tetrachloroethane	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.42 U	0.44 U	0.44 U	0.44 U	0.25 U	0.44 U	0.44 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.23 U	0.24 U	0.24 U	0.24 U	0.069 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.18 U	0.19 U	0.19 U	0.19 U	0.11 U	0.19 U	0.19 U
1,1-Dichloroethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U
1,1-Dichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U
1,2,4-Trichlorobenzene	0.52 U	0.52 U	0.52 U	0.26 U	0.26 U	0.25 U	0.26 U	0.26 U	0.26 U	0.15 U	0.26 U	0.26 U
1,2,4-Trimethylbenzene	0.46	0.17 U	0.10	0.58	0.40	0.70	0.25	0.38	0.31	0.37	0.052 J	0.33
1,2-Dibromoethane (EDB)	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.27 U	0.27 U	0.27 U	0.077 U	0.27 U	0.27 U
1,2-Dichlorobenzene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U
1,2-Dichloroethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.11	0.14 U	0.14 U	0.14 U	0.15	0.14 U	0.065 J
1,2-Dichloropropane	0.094	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.085	0.16 U	0.16 U
1,2-Dichlorotetrafluoroethane												
1,3,5-Trimethylbenzene	0.26	0.17 U	0.17 U	0.17 U	0.17 U	0.23	0.17 U	0.17 U	0.17 U	0.057 J	0.17 U	0.083 J
1,3-Butadiene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.075 U	0.078 U	0.48	0.078 U	0.044 U	0.078 U	0.078 U
1,3-Dichlorobenzene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.20 U	0.21 U	0.21 U	0.21 U	0.06 J	0.21 U	0.21 U
1,4-Dichlorobenzene	0.063	0.21 U	0.21 U	0.21 U	0.21 U	0.086	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.16 J
1,4-Dioxane												
2-Butanone	2.8	1.9	1.9	1.7	1.6	3.8	0.69	1.5	3	2.2 J	0.75 J	1.4 J
2-Hexanone	0.41	0.20	0.35	0.14 U	0.15	1.1	0.14 U	0.37	0.35	0.41	0.14 U	0.43
4-Ethyltoluene	0.16	0.17 U	0.17 U	0.17 U	0.17 U	0.20	0.17 U	0.17 U	0.17 U	0.065 J	0.17 U	0.09 J
4-Methyl-2-pentanone	0.29	0.18	0.14 U	0.21	0.20	0.44	0.14 U	0.14 U	0.34	0.18	0.14 U	0.18
Acetone	24	14	15	49	46	46	20	15	30	41	12	16
Benzene	0.49	0.58	0.87	0.32	0.43	1.8	0.54	1.9	0.57	0.36	0.4	0.57
Benzyl chloride	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	0.052 U	0.18 U	0.18 U
Bromodichloromethane	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.23 U	0.24 U	0.24 U	0.24 U	0.067 U	0.24 U	0.24 U
Bromoform	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.35 U	0.36 U	0.36 U	0.36 U	0.21 U	0.36 U	0.36 U
Bromomethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U	0.056 J	0.14 U	0.14 U
Carbon disulfide	0.090	1.1 U	1.1 U	0.16	0.60	0.14	1.1 U	1.1 U	1.1 U	0.11 J	1.1 U	0.042 J
Carbon tetrachloride	0.38	0.51	0.39	0.55 [a]	0.46	0.45	0.49	0.42	0.45	0.46	0.33	0.34
Chlorobenzene	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	0.046 U	0.16 U	0.16 U
Chloroethane	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.089 U	0.093 U	0.093 U	0.093 U	0.053 U	0.093 U	0.093 U
Chloroform	0.20	0.17 U	0.082	0.21	0.47	0.17	0.24	0.17 U	0.18	0.12	0.096 J	0.079 J
Chloromethane	1.3	1.1	1.4	1.5	1.3	1.2	1.2	1.4	1.4	0.76	0.86	1
cis-1,2-Dichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U
cis-1,3-Dichloropropene	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	0.16 U
Cyclohexane	0.23	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.30	0.12 U	0.069 U	0.12 U	0.12 U
Dibromochloromethane	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.29 U	0.30 U	0.30 U	0.30 U	0.085 U	0.3 U	0.3 U
Dichlorodifluoromethane	2.9	2.6	1.7	3.1	2.1	1.5	2.7	1.5	2.1	2.2	1.8	1.3
Ethanol	60	52	11	45	21	40	25	50	79	96	39	110
Ethyl acetate	0.57	0.77	0.13 U	5.5	1.3	1.9	0.34	0.56	0.41	0.37	0.13 U	0.64
Ethylbenzene	0.45	0.19	0.14	0.36	0.48	0.62	0.15 U	0.43	0.35	0.2	0.085 J	0.58
Hexachlorobutadiene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.36 U	0.37 U	0.37 U	0.37 U	0.21 U	0.37 U	0.37 U
Hexane	0.97	0.86	0.87	2.9	1.3	0.97	0.39	1.1	0.9	0.37 J	0.35 J	4.9 J
Isopropyl alcohol	22	3.3	3.4 U	3.4 U	3.4 U	6.0	40	1.9	11.0	2 U	1.4 J	30
m,p-Xylene	1.4	0.71	0.40	1.1	1.2	1.8	0.25	1.2	1.1	0.54	0.29 J	0.67

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-7-091312 9/13/2012	IA-7-010313 1/3/2013	IA-7-031513 3/15/2013	IA-7-060713 6/7/2013	IA-7-090613 9/6/2013	IA-7-100313 10/3/2013	IA-7-121313 12/13/2013	IA-7-030714 3/7/2014	IA-7-061314 6/13/2014	IA-7-091214 9/12/2014	IA-7-121914 12/19/2014	IA-07-032715 3/27/2015	
Methyl methacrylate	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.082 U	0.14 U	0.14 U
Methylene chloride	2.3	2.6	1.4	6.1	1.3	1.1	0.76	0.68	0.74	0.63 J	0.39 J	0.6 J	
Methyl-t-butyl ether	0.11	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.13 U	0.13 U	0.072 U	0.13 U	0.13 U	
n-Heptane	0.99	0.14 U	0.16	0.42	1.1	1.6	0.45	1.3	4.6	1.9	4.3	0.19	
o-Xylene	0.56	0.24	0.15	0.40	0.44	0.85	0.15 U	0.44	0.39	0.19	0.088 J	0.26	
Propylene (Propene)	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.3 U	2.4 U	2.4 U	1.5	1.4 U	2.4 U	2.4 U	
Styrene	0.89	0.15 U	0.081	0.29	2.6	0.37	0.15 U	0.17	0.29	0.24	0.15 U	0.096 J	
Tetrachloroethene	1.7	0.24 U	0.15	0.24 U	5.5	0.22	0.24 U	0.40	0.34	0.13	0.13 J	0.23 J	
Tetrahydrofuran	0.10 U	0.10 U	0.10 U	0.10 U	0.65	0.15	0.10 U	0.10 U	0.14	0.13	0.1 U	0.11	
Toluene	2.4	0.99	1.0	3.8	4.7	7.8	1.1	2.8	2.2	1.3	0.72	1.1	
trans-1,2-Dichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U	
trans-1,3-Dichloropropene	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	0.16 U	
Trichloroethene	0.15	0.19 U	0.068	0.19 U	0.53	0.14	0.19 U	0.28	0.19 U	0.077	0.19 U	0.1 J	
Trichlorofluoromethane	1.8	1.8	1.5	2.5	1.8	1.9	1.6	1.7	1.4	1.3	1.4	1.2	
Trichlorotrifluoroethane	0.58	0.60	0.87	1.0	0.63	0.52	0.60	0.45	0.52	0.58	0.63	0.64 J	
Vinyl acetate	0.25 U	0.25 U	0.25 U	2.5 U	2.5 U	2.4 U	2.5 U	2.5 U	2.5 U	1.4 U	2.5 U	2.5 U	
Vinyl chloride	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.087 U	0.090 U	0.090 U	0.090 U	0.026 U	0.09 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: AKN 04/8/15
 Checked by / Date: MAM 4/23/15

NA - not available

U - Not detected, value is the detection limit

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

J - Indicates compound was detected at an estimated value.

D - Result from diluted analyses

ug/m³ - micrograms per cubic meter

Bolded and shaded values are above the CT target

5 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
6/7/2013	-0.226	-0.123	-0.011
9/6/2013	-0.232	-0.829	-0.007
10/3/2013	NM	NM	-0.006
12/13/2013	-0.215	-0.002	-0.002
3/7/2014	-0.177	-0.002	-0.002
6/13/2014	-0.185	-0.010	-0.011
9/12/2014	-0.258	-0.256	-0.014
12/19/2014	-0.222	-0.100	-0.001
3/27/2015	-0.301	-0.097	-0.036

** ASD system offline.

NM = Not Measured

Prepared by/Date: MAM 04/20/15

Checked by/Date: KRM 4/24/15

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 12/29/09	AA-1- 012810 1/28/2010	AA-1- 020510 2/5/2010	AA-1- 021210 2/12/2010
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	0.27 U
1,1,1,2-Tetrachloroethane																			
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	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	0.27 U
1,1-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.37 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	0.37 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	0.30	0.25 U	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	0.38 U
1,2-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.17 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	0.35 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
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.50	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	0.17	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	0.23 U
1,3-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.53	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.81	1.6	1.6
2-Hexanone	0.20 U	0.22	0.57	0.35	0.20 U	0.20 U	0.20 U	0.14 U	0.26	0.39	0.20 U	0.34	0.20 U	0.33	0.23	0.20 U	0.20 U	0.32	0.20 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.60	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	0.20 U	0.20 U	0.27	0.63	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.34
Acetone	7.3	8.0	15	22	8.4	5.9	12	1.1	27	9.5	10	10	9.6	5.4	17	11	3.5	7.6	5.0
Benzene	0.69	0.62	1.3	4.7	0.43	0.69	0.46	0.12 U	0.30	0.40	0.49	0.38	0.35	0.25	0.20	0.42	0.79	0.68	0.63
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	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	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	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	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	0.16 U	0.16 U	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	0.40	0.40	0.43	0.46	0.39	0.42	0.39	0.31 U
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	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	0.10 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	0.24 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	0.24 U
Chloromethane	1.1	0.90	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	1.3
cis-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.16 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
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	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	0.43 U
Dichlorodifluoromethane	2.0	2.2	2.6	2.7	2.6	2.6	2.8	2.0	2.5	2.7	2.6	2.1	2.1	2.2	2.1	2.1	2.3	2.4	2.5
Ethanol	4.0	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	7.2
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	0.18 U
Ethylbenzene	0.22 U	0.25	0.52	2.0	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	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	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	0.91
Isopropyl alcohol	1.4	1.4	1.8	4.3	1.4	0.67	1.4	0.18 U	14	1.0	2.5	2.8	0.87	0.63	0.25 U	0.54	0.56	2.7	1.5
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	0.47
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	0.70 U	4.2	0.70 U	23	4.6	1.3	1.9	1.7

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 12/29/09	AA-1- 012810 1/28/2010	AA-1- 020510 2/5/2010	AA-1- 021210 2/12/2010
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	0.18 U
n-Heptane	0.20 U	0.27	0.92	1.6	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.40	0.23	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.26	0.20 U	0.20 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	0.090 U	0.090 U	0.18 U	0.090 U	0.090 U	0.13 U	0.18 U	0.090 U	0.090 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	0.61	0.50	0.78	0.94	0.64	0.97
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.16 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	0.30
Trichlorofluoromethane	1.3	1.2	1.7	2.4	1.5	2.0	1.7	0.92	1.3	1.5	2.0	1.1	1.4	1.2	1.5	2.2	1.2	1.2	1.6
Trichlorotrifluoroethane	0.68	0.53	0.50	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	0.54
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.18 U	0.50 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	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	0.10 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

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-1-021910 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	AA-1-060713 6/7/2013	AA-1-090613 9/6/2013	AA-1-100313 10/3/2013	AA-1-121313 12/13/13	AA-1-030714 03/07/14	AA-1-061314 6/13/2014	AA-1-091214 9/12/2014	AA-1-121914 12/19/2014	AA-01-032715 3/27/2015
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	0.11 U	0.11 U	0.11 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
n-Heptane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.91	0.20 U	0.95	0.20 U	0.20 U	0.12	0.089	0.11	0.18	0.14 U	0.12	0.21	0.15	0.18	0.14 U	0.21	0.62	0.054 J	0.14 U	0.19
o-Xylene	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	0.20	0.15 U	0.24	0.15 U	0.17	0.5	0.054 J	0.046 J	0.25
Propylene (Propene)	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	2.4 U	2.4 U	2.3 U	2.4 U	2.4 U	1.3	1.4 U	2.4 U	2.4 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.37	0.13 U	0.10	0.13	0.15 U	0.039	0.15 U	0.15 U	0.052	0.15 U	0.15 U	0.16	0.085 U	0.15 U	0.15 U
Tetrachloroethene	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	0.10 U	0.20 U	0.87	0.24 U	0.90	0.24 U	0.24 U	0.30	0.24 U	0.24 U	0.40	0.07	0.09 J	0.22 J
Tetrahydrofuran	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	0.10 U	0.10 U	0.10 U	1.4	0.10 U	0.10 U	0.23	0.10 U	0.059 U	0.1 U	0.1 U
Toluene	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	1.2	1.4	1.3	0.35	1.2	2.6	0.33	0.35	1.3
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.14 U	0.04 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	0.23 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	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	0.064 J
Trichloroethene	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	0.19 U	0.19 U	0.11	0.19 U	0.19 U	0.19 U	0.052 J	0.19 U	0.19 U
Trichlorofluoromethane	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	1.8	11	3.3	1.5	1.1	1.4	1.3	1.3	1.1
Trichlorotrifluoroethane	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	1.0	0.60	0.55	0.55	0.46	0.54	0.57	0.63	0.49 J
Vinyl acetate	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	2.5 U	2.5 U	2.4 U	2.5 U	2.5 U	2.5 U	1.4 U	2.5 U	2.5 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	0.077 U	0.038 U	0.077 U	0.090 U	0.090 U	0.090 U	0.090 U	0.087 U	0.090 U	0.090 U	0.090 U	0.026 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
1,1,1,2-Tetrachloroethane																	
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	5.0 U	5.0 U	10 U	10 U	5.0 U	0.25 U	2.5 U	5.0 U	10 U	10 U	0.50 U	5.0 U	0.25 U	0.50 U	0.50 U	5.0 U	0.50 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	6.0 U	6.0 U	12 U	12 U	6.0 U	0.30 U	3.0 U	6.0 U	12 U	12 U	0.60 U	6.0 U	0.30 U	0.60 U	0.60 U	6.0 U	0.60 U
1,2-Dichloroethane	4.0 U	4.0 U	8.0 U	8.0 U	4.0 U	0.20 U	2.0 U	4.0 U	8.0 U	8.0 U	0.40 U	4.0 U	0.20 U	0.40 U	0.40 U	4.0 U	0.40 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	7.0 U	7.0 U	14 U	14 U	7.0 U	0.35 U	3.5 U	7.0 U	14 U	14 U	0.70 U	7.0 U	0.35 U	0.70 U	0.70 U	7.0 U	0.70 U
1,3,5-Trimethylbenzene	5.0 U	5.0 U	10 U	10 U	5.0 U	0.25 U	2.5 U	5.0 U	10 U	10 U	0.50 U	5.0 U	0.25 U	0.50 U	0.50 U	5.0 U	0.50 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	6.0 U	6.0 U	12 U	12 U	6.0 U	0.30 U	3.0 U	6.0 U	12 U	12 U	0.60 U	6.0 U	0.30 U	0.60 U	0.60 U	6.0 U	0.60 U
1,4-Dichlorobenzene	6.0 U	6.0 U	12 U	12 U	6.0 U	0.30 U	3.0 U	6.0 U	12 U	12 U	0.60 U	6.0 U	0.30 U	0.60 U	0.60 U	6.0 U	0.60 U
1,4-Dioxane																	
2-Butanone	37	32	48	60	21	40	7.8	31	30	21	4.0	11	10	9.0	12	22	22
2-Hexanone	4.0 U	4.0 U	8.0 U	8.0 U	4.0 U	0.50	2.0 U	4.0 U	8.0 U	8.0 U	0.40 U	4.0 U	0.20 U	0.40 U	0.40 U	4.0 U	0.40 U
4-Ethyltoluene	5.0 U	5.0 U	10 U	10 U	5.0 U	0.25 U	2.5 U	5.0 U	10 U	10 U	0.50 U	5.0 U	0.25 U	0.50 U	0.50 U	5.0 U	0.50 U
4-Methyl-2-pentanone	4.0 U	4.0 U	8.0 U	8.0 U	4.0 U	0.59	2.0 U	4.0 U	8.0 U	8.0 U	0.40 U	4.0 U	0.28	0.40 U	0.40 U	4.0 U	0.40 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	6.0	7.9	8.0
Chloromethane	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	8.2	1.0 U	2.0 U	4.0 U	4.0 U	0.20 U	2.0 U	0.10 U	0.20 U	0.20 U	2.0 U	0.20 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	5.0 U	5.0 U	10 U	110	5.0 U	2.8	2.5 U	5.0 U	10 U	10 U	2.4	5.0 U	2.2	2.7	1.7	5.0 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	5.0 U	0.25 U	22	5.0 U	9.9 U	9.9 U	2.3	5.0 U	1.0	0.50 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																	
Methylene chloride	12	7.0 U	14 U	14 U	19	2.6	7.0 U	14 U	28 U	28 U	1.4 U	14 U	2.6	1.4 U	1.4 U	7.0 U	2.1

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
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	4.0 U	4.0 U	8.0 U	8.0 U	4.0 U	0.20 U	2.0 U	4.0 U	8.0 U	8.0 U	0.40 U	4.0 U	0.20 U	0.40 U	0.40 U	4.0 U	0.40 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	3.0	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

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	EW-COMBINE D-120710	EW-COMBINE D-021711	EW-COMBINE D 091511	EW-Combined-120811	EW-Combined-030812	EW-Combined-061412	EW-Combined-091312	EW-Combined-01132013	EW-Combined-031513	EW-Combined-060713	EW-Combined-090613	EW-Combined-121313	EW-Combined-030714	EW-Combined-061314	EW-Combined-091214	EW-Combined-121914	EW-Combined-032715	EW-1-030609	EW-1-033109
1,1,1-Trichloroethane	4700	280	2500	2400	340	1100	1800	2800	1800	610	850	1900	1500	780	770	1300	420	500	59000	66000
1,1,1,2-Tetrachloroethane				2.5 U		12 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.44 U	1.2 U	1.2 U	1.2 U	2.5 U	1.2 U	1.2 U		
1,1,2,2-Tetrachloroethane	0.68 U	0.69 U	0.69 U	1.4 U	0.69 U	3.4 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.24 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	6.8 U	6.8 U
1,1,2-Trichloroethane	0.55	0.55 U	0.55 U	1.1 U	0.55 U	2.7 U	0.55 U	0.26	0.55 U	0.55 U	0.55 U	0.19 U	0.55 U	0.55 U	1.1 U	0.55 U	0.55 U	0.55 U	6.4	10
1,1-Dichloroethane	330	36	170	200	70	78	130	200	99	59	68	150	62	53	68	130	55	49	4100	4400
1,1-Dichloroethene	81	7.3	58	44	21	34	42	15	28	24	38	56	24	27	40	52	14	22	570	1200
1,2,4-Trichlorobenzene	0.74 U	0.74 U	0.74 U	3.0 U	1.5 U	3800	1.5 U	1.5 U	1.5 U	0.74 U	0.26 U	0.74 U	0.74 U	0.74 U	1.5 U	0.74 U	0.74 U	7.4 U	7.4 U	7.4 U
1,2,4-Trimethylbenzene	0.50 U	0.49 U	0.49 U	0.98 U	1.2	4.9 U	0.57	0.24	0.49 U	14	0.49 U	0.21	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.49 U	5.0 U	5.0 U
1,2-Dibromoethane (EDB)	0.76 U	0.77 U	0.77 U	1.5 U	0.77 U	3.8 U	0.77 U	0.77 U	0.77 U	0.77 U	0.27 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	7.6 U	7.6 U
1,2-Dichlorobenzene	0.60 U	0.60 U	0.60 U	1.2 U	0.60 U	7.3	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.21 U	0.60 U	0.60 U	0.60 U	1.2 U	0.6 U	0.6 U	6.0 U	6.0 U
1,2-Dichloroethane	0.40 U	0.40 U	0.40 U	0.81 U	0.40 U	2.0 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.14 U	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U	4.0 U	4.0 U
1,2-Dichloropropane	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	0.16 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	4.6 U
1,2-Dichlorotetrafluoroethane	0.70 U																		7.0 U	7.0 U
1,3,5-Trimethylbenzene	0.50 U	0.49 U	0.49 U	0.98 U	0.29	4.9 U	0.15	0.49 U	0.49 U	3.9	0.49 U	0.17 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.49 U	5.0 U	5.0 U
1,3-Butadiene	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	2.2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.078 U	0.22 U	0.22 U	0.22 U	0.44 U	0.22 U	0.22 U	2.2 U	2.2 U
1,3-Dichlorobenzene	0.60 U	0.60 U	0.60 U	1.2 U	0.60 U	6.0 U	0.60 U	0.60 U	0.60 U	1.1	0.60 U	0.21 U	0.60 U	0.60 U	0.60 U	1.2 U	0.6 U	0.6 U	6.0 U	6.0 U
1,4-Dichlorobenzene	0.60 U	0.60 U	0.60 U	1.2 U	0.60 U	6.0 U	0.60 U	0.60 U	0.60 U	0.64	0.60 U	0.21 U	0.60 U	0.60 U	0.60 U	1.2 U	0.6 U	0.6 U	6.0 U	6.0 U
1,4-Dioxane				0.72 U																
2-Butanone	10	4.5	4.5 B	24 U	1.3	120 U	110	16	2.9	22	5.3	7.6	0.97	2.5	5.1	3.3 J	1.4 J	1.2 J	3.5	8.9
2-Hexanone	0.40 U	0.41 U	0.41 U	0.82 U	0.16	4.1 U	0.31	0.41 U	0.41 U	1.4	0.41 U	0.26	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U	4.0 U	4.0 U
4-Ethyltoluene	0.50 U	0.49 U	0.49 U	0.98 U	0.27	4.9 U	0.49 U	0.49 U	0.49 U	3.4	0.49 U	0.17 U	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	0.49 U	5.0 U	5.0 U
4-Methyl-2-pentanone	0.40 U	0.41 U	0.41 U	0.82 U	0.16	4.1 U	0.38	0.41 U	0.41 U	8.7	0.41 U	0.14 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.13 J	4.0 U	4.0 U
Acetone	6.6	11 B	6.3 B	19 U	6.6	22	19	14	10	75	12	11	6.6	15	9.8	19 U	6.2 J	6.1 J	35	16
Benzene	1.7	0.5	0.72	0.77	0.56	3.2 U	1.0	0.96	0.45	5.0	0.32 U	0.82	0.32 U	0.63	0.66	0.35 J	0.33	0.39	5.3	11
Benzyl chloride	0.52 U	0.52 U	0.52 U	1.0 U	0.52 U	5.2 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.18 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	5.2 U	5.2 U
Bromodichloromethane	0.66 U	0.67 U	0.67 U	1.3 U	0.67 U	3.4 U	10	0.67 U	0.67 U	0.67 U	0.67 U	0.24 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	6.6 U	6.6 U
Bromoform	1.1 U	1.0 U	1.0 U	2.1 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.36 U	1.0 U	1.0 U	1 U	2.1 U	1 U	1 U	11 U	11 U
Bromomethane	0.38 U	0.39 U	0.39 U	0.78 U	0.39 U	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.14 U	0.39 U	0.39 U	0.39 U	0.78 U	0.39 U	0.39 U	3.8 U	3.8 U
Carbon disulfide	1.3	0.31 U	0.73	6.2 U	3.1 U	31 U	1.7	3.6	0.43	0.82	3.1 U	0.73	3.1 U	3.1 U	0.40	0.52 J	0.33 J	0.24 J	3.2 U	3.2 U
Carbon tetrachloride	1.1	0.63 U	0.63	1.3 U	0.48	3.1 U	0.50	0.74	0.63 U	0.63 U	0.63 U	0.68	0.63 U	0.63 U	0.63 U	0.58 J	0.4 J	0.28 J	6.2 U	6.2 U
Chlorobenzene	0.46 U	0.46 U	0.46 U	0.92 U	0.46 U	4.6 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.16 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	4.6 U
Chloroethane	17	1	3.6	6.7	2.1	2.6 U	3.0	5.3	1.5	1.1	1.4	3.3	1.2	1.0	1.5	1.8	0.8	0.4	170	250
Chloroform	8.3	1.6	6.9	7.6	2.7	3.2	6.3	8.5	4.7	3.5	2.3	7.0	1.5	3.1	3.4	4.9	3.4	2.5	20	34
Chloromethane	0.20 U	0.21 U	0.21 U	0.41 U	0.21 U	2.1 U	20	0.21 U	0.21 U	0.21 U	0.41 U	0.14 U	0.41 U	0.41 U	0.41 U	0.83 U	0.41 U	0.41 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	360	28	120	160	38	47	75	150	66	30	24	93	12	25	30	57	25	21	2000	2200
cis-1,3-Dichloropropene	0.44 U	0.45 U	0.45 U	0.91 U	0.45 U	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.16 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	4.4 U	4.4 U
Cyclohexane	0.55	0.34 U	0.34 U	0.69 U	0.34 U	3.4 U	0.34 U	0.34 U	0.34 U	21	0.34 U	0.12 U	0.34 U	0.34 U	0.34 U	0.69 U	0.34 U	0.34 U	3.4 U	5.7
Dibromochloromethane	0.86 U	0.85 U	0.85 U	1.7 U	0.85 U	4.3 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.30 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	8.6 U	8.6 U
Dichlorodifluoromethane	1.6	3	4.1	2.9	2.9	4.9 U	2.9	2.9	2.4	2.5	2.1	11	3.2	2.4	2.1	2.5	2.7	1.8	5.0 U	170
Ethanol	1.9 U	8.2	17	15 U	9.2	75 U	7.2	12	19	320	34	30	11	38	41	15	12	5.2 J	33	40
Ethyl acetate	0.36 U	0.36 U	0.36 U	0.72 U	1.2	3.6 U	1.3	0.36 U	0.36 U	110	0.36 U	0.13 U	1.8	1.8	0.36 U	0.72 U	0.36 U	11	3.6 U	3.6 U
Ethylbenzene	0.58	0.43 U	0.43 U	0.87 U	0.58	4.3 U	0.28	0.21	0.43 U	13	0.43 U	0.20	0.43 U	0.43 U	0.43 U	0.87 U	0.43 U	0.43 U	4.4 U	4.4 U
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	2.1 U	1.1 U	11 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.37 U	1.1 U	1.1 U	1.1 U	2.1 U	1.1 U	1.1 U	22 U	22 U
Hexane	0.71 U	0.7 U	0.8	28 U	0.66	140 U	0.91	1.5	0.53	6.8	14 U	2.2	1.2	0.80	14 U	28 U	14 U	7.9 J	3.6 U	3.6 U
Isopropyl alcohol	0.50 U	0.84	0.25 U	20 U	9.8 U	98 U	3.1	2.9	9.8 U	27	9.8 U	3.4 U	3.0	1.6	1.6	2.7 J	9.8 U	9.8 U	28	2.4 U
m,p-Xylene	1.6	0.87 U	0.87 J	1.7 U	1.6	8.7 U	0.51	0.59	0.87 U	34	0.87 U	0.40	0.87 U	0.57	0.95	1.7 U	0.25 J	0.87 U	8.6 U	8.6 U
Methyl methacrylate			0.41 U	0.82 U	0.41 U	4.1 U	0.41 U	0.41 U	0.41 U	3.5	0.41 U	0.14 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U		
Methylene chloride	0.90	0.78	2.9	6.9 U	2.2	8.1	2.3	2.2	2.2	2.4	1.3	4.6	2.1	1.7	1.1	1.4 J	3.5 U	3.5 U	7.0 U	19

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-Combined-010313 1/13/2013	EW-Combined-031513 3/15/2013	EW-Combined-060713 6/7/2013	EW-Combined-090613 9/6/2013	EW-Combined-121313 12/13/13	EW-Combined-030714 03/07/14	EW-Combined-061314 6/13/2014	EW-Combined-091214 9/12/2014	EW-Combined-121914 12/19/2014	EW-Combined-032715 3/27/2015	EW-1-030609 3/6/2009	EW-1-033109 3/31/2009
Methyl-t-butyl ether	0.36 U	0.36 U	0.36 U	0.72 U	0.24	3.6 U	1.1	0.17	0.36 U	0.36 U	0.36 U	0.17	0.36 U	0.36 U	0.36 U	0.72 U	0.36 U	0.2 J	3.6 U	3.6 U
n-Heptane	0.40 U	0.41 U	0.41 U	0.82 U	0.23	4.1 U	0.41 U	0.41 U	0.41 U	4.4	0.41 U	0.14 U	0.41 U	0.41 U	0.41 U	0.82 U	0.41 U	0.41 U	4.0 U	4.0 U
o-Xylene	0.56	0.43 U	0.43 U	0.87 U	0.69	4.3 U	0.28	0.25	0.43 U	16	0.43 U	0.20	0.43 U	0.43 U	0.43 U	0.87 U	0.43 U	0.43 U	4.4 U	4.4 U
Propylene (Propene)	0.69 U	1.8	1.7 U	14 U	6.9 U	13	3.8	6.9 U	6.9 U	6.9 U	6.9 U	2.4 U	6.9 U	6.9 U	6.9 U	14 U	6.9 U	1.6 J	1.8 U	1.8 U
Styrene	0.42 U	0.43 U	0.43 U	0.85 U	0.21	4.3 U	0.54	0.39	0.43 U	14	0.43 U	0.15 U	0.43 U	0.43 U	0.43 U	0.85 U	0.43 U	0.43 U	4.2 U	4.2 U
Tetrachloroethene	750	160	920	440	8.1	170	530	910	850	60	23	250	7.0	260	82	230	100	400	600	1200
Tetrahydrofuran	31	11	11	21	0.27	8.3	3800	110	1.8	4.1	7.2	10	0.79	1.7	4.7	2.9	0.85	1.2	6.3	21
Toluene	3.5	0.38	1.4	0.75 U	2.5	3.8 U	1.4	0.87	0.38 U	74	0.57	0.67	0.38 U	1.1	1.8	0.75 U	0.43	0.2 J	3.8 U	3.8 U
trans-1,2-Dichloroethene	6.6	0.6	1.9	3.5	1.1	2.0 U	1.7	1.9	1.0	0.86	0.62	2.6	0.40 U	0.59	0.89	1.4	0.6	0.65	9.2	23
trans-1,3-Dichloropropene	0.44 U	0.45 U	0.45 U	0.91 U	0.45 U	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.16 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	4.4 U	4.4 U
Trichloroethene	3200	240	1800	1900	97	730	1500	2600	2000	380	280	1200	160	560	560	800	480	490	31000	42000
Trichlorofluoromethane	410	71	200	610	200	150	260	100	230	130	140	410	200	98	160	360	200	80	520	540
Trichlorotrifluoroethane	0.76 U	0.77 U	0.77 U	1.5 U	0.89	3.8 U	0.77 U	0.37	0.77 U	0.92	1.4	1.3	0.77 U	0.77 U	0.77 U	0.86 J	0.89	0.54 J	7.6 U	7.6 U
Vinyl acetate	0.71 U	0.7 U	0.35 U	0.70 U	0.35 U	7.0 U	1.4	0.70 U	0.70 U	0.70 U	7.0 U	2.5 U	7.0 U	7.0 U	7.0 U	14 U	7 U	7 U	3.6 U	3.6 U
Vinyl chloride	0.40	0.26 U	0.26 U	0.51 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.090 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	2.7	4.8

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						Post Treatment - Large Retail Space								CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space					
	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	Post carbon-020309	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	
1,1,1-Trichloroethane	26000	30000	54000	72000	11000	14000	1.0	15	45	1.9	13000	0.56	450	500	10	0.56	1.1	0.99	0.35	1.8	
1,1,1,2-Tetrachloroethane														1.1							
1,1,2,2-Tetrachloroethane	6.8 U	6.8 U	6.8 U	6.8 U	1.7 U	6.8 U	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	
1,1,2-Trichloroethane	5.4 U	5.4 U	5.4 U	5.4 U	1.4 U	5.4 U	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	
1,1-Dichloroethane	5700	7000	1600	2300	690	1400	0.20 U	1.0 U	5.4	11000	490	370	610	430	0.71	0.20 U	0.20 U	0.20 U	0.20 U	0.27	
1,1-Dichloroethane	330	640	340	560	97	210	0.20 U	1.0 U	0.40 U	6400	96	78	87	20	0.38	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2,4-Trichlorobenzene	7.4 U	7.4 U	7.4 U	7.4 U	1.9 U	7.4 U	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	
1,2,4-Trimethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	0.25 U	1.3 U	0.50 U	0.50 U	50 U	0.25 U	0.25 U	52	0.25 U	0.36	0.70	0.77	0.25 U	0.25 U	
1,2-Dibromoethane (EDB)	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U	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	
1,2-Dichlorobenzene	6.0 U	6.0 U	6.0 U	6.0 U	1.5 U	6.0 U	0.30 U	1.5 U	0.60 U	0.60 U	60 U	0.30 U	0.30 U	410	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,2-Dichloroethane	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U	4.0 U	0.20 U	1.0 U	0.40 U	0.40 U	40 U	0.20 U	0.20 U	0.31	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloropropane	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	4.6 U	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	
1,2-Dichlorotetrafluoroethane	7.0 U	7.0 U	7.0 U	7.0 U	1.8 U	7.0 U	0.35 U	1.8 U	0.70 U	0.70 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	
1,3,5-Trimethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	2.1	1.3 U	0.50 U	0.50 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	
1,3-Butadiene	2.2 U	2.2 U	2.2 U	2.2 U	0.55 U	2.2 U	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	
1,3-Dichlorobenzene	6.0 U	6.0 U	6.0 U	6.0 U	1.5 U	6.0 U	2.9	1.5 U	0.60 U	0.60 U	60 U	0.30 U	0.30 U	410	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dichlorobenzene	6.0 U	6.0 U	6.0 U	6.0 U	1.5 U	6.0 U	0.30 U	1.5 U	0.60 U	0.60 U	60 U	0.30 U	0.30 U	24	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dioxane														NA							
2-Butanone	12	11	36	10	36	6.4	10	6.3	9.4	5.5	330	1.9	2.0	500	20	3.1	5.8	3.4	2.6	2.2	
2-Hexanone	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U	4.0 U	0.20 U	1.0 U	0.40 U	0.40 U	13000	0.27	0.34	NA	0.20 U	0.20 U	0.60	0.42	0.20 U	0.23	
4-Ethyltoluene	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	2.1	1.3 U	0.50 U	0.50 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	
4-Methyl-2-pentanone	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U	4.0 U	5.0	1.0 U	0.40 U	0.40 U	40 U	0.20 U	0.20 U	200	0.20 U	0.20 U	0.43	0.30	0.20 U	0.20 U	
Acetone	9.6 U	9.6 U	53	24	26	12	1200	11	19	12	430	3.6	5.7	500	18	7.7	19	21	10	8.7	
Benzene	5.6	7.8	3.2 U	6.8	1.4	3.2 U	1.3	0.80 U	0.32 U	0.32 U	32 U	0.16 U	0.16 U	3.3	1.0	0.68	1.9	3.0	0.69	0.87	
Benzyl chloride	5.2 U	5.2 U	5.2 U	5.2 U	1.3 U	5.2 U	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	
Bromodichloromethane	6.6 U	6.6 U	6.6 U	6.6 U	1.7 U	6.6 U	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	
Bromoform	11 U	11 U	11 U	11 U	2.6 U	11 U	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	
Bromomethane	3.8 U	3.8 U	3.8 U	3.8 U	0.95 U	3.8 U	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	
Carbon disulfide	27	25	3.2 U	3.2 U	1.8	3.2 U	0.16 U	0.80 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	
Carbon tetrachloride	6.2 U	6.2 U	6.2 U	6.2 U	1.6 U	6.2 U	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 [a]	0.46	0.59 [a]	
Chlorobenzene	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	4.6 U	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	
Chloroethane	700	590	41	44	17	33	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	
Chloroform	9.6	15	13	23	3.6	7.5	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	
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	0.50 U	2.0 U	0.59	0.50 U	0.20 U	0.20 U	23	0.10 U	0.10 U	80	1.1	1.0	1.4	1.5	1.0	1.0	
cis-1,2-Dichloroethene	6100	7600	610	1200	560	1300	0.27	1.0 U	3.9	5200	820	230	570	100	2.0	0.20 U	1.0	1.1	0.73	1.3	
cis-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	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	
Cyclohexane	8.4	8.8	3.4 U	3.4 U	0.85 U	3.4 U	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	
Dibromochloromethane	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	8.6 U	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	
Dichlorodifluoromethane	5.0 U	5.0 U	5.4	7.0	2.6	5.0 U	0.76	4.1	3.0	2.4	50 U	1.7	1.9	500	1.8	2.1	2.6	2.8	2.6	2.6	
Ethanol	12	8.3	39	1.8 U	8.6	1.8 U	740	36	25	9.8	110	0.38 U	2.8	NA	5.7	8.3	14	20	9.8	7.5	
Ethyl acetate	3.6 U	3.6 U	3.6 U	3.6 U	0.90 U	3.6 U	0.37 U	0.90 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	
Ethylbenzene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	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	
Hexachlorobutadiene	22 U	22 U	22 U	22 U	5.4 U	22 U	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	
Hexane	3.6 U	6.6	3.6 U	3.6 U	3.2	3.6 U	3.0	0.90 U	46	0.36 U	36 U	0.18 U	0.23	NA	0.92	0.74	1.2	1.6	1.0	0.51	
Isopropyl alcohol	2.4 U	2.4 U	26	5.9	7.5	7.1	450	2.9	3.1	47	290	0.25 U	1.4	NA	3.4	3.1	5.3	5.8	3.8	2.0	
m,p-Xylene	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	8.6 U	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	0.80	0.43 U	
Methyl methacrylate														NA							
Methylene chloride	7.0 U	17	7.0 U	13	19	12	20	76	17	3.0	810	0.70 U	0.72	17	2.3	33	2.3	1.8	4.4	1.1	

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						Post Treatment - Large Retail Space							CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space					
	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	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
Methyl-t-butyl ether	3.6 U	3.6 U	3.6 U	3.6 U	0.90 U	3.6 U	0.18 U	0.90 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
n-Heptane	4.0 U	4.0 U	4.0 U	4.0 U	1.0 U	4.0 U	1.8	1.0 U	0.40 U	0.40 U	40 U	0.20 U	0.20 U	NA	0.23	0.20 U	0.59	0.75	0.20 U	0.20 U
o-Xylene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	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	0.30	0.22 U
Propylene (Propene)	1.8 U	1.8 U	1.8 U	1.8 U	0.45 U	1.8 U	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	0.090 U	0.090 U	0.18 U	0.090 U
Styrene	4.2 U	4.2 U	4.2 U	4.2 U	1.1 U	4.2 U	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
Tetrachloroethene	2300	2500	73	310	31	170	0.72	1.7 U	1.1	0.68 U	68 U	0.52	1.9	5	6.6 [a]	0.57	4.2	3.2	2.6	4.9
Tetrahydrofuran	19	3.0 U	32	14	37	5.1	6.8	22	40	18	210	4.1	6.5	NA	12	1.2	1.3	0.48	0.32	0.15 U
Toluene	3.8 U	3.8 U	3.8 U	3.8 U	1.4	3.8 U	29	0.95 U	0.65	0.38 U	38 U	0.19 U	0.36	500	1.7	1.4	4.0	5.7	2.3	0.93
trans-1,2-Dichloroethene	69	180	4.0 U	8.8	2.5	8.0	0.20 U	1.0 U	0.40 U	28	40 U	7.7	15	200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
trans-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	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
Trichloroethene	25000	25000	8600	19000	2700	5500	2.0	11	16	2.7	54 U	1.0	1.0	1	4.2	0.46	1.6	1.4	0.65	1.5
Trichlorofluoromethane	1300	1800	430	840	240	370	0.71	1.4 U	23	6700	84	180	210	500	2.1	1.4	1.7	3.1	1.6	1.7
Trichlorotrifluoroethane	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U	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
Vinyl acetate	3.6 U	3.6 U	3.6 U	3.6 U	0.90 U	3.6 U	0.71 U	0.90 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
Vinyl chloride	9.4	8.1	2.6 U	2.6 U	0.65	2.6 U	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

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-1-033109 3/31/2009	IA-1-041409 4/14/2009	IA-1-042409 4/24/2009	IA-1-091709 9/17/2009	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	
1,1,1-Trichloroethane	1.5	1.4	2.0	0.27 U	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	
1,1,1,2-Tetrachloroethane																						
1,1,2,2-Tetrachloroethane	0.34 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	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	0.19 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	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
1,1-Dichloroethane	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,1-Dichloroethene	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2,4-Trichlorobenzene	0.37 U	0.26 U	0.37 U	0.37 U	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	
1,2,4-Trimethylbenzene	0.25 U	0.18 U	0.48	0.29	0.35	0.28	0.51	0.52	0.37	0.25 U	0.26	0.25 U	0.25 U	0.25 U	0.40	0.43	0.56	0.25 U	0.55	0.25 U	0.25 U	
1,2-Dibromoethane (EDB)	0.38 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	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	
1,2-Dichlorobenzene	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,2-Dichloroethane	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloropropane	0.23 U	0.17 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	0.23 U	0.23 U	
1,2-Dichlorotetrafluoroethane	0.35 U	0.25 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	0.35 U	0.35 U	0.35 U	
1,3,5-Trimethylbenzene	0.25 U	0.18 U	0.25 U	0.25 U	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	
1,3-Butadiene	0.11 U	0.08 U	0.11 U	0.23 U	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	
1,3-Dichlorobenzene	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dichlorobenzene	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dioxane																						
2-Butanone	1.3	1.2	4.4	2.0	2.6	2.7	1.3	2.7	1.6	0.30 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	
2-Hexanone	0.20 U	0.14 U	0.48	0.43	0.52	0.73	0.31	0.71	0.36	0.20 U	0.47	0.20 U	0.27	0.27	0.20 U	0.67	0.75	0.20 U	0.20 U	0.20 U	4.1 U	
4-Ethyltoluene	0.25 U	0.18 U	0.25 U	0.25 U	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	
4-Methyl-2-pentanone	0.20 U	0.14 U	0.52	0.21	0.35	0.32	0.20 U	0.34	0.20 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U	0.20 U	0.28	0.35	0.35	0.20 U	0.20 U	0.20 U	
Acetone	14	12	310	11	18	13	10	13	12	2.0	19	7.3	8.5	7.0	6.5	18	18	11	12 B	15 B	11 B	
Benzene	0.71	0.56	0.78	0.49	0.47	0.39	0.48	1.1	1.2	0.16 U	0.98	0.64	0.53	0.59	0.64	0.50	0.46	0.8	0.49	1.5	0.25	
Benzyl chloride	0.26 U	0.19 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	0.26 U	0.26 U	
Bromodichloromethane	0.33 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	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	
Bromoform	0.51 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	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	
Bromomethane	0.19 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	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	0.12 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	0.33	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
Carbon tetrachloride	0.53	0.31	0.43	0.48	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 [a]	0.52	0.50	0.46	0.47	0.53	
Chlorobenzene	0.23 U	0.17 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	0.23 U	0.23 U	
Chloroethane	0.13 U	0.10 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.10 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	0.17 U	0.24 U	0.24 U	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	
Chloromethane	1.2	1.1	1.3	1.1	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	0.92	
cis-1,2-Dichloroethene	0.50	0.60	1.3	0.20 U	0.20 U	0.83	0.44	0.57	0.20 U	0.20 U	0.20 U	0.20 U	0.56	0.20 U	1.3	0.20 U	0.50	0.20 U	1.7	0.20 U	0.20 U	
cis-1,3-Dichloropropene	0.22 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	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	
Cyclohexane	0.17 U	0.12 U	0.34	0.18 U	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	
Dibromochloromethane	0.43 U	0.31 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	0.43 U	0.43 U	
Dichlorodifluoromethane	3.1	2.0	8.3	2.4	2.0	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	2.0	3.1	1.5	
Ethanol	18	5.0	39	6.2	7.0	6.5	8.8	10	8.4	7.0	29	19	43	4.6	4.4	6.0	6.5	9.0	2.7	9.0	2.8	
Ethyl acetate	0.18 U	0.26 U	0.37 U	0.32	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	
Ethylbenzene	0.22 U	0.16 U	0.94	0.23	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	
Hexachlorobutadiene	1.1 U	0.75 U	1.1 U	0.53 U	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	
Hexane	0.53	0.65	1.7	0.99	1.3	0.41	0.77	0.78	0.74	0.18 U	0.82	1.3	0.45	0.20	1.1	0.80	0.46	0.61	0.35 U	1.9	0.43	
Isopropyl alcohol	9.1	0.18 U	240	5.2	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	
m,p-Xylene	0.63	0.31 U	2.5	0.79	0.91	0.73	1.0	1.4	1.1	0.43 U	1.0	0.43 U	0.43 U	0.50	0.77	1.1	1.2	1.7	0.43 U	1.6	0.42 U	
Methyl methacrylate																			0.20 U	0.20 U	0.20 U	
Methylene chloride	6.7	3.5	4.8	1.6	3.6	0.70 U	0.70 U	2.9	0.70 U	1.4	1.5	1.9	0.70 U	0.70 U	0.70 U	0.35 U	1.2	0.56	0.56	4.8	1.3	

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-1-033109 3/31/2009	IA-1-041409 4/14/2009	IA-1-042409 4/24/2009	IA-1-091709 9/17/2009	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	
Methyl-t-butyl ether	0.18 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	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
n-Heptane	0.20 U	0.14 U	0.67	0.20 U	0.20 U	0.20 U	0.26	0.42	0.35	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.36	0.20 U	0.50	0.20 U
o-Xylene	0.22 U	0.16 U	0.70	0.31	0.40	0.28	0.40	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	
Propylene (Propene)	0.090 U	0.13 U	0.18 U	0.35 U	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	
Styrene	0.21 U	0.15 U	0.24	0.21 U	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	
Tetrachloroethene	1.5	1.9	6.1 [a]	0.34 U	0.34 U	2.0	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	
Tetrahydrofuran	0.15 U	0.23	0.40	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	0.22	0.15 U	0.15 U	0.15 U	0.24	0.16	0.15 U	0.15 U	0.15 U	
Toluene	1.7	0.72	5.7	1.3	1.1	0.78	1.2	2.8	2.1	0.19 U	0.82	0.69	0.58	0.80	1.3	0.91	0.99	2.5	0.44	3.0	0.58	
trans-1,2-Dichloroethene	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
trans-1,3-Dichloropropene	0.22 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	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.23 U	
Trichloroethene	0.57	0.74	1.6	0.27 U	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	0.40	0.27 U	1.7	0.27 U	0.27 U	
Trichlorofluoromethane	1.2	1.2	1.5	1.4	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	
Trichlorotrifluoroethane	0.59	0.54	1.7	0.48	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	
Vinyl acetate	0.18 U	0.50 U	0.71 U	0.71 U	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	0.36 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	0.10 U	0.16	0.13 U	0.13 U	0.17	0.13 U	0.10 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 0915111 9/15/2011	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-1- 060713 6/7/2013	IA-1- 090613 9/6/2013	IA-1- 121313 12/13/13	IA-1- 030714 03/07/14	IA-1- 061314 6/13/2014	IA-1- 091214 9/12/2014	IA-1- 121914 12/19/2014	IA-1- 032715 3/27/2015	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
1,1,1-Trichloroethane	0.27 U	0.12	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.11	0.19 U	0.2	0.16 J	0.05 J	9.9	0.63	1.1	1.1	0.44	1.4	2.1	0.27 U	
1,1,1,2-Tetrachloroethane	0.62 U		0.37 U	0.37 U	0.44 U	0.44 U	0.44 U	0.44 U	0.35 J	0.44 U	0.44 U	0.44 U	0.37 U	0.44 U									
1,1,2,2-Tetrachloroethane	0.34 U	0.21 U	0.10 U	0.21 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.1 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	
1,1,2-Trichloroethane	0.27 U	0.16 U	0.082 U	0.16 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.16 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	
1,1-Dichloroethane	0.20 U	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.061 U	0.14 U	0.14 U	0.72	0.20 U	0.20 U	0.20 U	0.32	0.14 U	0.20 U	0.20 U	
1,1-Dichloroethene	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.059 U	0.14 U	0.14 U	0.41	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	
1,2,4-Trichlorobenzene	0.74 U	0.45 U	0.45 U	0.45 U	0.52 U	0.52 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.22 U	0.26 U	0.26 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	
1,2,4-Trimethylbenzene	0.25 U	0.10	0.15 U	0.16	0.55	0.17 U	0.17 U	0.21	0.32	0.17 U	0.52	0.25	0.14 J	0.17 U	0.12 J	0.25 U	0.37	0.70	0.65	0.30	0.18 U	0.25 U	
1,2-Dibromoethane (EDB)	0.38 U	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.12 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	
1,2-Dichlorobenzene	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.18 U	0.21 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	
1,2-Dichloroethane	0.20 U	0.056	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.061 U	0.14 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	
1,2-Dichloropropane	0.23 U	0.14 U	0.069 U	0.14 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.069 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	
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	
1,3,5-Trimethylbenzene	0.25 U	0.044	0.15 U	0.059	0.32	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.16	0.17 U	0.068 J	0.17 U	0.041 J	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	0.066 U	0.066 U	0.066 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.55	0.078 U	0.066 U	0.078 U	0.048 J	0.11 U	0.11 U	0.30	0.66	0.11 U	0.08 U	0.11 U	0.23 U	
1,3-Dichlorobenzene	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.18 U	0.21 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	
1,4-Dichlorobenzene	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.18 U	0.21 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	
1,4-Dioxane	0.18 U																						
2-Butanone	5.9 U	1.8	1.2	1.4	3.0	0.87	0.64	2.9	2.0	0.92	1.6	3.1	2.8 J	0.84 J	1.5 J	21	4.1	4.6	3.0	2.9	0.95	1.6	1.1
2-Hexanone	0.62	0.22	0.26	0.12 U	0.28	0.14 U	0.14 U	0.38	0.27	0.14 U	0.30	0.45	0.25	0.14 U	0.30	0.20 U	0.20 U	0.35	0.26	0.20 U	0.14 U	0.20 U	
4-Ethyltoluene	0.25 U	0.15 U	0.15 U	0.071	0.19	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.15 U	0.17 U	0.045 J	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	0.23	0.39	0.13	0.093	0.26	0.14 U	0.14 U	0.24	0.52	0.14 U	0.23	0.49	0.33	0.14 U	0.14 J	0.20 U	0.20 U	0.35	0.20 U	0.14 U	0.20 U	0.20 U	
Acetone	18	8.0	6.0	12	16	7.0	5.0	21	35	19	13	23	13	9.3	12	17	9.6	14	18	9.7	13	39	6.2
Benzene	0.32	0.47	0.34	0.19	0.67	0.51	0.72	0.28	0.75	0.54	2.3	0.46	0.39	0.38	0.53	1.0	0.67	1.8	3.0	0.77	0.58	0.44	0.41
Benzyl chloride	0.26 U	0.16 U	0.16 U	0.16 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.078 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	
Bromodichloromethane	0.34 U	0.20 U	0.10 U	0.20 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.1 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	
Bromoform	0.52 U	0.31 U	0.31 U	0.31 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.31 U	0.36 U	0.36 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	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.12	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	
Carbon disulfide	1.6 U	0.93 U	0.93 U	0.93 U	1.1 U	1.1 U	1.1 U	1.1 U	0.23	0.20	1.1 U	0.21	0.11 J	1.1 U	1.1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	
Carbon tetrachloride	0.57 [a]	0.49	0.46	0.46	0.39	0.54	0.44	0.53	0.53	0.54	0.41	0.42	0.4	0.29	0.32	0.33	0.41	0.55 [a]	0.57 [a]	0.48	0.41	0.41	0.44
Chlorobenzene	0.23 U	0.14 U	0.14 U	0.14 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.069 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	
Chloroethane	0.13 U	0.079 U	0.079 U	0.079 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.079 U	0.093 U	0.093 U	0.13 U	0.13 U	0.42	0.13 U	0.13 U	0.10 U	0.13 U	0.13 U
Chloroform	0.24 U	0.085	0.073 U	0.097	0.19	0.17 U	0.17 U	0.17 U	0.20	0.17 U	0.13	0.25	0.27	0.13 J	0.075 J	0.24 U	0.24 U	0.24 U	0.24 U	0.25	0.17 U	0.24 U	0.24 U
Chloromethane	1.3	0.93	1.3	1.6	1.3	0.99	1.1	1.4	1.2	1.0	1.3	1.3	0.8	0.8	1.0	1.1	1.0	1.3	1.0	1.1	1.2	0.91	
cis-1,2-Dichloroethene	0.20 U	0.15	0.059 U	0.12 U	0.045	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.059 U	0.14 U	0.14 U	2.1	0.24	1.1	1.1	0.95	0.59	1.6	0.20 U	
cis-1,3-Dichloropropene	0.23 U	0.14 U	0.068 U	0.14 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.068 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	
Cyclohexane	0.17 U	0.10 U	0.10 U	0.10 U	0.27	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.32	0.12 U	0.1 U	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
Dibromochloromethane	0.43 U	0.26 U	0.13 U	0.26 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.13 U	0.3 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	
Dichlorodifluoromethane	2.0	2.6	2.1	2.7	2.7	2.5	1.7	3.2	1.9	2.4	1.7	2.1	2.2	1.7	1.2	1.8	2.2	2.6	2.9	2.7	2.1	2.9	2.0
Ethanol	6.4	2.2	3.2	4.4	8.5	3.1	2.0	26	23	12	22	80	34	29	9.1	5.5	8.8	12	17	7.9	4.9	7.5	4.8
Ethyl acetate	0.18 U	0.11 U	0.92	0.26	0.57	0.40	0.21	0.33	0.13 U	0.25	0.34	0.13 U	0.46	0.2	0.57	0.37 U	0.37 U	0.18 U	0.18 U	0.37 U	0.26 U	0.37 U	0.18 U
Ethylbenzene	0.22 U	0.14	0.10	0.11	0.47	0.18	0.15 U	0.19	0.35	0.15 U	0.53	0.23	0.17	0.064 J	0.13 J	0.26	0.28	0.65	0.79	0.30	0.18	0.22 U	0.22 U
Hexachlorobutadiene	0.53 U	0.32 U	0.32 U	0.32 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.32 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	
Hexane	7.0 U	0.39	0.72	0.55	1.3	0.67	0.64	0.79	19	4.9 U	1.2	0.43	0.55 J	0.32 J	5.5	0.88	0.57	1.3	1.6	0.69	0.72	0.74	0.41
Isopropyl alcohol	4.9 U	2.9 U	0.64	2.9 U	1.9	3.4 U	0.36	3.4 U	3.4 U	2.1	1.9	5.5	4	1.5 J	2 J	3.7	3.1	4.5	4.5	4.7	5.6	28	340
m,p-Xylene	0.51	0.41	0.22	0.36	1.7	0.79	0.30	0.79	1.0	0.19	1.6	0.86	0.59	0.24 J	0.36	0.76	0.88	2.0	2.6	0.93	0.61	0.63	0.71
Methyl methacrylate	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.15	0.14 U	0.14 U	0.14 U	0.15	0.14 U	0.14 U								
Methylene chloride	1.7 U	1.6	3.3	1.2	1.8	1.3	1.9	1.3	34	0.68	0.80	0.67	0.9 J	0.26 J	6.00	2.0	30	4.0	1.6	1.8	4.0	4.2	0.70 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 091511 9/15/2011	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-1- 060713 6/7/2013	IA-1- 090613 9/6/2013	IA-1- 121313 12/13/13	IA-1- 030714 03/07/14	IA-1- 061314 6/13/2014	IA-1- 091214 9/12/2014	IA-1- 121914 12/19/2014	IA-1- 032715 3/27/2015	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
Methyl-t-butyl ether	0.18 U	0.11 U	0.11 U	0.11 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	0.11 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	
n-Heptane	0.20 U	0.079	0.12 U	0.093	0.44	0.14 U	0.14 U	0.14 U	0.81	0.14 U	0.67	0.44	0.53	0.14 U	0.15	0.23	0.20 U	0.58	0.73	0.22	0.15	0.20 U	0.20 U
o-Xylene	0.22 U	0.15	0.096	0.14	0.66	0.25	0.15 U	0.27	0.42	0.15 U	0.62	0.32	0.22	0.064 J	0.14 J	0.30	0.34	0.76	0.89	0.34	0.22	0.22	0.27
Propylene (Propene)	3.4 U	2.1 U	2.1 U	1.1	1.7	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.1 U	2.4 U	2.4 U	0.18 U	0.18 U	0.090 U	0.090 U	0.18 U	0.13 U	0.18 U	0.35 U
Styrene	0.21 U	0.85	0.13 U	0.038	0.14	0.15 U	0.15 U	0.15 U	0.27	0.15 U	0.16	0.29	0.11 J	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
Tetrachloroethene	0.47	0.84	0.21	0.065	2.7	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.21	0.31	0.13	0.3	0.24 U	7.5 [a]	0.64	4.2	3.2	3.3	2.2	7.6 [a]	0.34 U
Tetrahydrofuran	0.15 U	0.14	0.088 U	0.088 U	0.10 U	0.10 U	0.10 U	0.10 U	0.27	0.10 U	0.10 U	0.16	0.14	0.1 U	0.1 U	12	1.2	1.2	0.49	0.41	0.21	0.28	0.15 U
Toluene	0.93	1.6	0.30	0.64	2.8	0.47	0.49	1.0	4.2	0.62	3.2	1.9	2.7	0.58	0.63	1.7	1.3	4.0	5.5	2.3	1.0	1.2	1.1
trans-1,2-Dichloroethene	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.059 U	0.14 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U
trans-1,3-Dichloropropene	0.23 U	0.14 U	0.068 U	0.14 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	0.068 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
Trichloroethene	0.27 U	0.25	0.081 U	0.16 U	0.21	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.25	0.19 U	0.081	0.14 J	0.087 J	4.4	0.56	1.6	1.4	0.91	0.77	1.9	0.27 U
Trichlorofluoromethane	1.8	1.0	0.89	1.8	1.7	1.6	1.3	1.9	2.4	1.4	1.6	1.4	1.3	1.3	1.1	2.0	1.2	1.7	2.8	1.6	1.3	1.3	1.2
Trichlorotrifluoroethane	0.59	0.69	0.40	0.59	0.57	0.55	0.79	1.1	0.63	0.54	0.45	0.57	0.58	0.62	0.47 J	0.69	0.58	0.49	0.46	0.64	0.56	0.74	0.50
Vinyl acetate	0.18 U	0.11 U	0.21 U	0.21 U	0.25 U	0.25 U	0.25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.1 U	2.5 U	2.5 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.50 U	0.71 U	0.71 U
Vinyl chloride	0.13 U	0.077 U	0.038 U	0.077 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.038 U	0.09 U	0.09 U	0.27	0.13 U	0.18	0.20	0.13 U	0.10 U	0.18	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-2-092409 9/24/2009	IA-2-100109 10/1/2009	IA-2-100809 10/8/2009	IA-2-012810 1/28/2010	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	
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.44	0.73	0.27 U	0.27 U	0.27 U	1.0	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	
1,1,1,2-Tetrachloroethane																0.62 U		0.37 U	0.37 U	0.44 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	0.21 U	0.10 U	0.21 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	0.27 U	0.27 U	0.27 U	0.16 U	0.082 U	0.16 U	0.19 U	
1,1-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.061 U	0.12 U	0.043	
1,1-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.045	
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	0.75 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	
1,2,4-Trimethylbenzene	0.39	0.27	0.52	0.55	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	
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	0.23 U	0.12 U	0.23 U	0.27 U	
1,2-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.18 U	0.21 U	
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.063	0.061 U	0.051	0.08	
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	0.14 U	0.069 U	0.14 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	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	0.59	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	0.080	0.26	
1,3-Butadiene	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	0.066 U	0.066 U	0.066 U	0.078 U	
1,3-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.18 U	0.08	
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.34	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.18 U	0.093	
1,4-Dioxane																0.18 U					
2-Butanone	2.3	0.81	1.0	2.1	0.70	0.44	0.30 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	
2-Hexanone	0.54	0.20 U	0.26	0.51	0.20 U	0.20 U	0.20 U	0.26	0.84	0.68	0.20 U	0.20 U	0.24	4.1 U	0.50	0.12 U	0.16	0.15	0.32		
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	0.15 U	0.15 U	0.086	0.19	
4-Methyl-2-pentanone	0.39	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.28	0.49	0.34	0.20 U	0.20 U	0.20 U	0.20 U	0.24	0.10	0.11	0.12	0.19	
Acetone	17	11	8.8	17	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	
Benzene	0.47	0.39	0.54	1.2	0.86	0.67	0.16 U	0.58	0.63	0.47	0.48	0.72	0.48	1.5	0.26	0.30	0.39	0.36	0.24	0.62	
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	0.16 U	0.16 U	0.16 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	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U	0.20 U	0.10 U	0.20 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	0.51 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	
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	0.12 U	0.12 U	0.12 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	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	
Carbon tetrachloride	0.40	0.46	0.42	0.31 U	0.40	0.31 U	0.31 U	0.43	0.47	0.5	0.52	0.50	0.48	0.31 U	0.62 [a]	0.52	0.49	0.48	0.45	0.43	
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	0.14 U	0.14 U	0.14 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	0.13 U	0.13 U	0.13 U	0.079 U	0.079 U	0.079 U	0.093 U	
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.47	0.40	0.24 U	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
Chloromethane	1.1	0.96	0.98	1.2	1.3	1.3	1.4	1.3	0.80	1.20	1.2	1.1	0.96	0.97	0.95	1.2	0.93	1.0	1.4	1.3	
cis-1,2-Dichloroethene	0.20 U	0.79	0.48	0.58	0.20 U	0.20 U	0.20 U	0.20 U	1.0	0.20 U	0.61	0.20 U	1.7	0.20 U	0.20 U	0.20 U	0.17	0.059 U	0.12 U	0.064	
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	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 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	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.20	0.17 U	0.17 U	0.17 U	0.10 U	0.10 U	0.10 U	0.26	
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	0.26 U	0.13 U	0.26 U	0.30 U	
Dichlorodifluoromethane	2.1	2.3	2.1	2.2	2.5	2.6	3.0	1.6	2.0	2.4	2.6	1.7	1.9	3.2	1.6	2.0	2.7	2.1	2.7	2.8	
Ethanol	6.7	7.8	6.2	14	35	17	20	4.4	4.9	5	7.6	9.0	2.7	10	2.5	8.5	2.1	2.1	10	9.8	
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	0.18 U	0.18 U	0.18 U	0.18 U	0.22	0.24	3.5	0.71	
Ethylbenzene	0.22	0.22 U	0.31	0.42	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	
Hexachlorobutadiene	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	0.32 U	0.32 U	0.32 U	0.37 U	
Hexane	0.42	0.71	1.0	0.61	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	
Isopropyl alcohol	5.7	3.3	0.25 U	0.25 U	3.6	0.25 U	0.25 U	0.63	3.2	0.12 U	1.2	0.25 U	0.25 U	2.0	1.2 U	4.9 U	2.9 U	0.76	2.9 U	2.8	
m,p-Xylene	0.93	0.78	1.1	1.3	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	
Methyl methacrylate													0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	
Methylene chloride	0.70 U	0.70 U	0.70 U	1.4	0.90	1.9	0.70 U	0.70 U	0.70 U	0.70 U	1.3	0.53	0.61	4.2	1.0	7.5	1.1	1.2	6.6	6.4	

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-2-092409 9/24/2009	IA-2-100109 10/1/2009	IA-2-100809 10/8/2009	IA-2-012810 1/28/2010	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	
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	0.11 U	0.11 U	0.11 U	0.18
n-Heptane	0.20 U	0.20 U	0.34	0.83	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.8	0.34	0.20 U	0.48	0.20 U	0.20 U	0.091	0.12 U	0.11	0.40	
o-Xylene	0.42	0.30	0.44	0.46	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	
Propylene (Propene)	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	0.87 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	
Styrene	0.21 U	0.21 U	0.21 U	0.41	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	
Tetrachloroethene	0.35	1.7	1.0	2.3	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	0.090	2.0	
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	1.6	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	0.10 U	
Toluene	1.1	1.2	1.5	2.4	0.93	0.64	0.19 U	0.80	1.3	0.91	1.3	2.2	0.41	2.9	0.55	0.99	1.6	0.24	0.90	2.6	
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 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	0.22 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	
Trichloroethene	0.27 U	0.99	0.57	0.79	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	0.20	
Trichlorofluoromethane	1.2	1.2	1.2	1.2	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	
Trichlorotrifluoroethane	0.47	0.46	0.54	0.46	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	
Vinyl acetate	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	0.35 U	0.18 U	3.5 U	0.18 U	0.11 U	0.21 U	0.21 U	0.25 U	
Vinyl chloride	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	0.14	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.090 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-2-010313	IA-2-031513	IA-2-060713	IA-2-090613	IA-2-121313	IA-2-030714	IA-2-061314	IA-2-091214	IA-2-121914	IA-2-032715	IA-3-011609	IA-3-020309	IA-3-021109	IA-3-021809	IA-3-022609	IA-3-041409	IA-3-042409	IA-3-091709	IA-3-092409	IA-3-100109	IA-3-100809	IA-3-012810	IA-3-020510		
1,1,1-Trichloroethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.055 U	0.16 J	0.19 U	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		
1,1,1,2-Tetrachloroethane	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.25 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.069 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	0.34 U	0.34 U	0.34 U	0.34 U	
1,1,2-Trichloroethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.11 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	0.27 U	0.27 U	
1,1-Dichloroethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.68	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,1-Dichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.15	0.04 U	0.14 U	0.14 U	0.35	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2,4-Trichlorobenzene	0.52 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.15 U	0.26 U	0.26 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	
1,2,4-Trimethylbenzene	0.98	0.13	0.43	0.20	0.17 U	0.57	0.27	0.2	0.17 U	0.25	0.25 U	0.36	0.68	0.61	0.25 U	0.18 U	0.25 U	0.29	0.40	0.25 U	0.39	0.44	0.25 U	0.25 U	
1,2-Dibromoethane (EDB)	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.077 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	0.38 U	0.38 U	
1,2-Dichlorobenzene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,2-Dichloroethane	0.16	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04	0.14 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloropropane	0.16 U	0.11	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.046 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	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	
1,3,5-Trimethylbenzene	0.28	0.17 U	0.17 U	0.17 U	0.17 U	0.17	0.17 U	0.059 J	0.17 U	0.079 J	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	0.42	0.25 U	
1,3-Butadiene	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.44	0.11	0.044 U	0.078 U	0.078 U	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	
1,3-Dichlorobenzene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dichlorobenzene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U	0.063 J	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dioxane																									
2-Butanone	5.1	2.4	4.2	2.1	1.2	1.8	1.6	4.9	0.92 J	1.7 J	20	4.2	4.6	4.0	1.7	1.6	2.5	2.0	2.6	0.70	1.5	1.9	2.0	2.0	
2-Hexanone	0.17	0.22	0.51	0.41	0.14 U	0.39	0.14 U	0.16	0.14 U	0.2	0.20 U	0.26	0.33	0.3	0.20 U	0.14 U	0.38	0.51	0.58	0.20 U	0.37	0.52	0.39	0.39	
4-Ethyltoluene	0.24	0.17 U	0.17 U	0.17 U	0.17 U	0.18	0.17 U	0.049 J	0.17 U	0.072 J	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	
4-Methyl-2-pentanone	3.6	0.14 U	0.54	0.46	0.18	0.57	1.1	1.3	0.14 U	0.84	0.20 U	0.29	0.34	0.20 U	0.14 U	0.22	0.20 U	0.42	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
Acetone	19	46	32	22	32	32	29	37	9.7	40	18	12	17	24	9.7	7.5	50	11	19	6.7	11	14	21	21	
Benzene	0.65	0.91	0.56	0.32	0.66	2.0	0.62	0.30	0.36	0.67	1.0	0.71	1.9	3.1	0.69	0.6	0.46	0.41	0.5	0.39	0.46	1.3	0.86	0.86	
Benzyl chloride	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.052 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	0.26 U	0.26 U	
Bromodichloromethane	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.067 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	0.33 U	0.33 U	
Bromoform	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.21 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	0.51 U	0.51 U	
Bromomethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.078 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	0.19 U	0.19 U	
Carbon disulfide	1.9	0.47	0.39	0.33	0.17	0.17	0.56	0.49 J	1.1 U	0.29 J	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	
Carbon tetrachloride	0.56 [a]	0.45	0.58	0.45	0.46	0.41	0.42	0.43	0.37	0.36	0.34	0.45	0.52	0.6 [a]	0.43	0.22 U	0.42	0.4	0.43	0.4	0.42	0.31 U	0.42	0.42	
Chlorobenzene	0.58	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.046 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	0.23 U	0.23 U	
Chloroethane	0.093 U	0.14	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.053 U	0.093 U	0.061 J	0.13 U	0.13 U	0.43	0.13 U	0.13 U	0.10 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	0.17 U	0.15	0.17 U	0.17 U	0.37	0.29	0.53	1	0.13 J	0.41	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	0.53	
Chloromethane	1.0	2.7	1.7	0.98	1.1	1.3	1.2	0.71	0.8	1.4	1.1	0.98	1.2	1.4	1.1	1.2	0.91	1.1	0.97	1.0	1.2	2.9	2.9	2.9	
cis-1,2-Dichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U	1.9	0.20 U	1.1	1.1	0.55	0.61	1.5	0.20 U	0.20 U	0.94	0.49	0.59	0.20 U	0.20 U	
cis-1,3-Dichloropropene	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.045 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	0.22 U	0.22 U	
Cyclohexane	1.9	0.12 U	0.12 U	0.12 U	0.12 U	0.32	0.22	0.069 U	0.12 U	0.12 U	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	
Dibromochloromethane	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.3 U	0.085 U	0.3 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	0.43 U	0.43 U	
Dichlorodifluoromethane	2.6	1.7	3.3	1.8	2.6	1.5	2	2.1	1.8	1.4	1.9	2.3	2.5	2.9	2.6	2.0	2.9	2.1	2.1	2.2	2.2	2.3	2.5	2.5	
Ethanol	8.1	380	66	46	89	130	240	140	27	150	5.5	9.2	13	18	7.9	4.2	9.0	6.2	7.5	4.5	5.0	13	40	40	
Ethyl acetate	0.59	2	0.39	0.28	13	0.36	0.25	0.35	0.17	0.45	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	
Ethylbenzene	4.1	0.25	0.39	0.17	0.15 U	0.56	0.27	0.14	0.076 J	0.2	0.25	0.29	0.64	0.77	0.22 U	0.16	0.22 U	0.22 U	0.22 U	0.23	0.22 U	0.24	0.43	0.22 U	
Hexachlorobutadiene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.21 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	0.53 U	0.53 U	
Hexane	15	2.3	1.6	0.65	4.9	1.2	0.74	0.56 J	0.29 J	5	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	0.44	
Isopropyl alcohol	3.4 U	3.6	3.4 U	1.7	9.7	4.1	3.4 U	4.4	1.5 J	7.3	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	9.9	
m,p-Xylene	17	0.92	1.4	0.48	0.25	1.6	0.88	0.44	0.31	0.61	0.75	0.9	2.0	2.6	0.65	0.57	0.66	0.70	0.99	0.65	0.87	1.2	0.69	0.69	
Methyl methacrylate	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.082 U	0.14 U	0.14 U															
Methylene chloride	1.1	3.6	1.5	1.1	7.7	0.65	0.65	0.56 J	0.27 J	0.6 J	2.2	31	3.1	3.5	33	1.2	3.6	2.4	0.70 U	0.70 U	0.70 U	1.4	0.70 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-2-010313 1/3/2013	IA-2-031513 3/15/2013	IA-2-060713 6/7/2013	IA-2-090613 9/6/2013	IA-2-121313 12/13/13	IA-2-030714 03/07/14	IA-2-061314 6/13/2014	IA-2-091214 9/12/2014	IA-2-121914 12/19/2014	IA-2-032715 3/27/2015	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	
Methyl-t-butyl ether	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.072 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	0.18 U	0.18 U
n-Heptane	3.1	0.33	0.41	0.2	0.14 U	0.64	0.39	0.18	0.14 U	0.21	0.22	0.20 U	0.61	0.77	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.24	0.24	0.73	0.20 U
o-Xylene	5.1	0.33	0.52	0.2	0.15 U	0.66	0.34	0.17	0.088 J	0.25	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	
Propylene (Propene)	2.4 U	2.4 U	2.4 U	0.7	2.4 U	2.4 U	2.7	1.4 U	2.4 U	2.4 U	0.18 U	0.18 U	0.090 U	0.090 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
Styrene	0.45	0.12	0.15 U	0.17	0.15 U	0.20	0.35	0.40	0.15 U	0.18	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	0.21 U	0.40	0.21 U
Tetrachloroethene	0.24	0.18	0.64	0.25	0.24 U	0.28	0.34	0.13	0.32	0.65	6.1 [a]	0.56	4.3	3.3	1.9	2.2	7.1 [a]	0.34 U	0.34 U	2.0	1.1	2.2	0.34 U	
Tetrahydrofuran	0.24	0.10 U	0.10 U	0.10 U	0.10 U	0.058	0.12	0.09	0.1 U	0.3	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	
Toluene	5.6	1.5	2.8	1.3	1.0	3.2	1.9	1.6	0.6	1.4	1.7	1.5	4.7	5.8	2.1	1.0	1.2	1.2	1.1	0.73	1.1	2.5	0.78	
trans-1,2-Dichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
trans-1,3-Dichloropropene	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.045 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	0.22 U	0.22 U
Trichloroethene	0.19 U	0.053	0.19 U	0.19 U	0.19 U	0.23	0.19 U	0.064	0.14 J	0.079 J	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	
Trichlorofluoromethane	2.7	1.3	2.0	1.3	1.6	1.2	1.3	1.3	1.4	1.3	1.9	1.3	1.8	2.8	1.8	1.2	1.3	1.4	1.2	1.2	1.2	1.2	1.2	1.3
Trichlorotrifluoroethane	0.56	0.70	1.7	0.60	0.57	0.46	0.54	0.56	0.63	0.48 J	0.60	0.58	0.49	0.44	0.69	0.53	0.74	0.51	0.46	0.49	0.47	0.49	0.52	
Vinyl acetate	0.25 U	0.25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.4 U	2.5 U	2.5 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.50 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
Vinyl chloride	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.09 U	0.026 U	0.09 U	0.09 U	0.23	0.13 U	0.19	0.21	0.13 U	0.10 U	0.17	0.13 U	0.13 U	0.18	0.13 U	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-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	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-3-060713 6/7/2013	IA-3-090613 9/6/2013	IA-3-121313 12/13/13	
1,1,1-Trichloroethane	0.29	0.86	0.27 U	1.2	0.27 U	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	0.19 U	0.19 U	0.19 U	
1,1,1,2-Tetrachloroethane													0.62 U	0.37 U	0.37 U	0.44 U	0.44 U	0.44 U	0.44 U	0.46	0.44 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	0.10 U	0.21 U	0.24 U	0.24 U	0.24 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	0.19 U	0.19 U	0.19 U	
1,1-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
1,1-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 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	0.45 U	0.45 U	0.45 U	0.52 U	0.52 U	0.52 U	0.26 U	0.26 U	0.26 U	
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.26	0.34	0.46	0.60	0.25 U	0.49	0.25 U	0.25 U	0.071	0.10	0.19	0.47	0.17 U	0.076	0.26	0.33	0.17 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	0.23 U	0.12 U	0.23 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
1,2-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.21 U	0.21 U	
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.056	0.061 U	0.051	0.14 U	0.14 U	0.14 U	0.14 U	0.14 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	0.23 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	0.16 U	0.16 U	
1,2-Dichlorotrifluoroethane	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	0.15 U	0.15 U	0.074	0.22	0.17 U	0.17 U	0.17 U	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	0.11 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	0.078 U	0.078 U	
1,3-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.21 U	0.21 U	
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.18 U	0.059	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	
1,4-Dioxane												0.18 U									
2-Butanone	1.2	1.6	0.51	1.0	2.2	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	2.0	2.9	0.66	
2-Hexanone	0.22	0.39	0.20 U	0.29	0.52	0.67	0.20 U	0.20 U	0.20 U	4.1 U	0.24	0.093	0.12 U	0.33	0.22	0.14 U	0.32	0.28	0.31	0.14 U	
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	0.15 U	0.074	0.15	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
4-Methyl-2-pentanone	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.38	0.34	0.20 U	0.20 U	0.20 U	0.20 U	0.084	0.12 U	0.19	0.21	0.14 U	0.14 U	0.19	0.36	0.14 U	
Acetone	6.7	7.3	3.8	7.7	15	21	11	9.7 B	9.7 B	11 B	13	7.2	3.9	13	12	6.7	12	28	16	14	
Benzene	0.67	0.53	0.6	0.67	0.47	0.51	0.72	0.47	1.4	0.29	0.30	0.39	0.35	0.23	0.66	0.53	0.75	0.23	0.75	0.54	
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	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	0.34 U	0.34 U	0.34 U	0.34 U	0.20 U	0.10 U	0.20 U	0.24 U	0.24 U	0.24 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	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	0.31	0.14 U	0.14 U	0.14 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	1.1 U	1.1 U	0.25	1.1 U	
Carbon tetrachloride	0.31 U	0.43	0.43	0.49	0.54	0.57 [a]	0.41	0.45	0.6 [a]	0.64 [a]	0.51	0.50	0.49	0.43	0.38	0.32	0.39	0.42	0.47	0.47	
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	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	0.098	0.093 U	0.093 U	
Chloroform	0.48	0.24 U	0.24 U	0.24 U	0.24 U	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	0.17 U	0.21	0.17 U	
Chloromethane	1.3	1.2	1.1	0.85	1.2	1.2	1.1	0.98	0.97	1.2	1.4	0.84	1.1	1.4	1.3	0.95	1.3	1.3	1.1	1.0	
cis-1,2-Dichloroethene	0.20 U	0.59	0.20 U	1.3	0.20 U	0.51	0.20 U	1.7	0.20 U	0.20 U	0.20 U	0.17	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.19	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	0.23 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	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	0.18	0.17 U	0.17 U	0.17 U	0.17 U	0.10 U	0.10 U	0.10 U	0.27	0.12 U	0.12 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	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
Dichlorodifluoromethane	2.5	3.0	1.6	2.1	2.5	2.7	1.5	2.1	3.1	2.1	1.8	2.6	2.1	2.8	2.8	2.5	1.8	2.7	1.8	2.7	
Ethanol	17	38	3.6	5.3	5.5	7.0	8.0	2.4	9.4	3.6	5.8	2.1	2.2	4.4	6.6	2.7	2.5	21	27	11	
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	0.11 U	0.73	0.37	0.51	0.68	0.44	0.28	0.34	2.6	
Ethylbenzene	0.22 U	0.22 U	0.22 U	0.26	0.23	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	0.18	0.36	0.15 U	
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	0.37 U	0.37 U	0.37 U	
Hexane	1.0	0.29	0.19	1.4	0.55	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	0.68	0.94	0.76	
Isopropyl alcohol	0.25 U	2.0	0.64	3.4	0.12 U	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	3.4 U	3.4 U	1.9	
m,p-Xylene	0.43 U	0.43 U	0.46	0.80	0.99	1.3	1.6	0.43 U	1.4	0.55	0.54	0.38	0.24	0.40	1.5	1.0	0.31	0.72	1.1	0.19	
Methyl methacrylate								0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.12 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18	0.14 U	
Methylene chloride	2.3	0.70 U	0.70 U	0.70 U	0.35 U	1.2	0.57	0.55	4.6	8.0	1.7 U	1.5	1.1	1.3	2.7	3.3	2.1	1.1	1.2	1.3	

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-3-021210 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	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-3-060713 6/7/2013	IA-3-090613 9/6/2013	IA-3-121313 12/13/13
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	0.22	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
n-Heptane	0.20 U	0.20 U	0.20 U	0.36	0.20 U	0.20 U	0.32	0.20 U	0.44	0.20 U	0.20 U	0.074	0.12 U	0.11	0.41	0.14 U	0.083	0.15	0.83	0.14 U
o-Xylene	0.22 U	0.22 U	0.22 U	0.32	0.43	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	0.26	0.46	0.15 U
Propylene (Propene)	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	1.3	1.8	2.4 U	1.1	2.4 U	2.4 U	2.4 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.23	0.34	0.26	0.21 U	0.21 U	0.21 U	0.21 U	0.041	0.13 U	0.10	0.14	0.15 U	0.15 U	0.15 U	0.3	0.15 U
Tetrachloroethene	0.34 U	1.3	0.34 U	4.8	0.35	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	0.30	0.24 U	0.24 U
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.16	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	0.10 U	0.14	0.73	0.10 U
Toluene	0.61	0.46	0.81	1.5	0.93	1.1	2.3	0.41	2.7	0.58	0.95	1.5	0.27	0.72	2.8	0.62	0.56	0.90	4.6	0.66
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 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	0.16 U	0.16 U	0.16 U
Trichloroethene	0.27 U	0.40	0.27 U	1.5	0.27 U	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	0.19 U	0.19 U	0.19 U
Trichlorofluoromethane	1.4	1.6	1.3	1.2	1.3	1.5	2.8	1.2	1.7	1.6	1.7	1.0	0.92	1.6	1.5	1.2	1.3	1.5	1.6	1.4
Trichlorotrifluoroethane	0.57	0.52	0.57	0.45	0.52	0.54	0.45	0.55	0.67	0.74	0.54	0.69	0.44	0.56	0.54	0.59	0.65	0.65	0.62	0.61
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	2.5 U	2.5 U	2.5 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.14	0.13 U	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	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 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-3-030714 03/07/14	IA-3-061314 6/13/2014	IA-3-091214 9/12/2014	IA-3-121914 12/19/2014	IA-3-032715 3/27/2015	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	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	
1,1,1-Trichloroethane	0.19 U	0.19 U	0.19	0.16 J	0.05 J	10	0.62	1.1	1.1	0.45	1.5	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	
1,1,1,2-Tetrachloroethane	0.44 U	0.44 U	0.25 U	0.44 U	0.44 U																			
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.069 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	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	
1,1,2-Trichloroethane	0.19 U	0.19 U	0.11 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	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
1,1-Dichloroethane	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U	0.73	0.20 U	0.20 U	0.20 U	0.31	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,1-Dichloroethene	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U	0.42	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2,4-Trichlorobenzene	0.26 U	0.26 U	0.15 U	0.26 U	0.26 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	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	
1,2,4-Trimethylbenzene	0.53	0.23	0.32	0.12 J	0.12 J	0.26	0.37	0.74	0.65	0.29	0.18 U	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	
1,2-Dibromoethane (EDB)	0.27 U	0.27 U	0.077 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	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	
1,2-Dichlorobenzene	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,2-Dichloroethane	0.14 U	0.14 U	0.032 J	0.14 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloropropane	0.16 U	0.16 U	0.046 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	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	0.17 U	0.17 U	0.069 J	0.17 U	0.038 J	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	
1,3-Butadiene	0.55	0.078 U	0.044 U	0.078 U	0.045 J	0.11 U	0.11 U	0.33	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	0.21 U	0.21 U	0.12 U	0.21 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dichlorobenzene	0.21 U	0.21 U	0.12 U	0.068 J	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	
1,4-Dioxane																								
2-Butanone	1.1	1.5	2.1 J	1.1 J	1.4 J	21	4.4	6.0	3.2	2.5	1.1	1.6	1.5	2.0	1.3	1.2	0.30 U	0.69	1.2	0.50	1.6	1.5	2.2	
2-Hexanone	0.14 U	0.14 U	0.21	0.14 U	0.27	0.20 U	0.33	0.73	0.39	0.20 U	0.14 U	0.20 U	0.29	0.45	0.32	0.27	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.39	0.54
4-Ethyltoluene	0.18	0.17 U	0.051 J	0.059 J	0.086 J	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	0.25 U
4-Methyl-2-pentanone	0.17	0.35	0.26	0.27	0.15	0.20 U	0.20 U	0.43	0.28	0.20 U	0.14 U	0.20 U	0.20 U	0.32	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Acetone	11	15	42	29	11	17	10	15	20	7.8	7.9	20	9.3	16	9.3	10	2.3	4.9	5.9	2.5	6.9	8.7	15	
Benzene	2.4	0.41	0.29	0.5	0.5	1.1	0.68	1.8	3.0	0.76	0.59	0.44	0.40	0.43	0.37	0.48	0.16 U	0.88	0.66	0.54	0.57	0.64	0.48	
Benzyl chloride	0.18 U	0.18 U	0.052 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	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.24 U	0.24 U	0.067 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	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.36 U	0.36 U	0.21 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	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.14 U	0.16	0.099	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	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	1.1 U	0.15	0.16 J	0.24 J	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	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.31
Carbon tetrachloride	0.45	0.44	0.42	0.34	0.36	0.40	0.43	0.50	0.58 [a]	0.46	0.22 U	0.45	0.41	0.40	0.46	0.40	0.31 U	0.43	0.31 U	0.42	0.43	0.47	0.52	
Chlorobenzene	0.16 U	0.16 U	0.046 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	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.093 U	0.093 U	0.053 U	0.093 U	0.093 U	0.13 U	0.13 U	0.41	0.13 U	0.13 U	0.10 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	0.17 U	0.24	0.28	0.4	0.065 J	0.24 U	0.24 U	0.24 U	0.24 U	0.26	0.17 U	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
Chloromethane	1.3	1.2	0.7	0.9	1.0	1.2	0.99	1.4	1.3	1.0	1.1	1.2	0.90	1.1	1.0	1.0	1.3	1.3	1.2	1.1	0.77	1.2	1.2	
cis-1,2-Dichloroethene	0.14 U	0.14 U	0.04 U	0.46	0.14 U	2.4	0.20 U	1.1	1.1	0.98	0.61	1.7	0.20 U	0.20 U	0.84	0.48	0.20 U	0.20 U	0.59	0.20 U	1.3	0.20 U	0.20 U	
cis-1,3-Dichloropropene	0.16 U	0.16 U	0.045 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	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.34	0.12 U	0.069 U	0.12 U	0.12 U	0.17 U	0.17 U	0.44	0.64	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	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.30 U	0.3 U	0.085 U	0.3 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	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	1.5	2.1	2.2	1.8	1.4	1.9	2.2	2.5	2.8	2.6	2.1	2.4	2.1	2.0	2.2	2.2	2.4	2.5	2.6	3.0	1.7	2.1	2.5	
Ethanol	24	64	41	580	8.7	5.3	8.9	12	18	8.0	5.2	5.5	6.0	6.5	4.9	5.6	7.7	34	17	31	3.9	4.9	6.1	
Ethyl acetate	2.5	0.13 U	0.25	0.47	0.27	0.37 U	0.37 U	0.18 U	0.19	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	0.18 U
Ethylbenzene	0.55	0.22	0.17	0.14 J	0.13 J	0.25	0.29	0.65	0.78	0.29	0.16	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	
Hexachlorobutadiene	0.37 U	0.37 U	0.21 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	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	
Hexane	2.1	0.44	0.43 J	0.41 J	5.1	0.90	0.66	1.2	1.7	0.66	0.43	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	
Isopropyl alcohol	2.1	5.2	4.8	7.7	1.9 J	3.5	3.3	4.7	4.8	3.9	0.18 U	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	
m,p-Xylene	1.6	0.84	0.62	0.58	0.37	0.76	0.89	2.1	2.6	0.89	0.58	0.49	0.61	0.93	0.69	1.0	0.43 U	0.81	0.43 U	0.43 U	0.49	0.80	0.98	
Methyl methacrylate	0.14 U	0.14 U	0.16	0.14 U	0.14 U																			
Methylene chloride	2.2	0.77	0.58 J	0.29 J	2.1	2.3	29	1.7	2.5	1.3	1.9	2.2	0.70 U	9.7	0.70 U	0.70 U	1.5	0.70 U	1.9	0.70 U	0.70 U	0.70 U	0.35 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-3-030714	IA-3-061314	IA-3-091214	IA-3-121914	IA-3-032715	IA-4-011609	IA-4-020309	IA-4-021109	IA-4-021809	IA-4-022609	IA-4-041409	IA-4-042409	IA-4-091709	IA-4-092409	IA-4-100109	IA-4-100809	IA-4-012810	IA-4-020510	IA-4-021210	IA-4-021910	IA-4-032610	IA-4-043010	IA-4-052810	
Methyl-t-butyl ether	0.13 U	0.13 U	0.072 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	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.65	0.43	0.52	0.14 U	0.13 J	0.23	0.20 U	0.58	0.79	0.21	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.26	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
o-Xylene	0.62	0.30	0.22	0.18	0.14 J	0.27	0.33	0.78	0.87	0.33	0.22	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	0.30	0.44
Propylene (Propene)	2.4 U	2.4 U	1.8	2.4 U	2.4 U	0.18 U	0.18 U	0.090 U	0.090 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	0.18	0.16	0.15	0.12 J	0.15 U	0.21 U	0.21 U	0.22	0.23	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	0.21 U	0.22
Tetrachloroethene	0.24 U	0.30	0.12	1.90	0.24 U	7.3 [a]	0.58	4.4	3.4	3.4	2.4	7.9 [a]	0.75	0.34 U	2.0	1.1	0.34 U	0.34 U	0.34 U	1.4	0.34 U	4.4	0.44	
Tetrahydrofuran	0.10 U	0.13	0.16	0.1 U	0.1 U	13	1.2	1.3	0.47	0.34	0.21	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	0.15 U	0.19
Toluene	3.4	1.8	2.5	1.3	0.63	1.8	1.3	4.3	5.8	2.3	1.0	1.0	1.1	1.3	0.76	1.2	0.19 U	0.79	0.63	0.47	0.83	1.4	0.98	
trans-1,2-Dichloroethene	0.14 U	0.14 U	0.04 U	0.14 U	0.14 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.20 U	0.20 U	1.1	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
trans-1,3-Dichloropropene	0.16 U	0.16 U	0.045 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	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.26	0.19 U	0.075	0.64	0.072 J	4.7	0.48	1.7	1.5	0.88	0.78	2.0	0.27 U	0.27 U	1.1	0.57	0.27 U	0.27 U	0.27 U	0.40	0.27 U	1.4	0.27 U	
Trichlorofluoromethane	1.7	1.4	1.3	1.3	1	2.0	1.3	1.6	3.0	1.7	1.3	1.3	1.2	1.5	1.2	1.2	0.93	1.3	1.4	1.6	1.5	1.3	1.3	
Trichlorotrifluoroethane	0.51	0.59	0.57	0.63	0.47 J	0.72	0.59	0.51	0.45	0.57	0.54	0.61	0.49	0.48	0.47	0.50	0.38 U	0.55	0.58	0.55	1.3	0.48	0.51	
Vinyl acetate	2.5 U	2.5 U	1.4 U	2.5 U	2.5 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.50 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	0.71 U	0.36 U	0.71 U	0.18 U
Vinyl chloride	0.090 U	0.09 U	0.026 U	0.09 U	0.09 U	0.29	0.13 U	0.20	0.22	0.13 U	0.10 U	0.20	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

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-4-070110 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	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	IA-4-060713 6/7/2013	IA-4-090613 9/6/2013	IA-4-121313 12/13/13	IA-4-030714 03/07/14	IA-4-061314 6/13/2014	IA-4-091214 9/12/2014	IA-4-121914 12/19/2014	IA-4-032715 3/27/2015
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.14	0.082 U	0.16 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
1,1,1,2-Tetrachloroethane								0.62 U		0.37 U	0.37 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 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	0.10 U	0.21 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
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	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.061 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,4-Trichlorobenzene	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	0.52 U	0.52 U	0.52 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.15 U	0.26 U
1,2,4-Trimethylbenzene	0.41	0.44	0.25 U	0.49	0.25 U	0.25 U	0.094	0.15 U	0.19	0.38	0.90	0.13	0.47	0.20	0.17 U	0.56	0.26	0.17	0.14 J	0.25
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	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.077 U	0.27 U
1,2-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18	0.18 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	0.12 U	0.21 U
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.063	0.061 U	0.12 U	0.14 U	0.16	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 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	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.046 U	0.16 U
1,2-Dichlorotetrafluoroethane	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	0.15 U	0.15 U	0.080	0.12	0.27	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.098 U	0.17 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	0.078 U	0.078 U	0.078 U	0.47	0.11	0.044 U	0.078 U	0.078 U
1,3-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.21 U
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 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	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.12 U	0.08 J
1,4-Dioxane							0.18 U													0.063 J
2-Butanone	4.8	2.4	0.96	1.0 B	2.9 U	5.9 U	1.0	1.5	0.97	2.3	4.7	2.3	3.9	0.95	1.2	1.1	2.9	4.6	1.1 J	1.9 J
2-Hexanone	1.0	0.59	0.20 U	0.20 U	0.21 J	0.35	0.086	0.32	0.098	0.18	0.19	0.25	0.51	0.14 U	0.14 U	0.15	0.36	0.2	0.14 U	0.25
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	0.068	0.12	0.22	0.17 U	0.17 U	0.17 U	0.17 U	0.18	0.17 U	0.098 U	0.055 J	0.069 J
4-Methyl-2-pentanone	0.43	0.45	0.20 U	0.20 U	0.20 U	0.20 U	0.098	0.15	0.13	0.14 U	3.3	0.28	0.56	0.47	0.16	0.48	1.3	1	0.34	0.89
Acetone	31	19	13 B	12 B	12 B	15	7.4	6.8	9.1	12	17	44	36	18	29	29	37	38	27	42
Benzene	0.47	0.66	0.49	1.4	0.31	0.30	0.38	0.35	0.23	0.64	0.67	0.82	0.55	0.47	0.56	2.2	0.68	0.39	0.47	0.69
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	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.052 U	0.18 U
Bromodichloromethane	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U	0.34 U	0.20 U	0.10 U	0.20 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	0.067 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	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.21 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	0.24	0.14 U	0.14 U	0.13	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.078 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.93 U	0.93 U	0.052	1.1 U	1.6	0.52	0.38	0.39	0.15	0.19	0.62	0.46 J	0.27 J	0.31 J
Carbon tetrachloride	0.48	0.44	0.46	0.57 [a]	0.68 [a]	0.52	0.48	0.47	0.43	0.36	0.54	0.41	0.65 [a]	0.45	0.46	0.45	0.40	0.39	0.37	0.35
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	0.47	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.046 U	0.16 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	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.053 U	0.093 U
Chloroform	0.24 U	3.3	0.24 U	0.24 U	0.24 U	0.24 U	0.085	0.073 U	0.13	0.19	0.17 U	0.11	0.17 U	0.27	0.44	0.46	0.84	1.2	0.69	0.39
Chloromethane	1.2	1.0	0.95	0.95	1.1	1.5	1.4	1.0	1.3	1.3	1.1	1.3	1.6	1.0	1.1	1.4	1.2	0.89	0.97	1.2
cis-1,2-Dichloroethene	0.44	0.20 U	1.8	0.20 U	0.20 U	0.20 U	0.19	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18	0.14 U	0.14 U	0.14 U	0.04 U	0.87	0.14 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	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.045 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	0.10 U	0.10 U	0.10 U	0.26	2.1	0.12 U	0.12 U	0.12 U	0.12 U	0.33	0.12 U	0.069 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	0.26 U	0.13 U	0.26 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.085 U	0.3 U	0.3 U
Dichlorodifluoromethane	2.6	1.5	2.0	3.2	1.8	1.7	2.8	2.0	2.9	2.8	2.8	1.7	3.3	1.8	2.7	1.3	2.1	2.1	1.7	1.4
Ethanol	8.7	9.8	3.4	8.9	5.3	7.0	2.4	2.5	9.4	7.3	7.5	46	79	71	91	83	240	150	260	190
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.26	0.18 U	0.18 U	0.16	0.21	0.38	2.4	0.13 U	0.73	0.94	0.13 U	0.13 U	0.88	0.26	0.38	0.46	0.69
Ethylbenzene	0.29	0.44	0.22 U	0.49	0.22 U	0.22 U	0.16	0.17	0.14	0.38	4.1	0.32	0.43	0.19	0.15 U	0.57	0.27	0.12	0.14 J	0.19
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	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.21 U	0.37 U	0.37 U
Hexane	2.8	0.61	0.38	1.7	1.0	7.0 U	0.35	0.55	0.47	5.0	17	0.89	2.8	0.53	4.9 U	1.3	0.75	0.58 J	0.44 J	5.6
Isopropyl alcohol	1.8	8.3	0.48	1.7	1.2 U	4.9 U	2.9 U	2.9 U	2.9 U	1.4	2.6	3.4 U	4.0	1.6	8.4	4.4	3.9	4.8	8.2	7.1
m,p-Xylene	1.1	1.4	0.43 U	1.4	0.41 J	0.53	0.41	0.27	0.38	1.2	17	1.1	1.6	0.53	0.28	1.6	0.86	0.4	0.56	0.62
Methyl methacrylate			0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.12 U	0.13	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.082 U	0.14 U	0.14 U
Methylene chloride	7.7	0.68	0.79	5.1	3.2	1.7 U	1.5	2.0	0.72	12	1.3	0.97	3.1	0.89	0.69	0.72	0.61	0.64 J	0.29 J	1.5

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-4-070110 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	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	IA-4-060713 6/7/2013	IA-4-090613 9/6/2013	IA-4-121313 12/13/13	IA-4-030714 03/07/14	IA-4-061314 6/13/2014	IA-4-091214 9/12/2014	IA-4-121914 12/19/2014	IA-4-032715 3/27/2015
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	0.19	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
n-Heptane	0.22	0.32	0.20 U	0.51	0.20 U	0.20 U	0.071	0.12 U	0.11	0.41	1.6	0.32	0.53	0.16	0.14 U	0.66	0.39	0.17	0.11 J	0.22
o-Xylene	0.50	0.57	0.22 U	0.53	0.22 U	0.22 U	0.15	0.11	0.17	0.41	5.1	0.43	0.57	0.23	0.15 U	0.66	0.33	0.16	0.17	0.25
Propylene (Propene)	1.1	0.35 U	0.86 U	0.86 U	0.86 U	3.4 U	2.1 U	2.1 U	2.1 U	1.7	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	3.0	1.4 U	2.4 U	2.4 U
Styrene	0.29	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.077	0.092	0.55	0.093	0.52	0.099	0.15 U	0.15 U	0.15 U	0.23	0.46	0.4	0.15 J	0.19
Tetrachloroethene	1.1	0.34 U	3.4	5.0	0.34 U	0.45	1.2	0.31	0.12	1.7	0.18	0.21	0.45	0.30	0.24 U	0.31	0.32	0.23	3.2	0.98
Tetrahydrofuran	0.24	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.076	0.088 U	0.055	0.10 U	0.28	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12	0.094	0.1 U	0.24
Toluene	1.0	2.0	0.43	2.7	0.56	0.95	1.6	0.32	0.80	2.9	4.8	1.5	3.0	1.4	0.75	3.4	1.9	1.4	1.4	1.4
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 U	0.059 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.04 U	0.14 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	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	0.16 U
Trichloroethene	0.44	0.27 U	1.6	0.27 U	0.27 U	0.27 U	0.35	0.15	0.052	0.12	0.19 U	0.057	0.19 U	0.19 U	0.19 U	0.24	0.19 U	0.054 U	1.2	0.083 J
Trichlorofluoromethane	1.9	2.4	1.2	1.8	1.4	1.8	1.3	0.87	1.5	1.7	2.8	1.2	2.2	1.3	1.5	1.3	1.4	1.3	1.3	1.4
Trichlorotrifluoroethane	0.59	0.43	0.54	0.70	0.71	0.52	0.71	0.44	0.56	0.59	0.60	0.66	1.6	0.65	0.58	0.49	0.54	0.55	0.62	0.52 J
Vinyl acetate	0.18 U	0.36 U	0.38	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	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.4 U	2.5 U	2.5 U
Vinyl chloride	0.13 U	0.13 U	0.16	0.13 U	0.13 U	0.13 U	0.077 U	0.038 U	0.077 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.09 U	0.026 U	0.072 J	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									
	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	0.45	0.52	0.65	0.57	0.51	0.44	0.69	0.50	0.49	0.53
1,1,1,2-Tetrachloroethane										
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
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
1,1-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	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)	0.38 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	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
1,2-Dichloroethane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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
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	0.25 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	0.11 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
1,4-Dichlorobenzene	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
1,4-Dioxane										
2-Butanone	3.3	3.4	2.1	2.6	2.0	1.6	3.1	2.5	2.6	1.4
2-Hexanone	0.73	0.66	0.38	0.51	0.37	0.38	0.61	0.48	0.43	0.29
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
4-Methyl-2-pentanone	0.42	0.39	0.32	0.36	0.54	0.27	0.32	0.30	0.61	0.23
Acetone	12	13	10	11	8.5	7.7	13	11	9.8	6.9
Benzene	0.54	0.60	0.67	0.55	0.56	0.51	0.53	0.60	0.51	0.57
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
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
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
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
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
Carbon tetrachloride	0.7 [a]	0.68 [a]	0.71 [a]	0.68 [a]	0.68 [a]	0.63 [a]	0.68 [a]	0.7 [a]	0.64 [a]	0.66 [a]
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
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
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
Chloromethane	1.0	0.98	1.0	0.95	1.0	1.0	0.92	1.1	0.91	1.2
cis-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21	0.20 U	0.20 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
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
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
Dichlorodifluoromethane	2.5	2.3	2.6	2.4	2.7	2.4	2.4	2.8	2.3	2.7
Ethanol	65	9.0	6.5	5.9	6.0	5.6	5.9	14	44	14
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
Ethylbenzene	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	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	1.1	0.21	0.18 U	0.18	0.24	0.18 U	0.19	0.21	0.20	0.18 U
Isopropyl alcohol	3.3	3.4	3.7	3.5	3.6	3.4	4.4	3.6	2.8	3.2
m,p-Xylene	0.58	0.57	0.58	0.55	0.49	0.50	0.48	0.53	1.0	0.50
Methyl methacrylate										
Methylene chloride	5.9	1.5	1.5	1.6	1.9	1.6	1.5	1.6	1.6	1.4

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									
	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
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
n-Heptane	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
o-Xylene	0.28	0.28	0.27	0.27	0.25	0.26	0.25	0.27	0.34	0.26
Propylene (Propene)	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
Styrene	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	0.47	0.47	0.54	0.66	0.64	0.60	0.73	0.53	0.46	0.46
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.20	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	0.73	0.7	0.58	0.59	0.51	0.53	0.57	0.53	0.54	0.47
trans-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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
Trichloroethene	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	1.3	1.2	1.1	1.4	1.3	1.1	1.4	1.0	1.4
Trichlorotrifluoroethane	0.63	0.60	0.65	0.62	0.64	0.57	0.59	0.68	0.62	0.58
Vinyl 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
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

Notes:

[a] Carbon tetrachloride and 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

J - Indicates compound was detected at an estimated value.

ug/m³ - micrograms per cubic meter

Prepared by / Date: AKN 04/08/15

Checked by / Date: MAM 04/20/15

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

**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
6/7/2013	-0.121	-0.681	-0.787	-0.223
9/6/2013	-0.421	-0.743	-0.766	-0.265
12/13/2013	-0.435	-0.580	-0.031	-0.190
3/7/2014	-0.311	-0.541	-0.741	-0.157
6/13/2014	-0.538	-0.627	-0.010	-0.058
9/12/2014	-0.549	-0.528	-0.295	-0.002
12/19/2014	-0.492	-0.427	-0.002	-0.143
3/27/2015	-0.433	-0.655	-0.011	-0.108

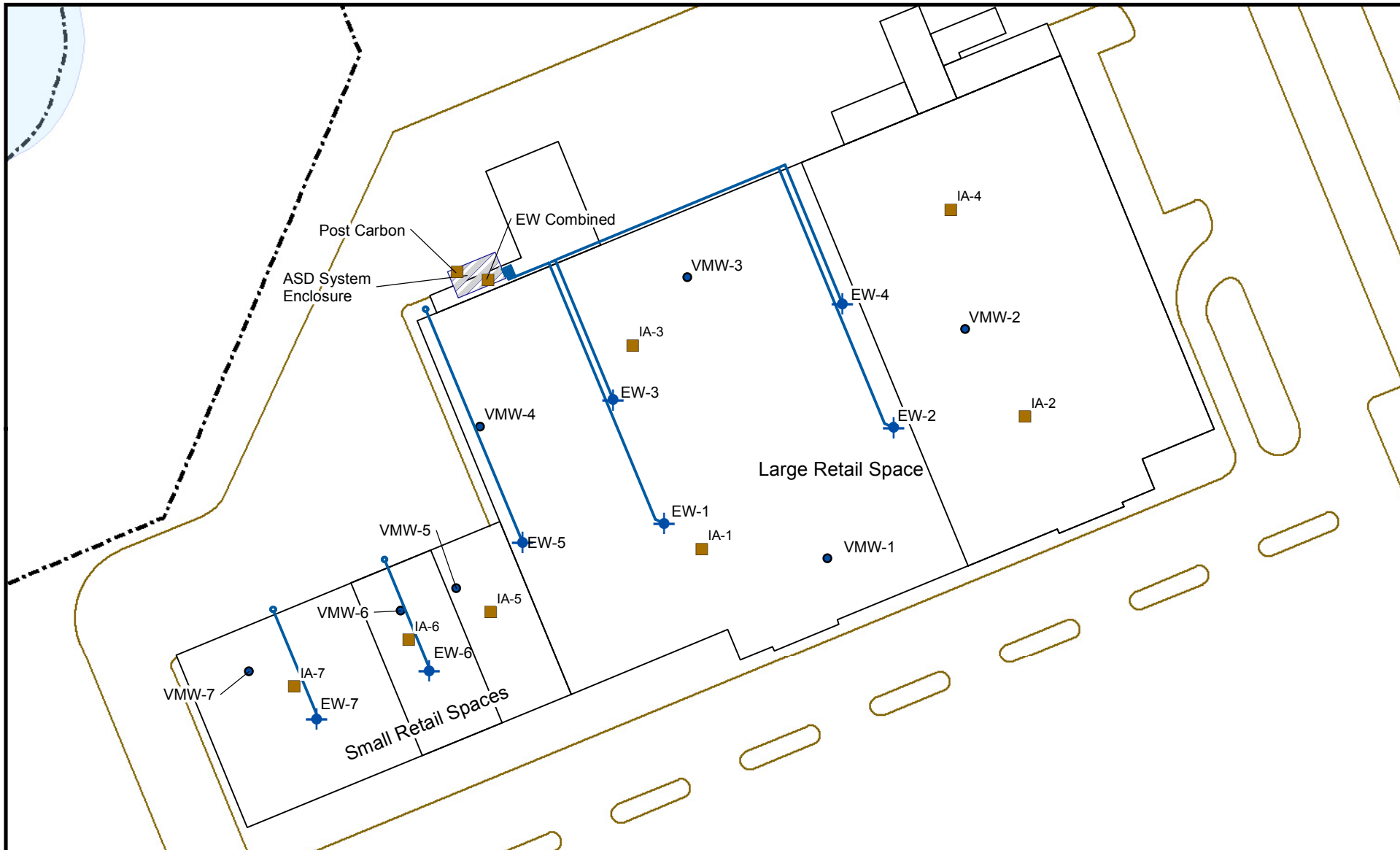
* vacuum reduced at extraction wells

** ASD system offline

Prepared by/Date: MAM 04/20/15

Checked by/Date: KRM 4/24/15

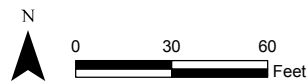
FIGURES



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

APPENDIX A
Laboratory Reports

April 7, 2015

Kelly Chatterton
AMEC E&I, Inc.
271 Mill Road
Chelmsford, MA 01824

Project Location: Providence, CT
Client Job Number:
Project Number: 3652150005
Laboratory Work Order Number: 15C1165

Enclosed are results of analyses for samples received by the laboratory on March 27, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



James M. Georgantas
Project Manager



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

AMEC E&I, Inc.
271 Mill Road
Chelmsford, MA 01824
ATTN: Kelly Chatterton

REPORT DATE: 4/7/2015

PURCHASE ORDER NUMBER: C012206368

PROJECT NUMBER: 3652150005

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15C1165

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

PROJECT LOCATION: Providence, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
IA-01-032715	15C1165-01	Indoor air		EPA TO-15	
IA-02-032715	15C1165-02	Indoor air		EPA TO-15	
IA-03-032715	15C1165-03	Indoor air		EPA TO-15	
IA-04-032715	15C1165-04	Indoor air		EPA TO-15	
IA-05-032715	15C1165-05	Indoor air		EPA TO-15	
IA-06-032715	15C1165-06	Indoor air		EPA TO-15	
IA-07-032715	15C1165-07	Indoor air		EPA TO-15	
AA-01-032715	15C1165-08	Ambient Air		EPA TO-15	
EW-05-032715	15C1165-09	Sub Slab		EPA TO-15	
EW-06-032715	15C1165-10	Sub Slab		EPA TO-15	
EW-07-032715	15C1165-11	Sub Slab		EPA TO-15	
EW-Combined-032715	15C1165-12	Sub Slab		EPA TO-15	
Unused 1909	15C1165-13	Air		-	

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:

Data is not affected by elevated level in blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:

Acetone, Hexane

B118556-BLK1

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:

4-Methyl-2-pentanone (MIBK)

15C1165-01[IA-01-032715], 15C1165-02[IA-02-032715], 15C1165-03[IA-03-032715], 15C1165-04[IA-04-032715], 15C1165-05[IA-05-032715], 15C1165-06[IA-06-032715], 15C1165-07[IA-07-032715], 15C1165-08[AA-01-032715], 15C1165-09[EW-05-032715], 15C1165-10[EW-06-032715], 15C1165-11[EW-07-032715], 15C1165-12[EW-Combined-032715], B118556-BLK1, B118556-BS1, B118556-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:

Bromomethane

15C1165-01[IA-01-032715], 15C1165-02[IA-02-032715], 15C1165-03[IA-03-032715], 15C1165-04[IA-04-032715], 15C1165-05[IA-05-032715], 15C1165-06[IA-06-032715], 15C1165-07[IA-07-032715], 15C1165-08[AA-01-032715], 15C1165-09[EW-05-032715], 15C1165-10[EW-06-032715], 15C1165-11[EW-07-032715], 15C1165-12[EW-Combined-032715], B118556-BLK1, B118556-BS1, B118556-DUP1

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.



Daren J. Damboragian
Laboratory Manager

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-01-032715
Sample ID: 15C1165-01
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 08:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1839
 Canister Size: 6 liter
 Flow Controller ID: 4193
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -27
 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	5.1	1.4	0.49		12	3.3	0.702	4/1/15	1:51	WSD
Benzene	0.17	0.035	0.018		0.53	0.11	0.702	4/1/15	1:51	WSD
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	4/1/15	1:51	WSD
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	4/1/15	1:51	WSD
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	4/1/15	1:51	WSD
Bromomethane	ND	0.035	0.024	V-05	ND	0.14	0.702	4/1/15	1:51	WSD
1,3-Butadiene	0.022	0.035	0.018	J	0.048	0.078	0.702	4/1/15	1:51	WSD
2-Butanone (MEK)	0.52	1.4	0.026	J	1.5	4.1	0.702	4/1/15	1:51	WSD
Carbon Disulfide	ND	0.35	0.012		ND	1.1	0.702	4/1/15	1:51	WSD
Carbon Tetrachloride	0.051	0.035	0.0085		0.32	0.22	0.702	4/1/15	1:51	WSD
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	4/1/15	1:51	WSD
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	4/1/15	1:51	WSD
Chloroform	0.015	0.035	0.0082	J	0.075	0.17	0.702	4/1/15	1:51	WSD
Chloromethane	0.49	0.070	0.015		1.0	0.14	0.702	4/1/15	1:51	WSD
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	4/1/15	1:51	WSD
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	4/1/15	1:51	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	4/1/15	1:51	WSD
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	4/1/15	1:51	WSD
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	4/1/15	1:51	WSD
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	4/1/15	1:51	WSD
Dichlorodifluoromethane (Freon 12)	0.24	0.035	0.015		1.2	0.17	0.702	4/1/15	1:51	WSD
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	4/1/15	1:51	WSD
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	4/1/15	1:51	WSD
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	4/1/15	1:51	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	4/1/15	1:51	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	4/1/15	1:51	WSD
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	4/1/15	1:51	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	4/1/15	1:51	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	4/1/15	1:51	WSD
Ethanol	4.8	1.4	0.63		9.1	2.6	0.702	4/1/15	1:51	WSD
Ethyl Acetate	0.16	0.035	0.026		0.57	0.13	0.702	4/1/15	1:51	WSD
Ethylbenzene	0.029	0.035	0.0097	J	0.13	0.15	0.702	4/1/15	1:51	WSD
4-Ethyltoluene	0.0091	0.035	0.0079	J	0.045	0.17	0.702	4/1/15	1:51	WSD
Heptane	0.036	0.035	0.011		0.15	0.14	0.702	4/1/15	1:51	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	4/1/15	1:51	WSD
Hexane	1.5	1.4	0.062		5.5	4.9	0.702	4/1/15	1:51	WSD
2-Hexanone (MBK)	0.072	0.035	0.0090		0.30	0.14	0.702	4/1/15	1:51	WSD
Isopropanol	0.83	1.4	0.043	J	2.0	3.4	0.702	4/1/15	1:51	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
 Field Sample #: IA-01-032715
 Sample ID: 15C1165-01
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 08:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1839
 Canister Size: 6 liter
 Flow Controller ID: 4193
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -27
 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	0.011		ND	0.13	0.702	4/1/15	1:51	WSD
Methylene Chloride	1.7	0.35	0.043		6.0	1.2	0.702	4/1/15	1:51	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	4/1/15	1:51	WSD
4-Methyl-2-pentanone (MIBK)	0.033	0.035	0.0084	L-03, J	0.14	0.14	0.702	4/1/15	1:51	WSD
Propene	ND	1.4	0.11		ND	2.4	0.702	4/1/15	1:51	WSD
Styrene	ND	0.035	0.0068		ND	0.15	0.702	4/1/15	1:51	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	4/1/15	1:51	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	4/1/15	1:51	WSD
Tetrachloroethylene	ND	0.035	0.010		ND	0.24	0.702	4/1/15	1:51	WSD
Tetrahydrofuran	ND	0.035	0.015		ND	0.10	0.702	4/1/15	1:51	WSD
Toluene	0.17	0.035	0.011		0.63	0.13	0.702	4/1/15	1:51	WSD
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	4/1/15	1:51	WSD
1,1,1-Trichloroethane	0.0091	0.035	0.0063	J	0.050	0.19	0.702	4/1/15	1:51	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	4/1/15	1:51	WSD
Trichloroethylene	0.016	0.035	0.010	J	0.087	0.19	0.702	4/1/15	1:51	WSD
Trichlorofluoromethane (Freon 11)	0.19	0.14	0.012		1.1	0.79	0.702	4/1/15	1:51	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.061	0.14	0.0098	J	0.47	1.1	0.702	4/1/15	1:51	WSD
1,2,4-Trimethylbenzene	0.024	0.035	0.0086	J	0.12	0.17	0.702	4/1/15	1:51	WSD
1,3,5-Trimethylbenzene	0.0084	0.035	0.0070	J	0.041	0.17	0.702	4/1/15	1:51	WSD
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	4/1/15	1:51	WSD
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	4/1/15	1:51	WSD
m&p-Xylene	0.084	0.070	0.018		0.36	0.30	0.702	4/1/15	1:51	WSD
o-Xylene	0.032	0.035	0.010	J	0.14	0.15	0.702	4/1/15	1:51	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.5	70-130	4/1/15 1:51
4-Bromofluorobenzene (2)	102	70-130	4/1/15 1:51

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-02-032715
Sample ID: 15C1165-02
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 10:21

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1146
 Canister Size: 6 liter
 Flow Controller ID: 4205
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -4
 Receipt Vacuum(in Hg): -4.6
 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		Analized		
Acetone	17	1.4	0.49		40	3.3	0.702	4/1/15	2:35	WSD
Benzene	0.21	0.035	0.018		0.67	0.11	0.702	4/1/15	2:35	WSD
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	4/1/15	2:35	WSD
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	4/1/15	2:35	WSD
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	4/1/15	2:35	WSD
Bromomethane	ND	0.035	0.024	V-05	ND	0.14	0.702	4/1/15	2:35	WSD
1,3-Butadiene	ND	0.035	0.018		ND	0.078	0.702	4/1/15	2:35	WSD
2-Butanone (MEK)	0.58	1.4	0.026	J	1.7	4.1	0.702	4/1/15	2:35	WSD
Carbon Disulfide	0.093	0.35	0.012	J	0.29	1.1	0.702	4/1/15	2:35	WSD
Carbon Tetrachloride	0.058	0.035	0.0085		0.36	0.22	0.702	4/1/15	2:35	WSD
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	4/1/15	2:35	WSD
Chloroethane	0.023	0.035	0.013	J	0.061	0.093	0.702	4/1/15	2:35	WSD
Chloroform	0.085	0.035	0.0082		0.41	0.17	0.702	4/1/15	2:35	WSD
Chloromethane	0.69	0.070	0.015		1.4	0.14	0.702	4/1/15	2:35	WSD
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	4/1/15	2:35	WSD
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	4/1/15	2:35	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	4/1/15	2:35	WSD
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	4/1/15	2:35	WSD
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	4/1/15	2:35	WSD
1,4-Dichlorobenzene	0.011	0.035	0.0088	J	0.063	0.21	0.702	4/1/15	2:35	WSD
Dichlorodifluoromethane (Freon 12)	0.28	0.035	0.015		1.4	0.17	0.702	4/1/15	2:35	WSD
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	4/1/15	2:35	WSD
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	4/1/15	2:35	WSD
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	4/1/15	2:35	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	4/1/15	2:35	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	4/1/15	2:35	WSD
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	4/1/15	2:35	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	4/1/15	2:35	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	4/1/15	2:35	WSD
Ethanol	81	8.0	3.6		150	15	4	4/2/15	8:18	WSD
Ethyl Acetate	0.12	0.035	0.026		0.45	0.13	0.702	4/1/15	2:35	WSD
Ethylbenzene	0.045	0.035	0.0097		0.20	0.15	0.702	4/1/15	2:35	WSD
4-Ethyltoluene	0.015	0.035	0.0079	J	0.072	0.17	0.702	4/1/15	2:35	WSD
Heptane	0.052	0.035	0.011		0.21	0.14	0.702	4/1/15	2:35	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	4/1/15	2:35	WSD
Hexane	1.4	1.4	0.062		5.0	4.9	0.702	4/1/15	2:35	WSD
2-Hexanone (MBK)	0.049	0.035	0.0090		0.20	0.14	0.702	4/1/15	2:35	WSD
Isopropanol	3.0	1.4	0.043		7.3	3.4	0.702	4/1/15	2:35	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-02-032715
Sample ID: 15C1165-02
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 10:21

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1146
 Canister Size: 6 liter
 Flow Controller ID: 4205
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -4
 Receipt Vacuum(in Hg): -4.6
 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	0.011		ND	0.13	0.702	4/1/15	2:35	WSD
Methylene Chloride	0.17	0.35	0.043	J	0.60	1.2	0.702	4/1/15	2:35	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	4/1/15	2:35	WSD
4-Methyl-2-pentanone (MIBK)	0.20	0.035	0.0084	L-03	0.84	0.14	0.702	4/1/15	2:35	WSD
Propene	ND	1.4	0.11		ND	2.4	0.702	4/1/15	2:35	WSD
Styrene	0.042	0.035	0.0068		0.18	0.15	0.702	4/1/15	2:35	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	4/1/15	2:35	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	4/1/15	2:35	WSD
Tetrachloroethylene	0.096	0.035	0.010		0.65	0.24	0.702	4/1/15	2:35	WSD
Tetrahydrofuran	0.10	0.035	0.015		0.30	0.10	0.702	4/1/15	2:35	WSD
Toluene	0.36	0.035	0.011		1.4	0.13	0.702	4/1/15	2:35	WSD
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	4/1/15	2:35	WSD
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19	0.702	4/1/15	2:35	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	4/1/15	2:35	WSD
Trichloroethylene	0.015	0.035	0.010	J	0.079	0.19	0.702	4/1/15	2:35	WSD
Trichlorofluoromethane (Freon 11)	0.22	0.14	0.012		1.3	0.79	0.702	4/1/15	2:35	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.062	0.14	0.0098	J	0.48	1.1	0.702	4/1/15	2:35	WSD
1,2,4-Trimethylbenzene	0.051	0.035	0.0086		0.25	0.17	0.702	4/1/15	2:35	WSD
1,3,5-Trimethylbenzene	0.016	0.035	0.0070	J	0.079	0.17	0.702	4/1/15	2:35	WSD
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	4/1/15	2:35	WSD
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	4/1/15	2:35	WSD
m&p-Xylene	0.14	0.070	0.018		0.61	0.30	0.702	4/1/15	2:35	WSD
o-Xylene	0.058	0.035	0.010		0.25	0.15	0.702	4/1/15	2:35	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.0	70-130	4/2/15 8:18
4-Bromofluorobenzene (1)	99.1	70-130	4/1/15 2:35
4-Bromofluorobenzene (2)	101	70-130	4/1/15 2:35

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-03-032715
Sample ID: 15C1165-03
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 08:39

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1142
 Canister Size: 6 liter
 Flow Controller ID: 4192
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -4
 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	4.7	1.4	0.49		11	3.3	0.702	4/1/15	3:19	WSD
Benzene	0.16	0.035	0.018		0.50	0.11	0.702	4/1/15	3:19	WSD
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	4/1/15	3:19	WSD
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	4/1/15	3:19	WSD
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	4/1/15	3:19	WSD
Bromomethane	ND	0.035	0.024	V-05	ND	0.14	0.702	4/1/15	3:19	WSD
1,3-Butadiene	0.020	0.035	0.018	J	0.045	0.078	0.702	4/1/15	3:19	WSD
2-Butanone (MEK)	0.46	1.4	0.026	J	1.4	4.1	0.702	4/1/15	3:19	WSD
Carbon Disulfide	ND	0.35	0.012		ND	1.1	0.702	4/1/15	3:19	WSD
Carbon Tetrachloride	0.057	0.035	0.0085		0.36	0.22	0.702	4/1/15	3:19	WSD
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	4/1/15	3:19	WSD
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	4/1/15	3:19	WSD
Chloroform	0.013	0.035	0.0082	J	0.065	0.17	0.702	4/1/15	3:19	WSD
Chloromethane	0.48	0.070	0.015		0.99	0.14	0.702	4/1/15	3:19	WSD
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	4/1/15	3:19	WSD
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	4/1/15	3:19	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	4/1/15	3:19	WSD
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	4/1/15	3:19	WSD
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	4/1/15	3:19	WSD
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	4/1/15	3:19	WSD
Dichlorodifluoromethane (Freon 12)	0.29	0.035	0.015		1.4	0.17	0.702	4/1/15	3:19	WSD
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	4/1/15	3:19	WSD
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	4/1/15	3:19	WSD
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	4/1/15	3:19	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	4/1/15	3:19	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	4/1/15	3:19	WSD
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	4/1/15	3:19	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	4/1/15	3:19	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	4/1/15	3:19	WSD
Ethanol	4.6	1.4	0.63		8.7	2.6	0.702	4/1/15	3:19	WSD
Ethyl Acetate	0.075	0.035	0.026		0.27	0.13	0.702	4/1/15	3:19	WSD
Ethylbenzene	0.029	0.035	0.0097	J	0.13	0.15	0.702	4/1/15	3:19	WSD
4-Ethyltoluene	0.018	0.035	0.0079	J	0.086	0.17	0.702	4/1/15	3:19	WSD
Heptane	0.032	0.035	0.011	J	0.13	0.14	0.702	4/1/15	3:19	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	4/1/15	3:19	WSD
Hexane	1.4	1.4	0.062		5.1	4.9	0.702	4/1/15	3:19	WSD
2-Hexanone (MBK)	0.065	0.035	0.0090		0.27	0.14	0.702	4/1/15	3:19	WSD
Isopropanol	0.79	1.4	0.043	J	1.9	3.4	0.702	4/1/15	3:19	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-03-032715
Sample ID: 15C1165-03
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 08:39

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1142
 Canister Size: 6 liter
 Flow Controller ID: 4192
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -4
 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		Analyst
		RL	MDL		Results	RL		Analyzed		
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13	0.702	4/1/15	3:19	WSD
Methylene Chloride	0.60	0.35	0.043		2.1	1.2	0.702	4/1/15	3:19	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	4/1/15	3:19	WSD
4-Methyl-2-pentanone (MIBK)	0.036	0.035	0.0084	L-03	0.15	0.14	0.702	4/1/15	3:19	WSD
Propene	ND	1.4	0.11		ND	2.4	0.702	4/1/15	3:19	WSD
Styrene	ND	0.035	0.0068		ND	0.15	0.702	4/1/15	3:19	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	4/1/15	3:19	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	4/1/15	3:19	WSD
Tetrachloroethylene	ND	0.035	0.010		ND	0.24	0.702	4/1/15	3:19	WSD
Tetrahydrofuran	ND	0.035	0.015		ND	0.10	0.702	4/1/15	3:19	WSD
Toluene	0.17	0.035	0.011		0.63	0.13	0.702	4/1/15	3:19	WSD
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	4/1/15	3:19	WSD
1,1,1-Trichloroethane	0.0091	0.035	0.0063	J	0.050	0.19	0.702	4/1/15	3:19	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	4/1/15	3:19	WSD
Trichloroethylene	0.013	0.035	0.010	J	0.072	0.19	0.702	4/1/15	3:19	WSD
Trichlorofluoromethane (Freon 11)	0.18	0.14	0.012		1.0	0.79	0.702	4/1/15	3:19	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.061	0.14	0.0098	J	0.47	1.1	0.702	4/1/15	3:19	WSD
1,2,4-Trimethylbenzene	0.024	0.035	0.0086	J	0.12	0.17	0.702	4/1/15	3:19	WSD
1,3,5-Trimethylbenzene	0.0077	0.035	0.0070	J	0.038	0.17	0.702	4/1/15	3:19	WSD
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	4/1/15	3:19	WSD
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	4/1/15	3:19	WSD
m&p-Xylene	0.086	0.070	0.018		0.37	0.30	0.702	4/1/15	3:19	WSD
o-Xylene	0.032	0.035	0.010	J	0.14	0.15	0.702	4/1/15	3:19	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.7	70-130	4/1/15 3:19
4-Bromofluorobenzene (2)	100	70-130	4/1/15 3:19

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-04-032715
Sample ID: 15C1165-04
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 10:23

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1220
 Canister Size: 6 liter
 Flow Controller ID: 4204
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -4.7
 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	18	1.4	0.49		42	3.3	0.702	4/1/15	4:03	WSD
Benzene	0.22	0.035	0.018		0.69	0.11	0.702	4/1/15	4:03	WSD
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	4/1/15	4:03	WSD
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	4/1/15	4:03	WSD
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	4/1/15	4:03	WSD
Bromomethane	ND	0.035	0.024	V-05	ND	0.14	0.702	4/1/15	4:03	WSD
1,3-Butadiene	ND	0.035	0.018		ND	0.078	0.702	4/1/15	4:03	WSD
2-Butanone (MEK)	0.64	1.4	0.026	J	1.9	4.1	0.702	4/1/15	4:03	WSD
Carbon Disulfide	0.10	0.35	0.012	J	0.31	1.1	0.702	4/1/15	4:03	WSD
Carbon Tetrachloride	0.056	0.035	0.0085		0.35	0.22	0.702	4/1/15	4:03	WSD
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	4/1/15	4:03	WSD
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	4/1/15	4:03	WSD
Chloroform	0.080	0.035	0.0082		0.39	0.17	0.702	4/1/15	4:03	WSD
Chloromethane	0.59	0.070	0.015		1.2	0.14	0.702	4/1/15	4:03	WSD
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	4/1/15	4:03	WSD
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	4/1/15	4:03	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	4/1/15	4:03	WSD
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	4/1/15	4:03	WSD
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	4/1/15	4:03	WSD
1,4-Dichlorobenzene	0.011	0.035	0.0088	J	0.063	0.21	0.702	4/1/15	4:03	WSD
Dichlorodifluoromethane (Freon 12)	0.28	0.035	0.015		1.4	0.17	0.702	4/1/15	4:03	WSD
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	4/1/15	4:03	WSD
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	4/1/15	4:03	WSD
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	4/1/15	4:03	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	4/1/15	4:03	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	4/1/15	4:03	WSD
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	4/1/15	4:03	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	4/1/15	4:03	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	4/1/15	4:03	WSD
Ethanol	99	8.0	3.6		190	15	4	4/2/15	8:58	WSD
Ethyl Acetate	0.19	0.035	0.026		0.69	0.13	0.702	4/1/15	4:03	WSD
Ethylbenzene	0.044	0.035	0.0097		0.19	0.15	0.702	4/1/15	4:03	WSD
4-Ethyltoluene	0.014	0.035	0.0079	J	0.069	0.17	0.702	4/1/15	4:03	WSD
Heptane	0.053	0.035	0.011		0.22	0.14	0.702	4/1/15	4:03	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	4/1/15	4:03	WSD
Hexane	1.6	1.4	0.062		5.6	4.9	0.702	4/1/15	4:03	WSD
2-Hexanone (MBK)	0.060	0.035	0.0090		0.25	0.14	0.702	4/1/15	4:03	WSD
Isopropanol	2.9	1.4	0.043		7.1	3.4	0.702	4/1/15	4:03	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-04-032715
Sample ID: 15C1165-04
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 10:23

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1220
 Canister Size: 6 liter
 Flow Controller ID: 4204
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -4.7
 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	0.011		ND	0.13	0.702	4/1/15	4:03	WSD
Methylene Chloride	0.44	0.35	0.043		1.5	1.2	0.702	4/1/15	4:03	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	4/1/15	4:03	WSD
4-Methyl-2-pentanone (MIBK)	0.22	0.035	0.0084	L-03	0.89	0.14	0.702	4/1/15	4:03	WSD
Propene	ND	1.4	0.11		ND	2.4	0.702	4/1/15	4:03	WSD
Styrene	0.044	0.035	0.0068		0.19	0.15	0.702	4/1/15	4:03	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	4/1/15	4:03	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	4/1/15	4:03	WSD
Tetrachloroethylene	0.14	0.035	0.010		0.98	0.24	0.702	4/1/15	4:03	WSD
Tetrahydrofuran	0.081	0.035	0.015		0.24	0.10	0.702	4/1/15	4:03	WSD
Toluene	0.37	0.035	0.011		1.4	0.13	0.702	4/1/15	4:03	WSD
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	4/1/15	4:03	WSD
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19	0.702	4/1/15	4:03	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	4/1/15	4:03	WSD
Trichloroethylene	0.015	0.035	0.010	J	0.083	0.19	0.702	4/1/15	4:03	WSD
Trichlorofluoromethane (Freon 11)	0.25	0.14	0.012		1.4	0.79	0.702	4/1/15	4:03	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.068	0.14	0.0098	J	0.52	1.1	0.702	4/1/15	4:03	WSD
1,2,4-Trimethylbenzene	0.051	0.035	0.0086		0.25	0.17	0.702	4/1/15	4:03	WSD
1,3,5-Trimethylbenzene	0.013	0.035	0.0070	J	0.066	0.17	0.702	4/1/15	4:03	WSD
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	4/1/15	4:03	WSD
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	4/1/15	4:03	WSD
m&p-Xylene	0.14	0.070	0.018		0.62	0.30	0.702	4/1/15	4:03	WSD
o-Xylene	0.058	0.035	0.010		0.25	0.15	0.702	4/1/15	4:03	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.7	70-130	4/2/15 8:58
4-Bromofluorobenzene (1)	99.6	70-130	4/1/15 4:03
4-Bromofluorobenzene (2)	101	70-130	4/1/15 4:03

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-05-032715
Sample ID: 15C1165-05
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 09:35

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1874
 Canister Size: 6 liter
 Flow Controller ID: 4039
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -10
 Receipt Vacuum(in Hg): -7.5
 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	5.8	1.4	0.49		14	3.3	0.702	4/1/15	4:47	WSD
Benzene	0.17	0.035	0.018		0.54	0.11	0.702	4/1/15	4:47	WSD
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	4/1/15	4:47	WSD
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	4/1/15	4:47	WSD
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	4/1/15	4:47	WSD
Bromomethane	ND	0.035	0.024	V-05	ND	0.14	0.702	4/1/15	4:47	WSD
1,3-Butadiene	ND	0.035	0.018		ND	0.078	0.702	4/1/15	4:47	WSD
2-Butanone (MEK)	0.70	1.4	0.026	J	2.1	4.1	0.702	4/1/15	4:47	WSD
Carbon Disulfide	ND	0.35	0.012		ND	1.1	0.702	4/1/15	4:47	WSD
Carbon Tetrachloride	0.055	0.035	0.0085		0.35	0.22	0.702	4/1/15	4:47	WSD
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	4/1/15	4:47	WSD
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	4/1/15	4:47	WSD
Chloroform	0.013	0.035	0.0082	J	0.062	0.17	0.702	4/1/15	4:47	WSD
Chloromethane	0.47	0.070	0.015		0.97	0.14	0.702	4/1/15	4:47	WSD
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	4/1/15	4:47	WSD
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	4/1/15	4:47	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	4/1/15	4:47	WSD
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	4/1/15	4:47	WSD
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	4/1/15	4:47	WSD
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	4/1/15	4:47	WSD
Dichlorodifluoromethane (Freon 12)	0.27	0.035	0.015		1.3	0.17	0.702	4/1/15	4:47	WSD
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	4/1/15	4:47	WSD
1,2-Dichloroethane	0.011	0.035	0.0098	J	0.045	0.14	0.702	4/1/15	4:47	WSD
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	4/1/15	4:47	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	4/1/15	4:47	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	4/1/15	4:47	WSD
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	4/1/15	4:47	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	4/1/15	4:47	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	4/1/15	4:47	WSD
Ethanol	6.1	1.4	0.63		12	2.6	0.702	4/1/15	4:47	WSD
Ethyl Acetate	1.4	0.035	0.026		5.0	0.13	0.702	4/1/15	4:47	WSD
Ethylbenzene	0.040	0.035	0.0097		0.17	0.15	0.702	4/1/15	4:47	WSD
4-Ethyltoluene	ND	0.035	0.0079		ND	0.17	0.702	4/1/15	4:47	WSD
Heptane	0.041	0.035	0.011		0.17	0.14	0.702	4/1/15	4:47	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	4/1/15	4:47	WSD
Hexane	1.4	1.4	0.062		5.1	4.9	0.702	4/1/15	4:47	WSD
2-Hexanone (MBK)	0.10	0.035	0.0090		0.43	0.14	0.702	4/1/15	4:47	WSD
Isopropanol	1.1	1.4	0.043	J	2.6	3.4	0.702	4/1/15	4:47	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
 Field Sample #: IA-05-032715
 Sample ID: 15C1165-05
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 09:35

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1874
 Canister Size: 6 liter
 Flow Controller ID: 4039
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -10
 Receipt Vacuum(in Hg): -7.5
 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	0.011		ND	0.13	0.702	4/1/15	4:47	WSD
Methylene Chloride	0.30	0.35	0.043	J	1.0	1.2	0.702	4/1/15	4:47	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	4/1/15	4:47	WSD
4-Methyl-2-pentanone (MIBK)	0.046	0.035	0.0084	L-03	0.19	0.14	0.702	4/1/15	4:47	WSD
Propene	ND	1.4	0.11		ND	2.4	0.702	4/1/15	4:47	WSD
Styrene	0.0084	0.035	0.0068	J	0.036	0.15	0.702	4/1/15	4:47	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	4/1/15	4:47	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	4/1/15	4:47	WSD
Tetrachloroethylene	0.058	0.035	0.010		0.39	0.24	0.702	4/1/15	4:47	WSD
Tetrahydrofuran	ND	0.035	0.015		ND	0.10	0.702	4/1/15	4:47	WSD
Toluene	0.20	0.035	0.011		0.74	0.13	0.702	4/1/15	4:47	WSD
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	4/1/15	4:47	WSD
1,1,1-Trichloroethane	0.0077	0.035	0.0063	J	0.042	0.19	0.702	4/1/15	4:47	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	4/1/15	4:47	WSD
Trichloroethylene	0.015	0.035	0.010	J	0.083	0.19	0.702	4/1/15	4:47	WSD
Trichlorofluoromethane (Freon 11)	0.19	0.14	0.012		1.1	0.79	0.702	4/1/15	4:47	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.064	0.14	0.0098	J	0.49	1.1	0.702	4/1/15	4:47	WSD
1,2,4-Trimethylbenzene	0.027	0.035	0.0086	J	0.13	0.17	0.702	4/1/15	4:47	WSD
1,3,5-Trimethylbenzene	0.0077	0.035	0.0070	J	0.038	0.17	0.702	4/1/15	4:47	WSD
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	4/1/15	4:47	WSD
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	4/1/15	4:47	WSD
m&p-Xylene	0.11	0.070	0.018		0.50	0.30	0.702	4/1/15	4:47	WSD
o-Xylene	0.042	0.035	0.010		0.18	0.15	0.702	4/1/15	4:47	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.8	70-130	4/1/15 4:47
4-Bromofluorobenzene (2)	99.4	70-130	4/1/15 4:47

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-06-032715
Sample ID: 15C1165-06
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 09:36

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1170
 Canister Size: 6 liter
 Flow Controller ID: 4107
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -6
 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	3.9	1.4	0.49		9.2	3.3	0.702	4/1/15	5:32	WSD
Benzene	0.17	0.035	0.018		0.53	0.11	0.702	4/1/15	5:32	WSD
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	4/1/15	5:32	WSD
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	4/1/15	5:32	WSD
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	4/1/15	5:32	WSD
Bromomethane	ND	0.035	0.024	V-05	ND	0.14	0.702	4/1/15	5:32	WSD
1,3-Butadiene	0.027	0.035	0.018	J	0.061	0.078	0.702	4/1/15	5:32	WSD
2-Butanone (MEK)	0.34	1.4	0.026	J	1.0	4.1	0.702	4/1/15	5:32	WSD
Carbon Disulfide	0.013	0.35	0.012	J	0.039	1.1	0.702	4/1/15	5:32	WSD
Carbon Tetrachloride	0.050	0.035	0.0085		0.31	0.22	0.702	4/1/15	5:32	WSD
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	4/1/15	5:32	WSD
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	4/1/15	5:32	WSD
Chloroform	0.014	0.035	0.0082	J	0.069	0.17	0.702	4/1/15	5:32	WSD
Chloromethane	0.46	0.070	0.015		0.95	0.14	0.702	4/1/15	5:32	WSD
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	4/1/15	5:32	WSD
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	4/1/15	5:32	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	4/1/15	5:32	WSD
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	4/1/15	5:32	WSD
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	4/1/15	5:32	WSD
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	4/1/15	5:32	WSD
Dichlorodifluoromethane (Freon 12)	0.27	0.035	0.015		1.4	0.17	0.702	4/1/15	5:32	WSD
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	4/1/15	5:32	WSD
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	4/1/15	5:32	WSD
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	4/1/15	5:32	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	4/1/15	5:32	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	4/1/15	5:32	WSD
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	4/1/15	5:32	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	4/1/15	5:32	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	4/1/15	5:32	WSD
Ethanol	9.3	1.4	0.63		17	2.6	0.702	4/1/15	5:32	WSD
Ethyl Acetate	0.082	0.035	0.026		0.30	0.13	0.702	4/1/15	5:32	WSD
Ethylbenzene	0.041	0.035	0.0097		0.18	0.15	0.702	4/1/15	5:32	WSD
4-Ethyltoluene	0.0091	0.035	0.0079	J	0.045	0.17	0.702	4/1/15	5:32	WSD
Heptane	0.036	0.035	0.011		0.15	0.14	0.702	4/1/15	5:32	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	4/1/15	5:32	WSD
Hexane	1.4	1.4	0.062	J	4.9	4.9	0.702	4/1/15	5:32	WSD
2-Hexanone (MBK)	0.045	0.035	0.0090		0.18	0.14	0.702	4/1/15	5:32	WSD
Isopropanol	1.3	1.4	0.043	J	3.1	3.4	0.702	4/1/15	5:32	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-06-032715
Sample ID: 15C1165-06
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 09:36

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1170
 Canister Size: 6 liter
 Flow Controller ID: 4107
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -6
 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		Dilution	Date/Time		Analyst
		RL	MDL		Results	RL		Analyzed		
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13	0.702	4/1/15	5:32	WSD
Methylene Chloride	0.14	0.35	0.043	J	0.49	1.2	0.702	4/1/15	5:32	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	4/1/15	5:32	WSD
4-Methyl-2-pentanone (MIBK)	0.029	0.035	0.0084	L-03, J	0.12	0.14	0.702	4/1/15	5:32	WSD
Propene	ND	1.4	0.11		ND	2.4	0.702	4/1/15	5:32	WSD
Styrene	0.0084	0.035	0.0068	J	0.036	0.15	0.702	4/1/15	5:32	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	4/1/15	5:32	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	4/1/15	5:32	WSD
Tetrachloroethylene	0.11	0.035	0.010		0.72	0.24	0.702	4/1/15	5:32	WSD
Tetrahydrofuran	ND	0.035	0.015		ND	0.10	0.702	4/1/15	5:32	WSD
Toluene	0.20	0.035	0.011		0.76	0.13	0.702	4/1/15	5:32	WSD
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	4/1/15	5:32	WSD
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19	0.702	4/1/15	5:32	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	4/1/15	5:32	WSD
Trichloroethylene	0.014	0.035	0.010	J	0.075	0.19	0.702	4/1/15	5:32	WSD
Trichlorofluoromethane (Freon 11)	0.18	0.14	0.012		1.0	0.79	0.702	4/1/15	5:32	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.062	0.14	0.0098	J	0.47	1.1	0.702	4/1/15	5:32	WSD
1,2,4-Trimethylbenzene	0.027	0.035	0.0086	J	0.13	0.17	0.702	4/1/15	5:32	WSD
1,3,5-Trimethylbenzene	0.0077	0.035	0.0070	J	0.038	0.17	0.702	4/1/15	5:32	WSD
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	4/1/15	5:32	WSD
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	4/1/15	5:32	WSD
m&p-Xylene	0.10	0.070	0.018		0.44	0.30	0.702	4/1/15	5:32	WSD
o-Xylene	0.041	0.035	0.010		0.18	0.15	0.702	4/1/15	5:32	WSD

Surrogates	% Recovery	% REC Limits		
4-Bromofluorobenzene (1)	99.0	70-130	4/1/15	5:32
4-Bromofluorobenzene (2)	100	70-130	4/1/15	5:32

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-07-032715
Sample ID: 15C1165-07
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 11:23

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1317
 Canister Size: 6 liter
 Flow Controller ID: 4106
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.5
 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	6.9	1.4	0.49		16	3.3	0.702	4/1/15	6:18	WSD
Benzene	0.18	0.035	0.018		0.57	0.11	0.702	4/1/15	6:18	WSD
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	4/1/15	6:18	WSD
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	4/1/15	6:18	WSD
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	4/1/15	6:18	WSD
Bromomethane	ND	0.035	0.024	V-05	ND	0.14	0.702	4/1/15	6:18	WSD
1,3-Butadiene	ND	0.035	0.018		ND	0.078	0.702	4/1/15	6:18	WSD
2-Butanone (MEK)	0.49	1.4	0.026	J	1.4	4.1	0.702	4/1/15	6:18	WSD
Carbon Disulfide	0.013	0.35	0.012	J	0.042	1.1	0.702	4/1/15	6:18	WSD
Carbon Tetrachloride	0.055	0.035	0.0085		0.34	0.22	0.702	4/1/15	6:18	WSD
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	4/1/15	6:18	WSD
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	4/1/15	6:18	WSD
Chloroform	0.016	0.035	0.0082	J	0.079	0.17	0.702	4/1/15	6:18	WSD
Chloromethane	0.49	0.070	0.015		1.0	0.14	0.702	4/1/15	6:18	WSD
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	4/1/15	6:18	WSD
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	4/1/15	6:18	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	4/1/15	6:18	WSD
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	4/1/15	6:18	WSD
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	4/1/15	6:18	WSD
1,4-Dichlorobenzene	0.027	0.035	0.0088	J	0.16	0.21	0.702	4/1/15	6:18	WSD
Dichlorodifluoromethane (Freon 12)	0.27	0.035	0.015		1.3	0.17	0.702	4/1/15	6:18	WSD
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	4/1/15	6:18	WSD
1,2-Dichloroethane	0.016	0.035	0.0098	J	0.065	0.14	0.702	4/1/15	6:18	WSD
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	4/1/15	6:18	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	4/1/15	6:18	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	4/1/15	6:18	WSD
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	4/1/15	6:18	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	4/1/15	6:18	WSD
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	4/1/15	6:18	WSD
Ethanol	58	8.0	3.6		110	15	4	4/2/15	9:37	WSD
Ethyl Acetate	0.18	0.035	0.026		0.64	0.13	0.702	4/1/15	6:18	WSD
Ethylbenzene	0.13	0.035	0.0097		0.58	0.15	0.702	4/1/15	6:18	WSD
4-Ethyltoluene	0.018	0.035	0.0079	J	0.090	0.17	0.702	4/1/15	6:18	WSD
Heptane	0.046	0.035	0.011		0.19	0.14	0.702	4/1/15	6:18	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	4/1/15	6:18	WSD
Hexane	1.4	1.4	0.062	J	4.9	4.9	0.702	4/1/15	6:18	WSD
2-Hexanone (MBK)	0.10	0.035	0.0090		0.43	0.14	0.702	4/1/15	6:18	WSD
Isopropanol	12	1.4	0.043		30	3.4	0.702	4/1/15	6:18	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: IA-07-032715
Sample ID: 15C1165-07
 Sample Matrix: Indoor air
 Sampled: 3/27/2015 11:23

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1317
 Canister Size: 6 liter
 Flow Controller ID: 4106
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.5
 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	0.035	0.011		ND	0.13	0.702	4/1/15	6:18	WSD
Methylene Chloride	0.17	0.35	0.043	J	0.60	1.2	0.702	4/1/15	6:18	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	4/1/15	6:18	WSD
4-Methyl-2-pentanone (MIBK)	0.044	0.035	0.0084	L-03	0.18	0.14	0.702	4/1/15	6:18	WSD
Propene	ND	1.4	0.11		ND	2.4	0.702	4/1/15	6:18	WSD
Styrene	0.022	0.035	0.0068	J	0.096	0.15	0.702	4/1/15	6:18	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	4/1/15	6:18	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	4/1/15	6:18	WSD
Tetrachloroethylene	0.034	0.035	0.010	J	0.23	0.24	0.702	4/1/15	6:18	WSD
Tetrahydrofuran	0.036	0.035	0.015		0.11	0.10	0.702	4/1/15	6:18	WSD
Toluene	0.29	0.035	0.011		1.1	0.13	0.702	4/1/15	6:18	WSD
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	4/1/15	6:18	WSD
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19	0.702	4/1/15	6:18	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	4/1/15	6:18	WSD
Trichloroethylene	0.019	0.035	0.010	J	0.10	0.19	0.702	4/1/15	6:18	WSD
Trichlorofluoromethane (Freon 11)	0.21	0.14	0.012		1.2	0.79	0.702	4/1/15	6:18	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.14	0.0098	J	0.64	1.1	0.702	4/1/15	6:18	WSD
1,2,4-Trimethylbenzene	0.067	0.035	0.0086		0.33	0.17	0.702	4/1/15	6:18	WSD
1,3,5-Trimethylbenzene	0.017	0.035	0.0070	J	0.083	0.17	0.702	4/1/15	6:18	WSD
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	4/1/15	6:18	WSD
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	4/1/15	6:18	WSD
m&p-Xylene	0.15	0.070	0.018		0.67	0.30	0.702	4/1/15	6:18	WSD
o-Xylene	0.060	0.035	0.010		0.26	0.15	0.702	4/1/15	6:18	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.4	70-130	4/2/15 9:37
4-Bromofluorobenzene (1)	102	70-130	4/1/15 6:18
4-Bromofluorobenzene (2)	103	70-130	4/1/15 6:18

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: AA-01-032715
Sample ID: 15C1165-08
 Sample Matrix: Ambient Air
 Sampled: 3/27/2015 11:08

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1834
 Canister Size: 6 liter
 Flow Controller ID: 4181
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7.3
 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		
Acetone	3.7	1.4	0.49		8.7	3.3	0.702	4/1/15	7:03	WSD
Benzene	0.21	0.035	0.018		0.67	0.11	0.702	4/1/15	7:03	WSD
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	4/1/15	7:03	WSD
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	4/1/15	7:03	WSD
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	4/1/15	7:03	WSD
Bromomethane	ND	0.035	0.024	V-05	ND	0.14	0.702	4/1/15	7:03	WSD
1,3-Butadiene	ND	0.035	0.018		ND	0.078	0.702	4/1/15	7:03	WSD
2-Butanone (MEK)	0.32	1.4	0.026	J	0.96	4.1	0.702	4/1/15	7:03	WSD
Carbon Disulfide	0.018	0.35	0.012	J	0.057	1.1	0.702	4/1/15	7:03	WSD
Carbon Tetrachloride	0.055	0.035	0.0085		0.34	0.22	0.702	4/1/15	7:03	WSD
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	4/1/15	7:03	WSD
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	4/1/15	7:03	WSD
Chloroform	0.013	0.035	0.0082	J	0.065	0.17	0.702	4/1/15	7:03	WSD
Chloromethane	0.52	0.070	0.015		1.1	0.14	0.702	4/1/15	7:03	WSD
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	4/1/15	7:03	WSD
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	4/1/15	7:03	WSD
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	4/1/15	7:03	WSD
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	4/1/15	7:03	WSD
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	4/1/15	7:03	WSD
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	4/1/15	7:03	WSD
Dichlorodifluoromethane (Freon 12)	0.28	0.035	0.015		1.4	0.17	0.702	4/1/15	7:03	WSD
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	4/1/15	7:03	WSD
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	4/1/15	7:03	WSD
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	4/1/15	7:03	WSD
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	4/1/15	7:03	WSD
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	4/1/15	7:03	WSD
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	4/1/15	7:03	WSD
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	4/1/15	7:03	WSD
trans-1,3-Dichloropropene	0.014	0.035	0.0094	J	0.064	0.16	0.702	4/1/15	7:03	WSD
Ethanol	1.1	1.4	0.63	J	2.0	2.6	0.702	4/1/15	7:03	WSD
Ethyl Acetate	0.075	0.035	0.026		0.27	0.13	0.702	4/1/15	7:03	WSD
Ethylbenzene	0.043	0.035	0.0097		0.19	0.15	0.702	4/1/15	7:03	WSD
4-Ethyltoluene	0.016	0.035	0.0079	J	0.079	0.17	0.702	4/1/15	7:03	WSD
Heptane	0.046	0.035	0.011		0.19	0.14	0.702	4/1/15	7:03	WSD
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	4/1/15	7:03	WSD
Hexane	1.4	1.4	0.062		5.1	4.9	0.702	4/1/15	7:03	WSD
2-Hexanone (MBK)	0.041	0.035	0.0090		0.17	0.14	0.702	4/1/15	7:03	WSD
Isopropanol	0.26	1.4	0.043	J	0.65	3.4	0.702	4/1/15	7:03	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: AA-01-032715
Sample ID: 15C1165-08
 Sample Matrix: Ambient Air
 Sampled: 3/27/2015 11:08

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1834
 Canister Size: 6 liter
 Flow Controller ID: 4181
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7.3
 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	0.011		ND	0.13	0.702	4/1/15	7:03	WSD
Methylene Chloride	0.13	0.35	0.043	J	0.44	1.2	0.702	4/1/15	7:03	WSD
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	4/1/15	7:03	WSD
4-Methyl-2-pentanone (MIBK)	0.022	0.035	0.0084	L-03, J	0.092	0.14	0.702	4/1/15	7:03	WSD
Propene	ND	1.4	0.11		ND	2.4	0.702	4/1/15	7:03	WSD
Styrene	ND	0.035	0.0068		ND	0.15	0.702	4/1/15	7:03	WSD
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	4/1/15	7:03	WSD
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	4/1/15	7:03	WSD
Tetrachloroethylene	0.032	0.035	0.010	J	0.22	0.24	0.702	4/1/15	7:03	WSD
Tetrahydrofuran	ND	0.035	0.015		ND	0.10	0.702	4/1/15	7:03	WSD
Toluene	0.33	0.035	0.011		1.3	0.13	0.702	4/1/15	7:03	WSD
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	4/1/15	7:03	WSD
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19	0.702	4/1/15	7:03	WSD
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	4/1/15	7:03	WSD
Trichloroethylene	ND	0.035	0.010		ND	0.19	0.702	4/1/15	7:03	WSD
Trichlorofluoromethane (Freon 11)	0.19	0.14	0.012		1.1	0.79	0.702	4/1/15	7:03	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.064	0.14	0.0098	J	0.49	1.1	0.702	4/1/15	7:03	WSD
1,2,4-Trimethylbenzene	0.040	0.035	0.0086		0.20	0.17	0.702	4/1/15	7:03	WSD
1,3,5-Trimethylbenzene	0.013	0.035	0.0070	J	0.062	0.17	0.702	4/1/15	7:03	WSD
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	4/1/15	7:03	WSD
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	4/1/15	7:03	WSD
m&p-Xylene	0.15	0.070	0.018		0.66	0.30	0.702	4/1/15	7:03	WSD
o-Xylene	0.057	0.035	0.010		0.25	0.15	0.702	4/1/15	7:03	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	98.2	70-130	4/1/15 7:03
4-Bromofluorobenzene (2)	101	70-130	4/1/15 7:03

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: EW-05-032715
Sample ID: 15C1165-09
 Sample Matrix: Sub Slab
 Sampled: 3/27/2015 09:11

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1301
 Canister Size: 6 liter
 Flow Controller ID: 4103
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -7
 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		Analized		
Acetone	20	4.0	1.4		49	9.5	2	4/1/15	9:09	WSD
Benzene	0.98	0.10	0.052		3.1	0.32	2	4/1/15	9:09	WSD
Benzyl chloride	ND	0.10	0.019		ND	0.52	2	4/1/15	9:09	WSD
Bromodichloromethane	ND	0.10	0.022		ND	0.67	2	4/1/15	9:09	WSD
Bromoform	ND	0.10	0.019		ND	1.0	2	4/1/15	9:09	WSD
Bromomethane	ND	0.10	0.069	V-05	ND	0.39	2	4/1/15	9:09	WSD
1,3-Butadiene	ND	0.10	0.051		ND	0.22	2	4/1/15	9:09	WSD
2-Butanone (MEK)	31	4.0	0.075		91	12	2	4/1/15	9:09	WSD
Carbon Disulfide	2.4	1.0	0.034		7.4	3.1	2	4/1/15	9:09	WSD
Carbon Tetrachloride	0.050	0.10	0.024	J	0.31	0.63	2	4/1/15	9:09	WSD
Chlorobenzene	ND	0.10	0.035		ND	0.46	2	4/1/15	9:09	WSD
Chloroethane	ND	0.10	0.038		ND	0.26	2	4/1/15	9:09	WSD
Chloroform	0.036	0.10	0.023	J	0.18	0.49	2	4/1/15	9:09	WSD
Chloromethane	ND	0.20	0.044		ND	0.41	2	4/1/15	9:09	WSD
Cyclohexane	ND	0.10	0.057		ND	0.34	2	4/1/15	9:09	WSD
Dibromochloromethane	ND	0.10	0.027		ND	0.85	2	4/1/15	9:09	WSD
1,2-Dibromoethane (EDB)	ND	0.10	0.022		ND	0.77	2	4/1/15	9:09	WSD
1,2-Dichlorobenzene	ND	0.10	0.027		ND	0.60	2	4/1/15	9:09	WSD
1,3-Dichlorobenzene	ND	0.10	0.022		ND	0.60	2	4/1/15	9:09	WSD
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60	2	4/1/15	9:09	WSD
Dichlorodifluoromethane (Freon 12)	0.41	0.10	0.043		2.0	0.49	2	4/1/15	9:09	WSD
1,1-Dichloroethane	0.71	0.10	0.028		2.9	0.40	2	4/1/15	9:09	WSD
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40	2	4/1/15	9:09	WSD
1,1-Dichloroethylene	0.23	0.10	0.024		0.90	0.40	2	4/1/15	9:09	WSD
cis-1,2-Dichloroethylene	0.20	0.10	0.038		0.78	0.40	2	4/1/15	9:09	WSD
trans-1,2-Dichloroethylene	ND	0.10	0.026		ND	0.40	2	4/1/15	9:09	WSD
1,2-Dichloropropane	ND	0.10	0.035		ND	0.46	2	4/1/15	9:09	WSD
cis-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45	2	4/1/15	9:09	WSD
trans-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45	2	4/1/15	9:09	WSD
Ethanol	16	4.0	1.8		31	7.5	2	4/1/15	9:09	WSD
Ethyl Acetate	0.73	0.10	0.075		2.6	0.36	2	4/1/15	9:09	WSD
Ethylbenzene	0.038	0.10	0.028	J	0.16	0.43	2	4/1/15	9:09	WSD
4-Ethyltoluene	ND	0.10	0.023		ND	0.49	2	4/1/15	9:09	WSD
Heptane	ND	0.10	0.032		ND	0.41	2	4/1/15	9:09	WSD
Hexachlorobutadiene	ND	0.10	0.038		ND	1.1	2	4/1/15	9:09	WSD
Hexane	2.1	4.0	0.18	J	7.4	14	2	4/1/15	9:09	WSD
2-Hexanone (MBK)	0.040	0.10	0.026	J	0.16	0.41	2	4/1/15	9:09	WSD
Isopropanol	4.0	4.0	0.12	J	9.8	9.8	2	4/1/15	9:09	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
 Field Sample #: EW-05-032715
 Sample ID: 15C1165-09
 Sample Matrix: Sub Slab
 Sampled: 3/27/2015 09:11

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1301
 Canister Size: 6 liter
 Flow Controller ID: 4103
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -28
 Final Vacuum(in Hg): -7
 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		Analyzed		
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.031		ND	0.36	2	4/1/15	9:09	WSD
Methylene Chloride	0.13	1.0	0.12	J	0.44	3.5	2	4/1/15	9:09	WSD
Methyl methacrylate	ND	0.10	0.031		ND	0.41	2	4/1/15	9:09	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.024	L-03	ND	0.41	2	4/1/15	9:09	WSD
Propene	ND	4.0	0.31		ND	6.9	2	4/1/15	9:09	WSD
Styrene	ND	0.10	0.019		ND	0.43	2	4/1/15	9:09	WSD
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	4/1/15	9:09	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69	2	4/1/15	9:09	WSD
Tetrachloroethylene	ND	0.10	0.028		ND	0.68	2	4/1/15	9:09	WSD
Tetrahydrofuran	110	1.0	0.42		320	2.9	20	4/1/15	9:49	WSD
Toluene	0.15	0.10	0.031		0.55	0.38	2	4/1/15	9:09	WSD
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74	2	4/1/15	9:09	WSD
1,1,1-Trichloroethane	2.5	0.10	0.018		14	0.55	2	4/1/15	9:09	WSD
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55	2	4/1/15	9:09	WSD
Trichloroethylene	7.1	0.10	0.030		38	0.54	2	4/1/15	9:09	WSD
Trichlorofluoromethane (Freon 11)	0.34	0.40	0.035	J	1.9	2.2	2	4/1/15	9:09	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.058	0.40	0.028	J	0.44	3.1	2	4/1/15	9:09	WSD
1,2,4-Trimethylbenzene	0.032	0.10	0.025	J	0.16	0.49	2	4/1/15	9:09	WSD
1,3,5-Trimethylbenzene	ND	0.10	0.020		ND	0.49	2	4/1/15	9:09	WSD
Vinyl Acetate	ND	2.0	0.051		ND	7.0	2	4/1/15	9:09	WSD
Vinyl Chloride	0.058	0.10	0.043	J	0.15	0.26	2	4/1/15	9:09	WSD
m&p-Xylene	0.090	0.20	0.050	J	0.39	0.87	2	4/1/15	9:09	WSD
o-Xylene	0.034	0.10	0.029	J	0.15	0.43	2	4/1/15	9:09	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.6	70-130	4/1/15 9:49
4-Bromofluorobenzene (1)	98.2	70-130	4/1/15 9:09
4-Bromofluorobenzene (2)	99.0	70-130	4/1/15 9:09

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: EW-06-032715
Sample ID: 15C1165-10
 Sample Matrix: Sub Slab
 Sampled: 3/27/2015 09:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1855
 Canister Size: 6 liter
 Flow Controller ID: 4104
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7.5
 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		Analized		
Acetone	16	4.0	1.4		39	9.5	2	4/1/15	10:28	WSD
Benzene	0.20	0.10	0.052		0.65	0.32	2	4/1/15	10:28	WSD
Benzyl chloride	ND	0.10	0.019		ND	0.52	2	4/1/15	10:28	WSD
Bromodichloromethane	ND	0.10	0.022		ND	0.67	2	4/1/15	10:28	WSD
Bromoform	ND	0.10	0.019		ND	1.0	2	4/1/15	10:28	WSD
Bromomethane	ND	0.10	0.069	V-05	ND	0.39	2	4/1/15	10:28	WSD
1,3-Butadiene	ND	0.10	0.051		ND	0.22	2	4/1/15	10:28	WSD
2-Butanone (MEK)	3.8	4.0	0.075	J	11	12	2	4/1/15	10:28	WSD
Carbon Disulfide	5.0	1.0	0.034		15	3.1	2	4/1/15	10:28	WSD
Carbon Tetrachloride	0.048	0.10	0.024	J	0.30	0.63	2	4/1/15	10:28	WSD
Chlorobenzene	ND	0.10	0.035		ND	0.46	2	4/1/15	10:28	WSD
Chloroethane	ND	0.10	0.038		ND	0.26	2	4/1/15	10:28	WSD
Chloroform	0.076	0.10	0.023	J	0.37	0.49	2	4/1/15	10:28	WSD
Chloromethane	1.1	0.20	0.044		2.4	0.41	2	4/1/15	10:28	WSD
Cyclohexane	ND	0.10	0.057		ND	0.34	2	4/1/15	10:28	WSD
Dibromochloromethane	ND	0.10	0.027		ND	0.85	2	4/1/15	10:28	WSD
1,2-Dibromoethane (EDB)	ND	0.10	0.022		ND	0.77	2	4/1/15	10:28	WSD
1,2-Dichlorobenzene	ND	0.10	0.027		ND	0.60	2	4/1/15	10:28	WSD
1,3-Dichlorobenzene	ND	0.10	0.022		ND	0.60	2	4/1/15	10:28	WSD
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60	2	4/1/15	10:28	WSD
Dichlorodifluoromethane (Freon 12)	0.37	0.10	0.043		1.8	0.49	2	4/1/15	10:28	WSD
1,1-Dichloroethane	0.68	0.10	0.028		2.8	0.40	2	4/1/15	10:28	WSD
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40	2	4/1/15	10:28	WSD
1,1-Dichloroethylene	ND	0.10	0.024		ND	0.40	2	4/1/15	10:28	WSD
cis-1,2-Dichloroethylene	0.072	0.10	0.038	J	0.29	0.40	2	4/1/15	10:28	WSD
trans-1,2-Dichloroethylene	ND	0.10	0.026		ND	0.40	2	4/1/15	10:28	WSD
1,2-Dichloropropane	ND	0.10	0.035		ND	0.46	2	4/1/15	10:28	WSD
cis-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45	2	4/1/15	10:28	WSD
trans-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45	2	4/1/15	10:28	WSD
Ethanol	3.0	4.0	1.8	J	5.6	7.5	2	4/1/15	10:28	WSD
Ethyl Acetate	0.10	0.10	0.075		0.37	0.36	2	4/1/15	10:28	WSD
Ethylbenzene	0.078	0.10	0.028	J	0.34	0.43	2	4/1/15	10:28	WSD
4-Ethyltoluene	ND	0.10	0.023		ND	0.49	2	4/1/15	10:28	WSD
Heptane	ND	0.10	0.032		ND	0.41	2	4/1/15	10:28	WSD
Hexachlorobutadiene	ND	0.10	0.038		ND	1.1	2	4/1/15	10:28	WSD
Hexane	2.1	4.0	0.18	J	7.3	14	2	4/1/15	10:28	WSD
2-Hexanone (MBK)	0.078	0.10	0.026	J	0.32	0.41	2	4/1/15	10:28	WSD
Isopropanol	0.71	4.0	0.12	J	1.8	9.8	2	4/1/15	10:28	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: EW-06-032715
Sample ID: 15C1165-10
 Sample Matrix: Sub Slab
 Sampled: 3/27/2015 09:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1855
 Canister Size: 6 liter
 Flow Controller ID: 4104
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -7.5
 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	0.031		ND	0.36	2	4/1/15	10:28	WSD
Methylene Chloride	0.12	1.0	0.12	J	0.43	3.5	2	4/1/15	10:28	WSD
Methyl methacrylate	ND	0.10	0.031		ND	0.41	2	4/1/15	10:28	WSD
4-Methyl-2-pentanone (MIBK)	0.032	0.10	0.024	L-03, J	0.13	0.41	2	4/1/15	10:28	WSD
Propene	0.53	4.0	0.31	J	0.91	6.9	2	4/1/15	10:28	WSD
Styrene	ND	0.10	0.019		ND	0.43	2	4/1/15	10:28	WSD
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	4/1/15	10:28	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69	2	4/1/15	10:28	WSD
Tetrachloroethylene	0.21	0.10	0.028		1.4	0.68	2	4/1/15	10:28	WSD
Tetrahydrofuran	230	1.0	0.42		680	2.9	20	4/1/15	11:08	WSD
Toluene	0.13	0.10	0.031		0.49	0.38	2	4/1/15	10:28	WSD
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74	2	4/1/15	10:28	WSD
1,1,1-Trichloroethane	2.6	0.10	0.018		14	0.55	2	4/1/15	10:28	WSD
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55	2	4/1/15	10:28	WSD
Trichloroethylene	6.2	0.10	0.030		33	0.54	2	4/1/15	10:28	WSD
Trichlorofluoromethane (Freon 11)	1.5	0.40	0.035		8.6	2.2	2	4/1/15	10:28	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.054	0.40	0.028	J	0.41	3.1	2	4/1/15	10:28	WSD
1,2,4-Trimethylbenzene	0.040	0.10	0.025	J	0.20	0.49	2	4/1/15	10:28	WSD
1,3,5-Trimethylbenzene	ND	0.10	0.020		ND	0.49	2	4/1/15	10:28	WSD
Vinyl Acetate	ND	2.0	0.051		ND	7.0	2	4/1/15	10:28	WSD
Vinyl Chloride	ND	0.10	0.043		ND	0.26	2	4/1/15	10:28	WSD
m&p-Xylene	0.080	0.20	0.050	J	0.35	0.87	2	4/1/15	10:28	WSD
o-Xylene	0.038	0.10	0.029	J	0.16	0.43	2	4/1/15	10:28	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.5	70-130	4/1/15 10:28
4-Bromofluorobenzene (2)	95.5	70-130	4/1/15 11:08
4-Bromofluorobenzene (2)	97.4	70-130	4/1/15 10:28

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: EW-07-032715
Sample ID: 15C1165-11
 Sample Matrix: Sub Slab
 Sampled: 3/27/2015 11:25

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1294
 Canister Size: 6 liter
 Flow Controller ID: 4180
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -6
 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		Analized		
Acetone	5.3	4.0	1.4		13	9.5	2	4/1/15	11:47	WSD
Benzene	0.64	0.10	0.052		2.1	0.32	2	4/1/15	11:47	WSD
Benzyl chloride	ND	0.10	0.019		ND	0.52	2	4/1/15	11:47	WSD
Bromodichloromethane	ND	0.10	0.022		ND	0.67	2	4/1/15	11:47	WSD
Bromoform	ND	0.10	0.019		ND	1.0	2	4/1/15	11:47	WSD
Bromomethane	ND	0.10	0.069	V-05	ND	0.39	2	4/1/15	11:47	WSD
1,3-Butadiene	ND	0.10	0.051		ND	0.22	2	4/1/15	11:47	WSD
2-Butanone (MEK)	3.3	4.0	0.075	J	9.7	12	2	4/1/15	11:47	WSD
Carbon Disulfide	3.2	1.0	0.034		10	3.1	2	4/1/15	11:47	WSD
Carbon Tetrachloride	0.034	0.10	0.024	J	0.21	0.63	2	4/1/15	11:47	WSD
Chlorobenzene	ND	0.10	0.035		ND	0.46	2	4/1/15	11:47	WSD
Chloroethane	0.37	0.10	0.038		0.97	0.26	2	4/1/15	11:47	WSD
Chloroform	0.42	0.10	0.023		2.1	0.49	2	4/1/15	11:47	WSD
Chloromethane	ND	0.20	0.044		ND	0.41	2	4/1/15	11:47	WSD
Cyclohexane	ND	0.10	0.057		ND	0.34	2	4/1/15	11:47	WSD
Dibromochloromethane	ND	0.10	0.027		ND	0.85	2	4/1/15	11:47	WSD
1,2-Dibromoethane (EDB)	ND	0.10	0.022		ND	0.77	2	4/1/15	11:47	WSD
1,2-Dichlorobenzene	ND	0.10	0.027		ND	0.60	2	4/1/15	11:47	WSD
1,3-Dichlorobenzene	ND	0.10	0.022		ND	0.60	2	4/1/15	11:47	WSD
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60	2	4/1/15	11:47	WSD
Dichlorodifluoromethane (Freon 12)	0.30	0.10	0.043		1.5	0.49	2	4/1/15	11:47	WSD
1,1-Dichloroethane	1.2	0.10	0.028		4.9	0.40	2	4/1/15	11:47	WSD
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40	2	4/1/15	11:47	WSD
1,1-Dichloroethylene	ND	0.10	0.024		ND	0.40	2	4/1/15	11:47	WSD
cis-1,2-Dichloroethylene	0.77	0.10	0.038		3.1	0.40	2	4/1/15	11:47	WSD
trans-1,2-Dichloroethylene	1.7	0.10	0.026		6.7	0.40	2	4/1/15	11:47	WSD
1,2-Dichloropropane	ND	0.10	0.035		ND	0.46	2	4/1/15	11:47	WSD
cis-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45	2	4/1/15	11:47	WSD
trans-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45	2	4/1/15	11:47	WSD
Ethanol	ND	4.0	1.8		ND	7.5	2	4/1/15	11:47	WSD
Ethyl Acetate	8.1	0.10	0.075		29	0.36	2	4/1/15	11:47	WSD
Ethylbenzene	0.28	0.10	0.028		1.2	0.43	2	4/1/15	11:47	WSD
4-Ethyltoluene	0.068	0.10	0.023	J	0.33	0.49	2	4/1/15	11:47	WSD
Heptane	0.10	0.10	0.032		0.43	0.41	2	4/1/15	11:47	WSD
Hexachlorobutadiene	ND	0.10	0.038		ND	1.1	2	4/1/15	11:47	WSD
Hexane	2.3	4.0	0.18	J	8.1	14	2	4/1/15	11:47	WSD
2-Hexanone (MBK)	0.25	0.10	0.026		1.0	0.41	2	4/1/15	11:47	WSD
Isopropanol	5.0	4.0	0.12		12	9.8	2	4/1/15	11:47	WSD

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: EW-07-032715
Sample ID: 15C1165-11
 Sample Matrix: Sub Slab
 Sampled: 3/27/2015 11:25

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1294
 Canister Size: 6 liter
 Flow Controller ID: 4180
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -6
 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	0.10	0.031		ND	0.36	2	4/1/15 11:47	WSD	
Methylene Chloride	0.14	1.0	0.12	J	0.49	3.5	2	4/1/15 11:47	WSD	
Methyl methacrylate	ND	0.10	0.031		ND	0.41	2	4/1/15 11:47	WSD	
4-Methyl-2-pentanone (MIBK)	0.11	0.10	0.024	L-03	0.46	0.41	2	4/1/15 11:47	WSD	
Propene	0.56	4.0	0.31	J	0.96	6.9	2	4/1/15 11:47	WSD	
Styrene	0.080	0.10	0.019	J	0.34	0.43	2	4/1/15 11:47	WSD	
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	4/1/15 11:47	WSD	
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69	2	4/1/15 11:47	WSD	
Tetrachloroethylene	12	0.10	0.028		81	0.68	2	4/1/15 11:47	WSD	
Tetrahydrofuran	220	1.0	0.42		660	2.9	20	4/1/15 12:26	WSD	
Toluene	0.19	0.10	0.031		0.72	0.38	2	4/1/15 11:47	WSD	
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74	2	4/1/15 11:47	WSD	
1,1,1-Trichloroethane	4.5	0.10	0.018		25	0.55	2	4/1/15 11:47	WSD	
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55	2	4/1/15 11:47	WSD	
Trichloroethylene	34	0.10	0.030		180	0.54	2	4/1/15 11:47	WSD	
Trichlorofluoromethane (Freon 11)	82	4.0	0.35		460	22	20	4/1/15 12:26	WSD	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.10	0.40	0.028	J	0.80	3.1	2	4/1/15 11:47	WSD	
1,2,4-Trimethylbenzene	0.28	0.10	0.025		1.4	0.49	2	4/1/15 11:47	WSD	
1,3,5-Trimethylbenzene	0.14	0.10	0.020		0.69	0.49	2	4/1/15 11:47	WSD	
Vinyl Acetate	ND	2.0	0.051		ND	7.0	2	4/1/15 11:47	WSD	
Vinyl Chloride	0.32	0.10	0.043		0.82	0.26	2	4/1/15 11:47	WSD	
m&p-Xylene	0.16	0.20	0.050	J	0.68	0.87	2	4/1/15 11:47	WSD	
o-Xylene	0.13	0.10	0.029		0.57	0.43	2	4/1/15 11:47	WSD	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	110	70-130	4/1/15 12:26
4-Bromofluorobenzene (1)	107	70-130	4/1/15 11:47
4-Bromofluorobenzene (2)	107	70-130	4/1/15 11:47

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: EW-Combined-032715
Sample ID: 15C1165-12
 Sample Matrix: Sub Slab
 Sampled: 3/27/2015 11:12

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1848
 Canister Size: 6 liter
 Flow Controller ID: 4070
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -8.5
 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	2.6	4.0	1.4	J		6.1	9.5	2	4/1/15 13:05	WSD	
Benzene	0.12	0.10	0.052			0.39	0.32	2	4/1/15 13:05	WSD	
Benzyl chloride	ND	0.10	0.019			ND	0.52	2	4/1/15 13:05	WSD	
Bromodichloromethane	ND	0.10	0.022			ND	0.67	2	4/1/15 13:05	WSD	
Bromoform	ND	0.10	0.019			ND	1.0	2	4/1/15 13:05	WSD	
Bromomethane	ND	0.10	0.069	V-05		ND	0.39	2	4/1/15 13:05	WSD	
1,3-Butadiene	ND	0.10	0.051			ND	0.22	2	4/1/15 13:05	WSD	
2-Butanone (MEK)	0.42	4.0	0.075	J		1.2	12	2	4/1/15 13:05	WSD	
Carbon Disulfide	0.076	1.0	0.034	J		0.24	3.1	2	4/1/15 13:05	WSD	
Carbon Tetrachloride	0.044	0.10	0.024	J		0.28	0.63	2	4/1/15 13:05	WSD	
Chlorobenzene	ND	0.10	0.035			ND	0.46	2	4/1/15 13:05	WSD	
Chloroethane	0.17	0.10	0.038			0.44	0.26	2	4/1/15 13:05	WSD	
Chloroform	0.51	0.10	0.023			2.5	0.49	2	4/1/15 13:05	WSD	
Chloromethane	ND	0.20	0.044			ND	0.41	2	4/1/15 13:05	WSD	
Cyclohexane	ND	0.10	0.057			ND	0.34	2	4/1/15 13:05	WSD	
Dibromochloromethane	ND	0.10	0.027			ND	0.85	2	4/1/15 13:05	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	0.022			ND	0.77	2	4/1/15 13:05	WSD	
1,2-Dichlorobenzene	ND	0.10	0.027			ND	0.60	2	4/1/15 13:05	WSD	
1,3-Dichlorobenzene	ND	0.10	0.022			ND	0.60	2	4/1/15 13:05	WSD	
1,4-Dichlorobenzene	ND	0.10	0.025			ND	0.60	2	4/1/15 13:05	WSD	
Dichlorodifluoromethane (Freon 12)	0.36	0.10	0.043			1.8	0.49	2	4/1/15 13:05	WSD	
1,1-Dichloroethane	12	0.10	0.028			49	0.40	2	4/1/15 13:05	WSD	
1,2-Dichloroethane	ND	0.10	0.028			ND	0.40	2	4/1/15 13:05	WSD	
1,1-Dichloroethylene	5.5	0.10	0.024			22	0.40	2	4/1/15 13:05	WSD	
cis-1,2-Dichloroethylene	5.2	0.10	0.038			21	0.40	2	4/1/15 13:05	WSD	
trans-1,2-Dichloroethylene	0.16	0.10	0.026			0.65	0.40	2	4/1/15 13:05	WSD	
1,2-Dichloropropane	ND	0.10	0.035			ND	0.46	2	4/1/15 13:05	WSD	
cis-1,3-Dichloropropene	ND	0.10	0.027			ND	0.45	2	4/1/15 13:05	WSD	
trans-1,3-Dichloropropene	ND	0.10	0.027			ND	0.45	2	4/1/15 13:05	WSD	
Ethanol	2.7	4.0	1.8	J		5.2	7.5	2	4/1/15 13:05	WSD	
Ethyl Acetate	3.0	0.10	0.075			11	0.36	2	4/1/15 13:05	WSD	
Ethylbenzene	ND	0.10	0.028			ND	0.43	2	4/1/15 13:05	WSD	
4-Ethyltoluene	ND	0.10	0.023			ND	0.49	2	4/1/15 13:05	WSD	
Heptane	ND	0.10	0.032			ND	0.41	2	4/1/15 13:05	WSD	
Hexachlorobutadiene	ND	0.10	0.038			ND	1.1	2	4/1/15 13:05	WSD	
Hexane	2.2	4.0	0.18	J		7.9	14	2	4/1/15 13:05	WSD	
2-Hexanone (MBK)	ND	0.10	0.026			ND	0.41	2	4/1/15 13:05	WSD	
Isopropanol	ND	4.0	0.12			ND	9.8	2	4/1/15 13:05	WSD	

ANALYTICAL RESULTS

Project Location: Providence, CT
 Date Received: 3/27/2015
Field Sample #: EW-Combined-032715
Sample ID: 15C1165-12
 Sample Matrix: Sub Slab
 Sampled: 3/27/2015 11:12

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1848
 Canister Size: 6 liter
 Flow Controller ID: 4070
 Sample Type: 30 min

Work Order: 15C1165
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -8.5
 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		
Methyl tert-Butyl Ether (MTBE)	0.056	0.10	0.031	J	0.20	0.36	2	4/1/15	13:05	WSD
Methylene Chloride	ND	1.0	0.12		ND	3.5	2	4/1/15	13:05	WSD
Methyl methacrylate	ND	0.10	0.031		ND	0.41	2	4/1/15	13:05	WSD
4-Methyl-2-pentanone (MIBK)	0.032	0.10	0.024	L-03, J	0.13	0.41	2	4/1/15	13:05	WSD
Propene	0.94	4.0	0.31	J	1.6	6.9	2	4/1/15	13:05	WSD
Styrene	ND	0.10	0.019		ND	0.43	2	4/1/15	13:05	WSD
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	4/1/15	13:05	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69	2	4/1/15	13:05	WSD
Tetrachloroethylene	59	0.10	0.028		400	0.68	2	4/1/15	13:05	WSD
Tetrahydrofuran	0.40	0.10	0.042		1.2	0.29	2	4/1/15	13:05	WSD
Toluene	0.052	0.10	0.031	J	0.20	0.38	2	4/1/15	13:05	WSD
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74	2	4/1/15	13:05	WSD
1,1,1-Trichloroethane	91	0.10	0.018		500	0.55	2	4/1/15	13:05	WSD
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55	2	4/1/15	13:05	WSD
Trichloroethylene	92	0.10	0.030		490	0.54	2	4/1/15	13:05	WSD
Trichlorofluoromethane (Freon 11)	14	0.40	0.035		80	2.2	2	4/1/15	13:05	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.070	0.40	0.028	J	0.54	3.1	2	4/1/15	13:05	WSD
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49	2	4/1/15	13:05	WSD
1,3,5-Trimethylbenzene	ND	0.10	0.020		ND	0.49	2	4/1/15	13:05	WSD
Vinyl Acetate	ND	2.0	0.051		ND	7.0	2	4/1/15	13:05	WSD
Vinyl Chloride	ND	0.10	0.043		ND	0.26	2	4/1/15	13:05	WSD
m&p-Xylene	ND	0.20	0.050		ND	0.87	2	4/1/15	13:05	WSD
o-Xylene	ND	0.10	0.029		ND	0.43	2	4/1/15	13:05	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	102	70-130	4/1/15 13:05
4-Bromofluorobenzene (2)	111	70-130	4/1/15 13:05

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
15C1165-01 [IA-01-032715]	B118556	1.5	1	N/A	1000	400	855	03/31/15
15C1165-02 [IA-02-032715]	B118556	1.5	1	N/A	1000	400	855	03/31/15
15C1165-03 [IA-03-032715]	B118556	1.5	1	N/A	1000	400	855	03/31/15
15C1165-04 [IA-04-032715]	B118556	1.5	1	N/A	1000	400	855	03/31/15
15C1165-05 [IA-05-032715]	B118556	1.5	1	N/A	1000	400	855	03/31/15
15C1165-06 [IA-06-032715]	B118556	1.5	1	N/A	1000	400	855	03/31/15
15C1165-07 [IA-07-032715]	B118556	1.5	1	N/A	1000	400	855	03/31/15
15C1165-08 [AA-01-032715]	B118556	1.5	1	N/A	1000	400	855	03/31/15
15C1165-09 [EW-05-032715]	B118556	1.5	1	N/A	1000	400	300	03/31/15
15C1165-09RE1 [EW-05-032715]	B118556	1.5	1	N/A	1000	400	30	03/31/15
15C1165-10 [EW-06-032715]	B118556	1.5	1	N/A	1000	400	300	03/31/15
15C1165-10RE1 [EW-06-032715]	B118556	1.5	1	N/A	1000	400	30	03/31/15
15C1165-11 [EW-07-032715]	B118556	1.5	1	N/A	1000	400	300	03/31/15
15C1165-11RE1 [EW-07-032715]	B118556	1.5	1	N/A	1000	400	30	03/31/15
15C1165-12 [EW-Combined-032715]	B118556	1.5	1	N/A	1000	400	300	03/31/15

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
15C1165-02RE1 [IA-02-032715]	B118557	1.5	1	N/A	1000	400	150	04/01/15
15C1165-04RE1 [IA-04-032715]	B118557	1.5	1	N/A	1000	400	150	04/01/15
15C1165-07RE1 [IA-07-032715]	B118557	1.5	1	N/A	1000	400	150	04/01/15

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 B118556 - TO-15 Prep										
Blank (B118556-BLK1)					Prepared & Analyzed: 03/31/15					
Acetone	0.47	1.0								B-07, J
Benzene	ND	0.025								
Benzyl chloride	ND	0.025								
Bromodichloromethane	ND	0.025								
Bromoform	ND	0.025								
Bromomethane	ND	0.025								V-05
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	0.050								
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								
Ethyl Acetate	ND	0.025								
Ethylbenzene	ND	0.025								
4-Ethyltoluene	ND	0.025								
Heptane	ND	0.025								
Hexachlorobutadiene	ND	0.025								
Hexane	0.27	1.0								B-07, J
2-Hexanone (MBK)	ND	0.025								
Isopropanol	ND	1.0								
Methyl tert-Butyl Ether (MTBE)	ND	0.025								
Methylene Chloride	ND	0.25								
Methyl methacrylate	ND	0.025								
4-Methyl-2-pentanone (MIBK)	ND	0.025								L-03
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 B118556 - TO-15 Prep

Blank (B118556-BLK1)

Prepared & Analyzed: 03/31/15

Tetrachloroethylene	ND	0.025									
Tetrahydrofuran	ND	0.025									
Toluene	ND	0.025									
1,2,4-Trichlorobenzene	ND	0.025									
1,1,1-Trichloroethane	ND	0.025									
1,1,2-Trichloroethane	ND	0.025									
Trichloroethylene	ND	0.025									
Trichlorofluoromethane (Freon 11)	ND	0.10									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10									
1,2,4-Trimethylbenzene	ND	0.025									
1,3,5-Trimethylbenzene	ND	0.025									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.025									
m&p-Xylene	ND	0.050									
o-Xylene	ND	0.025									
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.73</i>				<i>8.00</i>		<i>96.6</i>	<i>70-130</i>			
<i>Surrogate: 4-Bromofluorobenzene (2)</i>	<i>7.96</i>				<i>8.00</i>		<i>99.5</i>	<i>70-130</i>			

LCS (B118556-BS1)

Prepared & Analyzed: 03/31/15

Acetone	4.86				5.00		97.3	70-130			
Benzene	3.50				5.00		70.0	70-130			
Benzyl chloride	4.13				5.00		82.7	70-130			
Bromodichloromethane	3.89				5.00		77.9	70-130			
Bromoform	4.09				5.00		81.9	70-130			
Bromomethane	3.54				5.00		70.9	70-130			V-05
1,3-Butadiene	3.92				5.00		78.4	70-130			
2-Butanone (MEK)	3.55				5.00		71.0	70-130			
Carbon Disulfide	4.09				5.00		81.8	70-130			
Carbon Tetrachloride	3.61				5.00		72.2	70-130			
Chlorobenzene	3.94				5.00		78.9	70-130			
Chloroethane	4.23				5.00		84.5	70-130			
Chloroform	4.02				5.00		80.3	70-130			
Chloromethane	3.76				5.00		75.2	70-130			
Cyclohexane	3.80				5.00		75.9	70-130			
Dibromochloromethane	3.85				5.00		77.0	70-130			
1,2-Dibromoethane (EDB)	3.98				5.00		79.6	70-130			
1,2-Dichlorobenzene	4.04				5.00		80.8	70-130			
1,3-Dichlorobenzene	4.00				5.00		80.0	70-130			
1,4-Dichlorobenzene	3.91				5.00		78.2	70-130			
Dichlorodifluoromethane (Freon 12)	3.97				5.00		79.3	70-130			
1,1-Dichloroethane	3.96				5.00		79.1	70-130			
1,2-Dichloroethane	3.72				5.00		74.4	70-130			
1,1-Dichloroethylene	3.97				5.00		79.4	70-130			
cis-1,2-Dichloroethylene	3.94				5.00		78.7	70-130			
trans-1,2-Dichloroethylene	3.82				5.00		76.3	70-130			
1,2-Dichloropropane	3.68				5.00		73.6	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 B118556 - TO-15 Prep											
LCS (B118556-BS1)					Prepared & Analyzed: 03/31/15						
cis-1,3-Dichloropropene	4.03				5.00		80.5	70-130			
trans-1,3-Dichloropropene	3.74				5.00		74.7	70-130			
Ethanol	5.11				5.00		102	70-130			
Ethyl Acetate	3.62				5.00		72.5	70-130			
Ethylbenzene	4.10				5.00		81.9	70-130			
4-Ethyltoluene	4.00				5.00		80.0	70-130			
Heptane	3.59				5.00		71.7	70-130			
Hexachlorobutadiene	3.81				5.00		76.2	70-130			
Hexane	4.13				5.00		82.7	70-130			
2-Hexanone (MBK)	3.52				5.00		70.4	70-130			
Isopropanol	5.53				5.00		111	70-130			
Methyl tert-Butyl Ether (MTBE)	3.94				5.00		78.8	70-130			
Methylene Chloride	3.71				5.00		74.1	70-130			
Methyl methacrylate	3.82				5.00		76.4	70-130			
4-Methyl-2-pentanone (MIBK)	3.49				5.00		69.8 *	70-130			L-03
Propene	3.65				5.00		73.0	70-130			
Styrene	4.17				5.00		83.3	70-130			
1,1,1,2-Tetrachloroethane	0.741				0.910		81.4	70-130			
1,1,2,2-Tetrachloroethane	4.16				5.00		83.2	70-130			
Tetrachloroethylene	3.81				5.00		76.2	70-130			
Tetrahydrofuran	3.75				5.00		75.0	70-130			
Toluene	4.02				5.00		80.4	70-130			
1,2,4-Trichlorobenzene	3.86				5.00		77.3	70-130			
1,1,1-Trichloroethane	3.55				5.00		71.1	70-130			
1,1,2-Trichloroethane	4.05				5.00		81.0	70-130			
Trichloroethylene	3.70				5.00		74.0	70-130			
Trichlorofluoromethane (Freon 11)	4.03				5.00		80.5	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.51				5.00		90.2	70-130			
1,2,4-Trimethylbenzene	4.10				5.00		82.1	70-130			
1,3,5-Trimethylbenzene	3.96				5.00		79.3	70-130			
Vinyl Acetate	3.99				5.00		79.8	70-130			
Vinyl Chloride	3.77				5.00		75.4	70-130			
m&p-Xylene	8.68				10.0		86.8	70-130			
o-Xylene	3.96				5.00		79.2	70-130			
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	8.06				8.00		101	70-130			
<i>Surrogate: 4-Bromofluorobenzene (2)</i>	8.43				8.00		105	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 B118556 - TO-15 Prep										
Duplicate (B118556-DUP1)		Source: 15C1165-08				Prepared: 03/31/15 Analyzed: 04/01/15				
Acetone	3.7	1.4	8.7	3.3		3.7		0.229	25	
Benzene	0.21	0.035	0.67	0.11		0.21		0.336	25	
Benzyl chloride	ND	0.035	ND	0.18		ND			25	
Bromodichloromethane	ND	0.035	ND	0.24		ND			25	
Bromoform	ND	0.035	ND	0.36		ND			25	
Bromomethane	ND	0.035	ND	0.14		ND			25	V-05
1,3-Butadiene	0.032	0.035	0.070	0.078		ND			25	J
2-Butanone (MEK)	0.33	1.4	0.98	4.1		0.32		1.93	25	J
Carbon Disulfide	0.018	0.35	0.057	1.1		0.018		0.00	25	J
Carbon Tetrachloride	0.055	0.035	0.35	0.22		0.055		1.27	25	
Chlorobenzene	ND	0.035	ND	0.16		ND			25	
Chloroethane	ND	0.035	ND	0.093		ND			25	
Chloroform	0.013	0.035	0.062	0.17		0.013		5.41	25	J
Chloromethane	0.48	0.070	0.98	0.14		0.52		8.62	25	
Cyclohexane	ND	0.035	ND	0.12		ND			25	
Dibromochloromethane	ND	0.035	ND	0.30		ND			25	
1,2-Dibromoethane (EDB)	ND	0.035	ND	0.27		ND			25	
1,2-Dichlorobenzene	ND	0.035	ND	0.21		ND			25	
1,3-Dichlorobenzene	ND	0.035	ND	0.21		ND			25	
1,4-Dichlorobenzene	ND	0.035	ND	0.21		ND			25	
Dichlorodifluoromethane (Freon 12)	0.28	0.035	1.4	0.17		0.28		0.759	25	
1,1-Dichloroethane	ND	0.035	ND	0.14		ND			25	
1,2-Dichloroethane	ND	0.035	ND	0.14		ND			25	
1,1-Dichloroethylene	ND	0.035	ND	0.14		ND			25	
cis-1,2-Dichloroethylene	ND	0.035	ND	0.14		ND			25	
trans-1,2-Dichloroethylene	ND	0.035	ND	0.14		ND			25	
1,2-Dichloropropane	ND	0.035	ND	0.16		ND			25	
cis-1,3-Dichloropropene	ND	0.035	ND	0.16		ND			25	
trans-1,3-Dichloropropene	ND	0.035	ND	0.16		0.014			25	
Ethanol	1.1	1.4	2.0	2.6		1.1		1.23	25	J
Ethyl Acetate	0.066	0.035	0.24	0.13		0.075		12.9	25	
Ethylbenzene	0.043	0.035	0.19	0.15		0.043		0.00	25	
4-Ethyltoluene	0.015	0.035	0.076	0.17		0.016		4.44	25	J
Heptane	0.046	0.035	0.19	0.14		0.046		1.53	25	
Hexachlorobutadiene	ND	0.035	ND	0.37		ND			25	
Hexane	1.4	1.4	5.0	4.9		1.4		1.18	25	
2-Hexanone (MBK)	0.044	0.035	0.18	0.14		0.041		6.56	25	
Isopropanol	0.26	1.4	0.63	3.4		0.26		2.15	25	J
Methyl tert-Butyl Ether (MTBE)	ND	0.035	ND	0.13		ND			25	
Methylene Chloride	0.13	0.35	0.44	1.2		0.13		0.554	25	J
Methyl methacrylate	ND	0.035	ND	0.14		ND			25	
4-Methyl-2-pentanone (MIBK)	0.023	0.035	0.095	0.14		0.022		3.08	25	L-03, J
Propene	ND	1.4	ND	2.4		ND			25	
Styrene	0.0084	0.035	0.036	0.15		ND			25	J
1,1,1,2-Tetrachloroethane	ND	0.064	ND	0.44		ND			25	
1,1,2,2-Tetrachloroethane	ND	0.035	ND	0.24		ND			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 B118556 - TO-15 Prep										
Duplicate (B118556-DUP1)		Source: 15C1165-08				Prepared: 03/31/15 Analyzed: 04/01/15				
Tetrachloroethylene	0.034	0.035	0.23	0.24		0.032		6.32	25	J
Tetrahydrofuran	ND	0.035	ND	0.10		ND			25	
Toluene	0.33	0.035	1.2	0.13		0.33		2.55	25	
1,2,4-Trichlorobenzene	ND	0.035	ND	0.26		ND			25	
1,1,1-Trichloroethane	ND	0.035	ND	0.19		ND			25	
1,1,2-Trichloroethane	ND	0.035	ND	0.19		ND			25	
Trichloroethylene	0.013	0.035	0.072	0.19		ND			25	J
Trichlorofluoromethane (Freon 11)	0.18	0.14	1.0	0.79		0.19		3.80	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.062	0.14	0.47	1.1		0.064		3.35	25	J
1,2,4-Trimethylbenzene	0.041	0.035	0.20	0.17		0.040		1.74	25	
1,3,5-Trimethylbenzene	0.013	0.035	0.066	0.17		0.013		5.41	25	J
Vinyl Acetate	ND	0.70	ND	2.5		ND			25	
Vinyl Chloride	ND	0.035	ND	0.090		ND			25	
m&p-Xylene	0.15	0.070	0.65	0.30		0.15		2.33	25	
o-Xylene	0.055	0.035	0.24	0.15		0.057		3.77	25	
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.93</i>					<i>8.00</i>		<i>99.1</i>	<i>70-130</i>	
<i>Surrogate: 4-Bromofluorobenzene (2)</i>	<i>8.06</i>					<i>8.00</i>		<i>101</i>	<i>70-130</i>	
Batch B118557 - TO-15 Prep										
Blank (B118557-BLK1)		Prepared & Analyzed: 04/01/15								
Ethanol	ND	1.0								
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.66</i>					<i>8.00</i>		<i>95.7</i>	<i>70-130</i>	
LCS (B118557-BS1)										
Prepared & Analyzed: 04/01/15										
Ethanol	5.23					5.00		105	70-130	
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.15</i>					<i>8.00</i>		<i>102</i>	<i>70-130</i>	

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.
- B-07 Data is not affected by elevated level in blank since sample result is >10x level found in the blank.
 - 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.
 - 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,NY,ME
Benzene	AIHA,FL,NJ,NY,VA,ME
Benzyl chloride	AIHA,FL,NJ,NY,VA,ME
Bromodichloromethane	AIHA,NJ,NY,VA,ME
Bromoform	AIHA,NJ,NY,VA,ME
Bromomethane	AIHA,FL,NJ,NY,ME
1,3-Butadiene	AIHA,NJ,NY,VA,ME
2-Butanone (MEK)	AIHA,FL,NJ,NY,VA,ME
Carbon Disulfide	AIHA,NJ,NY,VA,ME
Carbon Tetrachloride	AIHA,FL,NJ,NY,VA,ME
Chlorobenzene	AIHA,FL,NJ,NY,VA,ME
Chloroethane	AIHA,FL,NJ,NY,VA,ME
Chloroform	AIHA,FL,NJ,NY,VA,ME
Chloromethane	AIHA,FL,NJ,NY,VA,ME
Cyclohexane	AIHA,NJ,NY,VA,ME
Dibromochloromethane	AIHA,NY,ME
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,VA,ME
1,3-Dichlorobenzene	AIHA,NJ,NY,ME
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,VA,ME
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME
1,1-Dichloroethane	AIHA,FL,NJ,NY,VA,ME
1,2-Dichloroethane	AIHA,FL,NJ,NY,VA,ME
1,1-Dichloroethylene	AIHA,FL,NJ,NY,VA,ME
cis-1,2-Dichloroethylene	AIHA,FL,NY,VA,ME
trans-1,2-Dichloroethylene	AIHA,NJ,NY,VA,ME
1,2-Dichloropropane	AIHA,FL,NJ,NY,VA,ME
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,VA,ME
trans-1,3-Dichloropropene	AIHA,NY,ME
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,VA,ME
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,VA,ME
Hexachlorobutadiene	AIHA,NJ,NY,VA,ME
Hexane	AIHA,FL,NJ,NY,VA,ME
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,VA,ME
Methylene Chloride	AIHA,FL,NJ,NY,VA,ME
Methyl methacrylate	AIHA,NJ,NY,VA,ME
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,VA,ME
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,VA,ME
Tetrachloroethylene	AIHA,FL,NJ,NY,VA,ME
Tetrahydrofuran	AIHA

CERTIFICATIONS

Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015



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

AIR SAMPLE CHAIN OF CUSTODY RECORD
 15C1165

39 SPRUCE ST
 EAST LONGMEADOW, MA 01028

Page 1 of 2
 DOC#284
 Rev. Feb 2014

Company Name: Ameex Foster Wheeler
 Address: 271 Mill Rd.
Chelmsford, MA 01821
 Attention: Mark Maggione
 Project Location: Providence, RI
 Sampled By: Mark Maggione

Telephone: 978-692-9090
 Project #: 365215005
 Client PO #: C012206368

DATA DELIVERY (check one):
 FAX EMAIL WEBSITE CLIENT

Fax #: _____
 Email: mark.maggione@ameexfw.com
 Format: XCEL PDF GIS KEY OTHER GeoTIFF

Proposal Provided? (For Billing purposes)
 yes no

Field ID	Sample Description	Media	Lab #	proposal date		ONLY USE WHEN USING PUMPS			Matrix Code*	Flow Controller ID
				Date Time	Stop Date Time	Total Minutes Sampled	Flow Rate M ³ /Min. or L/Min.	Volume Liters or M ³		
IA-01-032715	S	01		3-27-15 8:08	3-27-15 8:38	30	0.2	6	IA	1839
IA-02-032715	S	02		3-27-15 9:51	3-27-15 10:21	30	0.2	6	IA	1146
IA-03-032715	S	03		3-27-15 8:09	3-27-15 8:39	30	0.2	6	IA	1142
IA-04-032715	S	04		3-27-15 9:53	3-27-15 10:23	30	0.2	6	IA	1220
IA-05-032715	S	05		3-27-15 9:05	3-27-15 9:35	30	0.2	6	IA	1874
IA-06-032715	S	06		3-27-15 9:06	3-27-15 9:36	30	0.2	6	IA	1170
IA-07-032715	S	07		3-27-15 10:53	3-27-15 11:23	30	0.2	6	IA	1317
AA-01-032715	S	08		3-27-15 10:58	3-27-15 11:08	30	0.2	6	AMB	1834

ANALYSIS REQUESTED

70-15 for lead

"Hg"

PLEASE FILL OUT COMPLETELY, SIGN, DATE AND RETAIN THE YELLOW COPY FOR YOUR RECORD.

Summa canisters and flow controllers must be returned within 14 days of receipt or rental fees will apply.

For summa canister and flow controller information please refer to Con-Test's Air Media Agreement.

Summa Canister ID **Flow Controller ID**

CLIENT COMMENTS:
 Note: New PO and Project Number. Please B.I. to new PO

Relinquished by (signature): _____ Date/Time: 3/27/15 12:00

Received by (signature): _____ Date/Time: 1:30

Relinquished by (signature): _____ Date/Time: 17:45

Received by (signature): Mark Maggione Date/Time: 17:45

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

Turnaround
 7-Day
 10-Day
 Other _____
RUSH
 *24-Hr *48-Hr
 *72-Hr *4-Day
 *A approval Required

Matrix Code: SG= SOIL GAS IA= INDOOR AIR AMB= AMBIENT SS = SUB SLAB D = DUP BL = BLANK O = other
Media Codes: S= summa can T= tedlar 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. NELAC & AIHA-LAP, LLC Accredited/WBE/DBE Certified

Company Name: Amee Foster Wheeler
 Address: 27M, 11 Rd.
 Attention: Chersted, MA 01244

Telephone: 978-692-9090
 Project #: 36572150005
 Client PO #: C012206368

DATA DELIVERY (check one):
 FAX EMAIL WEBSITE CLIENT

Fax #: _____
 Email: Mark.Maggiore@amerfor.com
 Format: EXCEL PDF GIS KEY OTHER _____

Project Location: Providence, RI
 Sampled By: Mark Maggiore

Proposal Provided? (For Billing purposes)
 yes proposal date _____

Field ID	Sample Description	Media	Lab #	Date		Total Minutes Sampled	Flow Rate M ³ /Min. or L/Min.	Volume Liters or M ³	Matrix Code*
				Start Date Time	Stop Date Time				
	EW-05-032715	S	09	3-27-15 5:41	3-27-15 9:11	30	0.2	6	SS
	EW-06-032715	S	10	3-27-15 9:08	3-27-15 9:38	30	0.2	6	SS
	EW-07-032715	S	11	3-27-15 10:55	3-27-15 11:25	30	0.2	6	SS
	EW-Comb-032715	S	12	3-27-15 10:12	3-27-15 11:12	30	0.2	6	SS

ANALYSIS REQUESTED

TO-15 low level

Flow Controller ID

1301
1855
1294
1848

Summa Canister ID

4103
4104
4180
4070

Flow Controller ID

Summa Canister ID

Flow Controller ID

Flow Controller ID

Summa Canister ID

Flow Controller ID

Flow Controller ID

Summa Canister ID

Flow Controller ID

CLIENT COMMENTS: Note new PO.

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

Turnaround: 7-Day
 10-Day
 Other _____
RUSH
 *24-Hr *48-Hr
 *72-Hr *4-Day
 *Approval Required

Relinquished by (signature): [Signature] Date/Time: 3/27/15 13:00
 Received by (signature): [Signature] Date/Time: 13:00
 Relinquished by (signature): [Signature] Date/Time: 17:45
 Received by (signature): [Signature] Date/Time: 17:45

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. NELAC & AIHA-LAP, LLC Accredited/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 Foster Wheeler RECEIVED BY: KB DATE: 3/27/15

- 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? Yes No
Who was notified _____ Date _____ Time _____

6) Location where samples are stored: Air Lab
 Permission to subcontract samples? Yes No
 (Walk-in clients only) if not already approved
 Client Signature: _____

7) Number of cans Individually Certified or Batch Certified? _____

Containers received at Con-Test		
	# of Containers	Types (Size, Duration)
Summa Cans (TO-14/TO-15/APH)	13	6L
Tedlar Bags		
TO-17 Tubes		
Regulators	13	30 min
Restrictors		
Hg/Hopcalite Tube (NIOSH 6009)		
(TO-4A/ TO-10A/TO-13) PUFs		
PCB Florisil Tubes (NIOSH 5503)		
Air cassette		
PM 2.5/PM 10		
TO-11A Cartridges		
Other		

Unused Summas/PUF Media:
1909 -29"

Unused Regulators:
4100

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

Laboratory Comments:

1874	1834	1294	4193	4192	4107	4103	4080	4180
1839	1142	1170	4205	4204	4106	4104	4070	<input checked="" type="radio"/> KB
1146	1220	1317	4495	4039	4181			

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>		<u>Comment</u>
	T	F/NA	
1) The coolers'/boxes' custody seal, if present, is intact.		NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.		F	
4) Cooler Temperature is acceptable.		NA	
5) Cooler Temperature is recorded.		NA	
6) COC is filled out in ink and legible.	T		
7) COC is filled out with all pertinent information.	T		
8) Field Sampler's name present on COC.	T		
9) Samples are received within Holding Time.	T		
10) Sample containers have legible labels.	T		
11) Containers/media are not broken or leaking and valves and caps are closed tightly.	T		
12) Sample collection date/times are provided.	T		
13) Appropriate sample/media containers are used.	T		
14) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T		
15) Trip blanks provided if applicable.		NA	

Doc #278 Rev. 5 October 2014

Who notified of False statements?

Log-In Technician Initials: **KB**

Date/Time: **3/27/15**
 Date/Time: **17:45**

APPENDIX B

Analytical Laboratory Detection Limits

Analytical Method Information

Analyte	MDL	Reporting	Surrogate	Duplicate	Matrix Spike		Blank Spike / LCS	
		Limit	%R	RPD	%R	RPD	%R	RPD
TO-15 ppbv low level in Air (EPA TO-15)								
Preservation: NA								
Container: SUMMA Canister								
Amount Required:								
Hold Time: 30 days								
Acetone	0.69	2.0 ppbv		25				70 - 130
Benzene	0.026	0.050 ppbv		25				70 - 130
Benzyl chloride	0.0097	0.050 ppbv		25				70 - 130
Bromodichloromethane	0.011	0.050 ppbv		25				70 - 130
Bromoform	0.0096	0.050 ppbv		25				70 - 130
Bromomethane	0.034	0.050 ppbv		25				70 - 130
1,3-Butadiene	0.026	0.050 ppbv		25				70 - 130
2-Butanone (MEK)	0.037	2.0 ppbv		25				70 - 130
Carbon Disulfide	0.017	0.50 ppbv		25				70 - 130
Carbon Tetrachloride	0.012	0.050 ppbv		25				70 - 130
Chlorobenzene	0.017	0.050 ppbv		25				70 - 130
Chloroethane	0.019	0.050 ppbv		25				70 - 130
Chloroform	0.012	0.050 ppbv		25				70 - 130
Chloromethane	0.022	0.10 ppbv		25				70 - 130
Cyclohexane	0.029	0.050 ppbv		25				70 - 130
Dibromochloromethane	0.013	0.050 ppbv		25				70 - 130
1,2-Dibromoethane (EDB)	0.011	0.050 ppbv		25				70 - 130
1,2-Dichlorobenzene	0.013	0.050 ppbv		25				70 - 130
1,3-Dichlorobenzene	0.011	0.050 ppbv		25				70 - 130
1,4-Dichlorobenzene	0.013	0.050 ppbv		25				70 - 130
Dichlorodifluoromethane (Freon 12)	0.022	0.050 ppbv		25				70 - 130
1,1-Dichloroethane	0.014	0.050 ppbv		25				70 - 130
1,2-Dichloroethane	0.014	0.050 ppbv		25				70 - 130
1,1-Dichloroethylene	0.012	0.050 ppbv		25				70 - 130
cis-1,2-Dichloroethylene	0.019	0.050 ppbv		25				70 - 130
trans-1,2-Dichloroethylene	0.013	0.050 ppbv		25				70 - 130
1,2-Dichloropropane	0.017	0.050 ppbv		25				70 - 130
cis-1,3-Dichloropropene	0.013	0.050 ppbv		25				70 - 130
trans-1,3-Dichloropropene	0.013	0.050 ppbv		25				70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Fr	0.012	0.050 ppbv		25				70 - 130
1,4-Dioxane	0.32	0.50 ppbv		25				70 - 130
Ethanol	0.89	2.0 ppbv		25				70 - 130
Ethyl Acetate	0.037	0.050 ppbv		25				70 - 130
Ethylbenzene	0.014	0.050 ppbv		25				70 - 130
4-Ethyltoluene	0.011	0.050 ppbv		25				70 - 130
Heptane	0.016	0.050 ppbv		25				70 - 130
Hexachlorobutadiene	0.019	0.050 ppbv		25				70 - 130
Hexane	0.088	2.0 ppbv		25				70 - 130
2-Hexanone (MBK)	0.013	0.050 ppbv		25				70 - 130
Isopropanol	0.061	2.0 ppbv		25				70 - 130
Methyl tert-Butyl Ether (MTBE)	0.015	0.050 ppbv		25				70 - 130
Methylene Chloride	0.061	0.50 ppbv		25				70 - 130
4-Methyl-2-pentanone (MIBK)	0.012	0.050 ppbv		25				70 - 130
Naphthalene	0.027	0.050 ppbv		25				70 - 130
Propene	0.15	2.0 ppbv		25				70 - 130
Styrene	0.0097	0.050 ppbv		25				70 - 130

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike		Blank Spike / LCS	
					%R	RPD	%R	RPD
1,1,2,2-Tetrachloroethane	0.012	0.050 ppbv		25			70 - 130	
Tetrachloroethylene	0.014	0.050 ppbv		25			70 - 130	
Tetrahydrofuran	0.021	0.050 ppbv		25			70 - 130	
Toluene	0.016	0.050 ppbv		25			70 - 130	
1,2,4-Trichlorobenzene	0.019	0.050 ppbv		25			70 - 130	
1,1,1-Trichloroethane	0.0090	0.050 ppbv		25			70 - 130	
1,1,2-Trichloroethane	0.015	0.050 ppbv		25			70 - 130	
Trichloroethylene	0.015	0.050 ppbv		25			70 - 130	
Trichlorofluoromethane (Freon 11)	0.017	0.050 ppbv		25			70 - 130	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.014	0.050 ppbv		25			70 - 130	
1,2,4-Trimethylbenzene	0.012	0.050 ppbv		25			70 - 130	
1,3,5-Trimethylbenzene	0.010	0.050 ppbv		25			70 - 130	
Vinyl Acetate	0.025	1.0 ppbv		25			70 - 130	
Vinyl Chloride	0.021	0.050 ppbv		25			70 - 130	
m&p-Xylene	0.025	0.10 ppbv		25			70 - 130	
o-Xylene	0.014	0.050 ppbv		25			70 - 130	
surr: 4-Bromofluorobenzene (1)			70 - 130					
Bromochloromethane (1)								
1,4-Difluorobenzene (1)								
Chlorobenzene-d5 (1)								