

February 3, 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
Fourth Quarter, 2014
Retail Complex, Active Sub-Slab Depressurization System
Former Gorham Manufacturing Facility
333 Adelaide Avenue, Providence, Rhode Island
AMEC Project No. 3650080114**

Dear Mr. Martella:

This letter report presents the results of quarterly compliance sampling and analysis conducted by AMEC Environment and Infrastructure, Inc. (AMEC) at the retail complex located at the Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island (Site). The reporting period is from October 2014 through December 2014 and includes one quarterly compliance sampling event (December 19, 2014).

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 December 19, 2014.

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 (14L0924) associated with the December 19, 2014 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 December 19, 2014 quarterly sampling event in the small retail space (sample locations IA-5 through IA-7) were in compliance with action levels.
- The eastern small retail space (indoor air sample location IA-5) was intermittently occupied in early August 2014 for a political candidate's branch office. The lease ended after the election in November 2014.
- 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 December 19, 2014. 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 (14L0924)

associated with December 19, 2014 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) except for chloroform. The concentration of chloroform in sample from IA-4 was slightly above the TAC (0.69 ug/m³ vs. 0.50 ug/m³). As communicated to RIDEM in previous reports, Chloroform is not a constituent of concern for the site and is therefore not one of the compounds for which the vapor mitigation system was designed to address. There has been more activity in the large retail space in 2014, and it is possible that some volatile compounds are being introduced into the indoor air by the activity through cleaning fluids. The chloroform appears to be unrelated to the vapor intrusion pathway and the concentrations of chloroform above the action level do not constitute a violation of the action levels contained in the Orders of Approval.
- 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 (first quarter 2015) will cover the monitoring period from January 2015 through March 2015. The report will be prepared and submitted to the Rhode Island Department of Environmental Management (RIDEIM) in April 2015.

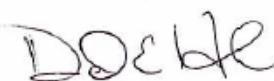
Please contact the undersigned at (978) 692-9090 if we can provide additional information or answer any questions concerning these monitoring events and system adjustments.

Sincerely,

AMEC Environment & Infrastructure, Inc.



Mark Maggiore
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

P:\old_Wakefield_Data\projects\3650080114 - Textron Gorham Vapor Mitigation System\V.0 Project Deliverables\4.1 Reports\2014\Qrt_4_2014\Final Gorham_QTR_4_2014.doc

TABLES

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

Parameter ($\mu\text{g}/\text{m}^3$)	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
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								
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								
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								
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								
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								
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	0.75 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	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								
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								
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								
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								
1,2-Dichlortetrafluoroethane	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								
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								
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								
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								
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	0.6	0.25 U	0.25 U	0.25 U	0.18 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	0.34								
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								
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								
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								
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								
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								
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	0.23	0.23	0.23	0.23	0.23	0.17 U	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	
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								
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								
Chloromethane	1.1	0.90	1.4	1.5															

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	0.13 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	0.14 U	0.20 U	0.40	0.23	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	
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								
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	
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								
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								
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								
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	0.30								
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								

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
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	0.29	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	0.055 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	0.42 U	0.44 U	0.44 U	0.44 U	0.25 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	0.21 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	0.069 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	0.16 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	0.11 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	0.063	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	0.04 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	0.059 U	0.12 U	0.14 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	0.16	0.04 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	0.74 U	0.62	0.45 U	0.12	0.52 U	0.52 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	
1,2,4-Trimethylbenzene	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	0.26	0.17 U	0.069	0.21	0.17 U	0.19	0.17 U	0.17 U	0.17 U	0.51	0.069 J	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	0.23 U	0.12 U	0.23 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	
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	0.34	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	0.12 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	0.20 U	0.20 U	0.20 U	0.066	0.061 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	0.037 J	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	0.14 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	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	0.28	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	
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	0.066 U	0.066 U	0.066 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	0.078 U	0.044 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	0.18 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	
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	0.18 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	
1,4-Dioxane																								
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
2-Hexanone	0.20 U	0.29	0.29	0.49	0.49	0.41	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
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	0.053	0.15 U	0.15 U	0.093	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.18	0.098 U	0.17 U	
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	0.12 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	0.14 U	0.2	0.036 J	0.14 U
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
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	0.58
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	0.16 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	
Bromodichloromethane	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	0.34 U	0.20 U	0.10 U	0.20 U	0.24 U	0.24									

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
Methyl methacrylate																								
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
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	0.11 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	0.072 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
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
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	2.3 U	2.4 U	2.4 U	2.4 U	1.3	1.4 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
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
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
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
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	0.13 U	0.14 U	0.14 U	0.14 U	0.04 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	0.15 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	
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
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
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
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
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	

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	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-Dichlortetrafluoroethane	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	2.3 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	2.7	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	0.82 U	0.82 U	82 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	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	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	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	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	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	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	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	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												

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	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
Methylene chloride	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	3.6 U	1.8 U	3.6 U	0.72 U	0.72 U	3.6 U	7.2 U	1.8 U	
Methyl-t-butyl ether	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	4.0 U	2.0 U	4.0 U	0.82 U	0.82 U	4.1 U	8.2 U	2.0 U	
n-Heptane	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	4.4 U	2.2 U	4.4 U	0.87 U	0.87 U	4.3 U	8.7 U	2.2 U	
o-Xylene	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
Propylene (Propene)	4.2 U	17	4.2 U	4.2 U	1.7	42 U	2.2	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	
Styrene	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
Tetrachloroethene	16	110	69	140	2200	42000	61000	150000	94000	9700	23000	37000	29000	8200	11000	30000	41000	11000
Tetrahydrofuran	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
Toluene	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	4.0 U	7.9 U	2.0 U	
trans-1,2-Dichloroethene	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	4.4 U	2.2 U	4.4 U	0.91 U	0.91 U	4.5 U	9.1 U	2.3 U	
trans-1,3-Dichloropropene	51000	20000	14000	8900	2400	3800	4400	2700	6800	1600	1100	1200	1100	410	660	790	940	290
Trichloroethene	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
Trichlorofluoromethane	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	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 6/7/2013	EW-5-121313 9/6/2013	EW-5-030714 12/13/2013	EW-5-061314 3/7/2014	EW-5-091214 6/13/2014	EW-5-121914 9/12/2014	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 4/14/2009	EW-6-061109 5/15/2009	EW-6-091709 6/11/2009	EW-6-122909 9/17/2009	EW-6-070110 12/29/2009	EW-6-091610 7/1/2010
1,1,1-Trichloroethane	81	100	190	0.55 U	0.55 U	59	180	40	68	54	74	25	69000	32000	21000	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	0.39 J	1.2 U	1.2 U	1.2 U	2.5 U	1.2 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	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	68 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	
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	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	54 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	
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	5200	2500	2100	2200	1600	780	1200	1100	930	580	47	38
1,1-Dichloroethene	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	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	0.74 U	0.35 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	74 U	3.7 U	3.7 U	3.7 U	7.5 U	3.7 U	
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	5.0 U	5.0 U	5.0 U	16	6.2	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	
1,2-Dibromoethane (EDB)	3.8 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	76 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	0.28 U	0.60 U	0.60 U	0.60 U	0.60 U	1.2 U	0.6 U	6.0 U	6.0 U	6.0 U	6.0 U	60 U	3.0 U						
1,2-Dichloroethane	2.0 U	0.17	0.40 U	0.40 U	0.40 U	0.19 U	0.40 U	0.40 U	0.40 U	0.40 U	0.4 U	0.4 U	4.0 U	4.0 U	4.0 U	4.0 U	40 U	2.0 U						
1,2-Dichloropropane	2.3 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	46 U	2.3 U						
1,2-Dichlortetrafluoroethane													7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	70 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 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	5.0 U	5.0 U	5.0 U	7.3	5.0 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	
1,3-Butadiene	2.2 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	0.22 U	0.44 U	0.22 U	2.2 U	2.2 U	2.2 U	2.2 U	22 U	1.1 U						
1,3-Dichlorobenzene	6.0 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	0.60 U	1.2 U	0.6 U	6.0 U	6.0 U	6.0 U	6.0 U	60 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	0.28 U	0.60 U	0.60 U	0.60 U	0.60 U	1.2 U	0.6 U	6.0 U	6.0 U	6.0 U	6.0 U	60 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	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	4.0 U	4.0 U	4.0 U	4.0 U	40 U	2.0 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	5.0 U	5.0 U	5.0 U	5.0 U	50 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	0.46	0.82 U	0.41 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	4.0 U		
Acetone	400	440	670	11	8.5	610	6800	210	380	610	500	98	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	5.2	5.2	4.1	3.2 U	3.2 U	32 U	1.7	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U
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	0.52 U	0.52 U	5.2 U	5.2 U	5.2 U	5.2 U	52 U	2.6 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	0.67 U	0.67 U	6.6 U	6.6 U	6.6 U	6.6 U	66 U	3.3 U						
Bromoform	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	11 U	11 U	11 U	11 U	110 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U		
Bromomethane	3.9 U	0.39 U	0.39 U	0.39 U	0.39 U	0.18 U	0.39 U	0.																

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 6/7/2013	EW-5-121313 9/6/2013	EW-5-030714 12/13/2013	EW-5-061314 3/7/2014	EW-5-091214 9/12/2014	EW-5-121914 12/19/2014	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 4/15/2009	EW-6-061109 5/15/2009	EW-6-091709 6/11/2009	EW-6-122909 9/17/2009	EW-6-070110 12/29/2009	EW-6-091610 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	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	
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	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	1.8 U	3.6 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	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	2.0 U	4.0 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	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	2.2 U	4.4 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	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	
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	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	2.1 U	4.2 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	330	290	130	290	190	300	190	210	250	68	34	23	
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	75	480	260	730	570	130	110	87	9.1	31	42000	53000	
Tetrahydrofuran	4500	7700	1000	0.29 U	0.29 U	2300	26000	1000	2900	2600	3300	460	12	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U
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	12	6.3	4.2	4.0 U	40 U	40 U	2.6	2.7	2.0	2.1	2.0 U	4.0 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	12	6.3	4.2	4.0 U	40 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	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	2.2 U	4.4 U
Trichloroethene	170	220	400	0.54 U	0.54 U	150	770	80	190	160	200	66	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	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	0.77 U	1.5 U	0.63 J	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	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	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	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	1.3 U	1.7	2.9

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

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-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	9.3	2.6	8.0	1.8	1.8 U	20	29		
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								
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	0.13 U	0.36 U	0.36 U	0.36 U	0.72 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	0.45	0.41 U	0.41 U	0.41 U	0.82 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	0.87 U	0.43 U	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U		
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	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	0.85 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	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	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	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	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	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	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	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	1.5 U	0.63 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	2.5 U	7.0 U	7.0 U	7.0 U	2.1 J	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	0.26 U	2.2	0.26 U	0.26 U	0.65	1.3	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

Extraction Well - Western Small Retail Space																									
Parameter (ug/m ³)	EW-7-061109	EW-7-091709	EW-7-122909	EW-7-032610	EW-7-070110	EW-7-091610	EW-7-120710	EW-7-021711	EW-7-060211	EW-7-091511	EW-7-120811	EW-7-030812	EW-7-061412	EW-7-091312	EW-7-010313	EW-7-031513	EW-7-060713	EW-7-090613	EW-7-100313	EW-7-121313	EW-7-030714	EW-7-061314	EW-7-091214	EW-7-121914	
	6/11/2009	9/17/2009	12/29/2009	3/26/2010	7/1/2010	9/16/2010	12/7/2010	2/17/2011	6/2/2011	9/15/2011	12/8/2011	3/8/2012	6/14/2012	9/13/2012	1/3/2013	3/15/2013	6/7/2013	9/6/2013	10/3/2013	12/13/2013	3/7/2014	6/13/2014	9/12/2014	12/19/2014	
1,1,1-Trichloroethane	2600	1400	340	51	250	290	160	110	5.5 U	110	66	11	47	95	0.55 U	3.1	15	76	52	41	30	15	52	6.1	
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	1.2 U	2.5 U	1.2 U
1,1,2,2-Tetrachloroethane	3.4 U	3.4 U	3.4 U	0.68 U	0.68 U	0.68 U	0.69 U	0.69 U	6.9 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						
1,1,2-Trichloroethane	2.7 U	2.7 U	2.7 U	0.54 U	0.54 U	0.54 U	0.55 U	0.55 U	5.5 U	1.1 U	0.55 U	2.7 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.19 U	0.55 U	1.1 U					
1,1-Dichloroethane	1100	970	470	85	320	340	220	150	45	150	80	6.4	42	100	0.40 U	2.0	7.0	51	25	12	6.9	5.4	20	1.8	
1,1-Dichloroethene	4.2	4.5	2.0 U	0.40 U	0.81	0.94	0.63	0.40 U	4.0 U	0.79 U	0.13	2.0 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.14 U	0.40 U	0.4 U					
1,2,4-Trichlorobenzene	3.7 U	3.7 U	7.5 U	1.5 U	0.74 U	0.74 U	0.74 U	0.74 U	7.4 U	3.0 U	1.5 U	15 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	1.5 U	0.74 U	
1,2,4-Trimethylbenzene	2.5 U	2.5 U	2.5 U	2.5	0.50 U	0.50 U	0.49 U	0.49 U	4.9 U	0.98 U	0.32	4.9 U	0.32	0.97	0.92	0.30	0.49 U	0.50	0.77	0.58	0.49 U	0.49 U	0.98 U	0.49 U	
1,2-Dibromoethane (EDB)	3.8 U	3.8 U	3.8 U	0.76 U	0.76 U	0.76 U	0.77 U	0.77 U	7.7 U	1.5 U	0.77 U	3.8 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.27 U	0.77 U						
1,2-Dichlorobenzene	3.0 U	3.0 U	3.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	6.0 U	1.2 U	0.60 U	6.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.21 U	0.60 U	1.2 U					
1,2-Dichloroethane	2.0 U	2.0 U	2.0 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	4.0 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	0.4 U					
1,2-Dichloropropane	2.3 U	2.3 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	4.6 U	0.92 U	0.46 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.16 U	0.46 U						
1,2-Dichlorotetrafluoroethane	3.5 U	3.5 U	3.5 U	0.70 U	0.70 U	0.70 U																			
1,3,5-Trimethylbenzene	2.5 U	2.5 U	2.5 U	1.1	0.50 U	0.50 U	0.49 U	0.49 U	4.9 U	0.98 U	0.49 U	4.9 U	0.49 U	0.50	0.49 U	0.49 U	0.49 U	0.24	0.32	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	
1,3-Butadiene	1.1 U	2.3 U	1.1 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U	0.44 U	0.22 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	0.22 U	0.44 U	0.22 U	
1,3-Dichlorobenzene	3.0 U	3.0 U	3.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	6.0 U	1.2 U	0.60 U	6.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.21 U	0.60 U	1.2 U					
1,4-Dichlorobenzene	3.0 U	3.0 U	3.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	6.0 U	1.2 U	0.60 U	6.0 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.21 U	0.60 U	1.2 U					
1,4-Dioxane																									
2-Butanone	16	4.9	3.5	31	3.8	1.8	4.1	5.3 B	59 U	24 U	6.2	100	14	3.6	18	210	99	12	8.5	5.9	3.8	9.3	7.2 J	35	
2-Hexanone	2.0 U	2.0 U	2.0 U	0.40 U	1.0	0.40 U	0.41 U	0.41 U	82 U	0.82 U	0.14	4.1 U	0.28	0.64	0.41 U	0.39	0.41 U	0.51	0.41 U	0.41 U	0.41 U	0.41 U	0.49	0.82 U	
4-Ethyltoluene	2.5 U	2.5 U	2.5 U	0.50 U	0.50 U	0.50 U	0.49 U	0.49 U	4.9 U	0.98 U	0.49 U	4.9 U	0.49 U	0.21	0.49 U	0.49 U	0.49 U	0.17 U	0.27	0.49 U	0.49 U	0.49 U	0.98 U	0.49 U	
4-Methyl-2-pentanone	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	0.13	4.1 U	1.6	0.31	0.55	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	
Acetone	24	7.9	49	26	25	12	42 B	35 B	48 U	23	12	46	31	17	23	55	28	24	35	14	6.9	19	18 J	9.4 J	
Benzene	2.8	3.0	2.2	1.5	1.7	2.1	1.4	1.6	3.2 U	2.5	1.6	3.2 U	1.5	1.2	0.89	0.54	0.61	1.9	1.9	0.86	1.3	1.1	0.59 J	0.49	
Benzyl chloride	2.6 U	2.6 U	2.6 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	5.2 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						
Bromodichloromethane	3.3 U	3.3 U	3.3 U	0.66 U	0.66 U	0.66 U	0.67 U	0.67 U	6.7 U	1.3 U	0.67 U	3.4 U	3.2	0.67 U	0.67 U	0.67 U	0.67 U	0.24 U	0.67 U						
Bromoform	5.1 U	5.1 U	5.1 U	1.1 U	1.																				

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
Methyl methacrylate																								
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
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	3.6 U	0.72 U	0.36 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.13 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.72 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
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
Proplyene (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	1.1	14 U	6.9 U	
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
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
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
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	0.6
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
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	
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
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
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
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 U	1.2 J	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	1.5	1.8	0.26 U	0.16 J	

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 6/11/2009	IA-5-032610 12/29/2009	IA-5-070110 3/26/2010	IA-5-091610 7/1/2010	IA-5-120810 9/16/2010	IA-5-021711 12/8/2010	IA-5-060211 2/17/2011	IA-5-091511 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					
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					
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					
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					
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	0.75 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	
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	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					
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					
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					
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					
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					
1,3,5-Trimethylbenzene	52	0.25 U	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	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					
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					
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					
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	0.20 U	0.20 U	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					
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	0.34 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	0.52 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	0.16 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					
Chloroethane	500	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									

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	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	0.39	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	0.52	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)	CT IACTIND 2003 (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	121914 12/19/2014	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		
1,1,1-Trichloroethane	500	0.15	0.082 U	0.065	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	110	3.9	0.27 U	0.29	0.27 U	0.27 U	1.6	0.27 U	0.27 U	0.27 U	0.27 U		
1,1,1,2-Tetrachloroethane	1.1		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	0.44													
1,1,2,2-Tetrachloroethane	0.14	0.16	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	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	0.14	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	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	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	3.9	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	0.12 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	1.2	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	22	0.45 U	0.45 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	0.26	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.75 U	0.75 U		
1,2,4-Trimethylbenzene	52	1.3	0.15 U	0.16	0.29	0.17 U	0.072	0.21	0.27	0.17 U	0.69	0.23	0.17 U	0.17	0.75	0.32	0.29	1.5	0.25 U	0.25 U	0.18 U	0.25 U	0.29	0.34	0.25 U	0.34	0.25 U
1,2-Dibromoethane (EDB)	0.038	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	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U		
1,2-Dichlorobenzene	410	23	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	0.21	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	
1,2-Dichloroethane	0.31	0.066	0.061 U	0.044	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	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		
1,2-Dichloropropane	0.42	0.14 U	0.069 U	0.067	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	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U		
1,2-Dichlorotetrafluoroethane	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	
1,3,5-Trimethylbenzene	52	0.39	0.15 U	0.077	0.11	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17	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		
1,3-Butadiene	NA	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	0.078 U	0.078 U	0.078	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.080 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U		
1,3-Dichlorobenzene	410	0.076	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	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		
1,4-Dichlorobenzene	24	0.37	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	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		
1,4-Dioxane	NA																										
2-Butanone	500	0.98	2.0	0.94	2.3	1.3	1.3	3.2	2.4	2.2	1.8	3.7	0.8 J	0.8	120	10	3.2	2.9	2.4	2.3	1.0	2.5	4.1	2.4	1.8		
2-Hexanone	NA	0.13	0.32	0.081	0.17	0.16	0.16	0.48	0.44	0.14 U	0.32	0.52	0.14 U	0.14	0.20 U	0.42	0.37	0.34	0.20 U	0.37	0.14 U	0.62	0.72	0.70	0.20 U		
4-Ethyltoluene	NA	0.25	0.15 U	0.053	0.097	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17	0.25 U	0.25 U	0.47	0.47	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U			
4-Methyl-2-pentanone	200	0.13	0.18	0.34	0.22	0.14 U	0.14 U	0.19	0.14 U	0.14 U	0.14 U	0.14	0.14	0.20 U	0.20 U	0.36	0.20 U	0.20 U	0.20 U	0.14 U	0.34	0.70	0.29	0.20 U			
Acetone	500	6.6	11	13	13	9.0	9.7	24	19	40	12	25	10	44	14	14	25	11	8.5	6.1	11	28	20	14			
Benzene	3.3	0.38	0.34	0.20	0.53	0.53	0.80	0.27	0.68	0.55	2.9	0.55	0.4	0.4													

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

Parameter (ug/m ³)	CT IACTIND 2003 (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	121914 9/12/2014	12/19/2014 4	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	NA	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												
Methylene chloride	17	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	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	190	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	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	0.081	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	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	500	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	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)	NA	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	2.4 U	2.4 U	2.4	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	290	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	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	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	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	
Tetrahydrofuran	NA	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	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	
Toluene	500	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	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	200	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	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	
trans-1,3-Dichloropropene	2.9	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	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	
Trichloroethene	1	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	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	
Trichlorofluoromethane	500	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	4.8	1.3	1.7	2.5	1.5	1.7	1.4	1.2	2.2	1.2	1.7
Trichlorotrifluoroethane	NA	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	0.64	0.51	0.48	0.45	0.64	0.48	0.53	0.74	0.63	0.48	0.51
Vinyl acetate	NA	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	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.50 U	0.18 U	0.71 U	0.36 U	
Vinyl chloride	1.9	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	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		

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

Parameter ($\mu\text{g}/\text{m}^3$)	CT IACTIND 2003 ($\mu\text{g}/\text{m}^3$)	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
1,1,1-Trichloroethane	500	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	0.12	0.19 U	
1,1,1,2-Tetrachloroethane	1.1								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	0.25 U	0.44 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	0.34 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	0.069 U	0.24 U	
1,1,2-Trichloroethane	12	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 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	0.11 U	0.19 U	
1,1-Dichloroethane	430	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	0.04 U	0.14 U	
1,1-Dichloroethene	20	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	0.04 U	0.14 U	
1,2,4-Trichlorobenzene	NA	0.75 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	0.26 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	52	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
1,2-Dibromoethane (EDB)	0.038	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 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	0.077 U	0.27 U	
1,2-Dichlorobenzene	410	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
1,2-Dichloroethane	0.31	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	0.039 J	0.14 U	
1,2-Dichloropropane	0.42	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 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	0.046 U	0.16 U	
1,2-Dichlorotetrafluoroethane	NA	0.35 U	0.35 U	0.35 U																	
1,3,5-Timethylbenzene	52	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.059	0.15 U	0.091	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.071 J	0.17 U	
1,3-Butadiene	NA	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	0.078 U	0.044 U	0.078 U	
1,3-Dichlorobenzene	410	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	0.12 U	0.21 U	
1,4-Dichlorobenzene	24	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	0.12 U	0.21 U	
1,4-Dioxane	NA																				
2-Butanone	500	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
2-Hexanone	NA	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
4-Ethyltoluene	NA	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
4-Methyl-2-pentanone	200	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
Acetone	500	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
Benzene	3.3	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	0.37
Benzyl chloride	NA	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	0.052 U	0.18 U	
Bromodichloromethane	0.46	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	0.067 U	0.24 U	
Bromoform	7.3	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	0.21 U	0.36 U	
Bromomethane	NA	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	0.078 U	0.14 U	
Carbon disulfide	NA	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	0.20	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.23	0.057 J	1.1 U
Carbon tetrachloride	0.54	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							

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 - 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
Methyl methacrylate	NA				0.20 U	0.20 U	0.20 U	0.20 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	0.082 U	0.14 U	
Methylene chloride	17	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
Methyl-t-butyl ether	190	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	0.072 U	0.13 U	
n-Heptane	NA	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
o-Xylene	500	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
Propylene (Propene)	NA	0.35 U	0.87 U	0.35 U	0.86 U	0.86 U	0.86 U	3.4 U	2.1 U	2.1 U	2.1 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.81	1.4 U	2.4 U
Styrene	290	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
Tetrachloroethene	5	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
Tetrahydrofuran	NA	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	0.17	0.046 J	0.1 U	
Toluene	500	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
trans-1,2-Dichloroethene	200	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
trans-1,3-Dichloropropene	2.9	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
Trichloroethene	1	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
Trichlorofluoromethane	500	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	
Trichlorotrifluoroethane	NA	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
Vinyl acetate	NA	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	1.4 U	2.5 U	
Vinyl chloride	1.9	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	0.084	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)	CT IACTIND 2003 (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	500	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	0.069	0.082 U	0.088	
1,1,1,2-Tetrachloroethane	1.1																		0.62 U		0.37 U	0.37 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	0.21 U	0.10 U	0.21 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	0.16 U	0.082 U	0.16 U	
1,1-Dichloroethane	430	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	0.12 U	0.061 U	0.12 U	
1,1-Dichloroethene	20	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	0.12 U	0.059 U	0.12 U	
1,2,4-Trichlorobenzene	NA	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.75 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	52	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)	0.038	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	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	0.18 U	0.18 U	0.18 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	0.070	0.061 U	0.051	
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	0.14 U	0.069 U	0.14 U	
1,2-Dichlorotetrafluoroethane	NA	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U						
1,3,5-Trimethylbenzene	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	0.10	0.15	0.083	
1,3-Butadiene	NA	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	0.066 U	0.066 U	0.066 U	
1,3-Dichlorobenzene	410	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	24	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	NA																					
2-Butanone	500	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	NA	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	NA	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	0.074	0.097	0.065	
4-Methyl-2-pentanone	200	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	500	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	3.3	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	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	0.16 U	0.16 U	0.16 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	0.33 U	0.34 U	0.34 U	0.34 U	0.20 U	0.20 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	0.51 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	
Bromomethane	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 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	NA	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	0.16 U	0.93 U	0.93 U	0.93 U	
Carbon tetrachloride	0.54	0.32	0.44	0.52	0.56 [a]	0.48	0.6 [a]	0.4														

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

Parameter (ug/m ³)	CT IACTIND 2003 (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	NA																					
Methylene chloride	17	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	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	0.11 U	0.11 U	0.11 U	
n-Heptane	NA	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	500	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)	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	2.1 U	2.1 U	2.1 U
Styrene	290	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	5	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	NA	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
Toluene	500	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	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	0.12 U	0.059 U	0.12 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	0.23 U	0.23 U	0.23 U	0.23 U	0.14 U	0.068 U	0.14 U	
Trichloroethene	1	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
Trichlorofluoromethane	500	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	NA	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	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	0.35 U	0.18 U	3.5 U	0.18 U	0.11 U	0.21 U	0.21 U
Vinyl chloride	1.9	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	0.077 U	0.038 U	0.077 U	

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

Parameter ($\mu\text{g}/\text{m}^3$)	CT IACTIND 2003 ($\mu\text{g}/\text{m}^3$)	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
1,1,1-Trichloroethane	500	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	0.055 U
1,1,1,2-Tetrachloroethane	1.1	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
1,1,2,2-Tetrachloroethane	0.14	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
1,1,2-Trichloroethane	12	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
1,1-Dichloroethane	430	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
1,1-Dichloroethene	20	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
1,2,4-Trichlorobenzene	NA	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
1,2,4-Trimethylbenzene	52	0.46	0.17 U	0.10	0.58	0.40	0.70	0.25	0.38	0.31	0.37
1,2-Dibromoethane (EDB)	0.038	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
1,2-Dichlorobenzene	410	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
1,2-Dichloroethane	0.31	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
1,2-Dichloropropane	0.42	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
1,2-Dichlorotetrafluoroethane	NA										
1,3,5-Trimethylbenzene	52	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
1,3-Butadiene	NA	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.075 U	0.078 U	0.078 U	0.044 U	0.078 U
1,3-Dichlorobenzene	410	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
1,4-Dichlorobenzene	24	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	0.21 U
1,4-Dioxane	NA										
2-Butanone	500	2.8	1.9	1.9	1.7	1.6	3.8	0.69	1.5	3	2.2 J
2-Hexanone	NA	0.41	0.20	0.35	0.14 U	0.15	1.1	0.14 U	0.37	0.35	0.41
4-Ethyltoluene	NA	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
4-Methyl-2-pentanone	200	0.29	0.18	0.14 U	0.21	0.20	0.44	0.14 U	0.14 U	0.34	0.18
Acetone	500	24	14	15	49	46	46	20	15	30	41
Benzene	3.3	0.49	0.58	0.87	0.32	0.43	1.8	0.54	1.9	0.57	0.36
Benzyl chloride	NA	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	0.46	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
Bromoform	7.3	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.35 U	0.36 U	0.36 U	0.21 U	0.36 U
Bromomethane	NA	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
Carbon disulfide	NA	0.090	1.1 U	1.1 U	0.16	0.60	0.14	1.1 U	1.1 U	0.15	0.11 J
Carbon tetrachloride	0.54	0.38	0.51	0.39	0.55 [a]	0.46	0.45	0.49	0.42	0.45	0.46
Chlorobenzene	200	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
Chloroethane	500	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
Chloroform	0.5	0.20	0.17 U	0.082	0.21	0.47	0.17	0.24	0.17 U	0.18	0.12
Chloromethane	80	1.3	1.1	1.4	1.5	1.3	1.2	1.2	1.4	1.4	0.76
cis-1,2-Dichloroethene	100	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
cis-1,3-Dichloropropene	2.9	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
Cyclohexane	NA	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
Dibromochloromethane	NA	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.29 U	0.30 U	0.30 U	0.085 U	0.3 U
Dichlorodifluoromethane	500	2.9	2.6	1.7	3.1	2.1	1.5	2.7	1.5	2.1	2.2
Ethanol	NA	60	52	11	45	21	40	25	50	79	96
Ethyl acetate	NA	0.57	0.77	0.13 U	5.5	1.3	1.9	0.34	0.56	0.41	0.37
Ethylbenzene	290	0.45	0.19	0.14	0.36	0.48	0.62	0.15 U	0.43	0.35	0.2
Hexachlorobutadiene	NA	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.36 U	0.37 U	0.37 U	0.21 U	0.37 U
Hexane	NA	0.97	0.86	0.87	2.9	1.3	0.97	0.39	1.1	0.9	0.37 J
Isopropyl alcohol	NA	22	3.3	3.4 U	3.4 U	3.4 U	6.0	40	1.9	11.0	2 U
m,p-Xylene	500	1.4	0.71	0.40	1.1	1.2	1.8	0.25	1.2	1.1	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)	CT IACTIND 2003 (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
Methyl methacrylate	NA	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
Methylene chloride	17	2.3	2.6	1.4	6.1	1.3	1.1	0.76	0.68	0.74	0.63 J
Methyl-t-butyl ether	190	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	0.13 U
n-Heptane	NA	0.99	0.14 U	0.16	0.42	1.1	1.6	0.45	1.3	4.6	1.9
o-Xylene	500	0.56	0.24	0.15	0.40	0.44	0.85	0.15 U	0.44	0.39	0.19
Propylene (Propene)	NA	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
Styrene	290	0.89	0.15 U	0.081	0.29	2.6	0.37	0.15 U	0.17	0.29	0.24
Tetrachloroethene	5	1.7	0.24 U	0.15	0.24 U	5.5	0.22	0.24 U	0.40	0.34	0.13
Tetrahydrofuran	NA	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
Toluene	500	2.4	0.99	1.0	3.8	4.7	7.8	1.1	2.8	2.2	1.3
trans-1,2-Dichloroethene	200	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U	0.14 U	0.04 U	0.14 U
trans-1,3-Dichloropropene	2.9	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	0.16 U
Trichloroethene	1	0.15	0.19 U	0.068	0.19 U	0.53	0.14	0.19 U	0.28	0.19 U	0.077
Trichlorofluoromethane	500	1.8	1.8	1.5	2.5	1.8	1.9	1.6	1.7	1.4	1.4
Trichlorotrifluoroethane	NA	0.58	0.60	0.87	1.0	0.63	0.52	0.60	0.45	0.52	0.58
Vinyl acetate	NA	0.25 U	0.25 U	0.25 U	2.5 U	2.5 U	2.4 U	2.5 U	2.5 U	1.4 U	2.5 U
Vinyl chloride	1.9	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.087 U	0.090 U	0.090 U	0.026 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 01/19/15

Checked by / Date:

NA - not available

U - Not detected, value is the detection limit

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

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	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

** ASD system offline.

NM = Not Measured

Prepared by/Date: MAM 01/21/15

Checked by/Date: SAI 1/21/15

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

Parameter ($\mu\text{g}/\text{m}^3$)	Outdoor Air Reference Locations																		
	AA-011609 1/16/2009	AA-020309 2/3/2009	AA-021109 2/11/2009	AA-021809 2/18/2009	AA-022609 2/26/2009	AA-030609 3/6/2009	AA-033109 3/31/2009	AA-041409 4/14/2009	AA-042409 4/24/2009	AA-051509 5/15/2009	AA-061109 6/11/2009	AA-091709 9/17/2009	AA-092409 9/24/2009	AA-100109 10/1/2009	AA-100809 10/8/2009	AA-122909 12/29/09	AA-012810 1/28/2010	AA-020510 2/5/2010	AA-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								
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								
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								
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								
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								
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	0.75 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								
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								
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								
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								
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								
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								
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	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 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								
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								
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								
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	0.34								
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								
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								
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								
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								
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	0.16 U	0.28	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								
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								
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								
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								
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.							

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								
n-Heptane	0.20 U	0.27	0.92	1.6	0.20 U	0.20 U	0.14 U	0.20 U	0.40	0.23	0.20 U	0.26	0.20 U	0.20 U	0.20 U					
o-Xylene	0.22 U	0.27	0.53	2.2	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	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	0.15 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	0.24 U	0.34 U	0.34 U	0.52	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U					
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.11 U	0.15 U	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								
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								
Trichloroethene	0.27 U	0.27 U	0.27 U	0.39	0.27 U	0.27 U	0.19 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								

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 12/13/2013	AA-1-030714 3/07/2014	AA-1-061314 6/13/2014	AA-1-091214 9/12/2014	AA-1-121914 12/19/2014
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	0.29	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	0.055 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	0.42 U	0.44 U	0.44 U	0.44 U	0.25 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	0.21 U	0.10 U	0.21 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	
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	0.18 U	0.19 U	0.19 U	0.19 U	0.11 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	0.063	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	0.04 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	0.12 U	0.059 U	0.12 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	0.16	0.04 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	0.74 U	0.62	0.45 U	0.12	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	
1,2,4-Trimethylbenzene	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	0.26	0.17 U	0.069	0.21	0.17 U	0.19	0.17 U	0.17 U	0.17 U	0.17 U	0.51	0.069 J	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	0.23 U	0.12 U	0.23 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		
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	0.34	0.18 U	0.18 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		
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	0.066	0.061 U	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	
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	0.14 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-Dichlortetrafluoroethane	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	0.18 U														
1,3,5-Trimethylbenzene	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	
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	0.066 U	0.066 U	0.066 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		
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	0.18 U	0.18 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	0.21 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	0.30 U	0.30 U	0.30 U	0.18 U	0.18 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	0.21 U	0.12 U	0.21 U	
1,4-Dioxane																								
2-Butanone	0.88	1.5	1.4	2.4	2.3	2.7	0.37	1.8 B	2.9 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	
2-Hexanone	0.20 U	0.29	0.29	0.49	0.49	0.41	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
4-Ethyltoluene	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	0.063	0.17 U	0.17 U	0.18	0.098 U	0.17 U		
4-Methyl-2-pentanone	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	0.10	0.14 U	0.083	0.24	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.2	0.036 J	0.14 U
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
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	0.58
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	0.16 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	
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	0.23 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
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	0.11 U	0.11 U	0.13 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	0.072 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
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
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	2.3 U	2.4 U	2.4 U	1.3	1.4 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
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
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
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
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	0.13 U	0.14 U	0.14 U	0.14 U	0.04 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	0.15 U	0.16 U	0.16 U	0.16 U	0.045 U	0.16 U	
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
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
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
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
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	

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

Parameter ($\mu\text{g}/\text{m}^3$)	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	190000	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	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										

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 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-d-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 12/13/2013	EW-Combined-030714 03/07/14	EW-Combined-061314 6/13/2014	EW-Combined-091214 9/12/2014	EW-Combined-121914 12/19/2014
1,1,1-Trichloroethane	4700	280	2500	2400	340	1100	1800	2800	1800	610	850	1900	1500	780	770	1300	420
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
1,1,2,2-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
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	0.55 U	1.1 U	0.55 U
1,1-Dichloroethane	330	36	170	200	70	78	130	200	99	59	68	150	62	53	68	130	55
1,1-Dichloroethene	81	7.3	58	44	21	34	42	15	28	24	38	56	24	27	40	52	14
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	1.5 U	0.74 U	0.26 U	0.74 U	0.74 U	0.74 U	1.5 U	0.74 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
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	0.77 U	0.27 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 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
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
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	0.46 U	0.16 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
1,2-Dichlortetrafluoroethane	0.70 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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
cis-1,2-Dichloroethene	360	28	120	160	38	47	75	150	66	30	24	93	12	25	30	57	25
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
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
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		

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-d-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
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	0.17	0.36 U	0.36 U	0.36 U	0.72 U	0.36 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
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
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	2.4 U	6.9 U	6.9 U	6.9 U	14 U	6.9 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
Tetrachloroethene	750	160	920	440	8.1	170	530	910	850	60	23	250	7.0	260	82	230	100
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
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
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
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	0.16 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	
Trichloroethene	3200	240	1800	1900	97	730	1500	2600	2000	380	280	1200	160	560	560	800	480
Trichlorofluoromethane	410	71	200	610	200	150	260	100	230	130	140	410	200	98	160	360	200
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
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
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

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							
	EW-1-030609 3/6/2009	EW-1-033109 3/31/2009	EW-2-030609 3/6/2009	EW-2-033109 3/31/2009	EW-3-030609 3/6/2009	EW-3-033109 3/31/2009	EW-4-030609 3/6/2009	EW-4-033109 3/31/2009	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	
1,1,1-Trichloroethane	59000	66000	26000	30000	54000	72000	11000	14000	1.0	15	45	1.9	13000	0.56	450	
1,1,1,2-Tetrachloroethane																
1,1,2,2-Tetrachloroethane	6.8 U	6.8 U	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	
1,1,2-Trichloroethane	6.4	10	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	
1,1-Dichloroethane	4100	4400	5700	7000	1600	2300	690	1400	0.20 U	1.0 U	5.4	11000	490	370	610	
1,1-Dichloroethene	570	1200	330	640	340	560	97	210	0.20 U	1.0 U	0.40 U	6400	96	78	87	
1,2,4-Trichlorobenzene	7.4 U	7.4 U	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	
1,2,4-Trimethylbenzene	5.0 U	5.0 U	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	
1,2-Dibromoethane (EDB)	7.6 U	7.6 U	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	
1,2-Dichlorobenzene	6.0 U	6.0 U	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	
1,2-Dichloroethane	4.0 U	4.0 U	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	
1,2-Dichloropropane	4.6 U	4.6 U	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	
1,2-Dichlorotetrafluoroethane	7.0 U	7.0 U	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	
1,3,5-Trimethylbenzene	5.0 U	5.0 U	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	
1,3-Butadiene	2.2 U	2.2 U	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	
1,3-Dichlorobenzene	6.0 U	6.0 U	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	
1,4-Dichlorobenzene	6.0 U	6.0 U	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	
1,4-Dioxane																
2-Butanone	3.5	8.9	12	11	36	10	36	6.4	10	6.3	9.4	5.5	330	1.9	2.0	
2-Hexanone	4.0 U	4.0 U	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	
4-Ethyltoluene	5.0 U	5.0 U	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	
4-Methyl-2-pentanone	4.0 U	4.0 U	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	
Acetone	35	16	9.6 U	9.6 U	53	24	26	12	1200	11	19	12	430	3.6	5.7	
Benzene	5.3	11	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	
Benzyl chloride	5.2 U	5.2 U	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	
Bromodichloromethane	6.6 U	6.6 U	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	
Bromoform	11 U	11 U	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	
Bromomethane	3.8 U	3.8 U	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	
Carbon disulfide	3.2 U	3.2 U	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	
Carbon tetrachloride	6.2 U	6.2 U	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	
Chlorobenzene	4.6 U	4.6 U	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	
Chloroethane	170	250	700	590	41	44	17	33	0.13 U	5100	1800	480	64	19	10	
Chloroform	20	34	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	
Chloromethane	2.0 U	2.0 U	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	
cis-1,2-Dichloroethene	2000	2200	6100	7600	610	1200	560	1300	0.27	1.0 U	3.9	5200	820	230	570	
cis-1,3-Dichloropropene	4.4 U	4.4 U	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	
Cyclohexane	3.4 U	5.7	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	
Dibromochloromethane	8.6 U	8.6 U	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	
Dichlorodifluoromethane	5.0 U	170	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	
Ethanol	33	40	12	8.3	39	1.8 U	8.6	1.8 U	740	36	25	9.8	110	0.38 U	2.8	
Ethyl acetate	3.6 U	3.6 U	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	
Ethylbenzene	4.4 U	4.4 U	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	
Hexachlorobutadiene	22 U	22 U	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	
Hexane	3.6 U	3.6 U	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			

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							
	EW-1-030609 3/6/2009	EW-1-033109 3/31/2009	EW-2-030609 3/6/2009	EW-2-033109 3/31/2009	EW-3-030609 3/6/2009	EW-3-033109 3/31/2009	EW-4-030609 3/6/2009	EW-4-033109 3/31/2009	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 4/14/2009	Post Carbon-010810 10/8/2010	
Methyl-t-butyl ether	3.6 U	3.6 U	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	
n-Heptane	4.0 U	4.0 U	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	
o-Xylene	4.4 U	4.4 U	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	
Propylene (Propene)	1.8 U	1.8 U	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	
Styrene	4.2 U	4.2 U	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	
Tetrachloroethene	600	1200	2300	2500	73	310	31	170	0.72	1.7 U	1.1	0.68 U	68 U	0.52	1.9	
Tetrahydrofuran	6.3	21	19	3.0 U	32	14	37	5.1	6.8	22	40	18	210	4.1	6.5	
Toluene	3.8 U	3.8 U	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	
trans-1,2-Dichloroethene	9.2	23	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	
trans-1,3-Dichloropropene	4.4 U	4.4 U	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	
Trichloroethene	31000	42000	25000	25000	8600	19000	2700	5500	2.0	11	16	2.7	54 U	1.0	1.0	
Trichlorofluoromethane	520	540	1300	1800	430	840	240	370	0.71	1.4 U	23	6700	84	180	210	
Trichlorotrifluoroethane	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U	1.3	1.9 U	0.76 U	0.76 U	76 U	0.38 U	0.51	
Vinyl acetate	3.6 U	3.6 U	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	
Vinyl chloride	2.7	4.8	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	

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

Parameter (ug/m ³)	CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space												Indoor Air - Large Retail Space												
		IA-1 011609 1/16/2009	IA-1- 020309 2/3/2009	IA-1- 021109 2/11/2009	IA-1- 021809 2/18/2009	IA-1- 022609 2/26/2009	IA-1- 030609 3/6/2009	IA-1- 033109 3/31/2009	IA-1- 041409 4/14/2009	IA-1- 042409 4/24/2009	IA-1- 091709 9/17/2009	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- 10810 1/8/2010	IA-1- 12810 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		
1,1,1-Trichloroethane	500	10	0.56	1.1	0.99	0.35	1.8	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		
1,1,1,2-Tetrachloroethane	1.1																									
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	0.34 U	0.24 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U						
1,1,2-Trichloroethane	12	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	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U						
1,1-Dichloroethane	430	0.71	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.14 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						
1,1-Dichloroethene	20	0.38	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U	0.14 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						
1,2,4-Trichlorobenzene	NA	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	0.52 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						
1,2,4-Trimethylbenzene	52	0.25 U	0.36	0.70	0.77	0.25 U	0.25 U	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	0.40	0.43				
1,2-Dibromoethane (EDB)	0.038	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U						
1,2-Dichlorobenzene	410	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	0.21 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						
1,2-Dichloroethane	0.31	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	0.14 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						
1,2-Dichloropropane	0.42	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	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U						
1,2-Dichlorotetrafluoroethane	NA	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	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U						
1,3,5-Trimethylbenzene	52	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.18	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						
1,3-Butadiene	NA	0.11 U	0.11 U	0.34	0.84	0.11 U	0.11 U	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	0.23 U	0.23 U	0.23 U	0.23 U		
1,3-Dichlorobenzene	410	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	0.21 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						
1,4-Dichlorobenzene	24	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	0.21 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						
1,4-Dioxane	NA																									
2-Butanone	500	20	3.1	5.8	3.4	2.6	2.2	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		
2-Hexanone	NA	0.20 U	0.20 U	0.60	0.42	0.20 U	0.23	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		
4-Ethyltoluene	NA	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.18	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						
4-Methyl-2-pentanone	200	0.20 U	0.20 U	0.43	0.30	0.20 U	0.20 U	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		
Acetone	500	18	7.7	19	21	10	8.7	14	12	310	11	18	13	10	13	12	2.0	19	7.3	8.5	7.0	6.5	18			
Benzene	3.3	1.0	0.68	1.9	3.0	0.69	0.87	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		
Benzyl chloride	NA	0.26 U	0.26 U	0.26 U	0.																					

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

Parameter (ug/m ³)	CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space						Indoor Air - Large Retail Space																		
		IA-1-011609 1/16/2009	IA-1-020309 2/3/2009	IA-1-021109 2/11/2009	IA-1-021809 2/18/2009	IA-1-022609 2/26/2009	IA-1-030609 3/6/2009	IA-1-033109 3/31/2009	IA-1-041409 4/14/2009	IA-1-042409 4/24/2009	IA-1-091709 9/17/2009	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		
Methyl-t-butyl ether	190	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	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U					
n-Heptane	NA	0.23	0.20 U	0.59	0.75	0.20 U	0.20 U	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	0.20 U
o-Xylene	500	0.26	0.33	0.76	0.99	0.30	0.22 U	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	0.22 U	0.28	0.46	0.51	
Propylene (Propene)	NA	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	0.35 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	0.35 U	0.87 U	0.87 U	
Styrene	290	0.21 U	0.21 U	0.21	0.28	0.21 U	0.21 U	0.21 U	0.15 U	0.24	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	0.21 U	0.21 U	0.25	0.31	
Tetrachloroethene	5	6.6 [a]	0.57	4.2	3.2	2.6	4.9	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	0.34 U	1.2	0.34 U	4.5	0.55	1.1	
Tetrahydrofuran	NA	12	1.2	1.3	0.48	0.32	0.15 U	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	0.15 U	0.22	0.15 U	0.15 U	0.15 U	0.24	
Toluene	500	1.7	1.4	4.0	5.7	2.3	0.93	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		
trans-1,2-Dichloroethene	200	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	0.14 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		
trans-1,3-Dichloropropene	2.9	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 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		
Trichloroethene	1	4.2	0.46	1.6	1.4	0.65	1.5	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	0.27 U	0.31	0.39	0.27 U	1.5	0.27 U	0.40	
Trichlorofluoromethane	500	2.1	1.4	1.7	3.1	1.6	1.7	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		
Trichlorotrifluoroethane	NA	0.65	0.64	0.47	0.46	0.67	0.48	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		
Vinyl acetate	NA	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	0.25 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						
Vinyl chloride	1.9	0.26	0.13 U	0.22	0.21	0.13 U	0.19	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		

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

Parameter (ug/m ³)	CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space																								
		IA-1-091610 9/16/2010	IA-1-120710 12/7/2010	IA-1-021711 2/17/2011	IA-1-060211 6/2/2011	IA-1-091511 9/15/2011	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-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		
1,1,1-Trichloroethane	500	0.27 U	0.27 U	0.27 U	0.27 U	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	0.19 U	0.19 U	0.11	0.19 U	0.2	0.16 J	9.9	0.63	1.1	1.1	0.44	
1,1,1,2-Tetrachloroethane	1.1					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	0.14	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	0.1 U	0.24 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	0.16 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	0.16 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
1,1-Dichloroethane	430	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	0.061 U	0.14 U	0.72	0.20 U	0.20 U	0.20 U	0.32
1,1-Dichloroethene	20	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	0.059 U	0.14 U	0.41	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	0.74 U	0.45 U	0.45 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	0.26 U	0.26 U	0.26 U	0.26 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	
1,2,4-Trimethylbenzene	52	0.56	0.25 U	0.55	0.25 U	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	0.25 U	0.37	0.70	0.65	0.30	0.30	
1,2-Dibromoethane (EDB)	0.038	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	0.12 U	0.27 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	0.18 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	0.18 U	0.21 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	0.056	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	0.14 U	0.061 U	0.14 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	0.14 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	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U		
1,2-Dichlortetrafluoroethane	NA	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	0.044	0.15 U	0.059	0.32	0.17 U	0.17 U	0.17 U	0.17 U	0.16	0.17 U	0.068 J	0.17 U	0.25 U	0.25 U	0.25	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	0.11 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	0.078 U	0.078 U	0.066 U	0.078 U	0.11 U	0.11 U	0.30	0.66	0.11 U		
1,3-Dichlorobenzene	410	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	0.18 U	0.21 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	0.18 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	0.18 U	0.21 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U		
1,4-Dioxane	NA																									
2-Butanone	500	0.85	0.68	1.7 B	2.9 U	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	21	4.1	4.6	3.0	2.9		
2-Hexanone	NA	0.20 U	0.20 U	0.20 U	4.1 U	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	0.20 U	0.20 U	0.35	0.26	0.20 U		
4-Ethyltoluene	NA	0.25 U	0.25 U	0.25 U	0.25 U	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	0.17 U	0.17 U	0.15 U	0.17 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
4-Methyl-2-pentanone	200	0.35	0.20 U	0.20 U	0.20 U	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	0.20 U	0.20 U	0.35	0.20 U	0.20 U	0.20 U	0.20 U
Acetone	500	11	12 B	15 B	11 B	18	8.0	6.0	12	16	7.0	5.0	21	35	19	13	23	13	9.3	17	9.6	14	18	9.7		
Benzene	3.3	0.8	0.49	1.5	0.25	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	1.0	0.67	1.8	3.0	0.77		
Benzyl chloride	NA	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														

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

Parameter (ug/m ³)	CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space																							
		IA-1-091610 9/16/2010	IA-1-120710 12/7/2010	IA-1-021711 2/17/2011	IA-1-060211 6/2/2011	IA-1-091511 9/15/2011	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 3/07/14	IA-1-061314 6/13/2014	IA-1-091214 9/12/2014	IA-1-121914 12/19/2014	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	
Methyl-t-butyl ether	190	0.18 U	0.18 U	0.18 U	0.18 U	0.18 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	0.13 U	0.11 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U		
n-Heptane	NA	0.36	0.20 U	0.50	0.20 U	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	0.23	0.20 U	0.58	0.73	0.22	
o-Xylene	500	0.69	0.22 U	0.56	0.22 U	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	0.30	0.34	0.76	0.89	0.34	
Propylene (Propene)	NA	0.35 U	0.86 U	0.86 U	0.86 U	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	0.18 U	0.18 U	0.090 U	0.090 U	0.18 U	
Styrene	290	0.24	0.21 U	0.21 U	0.21 U	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	0.21 U	0.21 U	0.23	0.21 U		
Tetrachloroethene	5	0.34 U	3.3	5.6 [a]	0.34 U	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	7.5 [a]	0.64	4.2	3.2	3.3	
Tetrahydrofuran	NA	0.16	0.15 U	0.15 U	0.15 U	0.15 U	0.14	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	0.16	0.14	0.1 U	12	1.2	1.2	0.49	0.41	
Toluene	500	2.5	0.44	3.0	0.58	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	1.7	1.3	4.0	5.5	2.3	
trans-1,2-Dichloroethene	200	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	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U		
trans-1,3-Dichloropropene	2.9	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	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U		
Trichloroethene	1	0.27 U	1.7	0.27 U	0.27 U	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	4.4	0.56	1.6	1.4	0.91	
Trichlorofluoromethane	500	2.7	1.2	1.7	1.1	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	2.0	1.2	1.7	2.8	1.6	
Trichlorotrifluoroethane	NA	0.48	0.57	0.64	0.67	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	0.69	0.58	0.49	0.46	0.64	
Vinyl acetate	NA	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	2.1 U	2.5 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	
Vinyl chloride	1.9	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	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.09 U	0.038 U	0.09 U	0.27	0.13 U	0.18	0.20	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)	CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space																							
		IA-2-041409 4/14/2009	IA-2-042409 4/24/2009	IA-2-091709 9/17/2009	IA-2-092409 9/24/2009	IA-2-100109 10/1/2009	IA-2-100809 10/8/2009	IA-2-012810 1/28/2010	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	500	1.4	2.1	0.27 U	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	0.13	0.082 U	0.16 U	0.08		
1,1,1,2-Tetrachloroethane	1.1																				0.62 U	0.37 U	0.37 U	0.44 U	
1,1,2,2-Tetrachloroethane	0.14	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	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	12	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	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	430	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	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	20	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	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	NA	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	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		
1,2,4-Trimethylbenzene	52	0.18 U	0.25 U	0.29	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)	0.038	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.23 U	0.12 U	0.23 U	0.27 U		
1,2-Dichlorobenzene	410	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	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.18 U	0.18 U	0.21 U		
1,2-Dichloroethane	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	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	0.42	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	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	NA	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U						
1,3,5-Trimethylbenzene	52	0.18 U	0.25 U	0.25 U	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	NA	0.08 U	0.11 U	0.23 U	0.23 U	0.23 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	0.078 U							
1,3-Dichlorobenzene	410	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	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	24	0.21 U	0.30 U	0.30 U	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	NA																				0.18 U				
2-Butanone	500	0.95	1.6	1.1	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	NA	0.14 U	0.20 U	0.25	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	NA	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	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	200	0.14 U	0.20 U	0.20 U	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	0.20 U	0.10	0.11	0.12	0.19	
Acetone	500	13	39	6.2	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	3.3	0.58	0.44	0.41	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	NA	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.16 U	0.16 U	0.18 U		
Bromodichloromethane	0.46	0.24 U	0.33 U	0.33 U	0.33 U	0.3																			

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

Parameter (ug/m ³)	CT IACTIND 2003 (ug/m ³)	Indoor Air - Large Retail Space																							
		IA-2-041409 4/14/2009	IA-2-042409 4/24/2009	IA-2-091709 9/17/2009	IA-2-092409 9/24/2009	IA-2-100109 10/1/2009	IA-2-100809 10/8/2009	IA-2-012810 1/28/2010	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	190	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.11 U	0.11 U	0.11 U	0.18			
n-Heptane	NA	0.15	0.20 U	0.34	0.83	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	500	0.22	0.22	0.27	0.42	0.30	0.44	0.46	0.40	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)	NA	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	0.87 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	290	0.15 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41	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	5	2.2	7.6 [a]	0.34 U	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	NA	0.21	0.28	0.15 U	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	0.27	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	500	1.0	1.2	1.1	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	200	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	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	2.9	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	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	1	0.77	1.9	0.27 U	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	500	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.4	1.1	1.4	1.1	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	NA	0.56	0.74	0.50	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	NA	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	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	1.9	0.10 U	0.18	0.13 U	0.13 U	0.16	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14	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)	CT IACTIND 2003 (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-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
1,1,1-Trichloroethane	500	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	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	1.1	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													
1,1,2,2-Tetrachloroethane	0.14	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	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U						
1,1,2-Trichloroethane	12	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	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U						
1,1-Dichloroethane	430	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	0.68	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U					
1,1-Dichloroethene	20	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	0.35	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U					
1,2,4-Trichlorobenzene	NA	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	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U						
1,2,4-Trimethylbenzene	52	0.98	0.13	0.43	0.20	0.17 U	0.57	0.27	0.2	0.17 U	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
1,2-Dibromoethane (EDB)	0.038	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	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U						
1,2-Dichlorobenzene	410	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	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U						
1,2-Dichloroethane	0.31	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	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U						
1,2-Dichloropropane	0.42	0.16 U	0.11	0.16 U	0.16 U	0.16 U	0.16 U	0.046 U	0.16 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U						
1,2-Dichlorotetrafluoroethane	NA										0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U						
1,3,5-Trimethylbenzene	52	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	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U						
1,3-Butadiene	NA	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	0.11 U	0.11 U	0.3	0.77	0.11 U	0.08 U	0.11 U	0.23 U					
1,3-Dichlorobenzene	410	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	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U						
1,4-Dichlorobenzene	24	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	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.21 U	0.30 U						
1,4-Dioxane	NA																						
2-Butanone	500	5.1	2.4	4.2	2.1	1.2	1.8	1.6	4.9	0.92 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-Hexanone	NA	0.17	0.22	0.51	0.41	0.14 U	0.39	0.14 U	0.16	0.14 U	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
4-Ethyltoluene	NA	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	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U						
4-Methyl-2-pentanone	200	3.6	0.14 U	0.54	0.46	0.18	0.57	1.1	1.3	0.14 U	0.20 U	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	
Acetone	500	19	46	32	22	32	32	29	37	9.7	18	12	17	24	9.7	7.5	50	11	19	6.7	11	14	21
Benzene	3.3	0.65	0.91	0.56	0.32	0.66	2.0	0.62	0.30	0.36	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
Benzyl chloride	NA	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	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U						
Bromodichloromethane	0.46	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	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U						
Bromoform	7.3	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	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U						
Bromomethane	NA	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	0.19 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			

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

Parameter (ug/m ³)	CT IACTIND 2003 (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-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	190	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	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U							
n-Heptane	NA	3.1	0.33	0.41	0.2	0.14 U	0.64	0.39	0.18	0.14 U	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	0.73	0.20 U
o-Xylene	500	5.1	0.33	0.52	0.2	0.15 U	0.66	0.34	0.17	0.088 J	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)	NA	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	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	
Styrene	290	0.45	0.12	0.15 U	0.17	0.15 U	0.20	0.35	0.40	0.15 U	0.21 U	0.21 U	0.21 U	0.21 U	0.15 U	0.21 U	0.40	0.21 U					
Tetrachloroethene	5	0.24	0.18	0.64	0.25	0.24 U	0.28	0.34	0.13	0.32	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	NA	0.24	0.10 U	0.10 U	0.10 U	0.10 U	0.058	0.12	0.09	0.1 U	12	1.1	1.3	0.49	0.15 U	0.24	0.15 U	0.40	0.15 U				
Toluene	500	5.6	1.5	2.8	1.3	1.0	3.2	1.9	1.6	0.6	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	200	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	0.20 U	0.20 U	0.20 U	0.20 U	0.14 U	0.20 U							
trans-1,3-Dichloropropene	2.9	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	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U							
Trichloroethene	1	0.19 U	0.053	0.19 U	0.19 U	0.19 U	0.23	0.19 U	0.064	0.14 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	500	2.7	1.3	2.0	1.3	1.6	1.2	1.3	1.3	1.4	1.9	1.3	1.8	2.8	1.8	1.2	1.3	1.4	1.2	1.2	1.2	1.2	1.3
Trichlorotrifluoroethane	NA	0.56	0.70	1.7	0.60	0.57	0.46	0.54	0.56	0.63	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	NA	0.25 U	0.25 U	2.5 U	2.5 U	1.4 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									
Vinyl chloride	1.9	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	0.09 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

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

Parameter (ug/m ³)	CT IACTIND 2003 (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 12/13/2013
1,1,1-Trichloroethane	500	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	0.11	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	1.1											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	0.14	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	12	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	430	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	0.14 U	
1,1-Dichloroethene	20	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	NA	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	0.45 U	0.45 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	
1,2,4-Trimethylbenzene	52	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)	0.038	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	410	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	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	
1,2-Dichloroethane	0.31	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 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	0.42	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	
1,2-Dichlorotetrafluoroethane	NA	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	0.25 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	NA	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	0.066 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	410	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	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	
1,4-Dichlorobenzene	24	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	0.059	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	
1,4-Dioxane	NA																				
2-Butanone	500	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	NA	0.22	0.39	0.20 U	0.29	0.52	0.67	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	NA	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	0.15	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	
4-Methyl-2-pentanone	200	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.38	0.34	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	500	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	3.3	0.67	0.53	0.6	0.67	0.47	0.51	0.72	0.47	1.4	0.29	0.30	0.39	0.23	0.66	0.53	0.75	0.23	0.75	0.54	
Benzyl chloride	NA	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	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
Bromodichloromethane	0.46	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	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	
Bromoform	7.3	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	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	
Bromomethane	NA	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	NA	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	0.93 U	0.93 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	
Carbon tetrachloride	0.54	0.31 U	0.43	0.43	0.49	0.54	0.57 [a]	0.41	0.45	0.64 [a]	0.51	0.50	0.49	0.43	0.38	0.32	0.39	0.42	0.47	0.47	
Chlorobenzene	200	0.23																			

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

Parameter (ug/m ³)	CT IACTIND 2003 (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	190	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	0.13 U	
n-Heptane	NA	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	500	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)	NA	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	290	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	0.041	0.13 U	0.10	0.14	0.15 U	0.15 U	0.15 U	0.15 U	0.3	0.15 U	
Tetrachloroethene	5	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	NA	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	0.08	0.088 U	0.088 U	0.072	0.10 U	0.10 U	0.14	0.73	0.10 U		
Toluene	500	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	200	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	0.14 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	0.22 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	
Trichloroethylene	1	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	0.19 U
Trichlorofluoromethane	500	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	NA	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	NA	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	1.9	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	0.077 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

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

Parameter (ug/m ³)	CT IACTIND 2003 (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-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
Methyl-t-butyl ether	190	0.13 U	0.13 U	0.072 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								
n-Heptane	NA	0.65	0.43	0.52	0.14 U	0.23	0.20 U	0.58	0.79	0.21	0.14 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	
o-Xylene	500	0.62	0.30	0.22	0.18	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	0.30	0.44
Propylene (Propene)	NA	2.4 U	2.4 U	1.8	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	0.18 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	
Styrene	290	0.18	0.16	0.15	0.12 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	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.22	
Tetrachloroethene	5	0.24 U	0.30	0.12	1.90	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	NA	0.10 U	0.13	0.16	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	0.19				
Toluene	500	3.4	1.8	2.5	1.3	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	200	0.14 U	0.14 U	0.04 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	
trans-1,3-Dichloropropene	2.9	0.16 U	0.16 U	0.045 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							
Trichloroethene	1	0.26	0.19 U	0.075	0.64	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	500	1.7	1.4	1.3	1.3	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	NA	0.51	0.59	0.57	0.63	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	NA	2.5 U	2.5 U	1.4 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	0.36 U	0.71 U	0.18 U						
Vinyl chloride	1.9	0.090 U	0.09 U	0.026 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	



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

Parameter ($\mu\text{g}/\text{m}^3$)	CT IACTIND 2003 ($\mu\text{g}/\text{m}^3$)	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 12/13/2013	IA-4-030714 3/07/2014	IA-4-061314 6/13/2014	IA-4-091214 9/12/2014	IA-4-121914 12/19/2014		
1,1,1-Trichloroethane	500	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	0.055 U	0.28	
1,1,1,2-Tetrachloroethane	1.1							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	0.25 U	0.44 U
1,1,2,2-Tetrachloroethane	0.14	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	0.069 U	0.24 U	
1,1,2-Trichloroethane	12	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	0.11 U	0.19 U	
1,1-Dichloroethane	430	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	20	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	0.14 U	
1,2,4-Trichlorobenzene	NA	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	0.26 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	0.15 U	0.26 U	
1,2,4-Trimethylbenzene	52	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 U		
1,2-Dibromoethane (EDB)	0.038	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	0.27 U	0.077 U	0.27 U	
1,2-Dichlorobenzene	410	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	0.21 U	0.12 U	0.21 U	
1,2-Dichloroethane	0.31	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	0.14 U	0.14 U	0.14 U	
1,2-Dichloropropane	0.42	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	
1,2-Dichlorotetrafluoroethane	NA	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	0.15 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	0.17 U	0.098 U	0.17 U	
1,3-Butadiene	NA	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	0.078 U	0.078 U	0.078 U	0.044 U	0.078 U		
1,3-Dichlorobenzene	410	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	0.21 U	0.12 U	0.21 U	
1,4-Dichlorobenzene	24	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	0.21 U	0.12 U	0.08 J	
1,4-Dioxane	NA						0.18 U															
2-Butanone	500	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		
2-Hexanone	NA	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		
4-Ethyltoluene	NA	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	0.17 U	0.17 U	0.17 U	0.17 U	0.098 U	0.055 J	
4-Methyl-2-pentanone	200	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		
Acetone	500	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		
Benzene	3.3	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		
Benzyl chloride	NA	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	
Bromodichloromethane	0.46	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	7.3	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.31 U	0.31 U	0.36 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	0.36 U	0.21 U	0.36 U	
Bromomethane	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 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	0.14 U	0.14 U	0.078 U	
Carbon disulfide	NA	0.16 U	0.16 U	0.16 U	0.16 U	1.6	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			
Carbon tetrachloride	0.54	0.48	0.44	0.46	0.																	

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

Parameter (ug/m ³)	CT IACTIND 2003 (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
Methyl-t-butyl ether	190	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	0.072 U	0.13 U
n-Heptane	NA	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
o-Xylene	500	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
Propylene (Propene)	NA	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
Styrene	290	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
Tetrachloroethene	5	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
Tetrahydrofuran	NA	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
Toluene	500	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
trans-1,2-Dichloroethene	200	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	0.04 U	0.14 U	
trans-1,3-Dichloropropene	2.9	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	0.045 U	0.16 U	
Trichloroethene	1	0.44	0.27 U	1.8	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
Trichlorofluoromethane	500	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
Trichlorotrifluoroethane	NA	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
Vinyl acetate	NA	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	1.4 U	2.5 U				
Vinyl chloride	1.9	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

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

Parameter ($\mu\text{g}/\text{m}^3$)	CT IACTIND 2003 ($\mu\text{g}/\text{m}^3$)	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	500	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										
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	0.34 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	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	430	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	0.20 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	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	52	0.25 U	0.25 U	0.25 U	0.29	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	0.38 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	0.30 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	0.20 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	0.23 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	0.35 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	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	NA	0.11 U	0.11 U	0.11 U	0.11 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	0.30 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	0.30 U	0.30 U	0.30 U	0.30 U
1,4-Dioxane	NA										
2-Butanone	500	3.3	3.4	2.1	2.6	2.0	1.6	3.1	2.5	2.6	1.4
2-Hexanone	NA	0.73	0.66	0.38	0.51	0.37	0.38	0.61	0.48	0.43	0.29
4-Ethyltoluene	NA	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	0.42	0.39	0.32	0.36	0.54	0.27	0.32	0.30	0.61	0.23
Acetone	500	12	13	10	11	8.5	7.7	13	11	9.8	6.9
Benzene	3.3	0.54	0.60	0.67	0.55	0.56	0.51	0.53	0.60	0.51	0.57
Benzyl chloride	NA	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	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	7.3	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	NA	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	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.54	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	200	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	0.13 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	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	80	1.0	0.98	1.0	0.95	1.0	1.0	0.92	1.1	0.91	1.2
cis-1,2-Dichloroethene	100	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	2.9	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	NA	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	NA	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	2.5	2.3	2.6	2.4	2.7	2.4	2.4	2.8	2.3	2.7
Ethanol	NA	65	9.0	6.5	5.9	6.0	5.6	5.9	14	44	14
Ethyl acetate	NA	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	290	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	NA	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	NA	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	NA	3.3	3.4	3.7	3.5	3.6	3.4	4.4	3.6	2.8	3.2
m,p-Xylene	500	0.58	0.57	0.58	0.55	0.49	0.50	0.48	0.53	1.0	0.50
Methyl methacrylate	NA										
Methylene chloride	17	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)	CT IACTIND 2003 (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	190	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	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
o-Xylene	500	0.28	0.28	0.27	0.27	0.25	0.26	0.25	0.27	0.34	0.26
Propylene (Propene)	NA	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	290	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	5	0.47	0.47	0.54	0.66	0.64	0.60	0.73	0.53	0.46	0.46
Tetrahydrofuran	NA	0.15 U	0.15 U	0.15 U	0.15 U	0.20	0.15 U				
Toluene	500	0.73	0.7	0.58	0.59	0.51	0.53	0.57	0.53	0.54	0.47
trans-1,2-Dichloroethene	200	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	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	1	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	500	1.3	1.3	1.2	1.1	1.4	1.3	1.1	1.4	1.0	1.4
Trichlorotrifluoroethane	NA	0.63	0.60	0.65	0.62	0.64	0.57	0.59	0.68	0.62	0.58
Vinyl acetate	NA	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	1.9	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

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

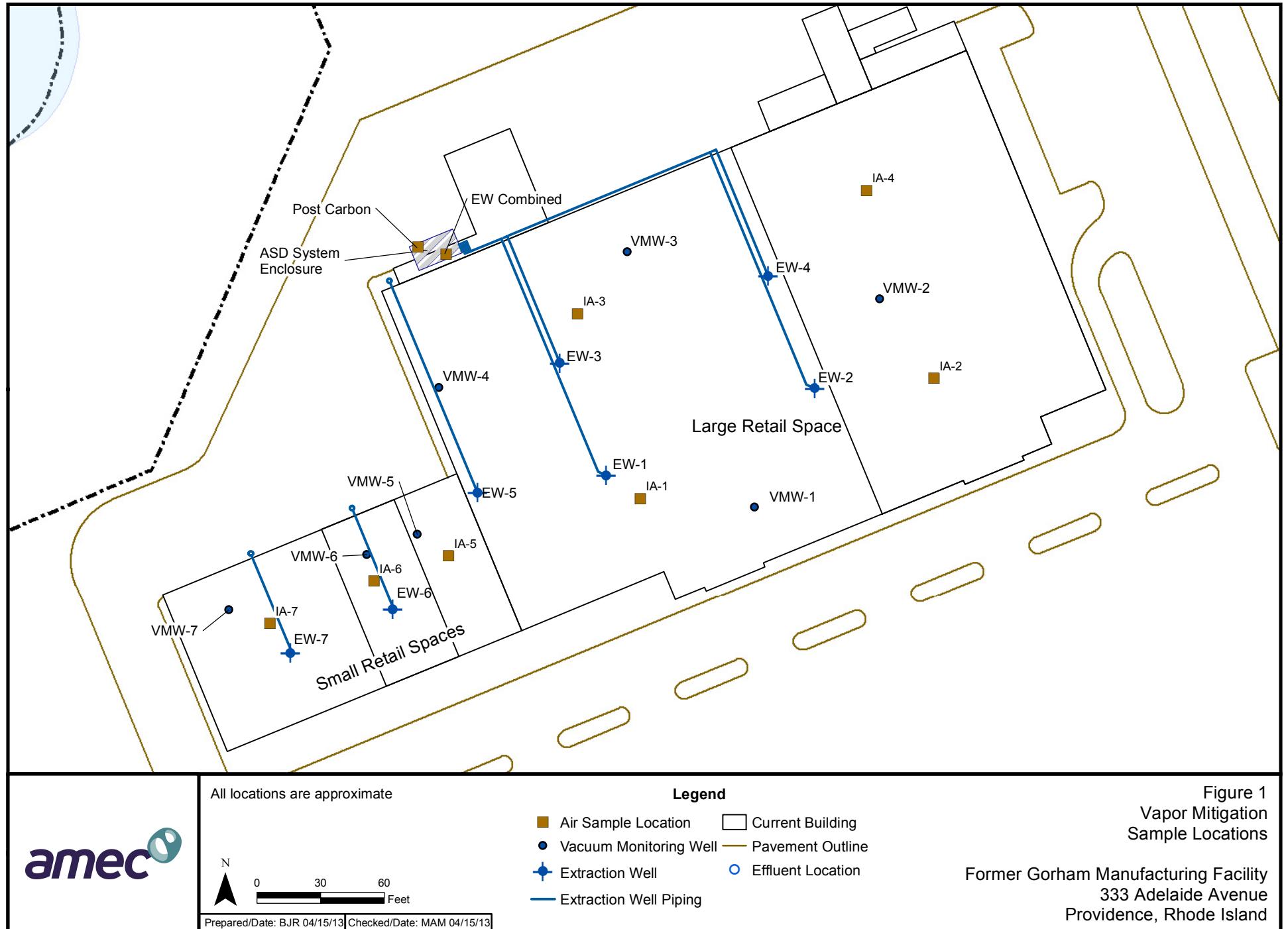
Date	Pressure Differential (inches of water)			
	VMW-1	VMW-2	VMW-3	VMW-4
2/3/2009	-0.20	-0.62	-0.15	-0.12
2/18/2009	-0.509	-0.738	-0.650	-0.253
2/26/2009	-0.511	-0.710	-0.665	-0.273
3/6/2009	-0.507	-0.610	-0.715	-0.251
3/6/2009*	-0.120	-0.195	-0.230	-0.028
3/31/2009	-0.148	-0.221	-0.244	-0.072
4/14/2009	-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

* vacuum reduced at extraction wells

** ASD system offline

Prepared by/Date: MAM 01/21/15
Checked by/Date: SAI 01/21/15

FIGURES



APPENDIX A

Laboratory Reports

December 29, 2014

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

Project Location: Providence RI
Client Job Number:
Project Number: 3650080114
Laboratory Work Order Number: 14L0924

Enclosed are results of analyses for samples received by the laboratory on December 19, 2014. 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

REPORT DATE: 12/29/2014

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

PURCHASE ORDER NUMBER: C012203270

PROJECT NUMBER: 3650080114

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14L0924

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

PROJECT LOCATION: Providence RI

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
IA-1-121914	14L0924-01	Indoor air		EPA TO-15	
IA-2-121914	14L0924-02	Indoor air		EPA TO-15	
IA-3-121914	14L0924-03	Indoor air		EPA TO-15	
IA-4-121914	14L0924-04	Indoor air		EPA TO-15	
IA-5-121914	14L0924-05	Indoor air		EPA TO-15	
IA-6-121914	14L0924-06	Indoor air		EPA TO-15	
IA-7-121914	14L0924-07	Indoor air		EPA TO-15	
AA-1-121914	14L0924-08	Ambient Air		EPA TO-15	
EW-5-121914	14L0924-09	Soil Gas		EPA TO-15	
EW-6-121914	14L0924-10	Soil Gas		EPA TO-15	
EW-7-121914	14L0924-11	Soil Gas		EPA TO-15	
EW-Combined-121914	14L0924-12	Soil Gas		EPA TO-15	
Post-Carbon-121914	14L0924-13	Soil Gas		EPA TO-15	

CASE NARRATIVE SUMMARY

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

EPA TO-15

Qualifications:

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

Analyte & Samples(s) Qualified:

1,3-Butadiene, 2-Hexanone (MBK), 4-Methyl-2-pentanone (MIBK), Chloromethane, Ethanol, Heptane

14L0924-01[IA-1-121914], 14L0924-02[IA-2-121914], 14L0924-03[IA-3-121914], 14L0924-04[IA-4-121914], 14L0924-05[IA-5-121914], 14L0924-06[IA-6-121914],
14L0924-07[IA-7-121914], 14L0924-08[AA-1-121914], 14L0924-09[EW-5-121914], 14L0924-10[EW-6-121914], 14L0924-11[EW-7-121914],
14L0924-12[EW-Combined-121914], 14L0924-13[Post-Carbon-121914], B112499-BLK1, B112499-BS1, 14L0924-04RE1[IA-4-121914], B112557-BLK1, B112557-BS1

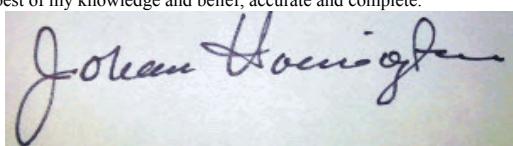
Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

1,3-Butadiene, 2-Hexanone (MBK), 4-Methyl-2-pentanone (MIBK), Heptane

14L0924-01[IA-1-121914], 14L0924-02[IA-2-121914], 14L0924-03[IA-3-121914], 14L0924-04[IA-4-121914], 14L0924-05[IA-5-121914], 14L0924-06[IA-6-121914],
14L0924-07[IA-7-121914], 14L0924-08[AA-1-121914], 14L0924-09[EW-5-121914], 14L0924-10[EW-6-121914], 14L0924-11[EW-7-121914],
14L0924-12[EW-Combined-121914], 14L0924-13[Post-Carbon-121914], B112499-BLK1, B112499-BS1

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.



Johanna K. Harrington

Manager, Laboratory Reporting

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-1-121914

Sample ID: 14L0924-01

Sample Matrix: Indoor air

Sampled: 12/19/2014 08:55

Sample Description/Location:

Sub Description/Location:

Canister ID: 1139

Canister Size: 6 liter

Flow Controller ID: 4077

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5.9

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Date/Time		
		RL	MDL	Flag	Results	RL	Dilution	Analyzed	Analyst	
Acetone	3.9	1.4	0.49		9.3	3.3	0.702	12/22/14 22:39	TPH	
Benzene	0.12	0.035	0.018		0.38	0.11	0.702	12/22/14 22:39	TPH	
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	12/22/14 22:39	TPH	
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	12/22/14 22:39	TPH	
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	12/22/14 22:39	TPH	
Bromomethane	ND	0.035	0.024		ND	0.14	0.702	12/22/14 22:39	TPH	
1,3-Butadiene	ND	0.035	0.018	L-03, V-05	ND	0.078	0.702	12/22/14 22:39	TPH	
2-Butanone (MEK)	0.28	1.4	0.026	J	0.84	4.1	0.702	12/22/14 22:39	TPH	
Carbon Disulfide	ND	0.35	0.012		ND	1.1	0.702	12/22/14 22:39	TPH	
Carbon Tetrachloride	0.046	0.035	0.0085		0.29	0.22	0.702	12/22/14 22:39	TPH	
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	12/22/14 22:39	TPH	
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	12/22/14 22:39	TPH	
Chloroform	0.027	0.035	0.0082	J	0.13	0.17	0.702	12/22/14 22:39	TPH	
Chloromethane	0.39	0.070	0.015	L-03	0.80	0.14	0.702	12/22/14 22:39	TPH	
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	12/22/14 22:39	TPH	
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	12/22/14 22:39	TPH	
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	12/22/14 22:39	TPH	
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	12/22/14 22:39	TPH	
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	12/22/14 22:39	TPH	
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	12/22/14 22:39	TPH	
Dichlorodifluoromethane (Freon 12)	0.35	0.035	0.015		1.7	0.17	0.702	12/22/14 22:39	TPH	
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	12/22/14 22:39	TPH	
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	12/22/14 22:39	TPH	
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	12/22/14 22:39	TPH	
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	12/22/14 22:39	TPH	
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	12/22/14 22:39	TPH	
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	12/22/14 22:39	TPH	
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	12/22/14 22:39	TPH	
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	12/22/14 22:39	TPH	
Ethanol	15	1.4	0.63		29	2.6	0.702	12/22/14 22:39	TPH	
Ethyl Acetate	0.056	0.035	0.026		0.20	0.13	0.702	12/22/14 22:39	TPH	
Ethylbenzene	0.015	0.035	0.0097	J	0.064	0.15	0.702	12/22/14 22:39	TPH	
4-Ethyltoluene	ND	0.035	0.0079		ND	0.17	0.702	12/22/14 22:39	TPH	
Heptane	ND	0.035	0.011	L-03, V-05	ND	0.14	0.702	12/22/14 22:39	TPH	
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	12/22/14 22:39	TPH	
Hexane	0.091	1.4	0.062	J	0.32	4.9	0.702	12/22/14 22:39	TPH	
2-Hexanone (MBK)	ND	0.035	0.0090	L-03, V-05	ND	0.14	0.702	12/22/14 22:39	TPH	
Isopropanol	0.62	1.4	0.043	J	1.5	3.4	0.702	12/22/14 22:39	TPH	

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-1-121914

Sample ID: 14L0924-01

Sample Matrix: Indoor air

Sampled: 12/19/2014 08:55

Sample Description/Location:

Sub Description/Location:

Canister ID: 1139

Canister Size: 6 liter

Flow Controller ID: 4077

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5.9

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13		0.702	12/22/14 22:39	TPH
Methylene Chloride	0.076	0.35	0.043	J	0.26	1.2		0.702	12/22/14 22:39	TPH
Methyl methacrylate	ND	0.035	0.011		ND	0.14		0.702	12/22/14 22:39	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.0084	L-03, V-05	ND	0.14		0.702	12/22/14 22:39	TPH
Propene	ND	1.4	0.11		ND	2.4		0.702	12/22/14 22:39	TPH
Styrene	ND	0.035	0.0068		ND	0.15		0.702	12/22/14 22:39	TPH
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44		0.702	12/22/14 22:39	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24		0.702	12/22/14 22:39	TPH
Tetrachloroethylene	0.044	0.035	0.010		0.30	0.24		0.702	12/22/14 22:39	TPH
Tetrahydrofuran	ND	0.035	0.015		ND	0.10		0.702	12/22/14 22:39	TPH
Toluene	0.15	0.035	0.011		0.58	0.13		0.702	12/22/14 22:39	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26		0.702	12/22/14 22:39	TPH
1,1,1-Trichloroethane	0.030	0.035	0.0063	J	0.16	0.19		0.702	12/22/14 22:39	TPH
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19		0.702	12/22/14 22:39	TPH
Trichloroethylene	0.026	0.035	0.010	J	0.14	0.19		0.702	12/22/14 22:39	TPH
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.012		1.3	0.20		0.702	12/22/14 22:39	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.081	0.035	0.0098		0.62	0.27		0.702	12/22/14 22:39	TPH
1,2,4-Trimethylbenzene	ND	0.035	0.0086		ND	0.17		0.702	12/22/14 22:39	TPH
1,3,5-Trimethylbenzene	ND	0.035	0.0070		ND	0.17		0.702	12/22/14 22:39	TPH
Vinyl Acetate	ND	0.70	0.018		ND	2.5		0.702	12/22/14 22:39	TPH
Vinyl Chloride	ND	0.035	0.015		ND	0.090		0.702	12/22/14 22:39	TPH
m&p-Xylene	0.055	0.070	0.018	J	0.24	0.30		0.702	12/22/14 22:39	TPH
o-Xylene	0.015	0.035	0.010	J	0.064	0.15		0.702	12/22/14 22:39	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	124	70-130	12/22/14 22:39
4-Bromofluorobenzene (2)	109	70-130	12/22/14 22:39

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-2-121914

Sample ID: 14L0924-02

Sample Matrix: Indoor air

Sampled: 12/19/2014 10:43

Sample Description/Location:

Sub Description/Location:

Canister ID: 1616

Canister Size: 6 liter

Flow Controller ID: 4174

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -4.2

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	4.1	1.4	0.49		9.7	3.3		0.702	12/22/14 23:23	TPH
Benzene	0.11	0.035	0.018		0.36	0.11		0.702	12/22/14 23:23	TPH
Benzyl chloride	ND	0.035	0.0068		ND	0.18		0.702	12/22/14 23:23	TPH
Bromodichloromethane	ND	0.035	0.0076		ND	0.24		0.702	12/22/14 23:23	TPH
Bromoform	ND	0.035	0.0067		ND	0.36		0.702	12/22/14 23:23	TPH
Bromomethane	ND	0.035	0.024		ND	0.14		0.702	12/22/14 23:23	TPH
1,3-Butadiene	ND	0.035	0.018	L-03, V-05	ND	0.078		0.702	12/22/14 23:23	TPH
2-Butanone (MEK)	0.31	1.4	0.026	J	0.92	4.1		0.702	12/22/14 23:23	TPH
Carbon Disulfide	ND	0.35	0.012		ND	1.1		0.702	12/22/14 23:23	TPH
Carbon Tetrachloride	0.058	0.035	0.0085		0.37	0.22		0.702	12/22/14 23:23	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16		0.702	12/22/14 23:23	TPH
Chloroethane	ND	0.035	0.013		ND	0.093		0.702	12/22/14 23:23	TPH
Chloroform	0.027	0.035	0.0082	J	0.13	0.17		0.702	12/22/14 23:23	TPH
Chloromethane	0.39	0.070	0.015	L-03	0.80	0.14		0.702	12/22/14 23:23	TPH
Cyclohexane	ND	0.035	0.020		ND	0.12		0.702	12/22/14 23:23	TPH
Dibromochloromethane	ND	0.035	0.0093		ND	0.30		0.702	12/22/14 23:23	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27		0.702	12/22/14 23:23	TPH
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21		0.702	12/22/14 23:23	TPH
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21		0.702	12/22/14 23:23	TPH
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21		0.702	12/22/14 23:23	TPH
Dichlorodifluoromethane (Freon 12)	0.37	0.035	0.015		1.8	0.17		0.702	12/22/14 23:23	TPH
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14		0.702	12/22/14 23:23	TPH
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14		0.702	12/22/14 23:23	TPH
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14		0.702	12/22/14 23:23	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14		0.702	12/22/14 23:23	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14		0.702	12/22/14 23:23	TPH
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16		0.702	12/22/14 23:23	TPH
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16		0.702	12/22/14 23:23	TPH
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16		0.702	12/22/14 23:23	TPH
Ethanol	14	1.4	0.63		27	2.6		0.702	12/22/14 23:23	TPH
Ethyl Acetate	0.048	0.035	0.026		0.17	0.13		0.702	12/22/14 23:23	TPH
Ethylbenzene	0.018	0.035	0.0097	J	0.076	0.15		0.702	12/22/14 23:23	TPH
4-Ethyltoluene	ND	0.035	0.0079		ND	0.17		0.702	12/22/14 23:23	TPH
Heptane	ND	0.035	0.011	L-03, V-05	ND	0.14		0.702	12/22/14 23:23	TPH
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37		0.702	12/22/14 23:23	TPH
Hexane	0.083	1.4	0.062	J	0.29	4.9		0.702	12/22/14 23:23	TPH
2-Hexanone (MBK)	ND	0.035	0.0090	L-03, V-05	ND	0.14		0.702	12/22/14 23:23	TPH
Isopropanol	0.63	1.4	0.043	J	1.5	3.4		0.702	12/22/14 23:23	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-2-121914

Sample ID: 14L0924-02

Sample Matrix: Indoor air

Sampled: 12/19/2014 10:43

Sample Description/Location:

Sub Description/Location:

Canister ID: 1616

Canister Size: 6 liter

Flow Controller ID: 4174

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -4.2

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13		0.702	12/22/14 23:23	TPH
Methylene Chloride	0.076	0.35	0.043	J	0.27	1.2		0.702	12/22/14 23:23	TPH
Methyl methacrylate	ND	0.035	0.011		ND	0.14		0.702	12/22/14 23:23	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.0084	L-03, V-05	ND	0.14		0.702	12/22/14 23:23	TPH
Propene	ND	1.4	0.11		ND	2.4		0.702	12/22/14 23:23	TPH
Styrene	ND	0.035	0.0068		ND	0.15		0.702	12/22/14 23:23	TPH
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44		0.702	12/22/14 23:23	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24		0.702	12/22/14 23:23	TPH
Tetrachloroethylene	0.048	0.035	0.010		0.32	0.24		0.702	12/22/14 23:23	TPH
Tetrahydrofuran	ND	0.035	0.015		ND	0.10		0.702	12/22/14 23:23	TPH
Toluene	0.17	0.035	0.011		0.64	0.13		0.702	12/22/14 23:23	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26		0.702	12/22/14 23:23	TPH
1,1,1-Trichloroethane	0.030	0.035	0.0063	J	0.16	0.19		0.702	12/22/14 23:23	TPH
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19		0.702	12/22/14 23:23	TPH
Trichloroethylene	0.025	0.035	0.010	J	0.14	0.19		0.702	12/22/14 23:23	TPH
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.012		1.4	0.20		0.702	12/22/14 23:23	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.083	0.035	0.0098		0.63	0.27		0.702	12/22/14 23:23	TPH
1,2,4-Trimethylbenzene	ND	0.035	0.0086		ND	0.17		0.702	12/22/14 23:23	TPH
1,3,5-Trimethylbenzene	ND	0.035	0.0070		ND	0.17		0.702	12/22/14 23:23	TPH
Vinyl Acetate	ND	0.70	0.018		ND	2.5		0.702	12/22/14 23:23	TPH
Vinyl Chloride	ND	0.035	0.015		ND	0.090		0.702	12/22/14 23:23	TPH
m&p-Xylene	0.071	0.070	0.018		0.31	0.30		0.702	12/22/14 23:23	TPH
o-Xylene	0.020	0.035	0.010	J	0.088	0.15		0.702	12/22/14 23:23	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	125	70-130	12/22/14 23:23
4-Bromofluorobenzene (2)	109	70-130	12/22/14 23:23

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-3-121914

Sample ID: 14L0924-03

Sample Matrix: Indoor air

Sampled: 12/19/2014 08:56

Sample Description/Location:

Sub Description/Location:

Canister ID: 1075

Canister Size: 6 liter

Flow Controller ID: 4076

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5.4

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	12	1.4	0.49		29	3.3		0.702	12/23/14 0:07	TPH
Benzene	0.16	0.035	0.018		0.50	0.11		0.702	12/23/14 0:07	TPH
Benzyl chloride	ND	0.035	0.0068		ND	0.18		0.702	12/23/14 0:07	TPH
Bromodichloromethane	ND	0.035	0.0076		ND	0.24		0.702	12/23/14 0:07	TPH
Bromoform	ND	0.035	0.0067		ND	0.36		0.702	12/23/14 0:07	TPH
Bromomethane	ND	0.035	0.024		ND	0.14		0.702	12/23/14 0:07	TPH
1,3-Butadiene	ND	0.035	0.018	L-03, V-05	ND	0.078		0.702	12/23/14 0:07	TPH
2-Butanone (MEK)	0.36	1.4	0.026	J	1.1	4.1		0.702	12/23/14 0:07	TPH
Carbon Disulfide	0.076	0.35	0.012	J	0.24	1.1		0.702	12/23/14 0:07	TPH
Carbon Tetrachloride	0.053	0.035	0.0085		0.34	0.22		0.702	12/23/14 0:07	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16		0.702	12/23/14 0:07	TPH
Chloroethane	ND	0.035	0.013		ND	0.093		0.702	12/23/14 0:07	TPH
Chloroform	0.083	0.035	0.0082		0.40	0.17		0.702	12/23/14 0:07	TPH
Chloromethane	0.41	0.070	0.015	L-03	0.85	0.14		0.702	12/23/14 0:07	TPH
Cyclohexane	ND	0.035	0.020		ND	0.12		0.702	12/23/14 0:07	TPH
Dibromochloromethane	ND	0.035	0.0093		ND	0.30		0.702	12/23/14 0:07	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27		0.702	12/23/14 0:07	TPH
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21		0.702	12/23/14 0:07	TPH
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21		0.702	12/23/14 0:07	TPH
1,4-Dichlorobenzene	0.011	0.035	0.0088	J	0.068	0.21		0.702	12/23/14 0:07	TPH
Dichlorodifluoromethane (Freon 12)	0.37	0.035	0.015		1.8	0.17		0.702	12/23/14 0:07	TPH
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14		0.702	12/23/14 0:07	TPH
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14		0.702	12/23/14 0:07	TPH
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14		0.702	12/23/14 0:07	TPH
cis-1,2-Dichloroethylene	0.12	0.035	0.013		0.46	0.14		0.702	12/23/14 0:07	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14		0.702	12/23/14 0:07	TPH
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16		0.702	12/23/14 0:07	TPH
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16		0.702	12/23/14 0:07	TPH
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16		0.702	12/23/14 0:07	TPH
Ethanol	310	40	18		580	75		20	12/23/14 23:00	TPH
Ethyl Acetate	0.13	0.035	0.026		0.47	0.13		0.702	12/23/14 0:07	TPH
Ethylbenzene	0.032	0.035	0.0097	J	0.14	0.15		0.702	12/23/14 0:07	TPH
4-Ethyltoluene	0.012	0.035	0.0079	J	0.059	0.17		0.702	12/23/14 0:07	TPH
Heptane	ND	0.035	0.011	L-03, V-05	ND	0.14		0.702	12/23/14 0:07	TPH
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37		0.702	12/23/14 0:07	TPH
Hexane	0.12	1.4	0.062	J	0.41	4.9		0.702	12/23/14 0:07	TPH
2-Hexanone (MBK)	ND	0.035	0.0090	L-03, V-05	ND	0.14		0.702	12/23/14 0:07	TPH
Isopropanol	3.1	1.4	0.043		7.7	3.4		0.702	12/23/14 0:07	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-3-121914

Sample ID: 14L0924-03

Sample Matrix: Indoor air

Sampled: 12/19/2014 08:56

Sample Description/Location:

Sub Description/Location:

Canister ID: 1075

Canister Size: 6 liter

Flow Controller ID: 4076

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5.4

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13		0.702	12/23/14 0:07	TPH
Methylene Chloride	0.084	0.35	0.043	J	0.29	1.2		0.702	12/23/14 0:07	TPH
Methyl methacrylate	ND	0.035	0.011		ND	0.14		0.702	12/23/14 0:07	TPH
4-Methyl-2-pentanone (MIBK)	0.065	0.035	0.0084	L-03, V-05	0.27	0.14		0.702	12/23/14 0:07	TPH
Propene	ND	1.4	0.11		ND	2.4		0.702	12/23/14 0:07	TPH
Styrene	0.027	0.035	0.0068	J	0.12	0.15		0.702	12/23/14 0:07	TPH
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44		0.702	12/23/14 0:07	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24		0.702	12/23/14 0:07	TPH
Tetrachloroethylene	0.28	0.035	0.010		1.9	0.24		0.702	12/23/14 0:07	TPH
Tetrahydrofuran	ND	0.035	0.015		ND	0.10		0.702	12/23/14 0:07	TPH
Toluene	0.36	0.035	0.011		1.3	0.13		0.702	12/23/14 0:07	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26		0.702	12/23/14 0:07	TPH
1,1,1-Trichloroethane	0.029	0.035	0.0063	J	0.16	0.19		0.702	12/23/14 0:07	TPH
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19		0.702	12/23/14 0:07	TPH
Trichloroethylene	0.12	0.035	0.010		0.64	0.19		0.702	12/23/14 0:07	TPH
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.012		1.3	0.20		0.702	12/23/14 0:07	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.083	0.035	0.0098		0.63	0.27		0.702	12/23/14 0:07	TPH
1,2,4-Trimethylbenzene	0.024	0.035	0.0086	J	0.12	0.17		0.702	12/23/14 0:07	TPH
1,3,5-Trimethylbenzene	ND	0.035	0.0070		ND	0.17		0.702	12/23/14 0:07	TPH
Vinyl Acetate	ND	0.70	0.018		ND	2.5		0.702	12/23/14 0:07	TPH
Vinyl Chloride	ND	0.035	0.015		ND	0.090		0.702	12/23/14 0:07	TPH
m&p-Xylene	0.13	0.070	0.018		0.58	0.30		0.702	12/23/14 0:07	TPH
o-Xylene	0.041	0.035	0.010		0.18	0.15		0.702	12/23/14 0:07	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	123	70-130	12/23/14 23:00
4-Bromofluorobenzene (1)	125	70-130	12/23/14 0:07
4-Bromofluorobenzene (2)	110	70-130	12/23/14 0:07

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-4-121914

Sample ID: 14L0924-04

Sample Matrix: Indoor air

Sampled: 12/19/2014 10:45

Sample Description/Location:

Sub Description/Location:

Canister ID: 1621

Canister Size: 6 liter

Flow Controller ID: 4175

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5.9

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	11	1.4	0.49		27	3.3		0.702	12/23/14 0:51	TPH
Benzene	0.15	0.035	0.018		0.47	0.11		0.702	12/23/14 0:51	TPH
Benzyl chloride	ND	0.035	0.0068		ND	0.18		0.702	12/23/14 0:51	TPH
Bromodichloromethane	ND	0.035	0.0076		ND	0.24		0.702	12/23/14 0:51	TPH
Bromoform	ND	0.035	0.0067		ND	0.36		0.702	12/23/14 0:51	TPH
Bromomethane	ND	0.035	0.024		ND	0.14		0.702	12/23/14 0:51	TPH
1,3-Butadiene	ND	0.035	0.018	L-03, V-05	ND	0.078		0.702	12/23/14 0:51	TPH
2-Butanone (MEK)	0.37	1.4	0.026	J	1.1	4.1		0.702	12/23/14 0:51	TPH
Carbon Disulfide	0.087	0.35	0.012	J	0.27	1.1		0.702	12/23/14 0:51	TPH
Carbon Tetrachloride	0.058	0.035	0.0085		0.37	0.22		0.702	12/23/14 0:51	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16		0.702	12/23/14 0:51	TPH
Chloroethane	ND	0.035	0.013		ND	0.093		0.702	12/23/14 0:51	TPH
Chloroform	0.14	0.035	0.0082		0.69	0.17		0.702	12/23/14 0:51	TPH
Chloromethane	0.47	0.070	0.015	L-03	0.97	0.14		0.702	12/23/14 0:51	TPH
Cyclohexane	ND	0.035	0.020		ND	0.12		0.702	12/23/14 0:51	TPH
Dibromochloromethane	ND	0.035	0.0093		ND	0.30		0.702	12/23/14 0:51	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27		0.702	12/23/14 0:51	TPH
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21		0.702	12/23/14 0:51	TPH
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21		0.702	12/23/14 0:51	TPH
1,4-Dichlorobenzene	0.013	0.035	0.0088	J	0.080	0.21		0.702	12/23/14 0:51	TPH
Dichlorodifluoromethane (Freon 12)	0.35	0.035	0.015		1.7	0.17		0.702	12/23/14 0:51	TPH
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14		0.702	12/23/14 0:51	TPH
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14		0.702	12/23/14 0:51	TPH
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14		0.702	12/23/14 0:51	TPH
cis-1,2-Dichloroethylene	0.22	0.035	0.013		0.87	0.14		0.702	12/23/14 0:51	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14		0.702	12/23/14 0:51	TPH
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16		0.702	12/23/14 0:51	TPH
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16		0.702	12/23/14 0:51	TPH
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16		0.702	12/23/14 0:51	TPH
Ethanol	140	40	18	L-03	260	75		20	12/27/14 8:06	TPH
Ethyl Acetate	0.13	0.035	0.026		0.46	0.13		0.702	12/23/14 0:51	TPH
Ethylbenzene	0.033	0.035	0.0097	J	0.14	0.15		0.702	12/23/14 0:51	TPH
4-Ethyltoluene	0.011	0.035	0.0079	J	0.055	0.17		0.702	12/23/14 0:51	TPH
Heptane	0.027	0.035	0.011	L-03, V-05, J	0.11	0.14		0.702	12/23/14 0:51	TPH
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37		0.702	12/23/14 0:51	TPH
Hexane	0.12	1.4	0.062	J	0.44	4.9		0.702	12/23/14 0:51	TPH
2-Hexanone (MBK)	ND	0.035	0.0090	L-03, V-05	ND	0.14		0.702	12/23/14 0:51	TPH
Isopropanol	3.3	1.4	0.043		8.2	3.4		0.702	12/23/14 0:51	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-4-121914

Sample ID: 14L0924-04

Sample Matrix: Indoor air

Sampled: 12/19/2014 10:45

Sample Description/Location:

Sub Description/Location:

Canister ID: 1621

Canister Size: 6 liter

Flow Controller ID: 4175

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5.9

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13		0.702	12/23/14 0:51	TPH
Methylene Chloride	0.085	0.35	0.043	J	0.29	1.2		0.702	12/23/14 0:51	TPH
Methyl methacrylate	ND	0.035	0.011		ND	0.14		0.702	12/23/14 0:51	TPH
4-Methyl-2-pentanone (MIBK)	0.082	0.035	0.0084	L-03, V-05	0.34	0.14		0.702	12/23/14 0:51	TPH
Propene	ND	1.4	0.11		ND	2.4		0.702	12/23/14 0:51	TPH
Styrene	0.034	0.035	0.0068	J	0.15	0.15		0.702	12/23/14 0:51	TPH
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44		0.702	12/23/14 0:51	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24		0.702	12/23/14 0:51	TPH
Tetrachloroethylene	0.48	0.035	0.010		3.2	0.24		0.702	12/23/14 0:51	TPH
Tetrahydrofuran	ND	0.035	0.015		ND	0.10		0.702	12/23/14 0:51	TPH
Toluene	0.38	0.035	0.011		1.4	0.13		0.702	12/23/14 0:51	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26		0.702	12/23/14 0:51	TPH
1,1,1-Trichloroethane	0.051	0.035	0.0063		0.28	0.19		0.702	12/23/14 0:51	TPH
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19		0.702	12/23/14 0:51	TPH
Trichloroethylene	0.23	0.035	0.010		1.2	0.19		0.702	12/23/14 0:51	TPH
Trichlorofluoromethane (Freon 11)	0.23	0.035	0.012		1.3	0.20		0.702	12/23/14 0:51	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.081	0.035	0.0098		0.62	0.27		0.702	12/23/14 0:51	TPH
1,2,4-Trimethylbenzene	0.029	0.035	0.0086	J	0.14	0.17		0.702	12/23/14 0:51	TPH
1,3,5-Trimethylbenzene	ND	0.035	0.0070		ND	0.17		0.702	12/23/14 0:51	TPH
Vinyl Acetate	ND	0.70	0.018		ND	2.5		0.702	12/23/14 0:51	TPH
Vinyl Chloride	0.028	0.035	0.015	J	0.072	0.090		0.702	12/23/14 0:51	TPH
m&p-Xylene	0.13	0.070	0.018		0.56	0.30		0.702	12/23/14 0:51	TPH
o-Xylene	0.040	0.035	0.010		0.17	0.15		0.702	12/23/14 0:51	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.2	70-130	12/27/14 8:06
4-Bromofluorobenzene (1)	123	70-130	12/23/14 0:51
4-Bromofluorobenzene (2)	108	70-130	12/23/14 0:51

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-5-121914

Sample ID: 14L0924-05

Sample Matrix: Indoor air

Sampled: 12/19/2014 09:42

Sample Description/Location:

Sub Description/Location:

Canister ID: 1917

Canister Size: 6 liter

Flow Controller ID: 4179

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -4.9

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Date/Time	
		RL	MDL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	4.3	1.4	0.49		10	3.3	0.702	12/23/14 1:35	TPH
Benzene	0.12	0.035	0.018		0.40	0.11	0.702	12/23/14 1:35	TPH
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	12/23/14 1:35	TPH
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	12/23/14 1:35	TPH
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	12/23/14 1:35	TPH
Bromomethane	ND	0.035	0.024		ND	0.14	0.702	12/23/14 1:35	TPH
1,3-Butadiene	ND	0.035	0.018	L-03, V-05	ND	0.078	0.702	12/23/14 1:35	TPH
2-Butanone (MEK)	0.27	1.4	0.026	J	0.80	4.1	0.702	12/23/14 1:35	TPH
Carbon Disulfide	ND	0.35	0.012		ND	1.1	0.702	12/23/14 1:35	TPH
Carbon Tetrachloride	0.058	0.035	0.0085		0.36	0.22	0.702	12/23/14 1:35	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	12/23/14 1:35	TPH
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	12/23/14 1:35	TPH
Chloroform	0.020	0.035	0.0082	J	0.099	0.17	0.702	12/23/14 1:35	TPH
Chloromethane	0.39	0.070	0.015	L-03	0.81	0.14	0.702	12/23/14 1:35	TPH
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	12/23/14 1:35	TPH
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	12/23/14 1:35	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	12/23/14 1:35	TPH
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	12/23/14 1:35	TPH
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	12/23/14 1:35	TPH
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	12/23/14 1:35	TPH
Dichlorodifluoromethane (Freon 12)	0.38	0.035	0.015		1.9	0.17	0.702	12/23/14 1:35	TPH
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	12/23/14 1:35	TPH
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	12/23/14 1:35	TPH
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	12/23/14 1:35	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	12/23/14 1:35	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	12/23/14 1:35	TPH
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	12/23/14 1:35	TPH
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	12/23/14 1:35	TPH
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	12/23/14 1:35	TPH
Ethanol	4.1	1.4	0.63		7.7	2.6	0.702	12/23/14 1:35	TPH
Ethyl Acetate	0.081	0.035	0.026		0.29	0.13	0.702	12/23/14 1:35	TPH
Ethylbenzene	0.027	0.035	0.0097	J	0.12	0.15	0.702	12/23/14 1:35	TPH
4-Ethyltoluene	ND	0.035	0.0079		ND	0.17	0.702	12/23/14 1:35	TPH
Heptane	ND	0.035	0.011	L-03, V-05	ND	0.14	0.702	12/23/14 1:35	TPH
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	12/23/14 1:35	TPH
Hexane	0.085	1.4	0.062	J	0.30	4.9	0.702	12/23/14 1:35	TPH
2-Hexanone (MBK)	ND	0.035	0.0090	L-03, V-05	ND	0.14	0.702	12/23/14 1:35	TPH
Isopropanol	0.19	1.4	0.043	J	0.47	3.4	0.702	12/23/14 1:35	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-5-121914

Sample ID: 14L0924-05

Sample Matrix: Indoor air

Sampled: 12/19/2014 09:42

Sample Description/Location:

Sub Description/Location:

Canister ID: 1917

Canister Size: 6 liter

Flow Controller ID: 4179

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -4.9

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13	0.702	12/23/14 1:35	TPH	
Methylene Chloride	0.081	0.35	0.043	J	0.28	1.2	0.702	12/23/14 1:35	TPH	
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	12/23/14 1:35	TPH	
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.0084	V-05, L-03	ND	0.14	0.702	12/23/14 1:35	TPH	
Propene	ND	1.4	0.11		ND	2.4	0.702	12/23/14 1:35	TPH	
Styrene	ND	0.035	0.0068		ND	0.15	0.702	12/23/14 1:35	TPH	
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	12/23/14 1:35	TPH	
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	12/23/14 1:35	TPH	
Tetrachloroethylene	0.020	0.035	0.010	J	0.13	0.24	0.702	12/23/14 1:35	TPH	
Tetrahydrofuran	ND	0.035	0.015		ND	0.10	0.702	12/23/14 1:35	TPH	
Toluene	0.21	0.035	0.011		0.78	0.13	0.702	12/23/14 1:35	TPH	
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	12/23/14 1:35	TPH	
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19	0.702	12/23/14 1:35	TPH	
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	12/23/14 1:35	TPH	
Trichloroethylene	ND	0.035	0.010		ND	0.19	0.702	12/23/14 1:35	TPH	
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.012		1.3	0.20	0.702	12/23/14 1:35	TPH	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035	0.0098		0.64	0.27	0.702	12/23/14 1:35	TPH	
1,2,4-Trimethylbenzene	ND	0.035	0.0086		ND	0.17	0.702	12/23/14 1:35	TPH	
1,3,5-Trimethylbenzene	ND	0.035	0.0070		ND	0.17	0.702	12/23/14 1:35	TPH	
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	12/23/14 1:35	TPH	
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	12/23/14 1:35	TPH	
m&p-Xylene	0.12	0.070	0.018		0.54	0.30	0.702	12/23/14 1:35	TPH	
o-Xylene	0.030	0.035	0.010	J	0.13	0.15	0.702	12/23/14 1:35	TPH	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	125	70-130	12/23/14 1:35
4-Bromofluorobenzene (2)	111	70-130	12/23/14 1:35

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-6-121914

Sample ID: 14L0924-06

Sample Matrix: Indoor air

Sampled: 12/19/2014 09:46

Sample Description/Location:

Sub Description/Location:

Canister ID: 1633

Canister Size: 6 liter

Flow Controller ID: 4178

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

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			ug/m3			Date/Time	
		RL	MDL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	3.4	1.4	0.49		8.2	3.3	0.702	12/23/14 2:19	TPH
Benzene	0.12	0.035	0.018		0.37	0.11	0.702	12/23/14 2:19	TPH
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	12/23/14 2:19	TPH
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	12/23/14 2:19	TPH
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	12/23/14 2:19	TPH
Bromomethane	ND	0.035	0.024		ND	0.14	0.702	12/23/14 2:19	TPH
1,3-Butadiene	ND	0.035	0.018	L-03, V-05	ND	0.078	0.702	12/23/14 2:19	TPH
2-Butanone (MEK)	0.28	1.4	0.026	J	0.81	4.1	0.702	12/23/14 2:19	TPH
Carbon Disulfide	ND	0.35	0.012		ND	1.1	0.702	12/23/14 2:19	TPH
Carbon Tetrachloride	0.053	0.035	0.0085		0.33	0.22	0.702	12/23/14 2:19	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	12/23/14 2:19	TPH
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	12/23/14 2:19	TPH
Chloroform	0.017	0.035	0.0082	J	0.082	0.17	0.702	12/23/14 2:19	TPH
Chloromethane	0.43	0.070	0.015	L-03	0.88	0.14	0.702	12/23/14 2:19	TPH
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	12/23/14 2:19	TPH
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	12/23/14 2:19	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	12/23/14 2:19	TPH
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	12/23/14 2:19	TPH
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	12/23/14 2:19	TPH
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	12/23/14 2:19	TPH
Dichlorodifluoromethane (Freon 12)	0.38	0.035	0.015		1.9	0.17	0.702	12/23/14 2:19	TPH
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	12/23/14 2:19	TPH
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	12/23/14 2:19	TPH
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	12/23/14 2:19	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	12/23/14 2:19	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	12/23/14 2:19	TPH
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	12/23/14 2:19	TPH
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	12/23/14 2:19	TPH
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	12/23/14 2:19	TPH
Ethanol	5.0	1.4	0.63		9.4	2.6	0.702	12/23/14 2:19	TPH
Ethyl Acetate	ND	0.035	0.026		ND	0.13	0.702	12/23/14 2:19	TPH
Ethylbenzene	0.020	0.035	0.0097	J	0.088	0.15	0.702	12/23/14 2:19	TPH
4-Ethyltoluene	ND	0.035	0.0079		ND	0.17	0.702	12/23/14 2:19	TPH
Heptane	ND	0.035	0.011	L-03, V-05	ND	0.14	0.702	12/23/14 2:19	TPH
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	12/23/14 2:19	TPH
Hexane	0.081	1.4	0.062	J	0.29	4.9	0.702	12/23/14 2:19	TPH
2-Hexanone (MBK)	ND	0.035	0.0090	L-03, V-05	ND	0.14	0.702	12/23/14 2:19	TPH
Isopropanol	0.21	1.4	0.043	J	0.52	3.4	0.702	12/23/14 2:19	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-6-121914

Sample ID: 14L0924-06

Sample Matrix: Indoor air

Sampled: 12/19/2014 09:46

Sample Description/Location:

Sub Description/Location:

Canister ID: 1633

Canister Size: 6 liter

Flow Controller ID: 4178

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

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			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13	0.702	12/23/14 2:19	TPH	
Methylene Chloride	0.079	0.35	0.043	J	0.28	1.2	0.702	12/23/14 2:19	TPH	
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	12/23/14 2:19	TPH	
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.0084	L-03, V-05	ND	0.14	0.702	12/23/14 2:19	TPH	
Propene	ND	1.4	0.11		ND	2.4	0.702	12/23/14 2:19	TPH	
Styrene	ND	0.035	0.0068		ND	0.15	0.702	12/23/14 2:19	TPH	
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	12/23/14 2:19	TPH	
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	12/23/14 2:19	TPH	
Tetrachloroethylene	0.018	0.035	0.010	J	0.12	0.24	0.702	12/23/14 2:19	TPH	
Tetrahydrofuran	ND	0.035	0.015		ND	0.10	0.702	12/23/14 2:19	TPH	
Toluene	0.13	0.035	0.011		0.50	0.13	0.702	12/23/14 2:19	TPH	
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	12/23/14 2:19	TPH	
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19	0.702	12/23/14 2:19	TPH	
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	12/23/14 2:19	TPH	
Trichloroethylene	ND	0.035	0.010		ND	0.19	0.702	12/23/14 2:19	TPH	
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.012		1.3	0.20	0.702	12/23/14 2:19	TPH	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.035	0.0098		0.64	0.27	0.702	12/23/14 2:19	TPH	
1,2,4-Trimethylbenzene	ND	0.035	0.0086		ND	0.17	0.702	12/23/14 2:19	TPH	
1,3,5-Trimethylbenzene	ND	0.035	0.0070		ND	0.17	0.702	12/23/14 2:19	TPH	
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	12/23/14 2:19	TPH	
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	12/23/14 2:19	TPH	
m&p-Xylene	0.071	0.070	0.018		0.31	0.30	0.702	12/23/14 2:19	TPH	
o-Xylene	0.020	0.035	0.010	J	0.085	0.15	0.702	12/23/14 2:19	TPH	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	125	70-130	12/23/14 2:19
4-Bromofluorobenzene (2)	109	70-130	12/23/14 2:19

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-7-121914

Sample ID: 14L0924-07

Sample Matrix: Indoor air

Sampled: 12/19/2014 11:05

Sample Description/Location:

Sub Description/Location:

Canister ID: 1644

Canister Size: 6 liter

Flow Controller ID: 4075

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5.8

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Date/Time	
		RL	MDL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	4.9	1.4	0.49		12	3.3	0.702	12/23/14 3:03	TPH
Benzene	0.12	0.035	0.018		0.40	0.11	0.702	12/23/14 3:03	TPH
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	12/23/14 3:03	TPH
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	12/23/14 3:03	TPH
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	12/23/14 3:03	TPH
Bromomethane	ND	0.035	0.024		ND	0.14	0.702	12/23/14 3:03	TPH
1,3-Butadiene	ND	0.035	0.018	L-03, V-05	ND	0.078	0.702	12/23/14 3:03	TPH
2-Butanone (MEK)	0.26	1.4	0.026	J	0.75	4.1	0.702	12/23/14 3:03	TPH
Carbon Disulfide	ND	0.35	0.012		ND	1.1	0.702	12/23/14 3:03	TPH
Carbon Tetrachloride	0.052	0.035	0.0085		0.33	0.22	0.702	12/23/14 3:03	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	12/23/14 3:03	TPH
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	12/23/14 3:03	TPH
Chloroform	0.020	0.035	0.0082	J	0.096	0.17	0.702	12/23/14 3:03	TPH
Chloromethane	0.42	0.070	0.015	L-03	0.86	0.14	0.702	12/23/14 3:03	TPH
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	12/23/14 3:03	TPH
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	12/23/14 3:03	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	12/23/14 3:03	TPH
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	12/23/14 3:03	TPH
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	12/23/14 3:03	TPH
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	12/23/14 3:03	TPH
Dichlorodifluoromethane (Freon 12)	0.36	0.035	0.015		1.8	0.17	0.702	12/23/14 3:03	TPH
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	12/23/14 3:03	TPH
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	12/23/14 3:03	TPH
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	12/23/14 3:03	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	12/23/14 3:03	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	12/23/14 3:03	TPH
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	12/23/14 3:03	TPH
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	12/23/14 3:03	TPH
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	12/23/14 3:03	TPH
Ethanol	21	1.4	0.63		39	2.6	0.702	12/23/14 3:03	TPH
Ethyl Acetate	ND	0.035	0.026		ND	0.13	0.702	12/23/14 3:03	TPH
Ethylbenzene	0.020	0.035	0.0097	J	0.085	0.15	0.702	12/23/14 3:03	TPH
4-Ethyltoluene	ND	0.035	0.0079		ND	0.17	0.702	12/23/14 3:03	TPH
Heptane	1.0	0.035	0.011	L-03, V-05	4.3	0.14	0.702	12/23/14 3:03	TPH
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	12/23/14 3:03	TPH
Hexane	0.098	1.4	0.062	J	0.35	4.9	0.702	12/23/14 3:03	TPH
2-Hexanone (MBK)	ND	0.035	0.0090	L-03, V-05	ND	0.14	0.702	12/23/14 3:03	TPH
Isopropanol	0.56	1.4	0.043	J	1.4	3.4	0.702	12/23/14 3:03	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: IA-7-121914

Sample ID: 14L0924-07

Sample Matrix: Indoor air

Sampled: 12/19/2014 11:05

Sample Description/Location:

Sub Description/Location:

Canister ID: 1644

Canister Size: 6 liter

Flow Controller ID: 4075

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5.8

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13		0.702	12/23/14 3:03	TPH
Methylene Chloride	0.11	0.35	0.043	J	0.39	1.2		0.702	12/23/14 3:03	TPH
Methyl methacrylate	ND	0.035	0.011		ND	0.14		0.702	12/23/14 3:03	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.0084	V-05, L-03	ND	0.14		0.702	12/23/14 3:03	TPH
Propene	ND	1.4	0.11		ND	2.4		0.702	12/23/14 3:03	TPH
Styrene	ND	0.035	0.0068		ND	0.15		0.702	12/23/14 3:03	TPH
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44		0.702	12/23/14 3:03	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24		0.702	12/23/14 3:03	TPH
Tetrachloroethylene	0.020	0.035	0.010	J	0.13	0.24		0.702	12/23/14 3:03	TPH
Tetrahydrofuran	ND	0.035	0.015		ND	0.10		0.702	12/23/14 3:03	TPH
Toluene	0.19	0.035	0.011		0.72	0.13		0.702	12/23/14 3:03	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26		0.702	12/23/14 3:03	TPH
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19		0.702	12/23/14 3:03	TPH
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19		0.702	12/23/14 3:03	TPH
Trichloroethylene	ND	0.035	0.010		ND	0.19		0.702	12/23/14 3:03	TPH
Trichlorofluoromethane (Freon 11)	0.24	0.035	0.012		1.4	0.20		0.702	12/23/14 3:03	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.082	0.035	0.0098		0.63	0.27		0.702	12/23/14 3:03	TPH
1,2,4-Trimethylbenzene	0.011	0.035	0.0086	J	0.052	0.17		0.702	12/23/14 3:03	TPH
1,3,5-Trimethylbenzene	ND	0.035	0.0070		ND	0.17		0.702	12/23/14 3:03	TPH
Vinyl Acetate	ND	0.70	0.018		ND	2.5		0.702	12/23/14 3:03	TPH
Vinyl Chloride	ND	0.035	0.015		ND	0.090		0.702	12/23/14 3:03	TPH
m&p-Xylene	0.067	0.070	0.018	J	0.29	0.30		0.702	12/23/14 3:03	TPH
o-Xylene	0.020	0.035	0.010	J	0.088	0.15		0.702	12/23/14 3:03	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	126	70-130	12/23/14 3:03
4-Bromofluorobenzene (2)	112	70-130	12/23/14 3:03

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: AA-1-121914

Sample ID: 14L0924-08

Sample Matrix: Ambient Air

Sampled: 12/19/2014 11:25

Sample Description/Location:

Sub Description/Location:

Canister ID: 1314

Canister Size: 6 liter

Flow Controller ID: 4209

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -3.0

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Date/Time	
		RL	MDL	Flag	Results	RL	Dilution	Analyzed	Analyst
Acetone	4.2	1.4	0.49		10	3.3	0.702	12/23/14 3:46	TPH
Benzene	0.18	0.035	0.018		0.58	0.11	0.702	12/23/14 3:46	TPH
Benzyl chloride	ND	0.035	0.0068		ND	0.18	0.702	12/23/14 3:46	TPH
Bromodichloromethane	ND	0.035	0.0076		ND	0.24	0.702	12/23/14 3:46	TPH
Bromoform	ND	0.035	0.0067		ND	0.36	0.702	12/23/14 3:46	TPH
Bromomethane	ND	0.035	0.024		ND	0.14	0.702	12/23/14 3:46	TPH
1,3-Butadiene	ND	0.035	0.018	L-03, V-05	ND	0.078	0.702	12/23/14 3:46	TPH
2-Butanone (MEK)	0.42	1.4	0.026	J	1.2	4.1	0.702	12/23/14 3:46	TPH
Carbon Disulfide	ND	0.35	0.012		ND	1.1	0.702	12/23/14 3:46	TPH
Carbon Tetrachloride	0.057	0.035	0.0085		0.36	0.22	0.702	12/23/14 3:46	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.702	12/23/14 3:46	TPH
Chloroethane	ND	0.035	0.013		ND	0.093	0.702	12/23/14 3:46	TPH
Chloroform	0.017	0.035	0.0082	J	0.082	0.17	0.702	12/23/14 3:46	TPH
Chloromethane	0.47	0.070	0.015	L-03	0.96	0.14	0.702	12/23/14 3:46	TPH
Cyclohexane	ND	0.035	0.020		ND	0.12	0.702	12/23/14 3:46	TPH
Dibromochloromethane	ND	0.035	0.0093		ND	0.30	0.702	12/23/14 3:46	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.0079		ND	0.27	0.702	12/23/14 3:46	TPH
1,2-Dichlorobenzene	ND	0.035	0.0093		ND	0.21	0.702	12/23/14 3:46	TPH
1,3-Dichlorobenzene	ND	0.035	0.0078		ND	0.21	0.702	12/23/14 3:46	TPH
1,4-Dichlorobenzene	ND	0.035	0.0088		ND	0.21	0.702	12/23/14 3:46	TPH
Dichlorodifluoromethane (Freon 12)	0.41	0.035	0.015		2.1	0.17	0.702	12/23/14 3:46	TPH
1,1-Dichloroethane	ND	0.035	0.0099		ND	0.14	0.702	12/23/14 3:46	TPH
1,2-Dichloroethane	ND	0.035	0.0098		ND	0.14	0.702	12/23/14 3:46	TPH
1,1-Dichloroethylene	ND	0.035	0.0086		ND	0.14	0.702	12/23/14 3:46	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.013		ND	0.14	0.702	12/23/14 3:46	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.0093		ND	0.14	0.702	12/23/14 3:46	TPH
1,2-Dichloropropane	ND	0.035	0.012		ND	0.16	0.702	12/23/14 3:46	TPH
cis-1,3-Dichloropropene	ND	0.035	0.0093		ND	0.16	0.702	12/23/14 3:46	TPH
trans-1,3-Dichloropropene	ND	0.035	0.0094		ND	0.16	0.702	12/23/14 3:46	TPH
Ethanol	1.5	1.4	0.63		2.7	2.6	0.702	12/23/14 3:46	TPH
Ethyl Acetate	ND	0.035	0.026		ND	0.13	0.702	12/23/14 3:46	TPH
Ethylbenzene	0.011	0.035	0.0097	J	0.046	0.15	0.702	12/23/14 3:46	TPH
4-Ethyltoluene	ND	0.035	0.0079		ND	0.17	0.702	12/23/14 3:46	TPH
Heptane	ND	0.035	0.011	V-05, L-03	ND	0.14	0.702	12/23/14 3:46	TPH
Hexachlorobutadiene	ND	0.035	0.013		ND	0.37	0.702	12/23/14 3:46	TPH
Hexane	0.11	1.4	0.062	J	0.39	4.9	0.702	12/23/14 3:46	TPH
2-Hexanone (MBK)	ND	0.035	0.0090	L-03, V-05	ND	0.14	0.702	12/23/14 3:46	TPH
Isopropanol	ND	1.4	0.043		ND	3.4	0.702	12/23/14 3:46	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: AA-1-121914

Sample ID: 14L0924-08

Sample Matrix: Ambient Air

Sampled: 12/19/2014 11:25

Sample Description/Location:

Sub Description/Location:

Canister ID: 1314

Canister Size: 6 liter

Flow Controller ID: 4209

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -3.0

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.011		ND	0.13	0.702	12/23/14 3:46	TPH	
Methylene Chloride	0.13	0.35	0.043	J	0.47	1.2	0.702	12/23/14 3:46	TPH	
Methyl methacrylate	ND	0.035	0.011		ND	0.14	0.702	12/23/14 3:46	TPH	
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.0084	L-03, V-05	ND	0.14	0.702	12/23/14 3:46	TPH	
Propene	ND	1.4	0.11		ND	2.4	0.702	12/23/14 3:46	TPH	
Styrene	ND	0.035	0.0068		ND	0.15	0.702	12/23/14 3:46	TPH	
1,1,1,2-Tetrachloroethane	ND	0.064	0.023		ND	0.44	0.702	12/23/14 3:46	TPH	
1,1,2,2-Tetrachloroethane	ND	0.035	0.0084		ND	0.24	0.702	12/23/14 3:46	TPH	
Tetrachloroethylene	0.013	0.035	0.010	J	0.090	0.24	0.702	12/23/14 3:46	TPH	
Tetrahydrofuran	ND	0.035	0.015		ND	0.10	0.702	12/23/14 3:46	TPH	
Toluene	0.093	0.035	0.011		0.35	0.13	0.702	12/23/14 3:46	TPH	
1,2,4-Trichlorobenzene	ND	0.035	0.013		ND	0.26	0.702	12/23/14 3:46	TPH	
1,1,1-Trichloroethane	ND	0.035	0.0063		ND	0.19	0.702	12/23/14 3:46	TPH	
1,1,2-Trichloroethane	ND	0.035	0.011		ND	0.19	0.702	12/23/14 3:46	TPH	
Trichloroethylene	ND	0.035	0.010		ND	0.19	0.702	12/23/14 3:46	TPH	
Trichlorofluoromethane (Freon 11)	0.23	0.035	0.012		1.3	0.20	0.702	12/23/14 3:46	TPH	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.083	0.035	0.0098		0.63	0.27	0.702	12/23/14 3:46	TPH	
1,2,4-Trimethylbenzene	ND	0.035	0.0086		ND	0.17	0.702	12/23/14 3:46	TPH	
1,3,5-Trimethylbenzene	ND	0.035	0.0070		ND	0.17	0.702	12/23/14 3:46	TPH	
Vinyl Acetate	ND	0.70	0.018		ND	2.5	0.702	12/23/14 3:46	TPH	
Vinyl Chloride	ND	0.035	0.015		ND	0.090	0.702	12/23/14 3:46	TPH	
m&p-Xylene	0.025	0.070	0.018	J	0.11	0.30	0.702	12/23/14 3:46	TPH	
o-Xylene	0.011	0.035	0.010	J	0.046	0.15	0.702	12/23/14 3:46	TPH	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	125	70-130	12/23/14 3:46
4-Bromofluorobenzene (2)	110	70-130	12/23/14 3:46

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: EW-5-121914

Sample ID: 14L0924-09

Sample Matrix: Soil Gas

Sampled: 12/19/2014 09:27

Sample Description/Location:

Sub Description/Location:

Canister ID: 1462

Canister Size: 6 liter

Flow Controller ID: 4072

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -

Final Vacuum(in Hg): -

Receipt Vacuum(in Hg): -6.0

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	41	4.0	1.4		98	9.5		2	12/23/14 13:27	TPH
Benzene	1.1	0.10	0.052		3.4	0.32		2	12/23/14 13:27	TPH
Benzyl chloride	ND	0.10	0.019		ND	0.52		2	12/23/14 13:27	TPH
Bromodichloromethane	ND	0.10	0.022		ND	0.67		2	12/23/14 13:27	TPH
Bromoform	ND	0.10	0.019		ND	1.0		2	12/23/14 13:27	TPH
Bromomethane	ND	0.10	0.069		ND	0.39		2	12/23/14 13:27	TPH
1,3-Butadiene	ND	0.10	0.051	L-03, V-05	ND	0.22		2	12/23/14 13:27	TPH
2-Butanone (MEK)	89	4.0	0.075		260	12		2	12/23/14 13:27	TPH
Carbon Disulfide	4.2	1.0	0.034		13	3.1		2	12/23/14 13:27	TPH
Carbon Tetrachloride	0.052	0.10	0.024	J	0.33	0.63		2	12/23/14 13:27	TPH
Chlorobenzene	ND	0.10	0.035		ND	0.46		2	12/23/14 13:27	TPH
Chloroethane	0.36	0.10	0.038		0.95	0.26		2	12/23/14 13:27	TPH
Chloroform	0.11	0.10	0.023		0.53	0.49		2	12/23/14 13:27	TPH
Chloromethane	ND	0.20	0.044	L-03	ND	0.41		2	12/23/14 13:27	TPH
Cyclohexane	ND	0.10	0.057		ND	0.34		2	12/23/14 13:27	TPH
Dibromochloromethane	ND	0.10	0.027		ND	0.85		2	12/23/14 13:27	TPH
1,2-Dibromoethane (EDB)	ND	0.10	0.022		ND	0.77		2	12/23/14 13:27	TPH
1,2-Dichlorobenzene	ND	0.10	0.027		ND	0.60		2	12/23/14 13:27	TPH
1,3-Dichlorobenzene	ND	0.10	0.022		ND	0.60		2	12/23/14 13:27	TPH
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60		2	12/23/14 13:27	TPH
Dichlorodifluoromethane (Freon 12)	0.51	0.10	0.043		2.5	0.49		2	12/23/14 13:27	TPH
1,1-Dichloroethane	1.0	0.10	0.028		4.2	0.40		2	12/23/14 13:27	TPH
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40		2	12/23/14 13:27	TPH
1,1-Dichloroethylene	0.26	0.10	0.024		1.0	0.40		2	12/23/14 13:27	TPH
cis-1,2-Dichloroethylene	0.34	0.10	0.038		1.4	0.40		2	12/23/14 13:27	TPH
trans-1,2-Dichloroethylene	ND	0.10	0.026		ND	0.40		2	12/23/14 13:27	TPH
1,2-Dichloropropane	ND	0.10	0.035		ND	0.46		2	12/23/14 13:27	TPH
cis-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45		2	12/23/14 13:27	TPH
trans-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45		2	12/23/14 13:27	TPH
Ethanol	17	4.0	1.8		33	7.5		2	12/23/14 13:27	TPH
Ethyl Acetate	1.0	0.10	0.075		3.6	0.36		2	12/23/14 13:27	TPH
Ethylbenzene	ND	0.10	0.028		ND	0.43		2	12/23/14 13:27	TPH
4-Ethyltoluene	ND	0.10	0.023		ND	0.49		2	12/23/14 13:27	TPH
Heptane	ND	0.10	0.032	L-03, V-05	ND	0.41		2	12/23/14 13:27	TPH
Hexachlorobutadiene	ND	0.10	0.038		ND	1.1		2	12/23/14 13:27	TPH
Hexane	ND	4.0	0.18		ND	14		2	12/23/14 13:27	TPH
2-Hexanone (MBK)	ND	0.10	0.026	L-03, V-05	ND	0.41		2	12/23/14 13:27	TPH
Isopropanol	0.82	4.0	0.12	J	2.0	9.8		2	12/23/14 13:27	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: EW-5-121914

Sample ID: 14L0924-09

Sample Matrix: Soil Gas

Sampled: 12/19/2014 09:27

Sample Description/Location:

Sub Description/Location:

Canister ID: 1462

Canister Size: 6 liter

Flow Controller ID: 4072

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -

Final Vacuum(in Hg): -

Receipt Vacuum(in Hg): -6.0

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.031		ND	0.36		2	12/23/14 13:27	TPH
Methylene Chloride	ND	1.0	0.12		ND	3.5		2	12/23/14 13:27	TPH
Methyl methacrylate	ND	0.10	0.031		ND	0.41		2	12/23/14 13:27	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.024	L-03, V-05	ND	0.41		2	12/23/14 13:27	TPH
Propene	ND	4.0	0.31		ND	6.9		2	12/23/14 13:27	TPH
Styrene	ND	0.10	0.019		ND	0.43		2	12/23/14 13:27	TPH
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2		2	12/23/14 13:27	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69		2	12/23/14 13:27	TPH
Tetrachloroethylene	0.068	0.10	0.028	J	0.46	0.68		2	12/23/14 13:27	TPH
Tetrahydrofuran	160	2.0	0.84		460	5.9		40	12/23/14 4:25	TPH
Toluene	0.096	0.10	0.031	J	0.36	0.38		2	12/23/14 13:27	TPH
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74		2	12/23/14 13:27	TPH
1,1,1-Trichloroethane	4.5	0.10	0.018		25	0.55		2	12/23/14 13:27	TPH
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55		2	12/23/14 13:27	TPH
Trichloroethylene	12	0.10	0.030		66	0.54		2	12/23/14 13:27	TPH
Trichlorofluoromethane (Freon 11)	0.55	0.10	0.035		3.1	0.56		2	12/23/14 13:27	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.082	0.10	0.028	J	0.63	0.77		2	12/23/14 13:27	TPH
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49		2	12/23/14 13:27	TPH
1,3,5-Trimethylbenzene	ND	0.10	0.020		ND	0.49		2	12/23/14 13:27	TPH
Vinyl Acetate	ND	2.0	0.051		ND	7.0		2	12/23/14 13:27	TPH
Vinyl Chloride	0.11	0.10	0.043		0.28	0.26		2	12/23/14 13:27	TPH
m&p-Xylene	0.056	0.20	0.050	J	0.24	0.87		2	12/23/14 13:27	TPH
o-Xylene	ND	0.10	0.029		ND	0.43		2	12/23/14 13:27	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	125	70-130	12/23/14 4:25
4-Bromofluorobenzene (1)	126	70-130	12/23/14 13:27
4-Bromofluorobenzene (2)	110	70-130	12/23/14 13:27

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: EW-6-121914

Sample ID: 14L0924-10

Sample Matrix: Soil Gas

Sampled: 12/19/2014 09:49

Sample Description/Location:

Sub Description/Location:

Canister ID: 1451

Canister Size: 6 liter

Flow Controller ID: 4073

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -

Final Vacuum(in Hg): -

Receipt Vacuum(in Hg): -5.2

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	15	4.0	1.4		35	9.5		2	12/23/14 14:07	TPH
Benzene	0.22	0.10	0.052		0.70	0.32		2	12/23/14 14:07	TPH
Benzyl chloride	ND	0.10	0.019		ND	0.52		2	12/23/14 14:07	TPH
Bromodichloromethane	ND	0.10	0.022		ND	0.67		2	12/23/14 14:07	TPH
Bromoform	ND	0.10	0.019		ND	1.0		2	12/23/14 14:07	TPH
Bromomethane	ND	0.10	0.069		ND	0.39		2	12/23/14 14:07	TPH
1,3-Butadiene	ND	0.10	0.051	L-03, V-05	ND	0.22		2	12/23/14 14:07	TPH
2-Butanone (MEK)	1.8	4.0	0.075	J	5.2	12		2	12/23/14 14:07	TPH
Carbon Disulfide	2.6	1.0	0.034		8.0	3.1		2	12/23/14 14:07	TPH
Carbon Tetrachloride	0.056	0.10	0.024	J	0.35	0.63		2	12/23/14 14:07	TPH
Chlorobenzene	ND	0.10	0.035		ND	0.46		2	12/23/14 14:07	TPH
Chloroethane	ND	0.10	0.038		ND	0.26		2	12/23/14 14:07	TPH
Chloroform	0.13	0.10	0.023		0.63	0.49		2	12/23/14 14:07	TPH
Chloromethane	0.70	0.20	0.044	L-03	1.4	0.41		2	12/23/14 14:07	TPH
Cyclohexane	ND	0.10	0.057		ND	0.34		2	12/23/14 14:07	TPH
Dibromochloromethane	ND	0.10	0.027		ND	0.85		2	12/23/14 14:07	TPH
1,2-Dibromoethane (EDB)	ND	0.10	0.022		ND	0.77		2	12/23/14 14:07	TPH
1,2-Dichlorobenzene	ND	0.10	0.027		ND	0.60		2	12/23/14 14:07	TPH
1,3-Dichlorobenzene	ND	0.10	0.022		ND	0.60		2	12/23/14 14:07	TPH
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60		2	12/23/14 14:07	TPH
Dichlorodifluoromethane (Freon 12)	0.52	0.10	0.043		2.6	0.49		2	12/23/14 14:07	TPH
1,1-Dichloroethane	0.87	0.10	0.028		3.5	0.40		2	12/23/14 14:07	TPH
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40		2	12/23/14 14:07	TPH
1,1-Dichloroethylene	ND	0.10	0.024		ND	0.40		2	12/23/14 14:07	TPH
cis-1,2-Dichloroethylene	0.052	0.10	0.038	J	0.21	0.40		2	12/23/14 14:07	TPH
trans-1,2-Dichloroethylene	ND	0.10	0.026		ND	0.40		2	12/23/14 14:07	TPH
1,2-Dichloropropane	ND	0.10	0.035		ND	0.46		2	12/23/14 14:07	TPH
cis-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45		2	12/23/14 14:07	TPH
trans-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45		2	12/23/14 14:07	TPH
Ethanol	1.8	4.0	1.8	J	3.5	7.5		2	12/23/14 14:07	TPH
Ethyl Acetate	ND	0.10	0.075		ND	0.36		2	12/23/14 14:07	TPH
Ethylbenzene	ND	0.10	0.028		ND	0.43		2	12/23/14 14:07	TPH
4-Ethyltoluene	ND	0.10	0.023		ND	0.49		2	12/23/14 14:07	TPH
Heptane	ND	0.10	0.032	L-03, V-05	ND	0.41		2	12/23/14 14:07	TPH
Hexachlorobutadiene	ND	0.10	0.038		ND	1.1		2	12/23/14 14:07	TPH
Hexane	ND	4.0	0.18		ND	14		2	12/23/14 14:07	TPH
2-Hexanone (MBK)	ND	0.10	0.026	L-03, V-05	ND	0.41		2	12/23/14 14:07	TPH
Isopropanol	ND	4.0	0.12		ND	9.8		2	12/23/14 14:07	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: EW-6-121914

Sample ID: 14L0924-10

Sample Matrix: Soil Gas

Sampled: 12/19/2014 09:49

Sample Description/Location:

Sub Description/Location:

Canister ID: 1451

Canister Size: 6 liter

Flow Controller ID: 4073

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -

Final Vacuum(in Hg): -

Receipt Vacuum(in Hg): -5.2

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv		Flag	ug/m3		Dilution	Date/Time Analyzed	Analyst
		RL	MDL		Results	RL			
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.031		ND	0.36	2	12/23/14 14:07	TPH
Methylene Chloride	ND	1.0	0.12		ND	3.5	2	12/23/14 14:07	TPH
Methyl methacrylate	ND	0.10	0.031		ND	0.41	2	12/23/14 14:07	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.024	L-03, V-05	ND	0.41	2	12/23/14 14:07	TPH
Propene	0.49	4.0	0.31	J	0.84	6.9	2	12/23/14 14:07	TPH
Styrene	ND	0.10	0.019		ND	0.43	2	12/23/14 14:07	TPH
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	12/23/14 14:07	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69	2	12/23/14 14:07	TPH
Tetrachloroethylene	0.46	0.10	0.028		3.1	0.68	2	12/23/14 14:07	TPH
Tetrahydrofuran	87	0.10	0.042		260	0.29	2	12/23/14 14:07	TPH
Toluene	0.066	0.10	0.031	J	0.25	0.38	2	12/23/14 14:07	TPH
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74	2	12/23/14 14:07	TPH
1,1,1-Trichloroethane	3.5	0.10	0.018		19	0.55	2	12/23/14 14:07	TPH
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55	2	12/23/14 14:07	TPH
Trichloroethylene	8.2	0.10	0.030		44	0.54	2	12/23/14 14:07	TPH
Trichlorofluoromethane (Freon 11)	2.7	0.10	0.035		15	0.56	2	12/23/14 14:07	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.082	0.10	0.028	J	0.63	0.77	2	12/23/14 14:07	TPH
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49	2	12/23/14 14:07	TPH
1,3,5-Trimethylbenzene	ND	0.10	0.020		ND	0.49	2	12/23/14 14:07	TPH
Vinyl Acetate	ND	2.0	0.051		ND	7.0	2	12/23/14 14:07	TPH
Vinyl Chloride	ND	0.10	0.043		ND	0.26	2	12/23/14 14:07	TPH
m&p-Xylene	ND	0.20	0.050		ND	0.87	2	12/23/14 14:07	TPH
o-Xylene	ND	0.10	0.029		ND	0.43	2	12/23/14 14:07	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	126	70-130	12/23/14 14:07
4-Bromofluorobenzene (2)	108	70-130	12/23/14 14:07

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: EW-7-121914

Sample ID: 14L0924-11

Sample Matrix: Soil Gas

Sampled: 12/19/2014 11:07

Sample Description/Location:

Sub Description/Location:

Canister ID: 1613

Canister Size: 6 liter

Flow Controller ID: 4212

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -

Final Vacuum(in Hg): -

Receipt Vacuum(in Hg): -4.8

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	4.0	4.0	1.4	J	9.4	9.5	2	12/23/14 14:45	TPH	
Benzene	0.15	0.10	0.052		0.49	0.32	2	12/23/14 14:45	TPH	
Benzyl chloride	ND	0.10	0.019		ND	0.52	2	12/23/14 14:45	TPH	
Bromodichloromethane	ND	0.10	0.022		ND	0.67	2	12/23/14 14:45	TPH	
Bromoform	ND	0.10	0.019		ND	1.0	2	12/23/14 14:45	TPH	
Bromomethane	ND	0.10	0.069		ND	0.39	2	12/23/14 14:45	TPH	
1,3-Butadiene	ND	0.10	0.051	L-03, V-05	ND	0.22	2	12/23/14 14:45	TPH	
2-Butanone (MEK)	12	4.0	0.075		35	12	2	12/23/14 14:45	TPH	
Carbon Disulfide	1.2	1.0	0.034		3.7	3.1	2	12/23/14 14:45	TPH	
Carbon Tetrachloride	0.058	0.10	0.024	J	0.36	0.63	2	12/23/14 14:45	TPH	
Chlorobenzene	ND	0.10	0.035		ND	0.46	2	12/23/14 14:45	TPH	
Chloroethane	ND	0.10	0.038		ND	0.26	2	12/23/14 14:45	TPH	
Chloroform	0.19	0.10	0.023		0.91	0.49	2	12/23/14 14:45	TPH	
Chloromethane	ND	0.20	0.044	L-03	ND	0.41	2	12/23/14 14:45	TPH	
Cyclohexane	ND	0.10	0.057		ND	0.34	2	12/23/14 14:45	TPH	
Dibromochloromethane	ND	0.10	0.027		ND	0.85	2	12/23/14 14:45	TPH	
1,2-Dibromoethane (EDB)	ND	0.10	0.022		ND	0.77	2	12/23/14 14:45	TPH	
1,2-Dichlorobenzene	ND	0.10	0.027		ND	0.60	2	12/23/14 14:45	TPH	
1,3-Dichlorobenzene	ND	0.10	0.022		ND	0.60	2	12/23/14 14:45	TPH	
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60	2	12/23/14 14:45	TPH	
Dichlorodifluoromethane (Freon 12)	0.52	0.10	0.043		2.6	0.49	2	12/23/14 14:45	TPH	
1,1-Dichloroethane	0.45	0.10	0.028		1.8	0.40	2	12/23/14 14:45	TPH	
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40	2	12/23/14 14:45	TPH	
1,1-Dichloroethylene	ND	0.10	0.024		ND	0.40	2	12/23/14 14:45	TPH	
cis-1,2-Dichloroethylene	0.25	0.10	0.038		0.99	0.40	2	12/23/14 14:45	TPH	
trans-1,2-Dichloroethylene	0.49	0.10	0.026		1.9	0.40	2	12/23/14 14:45	TPH	
1,2-Dichloropropane	ND	0.10	0.035		ND	0.46	2	12/23/14 14:45	TPH	
cis-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45	2	12/23/14 14:45	TPH	
trans-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45	2	12/23/14 14:45	TPH	
Ethanol	5.6	4.0	1.8		11	7.5	2	12/23/14 14:45	TPH	
Ethyl Acetate	0.46	0.10	0.075		1.7	0.36	2	12/23/14 14:45	TPH	
Ethylbenzene	ND	0.10	0.028		ND	0.43	2	12/23/14 14:45	TPH	
4-Ethyltoluene	ND	0.10	0.023		ND	0.49	2	12/23/14 14:45	TPH	
Heptane	1.1	0.10	0.032	V-05, L-03	4.4	0.41	2	12/23/14 14:45	TPH	
Hexachlorobutadiene	ND	0.10	0.038		ND	1.1	2	12/23/14 14:45	TPH	
Hexane	ND	4.0	0.18		ND	14	2	12/23/14 14:45	TPH	
2-Hexanone (MBK)	ND	0.10	0.026	L-03, V-05	ND	0.41	2	12/23/14 14:45	TPH	
Isopropanol	2.0	4.0	0.12	J	4.8	9.8	2	12/23/14 14:45	TPH	

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: EW-7-121914

Sample ID: 14L0924-11

Sample Matrix: Soil Gas

Sampled: 12/19/2014 11:07

Sample Description/Location:

Sub Description/Location:

Canister ID: 1613

Canister Size: 6 liter

Flow Controller ID: 4212

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -

Final Vacuum(in Hg): -

Receipt Vacuum(in Hg): -4.8

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.031		ND	0.36		2	12/23/14 14:45	TPH
Methylene Chloride	ND	1.0	0.12		ND	3.5		2	12/23/14 14:45	TPH
Methyl methacrylate	ND	0.10	0.031		ND	0.41		2	12/23/14 14:45	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.024	L-03, V-05	ND	0.41		2	12/23/14 14:45	TPH
Propene	ND	4.0	0.31		ND	6.9		2	12/23/14 14:45	TPH
Styrene	ND	0.10	0.019		ND	0.43		2	12/23/14 14:45	TPH
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2		2	12/23/14 14:45	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69		2	12/23/14 14:45	TPH
Tetrachloroethylene	2.6	0.10	0.028		18	0.68		2	12/23/14 14:45	TPH
Tetrahydrofuran	120	2.0	0.84		350	5.9		40	12/23/14 5:43	TPH
Toluene	0.17	0.10	0.031		0.63	0.38		2	12/23/14 14:45	TPH
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74		2	12/23/14 14:45	TPH
1,1,1-Trichloroethane	1.1	0.10	0.018		6.1	0.55		2	12/23/14 14:45	TPH
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55		2	12/23/14 14:45	TPH
Trichloroethylene	8.6	0.10	0.030		46	0.54		2	12/23/14 14:45	TPH
Trichlorofluoromethane (Freon 11)	36	0.10	0.035		200	0.56		2	12/23/14 14:45	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.10	0.10	0.028		0.78	0.77		2	12/23/14 14:45	TPH
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49		2	12/23/14 14:45	TPH
1,3,5-Trimethylbenzene	ND	0.10	0.020		ND	0.49		2	12/23/14 14:45	TPH
Vinyl Acetate	ND	2.0	0.051		ND	7.0		2	12/23/14 14:45	TPH
Vinyl Chloride	0.064	0.10	0.043	J	0.16	0.26		2	12/23/14 14:45	TPH
m&p-Xylene	0.060	0.20	0.050	J	0.26	0.87		2	12/23/14 14:45	TPH
o-Xylene	ND	0.10	0.029		ND	0.43		2	12/23/14 14:45	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	127	70-130	12/23/14 5:43
4-Bromofluorobenzene (1)	126	70-130	12/23/14 14:45
4-Bromofluorobenzene (2)	109	70-130	12/23/14 14:45

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: EW-Combined-121914
Sample ID: 14L0924-12

Sample Matrix: Soil Gas

Sampled: 12/19/2014 11:23

Sample Description/Location:

Sub Description/Location:

Canister ID: 1863

Canister Size: 6 liter

Flow Controller ID: 4213

Sample Type: 30 min

Work Order: 14L0924

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			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	2.6	4.0	1.4	J	6.2	9.5		2	12/23/14 15:24	TPH
Benzene	0.10	0.10	0.052		0.33	0.32		2	12/23/14 15:24	TPH
Benzyl chloride	ND	0.10	0.019		ND	0.52		2	12/23/14 15:24	TPH
Bromodichloromethane	ND	0.10	0.022		ND	0.67		2	12/23/14 15:24	TPH
Bromoform	ND	0.10	0.019		ND	1.0		2	12/23/14 15:24	TPH
Bromomethane	ND	0.10	0.069		ND	0.39		2	12/23/14 15:24	TPH
1,3-Butadiene	ND	0.10	0.051	L-03, V-05	ND	0.22		2	12/23/14 15:24	TPH
2-Butanone (MEK)	0.46	4.0	0.075	J	1.4	12		2	12/23/14 15:24	TPH
Carbon Disulfide	0.11	1.0	0.034	J	0.33	3.1		2	12/23/14 15:24	TPH
Carbon Tetrachloride	0.064	0.10	0.024	J	0.40	0.63		2	12/23/14 15:24	TPH
Chlorobenzene	ND	0.10	0.035		ND	0.46		2	12/23/14 15:24	TPH
Chloroethane	0.29	0.10	0.038		0.77	0.26		2	12/23/14 15:24	TPH
Chloroform	0.69	0.10	0.023		3.4	0.49		2	12/23/14 15:24	TPH
Chloromethane	ND	0.20	0.044	L-03	ND	0.41		2	12/23/14 15:24	TPH
Cyclohexane	ND	0.10	0.057		ND	0.34		2	12/23/14 15:24	TPH
Dibromochloromethane	ND	0.10	0.027		ND	0.85		2	12/23/14 15:24	TPH
1,2-Dibromoethane (EDB)	ND	0.10	0.022		ND	0.77		2	12/23/14 15:24	TPH
1,2-Dichlorobenzene	ND	0.10	0.027		ND	0.60		2	12/23/14 15:24	TPH
1,3-Dichlorobenzene	ND	0.10	0.022		ND	0.60		2	12/23/14 15:24	TPH
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60		2	12/23/14 15:24	TPH
Dichlorodifluoromethane (Freon 12)	0.55	0.10	0.043		2.7	0.49		2	12/23/14 15:24	TPH
1,1-Dichloroethane	13	0.10	0.028		55	0.40		2	12/23/14 15:24	TPH
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40		2	12/23/14 15:24	TPH
1,1-Dichloroethylene	3.5	0.10	0.024		14	0.40		2	12/23/14 15:24	TPH
cis-1,2-Dichloroethylene	6.3	0.10	0.038		25	0.40		2	12/23/14 15:24	TPH
trans-1,2-Dichloroethylene	0.15	0.10	0.026		0.60	0.40		2	12/23/14 15:24	TPH
1,2-Dichloropropane	ND	0.10	0.035		ND	0.46		2	12/23/14 15:24	TPH
cis-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45		2	12/23/14 15:24	TPH
trans-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45		2	12/23/14 15:24	TPH
Ethanol	6.3	4.0	1.8		12	7.5		2	12/23/14 15:24	TPH
Ethyl Acetate	ND	0.10	0.075		ND	0.36		2	12/23/14 15:24	TPH
Ethylbenzene	ND	0.10	0.028		ND	0.43		2	12/23/14 15:24	TPH
4-Ethyltoluene	ND	0.10	0.023		ND	0.49		2	12/23/14 15:24	TPH
Heptane	ND	0.10	0.032	L-03, V-05	ND	0.41		2	12/23/14 15:24	TPH
Hexachlorobutadiene	ND	0.10	0.038		ND	1.1		2	12/23/14 15:24	TPH
Hexane	ND	4.0	0.18		ND	14		2	12/23/14 15:24	TPH
2-Hexanone (MBK)	ND	0.10	0.026	L-03, V-05	ND	0.41		2	12/23/14 15:24	TPH
Isopropanol	ND	4.0	0.12		ND	9.8		2	12/23/14 15:24	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: EW-Combined-121914

Sample ID: 14L0924-12

Sample Matrix: Soil Gas

Sampled: 12/19/2014 11:23

Sample Description/Location:

Sub Description/Location:

Canister ID: 1863

Canister Size: 6 liter

Flow Controller ID: 4213

Sample Type: 30 min

Work Order: 14L0924

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 Analyzed	Analyst
		RL	MDL		Results	RL			
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.031		ND	0.36	2	12/23/14 15:24	TPH
Methylene Chloride	ND	1.0	0.12		ND	3.5	2	12/23/14 15:24	TPH
Methyl methacrylate	ND	0.10	0.031		ND	0.41	2	12/23/14 15:24	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.024	L-03, V-05	ND	0.41	2	12/23/14 15:24	TPH
Propene	ND	4.0	0.31		ND	6.9	2	12/23/14 15:24	TPH
Styrene	ND	0.10	0.019		ND	0.43	2	12/23/14 15:24	TPH
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2	2	12/23/14 15:24	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69	2	12/23/14 15:24	TPH
Tetrachloroethylene	15	0.10	0.028		100	0.68	2	12/23/14 15:24	TPH
Tetrahydrofuran	0.29	0.10	0.042		0.85	0.29	2	12/23/14 15:24	TPH
Toluene	0.11	0.10	0.031		0.43	0.38	2	12/23/14 15:24	TPH
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74	2	12/23/14 15:24	TPH
1,1,1-Trichloroethane	77	2.0	0.36		420	11	40	12/23/14 6:21	TPH
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55	2	12/23/14 15:24	TPH
Trichloroethylene	89	0.10	0.030		480	0.54	2	12/23/14 15:24	TPH
Trichlorofluoromethane (Freon 11)	36	0.10	0.035		200	0.56	2	12/23/14 15:24	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.12	0.10	0.028		0.89	0.77	2	12/23/14 15:24	TPH
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49	2	12/23/14 15:24	TPH
1,3,5-Trimethylbenzene	ND	0.10	0.020		ND	0.49	2	12/23/14 15:24	TPH
Vinyl Acetate	ND	2.0	0.051		ND	7.0	2	12/23/14 15:24	TPH
Vinyl Chloride	ND	0.10	0.043		ND	0.26	2	12/23/14 15:24	TPH
m&p-Xylene	0.058	0.20	0.050	J	0.25	0.87	2	12/23/14 15:24	TPH
o-Xylene	ND	0.10	0.029		ND	0.43	2	12/23/14 15:24	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	125	70-130	12/23/14 6:21
4-Bromofluorobenzene (1)	127	70-130	12/23/14 15:24
4-Bromofluorobenzene (2)	108	70-130	12/23/14 15:24

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: Post-Carbon-121914
Sample ID: 14L0924-13

Sample Matrix: Soil Gas

Sampled: 12/19/2014 11:55

Sample Description/Location:

Sub Description/Location:

Canister ID: 1729

Canister Size: 6 liter

Flow Controller ID: 4208

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -20

Receipt Vacuum(in Hg): -21

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	8.9	4.0	1.4		21	9.5		2	12/23/14 16:08	TPH
Benzene	0.10	0.10	0.052		0.33	0.32		2	12/23/14 16:08	TPH
Benzyl chloride	ND	0.10	0.019		ND	0.52		2	12/23/14 16:08	TPH
Bromodichloromethane	ND	0.10	0.022		ND	0.67		2	12/23/14 16:08	TPH
Bromoform	ND	0.10	0.019		ND	1.0		2	12/23/14 16:08	TPH
Bromomethane	ND	0.10	0.069		ND	0.39		2	12/23/14 16:08	TPH
1,3-Butadiene	ND	0.10	0.051	L-03, V-05	ND	0.22		2	12/23/14 16:08	TPH
2-Butanone (MEK)	0.86	4.0	0.075	J	2.5	12		2	12/23/14 16:08	TPH
Carbon Disulfide	ND	1.0	0.034		ND	3.1		2	12/23/14 16:08	TPH
Carbon Tetrachloride	0.056	0.10	0.024	J	0.35	0.63		2	12/23/14 16:08	TPH
Chlorobenzene	ND	0.10	0.035		ND	0.46		2	12/23/14 16:08	TPH
Chloroethane	ND	0.10	0.038		ND	0.26		2	12/23/14 16:08	TPH
Chloroform	0.25	0.10	0.023		1.2	0.49		2	12/23/14 16:08	TPH
Chloromethane	ND	0.20	0.044	L-03	ND	0.41		2	12/23/14 16:08	TPH
Cyclohexane	ND	0.10	0.057		ND	0.34		2	12/23/14 16:08	TPH
Dibromochloromethane	ND	0.10	0.027		ND	0.85		2	12/23/14 16:08	TPH
1,2-Dibromoethane (EDB)	ND	0.10	0.022		ND	0.77		2	12/23/14 16:08	TPH
1,2-Dichlorobenzene	ND	0.10	0.027		ND	0.60		2	12/23/14 16:08	TPH
1,3-Dichlorobenzene	ND	0.10	0.022		ND	0.60		2	12/23/14 16:08	TPH
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60		2	12/23/14 16:08	TPH
Dichlorodifluoromethane (Freon 12)	0.40	0.10	0.043		2.0	0.49		2	12/23/14 16:08	TPH
1,1-Dichloroethane	5.2	0.10	0.028		21	0.40		2	12/23/14 16:08	TPH
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40		2	12/23/14 16:08	TPH
1,1-Dichloroethylene	0.96	0.10	0.024		3.8	0.40		2	12/23/14 16:08	TPH
cis-1,2-Dichloroethylene	2.2	0.10	0.038		8.7	0.40		2	12/23/14 16:08	TPH
trans-1,2-Dichloroethylene	0.046	0.10	0.026	J	0.18	0.40		2	12/23/14 16:08	TPH
1,2-Dichloropropane	ND	0.10	0.035		ND	0.46		2	12/23/14 16:08	TPH
cis-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45		2	12/23/14 16:08	TPH
trans-1,3-Dichloropropene	ND	0.10	0.027		ND	0.45		2	12/23/14 16:08	TPH
Ethanol	2.5	4.0	1.8	J	4.7	7.5		2	12/23/14 16:08	TPH
Ethyl Acetate	ND	0.10	0.075		ND	0.36		2	12/23/14 16:08	TPH
Ethylbenzene	ND	0.10	0.028		ND	0.43		2	12/23/14 16:08	TPH
4-Ethyltoluene	ND	0.10	0.023		ND	0.49		2	12/23/14 16:08	TPH
Heptane	ND	0.10	0.032	L-03, V-05	ND	0.41		2	12/23/14 16:08	TPH
Hexachlorobutadiene	ND	0.10	0.038		ND	1.1		2	12/23/14 16:08	TPH
Hexane	0.21	4.0	0.18	J	0.74	14		2	12/23/14 16:08	TPH
2-Hexanone (MBK)	ND	0.10	0.026	L-03, V-05	ND	0.41		2	12/23/14 16:08	TPH
Isopropanol	ND	4.0	0.12		ND	9.8		2	12/23/14 16:08	TPH

ANALYTICAL RESULTS

Project Location: Providence RI

Date Received: 12/19/2014

Field Sample #: Post-Carbon-121914

Sample ID: 14L0924-13

Sample Matrix: Soil Gas

Sampled: 12/19/2014 11:55

Sample Description/Location:

Sub Description/Location:

Canister ID: 1729

Canister Size: 6 liter

Flow Controller ID: 4208

Sample Type: 30 min

Work Order: 14L0924

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -20

Receipt Vacuum(in Hg): -21

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.031		ND	0.36		2	12/23/14 16:08	TPH
Methylene Chloride	0.16	1.0	0.12	J	0.55	3.5		2	12/23/14 16:08	TPH
Methyl methacrylate	ND	0.10	0.031		ND	0.41		2	12/23/14 16:08	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.024	L-03, V-05	ND	0.41		2	12/23/14 16:08	TPH
Propene	1.2	4.0	0.31	J	2.1	6.9		2	12/23/14 16:08	TPH
Styrene	ND	0.10	0.019		ND	0.43		2	12/23/14 16:08	TPH
1,1,1,2-Tetrachloroethane	ND	0.18	0.066		ND	1.2		2	12/23/14 16:08	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.024		ND	0.69		2	12/23/14 16:08	TPH
Tetrachloroethylene	2.9	0.10	0.028		19	0.68		2	12/23/14 16:08	TPH
Tetrahydrofuran	0.12	0.10	0.042		0.35	0.29		2	12/23/14 16:08	TPH
Toluene	0.074	0.10	0.031	J	0.28	0.38		2	12/23/14 16:08	TPH
1,2,4-Trichlorobenzene	ND	0.10	0.038		ND	0.74		2	12/23/14 16:08	TPH
1,1,1-Trichloroethane	69	0.10	0.018		380	0.55		2	12/23/14 16:08	TPH
1,1,2-Trichloroethane	ND	0.10	0.030		ND	0.55		2	12/23/14 16:08	TPH
Trichloroethylene	46	0.10	0.030		250	0.54		2	12/23/14 16:08	TPH
Trichlorofluoromethane (Freon 11)	7.5	0.10	0.035		42	0.56		2	12/23/14 16:08	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.096	0.10	0.028	J	0.74	0.77		2	12/23/14 16:08	TPH
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49		2	12/23/14 16:08	TPH
1,3,5-Trimethylbenzene	ND	0.10	0.020		ND	0.49		2	12/23/14 16:08	TPH
Vinyl Acetate	0.23	2.0	0.051	J	0.80	7.0		2	12/23/14 16:08	TPH
Vinyl Chloride	ND	0.10	0.043		ND	0.26		2	12/23/14 16:08	TPH
m&p-Xylene	ND	0.20	0.050		ND	0.87		2	12/23/14 16:08	TPH
o-Xylene	ND	0.10	0.029		ND	0.43		2	12/23/14 16:08	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	125	70-130	12/23/14 16:08
4-Bromofluorobenzene (2)	109	70-130	12/23/14 16:08

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
14L0924-01 [IA-1-121914]	B112499	1.5	1	N/A	1000	400	855	12/22/14
14L0924-02 [IA-2-121914]	B112499	1.5	1	N/A	1000	400	855	12/22/14
14L0924-03 [IA-3-121914]	B112499	1.5	1	N/A	1000	400	855	12/22/14
14L0924-04 [IA-4-121914]	B112499	1.5	1	N/A	1000	400	855	12/22/14
14L0924-05 [IA-5-121914]	B112499	1.5	1	N/A	1000	400	855	12/22/14
14L0924-06 [IA-6-121914]	B112499	1.5	1	N/A	1000	400	855	12/22/14
14L0924-07 [IA-7-121914]	B112499	1.5	1	N/A	1000	400	855	12/22/14
14L0924-08 [AA-1-121914]	B112499	1.5	1	N/A	1000	400	855	12/22/14
14L0924-09 [EW-5-121914]	B112499	1.5	1	N/A	1000	400	300	12/22/14
14L0924-09RE1 [EW-5-121914]	B112499	1.5	1	N/A	1000	400	15	12/22/14
14L0924-10 [EW-6-121914]	B112499	1.5	1	N/A	1000	400	300	12/22/14
14L0924-11 [EW-7-121914]	B112499	1.5	1	N/A	1000	400	300	12/22/14
14L0924-11RE1 [EW-7-121914]	B112499	1.5	1	N/A	1000	400	15	12/22/14
14L0924-12 [EW-Combined-121914]	B112499	1.5	1	N/A	1000	400	300	12/22/14
14L0924-12RE1 [EW-Combined-121914]	B112499	1.5	1	N/A	1000	400	15	12/22/14
14L0924-13 [Post-Carbon-121914]	B112499	4	1	N/A	1000	400	800	12/22/14

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
14L0924-03RE1 [IA-3-121914]	B112546	1.5	1	N/A	1000	400	30	12/23/14

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
14L0924-04RE1 [IA-4-121914]	B112557	1.5	1	N/A	1000	400	30	12/26/14

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

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

Batch B112499 - TO-15 Prep

Blank (B112499-BLK1)	Prepared & Analyzed: 12/22/14									
Acetone	ND	0.80								
Benzene	ND	0.020								
Benzyl chloride	ND	0.020								
Bromodichloromethane	ND	0.020								
Bromoform	ND	0.020								
Bromomethane	ND	0.020								
1,3-Butadiene	ND	0.020								L-03, V-05
2-Butanone (MEK)	ND	0.80								
Carbon Disulfide	ND	0.20								
Carbon Tetrachloride	ND	0.020								
Chlorobenzene	ND	0.020								
Chloroethane	ND	0.020								
Chloroform	ND	0.020								
Chloromethane	ND	0.040								L-03
Cyclohexane	ND	0.020								
Dibromochloromethane	ND	0.020								
1,2-Dibromoethane (EDB)	ND	0.020								
1,2-Dichlorobenzene	ND	0.020								
1,3-Dichlorobenzene	ND	0.020								
1,4-Dichlorobenzene	ND	0.020								
Dichlorodifluoromethane (Freon 12)	ND	0.020								
1,1-Dichloroethane	ND	0.020								
1,2-Dichloroethane	ND	0.020								
1,1-Dichloroethylene	ND	0.020								
cis-1,2-Dichloroethylene	ND	0.020								
trans-1,2-Dichloroethylene	ND	0.020								
1,2-Dichloropropane	ND	0.020								
cis-1,3-Dichloropropene	ND	0.020								
trans-1,3-Dichloropropene	ND	0.020								
Ethanol	ND	0.80								
Ethyl Acetate	ND	0.020								
Ethylbenzene	ND	0.020								
4-Ethyltoluene	ND	0.020								
Heptane	ND	0.020								L-03, V-05
Hexachlorobutadiene	ND	0.020								
Hexane	ND	0.80								
2-Hexanone (MBK)	ND	0.020								L-03, V-05
Isopropanol	ND	0.80								
Methyl tert-Butyl Ether (MTBE)	ND	0.020								
Methylene Chloride	ND	0.20								
Methyl methacrylate	ND	0.020								
4-Methyl-2-pentanone (MIBK)	ND	0.020								V-05, L-03
Propene	ND	0.80								
Styrene	ND	0.020								
1,1,1,2-Tetrachloroethane	ND	0.036								
1,1,2,2-Tetrachloroethane	ND	0.020								

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

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

Batch B112499 - TO-15 Prep
Blank (B112499-BLK1)

Prepared & Analyzed: 12/22/14

Tetrachloroethylene	ND	0.020
Tetrahydrofuran	ND	0.020
Toluene	ND	0.020
1,2,4-Trichlorobenzene	ND	0.020
1,1,1-Trichloroethane	ND	0.020
1,1,2-Trichloroethane	ND	0.020
Trichloroethylene	ND	0.020
Trichlorofluoromethane (Freon 11)	ND	0.020
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.020
1,2,4-Trimethylbenzene	ND	0.020
1,3,5-Trimethylbenzene	ND	0.020
Vinyl Acetate	ND	0.40
Vinyl Chloride	ND	0.020
m&p-Xylene	ND	0.040
o-Xylene	ND	0.020

Surrogate: 4-Bromofluorobenzene (1)	9.81	8.00	123	70-130
Surrogate: 4-Bromofluorobenzene (2)	8.60	8.00	108	70-130

LCS (B112499-BS1)

Prepared & Analyzed: 12/22/14

Acetone	5.22	5.00	104	70-130
Benzene	3.61	5.00	72.2	70-130
Benzyl chloride	4.13	5.00	82.7	70-130
Bromodichloromethane	4.34	5.00	86.8	70-130
Bromoform	5.50	5.00	110	70-130
Bromomethane	3.69	5.00	73.7	70-130
1,3-Butadiene	3.38	5.00	67.7 *	70-130
2-Butanone (MEK)	3.84	5.00	76.9	70-130
Carbon Disulfide	4.90	5.00	97.9	70-130
Carbon Tetrachloride	4.10	5.00	82.0	70-130
Chlorobenzene	4.36	5.00	87.2	70-130
Chloroethane	3.85	5.00	76.9	70-130
Chloroform	5.13	5.00	103	70-130
Chloromethane	3.49	5.00	69.8 *	70-130
Cyclohexane	3.91	5.00	78.2	70-130
Dibromochloromethane	4.63	5.00	92.6	70-130
1,2-Dibromoethane (EDB)	4.53	5.00	90.5	70-130
1,2-Dichlorobenzene	5.30	5.00	106	70-130
1,3-Dichlorobenzene	5.06	5.00	101	70-130
1,4-Dichlorobenzene	5.03	5.00	101	70-130
Dichlorodifluoromethane (Freon 12)	5.27	5.00	105	70-130
1,1-Dichloroethane	4.58	5.00	91.6	70-130
1,2-Dichloroethane	4.53	5.00	90.7	70-130
1,1-Dichloroethylene	4.41	5.00	88.2	70-130
cis-1,2-Dichloroethylene	4.54	5.00	90.7	70-130
trans-1,2-Dichloroethylene	4.42	5.00	88.4	70-130
1,2-Dichloropropane	3.69	5.00	73.8	70-130

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	RL	ug/m3 Results	RL	Spike Level ppbv	Source Result	%REC %REC	Limits	RPD RPD	RPD Limit	Flag
Batch B112499 - TO-15 Prep											
LCS (B112499-BS1)											
Prepared & Analyzed: 12/22/14											
cis-1,3-Dichloropropene	3.96		5.00		79.2	70-130					
trans-1,3-Dichloropropene	4.04		5.00		80.7	70-130					
Ethanol	5.22		5.00		104	70-130					
Ethyl Acetate	3.95		5.00		79.0	70-130					
Ethylbenzene	4.47		5.00		89.4	70-130					
4-Ethyltoluene	4.54		5.00		90.9	70-130					
Heptane	3.48		5.00		69.6	*	70-130				V-05, L-03
Hexachlorobutadiene	5.32		5.00		106	70-130					
Hexane	4.10		5.00		82.1	70-130					
2-Hexanone (MBK)	3.44		5.00		68.7	*	70-130				L-03, V-05
Isopropanol	5.88		5.00		118	70-130					
Methyl tert-Butyl Ether (MTBE)	4.46		5.00		89.1	70-130					
Methylene Chloride	4.07		5.00		81.4	70-130					
Methyl methacrylate	3.80		5.00		76.0	70-130					
4-Methyl-2-pentanone (MIBK)	3.26		5.00		65.3	*	70-130				L-03, V-05
Propene	4.67		5.00		93.4	70-130					
Styrene	4.55		5.00		91.0	70-130					
1,1,1,2-Tetrachloroethane	0.833		0.910		91.5	70-130					
1,1,2,2-Tetrachloroethane	4.64		5.00		92.9	70-130					
Tetrachloroethylene	5.44		5.00		109	70-130					
Tetrahydrofuran	3.84		5.00		76.8	70-130					
Toluene	4.49		5.00		89.8	70-130					
1,2,4-Trichlorobenzene	4.84		5.00		96.7	70-130					
1,1,1-Trichloroethane	4.08		5.00		81.7	70-130					
1,1,2-Trichloroethane	4.80		5.00		96.0	70-130					
Trichloroethylene	4.20		5.00		84.0	70-130					
Trichlorofluoromethane (Freon 11)	5.42		5.00		108	70-130					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.56		5.00		111	70-130					
1,2,4-Trimethylbenzene	4.63		5.00		92.5	70-130					
1,3,5-Trimethylbenzene	4.44		5.00		88.8	70-130					
Vinyl Acetate	3.97		5.00		79.4	70-130					
Vinyl Chloride	3.60		5.00		71.9	70-130					
m&p-Xylene	9.63		10.0		96.3	70-130					
o-Xylene	4.44		5.00		88.8	70-130					
Surrogate: 4-Bromofluorobenzene (1)	10.2		8.00		127	70-130					
Surrogate: 4-Bromofluorobenzene (2)	8.87		8.00		111	70-130					

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

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

Batch B112546 - TO-15 Prep

Blank (B112546-BLK1)	Prepared & Analyzed: 12/23/14						
Ethanol	ND	1.0					
Surrogate: 4-Bromofluorobenzene (l)	10.1		8.00		126	70-130	
LCS (B112546-BS1)	Prepared & Analyzed: 12/23/14						
Ethanol	5.04		5.00		101	70-130	
Surrogate: 4-Bromofluorobenzene (l)	10.4		8.00		130	70-130	

Batch B112557 - TO-15 Prep

Blank (B112557-BLK1)	Prepared & Analyzed: 12/26/14						
Ethanol	ND	1.0					L-03
Surrogate: 4-Bromofluorobenzene (l)	7.77		8.00		97.1	70-130	
LCS (B112557-BS1)	Prepared & Analyzed: 12/26/14						
Ethanol	3.32		5.00		66.3 *	70-130	L-03
Surrogate: 4-Bromofluorobenzene (l)	7.92		8.00		98.9	70-130	

FLAG/QUALIFIER SUMMARY

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

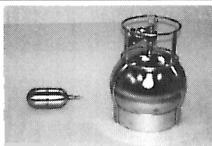
Analyte	Certifications
EPA TO-15 in Air	
Acetone	AIHA,NY,ME
Benzene	AIHA,FL,NJ,NY,VA,ME
Benzyl chloride	AIHA,FL,NJ,NY,VA,ME
Bromodichloromethane	AIHA,NJ,NY,VA,ME
Bromoform	AIHA,NJ,NY,VA,ME
Bromomethane	AIHA,FL,NJ,NY,ME
1,3-Butadiene	AIHA,NJ,NY,VA,ME
2-Butanone (MEK)	AIHA,FL,NJ,NY,VA,ME
Carbon Disulfide	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
EPA TO-15 in Air	
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	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
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	02/23/2015
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



www.contestlabs.com

con-test®
ANALYTICAL LABORATORY

Page 1 of 2

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

AIR Only Receipt Checklist

CLIENT NAME: AM EC

RECEIVED BY: TPH

DATE: 12-19-14

1) Was the chain(s) of custody relinquished and signed?

Yes No

2) Does the chain agree with the samples?

Yes No

If not, explain:

3) Are all the samples in good condition?

Yes No

If not, explain:

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			
Restrictors		13	30 min
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:

Unused Regulators:

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:	1644	1451	1729	4077	4175	4075	4073	4208
1139	1075	1617	1314	1613	4174	4179	4209	4212
1616	1621	1633	1462	1863	4076	4178	4072	4213

Page 2 of 2
Login Sample Receipt Checklist
(Rejection Criteria Listing - Using Sample Acceptance Policy)
Any False statement will be brought to the attention of Client

Question	Answer (True/False)		Comment
	<u>T/F/NA</u>		
1) The coolers'/boxes' custody seal, if present, is intact.	T		
2) The cooler or samples do not appear to have been compromised or tampered with.	T		
3) Samples were received on ice.	NA		
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: *TPH*

Date/Time:
 Date/Time:
12-19-14
1920

APPENDIX B

Analytical Laboratory Detection Limits

Con-Test Analytical Laboratory

1/30/2015

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Blank Spike / LCS %R	Blank Spike / LCS 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 (Freon 114)	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	

Con-Test Analytical Laboratory

1/30/2015

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Blank Spike / LCS %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 (Freo	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)							