



engineering and constructing a better tomorrow

April 13, 2011

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

**RE: Air Monitoring Report
First Quarter, 2011
Retail Complex, Active Sub-Slab Depressurization System
Former Gorham Manufacturing Facility
333 Adelaide Avenue, Providence, Rhode Island
MACTEC Project No. 3650080114**

Dear Mr. Martella:

This letter report presents the results of quarterly compliance sampling and analysis conducted by MACTEC Engineering and Consulting, Inc. (MACTEC) at the retail complex located at the Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island (the Site). The reporting period is from December, 2010 through March, 2011 and includes two quarterly compliance sampling events (December 2010 and February 2011).

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

Background

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

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

Small Retail Spaces

The quarterly monitoring events for the three small retail spaces, consistent with the requirements of the Orders of Approval, were completed on December 7 and 8, 2010 and February 17, 2011.

Table 1 summarizes the analytical results at the small retail spaces for the baseline sampling event conducted prior to system start-up and all subsequent sampling events conducted after system start-up. Results of the indoor air samples were compared to the Draft Connecticut Industrial/Commercial Indoor Target Air Concentrations (TAC), which were identified as action levels in the Orders of Approval. The laboratory reports (10L0202 and 10L0301) associated with the December 7 and 8, 2010 quarterly sampling events are provided in Appendix A of this letter report. The analytical laboratory's detection limits are provided in Appendix B. The laboratory report (11B0387) associated with the February 17, 2011 quarterly sampling event is also provided in Appendix A of this letter report.

Sampling events 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 at an upwind location during each of the sampling rounds (dependent on weather conditions). 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 programs. The vacuum monitoring results are tabulated in Table 2.

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

- Indoor air sample results were in compliance with action levels for the quarterly sampling events in the three small retail spaces (sample locations IA-5, IA-6, and IA-7). Although the concentration of carbon tetrachloride in the samples collected from locations IA-5 through IA-7 during the quarterly sampling in February 2011 was slightly above the action level, carbon tetrachloride is not one of the compounds for

which the vapor mitigation system was installed. In addition, carbon tetrachloride was detected in the ambient air slightly below the action level. It appears that the detection of carbon tetrachloride in indoor air is unrelated to the vapor intrusion pathway because it was not detected in the soil vapor. Thus, the concentration of carbon tetrachloride above the action level does not constitute a violation of the action levels contained in the order.

- The eastern small retail space (sample location IA-5) was unoccupied beginning with the December 2010 sampling event. Previously, the eastern small retail space was occupied. IA-5 was sampled on December 8, 2010, one day after compliance sampling at the other two small retail spaces due an access delay with the former tenant.
- The center small retail space (sample location IA-6) remains unoccupied.
- The western small retail space (sample location IA-7) of the retail complex is occupied.
- The mitigation systems are functioning as designed and are achieving desired results with respect to indoor quality in the three small retail units.

Large Retail Space

The quarterly monitoring events for the large retail space, consistent with the requirements of the Orders of Approval, were completed on December 7, 2010, and February 17, 2011. The additional sampling event in February 2011 was conducted on a slightly expedited basis because concentrations of trichloroethylene in the indoor air exceeded the action level during the December 2010 sampling event (average December 2010 indoor air trichloroethylene concentration of $1.7 \mu\text{g}/\text{m}^3$ as compared to TAC standard of $1.0 \mu\text{g}/\text{m}^3$). However, the December 2010 sampling event was conducted with limited heating and no ventilation (the large retail space is currently unoccupied). In addition, an inspection of the ASD system following receipt of the December 2010 results identified that the system was operating at less than ideal conditions due to water entrainment within system components. This resulted in a less than ideal vacuum being induced underneath the footprint of the large retail space. To address these factors, the February 2011 sampling event was preceded by one week of operating the large retail space heating, ventilation, and air conditioning (HVAC) system with typical air exchanges required for this type of commercial space and removal of accumulated water within the ASD system.

Table 3 summarizes the analytical results for the large retail space for the baseline sampling event conducted prior to system start-up and all subsequent sampling events conducted after system start-up. Results of the indoor air samples were compared to the Draft Connecticut Industrial/Commercial Indoor Target Air Concentrations (TAC), which were identified as action levels in the Orders of Approval. The laboratory report (10L0202) associated with the December 7, 2010 quarterly sampling event is provided in Appendix A of this letter report. The analytical

laboratory's detection limits are provided in Appendix B. The laboratory report (11B0387) associated with the February 17, 2011 quarterly sampling event is provided in Appendix A of this letter report. The analytical laboratory's detection limits are provided in Appendix B.

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

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

- Indoor air sample results were in compliance with action levels for the February 2011 quarterly sampling event in the large retail space (sample locations IA-1 through IA-4). Although the concentration of carbon tetrachloride in the samples collected from locations IA-3 and IA-4, during the quarterly sampling in February 2011, was slightly above the action level, carbon tetrachloride is not one of the compounds for which the vapor mitigation system was installed. In addition, carbon tetrachloride was detected in the ambient air slightly below the action level. It appears that the detection of carbon tetrachloride in indoor air is unrelated to the vapor intrusion pathway because it was detected in the soil vapor at approximately the same concentration as in the indoor air. If vapor intrusion is occurring, typically, there is a several order of magnitude lower concentration of site-related compounds in indoor air relative to sub-slab soil vapor. Thus, the concentration of carbon tetrachloride above the action level does not constitute a violation of the action levels contained in the order.
- Tetrachloroethylene was detected in all of the indoor air samples (IA-1 through IA-4) at the action level or above during the February 2011 quarterly sampling event. However, it was also detected above the action level in the ambient air sample collected during the same sampling event. Thus, the concentration of tetrachloroethylene above the action level in indoor air samples does not constitute a violation of the action levels contained in the order.
- The mitigation system is functioning as designed and is achieving desired results with respect to indoor air quality in the large retail space.

ASD System Monitoring

The ASD system performance is monitored monthly by Clean Harbors Environmental Services. There were three system shutdowns during the reporting period. The first two shutdowns occurred on January 22, 2011, for two days and on January 25, 2011 for approximately 24 hours. The third shutdown was on March 25, 2011, during a system check. It was determined that a failed relay had caused the shutdowns during the reporting period. The relay was replaced with an updated model on March 25, 2011.

Next Reporting Period

The next quarterly report (second quarter 2011) will include monitoring from April 2011 through June 2011. The report will be prepared and submitted to the Rhode Island Department of Environmental Management (RIDEM) in July 2011.

Please contact the undersigned at 781-245-6606 if we can provide additional information or answer any questions concerning these monitoring events and system adjustments.

Sincerely,
MACTEC Engineering and Consulting, Inc.



Philip Muller
Senior Engineer



Michael Murphy
Principal Scientist

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: T. Deller, City of Providence
 G. Simpson, Textron, Inc. (Electronic)
 Knight Memorial Library Repository
 G. Wilson, Kimco Realty Corporation (including tenants)
 J. Morgan, The Stop & Shop Supermarket Co., LLC
 MACTEC Project File

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 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
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U					
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U					
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U					
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U					
1,2,4-Trimethylbenzene	0.25 U	0.28	0.52	1.8	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.29	0.3	0.25 U	
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U					
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U					
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U					
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.5	0.25 U	0.25 U	0.18 U	0.25 U					
1,3-Butadiene	0.11 U	0.11 U	0.17	1.3	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.53	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-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
2-Hexanone	0.2 U	0.22	0.57	0.35	0.2 U	0.2 U	0.14 U	0.26	0.39	0.2 U	0.34	0.2 U	
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.6	0.25 U	0.25 U	0.18 U	0.25 U					
4-Methyl-2-pentanone	0.2 U	0.2 U	0.27	0.63	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	7.3	8	15	22	8.4	5.9	12	1.1	27	9.5	10	10	9.6
Benzene	0.69	0.62	1.3	4.7	0.43	0.69	0.46	0.12 U	0.3	0.4	0.49	0.38	0.35
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U					
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U					
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U					
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U					
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				
Carbon tetrachloride	0.38	0.44	0.52	0.56	0.43	0.61	0.47	0.22 U	0.41	0.78	0.43	0.4	0.4
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U					
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
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				
Chloromethane	1.1	0.9	1.4	1.5	1.1	1.3	1.1	1.2	1.1	1.2	0.85		1.1
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U					
Cyclohexane	0.17 U	0.17 U	0.35	1.1	0.17 U	0.17 U	0.17 U	0.12 U	0.17 U				
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U				
Dichlorodifluoromethane	2	2.2	2.6	2.7	2.6	2.6	2.8	2	2.5	2.7	2.6	2.1	2.1

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 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
Ethanol	4	5.4	10	47	4.3	3.5	4.7	0.81	4.9	4.8	8.6	6.6	4.6
Ethyl acetate	0.37 U	0.37 U	0.18 U	0.31	0.37 U	0.18 U	0.18 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.25	0.52	2	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.24	0.22 U	0.23
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	1.1 U	0.53 U	0.53 U
Hexane	1.5	0.75	1.1	2.9	0.38	2.8	2.2	0.13 U	0.56	0.37	0.59	0.48	1.4
Isopropyl alcohol	1.4	1.4	1.8	4.3	1.4	0.67	1.4	0.18 U	14	1	2.5	2.8	0.87
m,p-Xylene	0.43 U	0.72	1.4	6.4	0.44	0.43 U	0.43 U	0.31 U	0.43 U	0.49	0.73	0.62	0.59
Methyl methacrylate													
Methylene chloride	5.5	3.1	0.65	1.5	0.78	7.4	15	2.1	2.8	1.7	1.9	0.7 U	4.2
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				
n-Heptane	0.2 U	0.27	0.92	1.6	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.4	0.23	0.2 U	0.2 U
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
Propylene (Propene)	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.09 U	0.13 U	0.18 U	0.09 U	0.09 U	0.35 U	0.35 U
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				
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
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				
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
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
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				
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				
Trichlorofluoromethane	1.3	1.2	1.7	2.4	1.5	2	1.7	0.92	1.3	1.5	2	1.1	1.4
Trichlorotrifluoroethane	0.68	0.53	0.5	0.47	0.64	0.48	0.51	0.27 U	0.64	0.67	0.56	0.47	0.49
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.18 U	0.5 U	0.71 U	0.18 U	0.18 U	0.71 U	0.71 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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-1-100109 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	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
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.94	0.25 U	1.1
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.28	0.25 U	0.33
1,3-Butadiene	0.23 U	0.23 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.29	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane														
2-Butanone	1.2	1.2	2	0.81	1.6	1.6	0.88	1.5	1.4	2.4	2.3	2.7	0.37	1.8 B
2-Hexanone	0.33	0.23	0.2 U	0.2 U	0.32	0.2 U	0.2 U	0.29	0.29	0.49	0.49	0.41	0.2 U	0.2 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.3	0.25 U	0.34
4-Methyl-2-pentanone	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.8	0.2 U	0.2 U
Acetone	5.4	17	11	3.5	7.6	5	3.7	9.5	12	20	13	14	5.7 B	19 B
Benzene	0.25	0.2	0.42	0.79	0.68	0.63	0.41	0.69	0.35	0.19	0.16 U	1.2	0.28	2.3
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.34 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.28	0.16 U	0.16 U	0.44	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.38	0.16 U
Carbon tetrachloride	0.43	0.46	0.39	0.42	0.39	0.31 U	0.43	0.49	0.47	0.52	0.51	0.43	0.42	0.48
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	0.97	0.96	1.6	1.1	1.2	1.3	1.1	1.4	0.78	1.1	0.96	0.99	0.94	1
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.46	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.2	2.1	2.1	2.3	2.4	2.5	2.9	1.8	2.1	2.5	2.4	2.9	1.9	3.1

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-1-100109 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	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
Ethanol	3.9	4.9	3.8	5.4	5.1	7.2	1.2	4.9	4	3.3	4	14	2.3	12
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	1.1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.82	1.4	0.22 U
Hexachlorobutadiene	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Hexane	0.45	4.5	0.62	0.36	0.53	0.91	0.24	0.23	1.1	0.51	0.37	1.2	0.35 U	3.3
Isopropyl alcohol	0.63	0.25 U	0.54	0.56	2.7	1.5	0.8	0.73	0.69	1.6	0.79	0.25 U	0.29	2.4
m,p-Xylene	0.43 U	0.43 U	0.43 U	0.43 U	0.5	0.47	0.43 U	0.49	0.43 U	0.43 U	0.43 U	2.2	3.7	0.43 U
Methyl methacrylate													0.2 U	0.48
Methylene chloride	0.7 U	23	4.6	1.3	1.9	1.7	0.7 U	0.7 U	0.7 U	0.35 U	1.1	1.1	0.66	3
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.2 U	0.2 U	0.2 U	0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.91	0.2 U	0.95
o-Xylene	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	0.46	1.2	0.22 U	1.1
Propylene (Propene)	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 U	1.9	0.86 U	0.86 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	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	0.49	0.34 U	0.34 U	5.3
Tetrahydrofuran	1.2	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.19	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	0.61	0.5	0.78	0.94	0.64	0.97	0.46	1.1	0.75	0.63	0.57	10	0.19 U	5.3
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.3	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	1.2	1.5	2.2	1.2	1.2	1.6	1.5	1.5	1.2	1.4	1.3	11	1.2	1.7
Trichlorotrifluoroethane	0.45	0.46	0.54	0.49	0.55	0.54	0.54	0.62	0.45	0.58	0.56	0.44	0.56	0.66
Vinyl acetate	0.71 U	0.71 U	0.36 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.35 U	0.18 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 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)	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
1,1,1-Trichloroethane	190000	41000	17000	7100	1800	2600	3100	1900	3500	920	540	550	460	210 D	400 D
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 UD	1.4 UD
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 UD	1.1 UD
1,1-Dichloroethane	11000	1900	890	770	190	360	450	430	230	100	50	53	42	29 D	34 D
1,1-Dichloroethene	2500	290	130	190	61	160	160	98	30	18	21	15	13 D	15 D	
1,2,4-Trichlorobenzene	7.4 U	7.4 U	7.4 U	7.4 U	1.9 U	74 U	3.7 U	3.7 U	3.7 U	7.5 U	15 U	3.7 U	7.4 U	1.5 UD	1.5 UD
1,2,4-Trimethylbenzene	5 U	5 U	5 U	5 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	5 U	0.98 UD	0.98 UD
1,2-Dibromoethane (EDB)	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	76 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U	3.8 U	7.6 U	1.5 UD	1.5 UD
1,2-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	60 U	3 U	3 U	3 U	3 U	6 U	3 U	6 U	1.2 UD	1.2 UD
1,2-Dichloroethane	4 U	4 U	4 U	4 U	1 U	40 U	2 U	2 U	2 U	2 U	4 U	2 U	4 U	0.81 UD	0.81 UD
1,2-Dichloropropane	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	46 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U	2.3 U	4.6 U	0.92 UD	0.92 UD
1,2-Dichlortetrafluoroethane	7 U	7 U	7 U	7 U	1.8 U	70 U	3.5 U	3.5 U	3.5 U	3.5 U	7 U	3.5 U	7 U		
1,3,5-Trimethylbenzene	5 U	5 U	5 U	5 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	5 U	0.98 UD	0.98 UD
1,3-Butadiene	2.2 U	2.2 U	2.2 U	2.2 U	0.55 U	22 U	1.1 U	1.1 U	2.3 U	1.1 U	2.2 U	1.1 U	2.2 U	0.44 UD	0.44 UD
1,3-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	60 U	3 U	3 U	3 U	3 U	6 U	3 U	6 U	1.2 UD	1.2 UD
1,4-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	60 U	3 U	3 U	3 U	3 U	6 U	3 U	6 U	1.2 UD	1.2 UD
1,4-Dioxane															
2-Butanone	6.3	89	75	170	3700	64000	100000	230000	110000	7800	18000	28000	15000	4000 D	7200 BD
2-Hexanone	4 U	4 U	4 U	4 U	1 U	40 U	2.7	2 U	2 U	2 U	4 U	2 U	4 U	0.82 UD	0.82 UD
4-Ethyltoluene	5 U	5 U	5 U	5 U	1.3 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	5 U	0.98 UD	0.98 UD
4-Methyl-2-pentanone	4 U	4 U	4 U	4 U	1 U	40 U	2 U	2 U	2 U	2 U	4 U	2 U	4 U	0.82 UD	0.82 UD
Acetone	530	32	52	29	460	5600	14000	6900	9200	1700	3200	6000	4500	2000 BD	1800 BD
Benzene	13	12	6.2	4.8	5.6	32 U	11	7.1	11	6.3	5.5	8.2	5	4.2 D	4.5 D
Benzyl chloride	5.2 U	5.2 U	5.2 U	5.2 U	1.3 U	52 U	2.6 U	2.6 U	2.6 U	2.6 U	5.2 U	2.6 U	5.2 U	1 UD	1 UD
Bromodichloromethane	6.6 U	6.6 U	6.6 U	6.6 U	1.7 U	66 U	3.3 U	3.3 U	3.3 U	3.3 U	6.6 U	3.3 U	6.6 U	1.3 UD	1.3 UD
Bromoform	11 U	11 U	11 U	11 U	2.6 U	110 U	5.1 U	5.1 U	5.1 U	5.1 U	11 U	5.1 U	11 U	2.1 UD	2.1 UD
Bromomethane	3.8 U	3.8 U	3.8 U	3.8 U	0.95 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	1.9 U	3.8 U	0.78 UD	0.78 UD
Carbon disulfide	3.2 U	3.2 U	3.2 U	3.2 U	0.8 U	230	4	5.4	8.2	2.9	5.7	12	14	8 D	15 D
Carbon tetrachloride	6.2 U	6.2 U	6.2 U	6.2 U	1.6 U	62 U	3.1 U	3.1 U	3.1 U	3.1 U	6.2 U	3.1 U	6.2 U	1.3 UD	1.3 UD
Chlorobenzene	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	46 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U	2.3 U	4.6 U	0.92 UD	0.92 UD
Chloroethane	260	23	16	11	4.5	26 U	11	15	7	6.5	3.5	3.6	5.5	3.1 D	3.4 D
Chloroform	83	32	20	16	2.8	48 U	7.2	6.5	5.8	2.6	4.8 U	2.4 U	4.8 U	1.1 D	1.2 D
Chloromethane	2 U	2 U	2 U	2 U	0.5 U	20 U	1 U	1 U	1 U	1 U	2 U	1 U	2 U	0.41 UD	0.41 UD
cis-1,2-Dichloroethene	2900	710	400	410	100	150	270	250	170	58	32	43	31	17 D	27 D
cis-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U	4.4 U	0.91 UD	0.91 UD
Cyclohexane	3.4 U	3.4 U	3.4 U	3.4 U	0.85 U	34 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	1.7 U	3.4 U	0.69 UD	0.69 UD
Dibromochloromethane	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	86 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U	4.3 U	8.6 U	1.7 UD	1.7 UD
Dichlorodifluoromethane	5 U	5 U	5 U	5 U	2.7	50 U	3	3.2	2.5 U	2.5 U	5 U	2.5	5 U	2.4 D	3.7 D

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
Ethanol	320	36	46	33	22	130	30	26	3.8 U	45	28	68	89	23 D	19 D
Ethyl acetate	7.3 U	3.6 U	3.6 U	7.3 U	0.9 U	73 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	6.8	3.4 D	0.72 UD	
Ethylbenzene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U	4.4 U	0.87 UD	0.87 UD	
Hexachlorobutadiene	22 U	22 U	22 U	22 U	5.4 U	220 U	11 U	11 U	5.3 U	11 U	22 U	5.3 U	11 U	2.1 UD	2.1 UD
Hexane	5	3.6 U	3.6 U	3.6 U	2.3	36 U	3.3	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	7.1 U	1.4 UD	0.7 UD
Isopropyl alcohol	190	5.1	4.6	5 U	4.6	290	24	57	35	2.5 U	20	54	59	11 D	13 D
m,p-Xylene	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	86 U	4.3 U	4.3 U	4.3 U	8.6 U	4.3 U	8.6 U	1.7 UD	1.7 UD	
Methyl methacrylate															0.82 UD
Methylene chloride	7.8	7 U	9.6	7 U	12	720	21	15	7 U	25	14 U	8.6	7 U	1.4 UD	2 D
Methyl-t-butyl ether	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	36 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U	3.6 U	0.72 UD	0.72 UD	
n-Heptane	4 U	4 U	4 U	4 U	1 U	40 U	2 U	2 U	2 U	2 U	4 U	2 U	4 U	0.82 UD	0.82 UD
o-Xylene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U	4.4 U	0.87 UD	0.87 UD	
Proplylene (Propene)	3.5 U	1.8 U	1.8 U	3.5 U	0.45 U	35 U	0.9 U	0.9 U	3.5 U	3.5 U	6.9 U	8.7 U	6.9 U	1.4 UD	3.4 UD
Styrene	4.2 U	17	4.2 U	4.2 U	1.7	42 U	2.2	2.1 U	2.1 U	2.1 U	4.2 U	2.1 U	4.2 U	0.85 UD	0.85 UD
Tetrachloroethene	210	310	190	97	8	68 U	21	25	19	8.9	6.8 U	6.7	6.8 U	4 D	4100 D
Tetrahydrofuran	16	110	69	140	2200	42000	61000	150000	94000	9700	23000	37000	29000	8200 D	11000 D
Toluene	13	4.7	3.8 U	3.8 U	0.95 U	38 U	2.2	3.4	1.9 U	1.9 U	3.8 U	1.9 U	3.8 U	0.75 UD	1.6 D
trans-1,2-Dichloroethene	26	6.1	4 U	4.7	1 U	40 U	2.6	2.8	2 U	2 U	4 U	2 U	4 U	0.79 UD	0.79 UD
trans-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U	4.4 U	0.91 UD	0.91 UD	
Trichloroethene	51000	20000	14000	8900	2400	3800	4400	2700	6800	1600	1100	1200	1100	410 D	660 D
Trichlorofluoromethane	3500	200	120	67	16	56 U	27	41	2.8 U	53	7	7.4	5.8	5.1 D	5.8 D
Trichlorotrifluoroethane	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	76 U	3.8 U	3.8 U	3.8 U	7.6 U	3.8 U	7.6 U	1.5 UD	1.5 UD	
Vinyl acetate	15 U	3.6 U	3.6 U	15 U	0.9 U	150 U	1.8 U	1.8 U	7.1 U	3.6 U	7.1 U	1.8 U	7.1 U	1.4 UD	0.7 UD
Vinyl chloride	2.6 U	2.6 U	2.6 U	2.6 U	0.65 U	26 U	1.3 U	5.3	1.3 U	3	3.4	3.1	4.3	2.4 D	3.7 D

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													
	EW-6-020309 2/3/2009	EW-6-021109 2/11/2009	EW-6-021809 2/18/2009	EW-6-022609 2/26/2009	EW-6-030609 3/6/2009	EW-6-041409 4/14/2009	EW-6-051509 5/15/2009	EW-6-061109 6/11/2009	EW-6-091709 9/17/2009	EW-6-122909 12/29/2009	EW-6-070110 7/1/2010	EW-6-091610 9/16/2010	EW-6-120710 12/7/2010	EW-6-021711 2/17/2011
1,1,1-Trichloroethane	69000	32000	21000	16000	16000	5600	8200	5700	5400	1100	430	390	130 D	0.55 UD
1,1,2,2-Tetrachloroethane	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	68 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	6.8 U	0.69 UD	0.69 UD
1,1,2-Trichloroethane	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	54 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	5.4 U	0.55 UD	0.55 UD
1,1-Dichloroethane	5200	2500	2100	2200	1600	780	1200	1100	930	580	47	38	21 D	0.4 UD
1,1-Dichloroethene	850	210	100	110	55	74	87	83	80	6.4	3.5	4 U	0.4 UD	0.4 UD
1,2,4-Trichlorobenzene	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	74 U	3.7 U	3.7 U	3.7 U	7.5 U	3.7 U	7.4 U	0.74 UD	0.74 UD
1,2,4-Trimethylbenzene	5 U	5 U	5 U	16	6.2	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.49 UD	0.49 UD
1,2-Dibromoethane (EDB)	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	76 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U	0.77 UD	0.77 UD
1,2-Dichlorobenzene	6 U	6 U	6 U	6 U	6 U	60 U	3 U	3 U	3 U	3 U	3 U	6 U	0.6 UD	0.6 UD
1,2-Dichloroethane	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U	4 U	0.4 UD	0.4 UD
1,2-Dichloropropane	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	46 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U	0.46 UD	0.46 UD
1,2-Dichlortetrafluoroethane	7 U	7 U	7 U	7 U	7 U	70 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	7 U		
1,3,5-Trimethylbenzene	5 U	5 U	5 U	7.3	5 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.49 UD	0.49 UD
1,3-Butadiene	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	22 U	1.1 U	1.1 U	2.3 U	1.1 U	1.1 U	2.2 U	0.22 UD	0.22 UD
1,3-Dichlorobenzene	6 U	6 U	6 U	6 U	6 U	60 U	3 U	3 U	3 U	3 U	3 U	6 U	0.6 UD	0.6 UD
1,4-Dichlorobenzene	6 U	6 U	6 U	6 U	6 U	60 U	3 U	3 U	3 U	3 U	3 U	6 U	0.6 UD	0.6 UD
1,4-Dioxane														
2-Butanone	120	280	300	130	97	160	37	65	8.7	23	1800	110	20 D	1.9 BD
2-Hexanone	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U	4 U	0.41 UD	0.41 UD
4-Ethyltoluene	5 U	5 U	5 U	5 U	5 U	50 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.49 UD	0.49 UD
4-Methyl-2-pentanone	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U	4 U	0.41 UD	0.41 UD
Acetone	580	64	81	33	22	410	16	20	4.8 U	27	490	70	15 BD	15 BD
Benzene	5.2	5.2	4.1	3.2 U	3.2 U	32 U	1.7	1.6 U	1.6 U	1.6 U	1.6 U	3.2 U	0.92 D	1.1 D
Benzyl chloride	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	52 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	5.2 U	0.52 UD	0.52 UD
Bromodichloromethane	6.6 U	6.6 U	6.6 U	6.6 U	6.6 U	66 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	6.6 U	0.67 UD	0.67 UD
Bromoform	11 U	11 U	11 U	11 U	11 U	110 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	11 U	1 UD	1 UD
Bromomethane	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	0.39 UD	0.39 UD
Carbon disulfide	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	180	1.6 U	1.6 U	1.6 U	1.6 U	8	12	0.66 D	0.31 UD
Carbon tetrachloride	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	62 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	6.2 U	0.63 UD	0.63 UD
Chlorobenzene	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	46 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	4.6 U	0.46 UD	0.46 UD
Chloroethane	140	50	34	18	13	26 U	13	14	11	4	1.3 U	2.8	0.26 UD	0.26 UD
Chloroform	42	24	19	29	21	50	14	12	12	7.2	3.7	4.8 U	2.4 D	0.49 UD
Chloromethane	2 U	2 U	2 U	2 U	2 U	34	1 U	1 U	1 U	1 U	38	40	0.21 UD	1 D
cis-1,2-Dichloroethene	700	360	220	250	150	120	190	170	130	36	11	7.9	2.3 D	0.4 UD
cis-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	0.45 UD	0.45 UD
Cyclohexane	3.4 U	5.3	3.4 U	3.4 U	3.4 U	34 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	0.34 UD	0.34 UD
Dibromochloromethane	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	86 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U	0.85 UD	0.85 UD
Dichlorodifluoromethane	5 U	5 U	5 U	5 U	5 U	50 U	3.6	3.9	2.7	2.5 U	5 U	2.3 D	3.6 D	

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													
	EW-6-020309 2/3/2009	EW-6-021109 2/11/2009	EW-6-021809 2/18/2009	EW-6-022609 2/26/2009	EW-6-030609 3/6/2009	EW-6-041409 4/14/2009	EW-6-051509 5/15/2009	EW-6-061109 6/11/2009	EW-6-091709 9/17/2009	EW-6-122909 12/29/2009	EW-6-070110 7/1/2010	EW-6-091610 9/16/2010	EW-6-120710 12/7/2010	EW-6-021711 2/17/2011
Ethanol	360	38	73	38	25	110	18	14	6.7	18	15	19 U	4.6 D	11 D
Ethyl acetate	7.3 U	3.6 U	3.6 U	7.3 U	3.6 U	73 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	3.6 UD	0.36 UD	0.36 UD
Ethylbenzene	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	4.4 U	0.43 UD	0.43 UD	0.43 UD
Hexachlorobutadiene	22 U	22 U	22 U	22 U	22 U	220 U	11 U	11 U	5.3 U	11 U	5.3 U	11 U	1.1 UD	1.1 UD
Hexane	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	36 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	7.1 U	0.7 UD	1.3 D
Isopropyl alcohol	210	18	33	15	10	230	8.2	11	20	2.5 U	1.2 U	9.4	0.49 UD	2.9 D
m,p-Xylene	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	120	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U	0.87 UD	0.94 D
Methyl methacrylate														0.41 UD
Methylene chloride	7 U	7 U	7.5	7 U	7 U	780	12	15	7 U	27	10	7 U	1.3 D	2.8 D
Methyl-t-butyl ether	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	36 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	0.36 UD	0.36 UD
n-Heptane	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U	4 U	0.41 UD	0.41 UD
o-Xylene	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	0.43 UD	0.43 UD
Propylene (Propene)	3.5 U	1.8 U	1.8 U	3.5 U	1.8 U	35 U	0.9 U	0.9 U	3.5 U	3.5 U	8.7 U	6.9 U	0.69 UD	1.7 UD
Styrene	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	42 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	4.2 U	0.43 UD	0.43 UD
Tetrachloroethene	330	290	130	290	190	300	190	210	250	68	34	23	8.1 D	1.2 D
Tetrahydrofuran	75	480	260	730	570	130	110	87	9.1	31	42000	53000	480 D	0.29 UD
Toluene	12	3.8 U	3.8 U	3.8 U	3.8 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	0.38 UD	2.4 D
trans-1,2-Dichloroethene	12	6.3	4.2	6.4	4 U	40 U	2.6	2.7	2	2.1	2 U	4 U	0.4 UD	0.4 UD
trans-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	0.45 UD	0.45 UD
Trichloroethene	12000	6900	4200	4400	4800	3900	5400	4700	6100	2000	730	650	250 D	0.54 UD
Trichlorofluoromethane	2300	870	630	350	250	150	230	440	700	320	6.7	25	28 D	1.7 D
Trichlorotrifluoroethane	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	0.77 UD	0.86 D	
Vinyl acetate	15 U	3.6 U	3.6 U	15 U	3.6 U	150 U	1.8 U	1.8 U	7.1 U	3.6 U	1.8 U	7.1 U	0.7 UD	0.35 UD
Vinyl chloride	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	26 U	1.3 U	1.3 U	1.3 U	1.3 U	1.7	2.9	0.26 UD	0.26 UD

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

Parameter ($\mu\text{g}/\text{m}^3$)	Extraction Well - Western Small Retail Space														
	EW-7-020309 2/3/2009	EW-7-021109 2/11/2009	EW-7-021809 2/18/2009	EW-7-022609 2/26/2009	EW-7-030609 3/6/2009	EW-7-041409 4/14/2009	EW-7-051509 5/15/2009	EW-7-061109 6/11/2009	EW-7-091709 9/17/2009	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
1,1,1-Trichloroethane	5600	8500	7800	8200	8100	1600	3600	2600	1400	340	51	250	290	160 D	110 D
1,1,2,2-Tetrachloroethane	6.8 U	1.4 U	1.7 U	1.7 U	1.7 U	6.8 U	3.4 U	3.4 U	3.4 U	0.68 U	0.68 U	0.68 U	0.69 UD	0.69 UD	
1,1,2-Trichloroethane	5.4 U	1.1 U	1.4 U	1.4 U	1.4 U	5.4 U	2.7 U	2.7 U	2.7 U	0.54 U	0.54 U	0.54 U	0.55 UD	0.55 UD	
1,1-Dichloroethane	1700	1800	1600	2100	1700	590	1000	1100	970	470	85	320	340	220 D	150 D
1,1-Dichloroethene	14	15	8.5	9.4	6.6	4 U	4.2	4.2	4.5	2 U	0.4 U	0.81	0.94	0.63 D	0.4 UD
1,2,4-Trichlorobenzene	7.4 U	1.5 U	1.9 U	1.9 U	1.9 U	7.4 U	3.7 U	3.7 U	3.7 U	7.5 U	1.5 U	0.74 U	0.74 U	0.74 UD	0.74 UD
1,2,4-Trimethylbenzene	5 U	1 U	1.3 U	1.3 U	1.3 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5	0.5 U	0.5 U	0.49 UD	0.49 UD
1,2-Dibromoethane (EDB)	7.6 U	1.6 U	1.9 U	1.9 U	1.9 U	7.6 U	3.8 U	3.8 U	3.8 U	3.8 U	0.76 U	0.76 U	0.76 U	0.77 UD	0.77 UD
1,2-Dichlorobenzene	6 U	1.2 U	1.5 U	1.5 U	1.5 U	6 U	3 U	3 U	3 U	3 U	0.6 U	0.6 U	0.6 U	0.6 UD	0.6 UD
1,2-Dichloroethane	4 U	0.8 U	1 U	1 U	1 U	4 U	2 U	2 U	2 U	2 U	0.4 U	0.4 U	0.4 U	0.4 UD	0.4 UD
1,2-Dichloropropane	4.6 U	0.92 U	1.2 U	1.2 U	1.2 U	4.6 U	2.3 U	2.3 U	2.3 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 UD	0.46 UD
1,2-Dichlorotetrafluoroethane	7 U	1.4 U	1.8 U	1.8 U	1.8 U	7 U	3.5 U	3.5 U	3.5 U	3.5 U	0.7 U	0.7 U	0.7 U		
1,3,5-Trimethylbenzene	5 U	1 U	1.3 U	1.3 U	1.3 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.1	0.5 U	0.5 U	0.49 UD	0.49 UD
1,3-Butadiene	2.2 U	0.44 U	0.55 U	0.55 U	0.55 U	2.2 U	1.1 U	1.1 U	2.3 U	1.1 U	0.22 U	0.22 U	0.22 U	0.22 UD	0.22 UD
1,3-Dichlorobenzene	6 U	1.2 U	1.5 U	1.5 U	1.5 U	6 U	3 U	3 U	3 U	3 U	0.6 U	0.6 U	0.6 U	0.6 UD	0.6 UD
1,4-Dichlorobenzene	6 U	1.2 U	1.5 U	1.5 U	1.5 U	6 U	3 U	3 U	3 U	3 U	0.6 U	0.6 U	0.6 U	0.6 UD	0.6 UD
1,4-Dioxane															
2-Butanone	8.7	12	7.3	8.5	5.5	4.5	7.1	16	4.9	3.5	31	3.8	1.8	4.1 D	5.3 BD
2-Hexanone	4 U	0.8 U	1 U	1 U	1 U	4 U	2 U	2 U	2 U	2 U	0.4 U	1	0.4 U	0.41 UD	0.41 UD
4-Ethyltoluene	5 U	1 U	1.3 U	1.3 U	1.3 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.49 UD	0.49 UD
4-Methyl-2-pentanone	4 U	0.8 U	1 U	1 U	1 U	4 U	2 U	2 U	2 U	2 U	0.4 U	0.4 U	0.4 U	0.41 UD	0.41 UD
Acetone	580	38	58	30	24	15	24	24	7.9	49	26	25	12	42 BD	35 BD
Benzene	3.2 U	3.9	4.5	1.9	2.3	3.2 U	2.6	2.8	3	2.2	1.5	1.7	2.1	1.4 D	1.6 D
Benzyl chloride	5.2 U	1.1 U	1.3 U	1.3 U	1.3 U	5.2 U	2.6 U	2.6 U	2.6 U	2.6 U	0.52 U	0.52 U	0.52 U	0.52 UD	0.52 UD
Bromodichloromethane	6.6 U	1.4 U	1.7 U	1.7 U	1.7 U	6.6 U	3.3 U	3.3 U	3.3 U	3.3 U	0.66 U	0.66 U	0.66 U	0.67 UD	0.67 UD
Bromoform	11 U	2.1 U	2.6 U	2.6 U	2.6 U	11 U	5.1 U	5.1 U	5.1 U	5.1 U	1.1 U	1.1 U	1.1 U	1 UD	1 UD
Bromomethane	3.8 U	0.76 U	0.95 U	0.95 U	0.95 U	3.8 U	1.9 U	1.9 U	1.9 U	1.9 U	0.38 U	0.38 U	0.38 U	0.39 UD	0.39 UD
Carbon disulfide	5.7	3.4	2.7	3.7	3.3	3.2 U	3.2	2.7	2.1	1.6 U	1.5	0.93	0.9	0.78 D	0.31 UD
Carbon tetrachloride	6.2 U	1.3 U	1.6 U	1.6 U	1.6 U	6.2 U	3.1 U	3.1 U	3.1 U	3.1 U	0.62 U	0.62 U	0.62 U	0.63 UD	0.63 UD
Chlorobenzene	4.6 U	0.92 U	1.2 U	1.2 U	1.2 U	4.6 U	2.3 U	2.3 U	2.3 U	2.3 U	0.46 U	0.46 U	0.46 U	0.46 UD	0.46 UD
Chloroethane	170	150	88	41	33	7.1	9.6	10	8.1	6.5	1.6	2.2	3.6	2 D	0.26 UD
Chloroform	4.8 U	1	1.2 U	1.3	1.2 U	4.8 U	2.7	2.6	4.6	2.7	1.1	4.2	4.4	3.9 D	3 D
Chloromethane	2 U	0.4 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.21 UD	0.21 UD
cis-1,2-Dichloroethene	1100	1300	1200	1700	1200	520	1100	1200	1300	680	120	660	490	350 D	250 D
cis-1,3-Dichloropropene	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U	0.44 U	0.44 U	0.44 U	0.45 UD	0.45 UD
Cyclohexane	3.4 U	5.6	5	3.7	2.1	3.4 U	1.7 U	1.7 U	1.7 U	1.7 U	0.34 U	0.34 U	0.41	0.34 UD	0.34 UD
Dibromochloromethane	8.6 U	1.8 U	2.2 U	2.2 U	2.2 U	8.6 U	4.3 U	4.3 U	4.3 U	4.3 U	0.86 U	0.86 U	0.86 U	0.85 UD	0.85 UD
Dichlorodifluoromethane	5 U	2.5	3.2	770	2.6	5 U	2.9	3.3	2.5 U	2.5 U	1.5	2.2	1.5	2.1 D	0.49 UD

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

Parameter (ug/m ³)	Extraction Well - Western Small Retail Space														
	EW-7-020309 2/3/2009	EW-7-021109 2/11/2009	EW-7-021809 2/18/2009	EW-7-022609 2/26/2009	EW-7-030609 3/6/2009	EW-7-041409 4/14/2009	EW-7-051509 5/15/2009	EW-7-061109 6/11/2009	EW-7-091709 9/17/2009	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
Ethanol	350	26	29	17	15	3.8 U	19	18	12	18	37	31	1.9 U	1.9 UD	18 D
Ethyl acetate	7.3 U	0.72 U	0.9 U	1.9 U	0.9 U	7.3 U	1.8 U	1.8 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 UD	0.36 UD	0.36 UD
Ethylbenzene	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	2.2 U	2.2 U	0.57	0.44 U	0.44 U	0.43 UD	0.43 UD	0.43 UD
Hexachlorobutadiene	22 U	4.3 U	5.4 U	5.4 U	5.4 U	22 U	11 U	11 U	5.3 U	11 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 UD
Hexane	10	10	7.6	5.5	3.1	3.6 U	4	2.1	1.8 U	1.8 U	0.36 U	0.97	0.71 U	0.87 D	0.35 UD
Isopropyl alcohol	210	18	21	12	8.5	5 U	12	17	2.5 U	2.5 U	80	2.2	2.6	2.8 D	0.25 UD
m,p-Xylene	8.6 U	1.8 U	2.2 U	2.2 U	2.2 U	8.6 U	4.3 U	4.3 U	4.3 U	4.3 U	1.4	0.93	1	0.87 UD	0.87 UD
Methyl methacrylate															0.41 UD
Methylene chloride	9.3	2.6	8	1.8	1.8 U	20	29	16	7 U	27	1.4 U	2.4	0.81	1.9 D	2.4 D
Methyl-t-butyl ether	3.6 U	3.5	2.9	4.9	3.1	3.6 U	1.8 U	1.8 U	1.8 U	1.8 U	0.36 U	0.36 U	0.36 UD	0.36 UD	0.36 UD
n-Heptane	4 U	1.4	1 U	1 U	1 U	4 U	2 U	2 U	2 U	2 U	0.4 U	0.4 U	0.4 U	0.41 UD	0.41 UD
o-Xylene	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U	0.65	0.44 U	0.44 U	0.43 UD	0.43 UD
Propylene (Propene)	3.5 U	160	110	0.87 U	0.45 U	3.5 U	0.9 U	0.9 U	3.5 U	3.5 U	0.69 U	1.8 U	0.69 U	0.69 UD	1.7 UD
Styrene	4.2 U	0.84 U	1.1 U	1.1 U	1.1 U	4.2 U	2.1 U	2.1 U	2.1 U	2.1 U	0.42 U	0.67	0.47	0.43 UD	0.43 UD
Tetrachloroethene	66	69	56	84	69	40	140	230	410	130	74	510	610	190 D	110 D
Tetrahydrofuran	41	23	12	14	7.5	3 U	5.6	15	4.1	1.5 U	2800	0.7	18	6.1 D	2.7 D
Toluene	14	2.9	3.6	1.7	0.95 U	3.8 U	1.9 U	1.9 U	1.9 U	1.9 U	5.4	4.8	2.2	0.47 D	0.88 D
trans-1,2-Dichloroethene	150	140	90	90	80	48	120	140	150	84	22	120	110	78 D	58 D
trans-1,3-Dichloropropene	4.4 U	0.88 U	1.1 U	1.1 U	1.1 U	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U	0.44 U	0.44 U	0.44 UD	0.45 UD	0.45 UD
Trichloroethene	230	210	180	180	200	110	330	420	920	420	190	690	730	440 D	310 D
Trichlorofluoromethane	1800	1400	900	690	640	190	310	660	1400	620	210	690	700	530 D	740 D
Trichlorotrifluoroethane	7.6 U	1.6 U	1.9 U	1.9 U	1.9 U	7.6 U	3.8 U	3.8 U	3.8 U	3.8 U	0.76 U	0.76 U	0.76 U	0.89 D	0.77 UD
Vinyl acetate	15 U	0.72 U	0.9 U	3.6 U	0.9 U	15 U	1.8 U	1.8 U	7.1 U	3.6 U	0.71 U	0.36 U	0.71 U	0.7 UD	0.35 UD
Vinyl chloride	280	370	180	48	21	2.6 U	2.7	3.2	1.3 U	1.6	1	0.26 U	1.6	0.41 D	0.26 UD

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 - Eastern Small Retail Space														
		IA-5 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	
1,1,1-Trichloroethane	500	48	0.92	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	
1,1,2,2-Tetrachloroethane	0.14	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	
1,1,2-Trichloroethane	12	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	
1,1-Dichloroethane	430	1.8	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
1,1-Dichloroethene	20	0.58	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
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	0.37 U	0.75 U	0.75 U	0.37 U	0.37 U	0.37 U	
1,2,4-Trimethylbenzene	52	0.25 U	0.32	0.33	0.36	0.25 U	0.25 U	0.2	0.25 U	0.35	0.25 U	0.25 U	0.25 U	0.25 U	0.73	
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	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	
1,2-Dichloroethane	0.31	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
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	0.18 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	0.08 U	0.11 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	
1,3-Dichlorobenzene	410	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	
1,4-Dichlorobenzene	24	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	
1,4-Dioxane	NA															
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	
2-Hexanone	NA	0.2 U	0.48	0.38	0.27	0.2 U	0.2 U	0.47	0.45	1.1	0.48	0.2 U	0.23	0.44	0.2 U	
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	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.18	0.2 U	0.68	0.23	0.2 U	0.2 U	0.2 U	1.1	
Acetone	500	32	11	21	20	9.5	6.5	14	14	46	16	15	11	18	17	
Benzene	3.3	0.79	0.6	0.99	1.6	0.41	0.55	0.62	0.49	0.53	0.35	0.45	0.65	0.16 U	1.1	
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	0.33 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	0.36 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	0.14 U	0.23	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	
Carbon tetrachloride	0.54	0.33	0.44	0.5	0.55 [a]	0.47	0.61 [a]	0.44	0.64 [a]	0.46	0.46	0.39	0.41	0.48	0.53	0.44
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	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	
Chloroform	0.5	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.55	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	
Chloromethane	80	1.1	1	1.5	1.4	1.1	1.1	1	1.4	1	2	1.2	1	1	1	
cis-1,2-Dichloroethene	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
cis-1,3-Dichloropropene	2.9	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
Cyclohexane	NA	0.17 U	0.17 U	0.38	0.41	0.17 U	0.17 U	0.12 U	0.17 U	0.4	0.17 U	0.17 U	0.17 U	0.17 U	0.45	
Dibromochloromethane	NA	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	
Dichlorodifluoromethane	500	2	2.2	2.5	2.7	2.6	2.6	1.9	2.5	2.2	2.1	1.9	1.8	2.4	1.9	

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 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
Ethanol	NA	590	12	23	140	85	32	41	180	500	62	51	25	58	150
Ethyl acetate	NA	0.75	0.37 U	0.18 U	0.18 U	0.37 U	0.18 U	0.26 U	0.18 U	0.31	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	290	0.22 U	0.25	0.33	0.43	0.22 U	0.22 U	0.24	0.22 U	0.3	0.23	0.22 U	0.22 U	0.44	0.91
Hexachlorobutadiene	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U	0.53 U	0.53 U	
Hexane	NA	0.84	0.54	1.1	0.99	0.39	0.5	0.71	0.58	1	0.52	0.57	0.43	0.48	1
Isopropyl alcohol	NA	3.8	3.5	580	2.9	3	1.3	1.7	2	19	3.5	3.8	3.8	1.9	8.2
m,p-Xylene	500	0.6	0.74	0.91	1.2	0.43 U	0.43 U	0.68	0.51	0.88	0.59	0.43 U	0.46	1.2	2.4
Methyl methacrylate	NA														
Methylene chloride	17	2	3.6	5.2	1.1	1.2	0.74	2.5	2.9	2	0.7 U	4.3	2.2	1.3	0.75
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
n-Heptane	NA	0.2 U	0.2 U	0.36	0.35	0.2 U	0.2 U	0.23	0.38	0.48	0.2 U	0.2 U	0.2 U	0.2 U	0.2 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
Propylene (Propene)	NA	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.13 U	0.09 U	0.09 U	0.35 U	0.35 U	0.35 U	0.87 U	0.35 U
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	0.3	0.21 U	0.35	0.32	0.58
Tetrachloroethene	5	0.39	0.34 U	0.43	0.43	0.34 U	0.34 U	0.24 U	0.47	0.34 U	0.41	0.34 U	0.34 U	0.34 U	0.34 U
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
Toluene	500	1.3	1.1	3	3.3	0.65	0.51	1.5	2.8	2.8	1.5	0.54	1.5	0.7	6.2
trans-1,2-Dichloroethene	200	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 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
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
Trichlorofluoromethane	500	3	1.3	1.7	1.8	1.5	1.7	1.2	1.3	2	1.2	1.8	1.4	1.5	6.3
Trichlorotrifluoroethane	NA	0.62	0.54	0.48	0.45	0.64	0.48	0.53	0.61	0.54	0.5	0.54	0.55	0.55	0.43
Vinyl acetate	NA	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.5 U	0.18 U	0.18 U	0.71 U	0.36 U	0.36 U	0.18 U	0.36 U
Vinyl chloride	1.9	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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

Parameter ($\mu\text{g}/\text{m}^3$)	Indoor Air - Center Small Retail Space														
	IA-5-120810 12/8/2010	IA-5-021711 2/17/2011	IA-6-1/16/2009 2/3/2009	IA-6-020309 2/11/2009	IA-6-021109 2/11/2009	IA-6-021809 2/18/2009	IA-6-022609 2/26/2009	IA-6-030609 3/6/2009	IA-6-041409 4/14/2009	IA-6-051509 5/15/2009	IA-6-061109 6/11/2009	IA-6-091709 9/17/2009	IA-6-122909 12/29/2009	IA-6-032610 3/26/2010	IA-6-070110 7/1/2010
1,1,1-Trichloroethane	0.27 U	0.27 U	110	3.9	0.27 U	0.29	0.27 U	0.27 U	1.6	0.27 U	0.27 U	0.27 U	0.27 U	0.35	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	3.9	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	1.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.75 U	0.75 U	0.37 U	
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.75	0.32	0.29	1.5	0.25 U	0.25 U	0.18 U	0.25 U	0.29	0.34	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
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	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane			0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.38	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	1.1	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.41	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane	0.18 U														
2-Butanone	0.78	0.78 B	120	10	3.2	2.9	2.4	2.3	1	2.5	4.1	2.4	1.8	1.4	1.1
2-Hexanone	0.2 U	0.2 U	0.2 U	0.42	0.37	0.34	0.2 U	0.37	0.14 U	0.62	0.72	0.7	0.2 U	0.26	0.2 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.47	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.36	0.2 U	0.2 U	0.14 U	0.34	0.7	0.29	0.2 U	0.2 U	0.2 U
Acetone	6.4 B	9.5 B	44	14	14	25	11	8.5	6.1	11	28	20	14	6.5	14
Benzene	0.26	1.1	1	0.6	0.98	4.1 [a]	0.41	0.7	0.59	0.47	0.43	0.31	0.4	0.55	0.19
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	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.34 U	0.34 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.54	0.6	0.39	0.42	0.52	0.59 [a]	0.47	0.6 [a]	0.42	0.77 [a]	0.45	0.42	0.4	0.43	0.55
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.36
Chloromethane	0.76	0.96	1.3	0.9	1.4	1.5	1	1.1	1.1	1.1	1.9	0.97	1.8	1.4	1
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.25	0.91	0.17 U	0.17 U	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.3	3.1	2	2.1	2.6	2.8	2.6	2.6	2	2.7	2.5	2.2	1.9	1.6	2.4

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

Parameter (ug/m ³)	Indoor Air - Center Small Retail Space														
	IA-5-120810 12/8/2010	IA-5-021711 2/17/2011	IA-6-1/16/2009 2/3/2009	IA-6-020309 2/11/2009	IA-6-021109 2/18/2009	IA-6-021809 2/26/2009	IA-6-022609 3/6/2009	IA-6-030609 4/14/2009	IA-6-041409 5/15/2009	IA-6-051509 6/11/2009	IA-6-061109 9/17/2009	IA-6-091709 12/29/2009	IA-6-122909 3/26/2010	IA-6-032610 7/1/2010	IA-6-070110 7/1/2010
Ethanol	2.4	14	41	23	12	40	13	12	8.6	51	31	12	10	7.1	18
Ethyl acetate	0.18 U	0.18 U	0.37 U	0.37 U	0.18 U	0.22	0.37 U	0.18 U	0.26 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.3	0.29	0.25	0.33	1.6	0.22 U	0.22 U	0.21	0.22 U	0.24	0.23	0.22 U	0.22 U	0.22 U
Hexachlorobutadiene	0.53 U	0.53 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U	0.53 U	0.53 U
Hexane	0.3	1.3	1.2	0.78	0.7	2.6	0.33	0.4	0.63	0.38	0.68	0.45	0.18 U	0.22	1.3
Isopropyl alcohol	0.12 U	1.7	4.7	6.6	3.2	4.9	1.7	1.6	0.18 U	4.5	22	7	1.4	4.9	1
m,p-Xylene	0.43 U	0.85	0.82	0.72	0.84	4.9	0.43 U	0.43 U	0.51	0.43 U	0.67	0.62	0.43 U	0.51	0.58
Methyl methacrylate	0.2 U	0.2 U													
Methylene chloride	0.65	2.8	2.5	5.2	0.59	1.6	0.83	0.69	2	2	2.6	0.7 U	2.9	0.7 U	4.5
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.2 U	0.33	0.27	0.2 U	0.32	1.3	0.2 U	0.2 U	0.21	0.2 U	0.26	0.2 U	0.2 U	0.2 U	1.4
o-Xylene	0.22 U	0.3	0.36	0.26	0.34	1.8	0.22 U	0.22 U	0.19	0.22 U	0.25	0.23	0.22 U	0.22 U	0.22 U
Propylene (Propene)	0.86 U	0.86 U	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.13 U	0.09 U	0.09 U	0.35 U	0.35 U	0.35 U	0.87 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.28	0.21 U	0.21 U	0.15 U	0.25	0.21 U	0.23	0.21 U	0.21 U	0.24
Tetrachloroethene	0.39	2.4	1.2	0.34 U	0.45	1.2	0.34 U	0.34 U	0.72	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Tetrahydrofuran	0.15 U	0.15 U	77	2.8	0.32	0.15 U	0.15 U	0.15 U	0.22	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	0.19 U	1.8	1.8	1.3	2.5	11	0.65	0.71	1.3	0.81	2	1.1	0.49	1.6	1.7
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.27 U	0.27 U	13	1.7	0.27 U	0.34	0.27 U	0.27 U	0.6	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	1.3	1.7	4.8	1.3	1.7	2.5	1.5	1.7	1.4	1.2	2.2	1.2	1.7	1.3	1.5
Trichlorotrifluoroethane	0.52	0.66	0.64	0.51	0.48	0.45	0.64	0.48	0.53	0.74	0.63	0.48	0.51	0.55	0.55
Vinyl acetate	0.43	0.18 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.5 U	0.18 U	0.18 U	0.71 U	0.36 U	0.36 U	0.18 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 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 ($\mu\text{g}/\text{m}^3$)	Indoor Air - Western Small Retail Space														
	IA-6-091610 9/16/2010	IA-6-120710 12/7/2010	IA-6-021711 2/17/2011	IA-7-1/16/2009	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
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	44	2.4	0.4	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
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	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	1.3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.52	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	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	0.26 U	0.37 U	0.37 U	0.37 U	0.75 U	0.75 U
1,2,4-Trimethylbenzene	0.33	0.25 U	0.35	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
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	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 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	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U			0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 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	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.14	0.97	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U	0.23 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane															
2-Butanone	0.89	0.87	1.9 B	70	6.5	3.9	5.2	2.2	1.3	1.3	2.3	7.3	2.2	0.49	2.1
2-Hexanone	0.2 U	0.2 U	0.22	0.2 U	0.29	0.2 U	0.91	0.2 U	0.2 U	0.14 U	0.53	1.5	0.53	0.2 U	0.2 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.27	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42	0.2 U	0.2 U	0.14 U	0.22	0.79	0.24	0.2 U	0.2 U
Acetone	13	11 B	14 B	29	12	13	32	7.8	6.6	6.5	10	31	22	31	12
Benzene	0.6	0.44	1.3	0.95	0.75	1.1	3.2	0.67	0.73	0.42	0.35	0.52	0.43	0.52	0.53
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	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.34 U	0.34 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 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	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.26	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.44	0.46	0.57	0.32	0.44	0.52	0.56 [a]	0.48	0.6 [a]	0.43	0.65 [a]	0.43	0.42	0.44	0.43
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.36	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.1	0.95	0.92	1.7	0.98	1.4	1.5	1	1.2	1.1	0.93	1.8	1.2	2.1	1.2
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.29	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14	0.2 U	0.2 U	0.2 U	0.27	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.32	0.7	0.17 U	0.17 U	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	1.6	1.9	3.1	2.1	2.2	2.6	2.7	2.6	2.6	2	2.4	2.7	2.3	2.1	1.8

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

Parameter (ug/m ³)	Indoor Air - Western Small Retail Space														
	IA-6-091610 9/16/2010	IA-6-120710 12/7/2010	IA-6-021711 2/17/2011	IA-7-1/16/2009	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
Ethanol	36	5.9	10	7.3	16	11	26	7.9	8.4	7.1	11	14	11	10	13
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.37 U	0.37 U	0.18 U	0.21	0.37 U	0.18 U	0.26 U	0.18 U	0.24	2.6	0.18 U	0.18 U
Ethylbenzene	0.43	0.22 U	0.45	0.23	0.29	0.36	0.95	0.24	0.22 U	0.16 U	0.22 U	0.25	0.32	0.68	0.32
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U	1.1 U
Hexane	0.69	0.39	1.5	0.9	0.87	0.91	2	1.1	0.6	0.69	0.33	1.5	0.88	0.25	0.33
Isopropyl alcohol	3.2	1.1	2.8	3.7	6.2	3.6	8.3	0.25 U	2.7	0.18 U	7	14	4	1.9	18
m,p-Xylene	1.1	0.43 U	1.2	0.61	0.82	0.94	2.8	0.73	0.43 U	0.31 U	0.43 U	0.72	0.86	2.8	0.82
Methyl methacrylate		0.2 U	0.2 U												
Methylene chloride	0.64	0.94	3	1.9	5.7	0.92	1.5	6.3	1.4	4.2	2.3	5.7	0.7 U	2.9	0.7 U
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.47	0.2 U	0.35	0.2	0.2 U	0.37	1.2	0.2 U	0.2 U	0.17	0.2 U	0.34	0.37	0.2 U	0.29
o-Xylene	0.42	0.22 U	0.4	0.24	0.31	0.39	0.97	0.24	0.22 U	0.16 U	0.22 U	0.25	0.31	0.6	0.28
Propylene (Propene)	0.35 U	0.86 U	0.86 U	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.13 U	0.09 U	0.09 U	0.35 U	0.35 U	0.35 U
Styrene	0.29	0.21 U	0.21 U	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
Tetrachloroethene	0.34 U	0.34 U	1.6	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	0.34 U
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	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
Toluene	2.6	0.4	2.9	1.5	1.6	2.7	7.5	1.5	0.76	0.48	0.61	2.3	4	0.57	7.2
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.3	0.27 U	0.27 U	4.6	1.1	0.28	0.58	0.27 U	0.27 U	0.3	0.27 U	0.27 U	0.27 U	0.4	0.27 U
Trichlorofluoromethane	3.1	1.1	1.6	4.7	1.4	1.7	3.1	1.6	1.7	1.3	1.1	1.9	1.3	1.7	1.3
Trichlorotrifluoroethane	0.42	0.52	0.69	0.62	0.57	0.47	0.44	0.66	0.45	0.54	0.69	0.57	0.51	0.54	0.64
Vinyl acetate	0.36 U	0.35 U	0.18 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.5 U	0.18 U	0.18 U	0.71 U	0.36 U	0.36 U
Vinyl chloride	0.13 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	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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

Indoor Air - Western Small Retail Space				
Parameter (ug/m ³)	IA-7-070110 7/1/2010	IA-7-091610 9/16/2010	IA-7-120710 12/7/2010	IA-7-021711 2/17/2011
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.36	0.36	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.3	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U		
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane				
2-Butanone	4.3	1.8	0.42	1.7 B
2-Hexanone	0.82	0.55	0.2 U	0.2 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.43	0.61	0.2 U	0.2 U
Acetone	41	27	12 B	15 B
Benzene	0.27	0.56	0.45	1.1
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.34 U	0.34 U
Bromoform	0.51 U	0.51 U	0.52 U	0.52 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.5	0.47	0.45	0.56
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.38	0.24 U	0.24 U
Chloromethane	1.3	1.4	0.99	1
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.23 U	0.23 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.7	1.7	2	3.1

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

Parameter (ug/m ³)	Indoor Air - Western Small Retail Space			
	IA-7-070110 7/1/2010	IA-7-091610 9/16/2010	IA-7-120710 12/7/2010	IA-7-021711 2/17/2011
Ethanol	39	240	13	14
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.45	0.45	0.22 U	0.22 U
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	0.53 U
Hexane	0.7	0.64	0.5	1.3
Isopropyl alcohol	5.8	28	2.8	11
m,p-Xylene	1.2	1.2	0.43 U	0.43 J
Methyl methacrylate			0.2 U	0.2 U
Methylene chloride	1.3	0.6	1.3	2.5
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.5	0.68	0.33	0.47
o-Xylene	0.43	0.43	0.22 U	0.22 U
Propylene (Propene)	0.87 U	0.35 U	0.86 U	0.86 U
Styrene	0.7	0.39	0.21 U	0.21 U
Tetrachloroethene	0.34 U	0.36	0.34 U	1.7
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	8.4	3.5	0.48	1.6
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.23 U	0.23 U
Trichloroethene	0.27 U	0.77	0.27 U	0.27 U
Trichlorofluoromethane	1.3	2.9	1.2	1.6
Trichlorotrifluoroethane	0.54	0.43	0.55	0.67
Vinyl acetate	0.18 U	0.36 U	0.35 U	0.18 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U

[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.

NA - not available

U - Not detected, value is the detection limit

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

D - Result from diluted analyses

ug/m³ - micrograms per cubic meter

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

Prepared by / Date: KJC 03/22/11

Checked by / Date: PJM 03/29/11

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

Date	Pressure Differential (inches of water)		
	VMW-5	VMW-6	VMW-7
2/3/2009	-0.25	-0.17	0.00
2/18/2009	-0.212	-0.155	-0.011
2/26/2009	-0.230	-0.120	-0.025
3/6/2009	-0.200	-0.086	-0.012
4/14/2009	-0.108	-0.054	-0.014
5/15/2009	-0.081	-0.073	-0.016
6/11/2009	-0.090	-0.076	-0.098
9/17/2009	-0.110	-0.102	+0.074
12/29/2009**	-0.011	-0.010	-0.061
3/26/2010	-0.245	-0.142	-0.018
7/1/2010	-0.542	-0.114	-0.176
9/16/2010	-0.247	-0.874	-0.013
12/7/2010	-0.044	-0.028	+0.022
2/17/2011	-0.212	-0.599	-0.337

** ASD system offline.

Prepared by/Date: MAM 03/15/11

Checked by/Date: PJM 04/12/11

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 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
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						
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						
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						
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
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						
1,2,4-Trimethylbenzene	0.25 U	0.28	0.52	1.8	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.29	0.3	0.25 U	0.25 U	0.25 U
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						
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
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						
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						
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.5	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U						
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						
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.53	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane															
2-Butanone	0.58	1.2	2.4	3.2	1.6	0.67	1.7	0.11 U	1.6	1.6	1.1	1.7	0.8	1.2	1.2
2-Hexanone	0.2 U	0.22	0.57	0.35	0.2 U	0.2 U	0.2 U	0.14 U	0.26	0.39	0.2 U	0.34	0.2 U	0.33	0.23
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						
4-Methyl-2-pentanone	0.2 U	0.2 U	0.27	0.63	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	7.3	8	15	22	8.4	5.9	12	1.1	27	9.5	10	10	9.6	5.4	17
Benzene	0.69	0.62	1.3	4.7	0.43	0.69	0.46	0.12 U	0.3	0.4	0.49	0.38	0.35	0.25	0.2
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						
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						
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						
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						
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						
Carbon tetrachloride	0.38	0.44	0.52	0.56	0.43	0.61	0.47	0.22 U	0.41	0.78	0.43	0.4	0.4	0.43	0.46
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						
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U						
Chloromethane	1.1	0.9	1.4	1.5	1.1	1.1	1.3	1.1	1.2	1.1	1.2	0.85	1.1	0.97	0.96
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U					
Cyclohexane	0.17 U	0.17 U	0.35	1.1	0.17 U	0.17 U	0.17 U	0.17 U	0.12 U	0.17 U					
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U						
Dichlorodifluoromethane	2	2.2	2.6	2.7	2.6	2.6	2.8	2	2.5	2.7	2.6	2.1	2.1	2.2	2.1
Ethanol	4	5.4	10	47	4.3	3.5	4.7	0.81	4.9	4.8	8.6	6.6	4.6	3.9	4.9
Ethyl acetate	0.37 U	0.37 U	0.18 U	0.31	0.37 U	0.18 U	0.18 U	0.26 U	0.37 U	0.18 U					

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 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
Ethylbenzene	0.22 U	0.25	0.52	2	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.24	0.22 U	0.23	0.22 U	0.22 U
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U
Hexane	1.5	0.75	1.1	2.9	0.38	2.8	2.2	0.13 U	0.56	0.37	0.59	0.48	1.4	0.45	4.5
Isopropyl alcohol	1.4	1.4	1.8	4.3	1.4	0.67	1.4	0.18 U	14	1	2.5	2.8	0.87	0.63	0.25 U
m,p-Xylene	0.43 U	0.72	1.4	6.4	0.44	0.43 U	0.43 U	0.31 U	0.43 U	0.49	0.73	0.62	0.59	0.43 U	0.43 U
Methyl methacrylate															
Methylene chloride	5.5	3.1	0.65	1.5	0.78	7.4	15	2.1	2.8	1.7	1.9	0.7 U	4.2	0.7 U	23
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						
n-Heptane	0.2 U	0.27	0.92	1.6	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.4	0.23	0.2 U	0.2 U	0.2 U	0.2 U
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
Propylene (Propene)	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.09 U	0.13 U	0.18 U	0.09 U	0.09 U	0.35 U	0.35 U	0.18 U	0.35 U
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						
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
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				
Toluene	0.94	1.5	3.2	14	0.71	0.99	0.82	0.14 U	0.72	2.6	2.1	1.9	2	0.61	0.5
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
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						
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						
Trichlorofluoromethane	1.3	1.2	1.7	2.4	1.5	2	1.7	0.92	1.3	1.5	2	1.1	1.4	1.2	1.5
Trichlorotrifluoroethane	0.68	0.53	0.5	0.47	0.64	0.48	0.51	0.27 U	0.64	0.67	0.56	0.47	0.49	0.45	0.46
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.18 U	0.5 U	0.71 U	0.18 U	0.18 U	0.71 U	0.71 U	0.71 U	0.71 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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-1-122909 12/29/2009	AA-1-012810 1/28/2010	AA-1-020510 2/5/2010	AA-1-021210 2/12/2010	AA-1-021910 2/19/2010	AA-1-032610 3/26/2010	AA-1-043010 4/30/2010	AA-1-052810 5/28/2010	AA-1-070110 7/1/2010	AA-1-091610 9/16/2010	AA-1-120710 12/7/2010	AA-1-021711 2/17/2011
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.94	0.25 U	1.1
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.28	0.25 U	0.33
1,3-Butadiene	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.29	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane												
2-Butanone	2	0.81	1.6	1.6	0.88	1.5	1.4	2.4	2.3	2.7	0.37	1.8 B
2-Hexanone	0.2 U	0.2 U	0.32	0.2 U	0.2 U	0.29	0.29	0.49	0.49	0.41	0.2 U	0.2 U
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.3	0.25 U	0.34
4-Methyl-2-pentanone	0.2 U	0.2 U	0.2 U	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.8	0.2 U	0.2 U
Acetone	11	3.5	7.6	5.0	3.7	9.5	12	20	13	14	5.7 B	19 B
Benzene	0.42	0.79	0.68	0.63	0.41	0.69	0.35	0.19	0.16 U	1.2	0.28	2.3
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.28	0.16 U	0.16 U	0.44	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.38	0.16 U
Carbon tetrachloride	0.39	0.42	0.39	0.31 U	0.43	0.49	0.47	0.52	0.51	0.43	0.42	0.48
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.6	1.1	1.2	1.3	1.1	1.4	0.78	1.1	0.96	0.99	0.94	1
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.46	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.1	2.3	2.4	2.5	2.9	1.8	2.1	2.5	2.4	2.9	1.9	3.1
Ethanol	3.8	5.4	5.1	7.2	1.2	4.9	4	3.3	4	14	2.3	12
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	1.1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U

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-1-122909 12/29/2009	AA-1-012810 1/28/2010	AA-1-020510 2/5/2010	AA-1-021210 2/12/2010	AA-1-021910 2/19/2010	AA-1-032610 3/26/2010	AA-1-043010 4/30/2010	AA-1-052810 5/28/2010	AA-1-070110 7/1/2010	AA-1-091610 9/16/2010	AA-1-120710 12/7/2010	AA-1-021711 2/17/2011
Ethylbenzene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.82	1.4	0.22 U	1.1
Hexachlorobutadiene	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Hexane	0.62	0.36	0.53	0.91	0.24	0.23	1.1	0.51	0.37	1.2	0.35 U	3.3
Isopropyl alcohol	0.54	0.56	2.7	1.5	0.8	0.73	0.69	1.6	0.79	0.25 U	0.29	2.4
m,p-Xylene	0.43 U	0.43 U	0.50	0.47	0.43 U	0.49	0.43 U	0.43 U	2.2	3.7	0.43 U	3.3
Methyl methacrylate											0.2 U	0.48
Methylene chloride	4.6	1.3	1.9	1.7	0.7 U	0.7 U	0.7 U	0.35 U	1.1	1.1	0.66	3
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.2 U	0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.91	0.2 U	0.95
o-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.46	1.2	0.22 U	1.1
Propylene (Propene)	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	1.9	0.86 U	0.86 U
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.49	0.34 U	5.3	
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.19	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	0.78	0.94	0.64	0.97	0.46	1.1	0.75	0.63	0.57	10	0.19 U	5.3
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.30	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	2.2	1.2	1.2	1.6	1.5	1.5	1.2	1.4	1.3	11	1.2	1.7
Trichlorotrifluoroethane	0.54	0.49	0.55	0.54	0.54	0.62	0.45	0.58	0.56	0.44	0.56	0.66
Vinyl acetate	0.36 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.35 U	0.18 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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
1,1,1-Trichloroethane	190000	91000	73000	32000	3500	19000	11000	8100	7900	6800	1500	2500	150	1200
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
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
1,1-Dichloroethane	19000	7800	5300	4800	390	2200	1600	1900	1900	1700	280	370	31	310
1,1-Dichloroethene	7800	1800	1000	630	73	420	310	250	260	280	52	66	7.3	62
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
1,2,4-Trimethylbenzene	5 U	5 U	10 U	10 U	5 U	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U
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
1,2-Dichlorobenzene	6 U	6 U	12 U	12 U	6 U	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U
1,2-Dichloroethane	4 U	4 U	8 U	8 U	4 U	0.2 U	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U
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
1,2-Dichlorotetrafluoroethane	7 U	7 U	14 U	14 U	7 U	0.35 U	3.5 U	7 U	14 U	14 U	0.7 U	7 U	0.35 U	0.7 U
1,3,5-Trimethylbenzene	5 U	5 U	10 U	10 U	5 U	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U
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
1,3-Dichlorobenzene	6 U	6 U	12 U	12 U	6 U	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U
1,4-Dichlorobenzene	6 U	6 U	12 U	12 U	6 U	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U
1,4-Dioxane														
2-Butanone	37	32	48	60	21	40	7.8	31	30	21	4	11	10	9
2-Hexanone	4 U	4 U	8 U	8 U	4 U	0.5	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U
4-Ethyltoluene	5 U	5 U	10 U	10 U	5 U	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U
4-Methyl-2-pentanone	4 U	4 U	8 U	8 U	4 U	0.59	2 U	4 U	8 U	8 U	0.4 U	4 U	0.28	0.4 U
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
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
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
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
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
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
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
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
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
Chloroethane	3400	1700	1200	450	42	220	110	94	92	88	9.8	11	1.3	9.9
Chloroform	27	17	20	17	4.8 U	8.8	12	14	11	11	4.1	5.8	0.49	6.2
Chloromethane	2 U	2 U	4 U	4 U	2 U	8.2	1 U	2 U	4 U	4 U	0.2 U	2 U	0.1 U	0.2 U
cis-1,2-Dichloroethene	14000	4700	6300	4200	300	1600	1600	1500	1300	1200	190	280	21	240
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
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
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
Dichlorodifluoromethane	5 U	5 U	10 U	110	5 U	2.8	2.5 U	5 U	10 U	10 U	2.4	5 U	2.2	2.7
Ethanol	960	81	120	120	17	21	200	96	32	33	39	60	23	62
Ethyl acetate	7.3 U	3.6 U	7.2 U	15 U	7.3 U	0.37 U	1.8 U	3.6 U	7.2 U	7.2 U	0.36 U	3.6 U	0.18 U	0.36 U

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
Ethylbenzene	9.4	4.4 U	8.8 U	8.8 U	4.4 U	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U
Hexachlorobutadiene	22 U	22 U	43 U	43 U	22 U	1.1 U	5.3 U	11 U	22 U	22 U	1.1 U	11 U	0.53 U	1.1 U
Hexane	16	4.9	270	7.2 U	3.6 U	2.3	1.9	3.6 U	7.2 U	7.2 U	0.36 U	3.6 U	0.74	0.36 U
Isopropyl alcohol	610	2.4 U	15	9.9 U	5 U	0.25 U	22	5 U	9.9 U	9.9 U	2.3	5 U	1.0	0.5 U
m,p-Xylene	25	8.6 U	18 U	18 U	8.6 U	0.43 U	4.3 U	8.6 U	18 U	18 U	0.86 U	8.6 U	0.49	0.86 U
Methyl methacrylate														
Methylene chloride	12	7 U	14 U	14 U	19	2.6	7 U	14 U	28 U	28 U	1.4 U	14 U	2.6	1.4 U
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
n-Heptane	4 U	4 U	8 U	8 U	4 U	0.2 U	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U
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
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
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
Tetrachloroethene	140	60	430	540	47	110	110	260	67	72	4.6	200	4.8	45
Tetrahydrofuran	77	77	150	180	66	110	1.5 U	96	85	67	15	32	28	43
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
trans-1,2-Dichloroethene	110	61	47	47	4.6	33	29	34	30	26	3.4	4.6	0.36	4.1
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
Trichloroethene	36000	17000	26000	13000	1400	6200	4000	3600	4000	4300	390	1400	58	460
Trichlorofluoromethane	9900	2300	1800	1000	98	600	1800	1400	1500	1500	260	230	29	230
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
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
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

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-COMBINE D-043010 4/30/2010	EW-COMBINE D-052810 5/28/2010	EW-COMBINE D-070110 7/1/2010	EW-COMBINE D-091610 9/16/2010	EW-COMBINE D-120710 12/7/2010	EW-COMBINE D-021711 2/17/2011	EW-1-030609 3/6/2009	EW-1-033109 3/31/2009	EW-2-030609 3/6/2009	EW-2-033109 3/31/2009	EW-3-030609 3/6/2009	EW-3-033109 3/31/2009	EW-4-030609 3/6/2009	EW-4-033109 3/31/2009
1,1,1-Trichloroethane	1400	1700	2000	4700	280 D	2500 D	59000	66000	26000	30000	54000	72000	11000	14000
1,1,2,2-Tetrachloroethane	0.68 U	6.8 U	0.68 U	0.68 U	0.69 UD	0.69 UD	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	1.7 U	6.8 U
1,1,2-Trichloroethane	0.54 U	5.4 U	0.54 U	0.55	0.55 UD	0.55 UD	6.4	10	5.4 U	5.4 U	5.4 U	5.4 U	1.4 U	5.4 U
1,1-Dichloroethane	200	270	290	330	36 D	170 D	4100	4400	5700	7000	1600	2300	690	1400
1,1-Dichloroethene	30	40	52	81	7.3 D	58 D	570	1200	330	640	340	560	97	210
1,2,4-Trichlorobenzene	0.74 U	7.4 U	0.74 U	0.74 U	0.74 UD	0.74 UD	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	1.9 U	7.4 U
1,2,4-Trimethylbenzene	0.5 U	5 U	0.5 U	0.5 U	0.49 UD	0.49 UD	5 U	5 U	5 U	5 U	5 U	5 U	1.3 U	5 U
1,2-Dibromoethane (EDB)	0.76 U	7.6 U	0.76 U	0.76 U	0.77 UD	0.77 UD	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U
1,2-Dichlorobenzene	0.6 U	6 U	0.6 U	0.6 U	0.6 UD	0.6 UD	6 U	6 U	6 U	6 U	6 U	6 U	1.5 U	6 U
1,2-Dichloroethane	0.4 U	4 U	0.4 U	0.4 U	0.4 UD	0.4 UD	4 U	4 U	4 U	4 U	4 U	4 U	1 U	4 U
1,2-Dichloropropane	0.46 U	4.6 U	0.46 U	0.46 U	0.46 UD	0.46 UD	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	4.6 U
1,2-Dichlorotetrafluoroethane	0.7 U	7 U	0.7 U	0.7 U			7 U	7 U	7 U	7 U	7 U	7 U	1.8 U	7 U
1,3,5-Trimethylbenzene	0.5 U	5 U	0.5 U	0.5 U	0.49 UD	0.49 UD	5 U	5 U	5 U	5 U	5 U	5 U	1.3 U	5 U
1,3-Butadiene	0.45 U	2.2 U	0.22 U	0.22 U	0.22 UD	0.22 UD	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.55 U	2.2 U
1,3-Dichlorobenzene	0.6 U	6 U	0.6 U	0.6 U	0.6 UD	0.6 UD	6 U	6 U	6 U	6 U	6 U	6 U	1.5 U	6 U
1,4-Dichlorobenzene	0.6 U	6 U	0.6 U	0.6 U	0.6 UD	0.6 UD	6 U	6 U	6 U	6 U	6 U	6 U	1.5 U	6 U
1,4-Dioxane														
2-Butanone	12.0	22.0	22.0	10.0	4.5 D	4.5 BD	3.5	8.9	12.0	11	36	10	36	6.4
2-Hexanone	0.4 U	4 U	0.4 U	0.4 U	0.41 UD	0.41 UD	4 U	4 U	4 U	4 U	4 U	4 U	1 U	4 U
4-Ethyltoluene	0.5 U	5 U	0.5 U	0.5 U	0.49 UD	0.49 UD	5 U	5 U	5 U	5 U	5 U	5 U	1.3 U	5 U
4-Methyl-2-pentanone	0.4 U	4 U	0.4 U	0.4 U	0.41 UD	0.41 UD	4 U	4 U	4 U	4 U	4 U	4 U	1 U	4 U
Acetone	16	24	16	6.6	11 BD	6.3 BD	35	16	9.6 U	9.6 U	53	24	26	12
Benzene	0.74	5.5	0.84	1.7	0.5 D	0.72 D	5.3	11	5.6	7.8	3.2 U	6.8	1.4	3.2 U
Benzyl chloride	0.52 U	5.2 U	0.52 U	0.52 U	0.52 UD	0.52 UD	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	1.3 U	5.2 U
Bromodichloromethane	0.66 U	6.6 U	0.66 U	0.66 U	0.67 UD	0.67 UD	6.6 U	6.6 U	6.6 U	6.6 U	6.6 U	6.6 U	1.7 U	6.6 U
Bromoform	1.1 U	11 U	1.1 U	1.1 U	1 UD	1 UD	11 U	11 U	11 U	11 U	11 U	11 U	2.6 U	11 U
Bromomethane	0.38 U	3.8 U	0.38 U	0.38 U	0.39 UD	0.39 UD	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	0.95 U	3.8 U
Carbon disulfide	0.77	3.2 U	1.1	1.3	0.31 UD	0.73 D	3.2 U	3.2 U	27	25	3.2 U	3.2 U	1.8	3.2 U
Carbon tetrachloride	0.62 U	6.2 U	0.73	1.1	0.63 UD	0.63 D	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	1.6 U	6.2 U
Chlorobenzene	0.46 U	7.2	0.46 U	0.46 U	0.46 UD	0.46 UD	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	4.6 U
Chloroethane	4.8	7.2	9.4	17	1 D	3.6 D	170	250	700	590	41	44	17	33
Chloroform	6	7.9	8	8.3	1.6 D	6.9 D	20	34	9.6	15	13	23	3.6	7.5
Chloromethane	0.2 U	2 U	0.2 U	0.2 U	0.21 UD	0.21 UD	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U
cis-1,2-Dichloroethene	180	260	260	360	28 D	120 D	2000	2200	6100	7600	610	1200	560	1300
cis-1,3-Dichloropropene	0.44 U	4.4 U	0.44 U	0.44 U	0.45 UD	0.45 UD	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U
Cyclohexane	0.34 U	3.4 U	0.34 U	0.55	0.34 UD	0.34 UD	3.4 U	5.7	8.4	8.8	3.4 U	3.4 U	0.85 U	3.4 U
Dibromochloromethane	0.86 U	8.6 U	0.86 U	0.86 U	0.85 UD	0.85 UD	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	8.6 U
Dichlorodifluoromethane	1.7	5 U	2.5	1.6	3 D	4.1 D	5 U	170	5 U	5 U	5.4	7	2.6	5 U
Ethanol	10	19 U	15	1.9 U	8.2 D	17 D	33	40	12	8.3	39	1.8 U	8.6	1.8 U
Ethyl acetate	0.36 U	3.6 U	0.36 U	0.36 U	0.36 UD	0.36 UD	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U

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

Parameter (ug/m ³)	Extraction Well - Large Retail Space													
	EW-COMBINE D-043010 4/30/2010	EW-COMBINE D-052810 5/28/2010	EW-COMBINE D-070110 7/1/2010	EW-COMBINE D-091610 9/16/2010	EW-COMBINE D-120710 12/7/2010	EW-COMBINE D-021711 2/17/2011	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
Ethylbenzene	0.44 U	4.4 U	0.44 U	0.58	0.43 UD	0.43 UD	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U
Hexachlorobutadiene	1.1 U	11 U	1.1 U	1.1 U	1.1 UD	1.1 UD	22 U	22 U	22 U	22 U	22 U	22 U	5.4 U	22 U
Hexane	0.92	3.6 U	0.44	0.71 U	0.7 UD	0.8 D	3.6 U	3.6 U	3.6 U	6.6	3.6 U	3.6 U	3.2	3.6 U
Isopropyl alcohol	2.6	2.4 U	0.24 U	0.5 U	0.84 D	0.25 UD	28	2.4 U	2.4 U	2.4 U	26	5.9	7.5	7.1
m,p-Xylene	0.86 U	8.6 U	0.86 U	1.6	0.87 UD	0.87 JD	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	8.6 U
Methyl methacrylate						0.41 UD								
Methylene chloride	1.4 U	7 U	2.1	0.9	0.78 D	2.9 D	7 U	19	7 U	17	7 U	13	19	12
Methyl-t-butyl ether	0.36 U	3.6 U	0.36 U	0.36 U	0.36 UD	0.36 UD	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U
n-Heptane	0.4 U	4 U	0.4 U	0.4 U	0.41 UD	0.41 UD	4 U	4 U	4 U	4 U	4 U	4 U	1 U	4 U
o-Xylene	0.44 U	4.4 U	0.44 U	0.56	0.43 UD	0.43 UD	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U
Propylene (Propene)	0.69 U	18 U	1.8 U	0.69 U	1.8 D	1.7 UD	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.45 U	1.8 U
Styrene	0.42 U	4.2 U	0.42 U	0.42 U	0.43 UD	0.43 UD	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	1.1 U	4.2 U
Tetrachloroethene	450	1300	640	750	160 D	920 D	600	1200	2300	2500	73	310	31	170
Tetrahydrofuran	34	54	65	31	11 D	11 D	6.3	21	19	3 U	32	14	37	5.1
Toluene	0.75	3.8 U	0.41	3.5	0.38 D	1.4 D	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	1.4	3.8 U
trans-1,2-Dichloroethene	3	4.6	5.5	6.6	0.6 D	1.9 D	9.2	23	69	180	4 U	8.8	2.5	8
trans-1,3-Dichloropropene	0.44 U	4.4 U	0.44 U	0.44 U	0.45 UD	0.45 UD	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U
Trichloroethene	1200	2000	1700	3200	240 D	1800 D	31000	42000	25000	25000	8600	19000	2700	5500
Trichlorofluoromethane	210	300	440	410	71 D	200 D	520	540	1300	1800	430	840	240	370
Trichlorotrifluoroethane	0.76 U	7.6 U	0.76 U	0.76 U	0.77 UD	0.77 UD	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U
Vinyl acetate	1.5 U	3.6 U	0.36 U	0.71 U	0.7 UD	0.35 UD	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U
Vinyl chloride	0.26 U	2.6 U	0.26 U	0.4	0.26 UD	0.26 UD	2.7	4.8	9.4	8.1	2.6 U	2.6 U	0.65	2.6 U

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

Parameter (ug/m ³)	Post Treatment - Large Retail Space						
	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	1	15	45	1.9	13000	0.56	450
1,1,2,2-Tetrachloroethane	0.34 U	1.7 U	0.68 U	0.68 U	68 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	1.4 U	0.54 U	0.54 U	54 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	1 U	5.4	11000	490	370	610
1,1-Dichloroethene	0.2 U	1 U	0.4 U	6400	96	78	87
1,2,4-Trichlorobenzene	0.37 U	1.9 U	0.74 U	0.74 U	74 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	1.9 U	0.76 U	0.76 U	76 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	1.2 U	0.46 U	0.46 U	46 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	1.8 U	0.7 U	0.7 U	70 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	2.1	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.55 U	0.22 U	0.22 U	22 U	0.23 U	0.23 U
1,3-Dichlorobenzene	2.9	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U
1,4-Dioxane							
2-Butanone	10	6.3	9.4	5.5	330	1.9	2.0
2-Hexanone	0.2 U	1 U	0.4 U	0.4 U	13000	0.27	0.34
4-Ethyltoluene	2.1	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U
4-Methyl-2-pentanone	5	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U
Acetone	1200	11	19	12	430	3.6	5.7
Benzene	1.3	0.8 U	0.32 U	0.32 U	32 U	0.16 U	0.16 U
Benzyl chloride	0.26 U	1.3 U	0.52 U	0.52 U	52 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	1.7 U	0.66 U	0.66 U	66 U	0.33 U	0.33 U
Bromoform	0.51 U	2.6 U	1.1 U	1.1 U	110 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.95 U	0.38 U	0.38 U	38 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.8 U	4.1	27	250	0.16 U	0.20
Carbon tetrachloride	0.38	1.6 U	0.62 U	0.62 U	62 U	0.31 U	0.31 U
Chlorobenzene	0.23 U	1.2 U	0.46 U	0.46 U	46 U	0.23 U	0.23 U
Chloroethane	0.13 U	5100	1800	480	64	19	10
Chloroform	0.24 U	1.2 U	0.48 U	0.67	48 U	0.24 U	6.8
Chloromethane	0.59	0.5 U	0.2 U	0.2 U	23	0.1 U	0.1 U
cis-1,2-Dichloroethene	0.27	1 U	3.9	5200	820	230	570
cis-1,3-Dichloropropene	0.22 U	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U
Cyclohexane	0.93	0.85 U	0.34 U	0.34 U	34 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	2.2 U	0.86 U	0.86 U	86 U	0.43 U	0.43 U
Dichlorodifluoromethane	0.76	4.1	3	2.4	50 U	1.7	1.9
Ethanol	740	36	25	9.8	110	0.38 U	2.8
Ethyl acetate	0.37 U	0.9 U	0.36 U	0.73 U	73 U	0.18 U	0.18 U

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

Parameter (ug/m ³)	Post Treatment - Large Retail Space						
	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
Ethylbenzene	10	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U
Hexachlorobutadiene	1.1 U	5.4 U	2.2 U	2.2 U	220 U	0.53 U	0.53 U
Hexane	3	0.9 U	46	0.36 U	36 U	0.18 U	0.23
Isopropyl alcohol	450	2.9	3.1	47	290	0.25 U	1.4
m,p-Xylene	27	2.2 U	0.86 U	0.86 U	86 U	0.43 U	0.43 U
Methyl methacrylate							
Methylene chloride	20	76	17	3	810	0.7 U	0.72
Methyl-t-butyl ether	0.18 U	0.9 U	0.36 U	0.36 U	36 U	0.18 U	0.18 U
n-Heptane	1.8	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U
o-Xylene	9.5	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U
Propylene (Propene)	0.18 U	98	0.18 U	0.35 U	35 U	0.35 U	0.35 U
Styrene	3.4	1.1 U	0.42 U	0.42 U	42 U	0.21 U	0.21 U
Tetrachloroethene	0.72	1.7 U	1.1	0.68 U	68 U	0.52	1.9
Tetrahydrofuran	6.8	22	40	18	210	4.1	6.5
Toluene	29	0.95 U	0.65	0.38 U	38 U	0.19 U	0.36
trans-1,2-Dichloroethene	0.2 U	1 U	0.4 U	28	40 U	7.7	15
trans-1,3-Dichloropropene	0.22 U	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U
Trichloroethene	2	11	16	2.7	54 U	1	1.0
Trichlorofluoromethane	0.71	1.4 U	23	6700	84	180	210
Trichlorotrifluoroethane	1.3	1.9 U	0.76 U	0.76 U	76 U	0.38 U	0.51
Vinyl acetate	0.71 U	0.9 U	0.36 U	1.5 U	150 U	0.71 U	0.71 U
Vinyl chloride	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	Indoor Air - Large Retail Space													
		IA-1 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
1,1,1-Trichloroethane	500	10	0.56	1.1	0.99	0.35	1.8	1.5	1.4	2	0.27 U	0.27 U	0.27 U	0.27 U	0.24
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	0.34 U	0.34 U	0.34 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	0.19 U	0.27 U	0.19 U				
1,1-Dichloroethane	430	0.71	0.2 U	0.2 U	0.2 U	0.27	0.32	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U
1,1-Dichloroethene	20	0.38	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 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				
1,2,4-Trimethylbenzene	52	0.25 U	0.36	0.7	0.77	0.25 U	0.25 U	0.25 U	0.18 U	0.48	0.29	0.35	0.28	0.51	0.52
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				
1,2-Dichlorobenzene	410	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U
1,2-Dichloroethane	0.31	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 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	0.17 U	0.23 U	0.17 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				
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				
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
1,3-Dichlorobenzene	410	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U
1,4-Dichlorobenzene	24	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 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	2.6	2.7	1.3	2.7
2-Hexanone	NA	0.2 U	0.2 U	0.6	0.42	0.2 U	0.23	0.2 U	0.14 U	0.48	0.43	0.52	0.73	0.31	0.71
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				
4-Methyl-2-pentanone	200	0.2 U	0.2 U	0.43	0.3	0.2 U	0.2 U	0.2 U	0.14 U	0.52	0.21	0.35	0.32	0.2 U	0.34
Acetone	500	18	7.7	19	21	10	8.7	14	12	310	11	18	13	10	13
Benzene	3.3	1	0.68	1.9	3	0.69	0.87	0.71	0.56	0.78	0.49	0.47	0.39	0.48	1.1
Benzyl chloride	NA	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.19 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	0.24 U	0.33 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	0.36 U	0.51 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	0.14 U	0.19 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	0.12 U	0.16 U	0.12 U				
Carbon tetrachloride	0.54	0.35	0.41	0.52	0.55	0.46	0.59	0.53	0.31	0.43	0.48	0.38	0.42	0.43	0.48
Chlorobenzene	200	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				
Chloroethane	500	0.13 U	0.13 U	0.42	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 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	0.17 U	0.24 U	0.17 U				
Chloromethane	80	1.1	1	1.4	1.5	1	1	1.2	1.1	1.3	1.1	1.1	0.98	0.95	1.3
cis-1,2-Dichloroethene	100	2	0.2 U	1	1.1	0.73	1.3	0.5	0.6	1.3	0.2 U	0.2 U	0.83	0.44	0.57
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	0.16 U	0.22 U	0.16 U				
Cyclohexane	NA	0.17 U	0.17 U	0.49	0.61	0.17 U	0.17 U	0.17 U	0.12 U	0.34	0.18 U	0.17 U	0.17 U	0.17 U	0.28
Dibromochloromethane	NA	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.31 U				
Dichlorodifluoromethane	500	1.8	2.1	2.6	2.8	2.6	2.6	3.1	2	8.3	2.4	2	2.3	2.1	1.6
Ethanol	NA	5.7	8.3	14	20	9.8	7.5	18	5	39	6.2	7	6.5	8.8	10
Ethyl acetate	NA	0.37 U	0.37 U	0.18 U	0.18 U	0.37 U	0.18 U	0.18 U	0.26 U	0.37 U	0.32	0.18 U	0.18 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 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
Ethylbenzene	290	0.26	0.28	0.66	0.85	0.23	0.22 U	0.22 U	0.16 U	0.94	0.23	0.23	0.22 U	0.28	0.46
Hexachlorobutadiene	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.75 U
Hexane	NA	0.92	0.74	1.2	1.6	1	0.51	0.53	0.65	1.7	0.99	1.3	0.41	0.77	0.78
Isopropyl alcohol	NA	3.4	3.1	5.3	5.8	3.8	2	9.1	0.18 U	240	5.2	5.2	0.25 U	2.7	1.8
m,p-Xylene	500	0.76	0.87	2.1	2.8	0.8	0.43 U	0.63	0.31 U	2.5	0.79	0.91	0.73	1	1.4
Methyl methacrylate	NA														
Methylene chloride	17	2.3	33	2.3	1.8	4.4	1.1	6.7	3.5	4.8	1.6	3.6	0.7 U	0.7 U	2.9
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				
n-Heptane	NA	0.23	0.2 U	0.59	0.75	0.2 U	0.2 U	0.2 U	0.14 U	0.67	0.2 U	0.2 U	0.2 U	0.26	0.42
o-Xylene	500	0.26	0.33	0.76	0.99	0.3	0.22 U	0.22 U	0.16 U	0.7	0.31	0.4	0.28	0.4	0.52
Propylene (Propene)	NA	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.09 U	0.13 U	0.18 U	0.35 U	0.35 U	0.18 U	0.35 U	0.25 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	0.21 U	0.19
Tetrachloroethene	5	6.6	0.57	4.2	3.2	2.6	4.9	1.5	1.9	6.1	0.34 U	0.34 U	2	1.1	3.2
Tetrahydrofuran	NA	12	1.2	1.3	0.48	0.32	0.15 U	0.15 U	0.23	0.4	0.15 U	0.15 U	0.15 U	0.15 U	0.11 U
Toluene	500	1.7	1.4	4	5.7	2.3	0.93	1.7	0.72	5.7	1.3	1.1	0.78	1.2	2.8
trans-1,2-Dichloroethene	200	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 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	0.16 U	0.22 U	0.16 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
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
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
Vinyl acetate	NA	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.18 U	0.5 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.25 U
Vinyl chloride	1.9	0.26	0.13 U	0.22	0.21	0.13 U	0.19	0.13 U	0.1 U	0.16	0.13 U	0.13 U	0.17	0.13 U	0.1 U

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space														
	IA-1-010810 1/8/2010	IA-1-012810 1/28/2010	IA-1-020510 2/5/2010	IA-1-021210 2/12/2010	IA-1-021910 2/19/2010	IA-1-032610 3/26/2010	IA-1-043010 4/30/2010	IA-1-052810 5/28/2010	IA-1-070110 7/1/2010	IA-1-091610 9/16/2010	IA-1-120710 12/7/2010	IA-1-021711 2/17/2011	IA-2-016209 1/16/2009	IA-2-020309 2/3/2009	IA-2-021109 2/11/2009
1,1,1-Trichloroethane	0.27 U	0.27 U	0.76	0.30	0.88	0.27 U	1.2	0.33	0.27 U	0.27 U	0.27 U	0.27 U	9.9	0.63	1.1
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.72	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.41	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.37	0.25 U	0.26	0.25 U	0.25 U	0.25 U	0.25 U	0.4	0.43	0.56	0.25 U	0.55	0.25 U	0.37	0.7
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25
1,3-Butadiene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane															
2-Butanone	1.6	0.3 U	2.4	1.1	1.2	1.3	0.78	2.6	3.3	0.85	0.68	1.7 B	21	4.1	4.6
2-Hexanone	0.36	0.2 U	0.47	0.2 U	0.27	0.27	0.2 U	0.67	0.75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.2 U	0.22	0.2 U	0.2 U	0.2 U	0.28	0.35	0.35	0.2 U	0.2 U	0.2 U	0.2 U	0.35
Acetone	12	2.0	19	7.3	8.5	7	6.5	18	18	11	12 B	15 B	17	9.6	14
Benzene	1.2	0.16 U	0.98	0.64	0.53	0.59	0.64	0.5	0.46	0.8	0.49	1.5	1	0.67	1.8
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.33	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.43	0.31 U	0.40	0.31 U	0.45	0.44	0.48	0.55	0.52	0.5	0.46	0.47	0.33	0.41	0.55
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.42
Chloroform	0.26	0.24 U	0.47	0.43	0.24 U	0.24 U	0.25	0.24 U	0.24 U	3.8	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.1	1.4	1.3	1.3	1.2	1.3	0.79	1.2	1.2	1.1	0.97	1	1.1	1	1.3
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.56	0.2 U	1.3	0.2 U	0.5	0.2 U	1.7	0.2 U	2.1	0.24	1.1
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.44
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	3.1	2.4	2.4	2.6	3.0	1.6	2.2	2.3	2.7	1.7	2	3.1	1.8	2.2	2.6
Ethanol	8.4	7.0	29	19	43	4.6	4.4	6	6.5	9	2.7	9	5.5	8.8	12
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.37 U	0.18 U	0.18 U

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space														
	IA-1-010810 1/8/2010	IA-1-012810 1/28/2010	IA-1-020510 2/5/2010	IA-1-021210 2/12/2010	IA-1-021910 2/19/2010	IA-1-032610 3/26/2010	IA-1-043010 4/30/2010	IA-1-052810 5/28/2010	IA-1-070110 7/1/2010	IA-1-091610 9/16/2010	IA-1-120710 12/7/2010	IA-1-021711 2/17/2011	IA-2-016 1/16/2009	IA-2-020309 2/3/2009	IA-2-021109 2/11/2009
Ethylbenzene	0.40	0.22 U	0.32	0.22 U	0.22 U	0.22 U	0.23	0.29	0.27	0.51	0.22 U	0.54	0.26	0.28	0.65
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	1.1 U	1.1 U
Hexane	0.74	0.18 U	0.82	1.3	0.45	0.2	1.1	0.8	0.46	0.61	0.35 U	1.9	0.88	0.57	1.3
Isopropyl alcohol	2.4	0.25 U	9.4	0.25 U	1.6	0.65	3.4	0.12 U	0.74	1.4	0.25 U	1.7	3.7	3.1	4.5
m,p-Xylene	1.1	0.43 U	1.0	0.43 U	0.43 U	0.5	0.77	1.1	1.2	1.7	0.43 U	1.6	0.76	0.88	2
Methyl methacrylate												0.2 U	0.2 U		
Methylene chloride	0.7 U	1.4	1.5	1.9	0.7 U	0.7 U	0.7 U	0.35 U	1.2	0.56	0.56	4.8	2	30	4
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.35	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.36	0.2 U	0.5	0.23	0.2 U	0.58
o-Xylene	0.44	0.22 U	0.38	0.22 U	0.22 U	0.22 U	0.28	0.46	0.51	0.69	0.22 U	0.56	0.3	0.34	0.76
Propylene (Propene)	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 U	0.35 U	0.86 U	0.86 U	0.18 U	0.18 U	0.09 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	0.25	0.31	0.24	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	0.34 U	0.34 U	0.34 U	0.34 U	1.2	0.34 U	4.5	0.55	1.1	0.34 U	3.3	5.6 [a]	7.5	0.64	4.2
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.22	0.15 U	0.15 U	0.15 U	0.24	0.16	0.15 U	0.15 U	12	1.2	1.2
Toluene	2.1	0.19 U	0.82	0.69	0.58	0.8	1.3	0.91	0.99	2.5	0.44	3	1.7	1.3	4
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.31	0.39	0.27 U	1.5	0.27 U	0.4	0.27 U	1.7	0.27 U	4.4	0.56	1.6
Trichlorofluoromethane	2.5	0.81	1.3	1.5	1.5	1.4	1.2	1.3	1.4	2.7	1.2	1.7	2	1.2	1.7
Trichlorotrifluoroethane	0.63	0.38 U	0.71	0.63	0.55	0.55	0.48	0.59	0.53	0.48	0.57	0.64	0.69	0.58	0.49
Vinyl acetate	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.35 U	0.18 U	0.71 U	0.71 U	0.18 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14	0.13 U	0.27	0.13 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)	Indoor Air - Large Retail Space														
	IA-2-021809 2/18/2009	IA-2-022609 2/26/2009	IA-2-041409 4/14/2009	IA-2-042409 4/24/2009	IA-2-091709 9/17/2009	IA-2-092409 9/24/2009	IA-2-100109 10/1/2009	IA-2-100809 10/8/2009	IA-2-012810 1/28/2010	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-2-052810 5/28/2010
1,1,1-Trichloroethane	1.1	0.44	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	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U						
1,1,2-Trichloroethane	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U						
1,1-Dichloroethane	0.2 U	0.32	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U						
1,2,4-Trimethylbenzene	0.65	0.3	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
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U						
1,2-Dichlorobenzene	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U						
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U						
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.18 U	0.25 U	0.59	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U				
1,3-Butadiene	0.66	0.11 U	0.08 U	0.11 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U					
1,3-Dichlorobenzene	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.34	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane															
2-Butanone	3	2.9	0.95	1.6	1.1	2.3	0.81	1	2.1	0.70	0.44	0.3 U	0.96	1.3	3.1
2-Hexanone	0.26	0.2 U	0.14 U	0.2 U	0.25	0.54	0.2 U	0.26	0.51	0.2 U	0.2 U	0.2 U	0.2 U	0.26	0.84
4-Ethyltoluene	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U						
4-Methyl-2-pentanone	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.39	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28
Acetone	18	9.7	13	39	6.2	17	11	8.8	17	7.8	3.1	0.48 U	6.3	8.2	18
Benzene	3	0.77	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
Benzyl chloride	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U						
Bromodichloromethane	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U						
Bromoform	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U						
Bromomethane	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U						
Carbon disulfide	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U						
Carbon tetrachloride	0.57	0.48	0.41	0.41	0.44	0.4	0.46	0.42	0.31 U	0.40	0.31 U	0.31 U	0.43	0.47	0.5
Chlorobenzene	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U						
Chloroethane	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.25	0.17 U	0.24 U	0.47	0.40	0.24 U	0.24 U	0.24 U	0.24 U					
Chloromethane	1.3	1	1.1	1.2	0.91	1.1	0.96	0.98	1.2	1.3	1.3	1.4	1.3	0.8	1.2
cis-1,2-Dichloroethene	1.1	0.95	0.59	1.6	0.2 U	0.2 U	0.79	0.48	0.58	0.2 U	0.2 U	0.2 U	0.2 U	1	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U						
Cyclohexane	0.61	0.17 U	0.12 U	0.22	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U				
Dibromochloromethane	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U						
Dichlorodifluoromethane	2.9	2.7	2.1	2.9	2	2.1	2.3	2.1	2.2	2.5	2.6	3.0	1.6	2.0	2.4
Ethanol	17	7.9	4.9	7.5	4.8	6.7	7.8	6.2	14	35	17	20	4.4	4.9	5
Ethyl acetate	0.18 U	0.37 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U					

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space														
	IA-2-021809 2/18/2009	IA-2-022609 2/26/2009	IA-2-041409 4/14/2009	IA-2-042409 4/24/2009	IA-2-091709 9/17/2009	IA-2-092409 9/24/2009	IA-2-100109 10/1/2009	IA-2-100809 10/8/2009	IA-2-012810 1/28/2010	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-2-052810 5/28/2010
Ethylbenzene	0.79	0.3	0.18	0.22 U	0.22 U	0.22	0.22 U	0.31	0.42	0.34	0.22 U	0.22 U	0.22 U	0.23	0.24
Hexachlorobutadiene	1.1 U	1.1 U	0.75 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U
Hexane	1.6	0.69	0.72	0.74	0.41	0.42	0.71	1	0.61	0.64	1.4	0.18 U	0.27	1.6	0.51
Isopropyl alcohol	4.5	4.7	5.6	28	340	5.7	3.3	0.25 U	0.25 U	3.6	0.25 U	0.25 U	0.63	3.2	0.12 U
m,p-Xylene	2.6	0.93	0.61	0.63	0.71	0.93	0.78	1.1	1.3	1.1	0.43 U	0.43 U	0.47	0.75	0.96
Methyl methacrylate															
Methylene chloride	1.6	1.8	4	4.2	0.7 U	0.7 U	0.7 U	0.7 U	1.4	0.90	1.9	0.7 U	0.7 U	0.35 U	
Methyl-t-butyl ether	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U						
n-Heptane	0.73	0.22	0.15	0.2 U	0.2 U	0.2 U	0.2 U	0.34	0.83	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.89	0.34	0.22	0.22	0.27	0.42	0.3	0.44	0.46	0.40	0.22 U	0.22 U	0.22 U	0.29	0.44
Propylene (Propene)	0.09 U	0.18 U	0.13 U	0.18 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U
Styrene	0.23	0.21 U	0.15 U	0.21 U	0.41	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.25				
Tetrachloroethene	3.2	3.3	2.2	7.6	0.34 U	0.35	1.7	1	2.3	0.34 U	0.34 U	0.34 U	0.34 U	3.6	0.43
Tetrahydrofuran	0.49	0.41	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	0.15 U
Toluene	5.5	2.3	1	1.2	1.1	1.1	1.2	1.5	2.4	0.93	0.64	0.19 U	0.8	1.3	0.91
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U						
Trichloroethene	1.4	0.91	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
Trichlorofluoromethane	2.8	1.6	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.4	1.1	1.4	1.3	1.3
Trichlorotrifluoroethane	0.46	0.64	0.56	0.74	0.5	0.47	0.46	0.54	0.46	0.53	0.61	0.38 U	0.51	0.44	0.53
Vinyl acetate	0.18 U	0.71 U	0.5 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U
Vinyl chloride	0.2	0.13 U	0.1 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

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space														
	IA-2-070110 7/1/2010	IA-2-091610 9/16/2010	IA-2-120710 12/7/2010	IA-2-021711 2/17/2011	IA-3 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
1,1,1-Trichloroethane	0.28	0.27 U	0.27 U	0.27 U	9.8	0.57	1.1	1.1	0.28	1.5	2.2	0.27 U	0.27 U	0.27 U	0.27 U
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	0.24 U	0.34 U				
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U				
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.68	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.35	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U					
1,2,4-Trimethylbenzene	0.48	0.52	0.25 U	0.52	0.25 U	0.36	0.68	0.61	0.25 U	0.18 U	0.25 U	0.29	0.4	0.25 U	0.39
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	0.27 U	0.38 U					
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 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	0.17 U	0.23 U				
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U			0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U					
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U				
1,3-Butadiene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.3	0.77	0.11 U	0.08 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane															
2-Butanone	3.4	0.96	0.36	1.9 B	20	4.2	4.6	4	1.7	1.6	2.5	2	2.6	0.7	1.5
2-Hexanone	0.68	0.2 U	0.2 U	0.24	0.2 U	0.26	0.33	0.3	0.2 U	0.14 U	0.38	0.51	0.58	0.2 U	0.37
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U				
4-Methyl-2-pentanone	0.49	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.29	0.34	0.2 U	0.14 U	0.22	0.2 U	0.42	0.2 U	0.2 U
Acetone	20	11	9.8 B	15 B	18	12	17	24	9.7	7.5	50	11	19	6.7	11
Benzene	0.48	0.72	0.48	1.5	1	0.71	1.9	3.1	0.69	0.6	0.46	0.41	0.5	0.39	0.46
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	0.19 U	0.26 U				
Bromodichloromethane	0.33 U	0.33 U	0.34 U	0.34 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U				
Bromoform	0.51 U	0.51 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U				
Bromomethane	0.22	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 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	0.12 U	0.16 U				
Carbon tetrachloride	0.52	0.5	0.48	0.31 U	0.34	0.45	0.52	0.6	0.43	0.22 U	0.42	0.4	0.43	0.4	0.42
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U				
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.43	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	3.4	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				
Chloromethane	1.2	1.1	0.96	0.97	1.1	0.98	1.2	1.4	1.1	1.2	0.91	1.1	0.97	1	
cis-1,2-Dichloroethene	0.61	0.2 U	1.7	0.2 U	1.9	0.2 U	1.1	1.1	0.55	0.61	1.5	0.2 U	0.2 U	0.94	0.49
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U				
Cyclohexane	0.17 U	0.2	0.17 U	0.17 U	0.17 U	0.17 U	0.46	0.6	0.17 U	0.15	0.17 U				
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U				
Dichlorodifluoromethane	2.6	1.7	1.9	3.2	1.9	2.3	2.5	2.9	2.6	2	2.9	2.1	2.1	2.2	2.2
Ethanol	7.6	9	2.7	10	5.5	9.2	13	18	7.9	4.2	9	6.2	7.5	4.5	5
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.37 U	0.37 U	0.18 U	0.18 U	0.37 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space														
	IA-2-070110 7/1/2010	IA-2-091610 9/16/2010	IA-2-120710 12/7/2010	IA-2-021711 2/17/2011	IA-3 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
Ethylbenzene	0.29	0.46	0.22 U	0.5	0.25	0.29	0.64	0.77	0.22 U	0.16	0.22 U	0.22 U	0.23	0.22 U	0.24
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U
Hexane	0.49	0.53	0.35 U	1.6	0.94	0.87	1.3	1.9	3.7	0.37	0.77	0.96	0.47	0.37	0.71
Isopropyl alcohol	1.2	0.25 U	0.25 U	2	3.5	4.1	5.5	4.9	3.1	0.18 U	33	180	5.9	0.25 U	0.25 U
m,p-Xylene	1.3	1.5	0.43 U	1.5	0.75	0.9	2	2.6	0.65	0.57	0.66	0.7	0.99	0.65	0.87
Methyl methacrylate			0.2 U	0.2 U											
Methylene chloride	1.3	0.53	0.61	4.2	2.2	31	3.1	3.5	33	1.2	3.6	2.4	0.7 U	0.7 U	0.7 U
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U				
n-Heptane	0.8	0.34	0.2 U	0.48	0.22	0.2 U	0.61	0.77	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24
o-Xylene	0.57	0.63	0.22 U	0.56	0.28	0.33	0.79	0.86	0.23	0.22	0.24	0.26	0.45	0.27	0.34
Propylene (Propene)	0.87 U	0.35 U	0.86 U	0.86 U	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.13 U	0.18 U	0.35 U	0.35 U	0.18 U	0.35 U
Styrene	0.36	0.24	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.15 U	0.21 U				
Tetrachloroethene	1.4	0.34 U	3.2	5.2 [a]	6.1	0.56	4.3	3.3	1.9	2.2	7.1	0.34 U	0.34 U	2	1.1
Tetrahydrofuran	0.27	0.15 U	0.15 U	0.15 U	12	1.1	1.3	0.49	0.15 U	0.24	0.15 U				
Toluene	1.3	2.2	0.41	2.9	1.7	1.5	4.7	5.8	2.1	1	1.2	1.1	0.73	1.1	
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U				
Trichloroethene	0.53	0.27 U	1.7	0.27 U	3.9	0.49	1.7	1.5	0.53	0.77	1.8	0.27 U	0.27 U	1.1	0.54
Trichlorofluoromethane	1.6	2.5	1.2	1.8	1.9	1.3	1.8	2.8	1.8	1.2	1.3	1.4	1.2	1.2	1.2
Trichlorotrifluoroethane	0.94	0.45	0.59	0.71	0.6	0.58	0.49	0.44	0.69	0.53	0.74	0.51	0.46	0.49	0.47
Vinyl acetate	0.18 U	0.36 U	0.35 U	0.18 U	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.5 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
Vinyl chloride	0.13 U	0.13 U	0.14	0.13 U	0.23	0.13 U	0.19	0.21	0.13 U	0.1 U	0.17	0.13 U	0.13 U	0.18	0.13 U

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space														
	IA-3-012810 1/28/2010	IA-3-020510 2/5/2010	IA-3-021210 2/12/2010	IA-3-021910 2/19/2010	IA-3-032610 3/26/2010	IA-3-043010 4/30/2010	IA-3-052810 5/28/2010	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-4-01/16/2009 1/16/2009	IA-4-020309 2/3/2009	IA-4-021109 2/11/2009	IA-4-021809 2/18/2009
1,1,1-Trichloroethane	0.45	0.71	0.29	0.86	0.27 U	1.2	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	10	0.62	1.1	1.1
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.23	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.44	0.25 U	0.25 U	0.25 U	0.25 U	0.26	0.34	0.46	0.6	0.25 U	0.49	0.26	0.37	0.74	0.65
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.42	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane															
2-Butanone	1.9	2	1.2	1.6	0.51	1	2.2	3.3	0.95	0.39	0.76 B	21	4.4	6	3.2
2-Hexanone	0.52	0.39	0.22	0.39	0.2 U	0.29	0.52	0.67	0.2 U	0.2 U	0.2 U	0.2 U	0.33	0.73	0.39
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.43	0.28
Acetone	14	21	6.7	7.3	3.8	7.7	15	21	11	9.7 B	9.7 B	17	10	15	20
Benzene	1.3	0.86	0.67	0.53	0.6	0.67	0.47	0.51	0.72	0.47	1.4	1.1	0.68	1.8	3
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.34 U	0.34 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.31 U	0.42	0.31 U	0.43	0.43	0.49	0.54	0.57	0.41	0.45	0.6	0.4	0.43	0.5	0.58
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.53	0.48	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	3.7	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.2	2.9	1.3	1.2	1.1	0.85	1.2	1.2	1.1	0.98	0.97	1.2	0.99	1.4	1.3
cis-1,2-Dichloroethene	0.59	0.2 U	0.2 U	0.59	0.2 U	1.3	0.2 U	0.51	0.2 U	1.7	0.2 U	2.4	0.2 U	1.1	1.1
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.18	0.17 U	0.17 U	0.17 U	0.44	0.64
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.3	2.5	2.5	3	1.6	2.1	2.5	2.7	1.5	2.1	3.1	1.9	2.2	2.5	2.8
Ethanol	13	40	17	38	3.6	5.3	5.5	7	8	2.4	9.4	5.3	8.9	12	18
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.19

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space														
	IA-3-012810 1/28/2010	IA-3-020510 2/5/2010	IA-3-021210 2/12/2010	IA-3-021910 2/19/2010	IA-3-032610 3/26/2010	IA-3-043010 4/30/2010	IA-3-052810 5/28/2010	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-4-021609 1/16/2009	IA-4-020309 2/3/2009	IA-4-021109 2/11/2009	IA-4-021809 2/18/2009
Ethylbenzene	0.43	0.22 U	0.22 U	0.22 U	0.22 U	0.26	0.23	0.29	0.47	0.22 U	0.47	0.25	0.29	0.65	0.78
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	0.55	0.44	1	0.29	0.19	1.4	0.55	0.45	0.58	0.35 U	1.5	0.9	0.66	1.2	1.7
Isopropyl alcohol	0.25 U	9.9	0.25 U	2	0.64	3.4	0.12 U	0.76	8.8	1.1	1.7	3.5	3.3	4.7	4.8
m,p-Xylene	1.2	0.69	0.43 U	0.43 U	0.46	0.8	0.99	1.3	1.6	0.43 U	1.4	0.76	0.89	2.1	2.6
Methyl methacrylate											0.2 U	0.2 U			
Methylene chloride	1.4	0.7 U	2.3	0.7 U	0.7 U	0.7 U	0.35 U	1.2	0.57	0.55	4.6	2.3	29	1.7	2.5
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.73	0.2 U	0.2 U	0.2 U	0.2 U	0.36	0.2 U	0.2 U	0.32	0.2 U	0.44	0.23	0.2 U	0.58	0.79
o-Xylene	0.44	0.26	0.22 U	0.22 U	0.22 U	0.32	0.43	0.58	0.64	0.22 U	0.48	0.27	0.33	0.78	0.87
Propylene (Propene)	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	0.18 U	0.18 U	0.09 U	0.09 U
Styrene	0.40	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.23	0.34	0.26	0.21 U	0.21 U	0.21 U	0.21 U	0.22	0.23
Tetrachloroethene	2.2	0.34 U	0.34 U	1.3	0.34 U	4.8	0.35	1.1	0.76	3.2	5.2 [a]	7.3	0.58	4.4	3.4
Tetrahydrofuran	0.40	0.15 U	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	13	1.2	1.3	0.47
Toluene	2.5	0.78	0.61	0.46	0.81	1.5	0.93	1.1	2.3	0.41	2.7	1.8	1.3	4.3	5.8
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.75	0.27 U	0.27 U	0.4	0.27 U	1.5	0.27 U	0.47	0.27 U	1.7	0.27 U	4.7	0.48	1.7	1.5
Trichlorofluoromethane	1.2	1.3	1.4	1.6	1.3	1.2	1.3	1.5	2.8	1.2	1.7	2	1.3	1.6	3
Trichlorotrifluoroethane	0.49	0.52	0.57	0.52	0.57	0.45	0.52	0.54	0.45	0.55	0.67	0.72	0.59	0.51	0.45
Vinyl acetate	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.36 U	0.35 U	0.18 U	0.71 U	0.71 U	0.18 U	0.18 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14	0.13 U	0.13 U	0.13 U	0.13	0.13 U	0.29	0.13 U	0.2	0.22

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space														
	IA-4-022609 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	IA-4-070110 7/1/2010
1,1,1-Trichloroethane	0.45	1.5	2.2	0.27 U	0.76	0.29	0.89	0.27 U	1.1	0.28	0.27 U				
1,1,2,2-Tetrachloroethane	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U						
1,1,2-Trichloroethane	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U						
1,1-Dichloroethane	0.31	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.26 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U						
1,2,4-Trimethylbenzene	0.29	0.18 U	0.25 U	0.25 U	0.41	0.28	0.41	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.34
1,2-Dibromoethane (EDB)	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U						
1,2-Dichlorobenzene	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U						
1,2-Dichlorotetrafluoroethane	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U						
1,3,5-Trimethylbenzene	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U						
1,3-Butadiene	0.11 U	0.08 U	0.11 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U					
1,3-Dichlorobenzene	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane															
2-Butanone	2.5	1.1	1.6	1.5	2	1.30	1.20	0.3 U	0.69	1.2	0.50	1.60	1.50	2.20	4.8
2-Hexanone	0.2 U	0.14 U	0.2 U	0.29	0.45	0.32	0.27	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.39	0.54	1
4-Ethyltoluene	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	0.2 U	0.14 U	0.2 U	0.2 U	0.32	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43
Acetone	7.8	7.9	20	9.3	16	9.3	10	2.3	4.9	5.9	2.5	6.9	8.7	15	31
Benzene	0.76	0.59	0.44	0.4	0.43	0.37	0.48	0.16 U	0.88	0.66	0.54	0.57	0.64	0.48	0.47
Benzyl chloride	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	0.33 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						
Bromoform	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						
Bromomethane	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						
Carbon disulfide	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.31						
Carbon tetrachloride	0.46	0.22 U	0.45	0.41	0.4	0.46	0.4	0.31 U	0.43	0.31 U	0.42	0.43	0.47	0.52	0.48
Chlorobenzene	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	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.26	0.17 U	0.24 U	0.46	0.39	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U					
Chloromethane	1	1.1	1.2	0.9	1.1	1	1	1.3	1.3	1.3	1.2	1.1	0.77	1.2	1.2
cis-1,2-Dichloroethene	0.98	0.61	1.7	0.2 U	0.2 U	0.84	0.48	0.2 U	0.2 U	0.2 U	0.59	0.2 U	1.3	0.2 U	0.44
cis-1,3-Dichloropropene	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U						
Cyclohexane	0.17 U	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U						
Dibromochloromethane	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U						
Dichlorodifluoromethane	2.6	2.1	2.4	2.1	2	2.2	2.2	2.4	2.5	2.6	3.0	1.7	2.1	2.5	2.6
Ethanol	8	5.2	5.5	6	6.5	4.9	5.6	7.7	34	17	31	3.9	4.9	6.1	8.7
Ethyl acetate	0.37 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U					

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space													
	IA-4-022609 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
Ethylbenzene	0.29	0.16	0.22 U	0.22 U	0.27	0.22 U	0.26	0.22 U	0.26	0.22 U	0.22 U	0.25	0.25	0.25
Hexachlorobutadiene	1.1 U	0.75 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U
Hexane	0.66	0.43	0.34	0.42	2.2	0.49	0.93	0.18 U	0.37	1.3	0.49	0.19	1.3	0.55
Isopropyl alcohol	3.9	0.18 U	13	5.6	5.2	0.25 U	0.25 U	0.96	0.25 U	0.25 U	1.9	0.66	3.4	4.4
m,p-Xylene	0.89	0.58	0.49	0.61	0.93	0.69	1	0.43 U	0.81	0.43 U	0.43 U	0.49	0.8	0.98
Methyl methacrylate														
Methylene chloride	1.3	1.9	2.2	0.7 U	9.7	0.7 U	0.7 U	1.5	0.7 U	1.9	0.71	0.7 U	0.7 U	0.35 U
Methyl-t-butyl ether	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U						
n-Heptane	0.21	0.14 U	0.2 U	0.2 U	0.2 U	0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22
o-Xylene	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	0.3	0.44
Propylene (Propene)	0.18 U	0.13 U	0.18 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U
Styrene	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	0.21 U	0.22
Tetrachloroethene	3.4	2.4	7.9	0.75	0.34 U	2	1.1	0.34 U	0.34 U	0.34 U	1.4	0.34 U	4.4	0.44
Tetrahydrofuran	0.34	0.21	0.25	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.24				
Toluene	2.3	1	1	1.1	1.3	0.76	1.2	0.19 U	0.79	0.63	0.47	0.83	1.4	0.98
trans-1,2-Dichloroethene	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	1.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U						
Trichloroethene	0.88	0.78	2	0.27 U	0.27 U	1.10	0.57	0.27 U	0.27 U	0.27 U	0.40	0.27 U	1.4	0.27 U
Trichlorofluoromethane	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	1.9
Trichlorotrifluoroethane	0.57	0.54	0.61	0.49	0.48	0.47	0.5	0.38 U	0.55	0.58	0.55	1.3	0.48	0.51
Vinyl acetate	0.71 U	0.5 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U
Vinyl chloride	0.13 U	0.1 U	0.2	0.13 U	0.13 U	0.16	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space												
	IA-4-091610 9/16/2010	IA-4-120710 12/7/2010	IA-4-021711 2/17/2011	LRAIR01 5/15/2009	LRAIR02 5/15/2009	LRAIR03 5/15/2009	LRAIR04 5/15/2009	LRAIR05 5/15/2009	LRAIR06 5/15/2009	LRAIR07 5/15/2009	LRAIR08 5/15/2009	LRAIR09 5/15/2009	LRAIR10 5/15/2009
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.45	0.52	0.65	0.57	0.51	0.44	0.69	0.5	0.49	0.53
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.44	0.25 U	0.49	0.25 U	0.25 U	0.25 U	0.29	0.25 U					
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlortetrafluoroethane	0.35 U			0.35 U									
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dioxane													
2-Butanone	2.4	0.96	1 B	3.3	3.4	2.1	2.6	2	1.6	3.1	2.5	2.6	1.4
2-Hexanone	0.59	0.2 U	0.2 U	0.73	0.66	0.38	0.51	0.37	0.38	0.61	0.48	0.43	0.29
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.45	0.2 U	0.2 U	0.42	0.39	0.32	0.36	0.54	0.27	0.32	0.3	0.61	0.23
Acetone	19	13 B	12 B	12	13	10	11	8.5	7.7	13	11	9.8	6.9
Benzene	0.66	0.49	1.4	0.54	0.6	0.67	0.55	0.56	0.51	0.53	0.6	0.51	0.57
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.34 U	0.34 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.44	0.46	0.57	0.7	0.68	0.71	0.68	0.68	0.63	0.68	0.7	0.64	0.66
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	3.3	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1	0.95	0.95	1	0.98	1	0.95	1	1	0.92	1.1	0.91	1.2
cis-1,2-Dichloroethene	0.2 U	1.8	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	1.5	2	3.2	2.5	2.3	2.6	2.4	2.7	2.4	2.4	2.8	2.3	2.7
Ethanol	9.8	3.4	8.9	65	9	6.5	5.9	6	5.6	5.9	14	44	14
Ethyl acetate	0.18 U	0.18 U	0.26	0.18 U									

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space												
	IA-4-091610 9/16/2010	IA-4-120710 12/7/2010	IA-4-021711 2/17/2011	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
Ethylbenzene	0.44	0.22 U	0.49	0.22 U	0.27	0.22 U							
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	0.61	0.38	1.7	1.1	0.21	0.18 U	0.18	0.24	0.18 U	0.19	0.21	0.2	0.18 U
Isopropyl alcohol	8.3	0.48	1.7	3.3	3.4	3.7	3.5	3.6	3.4	4.4	3.6	2.8	3.2
m,p-Xylene	1.4	0.43 U	1.4	0.58	0.57	0.58	0.55	0.49	0.5	0.48	0.53	1	0.5
Methyl methacrylate		0.2 U	0.2 U										
Methylene chloride	0.68	0.79	5.1	5.9	1.5	1.5	1.6	1.9	1.6	1.5	1.6	1.6	1.4
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.32	0.2 U	0.51	0.2 U									
o-Xylene	0.57	0.22 U	0.53	0.28	0.28	0.27	0.27	0.25	0.26	0.25	0.27	0.34	0.26
Propylene (Propene)	0.35 U	0.86 U	0.86 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Styrene	0.21 U	0.21 U	0.21 U	0.23	0.21 U	0.21 U	0.22	0.21 U	0.21 U	0.37	0.21 U	0.21 U	0.21 U
Tetrachloroethene	0.34 U	3.4	5	0.47	0.47	0.54	0.66	0.64	0.6	0.73	0.53	0.46	0.46
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.2	0.15 U				
Toluene	2	0.43	2.7	0.73	0.7	0.58	0.59	0.51	0.53	0.57	0.53	0.54	0.47
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.23 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.27 U	1.8	0.27 U	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	2.4	1.2	1.8	1.3	1.3	1.2	1.1	1.4	1.3	1.1	1.4	1	1.4
Trichlorotrifluoroethane	0.43	0.54	0.7	0.63	0.6	0.65	0.62	0.64	0.57	0.59	0.68	0.62	0.58
Vinyl acetate	0.36 U	0.38	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
Vinyl chloride	0.13 U	0.16	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

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

NA - not available

U - Not detected, value is the detection limit

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

D - Result from diluted analyses

ug/m³ - micrograms per cubic meter

Prepared by/Date: KJC 03/21/11

Checked by/Date: PJM 03/29/11

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

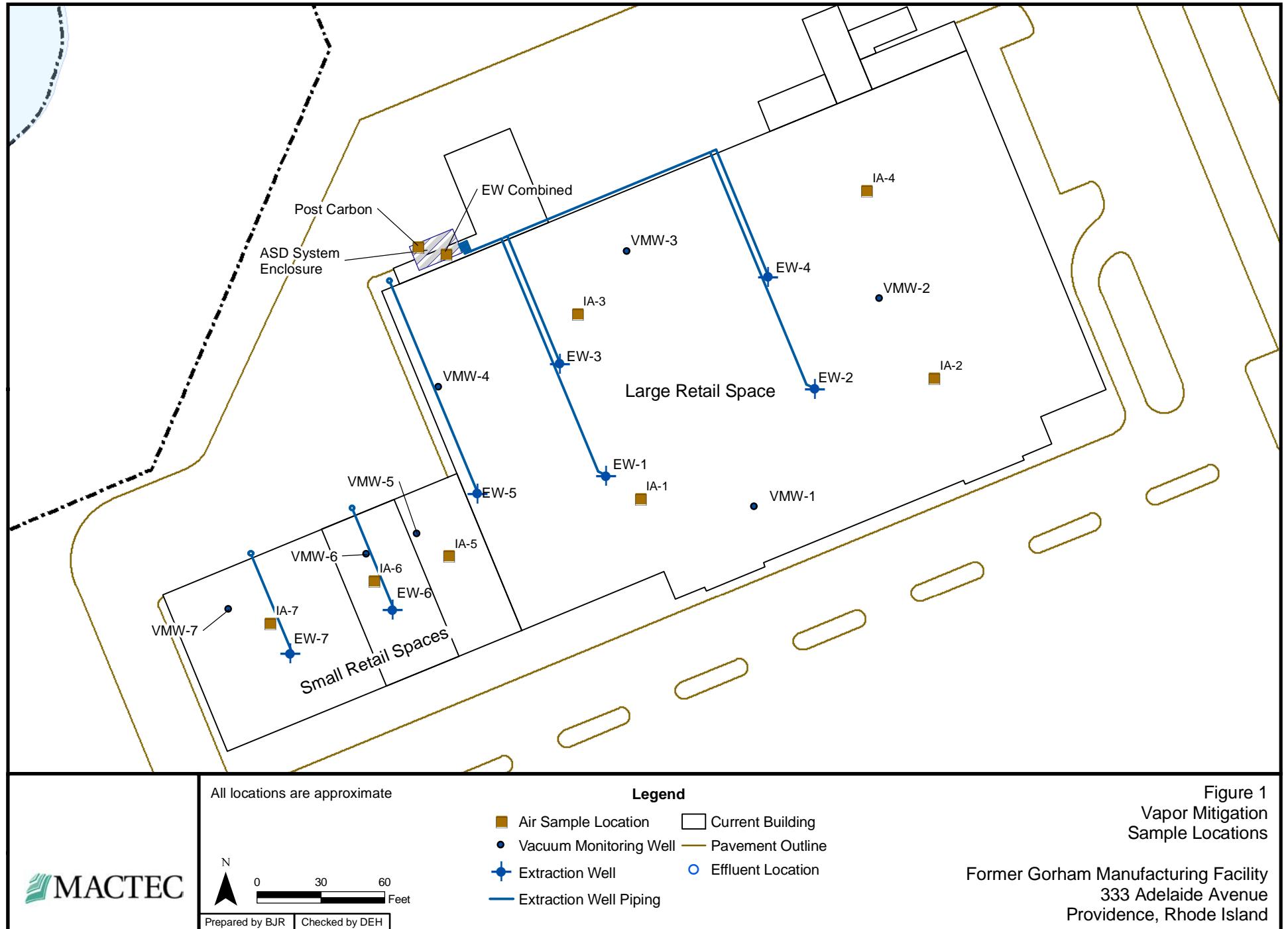
* vacuum reduced at extraction wells

** ASD system offline

Prepared by/Date: MAM 3/15/11

Checked by/Date: PJM 04/12/11

FIGURES



APPENDIX A

Laboratory Reports

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

December 16, 2010

Kelly Chatterton
Mactec Engineering & Consulting
107 Audubon Rd., Bldg. 2, Suite 301
Wakefield, MA 01880

Project Location: Providence RI, Gorham Site

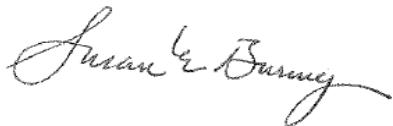
Client Job Number:

Project Number: 3650080114

Laboratory Work Order Number: 10L0202

Enclosed are results of analyses for samples received by the laboratory on December 7, 2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Susan M. Burney
Project Manager

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

REPORT DATE: 12/16/2010

Mactec Engineering & Consulting
107 Audubon Rd., Bldg. 2, Suite 301
Wakefield, MA 01880
ATTN: Kelly Chatterton

PURCHASE ORDER NUMBER: 200914545

PROJECT NUMBER: 3650080114

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 10L0202

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, Gorham Site

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
IA-1-120710	10L0202-01	Indoor air		EPA TO-15	
IA-2-120710	10L0202-02	Indoor air		EPA TO-15	
IA-3-120710	10L0202-03	Indoor air		EPA TO-15	
IA-4-120710	10L0202-04	Indoor air		EPA TO-15	
IA-6-120710	10L0202-05	Indoor air		EPA TO-15	
IA-7-120710	10L0202-06	Indoor air		EPA TO-15	
AA-1-120710	10L0202-07	Ambient Air		EPA TO-15	
EW-5-120710	10L0202-08	Soil Gas		EPA TO-15	
EW-6-120710	10L0202-09	Soil Gas		EPA TO-15	
EW-7-120710	10L0202-10	Soil Gas		EPA TO-15	
EW-Combined-120710	10L0202-11	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:

Analyte is found in the associated blank as well as in the sample.

Analyte & Samples(s) Qualified:

Acetone

10L0202-01[IA-1-120710], 10L0202-02[IA-2-120710], 10L0202-03[IA-3-120710], 10L0202-04[IA-4-120710], 10L0202-05[IA-6-120710], 10L0202-06[IA-7-120710],
10L0202-07[AA-1-120710], 10L0202-08RE1[EW-5-120710], 10L0202-09[EW-6-120710], 10L0202-10[EW-7-120710], 10L0202-11[EW-Combined-120710],
B023757-BLK1, B023757-BS1, B023774-BLK1, B023774-BS1

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

Analyte & Samples(s) Qualified:

2-Hexanone (MBK), 4-Methyl-2-pentanone (MIBK), Vinyl Acetate

10L0202-01[IA-1-120710], 10L0202-02[IA-2-120710], 10L0202-03[IA-3-120710], 10L0202-04[IA-4-120710], 10L0202-05[IA-6-120710], 10L0202-06[IA-7-120710],
10L0202-07[AA-1-120710], 10L0202-08[EW-5-120710], 10L0202-09[EW-6-120710], 10L0202-10[EW-7-120710], 10L0202-11[EW-Combined-120710], B023757-BLK1,
B023757-BS1, B023774-BLK1, B023774-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.



Michael A. Erickson
Laboratory Director

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-1-120710

Sample ID: 10L0202-01

Sample Matrix: Indoor air

Sampled: 12/7/2010 10:38

Sample Description/Location:

Sub Description/Location:

Canister ID: 1843

Canister Size: 6 liter

Flow Controller ID: 4066

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -25

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	5.0	0.50	B	12	1.2		1	12/10/10 18:08	WSD
Benzene	0.15	0.050		0.49	0.16		1	12/10/10 18:08	WSD
Benzyl chloride	ND	0.050		ND	0.26		1	12/10/10 18:08	WSD
Bromodichloromethane	ND	0.050		ND	0.34		1	12/10/10 18:08	WSD
Bromoform	ND	0.050		ND	0.52		1	12/10/10 18:08	WSD
Bromomethane	ND	0.050		ND	0.19		1	12/10/10 18:08	WSD
1,3-Butadiene	ND	0.050		ND	0.11		1	12/10/10 18:08	WSD
2-Butanone (MEK)	0.23	0.10		0.68	0.29		1	12/10/10 18:08	WSD
Carbon Disulfide	ND	0.050		ND	0.16		1	12/10/10 18:08	WSD
Carbon Tetrachloride	0.073	0.050		0.46	0.31		1	12/10/10 18:08	WSD
Chlorobenzene	ND	0.050		ND	0.23		1	12/10/10 18:08	WSD
Chloroethane	ND	0.050		ND	0.13		1	12/10/10 18:08	WSD
Chloroform	ND	0.050		ND	0.24		1	12/10/10 18:08	WSD
Chloromethane	0.47	0.050		0.97	0.10		1	12/10/10 18:08	WSD
Cyclohexane	ND	0.050		ND	0.17		1	12/10/10 18:08	WSD
Dibromochloromethane	ND	0.050		ND	0.43		1	12/10/10 18:08	WSD
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38		1	12/10/10 18:08	WSD
1,2-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 18:08	WSD
1,3-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 18:08	WSD
1,4-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 18:08	WSD
Dichlorodifluoromethane (Freon 12)	0.40	0.050		2.0	0.25		1	12/10/10 18:08	WSD
1,1-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 18:08	WSD
1,2-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 18:08	WSD
1,1-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 18:08	WSD
cis-1,2-Dichloroethylene	0.44	0.050		1.7	0.20		1	12/10/10 18:08	WSD
trans-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 18:08	WSD
1,2-Dichloropropane	ND	0.050		ND	0.23		1	12/10/10 18:08	WSD
cis-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 18:08	WSD
trans-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 18:08	WSD
Ethanol	1.4	0.50		2.7	0.94		1	12/10/10 18:08	WSD
Ethyl Acetate	ND	0.050		ND	0.18		1	12/10/10 18:08	WSD
Ethylbenzene	ND	0.050		ND	0.22		1	12/10/10 18:08	WSD
4-Ethyltoluene	ND	0.050		ND	0.25		1	12/10/10 18:08	WSD
Heptane	ND	0.050		ND	0.20		1	12/10/10 18:08	WSD
Hexachlorobutadiene	ND	0.050		ND	0.53		1	12/10/10 18:08	WSD
Hexane	ND	0.10		ND	0.35		1	12/10/10 18:08	WSD
2-Hexanone (MBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 18:08	WSD
Isopropanol	ND	0.10		ND	0.25		1	12/10/10 18:08	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-1-120710

Sample ID: 10L0202-01

Sample Matrix: Indoor air

Sampled: 12/7/2010 10:38

Sample Description/Location:

Sub Description/Location:

Canister ID: 1843

Canister Size: 6 liter

Flow Controller ID: 4066

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -25

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050		ND	0.18		1	12/10/10 18:08	WSD
Methylene Chloride	0.16	0.10		0.56	0.35		1	12/10/10 18:08	WSD
Methyl Methacrylate	ND	0.050		ND	0.20		1	12/10/10 18:08	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 18:08	WSD
Propene	ND	0.50		ND	0.86		1	12/10/10 18:08	WSD
Styrene	ND	0.050		ND	0.21		1	12/10/10 18:08	WSD
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34		1	12/10/10 18:08	WSD
Tetrachloroethylene	0.49	0.050		3.3	0.34		1	12/10/10 18:08	WSD
Tetrahydrofuran	ND	0.050		ND	0.15		1	12/10/10 18:08	WSD
Toluene	0.12	0.050		0.44	0.19		1	12/10/10 18:08	WSD
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37		1	12/10/10 18:08	WSD
1,1,1-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 18:08	WSD
1,1,2-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 18:08	WSD
Trichloroethylene	0.32	0.050		1.7	0.27		1	12/10/10 18:08	WSD
Trichlorofluoromethane (Freon 11)	0.20	0.050		1.2	0.28		1	12/10/10 18:08	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.074	0.050		0.57	0.38		1	12/10/10 18:08	WSD
1,2,4-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 18:08	WSD
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 18:08	WSD
Vinyl Acetate	ND	0.10		ND	0.35		1	12/10/10 18:08	WSD
Vinyl Chloride	0.053	0.050		0.14	0.13		1	12/10/10 18:08	WSD
m&p-Xylene	ND	0.10		ND	0.43		1	12/10/10 18:08	WSD
o-Xylene	ND	0.050		ND	0.22		1	12/10/10 18:08	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)	95.1	70-130	12/10/10 18:08
--------------------------	------	--------	----------------

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-2-120710
Sample ID: 10L0202-02

Sample Matrix: Indoor air

Sampled: 12/7/2010 10:39

Sample Description/Location:

Sub Description/Location:

Canister ID: 1649

Canister Size: 6 liter

Flow Controller ID: 4068

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	4.1	0.50	B	9.8	1.2		1	12/10/10 18:50	WSD
Benzene	0.15	0.050		0.48	0.16		1	12/10/10 18:50	WSD
Benzyl chloride	ND	0.050		ND	0.26		1	12/10/10 18:50	WSD
Bromodichloromethane	ND	0.050		ND	0.34		1	12/10/10 18:50	WSD
Bromoform	ND	0.050		ND	0.52		1	12/10/10 18:50	WSD
Bromomethane	ND	0.050		ND	0.19		1	12/10/10 18:50	WSD
1,3-Butadiene	ND	0.050		ND	0.11		1	12/10/10 18:50	WSD
2-Butanone (MEK)	0.12	0.10		0.36	0.29		1	12/10/10 18:50	WSD
Carbon Disulfide	ND	0.050		ND	0.16		1	12/10/10 18:50	WSD
Carbon Tetrachloride	0.076	0.050		0.48	0.31		1	12/10/10 18:50	WSD
Chlorobenzene	ND	0.050		ND	0.23		1	12/10/10 18:50	WSD
Chloroethane	ND	0.050		ND	0.13		1	12/10/10 18:50	WSD
Chloroform	ND	0.050		ND	0.24		1	12/10/10 18:50	WSD
Chloromethane	0.46	0.050		0.96	0.10		1	12/10/10 18:50	WSD
Cyclohexane	ND	0.050		ND	0.17		1	12/10/10 18:50	WSD
Dibromochloromethane	ND	0.050		ND	0.43		1	12/10/10 18:50	WSD
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38		1	12/10/10 18:50	WSD
1,2-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 18:50	WSD
1,3-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 18:50	WSD
1,4-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 18:50	WSD
Dichlorodifluoromethane (Freon 12)	0.39	0.050		1.9	0.25		1	12/10/10 18:50	WSD
1,1-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 18:50	WSD
1,2-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 18:50	WSD
1,1-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 18:50	WSD
cis-1,2-Dichloroethylene	0.43	0.050		1.7	0.20		1	12/10/10 18:50	WSD
trans-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 18:50	WSD
1,2-Dichloropropane	ND	0.050		ND	0.23		1	12/10/10 18:50	WSD
cis-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 18:50	WSD
trans-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 18:50	WSD
Ethanol	1.4	0.50		2.7	0.94		1	12/10/10 18:50	WSD
Ethyl Acetate	ND	0.050		ND	0.18		1	12/10/10 18:50	WSD
Ethylbenzene	ND	0.050		ND	0.22		1	12/10/10 18:50	WSD
4-Ethyltoluene	ND	0.050		ND	0.25		1	12/10/10 18:50	WSD
Heptane	ND	0.050		ND	0.20		1	12/10/10 18:50	WSD
Hexachlorobutadiene	ND	0.050		ND	0.53		1	12/10/10 18:50	WSD
Hexane	ND	0.10		ND	0.35		1	12/10/10 18:50	WSD
2-Hexanone (MBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 18:50	WSD
Isopropanol	ND	0.10		ND	0.25		1	12/10/10 18:50	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-2-120710

Sample ID: 10L0202-02

Sample Matrix: Indoor air

Sampled: 12/7/2010 10:39

Sample Description/Location:

Sub Description/Location:

Canister ID: 1649

Canister Size: 6 liter

Flow Controller ID: 4068

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050		ND	0.18		1	12/10/10 18:50	WSD
Methylene Chloride	0.18	0.10		0.61	0.35		1	12/10/10 18:50	WSD
Methyl Methacrylate	ND	0.050		ND	0.20		1	12/10/10 18:50	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 18:50	WSD
Propene	ND	0.50		ND	0.86		1	12/10/10 18:50	WSD
Styrene	ND	0.050		ND	0.21		1	12/10/10 18:50	WSD
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34		1	12/10/10 18:50	WSD
Tetrachloroethylene	0.48	0.050		3.2	0.34		1	12/10/10 18:50	WSD
Tetrahydrofuran	ND	0.050		ND	0.15		1	12/10/10 18:50	WSD
Toluene	0.11	0.050		0.41	0.19		1	12/10/10 18:50	WSD
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37		1	12/10/10 18:50	WSD
1,1,1-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 18:50	WSD
1,1,2-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 18:50	WSD
Trichloroethylene	0.31	0.050		1.7	0.27		1	12/10/10 18:50	WSD
Trichlorofluoromethane (Freon 11)	0.22	0.050		1.2	0.28		1	12/10/10 18:50	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.077	0.050		0.59	0.38		1	12/10/10 18:50	WSD
1,2,4-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 18:50	WSD
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 18:50	WSD
Vinyl Acetate	ND	0.10		ND	0.35		1	12/10/10 18:50	WSD
Vinyl Chloride	0.054	0.050		0.14	0.13		1	12/10/10 18:50	WSD
m&p-Xylene	ND	0.10		ND	0.43		1	12/10/10 18:50	WSD
o-Xylene	ND	0.050		ND	0.22		1	12/10/10 18:50	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)	96.2	70-130	12/10/10 18:50
--------------------------	------	--------	----------------

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-3-120710

Sample ID: 10L0202-03

Sample Matrix: Indoor air

Sampled: 12/7/2010 10:40

Sample Description/Location:

Sub Description/Location:

Canister ID: 1666

Canister Size: 6 liter

Flow Controller ID: 4057

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	4.1	0.50	B	9.7	1.2		1	12/10/10 19:31	WSD
Benzene	0.15	0.050		0.47	0.16		1	12/10/10 19:31	WSD
Benzyl chloride	ND	0.050		ND	0.26		1	12/10/10 19:31	WSD
Bromodichloromethane	ND	0.050		ND	0.34		1	12/10/10 19:31	WSD
Bromoform	ND	0.050		ND	0.52		1	12/10/10 19:31	WSD
Bromomethane	ND	0.050		ND	0.19		1	12/10/10 19:31	WSD
1,3-Butadiene	ND	0.050		ND	0.11		1	12/10/10 19:31	WSD
2-Butanone (MEK)	0.13	0.10		0.39	0.29		1	12/10/10 19:31	WSD
Carbon Disulfide	ND	0.050		ND	0.16		1	12/10/10 19:31	WSD
Carbon Tetrachloride	0.071	0.050		0.45	0.31		1	12/10/10 19:31	WSD
Chlorobenzene	ND	0.050		ND	0.23		1	12/10/10 19:31	WSD
Chloroethane	ND	0.050		ND	0.13		1	12/10/10 19:31	WSD
Chloroform	ND	0.050		ND	0.24		1	12/10/10 19:31	WSD
Chloromethane	0.48	0.050		0.98	0.10		1	12/10/10 19:31	WSD
Cyclohexane	ND	0.050		ND	0.17		1	12/10/10 19:31	WSD
Dibromochloromethane	ND	0.050		ND	0.43		1	12/10/10 19:31	WSD
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38		1	12/10/10 19:31	WSD
1,2-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 19:31	WSD
1,3-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 19:31	WSD
1,4-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 19:31	WSD
Dichlorodifluoromethane (Freon 12)	0.42	0.050		2.1	0.25		1	12/10/10 19:31	WSD
1,1-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 19:31	WSD
1,2-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 19:31	WSD
1,1-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 19:31	WSD
cis-1,2-Dichloroethylene	0.42	0.050		1.7	0.20		1	12/10/10 19:31	WSD
trans-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 19:31	WSD
1,2-Dichloropropane	ND	0.050		ND	0.23		1	12/10/10 19:31	WSD
cis-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 19:31	WSD
trans-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 19:31	WSD
Ethanol	1.3	0.50		2.4	0.94		1	12/10/10 19:31	WSD
Ethyl Acetate	ND	0.050		ND	0.18		1	12/10/10 19:31	WSD
Ethylbenzene	ND	0.050		ND	0.22		1	12/10/10 19:31	WSD
4-Ethyltoluene	ND	0.050		ND	0.25		1	12/10/10 19:31	WSD
Heptane	ND	0.050		ND	0.20		1	12/10/10 19:31	WSD
Hexachlorobutadiene	ND	0.050		ND	0.53		1	12/10/10 19:31	WSD
Hexane	ND	0.10		ND	0.35		1	12/10/10 19:31	WSD
2-Hexanone (MBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 19:31	WSD
Isopropanol	0.47	0.10		1.1	0.25		1	12/10/10 19:31	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-3-120710

Sample ID: 10L0202-03

Sample Matrix: Indoor air

Sampled: 12/7/2010 10:40

Sample Description/Location:

Sub Description/Location:

Canister ID: 1666

Canister Size: 6 liter

Flow Controller ID: 4057

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050		ND	0.18		1	12/10/10 19:31	WSD
Methylene Chloride	0.16	0.10		0.55	0.35		1	12/10/10 19:31	WSD
Methyl Methacrylate	ND	0.050		ND	0.20		1	12/10/10 19:31	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 19:31	WSD
Propene	ND	0.50		ND	0.86		1	12/10/10 19:31	WSD
Styrene	ND	0.050		ND	0.21		1	12/10/10 19:31	WSD
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34		1	12/10/10 19:31	WSD
Tetrachloroethylene	0.47	0.050		3.2	0.34		1	12/10/10 19:31	WSD
Tetrahydrofuran	ND	0.050		ND	0.15		1	12/10/10 19:31	WSD
Toluene	0.11	0.050		0.41	0.19		1	12/10/10 19:31	WSD
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37		1	12/10/10 19:31	WSD
1,1,1-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 19:31	WSD
1,1,2-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 19:31	WSD
Trichloroethylene	0.31	0.050		1.7	0.27		1	12/10/10 19:31	WSD
Trichlorofluoromethane (Freon 11)	0.21	0.050		1.2	0.28		1	12/10/10 19:31	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.072	0.050		0.55	0.38		1	12/10/10 19:31	WSD
1,2,4-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 19:31	WSD
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 19:31	WSD
Vinyl Acetate	ND	0.10		ND	0.35		1	12/10/10 19:31	WSD
Vinyl Chloride	0.052	0.050		0.13	0.13		1	12/10/10 19:31	WSD
m&p-Xylene	ND	0.10		ND	0.43		1	12/10/10 19:31	WSD
o-Xylene	ND	0.050		ND	0.22		1	12/10/10 19:31	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

95.1

70-130

12/10/10 19:31

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-4-120710

Sample ID: 10L0202-04

Sample Matrix: Indoor air

Sampled: 12/7/2010 10:42

Sample Description/Location:

Sub Description/Location:

Canister ID: 1717

Canister Size: 6 liter

Flow Controller ID: 4042

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -4

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	5.4	0.50	B	13	1.2		1	12/10/10 20:12	WSD
Benzene	0.15	0.050		0.49	0.16		1	12/10/10 20:12	WSD
Benzyl chloride	ND	0.050		ND	0.26		1	12/10/10 20:12	WSD
Bromodichloromethane	ND	0.050		ND	0.34		1	12/10/10 20:12	WSD
Bromoform	ND	0.050		ND	0.52		1	12/10/10 20:12	WSD
Bromomethane	ND	0.050		ND	0.19		1	12/10/10 20:12	WSD
1,3-Butadiene	ND	0.050		ND	0.11		1	12/10/10 20:12	WSD
2-Butanone (MEK)	0.33	0.10		0.96	0.29		1	12/10/10 20:12	WSD
Carbon Disulfide	ND	0.050		ND	0.16		1	12/10/10 20:12	WSD
Carbon Tetrachloride	0.073	0.050		0.46	0.31		1	12/10/10 20:12	WSD
Chlorobenzene	ND	0.050		ND	0.23		1	12/10/10 20:12	WSD
Chloroethane	ND	0.050		ND	0.13		1	12/10/10 20:12	WSD
Chloroform	ND	0.050		ND	0.24		1	12/10/10 20:12	WSD
Chloromethane	0.46	0.050		0.95	0.10		1	12/10/10 20:12	WSD
Cyclohexane	ND	0.050		ND	0.17		1	12/10/10 20:12	WSD
Dibromochloromethane	ND	0.050		ND	0.43		1	12/10/10 20:12	WSD
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38		1	12/10/10 20:12	WSD
1,2-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 20:12	WSD
1,3-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 20:12	WSD
1,4-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 20:12	WSD
Dichlorodifluoromethane (Freon 12)	0.41	0.050		2.0	0.25		1	12/10/10 20:12	WSD
1,1-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 20:12	WSD
1,2-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 20:12	WSD
1,1-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 20:12	WSD
cis-1,2-Dichloroethylene	0.45	0.050		1.8	0.20		1	12/10/10 20:12	WSD
trans-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 20:12	WSD
1,2-Dichloropropane	ND	0.050		ND	0.23		1	12/10/10 20:12	WSD
cis-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 20:12	WSD
trans-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 20:12	WSD
Ethanol	1.8	0.50		3.4	0.94		1	12/10/10 20:12	WSD
Ethyl Acetate	ND	0.050		ND	0.18		1	12/10/10 20:12	WSD
Ethylbenzene	ND	0.050		ND	0.22		1	12/10/10 20:12	WSD
4-Ethyltoluene	ND	0.050		ND	0.25		1	12/10/10 20:12	WSD
Heptane	ND	0.050		ND	0.20		1	12/10/10 20:12	WSD
Hexachlorobutadiene	ND	0.050		ND	0.53		1	12/10/10 20:12	WSD
Hexane	0.11	0.10		0.38	0.35		1	12/10/10 20:12	WSD
2-Hexanone (MBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 20:12	WSD
Isopropanol	0.20	0.10		0.48	0.25		1	12/10/10 20:12	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-4-120710

Sample ID: 10L0202-04

Sample Matrix: Indoor air

Sampled: 12/7/2010 10:42

Sample Description/Location:

Sub Description/Location:

Canister ID: 1717

Canister Size: 6 liter

Flow Controller ID: 4042

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -4

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050		ND	0.18		1	12/10/10 20:12	WSD
Methylene Chloride	0.23	0.10		0.79	0.35		1	12/10/10 20:12	WSD
Methyl Methacrylate	ND	0.050		ND	0.20		1	12/10/10 20:12	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 20:12	WSD
Propene	ND	0.50		ND	0.86		1	12/10/10 20:12	WSD
Styrene	ND	0.050		ND	0.21		1	12/10/10 20:12	WSD
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34		1	12/10/10 20:12	WSD
Tetrachloroethylene	0.50	0.050		3.4	0.34		1	12/10/10 20:12	WSD
Tetrahydrofuran	ND	0.050		ND	0.15		1	12/10/10 20:12	WSD
Toluene	0.11	0.050		0.43	0.19		1	12/10/10 20:12	WSD
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37		1	12/10/10 20:12	WSD
1,1,1-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 20:12	WSD
1,1,2-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 20:12	WSD
Trichloroethylene	0.33	0.050		1.8	0.27		1	12/10/10 20:12	WSD
Trichlorofluoromethane (Freon 11)	0.21	0.050		1.2	0.28		1	12/10/10 20:12	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.071	0.050		0.54	0.38		1	12/10/10 20:12	WSD
1,2,4-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 20:12	WSD
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 20:12	WSD
Vinyl Acetate	0.11	0.10		0.38	0.35		1	12/10/10 20:12	WSD
Vinyl Chloride	0.062	0.050		0.16	0.13		1	12/10/10 20:12	WSD
m&p-Xylene	ND	0.10		ND	0.43		1	12/10/10 20:12	WSD
o-Xylene	ND	0.050		ND	0.22		1	12/10/10 20:12	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

94.7

70-130

12/10/10 20:12

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-6-120710

Sample ID: 10L0202-05

Sample Matrix: Indoor air

Sampled: 12/7/2010 11:58

Sample Description/Location:

Sub Description/Location:

Canister ID: 1262

Canister Size: 6 liter

Flow Controller ID: 4071

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	4.8	0.50	B	11	1.2		1	12/10/10 20:54	WSD
Benzene	0.14	0.050		0.44	0.16		1	12/10/10 20:54	WSD
Benzyl chloride	ND	0.050		ND	0.26		1	12/10/10 20:54	WSD
Bromodichloromethane	ND	0.050		ND	0.34		1	12/10/10 20:54	WSD
Bromoform	ND	0.050		ND	0.52		1	12/10/10 20:54	WSD
Bromomethane	ND	0.050		ND	0.19		1	12/10/10 20:54	WSD
1,3-Butadiene	ND	0.050		ND	0.11		1	12/10/10 20:54	WSD
2-Butanone (MEK)	0.30	0.10		0.87	0.29		1	12/10/10 20:54	WSD
Carbon Disulfide	ND	0.050		ND	0.16		1	12/10/10 20:54	WSD
Carbon Tetrachloride	0.073	0.050		0.46	0.31		1	12/10/10 20:54	WSD
Chlorobenzene	ND	0.050		ND	0.23		1	12/10/10 20:54	WSD
Chloroethane	ND	0.050		ND	0.13		1	12/10/10 20:54	WSD
Chloroform	ND	0.050		ND	0.24		1	12/10/10 20:54	WSD
Chloromethane	0.46	0.050		0.95	0.10		1	12/10/10 20:54	WSD
Cyclohexane	ND	0.050		ND	0.17		1	12/10/10 20:54	WSD
Dibromochloromethane	ND	0.050		ND	0.43		1	12/10/10 20:54	WSD
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38		1	12/10/10 20:54	WSD
1,2-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 20:54	WSD
1,3-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 20:54	WSD
1,4-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 20:54	WSD
Dichlorodifluoromethane (Freon 12)	0.39	0.050		1.9	0.25		1	12/10/10 20:54	WSD
1,1-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 20:54	WSD
1,2-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 20:54	WSD
1,1-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 20:54	WSD
cis-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 20:54	WSD
trans-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 20:54	WSD
1,2-Dichloropropane	ND	0.050		ND	0.23		1	12/10/10 20:54	WSD
cis-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 20:54	WSD
trans-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 20:54	WSD
Ethanol	3.1	0.50		5.9	0.94		1	12/10/10 20:54	WSD
Ethyl Acetate	ND	0.050		ND	0.18		1	12/10/10 20:54	WSD
Ethylbenzene	ND	0.050		ND	0.22		1	12/10/10 20:54	WSD
4-Ethyltoluene	ND	0.050		ND	0.25		1	12/10/10 20:54	WSD
Heptane	ND	0.050		ND	0.20		1	12/10/10 20:54	WSD
Hexachlorobutadiene	ND	0.050		ND	0.53		1	12/10/10 20:54	WSD
Hexane	0.11	0.10		0.39	0.35		1	12/10/10 20:54	WSD
2-Hexanone (MBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 20:54	WSD
Isopropanol	0.43	0.10		1.1	0.25		1	12/10/10 20:54	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-6-120710

Sample ID: 10L0202-05

Sample Matrix: Indoor air

Sampled: 12/7/2010 11:58

Sample Description/Location:

Sub Description/Location:

Canister ID: 1262

Canister Size: 6 liter

Flow Controller ID: 4071

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050		ND	0.18		1	12/10/10 20:54	WSD
Methylene Chloride	0.27	0.10		0.94	0.35		1	12/10/10 20:54	WSD
Methyl Methacrylate	ND	0.050		ND	0.20		1	12/10/10 20:54	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 20:54	WSD
Propene	ND	0.50		ND	0.86		1	12/10/10 20:54	WSD
Styrene	ND	0.050		ND	0.21		1	12/10/10 20:54	WSD
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34		1	12/10/10 20:54	WSD
Tetrachloroethylene	ND	0.050		ND	0.34		1	12/10/10 20:54	WSD
Tetrahydrofuran	ND	0.050		ND	0.15		1	12/10/10 20:54	WSD
Toluene	0.11	0.050		0.40	0.19		1	12/10/10 20:54	WSD
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37		1	12/10/10 20:54	WSD
1,1,1-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 20:54	WSD
1,1,2-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 20:54	WSD
Trichloroethylene	ND	0.050		ND	0.27		1	12/10/10 20:54	WSD
Trichlorofluoromethane (Freon 11)	0.20	0.050		1.1	0.28		1	12/10/10 20:54	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.068	0.050		0.52	0.38		1	12/10/10 20:54	WSD
1,2,4-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 20:54	WSD
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 20:54	WSD
Vinyl Acetate	ND	0.10		ND	0.35		1	12/10/10 20:54	WSD
Vinyl Chloride	ND	0.050		ND	0.13		1	12/10/10 20:54	WSD
m&p-Xylene	ND	0.10		ND	0.43		1	12/10/10 20:54	WSD
o-Xylene	ND	0.050		ND	0.22		1	12/10/10 20:54	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)	94.8	70-130	12/10/10 20:54
--------------------------	------	--------	----------------

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-7-120710
Sample ID: 10L0202-06

Sample Matrix: Indoor air

Sampled: 12/7/2010 11:03

Sample Description/Location:

Sub Description/Location:

Canister ID: 1801

Canister Size: 6 liter

Flow Controller ID: 4074

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -5.5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	5.2	0.50	B	12	1.2		1	12/10/10 21:36	WSD
Benzene	0.14	0.050		0.45	0.16		1	12/10/10 21:36	WSD
Benzyl chloride	ND	0.050		ND	0.26		1	12/10/10 21:36	WSD
Bromodichloromethane	ND	0.050		ND	0.34		1	12/10/10 21:36	WSD
Bromoform	ND	0.050		ND	0.52		1	12/10/10 21:36	WSD
Bromomethane	ND	0.050		ND	0.19		1	12/10/10 21:36	WSD
1,3-Butadiene	ND	0.050		ND	0.11		1	12/10/10 21:36	WSD
2-Butanone (MEK)	0.14	0.10		0.42	0.29		1	12/10/10 21:36	WSD
Carbon Disulfide	ND	0.050		ND	0.16		1	12/10/10 21:36	WSD
Carbon Tetrachloride	0.072	0.050		0.45	0.31		1	12/10/10 21:36	WSD
Chlorobenzene	ND	0.050		ND	0.23		1	12/10/10 21:36	WSD
Chloroethane	ND	0.050		ND	0.13		1	12/10/10 21:36	WSD
Chloroform	ND	0.050		ND	0.24		1	12/10/10 21:36	WSD
Chloromethane	0.48	0.050		0.99	0.10		1	12/10/10 21:36	WSD
Cyclohexane	ND	0.050		ND	0.17		1	12/10/10 21:36	WSD
Dibromochloromethane	ND	0.050		ND	0.43		1	12/10/10 21:36	WSD
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38		1	12/10/10 21:36	WSD
1,2-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 21:36	WSD
1,3-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 21:36	WSD
1,4-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 21:36	WSD
Dichlorodifluoromethane (Freon 12)	0.41	0.050		2.0	0.25		1	12/10/10 21:36	WSD
1,1-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 21:36	WSD
1,2-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 21:36	WSD
1,1-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 21:36	WSD
cis-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 21:36	WSD
trans-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 21:36	WSD
1,2-Dichloropropane	ND	0.050		ND	0.23		1	12/10/10 21:36	WSD
cis-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 21:36	WSD
trans-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 21:36	WSD
Ethanol	7.1	0.50		13	0.94		1	12/10/10 21:36	WSD
Ethyl Acetate	ND	0.050		ND	0.18		1	12/10/10 21:36	WSD
Ethylbenzene	ND	0.050		ND	0.22		1	12/10/10 21:36	WSD
4-Ethyltoluene	ND	0.050		ND	0.25		1	12/10/10 21:36	WSD
Heptane	0.081	0.050		0.33	0.20		1	12/10/10 21:36	WSD
Hexachlorobutadiene	ND	0.050		ND	0.53		1	12/10/10 21:36	WSD
Hexane	0.14	0.10		0.50	0.35		1	12/10/10 21:36	WSD
2-Hexanone (MBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 21:36	WSD
Isopropanol	1.1	0.10		2.8	0.25		1	12/10/10 21:36	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: IA-7-120710
Sample ID: 10L0202-06

Sample Matrix: Indoor air

Sampled: 12/7/2010 11:03

Sample Description/Location:

Sub Description/Location:

Canister ID: 1801

Canister Size: 6 liter

Flow Controller ID: 4074

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -5.5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050		ND	0.18		1	12/10/10 21:36	WSD
Methylene Chloride	0.38	0.10		1.3	0.35		1	12/10/10 21:36	WSD
Methyl Methacrylate	ND	0.050		ND	0.20		1	12/10/10 21:36	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 21:36	WSD
Propene	ND	0.50		ND	0.86		1	12/10/10 21:36	WSD
Styrene	ND	0.050		ND	0.21		1	12/10/10 21:36	WSD
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34		1	12/10/10 21:36	WSD
Tetrachloroethylene	ND	0.050		ND	0.34		1	12/10/10 21:36	WSD
Tetrahydrofuran	ND	0.050		ND	0.15		1	12/10/10 21:36	WSD
Toluene	0.13	0.050		0.48	0.19		1	12/10/10 21:36	WSD
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37		1	12/10/10 21:36	WSD
1,1,1-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 21:36	WSD
1,1,2-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 21:36	WSD
Trichloroethylene	ND	0.050		ND	0.27		1	12/10/10 21:36	WSD
Trichlorofluoromethane (Freon 11)	0.21	0.050		1.2	0.28		1	12/10/10 21:36	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.072	0.050		0.55	0.38		1	12/10/10 21:36	WSD
1,2,4-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 21:36	WSD
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 21:36	WSD
Vinyl Acetate	ND	0.10		ND	0.35		1	12/10/10 21:36	WSD
Vinyl Chloride	ND	0.050		ND	0.13		1	12/10/10 21:36	WSD
m&p-Xylene	ND	0.10		ND	0.43		1	12/10/10 21:36	WSD
o-Xylene	ND	0.050		ND	0.22		1	12/10/10 21:36	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

94.7

70-130

12/10/10 21:36

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: AA-1-120710

Sample ID: 10L0202-07

Sample Matrix: Ambient Air

Sampled: 12/7/2010 10:49

Sample Description/Location:

Sub Description/Location:

Canister ID: 1887

Canister Size: 6 liter

Flow Controller ID: 4080

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -1.5

Receipt Vacuum(in Hg): -1

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	2.4	0.50	B	5.7	1.2		1	12/10/10 17:27	WSD
Benzene	0.088	0.050		0.28	0.16		1	12/10/10 17:27	WSD
Benzyl chloride	ND	0.050		ND	0.26		1	12/10/10 17:27	WSD
Bromodichloromethane	ND	0.050		ND	0.34		1	12/10/10 17:27	WSD
Bromoform	ND	0.050		ND	0.52		1	12/10/10 17:27	WSD
Bromomethane	ND	0.050		ND	0.19		1	12/10/10 17:27	WSD
1,3-Butadiene	ND	0.050		ND	0.11		1	12/10/10 17:27	WSD
2-Butanone (MEK)	0.12	0.10		0.37	0.29		1	12/10/10 17:27	WSD
Carbon Disulfide	0.12	0.050		0.38	0.16		1	12/10/10 17:27	WSD
Carbon Tetrachloride	0.066	0.050		0.42	0.31		1	12/10/10 17:27	WSD
Chlorobenzene	ND	0.050		ND	0.23		1	12/10/10 17:27	WSD
Chloroethane	ND	0.050		ND	0.13		1	12/10/10 17:27	WSD
Chloroform	ND	0.050		ND	0.24		1	12/10/10 17:27	WSD
Chloromethane	0.46	0.050		0.94	0.10		1	12/10/10 17:27	WSD
Cyclohexane	ND	0.050		ND	0.17		1	12/10/10 17:27	WSD
Dibromochloromethane	ND	0.050		ND	0.43		1	12/10/10 17:27	WSD
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38		1	12/10/10 17:27	WSD
1,2-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 17:27	WSD
1,3-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 17:27	WSD
1,4-Dichlorobenzene	ND	0.050		ND	0.30		1	12/10/10 17:27	WSD
Dichlorodifluoromethane (Freon 12)	0.39	0.050		1.9	0.25		1	12/10/10 17:27	WSD
1,1-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 17:27	WSD
1,2-Dichloroethane	ND	0.050		ND	0.20		1	12/10/10 17:27	WSD
1,1-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 17:27	WSD
cis-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 17:27	WSD
trans-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/10/10 17:27	WSD
1,2-Dichloropropane	ND	0.050		ND	0.23		1	12/10/10 17:27	WSD
cis-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 17:27	WSD
trans-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/10/10 17:27	WSD
Ethanol	1.2	0.50		2.3	0.94		1	12/10/10 17:27	WSD
Ethyl Acetate	ND	0.050		ND	0.18		1	12/10/10 17:27	WSD
Ethylbenzene	ND	0.050		ND	0.22		1	12/10/10 17:27	WSD
4-Ethyltoluene	ND	0.050		ND	0.25		1	12/10/10 17:27	WSD
Heptane	ND	0.050		ND	0.20		1	12/10/10 17:27	WSD
Hexachlorobutadiene	ND	0.050		ND	0.53		1	12/10/10 17:27	WSD
Hexane	ND	0.10		ND	0.35		1	12/10/10 17:27	WSD
2-Hexanone (MBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 17:27	WSD
Isopropanol	0.12	0.10		0.29	0.25		1	12/10/10 17:27	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: AA-1-120710

Sample ID: 10L0202-07

Sample Matrix: Ambient Air

Sampled: 12/7/2010 10:49

Sample Description/Location:

Sub Description/Location:

Canister ID: 1887

Canister Size: 6 liter

Flow Controller ID: 4080

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -1.5

Receipt Vacuum(in Hg): -1

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050		ND	0.18		1	12/10/10 17:27	WSD
Methylene Chloride	0.19	0.10		0.66	0.35		1	12/10/10 17:27	WSD
Methyl Methacrylate	ND	0.050		ND	0.20		1	12/10/10 17:27	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	L-03	ND	0.20		1	12/10/10 17:27	WSD
Propene	ND	0.50		ND	0.86		1	12/10/10 17:27	WSD
Styrene	ND	0.050		ND	0.21		1	12/10/10 17:27	WSD
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34		1	12/10/10 17:27	WSD
Tetrachloroethylene	ND	0.050		ND	0.34		1	12/10/10 17:27	WSD
Tetrahydrofuran	ND	0.050		ND	0.15		1	12/10/10 17:27	WSD
Toluene	ND	0.050		ND	0.19		1	12/10/10 17:27	WSD
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37		1	12/10/10 17:27	WSD
1,1,1-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 17:27	WSD
1,1,2-Trichloroethane	ND	0.050		ND	0.27		1	12/10/10 17:27	WSD
Trichloroethylene	ND	0.050		ND	0.27		1	12/10/10 17:27	WSD
Trichlorofluoromethane (Freon 11)	0.20	0.050		1.2	0.28		1	12/10/10 17:27	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.073	0.050		0.56	0.38		1	12/10/10 17:27	WSD
1,2,4-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 17:27	WSD
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25		1	12/10/10 17:27	WSD
Vinyl Acetate	ND	0.10		ND	0.35		1	12/10/10 17:27	WSD
Vinyl Chloride	ND	0.050		ND	0.13		1	12/10/10 17:27	WSD
m&p-Xylene	ND	0.10		ND	0.43		1	12/10/10 17:27	WSD
o-Xylene	ND	0.050		ND	0.22		1	12/10/10 17:27	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

95.7

70-130

12/10/10 17:27

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: EW-5-120710

Sample ID: 10L0202-08

Sample Matrix: Soil Gas

Sampled: 12/7/2010 14:52

Sample Description/Location:

Sub Description/Location:

Canister ID: 1268

Canister Size: 6 liter

Flow Controller ID: 4103

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -27.5

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -6

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	850	100	B	2000	240		200	12/14/10 16:51	WSD
Benzene	1.3	0.20		4.2	0.64		4	12/14/10 5:41	WSD
Benzyl chloride	ND	0.20		ND	1.0		4	12/14/10 5:41	WSD
Bromodichloromethane	ND	0.20		ND	1.3		4	12/14/10 5:41	WSD
Bromoform	ND	0.20		ND	2.1		4	12/14/10 5:41	WSD
Bromomethane	ND	0.20		ND	0.78		4	12/14/10 5:41	WSD
1,3-Butadiene	ND	0.20		ND	0.44		4	12/14/10 5:41	WSD
2-Butanone (MEK)	1400	20		4000	59		200	12/14/10 16:51	WSD
Carbon Disulfide	2.6	0.20		8.0	0.62		4	12/14/10 5:41	WSD
Carbon Tetrachloride	ND	0.20		ND	1.3		4	12/14/10 5:41	WSD
Chlorobenzene	ND	0.20		ND	0.92		4	12/14/10 5:41	WSD
Chloroethane	1.2	0.20		3.1	0.53		4	12/14/10 5:41	WSD
Chloroform	0.22	0.20		1.1	0.98		4	12/14/10 5:41	WSD
Chloromethane	ND	0.20		ND	0.41		4	12/14/10 5:41	WSD
Cyclohexane	ND	0.20		ND	0.69		4	12/14/10 5:41	WSD
Dibromochloromethane	ND	0.20		ND	1.7		4	12/14/10 5:41	WSD
1,2-Dibromoethane (EDB)	ND	0.20		ND	1.5		4	12/14/10 5:41	WSD
1,2-Dichlorobenzene	ND	0.20		ND	1.2		4	12/14/10 5:41	WSD
1,3-Dichlorobenzene	ND	0.20		ND	1.2		4	12/14/10 5:41	WSD
1,4-Dichlorobenzene	ND	0.20		ND	1.2		4	12/14/10 5:41	WSD
Dichlorodifluoromethane (Freon 12)	0.48	0.20		2.4	0.99		4	12/14/10 5:41	WSD
1,1-Dichloroethane	7.3	0.20		29	0.81		4	12/14/10 5:41	WSD
1,2-Dichloroethane	ND	0.20		ND	0.81		4	12/14/10 5:41	WSD
1,1-Dichloroethylene	3.2	0.20		13	0.79		4	12/14/10 5:41	WSD
cis-1,2-Dichloroethylene	4.2	0.20		17	0.79		4	12/14/10 5:41	WSD
trans-1,2-Dichloroethylene	ND	0.20		ND	0.79		4	12/14/10 5:41	WSD
1,2-Dichloropropane	ND	0.20		ND	0.92		4	12/14/10 5:41	WSD
cis-1,3-Dichloropropene	ND	0.20		ND	0.91		4	12/14/10 5:41	WSD
trans-1,3-Dichloropropene	ND	0.20		ND	0.91		4	12/14/10 5:41	WSD
Ethanol	12	2.0		23	3.8		4	12/14/10 5:41	WSD
Ethyl Acetate	0.96	0.20		3.4	0.72		4	12/14/10 5:41	WSD
Ethylbenzene	ND	0.20		ND	0.87		4	12/14/10 5:41	WSD
4-Ethyltoluene	ND	0.20		ND	0.98		4	12/14/10 5:41	WSD
Heptane	ND	0.20		ND	0.82		4	12/14/10 5:41	WSD
Hexachlorobutadiene	ND	0.20		ND	2.1		4	12/14/10 5:41	WSD
Hexane	ND	0.40		ND	1.4		4	12/14/10 5:41	WSD
2-Hexanone (MBK)	ND	0.20	L-03	ND	0.82		4	12/14/10 5:41	WSD
Isopropanol	4.5	0.40		11	0.98		4	12/14/10 5:41	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: EW-5-120710

Sample ID: 10L0202-08

Sample Matrix: Soil Gas

Sampled: 12/7/2010 14:52

Sample Description/Location:

Sub Description/Location:

Canister ID: 1268

Canister Size: 6 liter

Flow Controller ID: 4103

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -27.5

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -6

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.20		ND	0.72		4	12/14/10 5:41	WSD
Methylene Chloride	ND	0.40		ND	1.4		4	12/14/10 5:41	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.20	L-03	ND	0.82		4	12/14/10 5:41	WSD
Propene	ND	0.80		ND	1.4		4	12/14/10 5:41	WSD
Styrene	ND	0.20		ND	0.85		4	12/14/10 5:41	WSD
1,1,2,2-Tetrachloroethane	ND	0.20		ND	1.4		4	12/14/10 5:41	WSD
Tetrachloroethylene	0.59	0.20		4.0	1.4		4	12/14/10 5:41	WSD
Tetrahydrofuran	2800	10		8200	29		200	12/14/10 16:51	WSD
Toluene	ND	0.20		ND	0.75		4	12/14/10 5:41	WSD
1,2,4-Trichlorobenzene	ND	0.20		ND	1.5		4	12/14/10 5:41	WSD
1,1,1-Trichloroethane	38	0.20		210	1.1		4	12/14/10 5:41	WSD
1,1,2-Trichloroethane	ND	0.20		ND	1.1		4	12/14/10 5:41	WSD
Trichloroethylene	76	0.20		410	1.1		4	12/14/10 5:41	WSD
Trichlorofluoromethane (Freon 11)	0.91	0.20		5.1	1.1		4	12/14/10 5:41	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.20		ND	1.5		4	12/14/10 5:41	WSD
1,2,4-Trimethylbenzene	ND	0.20		ND	0.98		4	12/14/10 5:41	WSD
1,3,5-Trimethylbenzene	ND	0.20		ND	0.98		4	12/14/10 5:41	WSD
Vinyl Acetate	ND	0.40	L-03	ND	1.4		4	12/14/10 5:41	WSD
Vinyl Chloride	0.95	0.20		2.4	0.51		4	12/14/10 5:41	WSD
m&p-Xylene	ND	0.40		ND	1.7		4	12/14/10 5:41	WSD
o-Xylene	ND	0.20		ND	0.87		4	12/14/10 5:41	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	99.4	70-130	12/14/10 16:51
4-Bromofluorobenzene (1)	98.6	70-130	12/14/10 5:41

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: EW-6-120710

Sample ID: 10L0202-09

Sample Matrix: Soil Gas

Sampled: 12/7/2010 14:58

Sample Description/Location:

Sub Description/Location:

Canister ID: 1493

Canister Size: 6 liter

Flow Controller ID: 4039

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	6.1	1.0	B	15	2.4		2	12/14/10 6:23	WSD
Benzene	0.29	0.10		0.92	0.32		2	12/14/10 6:23	WSD
Benzyl chloride	ND	0.10		ND	0.52		2	12/14/10 6:23	WSD
Bromodichloromethane	ND	0.10		ND	0.67		2	12/14/10 6:23	WSD
Bromoform	ND	0.10		ND	1.0		2	12/14/10 6:23	WSD
Bromomethane	ND	0.10		ND	0.39		2	12/14/10 6:23	WSD
1,3-Butadiene	ND	0.10		ND	0.22		2	12/14/10 6:23	WSD
2-Butanone (MEK)	6.7	0.20		20	0.59		2	12/14/10 6:23	WSD
Carbon Disulfide	0.21	0.10		0.66	0.31		2	12/14/10 6:23	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63		2	12/14/10 6:23	WSD
Chlorobenzene	ND	0.10		ND	0.46		2	12/14/10 6:23	WSD
Chloroethane	ND	0.10		ND	0.26		2	12/14/10 6:23	WSD
Chloroform	0.48	0.10		2.4	0.49		2	12/14/10 6:23	WSD
Chloromethane	ND	0.10		ND	0.21		2	12/14/10 6:23	WSD
Cyclohexane	ND	0.10		ND	0.34		2	12/14/10 6:23	WSD
Dibromochloromethane	ND	0.10		ND	0.85		2	12/14/10 6:23	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77		2	12/14/10 6:23	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 6:23	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 6:23	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 6:23	WSD
Dichlorodifluoromethane (Freon 12)	0.47	0.10		2.3	0.49		2	12/14/10 6:23	WSD
1,1-Dichloroethane	5.3	0.10		21	0.40		2	12/14/10 6:23	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40		2	12/14/10 6:23	WSD
1,1-Dichloroethylene	ND	0.10		ND	0.40		2	12/14/10 6:23	WSD
cis-1,2-Dichloroethylene	0.57	0.10		2.3	0.40		2	12/14/10 6:23	WSD
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40		2	12/14/10 6:23	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46		2	12/14/10 6:23	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45		2	12/14/10 6:23	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45		2	12/14/10 6:23	WSD
Ethanol	2.4	1.0		4.6	1.9		2	12/14/10 6:23	WSD
Ethyl Acetate	ND	0.10		ND	0.36		2	12/14/10 6:23	WSD
Ethylbenzene	ND	0.10		ND	0.43		2	12/14/10 6:23	WSD
4-Ethyltoluene	ND	0.10		ND	0.49		2	12/14/10 6:23	WSD
Heptane	ND	0.10		ND	0.41		2	12/14/10 6:23	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1		2	12/14/10 6:23	WSD
Hexane	ND	0.20		ND	0.70		2	12/14/10 6:23	WSD
2-Hexanone (MBK)	ND	0.10	L-03	ND	0.41		2	12/14/10 6:23	WSD
Isopropanol	ND	0.20		ND	0.49		2	12/14/10 6:23	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: EW-6-120710

Sample ID: 10L0202-09

Sample Matrix: Soil Gas

Sampled: 12/7/2010 14:58

Sample Description/Location:

Sub Description/Location:

Canister ID: 1493

Canister Size: 6 liter

Flow Controller ID: 4039

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36		2	12/14/10 6:23	WSD
Methylene Chloride	0.36	0.20		1.3	0.69		2	12/14/10 6:23	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	L-03	ND	0.41		2	12/14/10 6:23	WSD
Propene	ND	0.40		ND	0.69		2	12/14/10 6:23	WSD
Styrene	ND	0.10		ND	0.43		2	12/14/10 6:23	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69		2	12/14/10 6:23	WSD
Tetrachloroethylene	1.2	0.10		8.1	0.68		2	12/14/10 6:23	WSD
Tetrahydrofuran	140	1.0		400	2.9		20	12/10/10 22:56	WSD
Tetrahydrofuran	160	0.10		480	0.29		2	12/14/10 6:23	WSD
Toluene	ND	0.10		ND	0.38		2	12/14/10 6:23	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74		2	12/14/10 6:23	WSD
1,1,1-Trichloroethane	24	0.10		130	0.55		2	12/14/10 6:23	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55		2	12/14/10 6:23	WSD
Trichloroethylene	46	0.10		250	0.54		2	12/14/10 6:23	WSD
Trichlorofluoromethane (Freon 11)	4.9	0.10		28	0.56		2	12/14/10 6:23	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77		2	12/14/10 6:23	WSD
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49		2	12/14/10 6:23	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49		2	12/14/10 6:23	WSD
Vinyl Acetate	ND	0.20	L-03	ND	0.70		2	12/14/10 6:23	WSD
Vinyl Chloride	ND	0.10		ND	0.26		2	12/14/10 6:23	WSD
m&p-Xylene	ND	0.20		ND	0.87		2	12/14/10 6:23	WSD
o-Xylene	ND	0.10		ND	0.43		2	12/14/10 6:23	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.8	70-130	12/10/10 22:56
4-Bromofluorobenzene (1)	98.8	70-130	12/14/10 6:23

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: EW-7-120710

Sample ID: 10L0202-10

Sample Matrix: Soil Gas

Sampled: 12/7/2010 11:36

Sample Description/Location:

Sub Description/Location:

Canister ID: 1095

Canister Size: 6 liter

Flow Controller ID: 4067

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -5.5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	18	1.0	B	42	2.4		2	12/14/10 7:04	WSD
Benzene	0.45	0.10		1.4	0.32		2	12/14/10 7:04	WSD
Benzyl chloride	ND	0.10		ND	0.52		2	12/14/10 7:04	WSD
Bromodichloromethane	ND	0.10		ND	0.67		2	12/14/10 7:04	WSD
Bromoform	ND	0.10		ND	1.0		2	12/14/10 7:04	WSD
Bromomethane	ND	0.10		ND	0.39		2	12/14/10 7:04	WSD
1,3-Butadiene	ND	0.10		ND	0.22		2	12/14/10 7:04	WSD
2-Butanone (MEK)	1.4	0.20		4.1	0.59		2	12/14/10 7:04	WSD
Carbon Disulfide	0.25	0.10		0.78	0.31		2	12/14/10 7:04	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63		2	12/14/10 7:04	WSD
Chlorobenzene	ND	0.10		ND	0.46		2	12/14/10 7:04	WSD
Chloroethane	0.77	0.10		2.0	0.26		2	12/14/10 7:04	WSD
Chloroform	0.81	0.10		3.9	0.49		2	12/14/10 7:04	WSD
Chloromethane	ND	0.10		ND	0.21		2	12/14/10 7:04	WSD
Cyclohexane	ND	0.10		ND	0.34		2	12/14/10 7:04	WSD
Dibromochloromethane	ND	0.10		ND	0.85		2	12/14/10 7:04	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77		2	12/14/10 7:04	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 7:04	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 7:04	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 7:04	WSD
Dichlorodifluoromethane (Freon 12)	0.42	0.10		2.1	0.49		2	12/14/10 7:04	WSD
1,1-Dichloroethane	54	0.10		220	0.40		2	12/14/10 7:04	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40		2	12/14/10 7:04	WSD
1,1-Dichloroethylene	0.16	0.10		0.63	0.40		2	12/14/10 7:04	WSD
cis-1,2-Dichloroethylene	89	0.10		350	0.40		2	12/14/10 7:04	WSD
trans-1,2-Dichloroethylene	20	0.10		78	0.40		2	12/14/10 7:04	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46		2	12/14/10 7:04	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45		2	12/14/10 7:04	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45		2	12/14/10 7:04	WSD
Ethanol	ND	1.0		ND	1.9		2	12/14/10 7:04	WSD
Ethyl Acetate	ND	0.10		ND	0.36		2	12/14/10 7:04	WSD
Ethylbenzene	ND	0.10		ND	0.43		2	12/14/10 7:04	WSD
4-Ethyltoluene	ND	0.10		ND	0.49		2	12/14/10 7:04	WSD
Heptane	ND	0.10		ND	0.41		2	12/14/10 7:04	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1		2	12/14/10 7:04	WSD
Hexane	0.25	0.20		0.87	0.70		2	12/14/10 7:04	WSD
2-Hexanone (MBK)	ND	0.10	L-03	ND	0.41		2	12/14/10 7:04	WSD
Isopropanol	1.1	0.20		2.8	0.49		2	12/14/10 7:04	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: EW-7-120710

Sample ID: 10L0202-10

Sample Matrix: Soil Gas

Sampled: 12/7/2010 11:36

Sample Description/Location:

Sub Description/Location:

Canister ID: 1095

Canister Size: 6 liter

Flow Controller ID: 4067

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -5.5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36		2	12/14/10 7:04	WSD
Methylene Chloride	0.54	0.20		1.9	0.69		2	12/14/10 7:04	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	L-03	ND	0.41		2	12/14/10 7:04	WSD
Propene	ND	0.40		ND	0.69		2	12/14/10 7:04	WSD
Styrene	ND	0.10		ND	0.43		2	12/14/10 7:04	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69		2	12/14/10 7:04	WSD
Tetrachloroethylene	28	0.10		190	0.68		2	12/14/10 7:04	WSD
Tetrahydrofuran	2.1	0.10		6.1	0.29		2	12/14/10 7:04	WSD
Toluene	0.12	0.10		0.47	0.38		2	12/14/10 7:04	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74		2	12/14/10 7:04	WSD
1,1,1-Trichloroethane	29	0.10		160	0.55		2	12/14/10 7:04	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55		2	12/14/10 7:04	WSD
Trichloroethylene	82	0.10		440	0.54		2	12/14/10 7:04	WSD
Trichlorofluoromethane (Freon 11)	94	0.10		530	0.56		2	12/14/10 7:04	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.12	0.10		0.89	0.77		2	12/14/10 7:04	WSD
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49		2	12/14/10 7:04	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49		2	12/14/10 7:04	WSD
Vinyl Acetate	ND	0.20	L-03	ND	0.70		2	12/14/10 7:04	WSD
Vinyl Chloride	0.16	0.10		0.41	0.26		2	12/14/10 7:04	WSD
m&p-Xylene	ND	0.20		ND	0.87		2	12/14/10 7:04	WSD
o-Xylene	ND	0.10		ND	0.43		2	12/14/10 7:04	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	101	70-130	12/14/10 7:04

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: EW-Combined-120710

Sample ID: 10L0202-11

Sample Matrix: Soil Gas

Sampled: 12/7/2010 15:07

Sample Description/Location:

Sub Description/Location:

Canister ID: 1314

Canister Size: 6 liter

Flow Controller ID: 4083

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -6

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	4.8	1.0	B	11	2.4		2	12/14/10 7:46	WSD
Benzene	0.16	0.10		0.50	0.32		2	12/14/10 7:46	WSD
Benzyl chloride	ND	0.10		ND	0.52		2	12/14/10 7:46	WSD
Bromodichloromethane	ND	0.10		ND	0.67		2	12/14/10 7:46	WSD
Bromoform	ND	0.10		ND	1.0		2	12/14/10 7:46	WSD
Bromomethane	ND	0.10		ND	0.39		2	12/14/10 7:46	WSD
1,3-Butadiene	ND	0.10		ND	0.22		2	12/14/10 7:46	WSD
2-Butanone (MEK)	1.5	0.20		4.5	0.59		2	12/14/10 7:46	WSD
Carbon Disulfide	ND	0.10		ND	0.31		2	12/14/10 7:46	WSD
Carbon Tetrachloride	ND	0.10		ND	0.63		2	12/14/10 7:46	WSD
Chlorobenzene	ND	0.10		ND	0.46		2	12/14/10 7:46	WSD
Chloroethane	0.39	0.10		1.0	0.26		2	12/14/10 7:46	WSD
Chloroform	0.33	0.10		1.6	0.49		2	12/14/10 7:46	WSD
Chloromethane	ND	0.10		ND	0.21		2	12/14/10 7:46	WSD
Cyclohexane	ND	0.10		ND	0.34		2	12/14/10 7:46	WSD
Dibromochloromethane	ND	0.10		ND	0.85		2	12/14/10 7:46	WSD
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77		2	12/14/10 7:46	WSD
1,2-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 7:46	WSD
1,3-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 7:46	WSD
1,4-Dichlorobenzene	ND	0.10		ND	0.60		2	12/14/10 7:46	WSD
Dichlorodifluoromethane (Freon 12)	0.61	0.10		3.0	0.49		2	12/14/10 7:46	WSD
1,1-Dichloroethane	8.8	0.10		36	0.40		2	12/14/10 7:46	WSD
1,2-Dichloroethane	ND	0.10		ND	0.40		2	12/14/10 7:46	WSD
1,1-Dichloroethylene	1.9	0.10		7.3	0.40		2	12/14/10 7:46	WSD
cis-1,2-Dichloroethylene	7.1	0.10		28	0.40		2	12/14/10 7:46	WSD
trans-1,2-Dichloroethylene	0.15	0.10		0.60	0.40		2	12/14/10 7:46	WSD
1,2-Dichloropropane	ND	0.10		ND	0.46		2	12/14/10 7:46	WSD
cis-1,3-Dichloropropene	ND	0.10		ND	0.45		2	12/14/10 7:46	WSD
trans-1,3-Dichloropropene	ND	0.10		ND	0.45		2	12/14/10 7:46	WSD
Ethanol	4.4	1.0		8.2	1.9		2	12/14/10 7:46	WSD
Ethyl Acetate	ND	0.10		ND	0.36		2	12/14/10 7:46	WSD
Ethylbenzene	ND	0.10		ND	0.43		2	12/14/10 7:46	WSD
4-Ethyltoluene	ND	0.10		ND	0.49		2	12/14/10 7:46	WSD
Heptane	ND	0.10		ND	0.41		2	12/14/10 7:46	WSD
Hexachlorobutadiene	ND	0.10		ND	1.1		2	12/14/10 7:46	WSD
Hexane	ND	0.20		ND	0.70		2	12/14/10 7:46	WSD
2-Hexanone (MBK)	ND	0.10	L-03	ND	0.41		2	12/14/10 7:46	WSD
Isopropanol	0.34	0.20		0.84	0.49		2	12/14/10 7:46	WSD

ANALYTICAL RESULTS

Project Location: Providence RI, Gorham Site

Date Received: 12/7/2010

Field Sample #: EW-Combined-120710

Sample ID: 10L0202-11

Sample Matrix: Soil Gas

Sampled: 12/7/2010 15:07

Sample Description/Location:

Sub Description/Location:

Canister ID: 1314

Canister Size: 6 liter

Flow Controller ID: 4083

Sample Type: 30 min

Work Order: 10L0202

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -6

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36		2	12/14/10 7:46	WSD
Methylene Chloride	0.22	0.20		0.78	0.69		2	12/14/10 7:46	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	L-03	ND	0.41		2	12/14/10 7:46	WSD
Propene	1.0	0.40		1.8	0.69		2	12/14/10 7:46	WSD
Styrene	ND	0.10		ND	0.43		2	12/14/10 7:46	WSD
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69		2	12/14/10 7:46	WSD
Tetrachloroethylene	24	0.10		160	0.68		2	12/14/10 7:46	WSD
Tetrahydrofuran	3.6	0.10		11	0.29		2	12/14/10 7:46	WSD
Toluene	0.10	0.10		0.38	0.38		2	12/14/10 7:46	WSD
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74		2	12/14/10 7:46	WSD
1,1,1-Trichloroethane	52	0.10		280	0.55		2	12/14/10 7:46	WSD
1,1,2-Trichloroethane	ND	0.10		ND	0.55		2	12/14/10 7:46	WSD
Trichloroethylene	45	0.10		240	0.54		2	12/14/10 7:46	WSD
Trichlorofluoromethane (Freon 11)	13	0.10		71	0.56		2	12/14/10 7:46	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10		ND	0.77		2	12/14/10 7:46	WSD
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49		2	12/14/10 7:46	WSD
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49		2	12/14/10 7:46	WSD
Vinyl Acetate	ND	0.20	L-03	ND	0.70		2	12/14/10 7:46	WSD
Vinyl Chloride	ND	0.10		ND	0.26		2	12/14/10 7:46	WSD
m&p-Xylene	ND	0.20		ND	0.87		2	12/14/10 7:46	WSD
o-Xylene	ND	0.10		ND	0.43		2	12/14/10 7:46	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	100	70-130	12/14/10 7:46

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
10L0202-01 [IA-1-120710]	B023757	1	1	N/A	1000	400	400	12/10/10
10L0202-02 [IA-2-120710]	B023757	1	1	N/A	1000	400	400	12/10/10
10L0202-03 [IA-3-120710]	B023757	1	1	N/A	1000	400	400	12/10/10
10L0202-04 [IA-4-120710]	B023757	1	1	N/A	1000	400	400	12/10/10
10L0202-05 [IA-6-120710]	B023757	1	1	N/A	1000	400	400	12/10/10
10L0202-06 [IA-7-120710]	B023757	1	1	N/A	1000	400	400	12/10/10
10L0202-07 [AA-1-120710]	B023757	1	1	N/A	1000	400	400	12/10/10
10L0202-09RE1 [EW-6-120710]	B023757	1	1	N/A	1000	400	20	12/10/10

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
10L0202-08 [EW-5-120710]	B023774	2	1	N/A	1000	400	200	12/13/10
10L0202-08RE1 [EW-5-120710]	B023774	2	100	10	1000	400	400	12/13/10
10L0202-09 [EW-6-120710]	B023774	1	1	N/A	1000	400	200	12/13/10
10L0202-10 [EW-7-120710]	B023774	1	1	N/A	1000	400	200	12/13/10
10L0202-11 [EW-Combined-120710]	B023774	1	1	N/A	1000	400	200	12/13/10

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 B023757 - TO-15 Prep

Blank (B023757-BLK1)	Prepared & Analyzed: 12/10/10									
Acetone	0.28	0.10								B
Benzene	ND	0.025								
Benzyl chloride	ND	0.025								
Bromodichloromethane	ND	0.025								
Bromoform	ND	0.025								
Bromomethane	ND	0.025								
1,3-Butadiene	ND	0.025								
2-Butanone (MEK)	ND	0.025								
Carbon Disulfide	ND	0.025								
Carbon Tetrachloride	ND	0.025								
Chlorobenzene	ND	0.025								
Chloroethane	ND	0.025								
Chloroform	ND	0.025								
Chloromethane	ND	0.025								
Cyclohexane	ND	0.025								
Dibromochloromethane	ND	0.025								
1,2-Dibromoethane (EDB)	ND	0.025								
1,2-Dichlorobenzene	ND	0.025								
1,3-Dichlorobenzene	ND	0.025								
1,4-Dichlorobenzene	ND	0.025								
Dichlorodifluoromethane (Freon 12)	ND	0.025								
1,1-Dichloroethane	ND	0.025								
1,2-Dichloroethane	ND	0.025								
1,1-Dichloroethylene	ND	0.025								
cis-1,2-Dichloroethylene	ND	0.025								
trans-1,2-Dichloroethylene	ND	0.025								
1,2-Dichloropropane	ND	0.025								
cis-1,3-Dichloropropene	ND	0.025								
trans-1,3-Dichloropropene	ND	0.025								
Ethanol	ND	0.10								
Ethyl Acetate	ND	0.025								
Ethylbenzene	ND	0.025								
4-Ethyltoluene	ND	0.025								
Heptane	ND	0.025								
Hexachlorobutadiene	ND	0.025								
Hexane	ND	0.025								
2-Hexanone (MBK)	ND	0.025								L-03
Isopropanol	ND	0.025								
Methyl tert-Butyl Ether (MTBE)	ND	0.025								
Methylene Chloride	ND	0.10								
Methyl Methacrylate	ND	0.025								
4-Methyl-2-pentanone (MIBK)	ND	0.025								L-03
Propene	ND	0.025								
Styrene	ND	0.025								
1,1,2,2-Tetrachloroethane	ND	0.025								
Tetrachloroethylene	ND	0.025								

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 B023757 - TO-15 Prep

Blank (B023757-BLK1)	Prepared & Analyzed: 12/10/10										
Tetrahydrofuran	ND	0.025									
Toluene	ND	0.025									
1,2,4-Trichlorobenzene	ND	0.025									
1,1,1-Trichloroethane	ND	0.025									
1,1,2-Trichloroethane	ND	0.025									
Trichloroethylene	ND	0.025									
Trichlorofluoromethane (Freon 11)	ND	0.025									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.025									
1,2,4-Trimethylbenzene	ND	0.025									
1,3,5-Trimethylbenzene	ND	0.025									
Vinyl Acetate	ND	0.025									
Vinyl Chloride	ND	0.025									
m&p-Xylene	ND	0.050									
o-Xylene	ND	0.025									
<i>Surrogate: 4-Bromofluorobenzene (l)</i>	7.65		8.00		95.6		70-130				

LCS (B023757-BS1)	Prepared & Analyzed: 12/10/10						
Acetone	6.30		5.00		126	50-150	B
Benzene	4.68		5.00		93.6	70-130	
Benzyl chloride	4.54		5.00		90.8	70-130	
Bromodichloromethane	4.88		5.00		97.6	70-130	
Bromoform	4.37		5.00		87.4	70-130	
Bromomethane	3.79		5.00		75.8	70-130	
1,3-Butadiene	4.14		5.00		82.9	70-130	
2-Butanone (MEK)	3.65		5.00		72.9	70-130	
Carbon Disulfide	5.08		5.00		102	70-130	
Carbon Tetrachloride	4.61		5.00		92.3	70-130	
Chlorobenzene	4.54		5.00		90.8	70-130	
Chloroethane	4.32		5.00		86.3	70-130	
Chloroform	4.93		5.00		98.6	70-130	
Chloromethane	4.25		5.00		85.1	70-130	
Cyclohexane	4.65		5.00		93.0	50-150	
Dibromochloromethane	4.53		5.00		90.7	70-130	
1,2-Dibromoethane (EDB)	4.60		5.00		91.9	70-130	
1,2-Dichlorobenzene	4.79		5.00		95.8	70-130	
1,3-Dichlorobenzene	4.82		5.00		96.4	70-130	
1,4-Dichlorobenzene	4.75		5.00		95.1	70-130	
Dichlorodifluoromethane (Freon 12)	4.83		5.00		96.6	70-130	
1,1-Dichloroethane	4.81		5.00		96.2	70-130	
1,2-Dichloroethane	4.50		5.00		90.1	70-130	
1,1-Dichloroethylene	4.75		5.00		94.9	70-130	
cis-1,2-Dichloroethylene	4.68		5.00		93.6	70-130	
trans-1,2-Dichloroethylene	4.82		5.00		96.3	70-130	
1,2-Dichloropropane	4.54		5.00		90.9	70-130	
cis-1,3-Dichloropropene	5.08		5.00		102	70-130	
trans-1,3-Dichloropropene	4.50		5.00		89.9	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 B023757 - TO-15 Prep											
LCS (B023757-BS1)											
Prepared & Analyzed: 12/10/10											
Ethanol	2.86				5.00		57.1	50-150			
Ethyl Acetate	4.88				5.00		97.7	50-150			
Ethylbenzene	4.65				5.00		93.1	70-130			
4-Ethyltoluene	4.52				5.00		90.4	50-150			
Heptane	4.41				5.00		88.2	50-150			
Hexachlorobutadiene	4.51				5.00		90.3	70-130			
Hexane	4.39				5.00		87.8	70-130			
2-Hexanone (MBK)	2.48				5.00		49.6	*	50-150		L-03
Isopropanol	3.59				5.00		71.9	50-150			
Methyl tert-Butyl Ether (MTBE)	4.57				5.00		91.4	70-130			
Methylene Chloride	4.38				5.00		87.5	70-130			
Methyl Methacrylate	4.15				5.00		83.1	70-130			
4-Methyl-2-pentanone (MIBK)	3.11				5.00		62.3	*	70-130		L-03
Propene	4.70				5.00		94.0	50-150			
Styrene	4.54				5.00		90.8	70-130			
1,1,2,2-Tetrachloroethane	4.67				5.00		93.5	70-130			
Tetrachloroethylene	4.79				5.00		95.8	70-130			
Tetrahydrofuran	4.51				5.00		90.2	50-150			
Toluene	4.58				5.00		91.5	70-130			
1,2,4-Trichlorobenzene	4.53				5.00		90.6	70-130			
1,1,1-Trichloroethane	4.68				5.00		93.6	70-130			
1,1,2-Trichloroethane	4.91				5.00		98.2	70-130			
Trichloroethylene	4.87				5.00		97.3	70-130			
Trichlorofluoromethane (Freon 11)	4.50				5.00		89.9	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.05				5.00		101	70-130			
1,2,4-Trimethylbenzene	4.62				5.00		92.4	70-130			
1,3,5-Trimethylbenzene	4.48				5.00		89.6	70-130			
Vinyl Acetate	3.54				5.00		70.7	70-130			
Vinyl Chloride	4.29				5.00		85.7	70-130			
m&p-Xylene	9.40				10.0		94.0	70-130			
o-Xylene	4.64				5.00		92.8	70-130			
Surrogate: 4-Bromofluorobenzene (l)	8.16				8.00		102	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 B023774 - TO-15 Prep

Blank (B023774-BLK1)	Prepared: 12/13/10 Analyzed: 12/14/10									
Acetone	0.96	0.10								B
Benzene	ND	0.025								
Benzyl chloride	ND	0.025								
Bromodichloromethane	ND	0.025								
Bromoform	ND	0.025								
Bromomethane	ND	0.025								
1,3-Butadiene	ND	0.025								
2-Butanone (MEK)	ND	0.025								
Carbon Disulfide	ND	0.025								
Carbon Tetrachloride	ND	0.025								
Chlorobenzene	ND	0.025								
Chloroethane	ND	0.025								
Chloroform	ND	0.025								
Chloromethane	ND	0.025								
Cyclohexane	ND	0.025								
Dibromochloromethane	ND	0.025								
1,2-Dibromoethane (EDB)	ND	0.025								
1,2-Dichlorobenzene	ND	0.025								
1,3-Dichlorobenzene	ND	0.025								
1,4-Dichlorobenzene	ND	0.025								
Dichlorodifluoromethane (Freon 12)	ND	0.025								
1,1-Dichloroethane	ND	0.025								
1,2-Dichloroethane	ND	0.025								
1,1-Dichloroethylene	ND	0.025								
cis-1,2-Dichloroethylene	ND	0.025								
trans-1,2-Dichloroethylene	ND	0.025								
1,2-Dichloropropane	ND	0.025								
cis-1,3-Dichloropropene	ND	0.025								
trans-1,3-Dichloropropene	ND	0.025								
Ethanol	ND	0.10								
Ethyl Acetate	ND	0.025								
Ethylbenzene	ND	0.025								
4-Ethyltoluene	ND	0.025								
Heptane	ND	0.025								
Hexachlorobutadiene	ND	0.025								
Hexane	ND	0.025								
2-Hexanone (MBK)	ND	0.025								L-03
Isopropanol	ND	0.025								
Methyl tert-Butyl Ether (MTBE)	ND	0.025								
Methylene Chloride	ND	0.10								
Methyl Methacrylate	ND	0.025								
4-Methyl-2-pentanone (MIBK)	ND	0.025								L-03
Propene	ND	0.025								
Styrene	ND	0.025								
1,1,2,2-Tetrachloroethane	ND	0.025								
Tetrachloroethylene	ND	0.025								

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 B023774 - TO-15 Prep

Blank (B023774-BLK1)	Prepared: 12/13/10 Analyzed: 12/14/10									
Tetrahydrofuran	ND	0.025								
Toluene	ND	0.025								
1,2,4-Trichlorobenzene	ND	0.025								
1,1,1-Trichloroethane	ND	0.025								
1,1,2-Trichloroethane	ND	0.025								
Trichloroethylene	ND	0.025								
Trichlorofluoromethane (Freon 11)	ND	0.025								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.025								
1,2,4-Trimethylbenzene	ND	0.025								
1,3,5-Trimethylbenzene	ND	0.025								
Vinyl Acetate	ND	0.025								L-03
Vinyl Chloride	ND	0.025								
m&p-Xylene	ND	0.050								
o-Xylene	ND	0.025								
<i>Surrogate: 4-Bromofluorobenzene (I)</i>	7.89		8.00		98.6	70-130				

LCS (B023774-BS1)	Prepared & Analyzed: 12/13/10							
Acetone	6.51		5.00		130	50-150		B
Benzene	4.41		5.00		88.1	70-130		
Benzyl chloride	4.15		5.00		82.9	70-130		
Bromodichloromethane	4.48		5.00		89.7	70-130		
Bromoform	4.09		5.00		81.8	70-130		
Bromomethane	3.62		5.00		72.4	70-130		
1,3-Butadiene	5.04		5.00		101	70-130		
2-Butanone (MEK)	3.60		5.00		72.1	70-130		
Carbon Disulfide	4.94		5.00		98.7	70-130		
Carbon Tetrachloride	4.22		5.00		84.4	70-130		
Chlorobenzene	4.39		5.00		87.8	70-130		
Chloroethane	4.10		5.00		81.9	70-130		
Chloroform	4.75		5.00		95.0	70-130		
Chloromethane	4.83		5.00		96.6	70-130		
Cyclohexane	4.48		5.00		89.6	50-150		
Dibromochloromethane	4.13		5.00		82.6	70-130		
1,2-Dibromoethane (EDB)	4.19		5.00		83.8	70-130		
1,2-Dichlorobenzene	4.54		5.00		90.8	70-130		
1,3-Dichlorobenzene	4.56		5.00		91.1	70-130		
1,4-Dichlorobenzene	4.49		5.00		89.8	70-130		
Dichlorodifluoromethane (Freon 12)	4.36		5.00		87.1	70-130		
1,1-Dichloroethane	4.64		5.00		92.9	70-130		
1,2-Dichloroethane	4.17		5.00		83.4	70-130		
1,1-Dichloroethylene	4.64		5.00		92.7	70-130		
cis-1,2-Dichloroethylene	4.57		5.00		91.4	70-130		
trans-1,2-Dichloroethylene	4.66		5.00		93.2	70-130		
1,2-Dichloropropane	4.26		5.00		85.3	70-130		
cis-1,3-Dichloropropene	4.76		5.00		95.3	70-130		
trans-1,3-Dichloropropene	4.14		5.00		82.7	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	Limit	Flag
Batch B023774 - TO-15 Prep											
LCS (B023774-BS1)											
Prepared & Analyzed: 12/13/10											
Ethanol	2.90				5.00		58.0	50-150			
Ethyl Acetate	4.73				5.00		94.6	50-150			
Ethylbenzene	4.42				5.00		88.4	70-130			
4-Ethyltoluene	4.33				5.00		86.5	50-150			
Heptane	4.12				5.00		82.5	50-150			
Hexachlorobutadiene	4.24				5.00		84.8	70-130			
Hexane	4.26				5.00		85.1	70-130			
2-Hexanone (MBK)	2.25				5.00		45.0 *	50-150			L-03
Isopropanol	3.60				5.00		72.0	50-150			
Methyl tert-Butyl Ether (MTBE)	4.53				5.00		90.7	70-130			
Methylene Chloride	4.24				5.00		84.8	70-130			
Methyl Methacrylate	3.84				5.00		76.8	70-130			
4-Methyl-2-pentanone (MIBK)	2.89				5.00		57.8 *	70-130			L-03
Propene	4.56				5.00		91.3	50-150			
Styrene	4.37				5.00		87.4	70-130			
1,1,2,2-Tetrachloroethane	4.31				5.00		86.1	70-130			
Tetrachloroethylene	4.72				5.00		94.3	70-130			
Tetrahydrofuran	4.54				5.00		90.8	50-150			
Toluene	4.44				5.00		88.8	70-130			
1,2,4-Trichlorobenzene	4.31				5.00		86.2	70-130			
1,1,1-Trichloroethane	4.32				5.00		86.5	70-130			
1,1,2-Trichloroethane	4.69				5.00		93.7	70-130			
Trichloroethylene	4.60				5.00		91.9	70-130			
Trichlorofluoromethane (Freon 11)	4.30				5.00		85.9	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.97				5.00		99.4	70-130			
1,2,4-Trimethylbenzene	4.36				5.00		87.2	70-130			
1,3,5-Trimethylbenzene	4.25				5.00		85.1	70-130			
Vinyl Acetate	3.48				5.00		69.7 *	70-130			L-03
Vinyl Chloride	5.03				5.00		101	70-130			
m&p-Xylene	8.82				10.0		88.2	70-130			
o-Xylene	4.31				5.00		86.2	70-130			
Surrogate: 4-Bromofluorobenzene (l)	8.16				8.00		102	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.
- B Analyte is found in the associated blank as well as in the sample.
- 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.

CERTIFICATIONS

Certified Analyses included in this Report

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

CERTIFICATIONS
Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	American Industrial Hygiene Association	100033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2011
CT	Connecticut Department of Public Health	PH-0567	09/30/2011
NY	New York State Department of Health	10899 NELAP	04/1/2011
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2011
RI	Rhode Island Department of Health	LAO00112	12/30/2011
NC	North Carolina Div. of Water Quality	652	12/31/2011
NJ	New Jersey DEP	MA007 NELAP	06/30/2011
FL	Florida Department of Health	E871027 NELAP	06/30/2011
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2011
WA	State of Washington Department of Ecology	C2065	02/23/2011

www.contestlabs.com

Telephone: (781) 245-6405

Project # 365008.014.13

Client PO # 200914545

1010202

Company Name:	MACTEC Engineering	Telephone: (781) 245-6405
Address:	107 Audubon Rd., Suite 301	Project # 365008.014.13
Attention:	Kelly Chatterton	Client PO # 200914545
Project Location:	Providence, RI (Gorham Site)	
Sampled By:	PJM	
Proposal Provided? (For Billing purposes)	<input checked="" type="checkbox"/> yes <u>3-3-c9</u> - proposal date	

DATA DELIVERY (check one):			
<input type="checkbox"/> FAX	<input checked="" type="checkbox"/> EMAIL	<input type="checkbox"/> WEBSITE	CLIENT
Fax #:	Email: KellyChatterton@nufit.com		
Format:	<input type="checkbox"/> EXCEL	<input type="checkbox"/> PDF	<input type="checkbox"/> GIS KEY <input checked="" type="checkbox"/> OTHER
Date Sampled ONLY USE WHEN USING PUMPS			
Start	Stop	Total	Flow Rate
Date	Date	Minutes	Volume
Time	Time	Sampled	M ³ /Min. or Litters or Matrix Code*

Field ID	Sample Description	Media	Lab #	Date	Date	Minutes	Volume	Matrix Code*	To-15 Low-level Scan	Summa Canister ID	Flow Controller ID
IA-1-120710	S	O1	01	12-7-10	12-7-10	30	0.2	6	X		1843 4066
IA-2-120710	S	O2		12-7-10	12-7-10	30	0.2	6	X		1649 4068
IA-3-120710	S	O3		12-7-10	12-7-10	30	0.2	6	X		1717 4057
IA-4-120710	S	O4		12-7-10	12-7-10	30	0.2	6	X		1262 4071
IA-6-120710	S	DS		12-7-10	12-7-10	30	0.2	6	X		-29-5-5 1801 4074
IA-7-120710	S	O6		12-7-10	12-7-10	30	0.2	6	X		-28-5.5-5 1801 4074
AA-1-120710	S	O7		12-7-10	12-7-10	35	0.2	6	X		-28-1.5-1 1801 4081

Laboratory Comments:

CLIENT COMMENTS:

Relinquished by: (signature)	Date/Time:	Turnaround **	Special Requirements	Matrix Code:
<u>J. J. Bell</u>	12-7-10 15:50	X 7-Day	Regulations: CT Target Indoor Air (Commercial)	G= SOIL GAS
Received by: (signature)	Date/Time:	<input type="checkbox"/> 10-Day	Data Enhancement/RCP? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	S= summa can
<u>Bethany Bryant</u>	12-7-10 15:50	<input type="checkbox"/> Other _____	Enhanced Data Package <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	TB=tedlar bag
Relinquished by: (signature)	Date/Time:	<input checked="" type="checkbox"/> RUSH *	(Surcharge Applies)	P=PUF
<u>J. J. Bell</u>	12-7-10 18:20	<input type="checkbox"/> *24-Hr <input type="checkbox"/> *48-Hr	Required Detection Limits: CT Target Indoor	T=tube
Received by: (signature)	Date/Time:	<input type="checkbox"/> *72-Hr <input type="checkbox"/> *4-Day	Other: Air (con. commercial)	F= filter
<u>J. J. Bell</u>	12-7-10 18:20	<input type="checkbox"/> Approval Required		C=cassette
				O = Other

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



**AIR SAMPLE CHAIN OF CUSTODY
RECORD**

39 SPRUCE ST
EAST LONGMEADOW, MA 01022

Page 2 of 2

Company Name: MACTEL Engineering
Address: 107 Audubon Rd. Suite 301

ANALYTICAL LABORATORY

Email: info@contesilabs.com

Telephone: (781) 245-6606

Client PO # 200914545

DATA DELIVERY (check one):

Project Location: Providence, RI (Lebanon Site)
Sampled By: JSM

✓ Proposal Provided? (For Billing purposes)

DATA DELIVERY (check one):	
<input checked="" type="checkbox"/> FAX	<input type="checkbox"/> EMAIL
<input type="checkbox"/> WEBSITE	CLIENT
Fax #:	
Email: <u>Kjuchatt, Jim</u> @ <u>mac.com</u>	
Format: <input type="checkbox"/> EXCEL <input type="checkbox"/> PDF <input type="checkbox"/> GIS KML	
Date Sampled	<u>ONLY USE WHEN U</u>

Laboratory comments:

Current communities. EW-3 - 120%¹⁰, EW-6 - 120%¹⁰, EW-7 - 120%¹⁰, + EW-combined - 120%¹⁰ were sampled for
Source area, Soil gas.

INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENTS.

INCORRECT TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENTS.



www.contestlabs.com

AIR ONLY RECEIPT CHECKLIST

39 Spruce Street
East Longmeadow, MA
Phone: 1-413-525-2412
Fax: 1-413-525-6465

CLIENT NAME: Mactec Engineering
RECEIVED BY: CB

DATE: 12/7/10

1. Was chain of custody relinquished and signed?
2. Does Chain agree with samples?

YES
YES

NO
NO

If not, explain:

3. All Samples in good condition?

YES

NO

If not, explain:

4. Are there any on hold samples? YES

NO

STORED WHERE:

5. ARE THERE ANY RUSH OR SHORT HOLDING TIME SAMPLES? WHO WAS NOTIFIED? _____ DATE _____ TIME _____

Location where samples are stored:

Arr Lab

Permission to sub-contract samples? Yes No (circle)
(Walk in clients only) if not already approved.
Client Signature

CONTAINERS SENT TO CON-TEST	# of containers
Summa cans	11
Tedlar Bags	
Regulators	30 min
Restrictors	11
Tubes	
Other	

1. Was all media (used & unused) checked into the WASP asset management program?
2. Were all returned summa cans, restrictors, & regulators documented as returned in the AIR Lab Outbound excel sheet?
3. Were the Lab ID's documented in the Air Lab Outbound excel sheet?
4. Was the job documented in the Air Lab Log-In Access Database?

Laboratory comments:

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

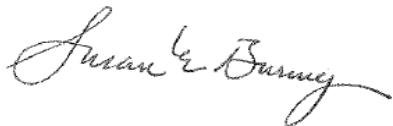
December 17, 2010

Kelly Chatterton
Mactec Engineering & Consulting
107 Audubon Rd., Bldg. 2, Suite 301
Wakefield, MA 01880

Project Location: Providence, RI
Client Job Number:
Project Number: 3650080114
Laboratory Work Order Number: 10L0301

Enclosed are results of analyses for samples received by the laboratory on December 8, 2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Susan M. Burney
Project Manager

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

Mactec Engineering & Consulting
107 Audubon Rd., Bldg. 2, Suite 301
Wakefield, MA 01880
ATTN: Kelly Chatterton

REPORT DATE: 12/17/2010

PURCHASE ORDER NUMBER: 200914545

PROJECT NUMBER: 3650080114

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 10L0301

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-5-120810	10L0301-01	Indoor air		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:

Analyte is found in the associated blank as well as in the sample.

Analyte & Samples(s) Qualified:

Acetone

10L0301-01[IA-5-120810], B023724-BLK1, B023724-BS1

Laboratory fortified blank /laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.

Analyte & Samples(s) Qualified:

Hexachlorobutadiene

B023724-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.



Michael A. Erickson
Laboratory Director

ANALYTICAL RESULTS

Project Location: Providence, RI

Date Received: 12/8/2010

Field Sample #: IA-5-120810

Sample ID: 10L0301-01

Sample Matrix: Indoor air

Sampled: 12/8/2010 10:15

Sample Description/Location:

Sub Description/Location:

Canister ID: 1607

Canister Size: 6 liter

Flow Controller ID: 4081

Sample Type: 30 min

Work Order: 10L0301

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -7

Receipt Vacuum(in Hg): -6.7

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Acetone	2.7	0.50	B	6.4	1.2		1	12/14/10 13:08	WSD
Benzene	0.080	0.050		0.26	0.16		1	12/14/10 13:08	WSD
Benzyl chloride	ND	0.050		ND	0.26		1	12/14/10 13:08	WSD
Bromodichloromethane	ND	0.050		ND	0.34		1	12/14/10 13:08	WSD
Bromoform	ND	0.050		ND	0.52		1	12/14/10 13:08	WSD
Bromomethane	ND	0.050		ND	0.19		1	12/14/10 13:08	WSD
1,3-Butadiene	ND	0.050		ND	0.11		1	12/14/10 13:08	WSD
2-Butanone (MEK)	0.27	0.050		0.78	0.15		1	12/14/10 13:08	WSD
Carbon Disulfide	ND	0.050		ND	0.16		1	12/14/10 13:08	WSD
Carbon Tetrachloride	0.086	0.050		0.54	0.31		1	12/14/10 13:08	WSD
Chlorobenzene	ND	0.050		ND	0.23		1	12/14/10 13:08	WSD
Chloroethane	ND	0.050		ND	0.13		1	12/14/10 13:08	WSD
Chloroform	ND	0.050		ND	0.24		1	12/14/10 13:08	WSD
Chloromethane	0.37	0.050		0.76	0.10		1	12/14/10 13:08	WSD
Cyclohexane	ND	0.050		ND	0.17		1	12/14/10 13:08	WSD
Dibromochloromethane	ND	0.050		ND	0.43		1	12/14/10 13:08	WSD
1,2-Dibromoethane (EDB)	ND	0.050		ND	0.38		1	12/14/10 13:08	WSD
1,2-Dichlorobenzene	ND	0.050		ND	0.30		1	12/14/10 13:08	WSD
1,3-Dichlorobenzene	ND	0.050		ND	0.30		1	12/14/10 13:08	WSD
1,4-Dichlorobenzene	ND	0.050		ND	0.30		1	12/14/10 13:08	WSD
Dichlorodifluoromethane (Freon 12)	0.47	0.050		2.3	0.25		1	12/14/10 13:08	WSD
1,1-Dichloroethane	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD
1,2-Dichloroethane	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD
1,1-Dichloroethylene	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD
cis-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD
trans-1,2-Dichloroethylene	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD
1,2-Dichloropropane	ND	0.050		ND	0.23		1	12/14/10 13:08	WSD
cis-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/14/10 13:08	WSD
trans-1,3-Dichloropropene	ND	0.050		ND	0.23		1	12/14/10 13:08	WSD
1,4-Dioxane	ND	0.050		ND	0.18		1	12/14/10 13:08	WSD
Ethanol	1.3	0.50		2.4	0.94		1	12/14/10 13:08	WSD
Ethyl Acetate	ND	0.050		ND	0.18		1	12/14/10 13:08	WSD
Ethylbenzene	ND	0.050		ND	0.22		1	12/14/10 13:08	WSD
4-Ethyltoluene	ND	0.050		ND	0.25		1	12/14/10 13:08	WSD
Heptane	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD
Hexachlorobutadiene	ND	0.050		ND	0.53		1	12/14/10 13:08	WSD
Hexane	0.086	0.050		0.30	0.18		1	12/14/10 13:08	WSD
2-Hexanone (MBK)	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI

Date Received: 12/8/2010

Field Sample #: IA-5-120810

Sample ID: 10L0301-01

Sample Matrix: Indoor air

Sampled: 12/8/2010 10:15

Sample Description/Location:

Sub Description/Location:

Canister ID: 1607

Canister Size: 6 liter

Flow Controller ID: 4081

Sample Type: 30 min

Work Order: 10L0301

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -7

Receipt Vacuum(in Hg): -6.7

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL				
Isopropanol	ND	0.050		ND	0.12		1	12/14/10 13:08	WSD
Methyl tert-Butyl Ether (MTBE)	ND	0.050		ND	0.18		1	12/14/10 13:08	WSD
Methylene Chloride	0.19	0.10		0.65	0.35		1	12/14/10 13:08	WSD
Methyl Methacrylate	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050		ND	0.20		1	12/14/10 13:08	WSD
Propene	ND	0.50		ND	0.86		1	12/14/10 13:08	WSD
Styrene	ND	0.050		ND	0.21		1	12/14/10 13:08	WSD
1,1,2,2-Tetrachloroethane	ND	0.050		ND	0.34		1	12/14/10 13:08	WSD
Tetrachloroethylene	0.058	0.050		0.39	0.34		1	12/14/10 13:08	WSD
Tetrahydrofuran	ND	0.050		ND	0.15		1	12/14/10 13:08	WSD
Toluene	ND	0.050		ND	0.19		1	12/14/10 13:08	WSD
1,2,4-Trichlorobenzene	ND	0.050		ND	0.37		1	12/14/10 13:08	WSD
1,1,1-Trichloroethane	ND	0.050		ND	0.27		1	12/14/10 13:08	WSD
1,1,2-Trichloroethane	ND	0.050		ND	0.27		1	12/14/10 13:08	WSD
Trichloroethylene	ND	0.050		ND	0.27		1	12/14/10 13:08	WSD
Trichlorofluoromethane (Freon 11)	0.23	0.050		1.3	0.28		1	12/14/10 13:08	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.068	0.050		0.52	0.38		1	12/14/10 13:08	WSD
1,2,4-Trimethylbenzene	ND	0.050		ND	0.25		1	12/14/10 13:08	WSD
1,3,5-Trimethylbenzene	ND	0.050		ND	0.25		1	12/14/10 13:08	WSD
Vinyl Acetate	0.12	0.050		0.43	0.18		1	12/14/10 13:08	WSD
Vinyl Chloride	ND	0.050		ND	0.13		1	12/14/10 13:08	WSD
m&p-Xylene	ND	0.10		ND	0.43		1	12/14/10 13:08	WSD
o-Xylene	ND	0.050		ND	0.22		1	12/14/10 13:08	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	122	70-130	12/14/10 13:08

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

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
10L0301-01 [IA-5-120810]	B023724	1	1	N/A	1000	400	400	12/14/10

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 B023724 - TO-15 Prep

Blank (B023724-BLK1)	Prepared & Analyzed: 12/14/10										
Acetone	0.58	0.20									B
Benzene	ND	0.050									
Benzyl chloride	ND	0.050									
Bromodichloromethane	ND	0.050									
Bromoform	ND	0.050									
Bromomethane	ND	0.050									
1,3-Butadiene	ND	0.050									
2-Butanone (MEK)	ND	0.050									
Carbon Disulfide	ND	0.050									
Carbon Tetrachloride	ND	0.050									
Chlorobenzene	ND	0.050									
Chloroethane	ND	0.050									
Chloroform	ND	0.050									
Chloromethane	ND	0.050									
Cyclohexane	ND	0.050									
Dibromochloromethane	ND	0.050									
1,2-Dibromoethane (EDB)	ND	0.050									
1,2-Dichlorobenzene	ND	0.050									
1,3-Dichlorobenzene	ND	0.050									
1,4-Dichlorobenzene	ND	0.050									
Dichlorodifluoromethane (Freon 12)	ND	0.050									
1,1-Dichloroethane	ND	0.050									
1,2-Dichloroethane	ND	0.050									
1,1-Dichloroethylene	ND	0.050									
cis-1,2-Dichloroethylene	ND	0.050									
trans-1,2-Dichloroethylene	ND	0.050									
1,2-Dichloropropane	ND	0.050									
cis-1,3-Dichloropropene	ND	0.050									
trans-1,3-Dichloropropene	ND	0.050									
Ethanol	ND	0.20									
Ethyl Acetate	ND	0.050									
Ethylbenzene	ND	0.050									
4-Ethyltoluene	ND	0.050									
Heptane	ND	0.050									
Hexachlorobutadiene	ND	0.050									
Hexane	ND	0.050									
2-Hexanone (MBK)	ND	0.050									
Isopropanol	ND	0.050									
Methyl tert-Butyl Ether (MTBE)	ND	0.050									
Methylene Chloride	ND	0.20									
Methyl Methacrylate	ND	0.050									
4-Methyl-2-pentanone (MIBK)	ND	0.050									
Propene	ND	0.050									
Styrene	ND	0.050									
1,1,2,2-Tetrachloroethane	ND	0.050									
Tetrachloroethylene	ND	0.050									

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 B023724 - TO-15 Prep

Blank (B023724-BLK1)	Prepared & Analyzed: 12/14/10						
Tetrahydrofuran	ND	0.050					
Toluene	ND	0.050					
1,2,4-Trichlorobenzene	ND	0.050					
1,1,1-Trichloroethane	ND	0.050					
1,1,2-Trichloroethane	ND	0.050					
Trichloroethylene	ND	0.050					
Trichlorofluoromethane (Freon 11)	ND	0.050					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.050					
1,2,4-Trimethylbenzene	ND	0.050					
1,3,5-Trimethylbenzene	ND	0.050					
Vinyl Acetate	ND	0.050					
Vinyl Chloride	ND	0.050					
m&p-Xylene	ND	0.10					
o-Xylene	ND	0.050					
<i>Surrogate: 4-Bromofluorobenzene (l)</i>	9.26		8.00		116		70-130

LCS (B023724-BS1)	Prepared & Analyzed: 12/14/10						
Acetone	7.01		5.00		140	50-150	B
Benzene	4.05		5.00		81.0	70-130	
Benzyl chloride	4.88		5.00		97.5	70-130	
Bromodichloromethane	5.16		5.00		103	70-130	
Bromoform	6.26		5.00		125	70-130	
Bromomethane	4.30		5.00		86.1	70-130	
1,3-Butadiene	4.04		5.00		80.7	70-130	
2-Butanone (MEK)	4.22		5.00		84.4	70-130	
Carbon Disulfide	4.16		5.00		83.1	70-130	
Carbon Tetrachloride	6.04		5.00		121	70-130	
Chlorobenzene	4.68		5.00		93.6	70-130	
Chloroethane	4.10		5.00		82.1	70-130	
Chloroform	5.12		5.00		102	70-130	
Chloromethane	4.14		5.00		82.9	70-130	
Cyclohexane	3.96		5.00		79.3	50-150	
Dibromochloromethane	5.60		5.00		112	70-130	
1,2-Dibromoethane (EDB)	4.73		5.00		94.5	70-130	
1,2-Dichlorobenzene	5.44		5.00		109	70-130	
1,3-Dichlorobenzene	5.69		5.00		114	70-130	
1,4-Dichlorobenzene	5.51		5.00		110	70-130	
Dichlorodifluoromethane (Freon 12)	5.41		5.00		108	70-130	
1,1-Dichloroethane	4.43		5.00		88.6	70-130	
1,2-Dichloroethane	5.45		5.00		109	70-130	
1,1-Dichloroethylene	4.84		5.00		96.9	70-130	
cis-1,2-Dichloroethylene	4.59		5.00		91.8	70-130	
trans-1,2-Dichloroethylene	4.51		5.00		90.3	70-130	
1,2-Dichloropropane	4.15		5.00		83.0	70-130	
cis-1,3-Dichloropropene	4.76		5.00		95.2	70-130	
trans-1,3-Dichloropropene	4.35		5.00		87.0	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 B023724 - TO-15 Prep											
LCS (B023724-BS1)											
Prepared & Analyzed: 12/14/10											
Ethanol	3.08				5.00		61.7	50-150			
Ethyl Acetate	4.42				5.00		88.5	50-150			
Ethylbenzene	4.49				5.00		89.8	70-130			
4-Ethyltoluene	4.78				5.00		95.7	50-150			
Heptane	4.33				5.00		86.6	50-150			
Hexachlorobutadiene	6.95				5.00		139	*	70-130		L-01
Hexane	4.74				5.00		94.8	70-130			
2-Hexanone (MBK)	3.64				5.00		72.7	50-150			
Isopropanol	2.93				5.00		58.6	50-150			
Methyl tert-Butyl Ether (MTBE)	4.28				5.00		85.5	70-130			
Methylene Chloride	4.46				5.00		89.2	70-130			
Methyl Methacrylate	3.97				5.00		79.3	70-130			
4-Methyl-2-pentanone (MIBK)	3.96				5.00		79.1	70-130			
Propene	4.66				5.00		93.3	50-150			
Styrene	3.95				5.00		79.0	70-130			
1,1,2,2-Tetrachloroethane	4.92				5.00		98.4	70-130			
Tetrachloroethylene	5.02				5.00		100	70-130			
Tetrahydrofuran	3.97				5.00		79.5	50-150			
Toluene	4.19				5.00		83.8	70-130			
1,2,4-Trichlorobenzene	5.99				5.00		120	70-130			
1,1,1-Trichloroethane	5.42				5.00		108	70-130			
1,1,2-Trichloroethane	4.57				5.00		91.4	70-130			
Trichloroethylene	4.75				5.00		95.1	70-130			
Trichlorofluoromethane (Freon 11)	5.57				5.00		111	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.89				5.00		97.8	70-130			
1,2,4-Trimethylbenzene	4.93				5.00		98.6	70-130			
1,3,5-Trimethylbenzene	4.90				5.00		97.9	70-130			
Vinyl Acetate	3.78				5.00		75.6	70-130			
Vinyl Chloride	4.32				5.00		86.3	70-130			
m&p-Xylene	9.21				10.0		92.1	70-130			
o-Xylene	4.86				5.00		97.3	70-130			
Surrogate: 4-Bromofluorobenzene (l)	9.81				8.00		123	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.
- B Analyte is found in the associated blank as well as in the sample.
- L-01 Laboratory fortified blank /laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.

CERTIFICATIONS

Certified Analyses included in this Report

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

CERTIFICATIONS

Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	American Industrial Hygiene Association	100033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2011
CT	Connecticut Department of Public Health	PH-0567	09/30/2011
NY	New York State Department of Health	10899 NELAP	04/1/2011
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2011
RI	Rhode Island Department of Health	LAO00112	12/30/2011
NC	North Carolina Div. of Water Quality	652	12/31/2011
NJ	New Jersey DEP	MA007 NELAP	06/30/2011
FL	Florida Department of Health	E871027 NELAP	06/30/2011
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2011
WA	State of Washington Department of Ecology	C2065	02/23/2011

AIR ONLY RECEIPT CHECKLIST

 CLIENT NAME: MACTEC

 RECEIVED BY: PB

 DATE: 12/8/10

1. Was chain of custody relinquished and signed?
2. Does Chain agree with samples?

 YES
 YES

 NO
 NO

If not, explain:

3. All Samples in good condition?

 YES

NO

If not, explain:

4. Are there any on hold samples? YES STORED WHERE: _____

5. ARE THERE ANY RUSH OR SHORT HOLDING TIME SAMPLES? WHO WAS NOTIFIED? _____ DATE _____ TIME _____

Location where samples are stored:

Air Lab

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

CONTAINERS SENT TO CON-TEST		# of containers
Summa cans	10L	1
Tedlar Bags		
Regulators	30 min	1
Restrictors		
Tubes		
Other		

1. Was all media (used & unused) checked into the WASP asset management program?
2. Were all returned summa cans, restrictors, & regulators documented as returned in the AIR Lab Outbound excel sheet?
3. Were the Lab ID's documented in the Air Lab Outbound excel sheet?
4. Was the job documented in the Air Lab Log-In Access Database?

Laboratory comments:

March 1, 2011

Kelly Chatterton
Mactec Engineering & Consulting
107 Audubon Rd., Bldg. 2, Suite 301
Wakefield, MA 01880

Project Location: Providence, RI, Gorham Site

Client Job Number:

Project Number: 3650080114

Laboratory Work Order Number: 11B0387

Enclosed are results of analyses for samples received by the laboratory on February 17, 2011. 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

Mactec Engineering & Consulting
107 Audubon Rd., Bldg. 2, Suite 301
Wakefield, MA 01880
ATTN: Kelly Chatterton

REPORT DATE: 3/1/2011

PURCHASE ORDER NUMBER: 200914545

PROJECT NUMBER: 3650080114

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 11B0387

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, Gorham Site

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
IA-1-021711	11B0387-01	Indoor air		EPA TO-15	
IA-2-021711	11B0387-02	Indoor air		EPA TO-15	
IA-3-021711	11B0387-03	Indoor air		EPA TO-15	
IA-4-021711	11B0387-04	Indoor air		EPA TO-15	
IA-5-021711	11B0387-05	Indoor air		EPA TO-15	
IA-6-021711	11B0387-06	Indoor air		EPA TO-15	
IA-7-021711	11B0387-07	Indoor air		EPA TO-15	
AA-1-021711	11B0387-08	Ambient Air		EPA TO-15	
EW-5-021711	11B0387-09	Soil Gas		EPA TO-15	
EW-6-021711	11B0387-10	Soil Gas		EPA TO-15	
EW-7-021711	11B0387-11	Soil Gas		EPA TO-15	
EW-Combined-021711	11B0387-12	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:

Analyte is found in the associated blank as well as in the sample.

Analyte & Samples(s) Qualified:

2-Butanone (MEK), Acetone

11B0387-01[IA-1-021711], 11B0387-02[IA-2-021711], 11B0387-03[IA-3-021711], 11B0387-04[IA-4-021711], 11B0387-05[IA-5-021711], 11B0387-06[IA-6-021711],
11B0387-07[IA-7-021711], 11B0387-08[AA-1-021711], 11B0387-09RE1[EW-5-021711], 11B0387-10[EW-6-021711], 11B0387-11[EW-7-021711],
11B0387-12[EW-Combined-021711], B026408-BLK1, B026408-BS1

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:

Vinyl Acetate

11B0387-01[IA-1-021711], 11B0387-02[IA-2-021711], 11B0387-03[IA-3-021711], 11B0387-04[IA-4-021711], 11B0387-05[IA-5-021711], 11B0387-06[IA-6-021711],
11B0387-07[IA-7-021711], 11B0387-08[AA-1-021711], 11B0387-09[EW-5-021711], 11B0387-10[EW-6-021711], 11B0387-11[EW-7-021711],
11B0387-12[EW-Combined-021711], B026408-BLK1, B026408-BS1

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

Analyte & Samples(s) Qualified:

Trichlorofluoromethane (Freon 11)

11B0387-01[IA-1-021711], 11B0387-02[IA-2-021711], 11B0387-03[IA-3-021711], 11B0387-04[IA-4-021711], 11B0387-05[IA-5-021711], 11B0387-06[IA-6-021711],
11B0387-07[IA-7-021711], 11B0387-08[AA-1-021711], 11B0387-09[EW-5-021711], 11B0387-10[EW-6-021711], 11B0387-11RE1[EW-7-021711],
11B0387-12[EW-Combined-021711], B026408-BLK1

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

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



Michael A. Erickson
Laboratory Director

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-1-021711

Sample ID: 11B0387-01

Sample Matrix: Indoor air

Sampled: 2/17/2011 07:59

Sample Description/Location:

Sub Description/Location:

Canister ID: 1239

Canister Size: 6 liter

Flow Controller ID: 4076

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	6.2	0.50	0.16	B	15	1.2	1	2/21/11 16:07	WSD	
Benzene	0.46	0.050	0.014		1.5	0.16	1	2/21/11 16:07	WSD	
Benzyl chloride	ND	0.050	0.015		ND	0.26	1	2/21/11 16:07	WSD	
Bromodichloromethane	ND	0.050	0.020		ND	0.34	1	2/21/11 16:07	WSD	
Bromoform	ND	0.050	0.013		ND	0.52	1	2/21/11 16:07	WSD	
Bromomethane	ND	0.050	0.028		ND	0.19	1	2/21/11 16:07	WSD	
1,3-Butadiene	ND	0.050	0.028		ND	0.11	1	2/21/11 16:07	WSD	
2-Butanone (MEK)	0.59	0.050	0.024	B	1.7	0.15	1	2/21/11 16:07	WSD	
Carbon Disulfide	ND	0.050	0.013		ND	0.16	1	2/21/11 16:07	WSD	
Carbon Tetrachloride	0.075	0.050	0.013		0.47	0.31	1	2/21/11 16:07	WSD	
Chlorobenzene	ND	0.050	0.020		ND	0.23	1	2/21/11 16:07	WSD	
Chloroethane	ND	0.050	0.028		ND	0.13	1	2/21/11 16:07	WSD	
Chloroform	ND	0.050	0.014		ND	0.24	1	2/21/11 16:07	WSD	
Chloromethane	0.49	0.050	0.028		1.0	0.10	1	2/21/11 16:07	WSD	
Cyclohexane	ND	0.050	0.022		ND	0.17	1	2/21/11 16:07	WSD	
Dibromochloromethane	ND	0.050	0.014		ND	0.43	1	2/21/11 16:07	WSD	
1,2-Dibromoethane (EDB)	ND	0.050	0.015		ND	0.38	1	2/21/11 16:07	WSD	
1,2-Dichlorobenzene	ND	0.050	0.015		ND	0.30	1	2/21/11 16:07	WSD	
1,3-Dichlorobenzene	ND	0.050	0.013		ND	0.30	1	2/21/11 16:07	WSD	
1,4-Dichlorobenzene	ND	0.050	0.013		ND	0.30	1	2/21/11 16:07	WSD	
Dichlorodifluoromethane (Freon 12)	0.62	0.050	0.020		3.1	0.25	1	2/21/11 16:07	WSD	
1,1-Dichloroethane	ND	0.050	0.012		ND	0.20	1	2/21/11 16:07	WSD	
1,2-Dichloroethane	ND	0.050	0.014		ND	0.20	1	2/21/11 16:07	WSD	
1,1-Dichloroethylene	ND	0.050	0.020		ND	0.20	1	2/21/11 16:07	WSD	
cis-1,2-Dichloroethylene	ND	0.050	0.015		ND	0.20	1	2/21/11 16:07	WSD	
trans-1,2-Dichloroethylene	ND	0.050	0.012		ND	0.20	1	2/21/11 16:07	WSD	
1,2-Dichloropropane	ND	0.050	0.017		ND	0.23	1	2/21/11 16:07	WSD	
cis-1,3-Dichloropropene	ND	0.050	0.032		ND	0.23	1	2/21/11 16:07	WSD	
trans-1,3-Dichloropropene	ND	0.050	0.012		ND	0.23	1	2/21/11 16:07	WSD	
Ethanol	4.8	0.50	0.095		9.0	0.94	1	2/21/11 16:07	WSD	
Ethyl Acetate	ND	0.050	0.029		ND	0.18	1	2/21/11 16:07	WSD	
Ethylbenzene	0.12	0.050	0.013		0.54	0.22	1	2/21/11 16:07	WSD	
4-Ethyltoluene	ND	0.050	0.014		ND	0.25	1	2/21/11 16:07	WSD	
Heptane	0.12	0.050	0.021		0.50	0.20	1	2/21/11 16:07	WSD	
Hexachlorobutadiene	ND	0.050	0.040		ND	0.53	1	2/21/11 16:07	WSD	
Hexane	0.54	0.050	0.017		1.9	0.18	1	2/21/11 16:07	WSD	
2-Hexanone (MBK)	ND	0.050	0.014		ND	0.20	1	2/21/11 16:07	WSD	
Isopropanol	0.71	0.050	0.034		1.7	0.12	1	2/21/11 16:07	WSD	

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-1-021711

Sample ID: 11B0387-01

Sample Matrix: Indoor air

Sampled: 2/17/2011 07:59

Sample Description/Location:

Sub Description/Location:

Canister ID: 1239

Canister Size: 6 liter

Flow Controller ID: 4076

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050	0.0070		ND	0.18		1	2/21/11 16:07	WSD
Methylene Chloride	1.4	0.10	0.054		4.8	0.35		1	2/21/11 16:07	WSD
Methyl methacrylate	ND	0.050	0.012		ND	0.20		1	2/21/11 16:07	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	0.015		ND	0.20		1	2/21/11 16:07	WSD
Propene	ND	0.50	0.036		ND	0.86		1	2/21/11 16:07	WSD
Styrene	ND	0.050	0.012		ND	0.21		1	2/21/11 16:07	WSD
1,1,2,2-Tetrachloroethane	ND	0.050	0.023		ND	0.34		1	2/21/11 16:07	WSD
Tetrachloroethylene	0.82	0.050	0.0095		5.6	0.34		1	2/21/11 16:07	WSD
Tetrahydrofuran	ND	0.050	0.025		ND	0.15		1	2/21/11 16:07	WSD
Toluene	0.80	0.050	0.015		3.0	0.19		1	2/21/11 16:07	WSD
1,2,4-Trichlorobenzene	ND	0.050	0.018		ND	0.37		1	2/21/11 16:07	WSD
1,1,1-Trichloroethane	ND	0.050	0.016		ND	0.27		1	2/21/11 16:07	WSD
1,1,2-Trichloroethane	ND	0.050	0.021		ND	0.27		1	2/21/11 16:07	WSD
Trichloroethylene	ND	0.050	0.012		ND	0.27		1	2/21/11 16:07	WSD
Trichlorofluoromethane (Freon 11)	0.31	0.050	0.028	L-05	1.7	0.28		1	2/21/11 16:07	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.084	0.050	0.016		0.64	0.38		1	2/21/11 16:07	WSD
1,2,4-Trimethylbenzene	0.11	0.050	0.013		0.55	0.25		1	2/21/11 16:07	WSD
1,3,5-Trimethylbenzene	ND	0.050	0.012		ND	0.25		1	2/21/11 16:07	WSD
Vinyl Acetate	ND	0.050	0.018	L-03	ND	0.18		1	2/21/11 16:07	WSD
Vinyl Chloride	ND	0.050	0.022		ND	0.13		1	2/21/11 16:07	WSD
m&p-Xylene	0.36	0.10	0.024		1.6	0.43		1	2/21/11 16:07	WSD
o-Xylene	0.13	0.050	0.0098		0.56	0.22		1	2/21/11 16:07	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

114

70-130

2/21/11 16:07

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-2-021711
Sample ID: 11B0387-02

Sample Matrix: Indoor air

Sampled: 2/17/2011 08:03

Sample Description/Location:

Sub Description/Location:

Canister ID: 1611

Canister Size: 6 liter

Flow Controller ID: 4075

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	6.3	0.50	0.16	B	15	1.2		1	2/21/11 16:48	WSD
Benzene	0.46	0.050	0.014		1.5	0.16		1	2/21/11 16:48	WSD
Benzyl chloride	ND	0.050	0.015		ND	0.26		1	2/21/11 16:48	WSD
Bromodichloromethane	ND	0.050	0.020		ND	0.34		1	2/21/11 16:48	WSD
Bromoform	ND	0.050	0.013		ND	0.52		1	2/21/11 16:48	WSD
Bromomethane	ND	0.050	0.028		ND	0.19		1	2/21/11 16:48	WSD
1,3-Butadiene	ND	0.050	0.028		ND	0.11		1	2/21/11 16:48	WSD
2-Butanone (MEK)	0.64	0.050	0.024	B	1.9	0.15		1	2/21/11 16:48	WSD
Carbon Disulfide	ND	0.050	0.013		ND	0.16		1	2/21/11 16:48	WSD
Carbon Tetrachloride	ND	0.050	0.013		ND	0.31		1	2/21/11 16:48	WSD
Chlorobenzene	ND	0.050	0.020		ND	0.23		1	2/21/11 16:48	WSD
Chloroethane	ND	0.050	0.028		ND	0.13		1	2/21/11 16:48	WSD
Chloroform	ND	0.050	0.014		ND	0.24		1	2/21/11 16:48	WSD
Chloromethane	0.47	0.050	0.028		0.97	0.10		1	2/21/11 16:48	WSD
Cyclohexane	ND	0.050	0.022		ND	0.17		1	2/21/11 16:48	WSD
Dibromochloromethane	ND	0.050	0.014		ND	0.43		1	2/21/11 16:48	WSD
1,2-Dibromoethane (EDB)	ND	0.050	0.015		ND	0.38		1	2/21/11 16:48	WSD
1,2-Dichlorobenzene	ND	0.050	0.015		ND	0.30		1	2/21/11 16:48	WSD
1,3-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 16:48	WSD
1,4-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 16:48	WSD
Dichlorodifluoromethane (Freon 12)	0.64	0.050	0.020		3.2	0.25		1	2/21/11 16:48	WSD
1,1-Dichloroethane	ND	0.050	0.012		ND	0.20		1	2/21/11 16:48	WSD
1,2-Dichloroethane	ND	0.050	0.014		ND	0.20		1	2/21/11 16:48	WSD
1,1-Dichloroethylene	ND	0.050	0.020		ND	0.20		1	2/21/11 16:48	WSD
cis-1,2-Dichloroethylene	ND	0.050	0.015		ND	0.20		1	2/21/11 16:48	WSD
trans-1,2-Dichloroethylene	ND	0.050	0.012		ND	0.20		1	2/21/11 16:48	WSD
1,2-Dichloropropane	ND	0.050	0.017		ND	0.23		1	2/21/11 16:48	WSD
cis-1,3-Dichloropropene	ND	0.050	0.032		ND	0.23		1	2/21/11 16:48	WSD
trans-1,3-Dichloropropene	ND	0.050	0.012		ND	0.23		1	2/21/11 16:48	WSD
Ethanol	5.3	0.50	0.095		10.0	0.94		1	2/21/11 16:48	WSD
Ethyl Acetate	ND	0.050	0.029		ND	0.18		1	2/21/11 16:48	WSD
Ethylbenzene	0.12	0.050	0.013		0.50	0.22		1	2/21/11 16:48	WSD
4-Ethyltoluene	ND	0.050	0.014		ND	0.25		1	2/21/11 16:48	WSD
Heptane	0.12	0.050	0.021		0.48	0.20		1	2/21/11 16:48	WSD
Hexachlorobutadiene	ND	0.050	0.040		ND	0.53		1	2/21/11 16:48	WSD
Hexane	0.45	0.050	0.017		1.6	0.18		1	2/21/11 16:48	WSD
2-Hexanone (MBK)	0.059	0.050	0.014		0.24	0.20		1	2/21/11 16:48	WSD
Isopropanol	0.80	0.050	0.034		2.0	0.12		1	2/21/11 16:48	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-2-021711

Sample ID: 11B0387-02

Sample Matrix: Indoor air

Sampled: 2/17/2011 08:03

Sample Description/Location:

Sub Description/Location:

Canister ID: 1611

Canister Size: 6 liter

Flow Controller ID: 4075

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050	0.0070		ND	0.18		1	2/21/11 16:48	WSD
Methylene Chloride	1.2	0.10	0.054		4.2	0.35		1	2/21/11 16:48	WSD
Methyl methacrylate	ND	0.050	0.012		ND	0.20		1	2/21/11 16:48	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	0.015		ND	0.20		1	2/21/11 16:48	WSD
Propene	ND	0.50	0.036		ND	0.86		1	2/21/11 16:48	WSD
Styrene	ND	0.050	0.012		ND	0.21		1	2/21/11 16:48	WSD
1,1,2,2-Tetrachloroethane	ND	0.050	0.023		ND	0.34		1	2/21/11 16:48	WSD
Tetrachloroethylene	0.77	0.050	0.0095		5.2	0.34		1	2/21/11 16:48	WSD
Tetrahydrofuran	ND	0.050	0.025		ND	0.15		1	2/21/11 16:48	WSD
Toluene	0.76	0.050	0.015		2.9	0.19		1	2/21/11 16:48	WSD
1,2,4-Trichlorobenzene	ND	0.050	0.018		ND	0.37		1	2/21/11 16:48	WSD
1,1,1-Trichloroethane	ND	0.050	0.016		ND	0.27		1	2/21/11 16:48	WSD
1,1,2-Trichloroethane	ND	0.050	0.021		ND	0.27		1	2/21/11 16:48	WSD
Trichloroethylene	ND	0.050	0.012		ND	0.27		1	2/21/11 16:48	WSD
Trichlorofluoromethane (Freon 11)	0.31	0.050	0.028	L-05	1.8	0.28		1	2/21/11 16:48	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.093	0.050	0.016		0.71	0.38		1	2/21/11 16:48	WSD
1,2,4-Trimethylbenzene	0.10	0.050	0.013		0.52	0.25		1	2/21/11 16:48	WSD
1,3,5-Trimethylbenzene	ND	0.050	0.012		ND	0.25		1	2/21/11 16:48	WSD
Vinyl Acetate	ND	0.050	0.018	L-03	ND	0.18		1	2/21/11 16:48	WSD
Vinyl Chloride	ND	0.050	0.022		ND	0.13		1	2/21/11 16:48	WSD
m&p-Xylene	0.34	0.10	0.024		1.5	0.43		1	2/21/11 16:48	WSD
o-Xylene	0.13	0.050	0.0098		0.56	0.22		1	2/21/11 16:48	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

114

70-130

2/21/11 16:48

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-3-021711
Sample ID: 11B0387-03

Sample Matrix: Indoor air

Sampled: 2/17/2011 08:05

Sample Description/Location:

Sub Description/Location:

Canister ID: 1199

Canister Size: 6 liter

Flow Controller ID: 4107

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29.5

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	4.1	0.50	0.16	B	9.7	1.2		1	2/21/11 17:29	WSD
Benzene	0.44	0.050	0.014		1.4	0.16		1	2/21/11 17:29	WSD
Benzyl chloride	ND	0.050	0.015		ND	0.26		1	2/21/11 17:29	WSD
Bromodichloromethane	ND	0.050	0.020		ND	0.34		1	2/21/11 17:29	WSD
Bromoform	ND	0.050	0.013		ND	0.52		1	2/21/11 17:29	WSD
Bromomethane	ND	0.050	0.028		ND	0.19		1	2/21/11 17:29	WSD
1,3-Butadiene	ND	0.050	0.028		ND	0.11		1	2/21/11 17:29	WSD
2-Butanone (MEK)	0.26	0.050	0.024	B	0.76	0.15		1	2/21/11 17:29	WSD
Carbon Disulfide	ND	0.050	0.013		ND	0.16		1	2/21/11 17:29	WSD
Carbon Tetrachloride	0.096	0.050	0.013		0.60	0.31		1	2/21/11 17:29	WSD
Chlorobenzene	ND	0.050	0.020		ND	0.23		1	2/21/11 17:29	WSD
Chloroethane	ND	0.050	0.028		ND	0.13		1	2/21/11 17:29	WSD
Chloroform	ND	0.050	0.014		ND	0.24		1	2/21/11 17:29	WSD
Chloromethane	0.47	0.050	0.028		0.97	0.10		1	2/21/11 17:29	WSD
Cyclohexane	ND	0.050	0.022		ND	0.17		1	2/21/11 17:29	WSD
Dibromochloromethane	ND	0.050	0.014		ND	0.43		1	2/21/11 17:29	WSD
1,2-Dibromoethane (EDB)	ND	0.050	0.015		ND	0.38		1	2/21/11 17:29	WSD
1,2-Dichlorobenzene	ND	0.050	0.015		ND	0.30		1	2/21/11 17:29	WSD
1,3-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 17:29	WSD
1,4-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 17:29	WSD
Dichlorodifluoromethane (Freon 12)	0.64	0.050	0.020		3.1	0.25		1	2/21/11 17:29	WSD
1,1-Dichloroethane	ND	0.050	0.012		ND	0.20		1	2/21/11 17:29	WSD
1,2-Dichloroethane	ND	0.050	0.014		ND	0.20		1	2/21/11 17:29	WSD
1,1-Dichloroethylene	ND	0.050	0.020		ND	0.20		1	2/21/11 17:29	WSD
cis-1,2-Dichloroethylene	ND	0.050	0.015		ND	0.20		1	2/21/11 17:29	WSD
trans-1,2-Dichloroethylene	ND	0.050	0.012		ND	0.20		1	2/21/11 17:29	WSD
1,2-Dichloropropane	ND	0.050	0.017		ND	0.23		1	2/21/11 17:29	WSD
cis-1,3-Dichloropropene	ND	0.050	0.032		ND	0.23		1	2/21/11 17:29	WSD
trans-1,3-Dichloropropene	ND	0.050	0.012		ND	0.23		1	2/21/11 17:29	WSD
Ethanol	5.0	0.50	0.095		9.4	0.94		1	2/21/11 17:29	WSD
Ethyl Acetate	ND	0.050	0.029		ND	0.18		1	2/21/11 17:29	WSD
Ethylbenzene	0.11	0.050	0.013		0.47	0.22		1	2/21/11 17:29	WSD
4-Ethyltoluene	ND	0.050	0.014		ND	0.25		1	2/21/11 17:29	WSD
Heptane	0.11	0.050	0.021		0.44	0.20		1	2/21/11 17:29	WSD
Hexachlorobutadiene	ND	0.050	0.040		ND	0.53		1	2/21/11 17:29	WSD
Hexane	0.44	0.050	0.017		1.5	0.18		1	2/21/11 17:29	WSD
2-Hexanone (MBK)	ND	0.050	0.014		ND	0.20		1	2/21/11 17:29	WSD
Isopropanol	0.68	0.050	0.034		1.7	0.12		1	2/21/11 17:29	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-3-021711
Sample ID: 11B0387-03

Sample Matrix: Indoor air

Sampled: 2/17/2011 08:05

Sample Description/Location:

Sub Description/Location:

Canister ID: 1199

Canister Size: 6 liter

Flow Controller ID: 4107

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29.5

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050	0.0070		ND	0.18		1	2/21/11 17:29	WSD
Methylene Chloride	1.3	0.10	0.054		4.6	0.35		1	2/21/11 17:29	WSD
Methyl methacrylate	ND	0.050	0.012		ND	0.20		1	2/21/11 17:29	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	0.015		ND	0.20		1	2/21/11 17:29	WSD
Propene	ND	0.50	0.036		ND	0.86		1	2/21/11 17:29	WSD
Styrene	ND	0.050	0.012		ND	0.21		1	2/21/11 17:29	WSD
1,1,2,2-Tetrachloroethane	ND	0.050	0.023		ND	0.34		1	2/21/11 17:29	WSD
Tetrachloroethylene	0.76	0.050	0.0095		5.2	0.34		1	2/21/11 17:29	WSD
Tetrahydrofuran	ND	0.050	0.025		ND	0.15		1	2/21/11 17:29	WSD
Toluene	0.72	0.050	0.015		2.7	0.19		1	2/21/11 17:29	WSD
1,2,4-Trichlorobenzene	ND	0.050	0.018		ND	0.37		1	2/21/11 17:29	WSD
1,1,1-Trichloroethane	ND	0.050	0.016		ND	0.27		1	2/21/11 17:29	WSD
1,1,2-Trichloroethane	ND	0.050	0.021		ND	0.27		1	2/21/11 17:29	WSD
Trichloroethylene	ND	0.050	0.012		ND	0.27		1	2/21/11 17:29	WSD
Trichlorofluoromethane (Freon 11)	0.30	0.050	0.028	L-05	1.7	0.28		1	2/21/11 17:29	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.087	0.050	0.016		0.67	0.38		1	2/21/11 17:29	WSD
1,2,4-Trimethylbenzene	0.099	0.050	0.013		0.49	0.25		1	2/21/11 17:29	WSD
1,3,5-Trimethylbenzene	ND	0.050	0.012		ND	0.25		1	2/21/11 17:29	WSD
Vinyl Acetate	ND	0.050	0.018	L-03	ND	0.18		1	2/21/11 17:29	WSD
Vinyl Chloride	ND	0.050	0.022		ND	0.13		1	2/21/11 17:29	WSD
m&p-Xylene	0.32	0.10	0.024		1.4	0.43		1	2/21/11 17:29	WSD
o-Xylene	0.11	0.050	0.0098		0.48	0.22		1	2/21/11 17:29	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

114

70-130

2/21/11 17:29

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-4-021711

Sample ID: 11B0387-04

Sample Matrix: Indoor air

Sampled: 2/17/2011 08:07

Sample Description/Location:

Sub Description/Location:

Canister ID: 1749

Canister Size: 6 liter

Flow Controller ID: 4082

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	4.9	0.50	0.16	B	12	1.2		1	2/21/11 18:10	WSD
Benzene	0.44	0.050	0.014		1.4	0.16		1	2/21/11 18:10	WSD
Benzyl chloride	ND	0.050	0.015		ND	0.26		1	2/21/11 18:10	WSD
Bromodichloromethane	ND	0.050	0.020		ND	0.34		1	2/21/11 18:10	WSD
Bromoform	ND	0.050	0.013		ND	0.52		1	2/21/11 18:10	WSD
Bromomethane	ND	0.050	0.028		ND	0.19		1	2/21/11 18:10	WSD
1,3-Butadiene	ND	0.050	0.028		ND	0.11		1	2/21/11 18:10	WSD
2-Butanone (MEK)	0.35	0.050	0.024	B	1.0	0.15		1	2/21/11 18:10	WSD
Carbon Disulfide	ND	0.050	0.013		ND	0.16		1	2/21/11 18:10	WSD
Carbon Tetrachloride	0.090	0.050	0.013		0.57	0.31		1	2/21/11 18:10	WSD
Chlorobenzene	ND	0.050	0.020		ND	0.23		1	2/21/11 18:10	WSD
Chloroethane	ND	0.050	0.028		ND	0.13		1	2/21/11 18:10	WSD
Chloroform	ND	0.050	0.014		ND	0.24		1	2/21/11 18:10	WSD
Chloromethane	0.46	0.050	0.028		0.95	0.10		1	2/21/11 18:10	WSD
Cyclohexane	ND	0.050	0.022		ND	0.17		1	2/21/11 18:10	WSD
Dibromochloromethane	ND	0.050	0.014		ND	0.43		1	2/21/11 18:10	WSD
1,2-Dibromoethane (EDB)	ND	0.050	0.015		ND	0.38		1	2/21/11 18:10	WSD
1,2-Dichlorobenzene	ND	0.050	0.015		ND	0.30		1	2/21/11 18:10	WSD
1,3-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 18:10	WSD
1,4-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 18:10	WSD
Dichlorodifluoromethane (Freon 12)	0.64	0.050	0.020		3.2	0.25		1	2/21/11 18:10	WSD
1,1-Dichloroethane	ND	0.050	0.012		ND	0.20		1	2/21/11 18:10	WSD
1,2-Dichloroethane	ND	0.050	0.014		ND	0.20		1	2/21/11 18:10	WSD
1,1-Dichloroethylene	ND	0.050	0.020		ND	0.20		1	2/21/11 18:10	WSD
cis-1,2-Dichloroethylene	ND	0.050	0.015		ND	0.20		1	2/21/11 18:10	WSD
trans-1,2-Dichloroethylene	ND	0.050	0.012		ND	0.20		1	2/21/11 18:10	WSD
1,2-Dichloropropane	ND	0.050	0.017		ND	0.23		1	2/21/11 18:10	WSD
cis-1,3-Dichloropropene	ND	0.050	0.032		ND	0.23		1	2/21/11 18:10	WSD
trans-1,3-Dichloropropene	ND	0.050	0.012		ND	0.23		1	2/21/11 18:10	WSD
Ethanol	4.7	0.50	0.095		8.9	0.94		1	2/21/11 18:10	WSD
Ethyl Acetate	0.071	0.050	0.029		0.26	0.18		1	2/21/11 18:10	WSD
Ethylbenzene	0.11	0.050	0.013		0.49	0.22		1	2/21/11 18:10	WSD
4-Ethyltoluene	ND	0.050	0.014		ND	0.25		1	2/21/11 18:10	WSD
Heptane	0.12	0.050	0.021		0.51	0.20		1	2/21/11 18:10	WSD
Hexachlorobutadiene	ND	0.050	0.040		ND	0.53		1	2/21/11 18:10	WSD
Hexane	0.49	0.050	0.017		1.7	0.18		1	2/21/11 18:10	WSD
2-Hexanone (MBK)	ND	0.050	0.014		ND	0.20		1	2/21/11 18:10	WSD
Isopropanol	0.70	0.050	0.034		1.7	0.12		1	2/21/11 18:10	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-4-021711

Sample ID: 11B0387-04

Sample Matrix: Indoor air

Sampled: 2/17/2011 08:07

Sample Description/Location:

Sub Description/Location:

Canister ID: 1749

Canister Size: 6 liter

Flow Controller ID: 4082

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -5

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050	0.0070		ND	0.18		1	2/21/11 18:10	WSD
Methylene Chloride	1.5	0.10	0.054		5.1	0.35		1	2/21/11 18:10	WSD
Methyl methacrylate	ND	0.050	0.012		ND	0.20		1	2/21/11 18:10	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	0.015		ND	0.20		1	2/21/11 18:10	WSD
Propene	ND	0.50	0.036		ND	0.86		1	2/21/11 18:10	WSD
Styrene	ND	0.050	0.012		ND	0.21		1	2/21/11 18:10	WSD
1,1,2,2-Tetrachloroethane	ND	0.050	0.023		ND	0.34		1	2/21/11 18:10	WSD
Tetrachloroethylene	0.74	0.050	0.0095		5.0	0.34		1	2/21/11 18:10	WSD
Tetrahydrofuran	ND	0.050	0.025		ND	0.15		1	2/21/11 18:10	WSD
Toluene	0.73	0.050	0.015		2.7	0.19		1	2/21/11 18:10	WSD
1,2,4-Trichlorobenzene	ND	0.050	0.018		ND	0.37		1	2/21/11 18:10	WSD
1,1,1-Trichloroethane	ND	0.050	0.016		ND	0.27		1	2/21/11 18:10	WSD
1,1,2-Trichloroethane	ND	0.050	0.021		ND	0.27		1	2/21/11 18:10	WSD
Trichloroethylene	ND	0.050	0.012		ND	0.27		1	2/21/11 18:10	WSD
Trichlorofluoromethane (Freon 11)	0.31	0.050	0.028	L-05	1.8	0.28		1	2/21/11 18:10	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.091	0.050	0.016		0.70	0.38		1	2/21/11 18:10	WSD
1,2,4-Trimethylbenzene	0.099	0.050	0.013		0.49	0.25		1	2/21/11 18:10	WSD
1,3,5-Trimethylbenzene	ND	0.050	0.012		ND	0.25		1	2/21/11 18:10	WSD
Vinyl Acetate	ND	0.050	0.018	L-03	ND	0.18		1	2/21/11 18:10	WSD
Vinyl Chloride	ND	0.050	0.022		ND	0.13		1	2/21/11 18:10	WSD
m&p-Xylene	0.33	0.10	0.024		1.4	0.43		1	2/21/11 18:10	WSD
o-Xylene	0.12	0.050	0.0098		0.53	0.22		1	2/21/11 18:10	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

114

70-130

2/21/11 18:10

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-5-021711
Sample ID: 11B0387-05

Sample Matrix: Indoor air

Sampled: 2/17/2011 09:17

Sample Description/Location:

Sub Description/Location:

Canister ID: 1256

Canister Size: 6 liter

Flow Controller ID: 4092

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -6

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	4.0	0.50	0.16	B	9.5	1.2		1	2/21/11 18:51	WSD
Benzene	0.35	0.050	0.014		1.1	0.16		1	2/21/11 18:51	WSD
Benzyl chloride	ND	0.050	0.015		ND	0.26		1	2/21/11 18:51	WSD
Bromodichloromethane	ND	0.050	0.020		ND	0.34		1	2/21/11 18:51	WSD
Bromoform	ND	0.050	0.013		ND	0.52		1	2/21/11 18:51	WSD
Bromomethane	ND	0.050	0.028		ND	0.19		1	2/21/11 18:51	WSD
1,3-Butadiene	ND	0.050	0.028		ND	0.11		1	2/21/11 18:51	WSD
2-Butanone (MEK)	0.26	0.050	0.024	B	0.78	0.15		1	2/21/11 18:51	WSD
Carbon Disulfide	ND	0.050	0.013		ND	0.16		1	2/21/11 18:51	WSD
Carbon Tetrachloride	0.096	0.050	0.013		0.60	0.31		1	2/21/11 18:51	WSD
Chlorobenzene	ND	0.050	0.020		ND	0.23		1	2/21/11 18:51	WSD
Chloroethane	ND	0.050	0.028		ND	0.13		1	2/21/11 18:51	WSD
Chloroform	ND	0.050	0.014		ND	0.24		1	2/21/11 18:51	WSD
Chloromethane	0.47	0.050	0.028		0.96	0.10		1	2/21/11 18:51	WSD
Cyclohexane	ND	0.050	0.022		ND	0.17		1	2/21/11 18:51	WSD
Dibromochloromethane	ND	0.050	0.014		ND	0.43		1	2/21/11 18:51	WSD
1,2-Dibromoethane (EDB)	ND	0.050	0.015		ND	0.38		1	2/21/11 18:51	WSD
1,2-Dichlorobenzene	ND	0.050	0.015		ND	0.30		1	2/21/11 18:51	WSD
1,3-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 18:51	WSD
1,4-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 18:51	WSD
Dichlorodifluoromethane (Freon 12)	0.63	0.050	0.020		3.1	0.25		1	2/21/11 18:51	WSD
1,1-Dichloroethane	ND	0.050	0.012		ND	0.20		1	2/21/11 18:51	WSD
1,2-Dichloroethane	ND	0.050	0.014		ND	0.20		1	2/21/11 18:51	WSD
1,1-Dichloroethylene	ND	0.050	0.020		ND	0.20		1	2/21/11 18:51	WSD
cis-1,2-Dichloroethylene	ND	0.050	0.015		ND	0.20		1	2/21/11 18:51	WSD
trans-1,2-Dichloroethylene	ND	0.050	0.012		ND	0.20		1	2/21/11 18:51	WSD
1,2-Dichloropropane	ND	0.050	0.017		ND	0.23		1	2/21/11 18:51	WSD
cis-1,3-Dichloropropene	ND	0.050	0.032		ND	0.23		1	2/21/11 18:51	WSD
trans-1,3-Dichloropropene	ND	0.050	0.012		ND	0.23		1	2/21/11 18:51	WSD
Ethanol	7.2	0.50	0.095		14	0.94		1	2/21/11 18:51	WSD
Ethyl Acetate	ND	0.050	0.029		ND	0.18		1	2/21/11 18:51	WSD
Ethylbenzene	0.068	0.050	0.013		0.30	0.22		1	2/21/11 18:51	WSD
4-Ethyltoluene	ND	0.050	0.014		ND	0.25		1	2/21/11 18:51	WSD
Heptane	0.081	0.050	0.021		0.33	0.20		1	2/21/11 18:51	WSD
Hexachlorobutadiene	ND	0.050	0.040		ND	0.53		1	2/21/11 18:51	WSD
Hexane	0.36	0.050	0.017		1.3	0.18		1	2/21/11 18:51	WSD
2-Hexanone (MBK)	ND	0.050	0.014		ND	0.20		1	2/21/11 18:51	WSD
Isopropanol	0.69	0.050	0.034		1.7	0.12		1	2/21/11 18:51	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-5-021711
Sample ID: 11B0387-05

Sample Matrix: Indoor air

Sampled: 2/17/2011 09:17

Sample Description/Location:

Sub Description/Location:

Canister ID: 1256

Canister Size: 6 liter

Flow Controller ID: 4092

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -6

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.050	0.0070		ND	0.18		1	2/21/11 18:51	WSD
Methylene Chloride	0.81	0.10	0.054		2.8	0.35		1	2/21/11 18:51	WSD
Methyl methacrylate	ND	0.050	0.012		ND	0.20		1	2/21/11 18:51	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	0.015		ND	0.20		1	2/21/11 18:51	WSD
Propene	ND	0.50	0.036		ND	0.86		1	2/21/11 18:51	WSD
Styrene	ND	0.050	0.012		ND	0.21		1	2/21/11 18:51	WSD
1,1,2,2-Tetrachloroethane	ND	0.050	0.023		ND	0.34		1	2/21/11 18:51	WSD
Tetrachloroethylene	0.36	0.050	0.0095		2.4	0.34		1	2/21/11 18:51	WSD
Tetrahydrofuran	ND	0.050	0.025		ND	0.15		1	2/21/11 18:51	WSD
Toluene	0.48	0.050	0.015		1.8	0.19		1	2/21/11 18:51	WSD
1,2,4-Trichlorobenzene	ND	0.050	0.018		ND	0.37		1	2/21/11 18:51	WSD
1,1,1-Trichloroethane	ND	0.050	0.016		ND	0.27		1	2/21/11 18:51	WSD
1,1,2-Trichloroethane	ND	0.050	0.021		ND	0.27		1	2/21/11 18:51	WSD
Trichloroethylene	ND	0.050	0.012		ND	0.27		1	2/21/11 18:51	WSD
Trichlorofluoromethane (Freon 11)	0.30	0.050	0.028	L-05	1.7	0.28		1	2/21/11 18:51	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.086	0.050	0.016		0.66	0.38		1	2/21/11 18:51	WSD
1,2,4-Trimethylbenzene	ND	0.050	0.013		ND	0.25		1	2/21/11 18:51	WSD
1,3,5-Trimethylbenzene	ND	0.050	0.012		ND	0.25		1	2/21/11 18:51	WSD
Vinyl Acetate	ND	0.050	0.018	L-03	ND	0.18		1	2/21/11 18:51	WSD
Vinyl Chloride	ND	0.050	0.022		ND	0.13		1	2/21/11 18:51	WSD
m&p-Xylene	0.20	0.10	0.024		0.85	0.43		1	2/21/11 18:51	WSD
o-Xylene	0.069	0.050	0.0098		0.30	0.22		1	2/21/11 18:51	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

111

70-130

2/21/11 18:51

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-6-021711

Sample ID: 11B0387-06

Sample Matrix: Indoor air

Sampled: 2/17/2011 10:55

Sample Description/Location:

Sub Description/Location:

Canister ID: 1486

Canister Size: 6 liter

Flow Controller ID: 4077

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -4

Receipt Vacuum(in Hg): -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				
Acetone	5.9	0.50	0.16	B	14	1.2		1	2/21/11 19:32	WSD
Benzene	0.40	0.050	0.014		1.3	0.16		1	2/21/11 19:32	WSD
Benzyl chloride	ND	0.050	0.015		ND	0.26		1	2/21/11 19:32	WSD
Bromodichloromethane	ND	0.050	0.020		ND	0.34		1	2/21/11 19:32	WSD
Bromoform	ND	0.050	0.013		ND	0.52		1	2/21/11 19:32	WSD
Bromomethane	ND	0.050	0.028		ND	0.19		1	2/21/11 19:32	WSD
1,3-Butadiene	ND	0.050	0.028		ND	0.11		1	2/21/11 19:32	WSD
2-Butanone (MEK)	0.63	0.050	0.024	B	1.9	0.15		1	2/21/11 19:32	WSD
Carbon Disulfide	ND	0.050	0.013		ND	0.16		1	2/21/11 19:32	WSD
Carbon Tetrachloride	0.091	0.050	0.013		0.57	0.31		1	2/21/11 19:32	WSD
Chlorobenzene	ND	0.050	0.020		ND	0.23		1	2/21/11 19:32	WSD
Chloroethane	ND	0.050	0.028		ND	0.13		1	2/21/11 19:32	WSD
Chloroform	ND	0.050	0.014		ND	0.24		1	2/21/11 19:32	WSD
Chloromethane	0.45	0.050	0.028		0.92	0.10		1	2/21/11 19:32	WSD
Cyclohexane	ND	0.050	0.022		ND	0.17		1	2/21/11 19:32	WSD
Dibromochloromethane	ND	0.050	0.014		ND	0.43		1	2/21/11 19:32	WSD
1,2-Dibromoethane (EDB)	ND	0.050	0.015		ND	0.38		1	2/21/11 19:32	WSD
1,2-Dichlorobenzene	ND	0.050	0.015		ND	0.30		1	2/21/11 19:32	WSD
1,3-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 19:32	WSD
1,4-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 19:32	WSD
Dichlorodifluoromethane (Freon 12)	0.62	0.050	0.020		3.1	0.25		1	2/21/11 19:32	WSD
1,1-Dichloroethane	ND	0.050	0.012		ND	0.20		1	2/21/11 19:32	WSD
1,2-Dichloroethane	ND	0.050	0.014		ND	0.20		1	2/21/11 19:32	WSD
1,1-Dichloroethylene	ND	0.050	0.020		ND	0.20		1	2/21/11 19:32	WSD
cis-1,2-Dichloroethylene	ND	0.050	0.015		ND	0.20		1	2/21/11 19:32	WSD
trans-1,2-Dichloroethylene	ND	0.050	0.012		ND	0.20		1	2/21/11 19:32	WSD
1,2-Dichloropropane	ND	0.050	0.017		ND	0.23		1	2/21/11 19:32	WSD
cis-1,3-Dichloropropene	ND	0.050	0.032		ND	0.23		1	2/21/11 19:32	WSD
trans-1,3-Dichloropropene	ND	0.050	0.012		ND	0.23		1	2/21/11 19:32	WSD
Ethanol	5.5	0.50	0.095		10	0.94		1	2/21/11 19:32	WSD
Ethyl Acetate	ND	0.050	0.029		ND	0.18		1	2/21/11 19:32	WSD
Ethylbenzene	0.10	0.050	0.013		0.45	0.22		1	2/21/11 19:32	WSD
4-Ethyltoluene	ND	0.050	0.014		ND	0.25		1	2/21/11 19:32	WSD
Heptane	0.086	0.050	0.021		0.35	0.20		1	2/21/11 19:32	WSD
Hexachlorobutadiene	ND	0.050	0.040		ND	0.53		1	2/21/11 19:32	WSD
Hexane	0.43	0.050	0.017		1.5	0.18		1	2/21/11 19:32	WSD
2-Hexanone (MBK)	0.054	0.050	0.014		0.22	0.20		1	2/21/11 19:32	WSD
Isopropanol	1.1	0.050	0.034		2.8	0.12		1	2/21/11 19:32	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: IA-6-021711

Sample ID: 11B0387-06

Sample Matrix: Indoor air

Sampled: 2/17/2011 10:55

Sample Description/Location:

Sub Description/Location:

Canister ID: 1486

Canister Size: 6 liter

Flow Controller ID: 4077

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -4

Receipt Vacuum(in Hg): -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	0.050	0.0070		ND	0.18		1	2/21/11 19:32	WSD
Methylene Chloride	0.85	0.10	0.054		3.0	0.35		1	2/21/11 19:32	WSD
Methyl methacrylate	ND	0.050	0.012		ND	0.20		1	2/21/11 19:32	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	0.015		ND	0.20		1	2/21/11 19:32	WSD
Propene	ND	0.50	0.036		ND	0.86		1	2/21/11 19:32	WSD
Styrene	ND	0.050	0.012		ND	0.21		1	2/21/11 19:32	WSD
1,1,2,2-Tetrachloroethane	ND	0.050	0.023		ND	0.34		1	2/21/11 19:32	WSD
Tetrachloroethylene	0.24	0.050	0.0095		1.6	0.34		1	2/21/11 19:32	WSD
Tetrahydrofuran	ND	0.050	0.025		ND	0.15		1	2/21/11 19:32	WSD
Toluene	0.77	0.050	0.015		2.9	0.19		1	2/21/11 19:32	WSD
1,2,4-Trichlorobenzene	ND	0.050	0.018		ND	0.37		1	2/21/11 19:32	WSD
1,1,1-Trichloroethane	ND	0.050	0.016		ND	0.27		1	2/21/11 19:32	WSD
1,1,2-Trichloroethane	ND	0.050	0.021		ND	0.27		1	2/21/11 19:32	WSD
Trichloroethylene	ND	0.050	0.012		ND	0.27		1	2/21/11 19:32	WSD
Trichlorofluoromethane (Freon 11)	0.29	0.050	0.028	L-05	1.6	0.28		1	2/21/11 19:32	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.090	0.050	0.016		0.69	0.38		1	2/21/11 19:32	WSD
1,2,4-Trimethylbenzene	0.071	0.050	0.013		0.35	0.25		1	2/21/11 19:32	WSD
1,3,5-Trimethylbenzene	ND	0.050	0.012		ND	0.25		1	2/21/11 19:32	WSD
Vinyl Acetate	ND	0.050	0.018	L-03	ND	0.18		1	2/21/11 19:32	WSD
Vinyl Chloride	ND	0.050	0.022		ND	0.13		1	2/21/11 19:32	WSD
m&p-Xylene	0.27	0.10	0.024		1.2	0.43		1	2/21/11 19:32	WSD
o-Xylene	0.093	0.050	0.0098		0.40	0.22		1	2/21/11 19:32	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

114

70-130

2/21/11 19:32

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: 1A-7-021711
Sample ID: 11B0387-07

Sample Matrix: Indoor air

Sampled: 2/17/2011 10:08

Sample Description/Location:

Sub Description/Location:

Canister ID: 1107

Canister Size: 6 liter

Flow Controller ID: 4067

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

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	6.3	0.50	0.16	B	15	1.2		1	2/21/11 20:13	WSD
Benzene	0.36	0.050	0.014		1.1	0.16		1	2/21/11 20:13	WSD
Benzyl chloride	ND	0.050	0.015		ND	0.26		1	2/21/11 20:13	WSD
Bromodichloromethane	ND	0.050	0.020		ND	0.34		1	2/21/11 20:13	WSD
Bromoform	ND	0.050	0.013		ND	0.52		1	2/21/11 20:13	WSD
Bromomethane	ND	0.050	0.028		ND	0.19		1	2/21/11 20:13	WSD
1,3-Butadiene	ND	0.050	0.028		ND	0.11		1	2/21/11 20:13	WSD
2-Butanone (MEK)	0.58	0.050	0.024	B	1.7	0.15		1	2/21/11 20:13	WSD
Carbon Disulfide	ND	0.050	0.013		ND	0.16		1	2/21/11 20:13	WSD
Carbon Tetrachloride	0.089	0.050	0.013		0.56	0.31		1	2/21/11 20:13	WSD
Chlorobenzene	ND	0.050	0.020		ND	0.23		1	2/21/11 20:13	WSD
Chloroethane	ND	0.050	0.028		ND	0.13		1	2/21/11 20:13	WSD
Chloroform	ND	0.050	0.014		ND	0.24		1	2/21/11 20:13	WSD
Chloromethane	0.50	0.050	0.028		1.0	0.10		1	2/21/11 20:13	WSD
Cyclohexane	ND	0.050	0.022		ND	0.17		1	2/21/11 20:13	WSD
Dibromochloromethane	ND	0.050	0.014		ND	0.43		1	2/21/11 20:13	WSD
1,2-Dibromoethane (EDB)	ND	0.050	0.015		ND	0.38		1	2/21/11 20:13	WSD
1,2-Dichlorobenzene	ND	0.050	0.015		ND	0.30		1	2/21/11 20:13	WSD
1,3-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 20:13	WSD
1,4-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 20:13	WSD
Dichlorodifluoromethane (Freon 12)	0.62	0.050	0.020		3.1	0.25		1	2/21/11 20:13	WSD
1,1-Dichloroethane	ND	0.050	0.012		ND	0.20		1	2/21/11 20:13	WSD
1,2-Dichloroethane	ND	0.050	0.014		ND	0.20		1	2/21/11 20:13	WSD
1,1-Dichloroethylene	ND	0.050	0.020		ND	0.20		1	2/21/11 20:13	WSD
cis-1,2-Dichloroethylene	ND	0.050	0.015		ND	0.20		1	2/21/11 20:13	WSD
trans-1,2-Dichloroethylene	ND	0.050	0.012		ND	0.20		1	2/21/11 20:13	WSD
1,2-Dichloropropane	ND	0.050	0.017		ND	0.23		1	2/21/11 20:13	WSD
cis-1,3-Dichloropropene	ND	0.050	0.032		ND	0.23		1	2/21/11 20:13	WSD
trans-1,3-Dichloropropene	ND	0.050	0.012		ND	0.23		1	2/21/11 20:13	WSD
Ethanol	7.5	0.50	0.095		14	0.94		1	2/21/11 20:13	WSD
Ethyl Acetate	ND	0.050	0.029		ND	0.18		1	2/21/11 20:13	WSD
Ethylbenzene	ND	0.050	0.013		ND	0.22		1	2/21/11 20:13	WSD
4-Ethyltoluene	ND	0.050	0.014		ND	0.25		1	2/21/11 20:13	WSD
Heptane	0.11	0.050	0.021		0.47	0.20		1	2/21/11 20:13	WSD
Hexachlorobutadiene	ND	0.050	0.040		ND	0.53		1	2/21/11 20:13	WSD
Hexane	0.37	0.050	0.017		1.3	0.18		1	2/21/11 20:13	WSD
2-Hexanone (MBK)	ND	0.050	0.014		ND	0.20		1	2/21/11 20:13	WSD
Isopropanol	4.6	0.050	0.034		11	0.12		1	2/21/11 20:13	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: 1A-7-021711
Sample ID: 11B0387-07

Sample Matrix: Indoor air

Sampled: 2/17/2011 10:08

Sample Description/Location:

Sub Description/Location:

Canister ID: 1107

Canister Size: 6 liter

Flow Controller ID: 4067

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

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	0.050	0.0070		ND	0.18		1	2/21/11 20:13	WSD
Methylene Chloride	0.73	0.10	0.054		2.5	0.35		1	2/21/11 20:13	WSD
Methyl methacrylate	ND	0.050	0.012		ND	0.20		1	2/21/11 20:13	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	0.015		ND	0.20		1	2/21/11 20:13	WSD
Propene	ND	0.50	0.036		ND	0.86		1	2/21/11 20:13	WSD
Styrene	ND	0.050	0.012		ND	0.21		1	2/21/11 20:13	WSD
1,1,2,2-Tetrachloroethane	ND	0.050	0.023		ND	0.34		1	2/21/11 20:13	WSD
Tetrachloroethylene	0.26	0.050	0.0095		1.7	0.34		1	2/21/11 20:13	WSD
Tetrahydrofuran	ND	0.050	0.025		ND	0.15		1	2/21/11 20:13	WSD
Toluene	0.43	0.050	0.015		1.6	0.19		1	2/21/11 20:13	WSD
1,2,4-Trichlorobenzene	ND	0.050	0.018		ND	0.37		1	2/21/11 20:13	WSD
1,1,1-Trichloroethane	ND	0.050	0.016		ND	0.27		1	2/21/11 20:13	WSD
1,1,2-Trichloroethane	ND	0.050	0.021		ND	0.27		1	2/21/11 20:13	WSD
Trichloroethylene	ND	0.050	0.012		ND	0.27		1	2/21/11 20:13	WSD
Trichlorofluoromethane (Freon 11)	0.29	0.050	0.028	L-05	1.6	0.28		1	2/21/11 20:13	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.088	0.050	0.016		0.67	0.38		1	2/21/11 20:13	WSD
1,2,4-Trimethylbenzene	ND	0.050	0.013		ND	0.25		1	2/21/11 20:13	WSD
1,3,5-Trimethylbenzene	ND	0.050	0.012		ND	0.25		1	2/21/11 20:13	WSD
Vinyl Acetate	ND	0.050	0.018	L-03	ND	0.18		1	2/21/11 20:13	WSD
Vinyl Chloride	ND	0.050	0.022		ND	0.13		1	2/21/11 20:13	WSD
m&p-Xylene	ND	0.10	0.024		ND	0.43		1	2/21/11 20:13	WSD
o-Xylene	ND	0.050	0.0098		ND	0.22		1	2/21/11 20:13	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

113

70-130

2/21/11 20:13

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: AA-1-021711

Sample ID: 11B0387-08

Sample Matrix: Ambient Air

Sampled: 2/17/2011 08:11

Sample Description/Location:

Sub Description/Location:

Canister ID: 1837

Canister Size: 6 liter

Flow Controller ID: 4093

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

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	7.9	0.50	0.16	B	19	1.2		1	2/21/11 20:54	WSD
Benzene	0.71	0.050	0.014		2.3	0.16		1	2/21/11 20:54	WSD
Benzyl chloride	ND	0.050	0.015		ND	0.26		1	2/21/11 20:54	WSD
Bromodichloromethane	ND	0.050	0.020		ND	0.34		1	2/21/11 20:54	WSD
Bromoform	ND	0.050	0.013		ND	0.52		1	2/21/11 20:54	WSD
Bromomethane	ND	0.050	0.028		ND	0.19		1	2/21/11 20:54	WSD
1,3-Butadiene	ND	0.050	0.028		ND	0.11		1	2/21/11 20:54	WSD
2-Butanone (MEK)	0.61	0.050	0.024	B	1.8	0.15		1	2/21/11 20:54	WSD
Carbon Disulfide	ND	0.050	0.013		ND	0.16		1	2/21/11 20:54	WSD
Carbon Tetrachloride	0.077	0.050	0.013		0.48	0.31		1	2/21/11 20:54	WSD
Chlorobenzene	ND	0.050	0.020		ND	0.23		1	2/21/11 20:54	WSD
Chloroethane	ND	0.050	0.028		ND	0.13		1	2/21/11 20:54	WSD
Chloroform	ND	0.050	0.014		ND	0.24		1	2/21/11 20:54	WSD
Chloromethane	0.49	0.050	0.028		1.0	0.10		1	2/21/11 20:54	WSD
Cyclohexane	ND	0.050	0.022		ND	0.17		1	2/21/11 20:54	WSD
Dibromochloromethane	ND	0.050	0.014		ND	0.43		1	2/21/11 20:54	WSD
1,2-Dibromoethane (EDB)	ND	0.050	0.015		ND	0.38		1	2/21/11 20:54	WSD
1,2-Dichlorobenzene	ND	0.050	0.015		ND	0.30		1	2/21/11 20:54	WSD
1,3-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 20:54	WSD
1,4-Dichlorobenzene	ND	0.050	0.013		ND	0.30		1	2/21/11 20:54	WSD
Dichlorodifluoromethane (Freon 12)	0.62	0.050	0.020		3.1	0.25		1	2/21/11 20:54	WSD
1,1-Dichloroethane	ND	0.050	0.012		ND	0.20		1	2/21/11 20:54	WSD
1,2-Dichloroethane	ND	0.050	0.014		ND	0.20		1	2/21/11 20:54	WSD
1,1-Dichloroethylene	ND	0.050	0.020		ND	0.20		1	2/21/11 20:54	WSD
cis-1,2-Dichloroethylene	ND	0.050	0.015		ND	0.20		1	2/21/11 20:54	WSD
trans-1,2-Dichloroethylene	ND	0.050	0.012		ND	0.20		1	2/21/11 20:54	WSD
1,2-Dichloropropane	ND	0.050	0.017		ND	0.23		1	2/21/11 20:54	WSD
cis-1,3-Dichloropropene	ND	0.050	0.032		ND	0.23		1	2/21/11 20:54	WSD
trans-1,3-Dichloropropene	ND	0.050	0.012		ND	0.23		1	2/21/11 20:54	WSD
Ethanol	6.4	0.50	0.095		12	0.94		1	2/21/11 20:54	WSD
Ethyl Acetate	ND	0.050	0.029		ND	0.18		1	2/21/11 20:54	WSD
Ethylbenzene	0.26	0.050	0.013		1.1	0.22		1	2/21/11 20:54	WSD
4-Ethyltoluene	0.070	0.050	0.014		0.34	0.25		1	2/21/11 20:54	WSD
Heptane	0.23	0.050	0.021		0.95	0.20		1	2/21/11 20:54	WSD
Hexachlorobutadiene	ND	0.050	0.040		ND	0.53		1	2/21/11 20:54	WSD
Hexane	0.94	0.050	0.017		3.3	0.18		1	2/21/11 20:54	WSD
2-Hexanone (MBK)	ND	0.050	0.014		ND	0.20		1	2/21/11 20:54	WSD
Isopropanol	0.97	0.050	0.034		2.4	0.12		1	2/21/11 20:54	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: AA-1-021711

Sample ID: 11B0387-08

Sample Matrix: Ambient Air

Sampled: 2/17/2011 08:11

Sample Description/Location:

Sub Description/Location:

Canister ID: 1837

Canister Size: 6 liter

Flow Controller ID: 4093

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -5

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	0.050	0.0070		ND	0.18		1	2/21/11 20:54	WSD
Methylene Chloride	0.88	0.10	0.054		3.0	0.35		1	2/21/11 20:54	WSD
Methyl methacrylate	0.12	0.050	0.012		0.48	0.20		1	2/21/11 20:54	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.050	0.015		ND	0.20		1	2/21/11 20:54	WSD
Propene	ND	0.50	0.036		ND	0.86		1	2/21/11 20:54	WSD
Styrene	ND	0.050	0.012		ND	0.21		1	2/21/11 20:54	WSD
1,1,2,2-Tetrachloroethane	ND	0.050	0.023		ND	0.34		1	2/21/11 20:54	WSD
Tetrachloroethylene	0.78	0.050	0.0095		5.3	0.34		1	2/21/11 20:54	WSD
Tetrahydrofuran	ND	0.050	0.025		ND	0.15		1	2/21/11 20:54	WSD
Toluene	1.4	0.050	0.015		5.3	0.19		1	2/21/11 20:54	WSD
1,2,4-Trichlorobenzene	ND	0.050	0.018		ND	0.37		1	2/21/11 20:54	WSD
1,1,1-Trichloroethane	ND	0.050	0.016		ND	0.27		1	2/21/11 20:54	WSD
1,1,2-Trichloroethane	ND	0.050	0.021		ND	0.27		1	2/21/11 20:54	WSD
Trichloroethylene	ND	0.050	0.012		ND	0.27		1	2/21/11 20:54	WSD
Trichlorofluoromethane (Freon 11)	0.30	0.050	0.028	L-05	1.7	0.28		1	2/21/11 20:54	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.086	0.050	0.016		0.66	0.38		1	2/21/11 20:54	WSD
1,2,4-Trimethylbenzene	0.22	0.050	0.013		1.1	0.25		1	2/21/11 20:54	WSD
1,3,5-Trimethylbenzene	0.067	0.050	0.012		0.33	0.25		1	2/21/11 20:54	WSD
Vinyl Acetate	ND	0.050	0.018	L-03	ND	0.18		1	2/21/11 20:54	WSD
Vinyl Chloride	ND	0.050	0.022		ND	0.13		1	2/21/11 20:54	WSD
m&p-Xylene	0.76	0.10	0.024		3.3	0.43		1	2/21/11 20:54	WSD
o-Xylene	0.26	0.050	0.0098		1.1	0.22		1	2/21/11 20:54	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

114

70-130

2/21/11 20:54

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: EW-5-021711

Sample ID: 11B0387-09

Sample Matrix: Soil Gas

Sampled: 2/17/2011 11:45

Sample Description/Location:

Sub Description/Location:

Canister ID: 1017

Canister Size: 6 liter

Flow Controller ID: 4102

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -27

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -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	750	50	16	B	1800	120		100	2/22/11 1:20	WSD
Benzene	1.4	0.20	0.058		4.5	0.64		4	2/22/11 0:41	WSD
Benzyl chloride	ND	0.20	0.060		ND	1.0		4	2/22/11 0:41	WSD
Bromodichloromethane	ND	0.20	0.081		ND	1.3		4	2/22/11 0:41	WSD
Bromoform	ND	0.20	0.052		ND	2.1		4	2/22/11 0:41	WSD
Bromomethane	ND	0.20	0.11		ND	0.78		4	2/22/11 0:41	WSD
1,3-Butadiene	ND	0.20	0.11		ND	0.44		4	2/22/11 0:41	WSD
2-Butanone (MEK)	2500	5.0	2.4	B	7200	15		100	2/22/11 1:20	WSD
Carbon Disulfide	4.8	0.20	0.052		15	0.62		4	2/22/11 0:41	WSD
Carbon Tetrachloride	ND	0.20	0.051		ND	1.3		4	2/22/11 0:41	WSD
Chlorobenzene	ND	0.20	0.079		ND	0.92		4	2/22/11 0:41	WSD
Chloroethane	1.3	0.20	0.11		3.4	0.53		4	2/22/11 0:41	WSD
Chloroform	0.24	0.20	0.058		1.2	0.98		4	2/22/11 0:41	WSD
Chloromethane	ND	0.20	0.11		ND	0.41		4	2/22/11 0:41	WSD
Cyclohexane	ND	0.20	0.089		ND	0.69		4	2/22/11 0:41	WSD
Dibromochloromethane	ND	0.20	0.055		ND	1.7		4	2/22/11 0:41	WSD
1,2-Dibromoethane (EDB)	ND	0.20	0.060		ND	1.5		4	2/22/11 0:41	WSD
1,2-Dichlorobenzene	ND	0.20	0.060		ND	1.2		4	2/22/11 0:41	WSD
1,3-Dichlorobenzene	ND	0.20	0.050		ND	1.2		4	2/22/11 0:41	WSD
1,4-Dichlorobenzene	ND	0.20	0.050		ND	1.2		4	2/22/11 0:41	WSD
Dichlorodifluoromethane (Freon 12)	0.74	0.20	0.081		3.7	0.99		4	2/22/11 0:41	WSD
1,1-Dichloroethane	8.4	0.20	0.050		34	0.81		4	2/22/11 0:41	WSD
1,2-Dichloroethane	ND	0.20	0.056		ND	0.81		4	2/22/11 0:41	WSD
1,1-Dichloroethylene	3.7	0.20	0.078		15	0.79		4	2/22/11 0:41	WSD
cis-1,2-Dichloroethylene	6.9	0.20	0.060		27	0.79		4	2/22/11 0:41	WSD
trans-1,2-Dichloroethylene	ND	0.20	0.048		ND	0.79		4	2/22/11 0:41	WSD
1,2-Dichloropropane	ND	0.20	0.067		ND	0.92		4	2/22/11 0:41	WSD
cis-1,3-Dichloropropene	ND	0.20	0.13		ND	0.91		4	2/22/11 0:41	WSD
trans-1,3-Dichloropropene	ND	0.20	0.046		ND	0.91		4	2/22/11 0:41	WSD
Ethanol	10	2.0	0.38		19	3.8		4	2/22/11 0:41	WSD
Ethyl Acetate	ND	0.20	0.11		ND	0.72		4	2/22/11 0:41	WSD
Ethylbenzene	ND	0.20	0.053		ND	0.87		4	2/22/11 0:41	WSD
4-Ethyltoluene	ND	0.20	0.056		ND	0.98		4	2/22/11 0:41	WSD
Heptane	ND	0.20	0.084		ND	0.82		4	2/22/11 0:41	WSD
Hexachlorobutadiene	ND	0.20	0.16		ND	2.1		4	2/22/11 0:41	WSD
Hexane	ND	0.20	0.069		ND	0.70		4	2/22/11 0:41	WSD
2-Hexanone (MBK)	ND	0.20	0.054		ND	0.82		4	2/22/11 0:41	WSD
Isopropanol	5.2	0.20	0.14		13	0.49		4	2/22/11 0:41	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: EW-5-021711

Sample ID: 11B0387-09

Sample Matrix: Soil Gas

Sampled: 2/17/2011 11:45

Sample Description/Location:

Sub Description/Location:

Canister ID: 1017

Canister Size: 6 liter

Flow Controller ID: 4102

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -27

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -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	0.20	0.028		ND	0.72		4	2/22/11 0:41	WSD
Methylene Chloride	0.59	0.40	0.22		2.0	1.4		4	2/22/11 0:41	WSD
Methyl methacrylate	ND	0.20	0.048		ND	0.82		4	2/22/11 0:41	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.061		ND	0.82		4	2/22/11 0:41	WSD
Propene	ND	2.0	0.14		ND	3.4		4	2/22/11 0:41	WSD
Styrene	ND	0.20	0.047		ND	0.85		4	2/22/11 0:41	WSD
1,1,2,2-Tetrachloroethane	ND	0.20	0.094		ND	1.4		4	2/22/11 0:41	WSD
Tetrachloroethylene	600	5.0	0.95		4100	34		100	2/22/11 1:20	WSD
Tetrahydrofuran	3800	5.0	2.5		11000	15		100	2/22/11 1:20	WSD
Toluene	0.44	0.20	0.059		1.6	0.75		4	2/22/11 0:41	WSD
1,2,4-Trichlorobenzene	ND	0.20	0.074		ND	1.5		4	2/22/11 0:41	WSD
1,1,1-Trichloroethane	74	0.20	0.064		400	1.1		4	2/22/11 0:41	WSD
1,1,2-Trichloroethane	ND	0.20	0.083		ND	1.1		4	2/22/11 0:41	WSD
Trichloroethylene	120	0.20	0.050		660	1.1		4	2/22/11 0:41	WSD
Trichlorofluoromethane (Freon 11)	1.0	0.20	0.11	L-05	5.8	1.1		4	2/22/11 0:41	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.20	0.062		ND	1.5		4	2/22/11 0:41	WSD
1,2,4-Trimethylbenzene	ND	0.20	0.050		ND	0.98		4	2/22/11 0:41	WSD
1,3,5-Trimethylbenzene	ND	0.20	0.047		ND	0.98		4	2/22/11 0:41	WSD
Vinyl Acetate	ND	0.20	0.074	L-03	ND	0.70		4	2/22/11 0:41	WSD
Vinyl Chloride	1.5	0.20	0.088		3.7	0.51		4	2/22/11 0:41	WSD
m&p-Xylene	ND	0.40	0.097		ND	1.7		4	2/22/11 0:41	WSD
o-Xylene	ND	0.20	0.039		ND	0.87		4	2/22/11 0:41	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	116	70-130	2/22/11 1:20
4-Bromofluorobenzene (1)	114	70-130	2/22/11 0:41

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: EW-6-021711

Sample ID: 11B0387-10

Sample Matrix: Soil Gas

Sampled: 2/17/2011 11:26

Sample Description/Location:

Sub Description/Location:

Canister ID: 1700

Canister Size: 6 liter

Flow Controller ID: 4088

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -8

Receipt Vacuum(in Hg): -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	6.2	1.0	0.32	B	15	2.4		2	2/21/11 21:32	WSD
Benzene	0.34	0.10	0.029		1.1	0.32		2	2/21/11 21:32	WSD
Benzyl chloride	ND	0.10	0.030		ND	0.52		2	2/21/11 21:32	WSD
Bromodichloromethane	ND	0.10	0.040		ND	0.67		2	2/21/11 21:32	WSD
Bromoform	ND	0.10	0.026		ND	1.0		2	2/21/11 21:32	WSD
Bromomethane	ND	0.10	0.055		ND	0.39		2	2/21/11 21:32	WSD
1,3-Butadiene	ND	0.10	0.057		ND	0.22		2	2/21/11 21:32	WSD
2-Butanone (MEK)	0.64	0.10	0.048	B	1.9	0.29		2	2/21/11 21:32	WSD
Carbon Disulfide	ND	0.10	0.026		ND	0.31		2	2/21/11 21:32	WSD
Carbon Tetrachloride	ND	0.10	0.025		ND	0.63		2	2/21/11 21:32	WSD
Chlorobenzene	ND	0.10	0.040		ND	0.46		2	2/21/11 21:32	WSD
Chloroethane	ND	0.10	0.057		ND	0.26		2	2/21/11 21:32	WSD
Chloroform	ND	0.10	0.029		ND	0.49		2	2/21/11 21:32	WSD
Chloromethane	0.49	0.10	0.055		1.0	0.21		2	2/21/11 21:32	WSD
Cyclohexane	ND	0.10	0.045		ND	0.34		2	2/21/11 21:32	WSD
Dibromochloromethane	ND	0.10	0.028		ND	0.85		2	2/21/11 21:32	WSD
1,2-Dibromoethane (EDB)	ND	0.10	0.030		ND	0.77		2	2/21/11 21:32	WSD
1,2-Dichlorobenzene	ND	0.10	0.030		ND	0.60		2	2/21/11 21:32	WSD
1,3-Dichlorobenzene	ND	0.10	0.025		ND	0.60		2	2/21/11 21:32	WSD
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60		2	2/21/11 21:32	WSD
Dichlorodifluoromethane (Freon 12)	0.73	0.10	0.040		3.6	0.49		2	2/21/11 21:32	WSD
1,1-Dichloroethane	ND	0.10	0.025		ND	0.40		2	2/21/11 21:32	WSD
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40		2	2/21/11 21:32	WSD
1,1-Dichloroethylene	ND	0.10	0.039		ND	0.40		2	2/21/11 21:32	WSD
cis-1,2-Dichloroethylene	ND	0.10	0.030		ND	0.40		2	2/21/11 21:32	WSD
trans-1,2-Dichloroethylene	ND	0.10	0.024		ND	0.40		2	2/21/11 21:32	WSD
1,2-Dichloropropane	ND	0.10	0.033		ND	0.46		2	2/21/11 21:32	WSD
cis-1,3-Dichloropropene	ND	0.10	0.064		ND	0.45		2	2/21/11 21:32	WSD
trans-1,3-Dichloropropene	ND	0.10	0.023		ND	0.45		2	2/21/11 21:32	WSD
Ethanol	5.7	1.0	0.19		11	1.9		2	2/21/11 21:32	WSD
Ethyl Acetate	ND	0.10	0.057		ND	0.36		2	2/21/11 21:32	WSD
Ethylbenzene	ND	0.10	0.026		ND	0.43		2	2/21/11 21:32	WSD
4-Ethyltoluene	ND	0.10	0.028		ND	0.49		2	2/21/11 21:32	WSD
Heptane	ND	0.10	0.042		ND	0.41		2	2/21/11 21:32	WSD
Hexachlorobutadiene	ND	0.10	0.080		ND	1.1		2	2/21/11 21:32	WSD
Hexane	0.36	0.10	0.034		1.3	0.35		2	2/21/11 21:32	WSD
2-Hexanone (MBK)	ND	0.10	0.027		ND	0.41		2	2/21/11 21:32	WSD
Isopropanol	1.2	0.10	0.068		2.9	0.25		2	2/21/11 21:32	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: EW-6-021711

Sample ID: 11B0387-10

Sample Matrix: Soil Gas

Sampled: 2/17/2011 11:26

Sample Description/Location:

Sub Description/Location:

Canister ID: 1700

Canister Size: 6 liter

Flow Controller ID: 4088

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -8

Receipt Vacuum(in Hg): -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	0.10	0.014		ND	0.36		2	2/21/11 21:32	WSD
Methylene Chloride	0.81	0.20	0.11		2.8	0.69		2	2/21/11 21:32	WSD
Methyl methacrylate	ND	0.10	0.024		ND	0.41		2	2/21/11 21:32	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.031		ND	0.41		2	2/21/11 21:32	WSD
Propene	ND	1.0	0.071		ND	1.7		2	2/21/11 21:32	WSD
Styrene	ND	0.10	0.023		ND	0.43		2	2/21/11 21:32	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.047		ND	0.69		2	2/21/11 21:32	WSD
Tetrachloroethylene	0.18	0.10	0.019		1.2	0.68		2	2/21/11 21:32	WSD
Tetrahydrofuran	ND	0.10	0.050		ND	0.29		2	2/21/11 21:32	WSD
Toluene	0.63	0.10	0.029		2.4	0.38		2	2/21/11 21:32	WSD
1,2,4-Trichlorobenzene	ND	0.10	0.037		ND	0.74		2	2/21/11 21:32	WSD
1,1,1-Trichloroethane	ND	0.10	0.032		ND	0.55		2	2/21/11 21:32	WSD
1,1,2-Trichloroethane	ND	0.10	0.041		ND	0.55		2	2/21/11 21:32	WSD
Trichloroethylene	ND	0.10	0.025		ND	0.54		2	2/21/11 21:32	WSD
Trichlorofluoromethane (Freon 11)	0.30	0.10	0.055	L-05	1.7	0.56		2	2/21/11 21:32	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.11	0.10	0.031		0.86	0.77		2	2/21/11 21:32	WSD
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49		2	2/21/11 21:32	WSD
1,3,5-Trimethylbenzene	ND	0.10	0.023		ND	0.49		2	2/21/11 21:32	WSD
Vinyl Acetate	ND	0.10	0.037	L-03	ND	0.35		2	2/21/11 21:32	WSD
Vinyl Chloride	ND	0.10	0.044		ND	0.26		2	2/21/11 21:32	WSD
m&p-Xylene	0.22	0.20	0.048		0.94	0.87		2	2/21/11 21:32	WSD
o-Xylene	ND	0.10	0.020		ND	0.43		2	2/21/11 21:32	WSD

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)

115

70-130

2/21/11 21:32

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: EW-7-021711

Sample ID: 11B0387-11

Sample Matrix: Soil Gas

Sampled: 2/17/2011 10:13

Sample Description/Location:

Sub Description/Location:

Canister ID: 1461

Canister Size: 6 liter

Flow Controller ID: 4106

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -6

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Acetone	15	1.0	0.32	B	35	2.4		2	2/21/11 22:46	WSD
Benzene	0.51	0.10	0.029		1.6	0.32		2	2/21/11 22:46	WSD
Benzyl chloride	ND	0.10	0.030		ND	0.52		2	2/21/11 22:46	WSD
Bromodichloromethane	ND	0.10	0.040		ND	0.67		2	2/21/11 22:46	WSD
Bromoform	ND	0.10	0.026		ND	1.0		2	2/21/11 22:46	WSD
Bromomethane	ND	0.10	0.055		ND	0.39		2	2/21/11 22:46	WSD
1,3-Butadiene	ND	0.10	0.057		ND	0.22		2	2/21/11 22:46	WSD
2-Butanone (MEK)	1.8	0.10	0.048	B	5.3	0.29		2	2/21/11 22:46	WSD
Carbon Disulfide	ND	0.10	0.026		ND	0.31		2	2/21/11 22:46	WSD
Carbon Tetrachloride	ND	0.10	0.025		ND	0.63		2	2/21/11 22:46	WSD
Chlorobenzene	ND	0.10	0.040		ND	0.46		2	2/21/11 22:46	WSD
Chloroethane	ND	0.10	0.057		ND	0.26		2	2/21/11 22:46	WSD
Chloroform	0.61	0.10	0.029		3.0	0.49		2	2/21/11 22:46	WSD
Chloromethane	ND	0.10	0.055		ND	0.21		2	2/21/11 22:46	WSD
Cyclohexane	ND	0.10	0.045		ND	0.34		2	2/21/11 22:46	WSD
Dibromochloromethane	ND	0.10	0.028		ND	0.85		2	2/21/11 22:46	WSD
1,2-Dibromoethane (EDB)	ND	0.10	0.030		ND	0.77		2	2/21/11 22:46	WSD
1,2-Dichlorobenzene	ND	0.10	0.030		ND	0.60		2	2/21/11 22:46	WSD
1,3-Dichlorobenzene	ND	0.10	0.025		ND	0.60		2	2/21/11 22:46	WSD
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60		2	2/21/11 22:46	WSD
Dichlorodifluoromethane (Freon 12)	ND	0.10	0.040		ND	0.49		2	2/21/11 22:46	WSD
1,1-Dichloroethane	36	0.10	0.025		150	0.40		2	2/21/11 22:46	WSD
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40		2	2/21/11 22:46	WSD
1,1-Dichloroethylene	ND	0.10	0.039		ND	0.40		2	2/21/11 22:46	WSD
cis-1,2-Dichloroethylene	62	0.10	0.030		250	0.40		2	2/21/11 22:46	WSD
trans-1,2-Dichloroethylene	15	0.10	0.024		58	0.40		2	2/21/11 22:46	WSD
1,2-Dichloropropane	ND	0.10	0.033		ND	0.46		2	2/21/11 22:46	WSD
cis-1,3-Dichloropropene	ND	0.10	0.064		ND	0.45		2	2/21/11 22:46	WSD
trans-1,3-Dichloropropene	ND	0.10	0.023		ND	0.45		2	2/21/11 22:46	WSD
Ethanol	9.7	1.0	0.19		18	1.9		2	2/21/11 22:46	WSD
Ethyl Acetate	ND	0.10	0.057		ND	0.36		2	2/21/11 22:46	WSD
Ethylbenzene	ND	0.10	0.026		ND	0.43		2	2/21/11 22:46	WSD
4-Ethyltoluene	ND	0.10	0.028		ND	0.49		2	2/21/11 22:46	WSD
Heptane	ND	0.10	0.042		ND	0.41		2	2/21/11 22:46	WSD
Hexachlorobutadiene	ND	0.10	0.080		ND	1.1		2	2/21/11 22:46	WSD
Hexane	ND	0.10	0.034		ND	0.35		2	2/21/11 22:46	WSD
2-Hexanone (MBK)	ND	0.10	0.027		ND	0.41		2	2/21/11 22:46	WSD
Isopropanol	ND	0.10	0.068		ND	0.25		2	2/21/11 22:46	WSD

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: EW-7-021711

Sample ID: 11B0387-11

Sample Matrix: Soil Gas

Sampled: 2/17/2011 10:13

Sample Description/Location:

Sub Description/Location:

Canister ID: 1461

Canister Size: 6 liter

Flow Controller ID: 4106

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg): -6

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling:

EPA TO-15

Analyte	Results	ppbv			ug/m3			Dilution	Date/Time Analyzed	Analyst
		RL	MDL	Flag	Results	RL				
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.014		ND	0.36		2	2/21/11 22:46	WSD
Methylene Chloride	0.70	0.20	0.11		2.4	0.69		2	2/21/11 22:46	WSD
Methyl methacrylate	ND	0.10	0.024		ND	0.41		2	2/21/11 22:46	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.031		ND	0.41		2	2/21/11 22:46	WSD
Propene	ND	1.0	0.071		ND	1.7		2	2/21/11 22:46	WSD
Styrene	ND	0.10	0.023		ND	0.43		2	2/21/11 22:46	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.047		ND	0.69		2	2/21/11 22:46	WSD
Tetrachloroethylene	16	0.10	0.019		110	0.68		2	2/21/11 22:46	WSD
Tetrahydrofuran	0.93	0.10	0.050		2.7	0.29		2	2/21/11 22:46	WSD
Toluene	0.23	0.10	0.029		0.88	0.38		2	2/21/11 22:46	WSD
1,2,4-Trichlorobenzene	ND	0.10	0.037		ND	0.74		2	2/21/11 22:46	WSD
1,1,1-Trichloroethane	20	0.10	0.032		110	0.55		2	2/21/11 22:46	WSD
1,1,2-Trichloroethane	ND	0.10	0.041		ND	0.55		2	2/21/11 22:46	WSD
Trichloroethylene	57	0.10	0.025		310	0.54		2	2/21/11 22:46	WSD
Trichlorofluoromethane (Freon 11)	130	1.0	0.55	L-05	740	5.6		20	2/22/11 9:22	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10	0.031		ND	0.77		2	2/21/11 22:46	WSD
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49		2	2/21/11 22:46	WSD
1,3,5-Trimethylbenzene	ND	0.10	0.023		ND	0.49		2	2/21/11 22:46	WSD
Vinyl Acetate	ND	0.10	0.037	L-03	ND	0.35		2	2/21/11 22:46	WSD
Vinyl Chloride	ND	0.10	0.044		ND	0.26		2	2/21/11 22:46	WSD
m&p-Xylene	ND	0.20	0.048		ND	0.87		2	2/21/11 22:46	WSD
o-Xylene	ND	0.10	0.020		ND	0.43		2	2/21/11 22:46	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	113	70-130	2/22/11 9:22
4-Bromofluorobenzene (1)	113	70-130	2/21/11 22:46

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: EW-Combined-021711

Sample ID: 11B0387-12

Sample Matrix: Soil Gas

Sampled: 2/17/2011 11:38

Sample Description/Location:

Sub Description/Location:

Canister ID: 1223

Canister Size: 6 liter

Flow Controller ID: 4072

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -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	2.7	1.0	0.32	B	6.3	2.4	2	2/22/11 0:05	WSD	
Benzene	0.23	0.10	0.029		0.72	0.32	2	2/22/11 0:05	WSD	
Benzyl chloride	ND	0.10	0.030		ND	0.52	2	2/22/11 0:05	WSD	
Bromodichloromethane	ND	0.10	0.040		ND	0.67	2	2/22/11 0:05	WSD	
Bromoform	ND	0.10	0.026		ND	1.0	2	2/22/11 0:05	WSD	
Bromomethane	ND	0.10	0.055		ND	0.39	2	2/22/11 0:05	WSD	
1,3-Butadiene	ND	0.10	0.057		ND	0.22	2	2/22/11 0:05	WSD	
2-Butanone (MEK)	1.5	0.10	0.048	B	4.5	0.29	2	2/22/11 0:05	WSD	
Carbon Disulfide	0.24	0.10	0.026		0.73	0.31	2	2/22/11 0:05	WSD	
Carbon Tetrachloride	0.10	0.10	0.025		0.63	0.63	2	2/22/11 0:05	WSD	
Chlorobenzene	ND	0.10	0.040		ND	0.46	2	2/22/11 0:05	WSD	
Chloroethane	1.4	0.10	0.057		3.6	0.26	2	2/22/11 0:05	WSD	
Chloroform	1.4	0.10	0.029		6.9	0.49	2	2/22/11 0:05	WSD	
Chloromethane	ND	0.10	0.055		ND	0.21	2	2/22/11 0:05	WSD	
Cyclohexane	ND	0.10	0.045		ND	0.34	2	2/22/11 0:05	WSD	
Dibromochloromethane	ND	0.10	0.028		ND	0.85	2	2/22/11 0:05	WSD	
1,2-Dibromoethane (EDB)	ND	0.10	0.030		ND	0.77	2	2/22/11 0:05	WSD	
1,2-Dichlorobenzene	ND	0.10	0.030		ND	0.60	2	2/22/11 0:05	WSD	
1,3-Dichlorobenzene	ND	0.10	0.025		ND	0.60	2	2/22/11 0:05	WSD	
1,4-Dichlorobenzene	ND	0.10	0.025		ND	0.60	2	2/22/11 0:05	WSD	
Dichlorodifluoromethane (Freon 12)	0.82	0.10	0.040		4.1	0.49	2	2/22/11 0:05	WSD	
1,1-Dichloroethane	43	0.10	0.025		170	0.40	2	2/22/11 0:05	WSD	
1,2-Dichloroethane	ND	0.10	0.028		ND	0.40	2	2/22/11 0:05	WSD	
1,1-Dichloroethylene	15	0.10	0.039		58	0.40	2	2/22/11 0:05	WSD	
cis-1,2-Dichloroethylene	30	0.10	0.030		120	0.40	2	2/22/11 0:05	WSD	
trans-1,2-Dichloroethylene	0.48	0.10	0.024		1.9	0.40	2	2/22/11 0:05	WSD	
1,2-Dichloropropane	ND	0.10	0.033		ND	0.46	2	2/22/11 0:05	WSD	
cis-1,3-Dichloropropene	ND	0.10	0.064		ND	0.45	2	2/22/11 0:05	WSD	
trans-1,3-Dichloropropene	ND	0.10	0.023		ND	0.45	2	2/22/11 0:05	WSD	
Ethanol	9.1	1.0	0.19		17	1.9	2	2/22/11 0:05	WSD	
Ethyl Acetate	ND	0.10	0.057		ND	0.36	2	2/22/11 0:05	WSD	
Ethylbenzene	ND	0.10	0.026		ND	0.43	2	2/22/11 0:05	WSD	
4-Ethyltoluene	ND	0.10	0.028		ND	0.49	2	2/22/11 0:05	WSD	
Heptane	ND	0.10	0.042		ND	0.41	2	2/22/11 0:05	WSD	
Hexachlorobutadiene	ND	0.10	0.080		ND	1.1	2	2/22/11 0:05	WSD	
Hexane	0.23	0.10	0.034		0.80	0.35	2	2/22/11 0:05	WSD	
2-Hexanone (MBK)	ND	0.10	0.027		ND	0.41	2	2/22/11 0:05	WSD	
Isopropanol	ND	0.10	0.068		ND	0.25	2	2/22/11 0:05	WSD	

ANALYTICAL RESULTS

Project Location: Providence, RI, Gorham Site

Date Received: 2/17/2011

Field Sample #: EW-Combined-021711

Sample ID: 11B0387-12

Sample Matrix: Soil Gas

Sampled: 2/17/2011 11:38

Sample Description/Location:

Sub Description/Location:

Canister ID: 1223

Canister Size: 6 liter

Flow Controller ID: 4072

Sample Type: 30 min

Work Order: 11B0387

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -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				
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.014		ND	0.36		2	2/22/11 0:05	WSD
Methylene Chloride	0.83	0.20	0.11		2.9	0.69		2	2/22/11 0:05	WSD
Methyl methacrylate	ND	0.10	0.024		ND	0.41		2	2/22/11 0:05	WSD
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.031		ND	0.41		2	2/22/11 0:05	WSD
Propene	ND	1.0	0.071		ND	1.7		2	2/22/11 0:05	WSD
Styrene	ND	0.10	0.023		ND	0.43		2	2/22/11 0:05	WSD
1,1,2,2-Tetrachloroethane	ND	0.10	0.047		ND	0.69		2	2/22/11 0:05	WSD
Tetrachloroethylene	140	1.0	0.19		920	6.8		20	2/22/11 8:46	WSD
Tetrahydrofuran	3.7	0.10	0.050		11	0.29		2	2/22/11 0:05	WSD
Toluene	0.36	0.10	0.029		1.4	0.38		2	2/22/11 0:05	WSD
1,2,4-Trichlorobenzene	ND	0.10	0.037		ND	0.74		2	2/22/11 0:05	WSD
1,1,1-Trichloroethane	470	1.0	0.32		2500	5.5		20	2/22/11 8:46	WSD
1,1,2-Trichloroethane	ND	0.10	0.041		ND	0.55		2	2/22/11 0:05	WSD
Trichloroethylene	340	1.0	0.25		1800	5.4		20	2/22/11 8:46	WSD
Trichlorofluoromethane (Freon 11)	36	0.10	0.055	L-05	200	0.56		2	2/22/11 0:05	WSD
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.10	0.031		ND	0.77		2	2/22/11 0:05	WSD
1,2,4-Trimethylbenzene	ND	0.10	0.025		ND	0.49		2	2/22/11 0:05	WSD
1,3,5-Trimethylbenzene	ND	0.10	0.023		ND	0.49		2	2/22/11 0:05	WSD
Vinyl Acetate	ND	0.10	0.037	L-03	ND	0.35		2	2/22/11 0:05	WSD
Vinyl Chloride	ND	0.10	0.044		ND	0.26		2	2/22/11 0:05	WSD
m&p-Xylene	ND	0.20	0.048		ND	0.87		2	2/22/11 0:05	WSD
o-Xylene	ND	0.10	0.020		ND	0.43		2	2/22/11 0:05	WSD

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	114	70-130	2/22/11 8:46
4-Bromofluorobenzene (1)	111	70-130	2/22/11 0:05

Sample Extraction Data
Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
11B0387-01 [IA-1-021711]	B026408	1	1	N/A	1000	400	400	02/21/11
11B0387-02 [IA-2-021711]	B026408	1	1	N/A	1000	400	400	02/21/11
11B0387-03 [IA-3-021711]	B026408	1	1	N/A	1000	400	400	02/21/11
11B0387-04 [IA-4-021711]	B026408	1	1	N/A	1000	400	400	02/21/11
11B0387-05 [IA-5-021711]	B026408	1	1	N/A	1000	400	400	02/21/11
11B0387-06 [IA-6-021711]	B026408	1	1	N/A	1000	400	400	02/21/11
11B0387-07 [IA-7-021711]	B026408	1	1	N/A	1000	400	400	02/21/11
11B0387-08 [AA-1-021711]	B026408	1	1	N/A	1000	400	400	02/21/11
11B0387-09 [EW-5-021711]	B026408	1.5	1	N/A	1000	400	150	02/21/11
11B0387-09RE1 [EW-5-021711]	B026408	1.5	66.67	15	1000	400	400	02/21/11
11B0387-10 [EW-6-021711]	B026408	1.5	1	N/A	1000	400	300	02/21/11
11B0387-11 [EW-7-021711]	B026408	1	1	N/A	1000	400	200	02/21/11
11B0387-11RE1 [EW-7-021711]	B026408	1	1	N/A	1000	400	20	02/21/11
11B0387-12 [EW-Combined-021711]	B026408	1	1	N/A	1000	400	200	02/21/11
11B0387-12RE1 [EW-Combined-021711]	B026408	1	1	N/A	1000	400	20	02/21/11

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 B026408 - TO-15 Prep

Blank (B026408-BLK1)	Prepared & Analyzed: 02/21/11									
Acetone	0.49	0.10								B
Benzene	ND	0.025								
Benzyl chloride	ND	0.025								
Bromodichloromethane	ND	0.025								
Bromoform	ND	0.025								
Bromomethane	ND	0.025								
1,3-Butadiene	ND	0.025								
2-Butanone (MEK)	0.067	0.025								B
Carbon Disulfide	ND	0.025								
Carbon Tetrachloride	ND	0.025								
Chlorobenzene	ND	0.025								
Chloroethane	ND	0.025								
Chloroform	ND	0.025								
Chloromethane	ND	0.025								
Cyclohexane	ND	0.025								
Dibromochloromethane	ND	0.025								
1,2-Dibromoethane (EDB)	ND	0.025								
1,2-Dichlorobenzene	ND	0.025								
1,3-Dichlorobenzene	ND	0.025								
1,4-Dichlorobenzene	ND	0.025								
Dichlorodifluoromethane (Freon 12)	ND	0.025								
1,1-Dichloroethane	ND	0.025								
1,2-Dichloroethane	ND	0.025								
1,1-Dichloroethylene	ND	0.025								
cis-1,2-Dichloroethylene	ND	0.025								
trans-1,2-Dichloroethylene	ND	0.025								
1,2-Dichloropropane	ND	0.025								
cis-1,3-Dichloropropene	ND	0.025								
trans-1,3-Dichloropropene	ND	0.025								
Ethanol	ND	0.10								
Ethyl Acetate	ND	0.025								
Ethylbenzene	ND	0.025								
4-Ethyltoluene	ND	0.025								
Heptane	ND	0.025								
Hexachlorobutadiene	ND	0.025								
Hexane	ND	0.025								
2-Hexanone (MBK)	ND	0.025								
Isopropanol	ND	0.025								
Methyl tert-Butyl Ether (MTBE)	ND	0.025								
Methylene Chloride	ND	0.10								
Methyl methacrylate	ND	0.025								
4-Methyl-2-pentanone (MIBK)	ND	0.025								
Propene	ND	0.025								
Styrene	ND	0.025								
1,1,2,2-Tetrachloroethane	ND	0.025								
Tetrachloroethylene	ND	0.025								

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 B026408 - TO-15 Prep

Blank (B026408-BLK1)	Prepared & Analyzed: 02/21/11							
Tetrahydrofuran	ND	0.025						
Toluene	ND	0.025						
1,2,4-Trichlorobenzene	ND	0.025						
1,1,1-Trichloroethane	ND	0.025						
1,1,2-Trichloroethane	ND	0.025						
Trichloroethylene	ND	0.025						
Trichlorofluoromethane (Freon 11)	ND	0.025						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.025						
1,2,4-Trimethylbenzene	ND	0.025						
1,3,5-Trimethylbenzene	ND	0.025						
Vinyl Acetate	ND	0.025						L-03
Vinyl Chloride	ND	0.025						
m&p-Xylene	ND	0.050						
o-Xylene	ND	0.025						
<i>Surrogate: 4-Bromofluorobenzene (l)</i>	9.03		8.00		113		70-130	

LCS (B026408-BS1)	Prepared & Analyzed: 02/21/11						
Acetone	6.72		5.00		134	50-150	B
Benzene	4.00		5.00		79.9	70-130	
Benzyl chloride	4.57		5.00		91.5	70-130	
Bromodichloromethane	5.27		5.00		105	70-130	
Bromoform	5.71		5.00		114	70-130	
Bromomethane	5.59		5.00		112	70-130	
1,3-Butadiene	4.94		5.00		98.8	70-130	
2-Butanone (MEK)	4.35		5.00		87.1	70-130	B
Carbon Disulfide	5.26		5.00		105	70-130	
Carbon Tetrachloride	5.94		5.00		119	70-130	
Chlorobenzene	4.30		5.00		86.1	70-130	
Chloroethane	4.99		5.00		99.9	70-130	
Chloroform	5.84		5.00		117	70-130	
Chloromethane	4.88		5.00		97.7	70-130	
Cyclohexane	3.80		5.00		75.9	50-150	
Dibromochloromethane	5.20		5.00		104	70-130	
1,2-Dibromoethane (EDB)	4.44		5.00		88.9	70-130	
1,2-Dichlorobenzene	4.94		5.00		98.7	70-130	
1,3-Dichlorobenzene	4.95		5.00		99.0	70-130	
1,4-Dichlorobenzene	4.92		5.00		98.4	70-130	
Dichlorodifluoromethane (Freon 12)	6.47		5.00		129	70-130	
1,1-Dichloroethane	5.08		5.00		102	70-130	
1,2-Dichloroethane	6.29		5.00		126	70-130	
1,1-Dichloroethylene	6.05		5.00		121	70-130	
cis-1,2-Dichloroethylene	5.25		5.00		105	70-130	
trans-1,2-Dichloroethylene	5.20		5.00		104	70-130	
1,2-Dichloropropane	3.93		5.00		78.6	70-130	
cis-1,3-Dichloropropene	4.66		5.00		93.1	70-130	
trans-1,3-Dichloropropene	4.34		5.00		86.8	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	Limit	Flag
Batch B026408 - TO-15 Prep											
LCS (B026408-BS1)											
Prepared & Analyzed: 02/21/11											
Ethanol	2.51				5.00		50.1	50-150			
Ethyl Acetate	4.35				5.00		87.0	50-150			
Ethylbenzene	4.22				5.00		84.4	70-130			
4-Ethyltoluene	4.46				5.00		89.2	50-150			
Heptane	3.98				5.00		79.6	50-150			
Hexachlorobutadiene	5.42				5.00		108	70-130			
Hexane	5.20				5.00		104	70-130			
2-Hexanone (MBK)	3.14				5.00		62.8	50-150			
Isopropanol	3.20				5.00		64.0	50-150			
Methyl tert-Butyl Ether (MTBE)	5.18				5.00		104	70-130			
Methylene Chloride	5.25				5.00		105	70-130			
Methyl methacrylate	3.74				5.00		74.9	70-130			
4-Methyl-2-pentanone (MIBK)	3.74				5.00		74.8	70-130			
Propene	5.36				5.00		107	50-150			
Styrene	4.16				5.00		83.2	70-130			
1,1,2,2-Tetrachloroethane	4.43				5.00		88.6	70-130			
Tetrachloroethylene	4.70				5.00		94.0	70-130			
Tetrahydrofuran	4.38				5.00		87.7	50-150			
Toluene	3.94				5.00		78.8	70-130			
1,2,4-Trichlorobenzene	4.92				5.00		98.5	70-130			
1,1,1-Trichloroethane	5.50				5.00		110	70-130			
1,1,2-Trichloroethane	4.14				5.00		82.8	70-130			
Trichloroethylene	4.65				5.00		93.0	70-130			
Trichlorofluoromethane (Freon 11)	6.90				5.00		138 *	70-130			L-05
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	6.17				5.00		123	70-130			
1,2,4-Trimethylbenzene	4.58				5.00		91.7	70-130			
1,3,5-Trimethylbenzene	4.60				5.00		92.1	70-130			
Vinyl Acetate	3.33				5.00		66.6 *	70-130			L-03
Vinyl Chloride	5.08				5.00		102	70-130			
m&p-Xylene	8.53				10.0		85.3	70-130			
o-Xylene	4.47				5.00		89.4	70-130			
Surrogate: 4-Bromofluorobenzene (l)	9.58				8.00		120	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.
- B Analyte is found in the associated blank as well as in the sample.
- 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.
- L-05 Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

CERTIFICATIONS

Certified Analyses included in this Report

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

CERTIFICATIONS
Certified Analyses included in this Report

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

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

Code	Description	Number	Expires
AIHA	American Industrial Hygiene Association	100033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2011
CT	Connecticut Department of Public Health	PH-0567	09/30/2011
NY	New York State Department of Health	10899 NELAP	04/1/2011
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2012
RI	Rhode Island Department of Health	LAO00112	12/30/2011
NC	North Carolina Div. of Water Quality	652	12/31/2011
NJ	New Jersey DEP	MA007 NELAP	06/30/2011
FL	Florida Department of Health	E871027 NELAP	06/30/2011
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2011
WA	State of Washington Department of Ecology	C2065	



ANALYTICAL LABORATORY

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

**HAIN OF CUSTODY
RECORD**

39 SPRUCE ST
EAST LONGMEADOW, MA 01028

Page 1 of 1

Company Name: <u>MacLean Engineering</u>		www.contestlabs.com					
Address: <u>107 Andover Rd Suite 301</u>		Telephone: (714) <u>243-6606</u>					
Attention: <u>Kelly Chastenier</u>		Project # <u>365008011413</u>					
Project Location: <u>Brentfield Park Area</u>		Client PO # <u>See Client</u>					
Sampled By: <u>MAR</u>		Fax #: _____					
Proposal Provided? (For Billing purposes)		Email: <u>lachastenier@maclean.com</u>					
<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		Format: <input type="checkbox"/> EXCEL <input type="checkbox"/> PDF <input type="checkbox"/> GIS KEY <input checked="" type="checkbox"/> OTHER					
DATA DELIVERY (check one):							
<input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> WEBSITE CLIENT							
Date Sampled ONLY USE WHEN USING PUMPS							
Start	Stop	Total	Flow Rate				
Date	Date	Minutes	Volume				
Time	Time	Sampled	L / Min. or M ³ /Min. or Liters or M ³				
Lab #	Matrix Code*	U	Summa Canister ID				
IA - 1 - 021711	5	01	02-17-11 02-17-11 72-01 739	30	0.2	6	IA X
IA - 2 - 021711	5	02	02-17-11 02-17-11 733 203	30	0.2	6	IA X
IA - 3 - 021711	5	03	02-17-11 02-17-11 735 805	30	0.2	6	IA X
IA - 4 - 021711	5	04	02-17-11 02-17-11 737 807	30	0.2	6	IA X
IA - 5 - 021711	5	05	02-17-11 02-17-11 747 917	30	0.2	6	IA X
IA - 6 - 021711	5	06	02-17-11 02-17-11 745 1033	30	0.2	6	IA X
IA - 7 - 021711	5	07	02-17-11 02-17-11 738 1063	30	0.2	6	IA X
IA - 1 - 021711	5	08	02-17-11 02-17-11 741 201	30	0.2	6	IA X
Laboratory Comments:							
CLIENT COMMENTS: <i>Do not analysis. monitor ID = 1828. inflow Res # 1040.</i>							
Relinquished by (Signature) <u>MacLean Engineering</u>		Date/Time: <u>2-17-11 1440</u>					
Received by: (Signature) <u>MacLean Engineering</u>		Date/Time: <u>2-17-11 1820</u>					
Received by: (Signature) <u>MacLean Engineering</u>		Date/Time: <u>2-17-11 1820</u>					
Date/Time: <u>RUSH*</u>		Date/Time: <u>RUSH*</u>					
*Approval Required		*Approval Required					
*TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT, TURNAROUND TIME WILL BE 48 HOURS.							



con-test
ANALYTICAL LABORATORY

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

**HAIN OF CUSTODY
RECORD**

39 SPRUCE ST
EAST LONGMEADOW, MA 0102

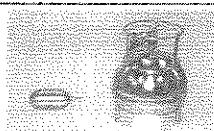
Page 2 of 2

Company Name:	Maytree Engineering		
Address:	107 Audubon Rd Suite 301 Westfield, MA 01884		
Attention:	Kelly Chatterton		
Project Location:	Providence, RI / Boston, MA		
Sampled By:	MAN		
Proposal Provided? (For Billing purposes)	DATA DELIVERY (check one): <input checked="" type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> WEBSITE CLIENT Fax #: _____ Email: kchatterton@maytree.com Format: <input type="checkbox"/> EXCEL <input checked="" type="checkbox"/> PDF <input type="checkbox"/> GIS KEY		
Date Sampled	ONLY USE WHEN US		

Reinquished by: (signature)		Turnaround		
<i>[Signature]</i>		Date/Time:	2-17-11 14:50	
Received by: (signature)		Date/Time:	<input type="checkbox"/>	7-Day
<i>[Signature]</i>		Date/Time:	<input checked="" type="checkbox"/>	10-Day
Requisition # (if applicable)		Date/Time:	<input type="checkbox"/>	Other
		Date/Time:	<input checked="" type="checkbox"/>	RUSH *
Received by: (signature)		Date/Time:	<input checked="" type="checkbox"/>	2-17-11 18:20
<i>[Signature]</i>		Date/Time:	<input checked="" type="checkbox"/>	2-17-11 18:20
** TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIVED.				
<input checked="" type="checkbox"/> *24-Hr <input type="checkbox"/> *48-Hr <input type="checkbox"/> *72-Hr <input type="checkbox"/> *4Da				
*Approval Required				

INCORRECT TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENTS UNLESS THERE ARE QUESTIONS

NOT FILLED OUT COMPLETELY OR IS



www.contestlabs.com

**AIR Only Receipt Checklist**

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

CLIENT NAME: _____ RECEIVED BY: _____ DATE: _____

- 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: _____

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved

Client Signature: _____

Containers received at Con-Test

		# of Containers	Types (Size, Duration)
Summa Cans		12	6L
Tedlar Bags			
Tubes			
Regulators		12	30 min
Restrictors			
Tubing			
Other			

Unused Summas:

1822

Unused Regulators:

4090

1) Was all media (used & unused checked into the WASP?)

2) Were all returned summa cans, Restrictors, & Regulators documented as returned in the Air Lab Inbound/Outbound Excel Spreadsheet?

Laboratory Comments:

APPENDIX B

Analytical Laboratory Detection Limits



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

Analyte:

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



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

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



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

APH COMPOUNDS

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



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

EXTRA COMPOUNDS

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

OTHER COMPOUNDS

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