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September 13, 2010

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: Quarterly Air Monitoring Report
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 June 1, 2010 to August 31, 2010.

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 event for the three small retail spaces, consistent with the requirements of the Orders of Approval, was completed on July 1, 2010.

Table 1 summarizes the analytical results at the small retail spaces for the baseline sampling event conducted prior to system start-up and all subsequent sampling events conducted after system start-up. Results of the indoor air samples were compared to the Draft Connecticut Industrial/Commercial Indoor Target Air Concentrations (TAC), which were identified as action levels in the Orders of Approval. The laboratory report (LIMT-25351) associated with the July 1, 2010 quarterly sampling event is provided in Appendix A of this letter report. The analytical laboratory's detection limits are provided in Appendix B.

Each of the post-start-up 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 program. The vacuum monitoring results are tabulated in Table 2.

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

- Indoor air sample results are in compliance with action levels for the quarterly sampling event in the three small retail spaces (sample locations IA-5, IA-6, and IA-7). Although the concentration of carbon tetrachloride in the sample collected from location IA-6 during the quarterly sampling was slightly above the action level, the concentration was consistent with the outdoor background sample and therefore is not considered an exceedance.
- The eastern small retail space (indoor air sample location IA-5) and the western small retail space (indoor air sample location IA-7) of the retail complex are currently occupied. The center small retail space (indoor sample location IA-6) remains unoccupied.

- 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 event for the large retail space, consistent with the requirements of the Orders of Approval, was completed on July 1, 2010.

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 (LIMT-25351) associated with the July 1, 2010 quarterly sampling event is provided in Appendix A of this letter report. The analytical laboratory's detection limits are provided in Appendix B.

Each of the post-start-up 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 are in compliance with action levels for the quarterly sampling event in the large retail space (sample locations IA-1 through IA-4). Although the concentration of carbon tetrachloride in the sample collected from location IA-3 during the quarterly sampling was slightly above the action level, the concentration was consistent with the outdoor background sample and therefore is not considered an exceedance.
- 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 biweekly by Clean Harbors Environmental Services. The mitigation system was shut down for several hours on July 15, 2010, for the installation of a replacement electrical meter for the entire mitigation system and current transformers for the mitigation systems in the small retail spaces.

Next Reporting Period

The next quarterly report will cover September, October, and November 2010. The report will be prepared and submitted to the Rhode Island Department of Environmental Management (RIDEM) in December 2010.

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.



Phil Muller
Project 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 (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
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U
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
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
1,2,4-Trichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.26 U	0.37 U	0.37 U
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
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U
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
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
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U
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
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.5	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.17	1.3	0.11 U	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U
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
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
2-Butanone	0.58	1.2	2.4	3.2	1.6	0.67	1.7	0.11 U	1.6	1.6
2-Hexanone	0.2 U	0.22	0.57	0.35	0.2 U	0.2 U	0.2 U	0.14 U	0.26	0.39
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.6	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U
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
Acetone	7.3	8	15	22	8.4	5.9	12	1.1	27	9.5
Benzene	0.69	0.62	1.3	4.7	0.43	0.69	0.46	0.12 U	0.3	0.4
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U
Carbon tetrachloride	0.38	0.44	0.52	0.56	0.43	0.61	0.47	0.22 U	0.41	0.78
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U
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
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U
Chloromethane	1.1	0.9	1.4	1.5	1.1	1.1	1.3	1.1	1.2	1.1
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U

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	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
Cyclohexane	0.17 U	0.17 U	0.35	1.1	0.17 U	0.17 U	0.17 U	0.12 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U
Dichlorodifluoromethane	2	2.2	2.6	2.7	2.6	2.6	2.8	2	2.5	2.7
Ethanol	4	5.4	10	47	4.3	3.5	4.7	0.81	4.9	4.8
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
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
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
Hexane	1.5	0.75	1.1	2.9	0.38	2.8	2.2	0.13 U	0.56	0.37
Isopropyl alcohol	1.4	1.4	1.8	4.3	1.4	0.67	1.4	0.18 U	14	1
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
Methylene chloride	5.5	3.1	0.65	1.5	0.78	7.4	15	2.1	2.8	1.7
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U
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
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
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
Styrene	0.21 U	0.21 U	0.21 U	0.28	0.21 U	0.21 U	0.21 U	0.15 U	0.21 U	0.21 U
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
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.11 U	0.15 U	0.15 U
Toluene	0.94	1.5	3.2	14	0.71	0.99	0.82	0.14 U	0.72	2.6
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
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.39	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U
Trichlorofluoromethane	1.3	1.2	1.7	2.4	1.5	2	1.7	0.92	1.3	1.5
Trichlorotrifluoroethane	0.68	0.53	0.5	0.47	0.64	0.48	0.51	0.27 U	0.64	0.67
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
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

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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	0.37 U	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
1,2,4-Trimethylbenzene	0.29	0.3	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
1,2-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	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
1,3-Butadiene	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.23 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	0.3 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
2-Butanone	1.1	1.7	0.84	1.2	1.2	2	0.81	1.6	1.6	0.88	1.5	1.4	2.4	2.3
2-Hexanone	0.2 U	0.34	0.2 U	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
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
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	0.2 U	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	10	10	9.6	5.4	17	11	3.5	7.6	5	3.7	9.5	12	20	13
Benzene	0.49	0.38	0.35	0.25	0.2	0.42	0.79	0.68	0.63	0.41	0.69	0.35	0.19	0.16 U
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	0.33 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	0.51 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
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.28	0.16 U	0.16 U	0.44	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.43	0.4	0.4	0.43	0.46	0.39	0.42	0.39	0.31 U	0.43	0.49	0.47	0.52	0.51
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	1.2	0.85	1.1	0.97	0.96	1.6	1.1	1.2	1.3	1.1	1.4	0.78	1.1	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	0.2 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	0.22 U	0.22 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-1-061109 6/11/2009	AA-1-091709 9/17/2009	AA-1-092409 9/24/2009	AA-1-100109 10/1/2009	AA-1-100809 10/8/2009	AA-1-122909 12/29/2009	AA-1-012810 1/28/2010	AA-1-020510 2/5/2010	AA-1-021210 2/12/2010	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
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
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	2.6	2.1	2.1	2.2	2.1	2.1	2.3	2.4	2.5	2.9	1.8	2.1	2.5	2.4
Ethanol	8.6	6.6	4.6	3.9	4.9	3.8	5.4	5.1	7.2	1.2	4.9	4	3.3	4
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	1.1	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.24	0.22 U	0.23	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.82
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	1.1 U	0.53 U	0.53 U	0.53 U
Hexane	0.59	0.48	1.4	0.45	4.5	0.62	0.36	0.53	0.91	0.24	0.23	1.1	0.51	0.37
Isopropyl alcohol	2.5	2.8	0.87	0.63	0.25 U	0.54	0.56	2.7	1.5	0.8	0.73	0.69	1.6	0.79
m,p-Xylene	0.73	0.62	0.59	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	2.2
Methylene chloride	1.9	0.7 U	4.2	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
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	0.23	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.27	0.23	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.46
Propylene (Propene)	0.09 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 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	0.52	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
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	1.2	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.19	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	2.1	1.9	2	0.61	0.5	0.78	0.94	0.64	0.97	0.46	1.1	0.75	0.63	0.57
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	0.22 U	0.22 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.3	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	2	1.1	1.4	1.2	1.5	2.2	1.2	1.2	1.6	1.5	1.5	1.2	1.4	1.3
Trichlorotrifluoroethane	0.56	0.47	0.49	0.45	0.46	0.54	0.49	0.55	0.54	0.54	0.62	0.45	0.58	0.56
Vinyl acetate	0.18 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 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	0.13 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
1,1,1-Trichloroethane	190000	41000	17000	7100	1800	2600	3100	1900	3500	920	540	550
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
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
1,1-Dichloroethane	11000	1900	890	770	190	360	450	430	230	100	50	53
1,1-Dichloroethene	2500	290	130	190	61	160	160	160	98	30	18	21
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
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
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
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
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
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
1,2-Dichlorotetrafluoroethane	7 U	7 U	7 U	7 U	1.8 U	70 U	3.5 U	3.5 U	3.5 U	3.5 U	7 U	3.5 U
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
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
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
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
2-Butanone	6.3	89	75	170	3700	64000	100000	230000	110000	7800	18000	28000
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-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
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
Acetone	530	32	52	29	460	5600	14000	6900	9200	1700	3200	6000
Benzene	13	12	6.2	4.8	5.6	32 U	11	7.1	11	6.3	5.5	8.2
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
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
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
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
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
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
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
Chloroethane	260	23	16	11	4.5	26 U	11	15	7	6.5	3.5	3.6
Chloroform	83	32	20	16	2.8	48 U	7.2	6.5	5.8	2.6	4.8 U	2.4 U
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
cis-1,2-Dichloroethene	2900	710	400	410	100	150	270	250	170	58	32	43
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

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
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
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
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
Ethanol	320	36	46	33	22	130	30	26	3.8 U	45	28	68
Ethyl acetate	7.3 U	3.6 U	3.6 U	7.3 U	0.9 U	73 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U
Ethylbenzene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U
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
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
Isopropyl alcohol	190	5.1	4.6	5 U	4.6	290	24	57	35	2.5 U	20	54
m,p-Xylene	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	86 U	4.3 U	4.3 U	4.3 U	4.3 U	8.6 U	4.3 U
Methylene chloride	7.8	7 U	9.6	7 U	12	720	21	15	7 U	25	14 U	8.6
Methyl-t-butyl ether	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	36 U	1.8 U	1.8 U	1.8 U	1.8 U	3.6 U	1.8 U
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
o-Xylene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U
Propylene (Propene)	3.5 U	1.8 U	1.8 U	3.5 U	0.45 U	35 U	0.9 U	0.9 U	3.5 U	3.5 U	6.9 U	8.7 U
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
Tetrachloroethene	210	310	190	97	8	68 U	21	25	19	8.9	6.8 U	6.7
Tetrahydrofuran	16	110	69	140	2200	42000	61000	150000	94000	9700	23000	37000
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
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
trans-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	44 U	2.2 U	2.2 U	2.2 U	2.2 U	4.4 U	2.2 U
Trichloroethene	51000	20000	14000	8900	2400	3800	4400	2700	6800	1600	1100	1200
Trichlorofluoromethane	3500	200	120	67	16	56 U	27	41	2.8 U	53	7	7.4
Trichlorotrifluoroethane	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	76 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U	3.8 U
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
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

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
1,1,1-Trichloroethane	69000	32000	21000	16000	16000	5600	8200	5700	5400	1100	430
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
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
1,1-Dichloroethane	5200	2500	2100	2200	1600	780	1200	1100	930	580	47
1,1-Dichloroethene	850	210	100	110	55	74	87	83	80	6.4	3.5
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
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
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
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
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
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
1,2-Dichlorotetrafluoroethane	7 U	7 U	7 U	7 U	7 U	70 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
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
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
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
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
2-Butanone	120	280	300	130	97	160	37	65	8.7	23	1800
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-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
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
Acetone	580	64	81	33	22	410	16	20	4.8 U	27	490
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
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
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
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
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
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
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
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
Chloroethane	140	50	34	18	13	26 U	13	14	11	4	1.3 U
Chloroform	42	24	19	29	21	50	14	12	12	7.2	3.7
Chloromethane	2 U	2 U	2 U	2 U	2 U	34	1 U	1 U	1 U	1 U	38
cis-1,2-Dichloroethene	700	360	220	250	150	120	190	170	130	36	11
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

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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
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
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
Dichlorodifluoromethane	5 U	5 U	5 U	5 U	5 U	50 U	3.6	3.9	2.7	2.5 U	2.5 U
Ethanol	360	38	73	38	25	110	18	14	6.7	18	15
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	1.8 U
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	2.2 U
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
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
Isopropyl alcohol	210	18	33	15	10	230	8.2	11	20	2.5 U	1.2 U
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
Methylene chloride	7 U	7 U	7.5	7 U	7 U	780	12	15	7 U	27	10
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
n-Heptane	4 U	4 U	4 U	4 U	4 U	40 U	2 U	2 U	2 U	2 U	2 U
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
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
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
Tetrachloroethene	330	290	130	290	190	300	190	210	250	68	34
Tetrahydrofuran	75	480	260	730	570	130	110	87	9.1	31	42000
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
trans-1,2-Dichloroethene	12	6.3	4.2	6.4	4 U	40 U	2.6	2.7	2	2.1	2 U
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
Trichloroethene	12000	6900	4200	4400	4800	3900	5400	4700	6100	2000	730
Trichlorofluoromethane	2300	870	630	350	250	150	230	440	700	320	6.7
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	3.8 U
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
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

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
1,1,1-Trichloroethane	5600	8500	7800	8200	8100	1600	3600	2600	1400	340	51	250
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	3.4 U	0.68 U	0.68 U
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	2.7 U	0.54 U	0.54 U
1,1-Dichloroethane	1700	1800	1600	2100	1700	590	1000	1100	970	470	85	320
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
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
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
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
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
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
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
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
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
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
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
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
2-Butanone	8.7	12	7.3	8.5	5.5	4.5	7.1	16	4.9	3.5	31	3.8
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
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
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
Acetone	580	38	58	30	24	15	24	24	7.9	49	26	25
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
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
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
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
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
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
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
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
Chloroethane	170	150	88	41	33	7.1	9.6	10	8.1	6.5	1.6	2.2
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
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
cis-1,2-Dichloroethene	1100	1300	1200	1700	1200	520	1100	1200	1300	680	120	660
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

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
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
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
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
Ethanol	350	26	29	17	15	3.8 U	19	18	12	18	37	31
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	1.8 U	0.36 U	0.36 U
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	2.2 U	0.57	0.44 U
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
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
Isopropyl alcohol	210	18	21	12	8.5	5 U	12	17	2.5 U	2.5 U	80	2.2
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
Methylene chloride	9.3	2.6	8	1.8	1.8 U	20	29	16	7 U	27	1.4 U	2.4
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
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
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
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
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
Tetrachloroethene	66	69	56	84	69	40	140	230	410	130	74	510
Tetrahydrofuran	41	23	12	14	7.5	3 U	5.6	15	4.1	1.5 U	2800	0.7
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
trans-1,2-Dichloroethene	150	140	90	90	80	48	120	140	150	84	22	120
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
Trichloroethene	230	210	180	180	200	110	330	420	920	420	190	690
Trichlorofluoromethane	1800	1400	900	690	640	190	310	660	1400	620	210	690
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
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
Vinyl chloride	280	370	180	48	21	2.6 U	2.7	3.2	1.3 U	1.6	1	0.26 U

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

Parameter (ug/m ³)	CT IACTIND 2003 (ug/m ³)	Indoor Air - Eastern Small Retail Space													
		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	
1,1,1-Trichloroethane	500	48	0.92	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.98	0.27 U	0.27 U	0.27 U	0.27 U	0.38	0.27 U
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	0.34 U	0.34 U
1,1,2-Trichloroethane	12	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 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	0.2 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	20	0.58	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	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	0.37 U	0.37 U	0.75 U	0.75 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	0.25 U
1,2-Dibromoethane (EDB)	0.038	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	410	0.3 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	0.31	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	0.2 U
1,2-Dichloropropane	0.42	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 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	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	0.35 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	0.11 U	0.23 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	0.3 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	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	0.3 U
2-Butanone	500	7.2	2.4	2.7	2.6	0.75	0.45	3.8	1.9	5.3	2.1	0.79	1.5	2.1	
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	
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	0.2 U
Acetone	500	32	11	21	20	9.5	6.5	14	14	46	16	15	11	18	
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	
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	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	7.3	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.23	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	NA	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.27	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	0.39	0.41	0.48	0.53	
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	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	500	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.5	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.55	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	1.1	1	1.4	1	2	1.2	1
cis-1,2-Dichloroethene	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 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	2.9	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U

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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	
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	
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	
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	
Ethanol	NA	590	12	23	140	85	32	41	180	500	62	51	25	58	
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	
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	
Hexachlorobutadiene	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U	0.53 U	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	

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

Parameter (ug/m ³)	Indoor Air - Center Small Retail Space												
	IA-6 1/16/2009	IA-6- 020309 2/3/2009	IA-6- 021109 2/11/2009	IA-6- 021809 2/18/2009	IA-6- 022609 2/26/2009	IA-6- 030609 3/6/2009	IA-6- 041409 4/14/2009	IA-6- 051509 5/15/2009	IA-6- 061109 6/11/2009	IA-6- 091709 9/17/2009	IA-6-122909 12/29/2009	IA-6- 032610 3/26/2010	IA-6- 070110 7/1/2010
1,1,1-Trichloroethane	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	0.24 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	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	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	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	0.26 U	0.37 U	0.37 U	0.37 U	0.75 U	0.75 U	0.37 U
1,2,4-Trimethylbenzene	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	0.27 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	0.21 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	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	0.38	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	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	0.21 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	0.41	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
2-Butanone	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	0.42	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	0.47	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	0.36	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	44	14	14	25	11	8.5	6.1	11	28	20	14	6.5	14
Benzene	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	0.19 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	0.33 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	0.51 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	0.14 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	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	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	0.17 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	0.1 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	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.36
Chloromethane	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	0.4	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	0.22 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

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

Parameter (ug/m ³)	Indoor Air - Center Small Retail Space													
	IA-6 1/16/2009	IA-6- 020309 2/3/2009	IA-6- 021109 2/11/2009	IA-6- 021809 2/18/2009	IA-6- 022609 2/26/2009	IA-6- 030609 3/6/2009	IA-6- 041409 4/14/2009	IA-6- 051509 5/15/2009	IA-6- 061109 6/11/2009	IA-6- 091709 9/17/2009	IA-6-122909 12/29/2009	IA-6- 032610 3/26/2010	IA-6- 070110 7/1/2010	
Cyclohexane	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	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	
Dichlorodifluoromethane	2	2.1	2.6	2.8	2.6	2.6	2	2.7	2.5	2.2	1.9	1.6	2.4	
Ethanol	41	23	12	40	13	12	8.6	51	31	12	10	7.1	18	
Ethyl acetate	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	0.29	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	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U	0.53 U	
Hexane	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	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	0.82	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	
Methylene chloride	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	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
n-Heptane	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	0.36	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)	0.18 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	0.28	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	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	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	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	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 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	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	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	0.64	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	0.71 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	0.1 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 (ug/m ³)	Indoor Air - Western Small Retail Space												
	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	IA-7- 070110 7/1/2010
1,1,1-Trichloroethane	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	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	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	0.2 U
1,1-Dichloroethene	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	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	0.37 U	0.37 U	0.75 U	0.75 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.34	0.34	0.99	0.25 U	0.25 U	0.18 U	0.25 U	0.29	0.39	0.25 U	0.35	0.36
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
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	0.23 U	0.23 U	0.23 U	0.23 U	0.3
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	0.18 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	0.14	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	0.11 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone	70	6.5	3.9	5.2	2.2	1.3	1.3	2.3	7.3	2.2	0.49	2.1	4.3
2-Hexanone	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	0.82
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.27	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	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	0.43
Acetone	29	12	13	32	7.8	6.6	6.5	10	31	22	31	12	41
Benzene	0.95	0.75	1.1	3.2	0.67	0.73	0.42	0.35	0.52	0.43	0.52	0.53	0.27
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.26	0.16 U	0.16 U	0.26	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.32	0.44	0.52	0.56 [a]	0.48	0.6 [a]	0.43	0.65 [a]	0.43	0.42	0.44	0.43	0.5
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.7	0.98	1.4	1.5	1	1.2	1.1	0.93	1.8	1.2	2.1	1.2	1.3
cis-1,2-Dichloroethene	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	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	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U

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

Parameter (ug/m ³)	Indoor Air - Western Small Retail Space													
	IA-7 1/16/2009	IA-7- 020309 2/3/2009	IA-7- 021109 2/11/2009	IA-7- 021809 2/18/2009	IA-7- 022609 2/26/2009	IA-7- 030609 3/6/2009	IA-7- 041409 4/14/2009	IA-7- 051509 5/15/2009	IA-7- 061109 6/11/2009	IA-7- 091709 9/17/2009	IA-7-122909 12/29/2009	IA-7- 032610 3/26/2010	IA-7- 070110 7/1/2010	
Cyclohexane	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	0.17 U	
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	
Dichlorodifluoromethane	2.1	2.2	2.6	2.7	2.6	2.6	2	2.4	2.7	2.3	2.1	1.8	2.7	
Ethanol	7.3	16	11	26	7.9	8.4	7.1	11	14	11	10	13	39	
Ethyl acetate	0.37 U	0.37 U	0.18 U	0.21	0.37 U	0.18 U	0.26 U	0.18 U	0.24	2.6	0.18 U	0.18 U	0.18 U	
Ethylbenzene	0.23	0.29	0.36	0.95	0.24	0.22 U	0.16 U	0.22 U	0.25	0.32	0.68	0.32	0.45	
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.75 U	1.1 U	1.1 U	0.53 U	1.1 U	1.1 U	0.53 U	
Hexane	0.9	0.87	0.91	2	1.1	0.6	0.69	0.33	1.5	0.88	0.25	0.33	0.7	
Isopropyl alcohol	3.7	6.2	3.6	8.3	0.25 U	2.7	0.18 U	7	14	4	1.9	18	5.8	
m,p-Xylene	0.61	0.82	0.94	2.8	0.73	0.43 U	0.31 U	0.43 U	0.72	0.86	2.8	0.82	1.2	
Methylene chloride	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	1.3	
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	
n-Heptane	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	0.5	
o-Xylene	0.24	0.31	0.39	0.97	0.24	0.22 U	0.16 U	0.22 U	0.25	0.31	0.6	0.28	0.43	
Propylene (Propene)	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.09 U	0.13 U	0.09 U	0.09 U	0.35 U	0.35 U	0.35 U	0.87 U	
Styrene	0.21 U	0.21 U	0.21 U	0.26	0.21 U	0.21 U	0.15 U	0.21 U	0.29	0.39	0.21 U	0.26	0.7	
Tetrachloroethene	1.6	0.34 U	0.65	0.63	0.34 U	0.34 U	0.48	0.34 U	0.34 U	0.34 U	1	0.34 U	0.34 U	
Tetrahydrofuran	45	2.1	0.74	0.43	0.15 U	0.15 U	0.27	0.15 U	0.15 U	0.51	0.15 U	0.15 U	0.15 U	
Toluene	1.5	1.6	2.7	7.5	1.5	0.76	0.48	0.61	2.3	4	0.57	7.2	8.4	
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	
Trichloroethene	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	0.27 U	
Trichlorofluoromethane	4.7	1.4	1.7	3.1	1.6	1.7	1.3	1.1	1.9	1.3	1.7	1.3	1.3	
Trichlorotrifluoroethane	0.62	0.57	0.47	0.44	0.66	0.45	0.54	0.69	0.57	0.51	0.54	0.64	0.54	
Vinyl acetate	0.71 U	0.71 U	0.18 U	0.18 U	0.71 U	0.18 U	0.5 U	0.18 U	0.18 U	0.71 U	0.36 U	0.36 U	0.18 U	
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	

[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
 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 09/08/10

Checked by / Date: PJM 09/08/10

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

** ASD system offline.

Prepared by/Date: PJM 9/8/10

Checked by/Date: DEH 9/8/10

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	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
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	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.28	0.52	1.8	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.29	0.3	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	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
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	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.5	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.11 U	0.17	1.3	0.11 U	0.11 U	0.11 U	0.08 U	0.11 U	0.11 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U
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
2-Butanone	0.58	1.2	2.4	3.2	1.6	0.67	1.7	0.11 U	1.6	1.6	1.1	1.7	0.84	1.2	1.2
2-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	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.2 U	0.27	0.63	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
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	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
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	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
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	0.16 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	0.17 U	0.35	1.1	0.17 U	0.17 U	0.17 U	0.12 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
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

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
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	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.25	0.52	2	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.24	0.22 U	0.23	0.22 U	0.22 U
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
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	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.2 U	0.27	0.92	1.6	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.4	0.23	0.2 U	0.2 U	0.2 U	0.2 U
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	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Tetrachloroethene	0.34 U	0.34 U	0.73	0.77	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.52	0.34 U	0.34 U	0.34 U
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.11 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	1.2	0.15 U
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	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.27 U	0.27 U	0.27 U	0.39	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
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 (ug/m ³)	Outdoor Air Reference Locations										Extraction Well - Large Retail Space				
	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	EW-Combined-020309 2/3/2009	EW-COMBINED-021109 2/11/2009	EW-COMBINED-021809 2/18/2009	EW-COMBINED-022609 2/26/2009	EW-COMBINED-041409 4/14/2009	
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	190000	91000	73000	32000	3500	
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	6.8 U	6.8 U	14 U	14 U	6.8 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	5.4 U	5.4 U	11 U	11 U	5.4 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	19000	7800	5300	4800	390	
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	7800	1800	1000	630	73	
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	7.4 U	7.4 U	15 U	15 U	7.4 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	5 U	5 U	10 U	10 U	5 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	7.6 U	7.6 U	16 U	16 U	7.6 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	6 U	6 U	12 U	12 U	6 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	4 U	4 U	8 U	8 U	4 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	4.6 U	4.6 U	9.2 U	9.2 U	4.6 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	7 U	7 U	14 U	14 U	7 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	5 U	5 U	10 U	10 U	5 U	
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	2.2 U	2.2 U	4.4 U	4.4 U	2.2 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	6 U	6 U	12 U	12 U	6 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	6 U	6 U	12 U	12 U	6 U	
2-Butanone	2.0	0.81	1.6	1.6	0.88	1.5	1.4	2.4	2.3	37	32	48	60	21	
2-Hexanone	0.2 U	0.2 U	0.32	0.2 U	0.2 U	0.29	0.29	0.49	0.49	4 U	4 U	8 U	8 U	4 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	5 U	5 U	10 U	10 U	5 U	
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	4 U	4 U	8 U	8 U	4 U	
Acetone	11	3.5	7.6	5.0	3.7	9.5	12	20	13	1600	31	75	63	4.8 U	
Benzene	0.42	0.79	0.68	0.63	0.41	0.69	0.35	0.19	0.16 U	14	7.3	8.4	6.4 U	3.2 U	
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	5.2 U	5.2 U	11 U	11 U	5.2 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	6.6 U	6.6 U	14 U	14 U	6.6 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	11 U	11 U	21 U	21 U	11 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	3.8 U	3.8 U	7.6 U	7.6 U	3.8 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	3.2 U	63	32	20	3.2 U	
Carbon tetrachloride	0.39	0.42	0.39	0.31 U	0.43	0.49	0.47	0.52	0.51	6.2 U	6.2 U	13 U	13 U	6.2 U	
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	4.6 U	4.6 U	9.2 U	9.2 U	4.6 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	3400	1700	1200	450	42	
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	27	17	20	17	4.8 U	
Chloromethane	1.6	1.1	1.2	1.3	1.1	1.4	0.78	1.1	0.96	2 U	2 U	4 U	4 U	2 U	
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	14000	4700	6300	4200	300	
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	4.4 U	4.4 U	8.8 U	8.8 U	4.4 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	3.4 U	3.4 U	6.8 U	6.8 U	3.4 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	8.6 U	8.6 U	18 U	18 U	8.6 U	
Dichlorodifluoromethane	2.1	2.3	2.4	2.5	2.9	1.8	2.1	2.5	2.4	5 U	5 U	10 U	110	5 U	

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

Parameter (ug/m ³)	Outdoor Air Reference Locations										Extraction Well - Large Retail Space				
	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	EW-Combined-020309 2/3/2009	EW-COMBINED-021109 2/11/2009	EW-COMBINED-021809 2/18/2009	EW-COMBINED-022609 2/26/2009	EW-COMBINED-041409 4/14/2009	
Ethanol	3.8	5.4	5.1	7.2	1.2	4.9	4	3.3	4	960	81	120	120	17	
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	7.3 U	3.6 U	7.2 U	15 U	7.3 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	0.82	9.4	4.4 U	8.8 U	8.8 U	4.4 U	
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	22 U	22 U	43 U	43 U	22 U	
Hexane	0.62	0.36	0.53	0.91	0.24	0.23	1.1	0.51	0.37	16	4.9	270	7.2 U	3.6 U	
Isopropyl alcohol	0.54	0.56	2.7	1.5	0.8	0.73	0.69	1.6	0.79	610	2.4 U	15	9.9 U	5 U	
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	25	8.6 U	18 U	18 U	8.6 U	
Methylene chloride	4.6	1.3	1.9	1.7	0.7 U	0.7 U	0.7 U	0.35 U	1.1	12	7 U	14 U	14 U	19	
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	3.6 U	3.6 U	7.2 U	7.2 U	3.6 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	4 U	4 U	8 U	8 U	4 U	
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	8.4	4.4 U	8.8 U	8.8 U	4.4 U	
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	3.5 U	100	3.6 U	6.9 U	3.5 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	4.2 U	4.2 U	8.4 U	8.4 U	4.2 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	140	60	430	540	47	
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	77	77	150	180	66	
Toluene	0.78	0.94	0.64	0.97	0.46	1.1	0.75	0.63	0.57	36	3.8 U	7.6 U	7.6 U	3.8 U	
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	110	61	47	47	4.6	
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	4.4 U	4.4 U	8.8 U	8.8 U	4.4 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	36000	17000	26000	13000	1400	
Trichlorofluoromethane	2.2	1.2	1.2	1.6	1.5	1.5	1.2	1.4	1.3	9900	2300	1800	1000	98	
Trichlorotrifluoroethane	0.54	0.49	0.55	0.54	0.54	0.62	0.45	0.58	0.56	7.6 U	7.6 U	16 U	16 U	7.6 U	
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	15 U	3.6 U	7.2 U	29 U	15 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	110	20	10	5.2 U	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)	Extraction Well - Large Retail Space													
	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-COMBINED	EW-1-	EW-1-
	042409 4/24/2009	091709 9/17/2009	092409 9/24/2009	100109 10/1/2009	100809 10/8/2009	012810 1/28/2010	020510 2/5/2010	021210 2/12/2010	021910 2/19/2010	043010 4/30/2010	052810 5/28/2010	070110 7/1/2010	030609 3/6/2009	033109 3/31/2009
1,1,1-Trichloroethane	19000	11000	8100	7900	6800	1500	2500	150	1200	1400	1700	2000	59000	66000
1,1,2,2-Tetrachloroethane	0.34 U	3.4 U	6.8 U	14 U	14 U	0.68 U	6.8 U	0.34 U	0.68 U	0.68 U	6.8 U	0.68 U	6.8 U	6.8 U
1,1,2-Trichloroethane	0.65	2.7 U	5.4 U	11 U	11 U	0.54 U	5.4 U	0.27 U	0.54 U	0.54 U	5.4 U	0.54 U	6.4	10
1,1-Dichloroethane	2200	1600	1900	1900	1700	280	370	31	310	200	270	290	4100	4400
1,1-Dichloroethene	420	310	250	260	280	52	66	7.3	62	30	40	52	570	1200
1,2,4-Trichlorobenzene	0.37 U	3.7 U	7.4 U	15 U	15 U	0.74 U	7.4 U	0.37 U	0.74 U	0.74 U	7.4 U	0.74 U	7.4 U	7.4 U
1,2,4-Trimethylbenzene	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U	0.5 U	5 U	0.5 U	5 U	5 U
1,2-Dibromoethane (EDB)	0.38 U	3.8 U	7.6 U	16 U	16 U	0.76 U	7.6 U	0.38 U	0.76 U	0.76 U	7.6 U	0.76 U	7.6 U	7.6 U
1,2-Dichlorobenzene	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U	0.6 U	6 U	0.6 U	6 U	6 U
1,2-Dichloroethane	0.2 U	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U	0.4 U	4 U	0.4 U	4 U	4 U
1,2-Dichloropropane	0.23 U	2.3 U	4.6 U	9.2 U	9.2 U	0.46 U	4.6 U	0.23 U	0.46 U	0.46 U	4.6 U	0.46 U	4.6 U	4.6 U
1,2-Dichlorotetrafluoroethane	0.35 U	3.5 U	7 U	14 U	14 U	0.7 U	7 U	0.35 U	0.7 U	0.7 U	7 U	0.7 U	7 U	7 U
1,3,5-Trimethylbenzene	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U	0.5 U	5 U	0.5 U	5 U	5 U
1,3-Butadiene	0.11 U	2.3 U	4.5 U	8.9 U	8.9 U	0.45 U	4.5 U	0.23 U	0.45 U	0.45 U	2.2 U	0.22 U	2.2 U	2.2 U
1,3-Dichlorobenzene	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U	0.6 U	6 U	0.6 U	6 U	6 U
1,4-Dichlorobenzene	0.3 U	3 U	6 U	12 U	12 U	0.6 U	6 U	0.3 U	0.6 U	0.6 U	6 U	0.6 U	6 U	6 U
2-Butanone	40	7.8	31	30	21	4	11	10	9.0	12.0	22.0	22	3.5	8.9
2-Hexanone	0.5	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U	0.4 U	4 U	0.4 U	4 U	4 U
4-Ethyltoluene	0.25 U	2.5 U	5 U	10 U	10 U	0.5 U	5 U	0.25 U	0.5 U	0.5 U	5 U	0.5 U	5 U	5 U
4-Methyl-2-pentanone	0.59	2 U	4 U	8 U	8 U	0.4 U	4 U	0.28	0.4 U	0.4 U	4 U	0.4 U	4 U	4 U
Acetone	0.24 U	20	9.6 U	20 U	20 U	31	9.6 U	13	0.96 U	16	24	16	35	16
Benzene	2.5	2.7	3.2 U	6.4 U	6.4 U	0.61	3.2 U	0.63	0.43	0.74	5.5	0.84	5.3	11
Benzyl chloride	0.26 U	2.6 U	5.2 U	11 U	11 U	0.52 U	5.2 U	0.26 U	0.52 U	0.52 U	5.2 U	0.52 U	5.2 U	5.2 U
Bromodichloromethane	0.33 U	3.3 U	6.6 U	14 U	14 U	0.66 U	6.6 U	0.33 U	0.66 U	0.66 U	6.6 U	0.66 U	6.6 U	6.6 U
Bromoform	0.51 U	5.1 U	11 U	21 U	21 U	1.1 U	11 U	0.51 U	1.1 U	1.1 U	11 U	1.1 U	11 U	11 U
Bromomethane	0.19 U	1.9 U	3.8 U	7.6 U	7.6 U	0.38 U	3.8 U	0.19 U	0.38 U	0.38 U	3.8 U	0.38 U	3.8 U	3.8 U
Carbon disulfide	4.6	1.6 U	3.2 U	6.4 U	6.4 U	4.3	3.2 U	0.17	3.8	0.77	3.2 U	1.1	3.2 U	3.2 U
Carbon tetrachloride	0.57	3.1 U	6.2 U	13 U	13 U	0.62 U	6.2 U	0.38	0.62 U	0.62 U	6.2 U	0.73	6.2 U	6.2 U
Chlorobenzene	0.23 U	2.3 U	4.6 U	9.2 U	9.2 U	0.46 U	4.6 U	0.23 U	0.46 U	0.46 U	7.2	0.46 U	4.6 U	4.6 U
Chloroethane	220	110	94	92	88	9.8	11	1.3	9.9	4.8	7.2	9.4	170	250
Chloroform	8.8	12	14	11	11	4.1	5.8	0.49	6.2	6	7.9	8	20	34
Chloromethane	8.2	1 U	2 U	4 U	4 U	0.2 U	2 U	0.1 U	0.2 U	0.2 U	2 U	0.2 U	2 U	2 U
cis-1,2-Dichloroethene	1600	1600	1500	1300	1200	190	280	21	240	180	260	260	2000	2200
cis-1,3-Dichloropropene	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U	0.44 U	4.4 U	0.44 U	4.4 U	4.4 U
Cyclohexane	0.17 U	1.7 U	3.4 U	6.8 U	6.8 U	0.34 U	3.4 U	0.17 U	0.34 U	0.34 U	3.4 U	0.34 U	3.4 U	5.7
Dibromochloromethane	0.43 U	4.3 U	8.6 U	18 U	18 U	0.86 U	8.6 U	0.43 U	0.86 U	0.86 U	8.6 U	0.86 U	8.6 U	8.6 U
Dichlorodifluoromethane	2.8	2.5 U	5 U	10 U	10 U	2.4	5 U	2.2	2.7	1.7	5 U	2.5	5 U	170

**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 042409 4/24/2009	EW-COMBINED 091709 9/17/2009	EW-COMBINED 092409 9/24/2009	EW-COMBINED 100109 10/1/2009	EW-COMBINED 100809 10/8/2009	EW-COMBINED 012810 1/28/2010	EW-COMBINED 020510 2/5/2010	EW-COMBINED 021210 2/12/2010	EW-COMBINED 021910 2/19/2010	EW-COMBINED 043010 4/30/2010	EW-COMBINED 052810 5/28/2010	EW-COMBINED 070110 7/1/2010	EW-1- 030609 3/6/2009	EW-1- 033109 3/31/2009
Ethanol	21	200	96	32	33	39	60	23	62	10	19 U	15	33	40
Ethyl acetate	0.37 U	1.8 U	3.6 U	7.2 U	7.2 U	0.36 U	3.6 U	0.18 U	0.36 U	0.36 U	3.6 U	0.36 U	3.6 U	3.6 U
Ethylbenzene	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U	0.44 U	4.4 U	0.44 U	4.4 U	4.4 U
Hexachlorobutadiene	1.1 U	5.3 U	11 U	22 U	22 U	1.1 U	11 U	0.53 U	1.1 U	1.1 U	11 U	1.1 U	22 U	22 U
Hexane	2.3	1.9	3.6 U	7.2 U	7.2 U	0.36 U	3.6 U	0.74	0.36 U	0.92	3.6 U	0.44	3.6 U	3.6 U
Isopropyl alcohol	0.25 U	22	5 U	9.9 U	9.9 U	2.3	5 U	1.0	0.5 U	2.6	2.4 U	0.24 U	28	2.4 U
m,p-Xylene	0.43 U	4.3 U	8.6 U	18 U	18 U	0.86 U	8.6 U	0.49	0.86 U	0.86 U	8.6 U	0.86 U	8.6 U	8.6 U
Methylene chloride	2.6	7 U	14 U	28 U	28 U	1.4 U	14 U	2.6	1.4 U	1.4 U	7 U	2.1	7 U	19
Methyl-t-butyl ether	0.18 U	1.8 U	3.6 U	7.2 U	7.2 U	0.36 U	3.6 U	0.18 U	0.36 U	0.36 U	3.6 U	0.36 U	3.6 U	3.6 U
n-Heptane	0.2 U	2 U	4 U	8 U	8 U	0.4 U	4 U	0.2 U	0.4 U	0.4 U	4 U	0.4 U	4 U	4 U
o-Xylene	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U	0.44 U	4.4 U	0.44 U	4.4 U	4.4 U
Propylene (Propene)	0.18 U	3.5 U	6.9 U	6.9 U	14 U	0.69 U	6.9 U	0.35 U	0.69 U	0.69 U	18 U	1.8 U	1.8 U	1.8 U
Styrene	0.21 U	2.1 U	4.2 U	8.4 U	8.4 U	0.42 U	4.2 U	0.21 U	0.42 U	0.42 U	4.2 U	0.42 U	4.2 U	4.2 U
Tetrachloroethene	110	110	260	67	72	4.6	200	4.8	45	450	1300	640	600	1200
Tetrahydrofuran	110	1.5 U	96	85	67	15	32	28	43	34	54	65	6.3	21
Toluene	0.59	3.4	4.7	7.6 U	7.6 U	0.38 U	3.8 U	3.6	0.38 U	0.75	3.8 U	0.41	3.8 U	3.8 U
trans-1,2-Dichloroethene	33	29	34	30	26	3.4	4.6	0.36	4.1	3	4.6	5.5	9.2	23
trans-1,3-Dichloropropene	0.22 U	2.2 U	4.4 U	8.8 U	8.8 U	0.44 U	4.4 U	0.22 U	0.44 U	0.44 U	4.4 U	0.44 U	4.4 U	4.4 U
Trichloroethene	6200	4000	3600	4000	4300	390	1400	58	460	1200	2000	1700	31000	42000
Trichlorofluoromethane	600	1800	1400	1500	1500	260	230	29	230	210	300	440	520	540
Trichlorotrifluoroethane	0.74	3.8 U	7.6 U	16 U	16 U	0.76 U	7.6 U	0.53	0.76 U	0.76 U	7.6 U	0.76 U	7.6 U	7.6 U
Vinyl acetate	0.71 U	7.1 U	15 U	29 U	29 U	1.5 U	15 U	0.71 U	1.5 U	1.5 U	3.6 U	0.36 U	3.6 U	3.6 U
Vinyl chloride	3.4	1.3 U	2.6 U	5.2 U	5.2 U	0.26 U	2.6 U	0.13 U	0.26 U	0.26 U	2.6 U	0.26 U	2.7	4.8

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

Parameter (ug/m ³)	Extraction Well - Large Retail Space						Post Treatment - Large Retail Space						
	EW-2-030609 3/6/2009	EW-2-033109 3/31/2009	EW-3-030609 3/6/2009	EW-3-033109 3/31/2009	EW-4-030609 3/6/2009	EW-4-033109 3/31/2009	Post carbon-020309 2/3/2009	POST CARBON-021109 2/11/2009	POST CARBON-021809 2/18/2009	POST CARBON-022609 2/26/2009	POST CARBON-041409 4/14/2009	POST CARBON-100809 10/8/2009	Post-Carbon-010810 1/8/2010
1,1,1-Trichloroethane	26000	30000	54000	72000	11000	14000	1	15	45	1.9	13000	0.56	450
1,1,2,2-Tetrachloroethane	6.8 U	6.8 U	6.8 U	6.8 U	1.7 U	6.8 U	0.34 U	1.7 U	0.68 U	0.68 U	68 U	0.34 U	0.34 U
1,1,2-Trichloroethane	5.4 U	5.4 U	5.4 U	5.4 U	1.4 U	5.4 U	0.27 U	1.4 U	0.54 U	0.54 U	54 U	0.27 U	0.27 U
1,1-Dichloroethane	5700	7000	1600	2300	690	1400	0.2 U	1 U	5.4	11000	490	370	610
1,1-Dichloroethene	330	640	340	560	97	210	0.2 U	1 U	0.4 U	6400	96	78	87
1,2,4-Trichlorobenzene	7.4 U	7.4 U	7.4 U	7.4 U	1.9 U	7.4 U	0.37 U	1.9 U	0.74 U	0.74 U	74 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	5 U	5 U	5 U	5 U	1.3 U	5 U	0.25 U	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U	0.38 U	1.9 U	0.76 U	0.76 U	76 U	0.38 U	0.38 U
1,2-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	6 U	0.3 U	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U
1,2-Dichloroethane	4 U	4 U	4 U	4 U	1 U	4 U	0.2 U	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U
1,2-Dichloropropane	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	4.6 U	0.23 U	1.2 U	0.46 U	0.46 U	46 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	7 U	7 U	7 U	7 U	1.8 U	7 U	0.35 U	1.8 U	0.7 U	0.7 U	70 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	5 U	5 U	5 U	5 U	1.3 U	5 U	2.1	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U
1,3-Butadiene	2.2 U	2.2 U	2.2 U	2.2 U	0.55 U	2.2 U	0.11 U	0.55 U	0.22 U	0.22 U	22 U	0.23 U	0.23 U
1,3-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	6 U	2.9	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U
1,4-Dichlorobenzene	6 U	6 U	6 U	6 U	1.5 U	6 U	0.3 U	1.5 U	0.6 U	0.6 U	60 U	0.3 U	0.3 U
2-Butanone	12	11	36	10	36	6.4	10	6.3	9.4	5.5	330	1.9	2.0
2-Hexanone	4 U	4 U	4 U	4 U	1 U	4 U	0.2 U	1 U	0.4 U	0.4 U	13000	0.27	0.34
4-Ethyltoluene	5 U	5 U	5 U	5 U	1.3 U	5 U	2.1	1.3 U	0.5 U	0.5 U	50 U	0.25 U	0.25 U
4-Methyl-2-pentanone	4 U	4 U	4 U	4 U	1 U	4 U	5	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U
Acetone	9.6 U	9.6 U	53	24	26	12	1200	11	19	12	430	3.6	5.7
Benzene	5.6	7.8	3.2 U	6.8	1.4	3.2 U	1.3	0.8 U	0.32 U	0.32 U	32 U	0.16 U	0.16 U
Benzyl chloride	5.2 U	5.2 U	5.2 U	5.2 U	1.3 U	5.2 U	0.26 U	1.3 U	0.52 U	0.52 U	52 U	0.26 U	0.26 U
Bromodichloromethane	6.6 U	6.6 U	6.6 U	6.6 U	1.7 U	6.6 U	0.33 U	1.7 U	0.66 U	0.66 U	66 U	0.33 U	0.33 U
Bromoform	11 U	11 U	11 U	11 U	2.6 U	11 U	0.51 U	2.6 U	1.1 U	1.1 U	110 U	0.51 U	0.51 U
Bromomethane	3.8 U	3.8 U	3.8 U	3.8 U	0.95 U	3.8 U	0.19 U	0.95 U	0.38 U	0.38 U	38 U	0.19 U	0.19 U
Carbon disulfide	27	25	3.2 U	3.2 U	1.8	3.2 U	0.16 U	0.8 U	4.1	27	250	0.16 U	0.20
Carbon tetrachloride	6.2 U	6.2 U	6.2 U	6.2 U	1.6 U	6.2 U	0.38	1.6 U	0.62 U	0.62 U	62 U	0.31 U	0.31 U
Chlorobenzene	4.6 U	4.6 U	4.6 U	4.6 U	1.2 U	4.6 U	0.23 U	1.2 U	0.46 U	0.46 U	46 U	0.23 U	0.23 U
Chloroethane	700	590	41	44	17	33	0.13 U	5100	1800	480	64	19	10
Chloroform	9.6	15	13	23	3.6	7.5	0.24 U	1.2 U	0.48 U	0.67	48 U	0.24 U	6.8
Chloromethane	2 U	2 U	2 U	2 U	0.5 U	2 U	0.59	0.5 U	0.2 U	0.2 U	23	0.1 U	0.1 U
cis-1,2-Dichloroethene	6100	7600	610	1200	560	1300	0.27	1 U	3.9	5200	820	230	570
cis-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	0.22 U	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U
Cyclohexane	8.4	8.8	3.4 U	3.4 U	0.85 U	3.4 U	0.93	0.85 U	0.34 U	0.34 U	34 U	0.17 U	0.17 U
Dibromochloromethane	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	8.6 U	0.43 U	2.2 U	0.86 U	0.86 U	86 U	0.43 U	0.43 U
Dichlorodifluoromethane	5 U	5 U	5.4	7	2.6	5 U	0.76	4.1	3	2.4	50 U	1.7	1.9

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

Parameter (ug/m ³)	Extraction Well - Large Retail Space						Post Treatment - Large Retail Space						
	EW-2-030609 3/6/2009	EW-2-033109 3/31/2009	EW-3-030609 3/6/2009	EW-3-033109 3/31/2009	EW-4-030609 3/6/2009	EW-4-033109 3/31/2009	Post carbon-020309 2/3/2009	POST CARBON-021109 2/11/2009	POST CARBON-021809 2/18/2009	POST CARBON-022609 2/26/2009	POST CARBON-041409 4/14/2009	POST CARBON-100809 10/8/2009	Post-Carbon-010810 1/8/2010
Ethanol	12	8.3	39	1.8 U	8.6	1.8 U	740	36	25	9.8	110	0.38 U	2.8
Ethyl acetate	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U	0.37 U	0.9 U	0.36 U	0.73 U	73 U	0.18 U	0.18 U
Ethylbenzene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	10	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U
Hexachlorobutadiene	22 U	22 U	22 U	22 U	5.4 U	22 U	1.1 U	5.4 U	2.2 U	2.2 U	220 U	0.53 U	0.53 U
Hexane	3.6 U	6.6	3.6 U	3.6 U	3.2	3.6 U	3	0.9 U	46	0.36 U	36 U	0.18 U	0.23
Isopropyl alcohol	2.4 U	2.4 U	26	5.9	7.5	7.1	450	2.9	3.1	47	290	0.25 U	1.4
m,p-Xylene	8.6 U	8.6 U	8.6 U	8.6 U	2.2 U	8.6 U	27	2.2 U	0.86 U	0.86 U	86 U	0.43 U	0.43 U
Methylene chloride	7 U	17	7 U	13	19	12	20	76	17	3	810	0.7 U	0.72
Methyl-t-butyl ether	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U	0.18 U	0.9 U	0.36 U	0.36 U	36 U	0.18 U	0.18 U
n-Heptane	4 U	4 U	4 U	4 U	1 U	4 U	1.8	1 U	0.4 U	0.4 U	40 U	0.2 U	0.2 U
o-Xylene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	9.5	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U
Propylene (Propene)	1.8 U	1.8 U	1.8 U	1.8 U	0.45 U	1.8 U	0.18 U	98	0.18 U	0.35 U	35 U	0.35 U	0.35 U
Styrene	4.2 U	4.2 U	4.2 U	4.2 U	1.1 U	4.2 U	3.4	1.1 U	0.42 U	0.42 U	42 U	0.21 U	0.21 U
Tetrachloroethene	2300	2500	73	310	31	170	0.72	1.7 U	1.1	0.68 U	68 U	0.52	1.9
Tetrahydrofuran	19	3 U	32	14	37	5.1	6.8	22	40	18	210	4.1	6.5
Toluene	3.8 U	3.8 U	3.8 U	3.8 U	1.4	3.8 U	29	0.95 U	0.65	0.38 U	38 U	0.19 U	0.36
trans-1,2-Dichloroethene	69	180	4 U	8.8	2.5	8	0.2 U	1 U	0.4 U	28	40 U	7.7	15
trans-1,3-Dichloropropene	4.4 U	4.4 U	4.4 U	4.4 U	1.1 U	4.4 U	0.22 U	1.1 U	0.44 U	0.44 U	44 U	0.22 U	0.22 U
Trichloroethene	25000	25000	8600	19000	2700	5500	2	11	16	2.7	54 U	1	1.0
Trichlorofluoromethane	1300	1800	430	840	240	370	0.71	1.4 U	23	6700	84	180	210
Trichlorotrifluoroethane	7.6 U	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U	1.3	1.9 U	0.76 U	0.76 U	76 U	0.38 U	0.51
Vinyl acetate	3.6 U	3.6 U	3.6 U	3.6 U	0.9 U	3.6 U	0.71 U	0.9 U	0.36 U	1.5 U	150 U	0.71 U	0.71 U
Vinyl chloride	9.4	8.1	2.6 U	2.6 U	0.65	2.6 U	0.13 U	30	13	4.5	26 U	0.13 U	0.13 U

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	
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	
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	0.34 U	
1,1,2-Trichloroethane	12	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 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	
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	
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	0.37 U	0.37 U	0.37 U	0.37 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	
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	0.38 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	0.3 U	0.21 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	0.2 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	0.42	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	0.23 U	0.23 U	0.23 U	0.23 U	
1,2-Dichlorotetrafluoroethane	NA	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	
1,3,5-Trimethylbenzene	52	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
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	
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	
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	
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-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	
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	0.25 U	0.25 U	0.25 U	0.25 U	
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	
Acetone	500	18	7.7	19	21	10	8.7	14	12	310	11	18	13	10	
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	
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	0.26 U	0.26 U	0.26 U	0.26 U	
Bromodichloromethane	0.46	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	
Bromoform	7.3	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	
Bromomethane	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	
Carbon disulfide	NA	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 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	
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	0.23 U	0.23 U	0.23 U	0.23 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	
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	0.24 U	0.24 U	0.24 U	0.24 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	
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	
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	0.22 U	0.22 U	0.22 U	0.22 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	
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	0.43 U	0.43 U	0.43 U	0.43 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	

**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
Ethanol	NA	5.7	8.3	14	20	9.8	7.5	18	5	39	6.2	7	6.5	8.8
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	0.18 U
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
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
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
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
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
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
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	0.18 U	0.18 U	0.18 U	0.18 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
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
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
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
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
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
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
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
trans-1,3-Dichloropropene	2.9	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	1	4.2	0.46	1.6	1.4	0.65	1.5	0.57	0.74	1.6	0.27 U	0.27 U	1.1	0.56
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
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
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
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

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-1-120209 12/2/2009	IA-1-010810 1/8/2010	IA-1-012810 1/28/2010	IA-1-020510 2/5/2010	IA-1-021210 2/12/2010	IA-1-021910 2/19/2010	IA-1-032610 3/26/2010	IA-1-043010 4/30/2010	IA-1-052810 5/28/2010	IA-1-070110 7/1/2010	IA-2-1/16/2009	IA-2-020309 2/3/2009	IA-2-021109 2/11/2009	IA-2-021809 2/18/2009
1,1,1-Trichloroethane	0.24	0.27 U	0.27 U	0.76	0.30	0.88	0.27 U	1.2	0.33	0.27 U	9.9	0.63	1.1	1.1
1,1,2,2-Tetrachloroethane	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.72	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.41	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.52 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.52	0.37	0.25 U	0.26	0.25 U	0.25 U	0.25 U	0.25 U	0.4	0.43	0.25 U	0.37	0.7	0.65
1,2-Dibromoethane (EDB)	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.18	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25	0.25 U
1,3-Butadiene	0.17	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.3	0.66
1,3-Dichlorobenzene	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone	2.7	1.6	0.3 U	2.4	1.1	1.2	1.3	0.78	2.6	3.3	21	4.1	4.6	3
2-Hexanone	0.71	0.36	0.2 U	0.47	0.2 U	0.27	0.27	0.2 U	0.67	0.75	0.2 U	0.2 U	0.35	0.26
4-Ethyltoluene	0.18	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.34	0.2 U	0.2 U	0.2 U	0.22	0.2 U	0.2 U	0.2 U	0.28	0.35	0.2 U	0.2 U	0.35	0.2 U
Acetone	13	12	2.0	19	7.3	8.5	7	6.5	18	18	17	9.6	14	18
Benzene	1.1	1.2	0.16 U	0.98	0.64	0.53	0.59	0.64	0.5	0.46	1	0.67	1.8	3
Benzyl chloride	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.33	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.48	0.43	0.31 U	0.40	0.31 U	0.45	0.44	0.48	0.55	0.52	0.33	0.41	0.55	0.57
Chlorobenzene	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.42	0.13 U
Chloroform	0.17 U	0.26	0.24 U	0.47	0.43	0.24 U	0.24 U	0.25	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	1.3	1.1	1.4	1.3	1.3	1.2	1.3	0.79	1.2	1.2	1.1	1	1.3	1.3
cis-1,2-Dichloroethene	0.57	0.2 U	0.2 U	0.2 U	0.2 U	0.56	0.2 U	1.3	0.2 U	0.5	2.1	0.24	1.1	1.1
cis-1,3-Dichloropropene	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.28	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.44	0.61
Dibromochloromethane	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	1.6	3.1	2.4	2.4	2.6	3.0	1.6	2.2	2.3	2.7	1.8	2.2	2.6	2.9

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-1-120209 12/2/2009	IA-1-010810 1/8/2010	IA-1-012810 1/28/2010	IA-1-020510 2/5/2010	IA-1-021210 2/12/2010	IA-1-021910 2/19/2010	IA-1-032610 3/26/2010	IA-1-043010 4/30/2010	IA-1-052810 5/28/2010	IA-1-070110 7/1/2010	IA-2-1/16/2009	IA-2-020309 2/3/2009	IA-2-021109 2/11/2009	IA-2-021809 2/18/2009
Ethanol	10	8.4	7.0	29	19	43	4.6	4.4	6	6.5	5.5	8.8	12	17
Ethyl acetate	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.37 U	0.37 U	0.18 U	0.18 U
Ethylbenzene	0.46	0.40	0.22 U	0.32	0.22 U	0.22 U	0.22 U	0.23	0.29	0.27	0.26	0.28	0.65	0.79
Hexachlorobutadiene	0.75 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	0.78	0.74	0.18 U	0.82	1.3	0.45	0.2	1.1	0.8	0.46	0.88	0.57	1.3	1.6
Isopropyl alcohol	1.8	2.4	0.25 U	9.4	0.25 U	1.6	0.65	3.4	0.12 U	0.74	3.7	3.1	4.5	4.5
m,p-Xylene	1.4	1.1	0.43 U	1.0	0.43 U	0.43 U	0.5	0.77	1.1	1.2	0.76	0.88	2	2.6
Methylene chloride	2.9	0.7 U	1.4	1.5	1.9	0.7 U	0.7 U	0.7 U	0.35 U	1.2	2	30	4	1.6
Methyl-t-butyl ether	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.42	0.35	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.23	0.2 U	0.58	0.73
o-Xylene	0.52	0.44	0.22 U	0.38	0.22 U	0.22 U	0.22 U	0.28	0.46	0.51	0.3	0.34	0.76	0.89
Propylene (Propene)	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 U	0.18 U	0.18 U	0.09 U	0.09 U
Styrene	0.19	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.25	0.31	0.21 U	0.21 U	0.21 U	0.23
Tetrachloroethene	3.2	0.34 U	0.34 U	0.34 U	0.34 U	1.2	0.34 U	4.5	0.55	1.1	7.5	0.64	4.2	3.2
Tetrahydrofuran	0.11 U	0.15 U	0.15 U	0.15 U	0.15 U	0.22	0.15 U	0.15 U	0.15 U	0.24	12	1.2	1.2	0.49
Toluene	2.8	2.1	0.19 U	0.82	0.69	0.58	0.8	1.3	0.91	0.99	1.7	1.3	4	5.5
trans-1,2-Dichloroethene	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.69	0.27 U	0.27 U	0.27 U	0.31	0.39	0.27 U	1.5	0.27 U	0.4	4.4	0.56	1.6	1.4
Trichlorofluoromethane	1.3	2.5	0.81	1.3	1.5	1.5	1.4	1.2	1.3	1.4	2	1.2	1.7	2.8
Trichlorotrifluoroethane	0.52	0.63	0.38 U	0.71	0.63	0.55	0.55	0.48	0.59	0.53	0.69	0.58	0.49	0.46
Vinyl acetate	0.25 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.71 U	0.71 U	0.18 U	0.18 U
Vinyl chloride	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.27	0.13 U	0.18	0.2

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-2-022609 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	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	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	0.32	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	0.14 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	0.26 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.75 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.3	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	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.21 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	0.14 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	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.59	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Butadiene	0.11 U	0.08 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U
1,3-Dichlorobenzene	0.3 U	0.21 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	0.21 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
2-Butanone	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	0.2 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	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.2 U	0.14 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	9.7	13	39	6.2	17	11	8.8	17	7.8	3.1	0.48 U	6.3	8.2	18
Benzene	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	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.48	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	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	0.13 U	0.1 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	0.25	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.47	0.40	0.24 U	0.24 U	0.24 U	0.24 U
Chloromethane	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	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	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.12 U	0.22	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	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	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	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

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-2-022609 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
Ethanol	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	0.37 U	0.26 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.3	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	0.75 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U
Hexane	0.69	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	4.7	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	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
Methylene chloride	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	0.7 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	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	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	0.34	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)	0.18 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 U	0.21 U	0.21 U	0.41	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.25
Tetrachloroethene	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	0.41	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	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	0.14 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	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	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	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	0.64	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	0.71 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	0.13 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-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	IA-3-012810 1/28/2010	IA-3-020510 2/5/2010
1,1,1-Trichloroethane	0.28	9.8	0.57	1.1	1.1	0.28	1.5	2.2	0.27 U	0.27 U	0.27 U	0.27 U	0.45	0.71
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.19 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethane	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	0.2 U	0.2 U
1,1-Dichloroethene	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	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	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.48	0.25 U	0.36	0.68	0.61	0.25 U	0.18 U	0.25 U	0.29	0.4	0.25 U	0.39	0.44	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.42	0.25 U
1,3-Butadiene	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	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	0.3 U
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone	3.4	20	4.2	4.6	4	1.7	1.6	2.5	2	2.6	0.7	1.5	1.9	2
2-Hexanone	0.68	0.2 U	0.26	0.33	0.3	0.2 U	0.14 U	0.38	0.51	0.58	0.2 U	0.37	0.52	0.39
4-Ethyltoluene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.18 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Methyl-2-pentanone	0.49	0.2 U	0.2 U	0.29	0.34	0.2 U	0.14 U	0.22	0.2 U	0.42	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	20	18	12	17	24	9.7	7.5	50	11	19	6.7	11	14	21
Benzene	0.48	1	0.71	1.9	3.1	0.69	0.6	0.46	0.41	0.5	0.39	0.46	1.3	0.86
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.24 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.36 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	0.22	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.14 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.52	0.34	0.45	0.52	0.6	0.43	0.22 U	0.42	0.4	0.43	0.4	0.42	0.31 U	0.42
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroethane	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	0.13 U	0.13 U
Chloroform	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.17 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.53
Chloromethane	1.2	1.1	0.98	1.2	1.4	1.1	1.2	1.2	0.91	1.1	0.97	1	1.2	2.9
cis-1,2-Dichloroethene	0.61	1.9	0.2 U	1.1	1.1	0.55	0.61	1.5	0.2 U	0.2 U	0.94	0.49	0.59	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Cyclohexane	0.17 U	0.17 U	0.17 U	0.46	0.6	0.17 U	0.15	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.31 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.6	1.9	2.3	2.5	2.9	2.6	2	2.9	2.1	2.1	2.2	2.2	2.3	2.5

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	IA-2-070110 7/1/2010	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	IA-3-012810 1/28/2010	IA-3-020510 2/5/2010
Ethanol	7.6	5.5	9.2	13	18	7.9	4.2	9	6.2	7.5	4.5	5	13	40
Ethyl acetate	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	0.18 U	0.18 U
Ethylbenzene	0.29	0.25	0.29	0.64	0.77	0.22 U	0.16	0.22 U	0.22 U	0.23	0.22 U	0.24	0.43	0.22 U
Hexachlorobutadiene	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	0.53 U	0.53 U
Hexane	0.49	0.94	0.87	1.3	1.9	3.7	0.37	0.77	0.96	0.47	0.37	0.71	0.55	0.44
Isopropyl alcohol	1.2	3.5	4.1	5.5	4.9	3.1	0.18 U	33	180	5.9	0.25 U	0.25 U	0.25 U	9.9
m,p-Xylene	1.3	0.75	0.9	2	2.6	0.65	0.57	0.66	0.7	0.99	0.65	0.87	1.2	0.69
Methylene chloride	1.3	2.2	31	3.1	3.5	33	1.2	3.6	2.4	0.7 U	0.7 U	0.7 U	1.4	0.7 U
Methyl-t-butyl ether	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
n-Heptane	0.8	0.22	0.2 U	0.61	0.77	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24	0.73	0.2 U
o-Xylene	0.57	0.28	0.33	0.79	0.86	0.23	0.22	0.24	0.26	0.45	0.27	0.34	0.44	0.26
Propylene (Propene)	0.87 U	0.18 U	0.18 U	0.09 U	0.09 U	0.18 U	0.13 U	0.18 U	0.35 U	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U
Styrene	0.36	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.15 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.40	0.21 U
Tetrachloroethene	1.4	6.1	0.56	4.3	3.3	1.9	2.2	7.1	0.34 U	0.34 U	2	1.1	2.2	0.34 U
Tetrahydrofuran	0.27	12	1.1	1.3	0.49	0.15 U	0.24	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.40	0.15 U
Toluene	1.3	1.7	1.5	4.7	5.8	2.1	1	1.2	1.2	1.1	0.73	1.1	2.5	0.78
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.16 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.53	3.9	0.49	1.7	1.5	0.53	0.77	1.8	0.27 U	0.27 U	1.1	0.54	0.75	0.27 U
Trichlorofluoromethane	1.6	1.9	1.3	1.8	2.8	1.8	1.2	1.3	1.4	1.2	1.2	1.2	1.2	1.3
Trichlorotrifluoroethane	0.94	0.6	0.58	0.49	0.44	0.69	0.53	0.74	0.51	0.46	0.49	0.47	0.49	0.52
Vinyl acetate	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	0.71 U	0.71 U
Vinyl chloride	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	0.13 U	0.13 U

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space													
	IA-3-021210 2/12/2010	IA-3-021910 2/19/2010	IA-3-032610 3/26/2010	IA-3-043010 4/30/2010	IA-3-052810 5/28/2010	IA-3-070110 7/1/2010	IA-4-1/16/2009	IA-4-020309 2/3/2009	IA-4-021109 2/11/2009	IA-4-021809 2/18/2009	IA-4-022609 2/26/2009	IA-4-041409 4/14/2009	IA-4-042409 4/24/2009	IA-4-091709 9/17/2009
1,1,1-Trichloroethane	0.29	0.86	0.27 U	1.2	0.27 U	0.27 U	10	0.62	1.1	1.1	0.45	1.5	2.2	0.27 U
1,1,2,2-Tetrachloroethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.24 U	0.34 U	0.34 U
1,1,2-Trichloroethane	0.27 U	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	0.19 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	0.73	0.2 U	0.2 U	0.2 U	0.31	0.14 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	0.42	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	0.37 U	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	0.26 U	0.37 U	0.37 U
1,2,4-Trimethylbenzene	0.25 U	0.25 U	0.25 U	0.26	0.34	0.46	0.26	0.37	0.74	0.65	0.29	0.18 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.27 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	0.21 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	0.14 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	0.17 U	0.23 U	0.23 U
1,2-Dichlorotetrafluoroethane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.25 U	0.35 U	0.35 U
1,3,5-Trimethylbenzene	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	0.18 U	0.25 U	0.25 U
1,3-Butadiene	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.33	0.77	0.11 U	0.08 U	0.11 U	0.23 U
1,3-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.21 U	0.3 U	0.3 U
1,4-Dichlorobenzene	0.3 U	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	0.21 U	0.3 U	0.3 U
2-Butanone	1.2	1.6	0.51	1	2.2	3.3	21	4.4	6	3.2	2.5	1.1	1.6	1.5
2-Hexanone	0.22	0.39	0.2 U	0.29	0.52	0.67	0.2 U	0.33	0.73	0.39	0.2 U	0.14 U	0.2 U	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	0.18 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	0.38	0.2 U	0.2 U	0.43	0.28	0.2 U	0.14 U	0.2 U	0.2 U
Acetone	6.7	7.3	3.8	7.7	15	21	17	10	15	20	7.8	7.9	20	9.3
Benzene	0.67	0.53	0.6	0.67	0.47	0.51	1.1	0.68	1.8	3	0.76	0.59	0.44	0.4
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	0.19 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	0.24 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	0.51 U	0.36 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	0.14 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	0.12 U	0.16 U	0.16 U
Carbon tetrachloride	0.31 U	0.43	0.43	0.49	0.54	0.57	0.4	0.43	0.5	0.58	0.46	0.22 U	0.45	0.41
Chlorobenzene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.17 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	0.41	0.13 U	0.13 U	0.1 U	0.13 U	0.13 U
Chloroform	0.48	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	0.26	0.17 U	0.24 U	0.24 U
Chloromethane	1.3	1.2	1.1	0.85	1.2	1.2	1.2	0.99	1.4	1.3	1	1.1	1.2	0.9
cis-1,2-Dichloroethene	0.2 U	0.59	0.2 U	1.3	0.2 U	0.51	2.4	0.2 U	1.1	1.1	0.98	0.61	1.7	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	0.16 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	0.44	0.64	0.17 U	0.12 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	0.31 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.5	3	1.6	2.1	2.5	2.7	1.9	2.2	2.5	2.8	2.6	2.1	2.4	2.1

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

Parameter (ug/m ³)	Indoor Air - Large Retail Space													
	IA-3-021210 2/12/2010	IA-3-021910 2/19/2010	IA-3-032610 3/26/2010	IA-3-043010 4/30/2010	IA-3-052810 5/28/2010	IA-3-070110 7/1/2010	IA-4 1/16/2009	IA-4-020309 2/3/2009	IA-4-021109 2/11/2009	IA-4-021809 2/18/2009	IA-4-022609 2/26/2009	IA-4-041409 4/14/2009	IA-4-042409 4/24/2009	IA-4-091709 9/17/2009
Ethanol	17	38	3.6	5.3	5.5	7	5.3	8.9	12	18	8	5.2	5.5	6
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.37 U	0.37 U	0.18 U	0.19	0.37 U	0.26 U	0.37 U	0.18 U
Ethylbenzene	0.22 U	0.22 U	0.22 U	0.26	0.23	0.29	0.25	0.29	0.65	0.78	0.29	0.16	0.22 U	0.22 U
Hexachlorobutadiene	0.53 U	0.53 U	1.1 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
Hexane	1	0.29	0.19	1.4	0.55	0.45	0.9	0.66	1.2	1.7	0.66	0.43	0.34	0.42
Isopropyl alcohol	0.25 U	2	0.64	3.4	0.12 U	0.76	3.5	3.3	4.7	4.8	3.9	0.18 U	13	5.6
m,p-Xylene	0.43 U	0.43 U	0.46	0.8	0.99	1.3	0.76	0.89	2.1	2.6	0.89	0.58	0.49	0.61
Methylene chloride	2.3	0.7 U	0.7 U	0.7 U	0.35 U	1.2	2.3	29	1.7	2.5	1.3	1.9	2.2	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	0.18 U	0.18 U	0.13 U	0.18 U	0.18 U
n-Heptane	0.2 U	0.2 U	0.2 U	0.36	0.2 U	0.2 U	0.23	0.2 U	0.58	0.79	0.21	0.14 U	0.2 U	0.2 U
o-Xylene	0.22 U	0.22 U	0.22 U	0.32	0.43	0.58	0.27	0.33	0.78	0.87	0.33	0.22	0.22 U	0.22 U
Propylene (Propene)	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	0.87 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
Styrene	0.21 U	0.21 U	0.21 U	0.21 U	0.23	0.34	0.21 U	0.21 U	0.22	0.23	0.21 U	0.15 U	0.21 U	0.21 U
Tetrachloroethene	0.34 U	1.3	0.34 U	4.8	0.35	1.1	7.3	0.58	4.4	3.4	3.4	2.4	7.9	0.75
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.16	0.24	13	1.2	1.3	0.47	0.34	0.21	0.25	0.15 U
Toluene	0.61	0.46	0.81	1.5	0.93	1.1	1.8	1.3	4.3	5.8	2.3	1	1	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	0.2 U	0.2 U	0.14 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	0.16 U	0.22 U	0.22 U
Trichloroethene	0.27 U	0.4	0.27 U	1.5	0.27 U	0.47	4.7	0.48	1.7	1.5	0.88	0.78	2	0.27 U
Trichlorofluoromethane	1.4	1.6	1.3	1.2	1.3	1.5	2	1.3	1.6	3	1.7	1.3	1.3	1.2
Trichlorotrifluoroethane	0.57	0.52	0.57	0.45	0.52	0.54	0.72	0.59	0.51	0.45	0.57	0.54	0.61	0.49
Vinyl acetate	0.71 U	0.71 U	0.36 U	0.71 U	0.18 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
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.14	0.13 U	0.13 U	0.29	0.13 U	0.2	0.22	0.13 U	0.1 U	0.2	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-4-092409 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	LRAIR01 5/15/2009	LRAIR02 5/15/2009	LRAIR03 5/15/2009	
1,1,1-Trichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.76	0.29	0.89	0.27 U	1.1	0.28	0.27 U	0.45	0.52	0.65	
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	0.37 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	
1,2,4-Trimethylbenzene	0.41	0.28	0.41	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.34	0.41	0.25 U	0.25 U	0.25 U	
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	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	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	
1,3-Butadiene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	
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	
2-Butanone	2	1.30	1.20	0.3 U	0.69	1.2	0.50	1.60	1.50	2.20	4.8	3.3	3.4	2.1	
2-Hexanone	0.45	0.32	0.27	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.39	0.54	1	0.73	0.66	0.38	
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	
4-Methyl-2-pentanone	0.32	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43	0.42	0.39	0.32	
Acetone	16	9.3	10	2.3	4.9	5.9	2.5	6.9	8.7	15	31	12	13	10	
Benzene	0.43	0.37	0.48	0.16 U	0.88	0.66	0.54	0.57	0.64	0.48	0.47	0.54	0.6	0.67	
Benzyl chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	
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	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.31	0.16 U	0.16 U	0.16 U	0.16 U	
Carbon tetrachloride	0.4	0.46	0.4	0.31 U	0.43	0.31 U	0.42	0.43	0.47	0.52	0.48	0.7	0.68	0.71	
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	0.46	0.39	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	
Chloromethane	1.1	1	1	1.3	1.3	1.3	1.2	1.1	0.77	1.2	1.2	1	0.98	1	
cis-1,2-Dichloroethene	0.2 U	0.84	0.48	0.2 U	0.2 U	0.2 U	0.59	0.2 U	1.3	0.2 U	0.44	0.2 U	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	0.22 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	
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	2.2	2.4	2.5	2.6	3.0	1.7	2.1	2.5	2.6	2.5	2.3	2.6	

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-4-092409 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	LRAIR01 5/15/2009	LRAIR02 5/15/2009	LRAIR03 5/15/2009
Ethanol	6.5	4.9	5.6	7.7	34	17	31	3.9	4.9	6.1	8.7	65	9	6.5
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
Ethylbenzene	0.27	0.22 U	0.26	0.22 U	0.26	0.22 U	0.22 U	0.22 U	0.25	0.25	0.29	0.22 U	0.22 U	0.22 U
Hexachlorobutadiene	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	1.1 U	1.1 U	1.1 U
Hexane	2.2	0.49	0.93	0.18 U	0.37	1.3	0.49	0.19	1.3	0.55	2.8	1.1	0.21	0.18 U
Isopropyl alcohol	5.2	0.25 U	0.25 U	0.96	0.25 U	0.25 U	1.9	0.66	3.4	4.4	1.8	3.3	3.4	3.7
m,p-Xylene	0.93	0.69	1	0.43 U	0.81	0.43 U	0.43 U	0.49	0.8	0.98	1.1	0.58	0.57	0.58
Methylene chloride	9.7	0.7 U	0.7 U	1.5	0.7 U	1.9	0.71	0.7 U	0.7 U	0.35 U	7.7	5.9	1.5	1.5
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
n-Heptane	0.2 U	0.2 U	0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22	0.2 U	0.2 U	0.2 U
o-Xylene	0.42	0.28	0.4	0.22 U	0.31	0.22 U	0.22 U	0.22 U	0.3	0.44	0.5	0.28	0.28	0.27
Propylene (Propene)	0.35 U	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.87 U	1.1	0.09 U	0.09 U	0.09 U
Styrene	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	0.29	0.23	0.21 U	0.21 U
Tetrachloroethene	0.34 U	2	1.1	0.34 U	0.34 U	0.34 U	1.4	0.34 U	4.4	0.44	1.1	0.47	0.47	0.54
Tetrahydrofuran	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.19	0.24	0.15 U	0.15 U	0.15 U
Toluene	1.3	0.76	1.2	0.19 U	0.79	0.63	0.47	0.83	1.4	0.98	1	0.73	0.7	0.58
trans-1,2-Dichloroethene	0.2 U	1.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Trichloroethene	0.27 U	1.10	0.57	0.27 U	0.27 U	0.27 U	0.40	0.27 U	1.4	0.27 U	0.44	0.27 U	0.28	0.27
Trichlorofluoromethane	1.5	1.2	1.2	0.93	1.3	1.4	1.6	1.5	1.3	1.3	1.9	1.3	1.3	1.2
Trichlorotrifluoroethane	0.48	0.47	0.5	0.38 U	0.55	0.58	0.55	1.3	0.48	0.51	0.59	0.63	0.6	0.65
Vinyl acetate	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.36 U	0.71 U	0.18 U	0.18 U	0.18 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	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						
	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	0.57	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
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
1,1-Dichloroethane	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
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
1,2,4-Trimethylbenzene	0.29	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dibromoethane (EDB)	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
1,2-Dichlorobenzene	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
1,2-Dichloropropane	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
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
1,3-Butadiene	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
1,4-Dichlorobenzene	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone	2.6	2	1.6	3.1	2.5	2.6	1.4
2-Hexanone	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
4-Methyl-2-pentanone	0.36	0.54	0.27	0.32	0.3	0.61	0.23
Acetone	11	8.5	7.7	13	11	9.8	6.9
Benzene	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
Bromodichloromethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Bromoform	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Bromomethane	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
Carbon tetrachloride	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
Chloroethane	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
Chloromethane	0.95	1	1	0.92	1.1	0.91	1.2
cis-1,2-Dichloroethene	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	0.22 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
Dibromochloromethane	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Dichlorodifluoromethane	2.4	2.7	2.4	2.4	2.8	2.3	2.7

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						
	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
Ethanol	5.9	6	5.6	5.9	14	44	14
Ethyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Ethylbenzene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.27	0.22 U
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	0.18	0.24	0.18 U	0.19	0.21	0.2	0.18 U
Isopropyl alcohol	3.5	3.6	3.4	4.4	3.6	2.8	3.2
m,p-Xylene	0.55	0.49	0.5	0.48	0.53	1	0.5
Methylene chloride	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
n-Heptane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.27	0.25	0.26	0.25	0.27	0.34	0.26
Propylene (Propene)	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Styrene	0.22	0.21 U	0.21 U	0.37	0.21 U	0.21 U	0.21 U
Tetrachloroethene	0.66	0.64	0.6	0.73	0.53	0.46	0.46
Tetrahydrofuran	0.15 U	0.2	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Toluene	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
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
Trichloroethene	0.29	0.34	0.27	0.28	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	1.1	1.4	1.3	1.1	1.4	1	1.4
Trichlorotrifluoroethane	0.62	0.64	0.57	0.59	0.68	0.62	0.58
Vinyl acetate	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Vinyl chloride	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

NA - not available

U - Not detected, value is the detection limit

ug/m³ - micrograms per cubic meter

Prepared by/Date: KJC 09/08/10

Checked by/Date: PJM 09/08/10

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

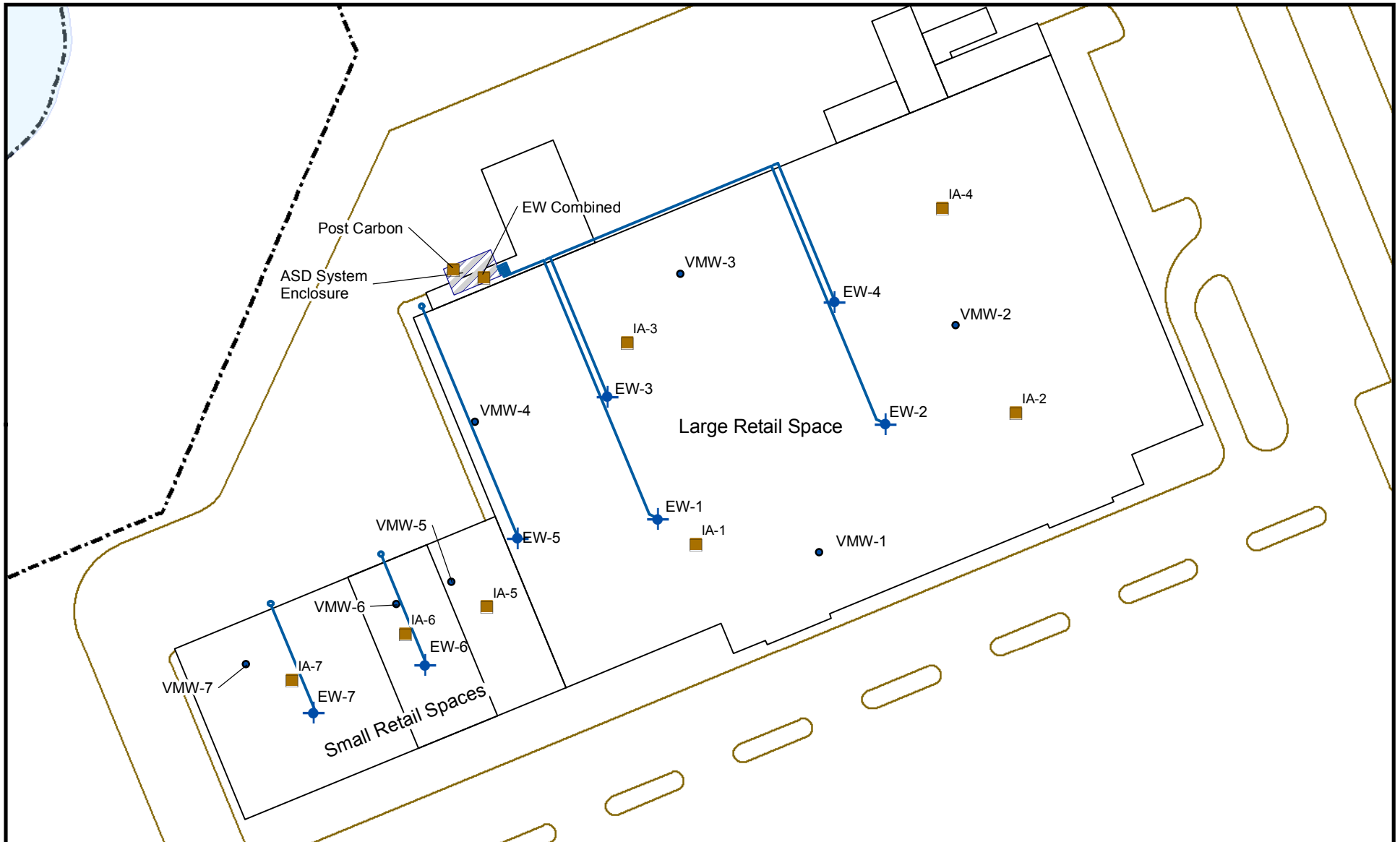
* vacuum reduced at extraction wells

** ASD system offline

Prepared by/Date: PJM 9/8/10

Checked by/Date: DEH 9/8/10

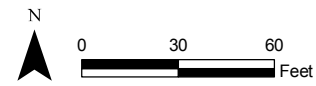
FIGURES



All locations are approximate

Legend

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



Prepared by BJR | Checked by DEH

Figure 1
Vapor Mitigation
Sample Locations

Former Gorham Manufacturing Facility
333 Adelaide Avenue
Providence, Rhode Island



APPENDIX A
Laboratory Reports



CHECKED FOR COMPLETENESS
OF PARAMETERS ORDERED BY:

Kari King

FILE COPY

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

REPORT DATE 7/12/2010

MACTEC ENGINEERING & CONSULTING - MA
107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880
ATTN: KELLY CHATTERTON

CONTRACT NUMBER:
PURCHASE ORDER NUMBER: 200914545

PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMT-25351
JOB NUMBER: 3650080114.13

PROJECT LOCATION: PROVIDENCE, RI (GORHAM SITE)

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST	Subcontract Lab (if any) Cert. Nos.
AA-1-070110	10B00074	AIR	Not Specified	to-15 ppbv	
AA-1-070110	10B00074	AIR	Not Specified	to-15 ug/m3	
EW-5-070110	10B00075	AIR	Not Specified	to-15 ppbv	
EW-5-070110	10B00075	AIR	Not Specified	to-15 ug/m3	
EW-6-070110	10B00076	AIR	Not Specified	to-15 ppbv	
EW-6-070110	10B00076	AIR	Not Specified	to-15 ug/m3	
EW-7-070110	10B00077	AIR	Not Specified	to-15 ppbv	
EW-7-070110	10B00077	AIR	Not Specified	to-15 ug/m3	
EW-COMBINED-07	10B00078	AIR	Not Specified	to-15 ppbv	
EW-COMBINED-07	10B00078	AIR	Not Specified	to-15 ug/m3	
IA-1-070110	10B00067	AIR	Not Specified	to-15 ppbv	
IA-1-070110	10B00067	AIR	Not Specified	to-15 ug/m3	
IA-2-070110	10B00068	AIR	Not Specified	to-15 ppbv	
IA-2-070110	10B00068	AIR	Not Specified	to-15 ug/m3	
IA-3-070110	10B00069	AIR	Not Specified	to-15 ppbv	
IA-3-070110	10B00069	AIR	Not Specified	to-15 ug/m3	
IA-4-070110	10B00070	AIR	Not Specified	to-15 ppbv	
IA-4-070110	10B00070	AIR	Not Specified	to-15 ug/m3	
IA-5-070110	10B00071	AIR	Not Specified	to-15 ppbv	
IA-5-070110	10B00071	AIR	Not Specified	to-15 ug/m3	
IA-6-070110	10B00072	AIR	Not Specified	to-15 ppbv	
IA-6-070110	10B00072	AIR	Not Specified	to-15 ug/m3	
IA-7-070110	10B00073	AIR	Not Specified	to-15 ppbv	
IA-7-070110	10B00073	AIR	Not Specified	to-15 ug/m3	



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

REPORT DATE 7/12/2010

MACTEC ENGINEERING & CONSULTING - MA
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PROJECT NUMBER:

ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-25351
JOB NUMBER: 3650080114.13

Comments :

LIMS BATCH NO. : LIMIT-25351

CASE NARRATIVE SUMMARY

In method TO-15, method blank-133056 associated with samples 10B00067 - 10B00074 contained Acetone at 0.44 ppbv = 1.0 ug/m3, 2-Butanone(MEK) at 0.03 ppbv = 0.09 ug/m3 and Methylene Chloride at 0.11 ppbv = 0.40 ug/m3.

In method TO-15, method blank-133057 associated with samples 10B00075 - 10B00078 contained Acetone at 0.68 ppbv = 1.6 ug/m3 and Methylene Chloride at 0.10 ppbv = 0.34 ug/m3.

In method TO-15, any reported result for Propene in samples 10B00067 - 10B00074 are estimated and likely to be biased on the low side based on continuing calibration bias.

There are no other analytical issues that affect the usability of the data.

METHOD TO-15 - ADDITIONAL DETAILS

All TO-15 samples were analyzed undiluted unless specified below:
If dilutions were performed only one dilution within the linear calibrated region of the curve is reported.

Table with 3 columns: Sample, Dilution, Compound(s). Lists various samples (10B00067-10B00078, blank-133056, blank-133057) and their corresponding dilutions and analyzed compounds.

Method blank-133056 is associated with samples 10B00067 - 10B00074.
Method blank-133057 is associated with samples 10B00075 - 10B00078.

LFBLANK-95385 is associated with samples 10B00067 - 10B00074.
LFBLANK-95386 is associated with samples 10B00075 - 10B00078.

The results of analyses performed are based on samples as submitted to the laboratory and relate only to the items collected and tested.

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations. AIHA accreditations only apply to NIOSH methods and Environmental Lead Analyses.

AIHA 100033 AIHA ELLAP (LEAD) 100033 NORTH CAROLINA CERT. # 652



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

REPORT DATE 7/12/2010

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ANALYTICAL SUMMARY

LIMS BAT #: LIMIT-25351

JOB NUMBER: 3650080114.13

MASSACHUSETTS MA0100

NEW HAMPSHIRE NELAP 2516

NEW JERSEY NELAP NJ MA007 (AIR)

CONNECTICUT PH-0567

VERMONT DOH (LEAD) No. LL015036

FLORIDA DOH E871027 (AIR)

NEW YORK ELAP/NELAP 10899

RHODE ISLAND (LIC. No. 112)

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.

SIGNATURE

DATE

Tod Kopyscinski
Air Laboratory Manager

Michael Erickson
Laboratory Director

Chris Hall
Project Chemist Supervisor

Daren Damboragian
Laboratory Manager

* See end of data tabulation for notes and comments pertaining to this sample

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : AA-1-070110

Sample ID : 10B00074 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR Sample Medium : SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	5.6	0.05		07/08/10	XC
Benzene	PPBv	ND	0.05		07/08/10	XC
Benzyl Chloride	PPBv	ND	0.05		07/08/10	XC
Bromodichloromethane	PPBv	ND	0.05		07/08/10	XC
Bromoform	PPBv	ND	0.05		07/08/10	XC
Bromomethane	PPBv	ND	0.05		07/08/10	XC
1,3-Butadiene	PPBv	ND	0.05		07/08/10	XC
2-Butanone (MEK)	PPBv	0.78	0.05		07/08/10	XC
Carbon Disulfide	PPBv	ND	0.05		07/08/10	XC
Carbon Tetrachloride	PPBv	0.08	0.05		07/08/10	XC
Chlorobenzene	PPBv	ND	0.05		07/08/10	XC
Chlorodibromomethane	PPBv	ND	0.05		07/08/10	XC
Chloroethane	PPBv	ND	0.05		07/08/10	XC
Chloroform	PPBv	ND	0.05		07/08/10	XC
Chloromethane	PPBv	0.46	0.05		07/08/10	XC
Cyclohexane	PPBv	ND	0.05		07/08/10	XC
1,2-Dibromoethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
Dichlorodifluoromethane	PPBv	0.48	0.05		07/08/10	XC
1,1-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
cis-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloropropane	PPBv	ND	0.05		07/08/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.05		07/08/10	XC
Ethanol	PPBv	2.1	0.05		07/08/10	XC
Ethyl Acetate	PPBv	ND	0.05		07/08/10	XC
Ethylbenzene	PPBv	0.19	0.05		07/08/10	XC
4-Ethyl Toluene	PPBv	ND	0.05		07/08/10	XC
n-Heptane	PPBv	ND	0.05		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled



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

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : AA-1-070110

Sample ID : 10B00074 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Hexachlorobutadiene	PPBv	ND	0.05		07/08/10	XC
Hexane	PPBv	0.10	0.05		07/08/10	XC
2-Hexanone	PPBv	0.12	0.05		07/08/10	XC
Isopropanol	PPBv	0.32	0.05		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.05		07/08/10	XC
Methylene Chloride	PPBv	0.33	0.05		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	0.05		07/08/10	XC
Propene	PPBv	ND	0.50		07/08/10	XC
Styrene	PPBv	ND	0.05		07/08/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.05		07/08/10	XC
Tetrachloroethylene	PPBv	ND	0.05		07/08/10	XC
Tetrahydrofuran	PPBv	ND	0.05		07/08/10	XC
Toluene	PPBv	0.15	0.05		07/08/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,1,1-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
Trichloroethylene	PPBv	ND	0.05		07/08/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	0.22	0.05		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.07	0.05		07/08/10	XC
1,2,4-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
Vinyl Acetate	PPBv	ND	0.05		07/08/10	XC
Vinyl Chloride	PPBv	ND	0.05		07/08/10	XC
m/p-Xylene	PPBv	0.50	0.10		07/08/10	XC
o-Xylene	PPBv	0.10	0.05		07/08/10	XC
to-15 ug/m				EPA TO-15		
Acetone	ug/m3	13	0.12		07/08/10	XC
Benzene	ug/m3	ND	0.16		07/08/10	XC
Benzyl Chloride	ug/m3	ND	0.26		07/08/10	XC
Bromodichloromethane	ug/m3	ND	0.33		07/08/10	XC
Bromoform	ug/m3	ND	0.51		07/08/10	XC
Bromomethane	ug/m3	ND	0.19		07/08/10	XC
1,3-Butadiene	ug/m3	ND	0.11		07/08/10	XC
2-Butanone (MEK)	ug/m3	2.3	0.15		07/08/10	XC
Carbon Disulfide	ug/m3	ND	0.16		07/08/10	XC

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : AA-1-070110

Sample ID : 10B00074 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR Sample Medium : SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	0.51	0.31		07/08/10	XC
Chlorobenzene	ug/m3	ND	0.23		07/08/10	XC
Chlorodibromomethane	ug/m3	ND	0.43		07/08/10	XC
Chloroethane	ug/m3	ND	0.13		07/08/10	XC
Chloroform	ug/m3	ND	0.24		07/08/10	XC
Chloromethane	ug/m3	0.96	0.10		07/08/10	XC
Cyclohexane	ug/m3	ND	0.17		07/08/10	XC
1,2-Dibromoethane	ug/m3	ND	0.38		07/08/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
Dichlorodifluoromethane	ug/m3	2.4	0.25		07/08/10	XC
1,1-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,1-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
cis-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloropropane	ug/m3	ND	0.23		07/08/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.35		07/08/10	XC
Ethanol	ug/m3	4.0	0.09		07/08/10	XC
Ethyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Ethylbenzene	ug/m3	0.82	0.22		07/08/10	XC
4-Ethyl Toluene	ug/m3	ND	0.25		07/08/10	XC
n-Heptane	ug/m3	ND	0.20		07/08/10	XC
Hexachlorobutadiene	ug/m3	ND	0.53		07/08/10	XC
Hexane	ug/m3	0.37	0.18		07/08/10	XC
2-Hexanone	ug/m3	0.49	0.20		07/08/10	XC
Isopropanol	ug/m3	0.79	0.12		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.18		07/08/10	XC
Methylene Chloride	ug/m3	1.1	0.17		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	0.20		07/08/10	XC
Propene	ug/m3	ND	0.87		07/08/10	XC
Styrene	ug/m3	ND	0.21		07/08/10	XC

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 WAKEFIELD, MA 01880

Purchase Order No.: 200914545

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Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : AA-1-070110

Sample ID : 10B00074 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.34		07/08/10	XC
Tetrachloroethylene	ug/m3	ND	0.34		07/08/10	XC
Tetrahydrofuran	ug/m3	ND	0.15		07/08/10	XC
Toluene	ug/m3	0.57	0.19		07/08/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.37		07/08/10	XC
1,1,1-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
Trichloroethylene	ug/m3	ND	0.27		07/08/10	XC
Trichlorofluoromethane	ug/m3	1.3	0.28		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.56	0.38		07/08/10	XC
1,2,4-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
Vinyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Vinyl Chloride	ug/m3	ND	0.13		07/08/10	XC
m/p-Xylene	ug/m3	2.2	0.43		07/08/10	XC
o-Xylene	ug/m3	0.46	0.22		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-5-070110

Sample ID : 10B00075 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	2500	0.50		07/09/10	XC
Benzene	PPBv	2.6	0.50		07/09/10	XC
Benzyl Chloride	PPBv	ND	0.50		07/09/10	XC
Bromodichloromethane	PPBv	ND	0.50		07/09/10	XC
Bromoform	PPBv	ND	0.50		07/09/10	XC
Bromomethane	PPBv	ND	0.50		07/09/10	XC
1,3-Butadiene	PPBv	ND	0.50		07/09/10	XC
2-Butanone (MEK)	PPBv	9500	0.50		07/09/10	XC
Carbon Disulfide	PPBv	4.0	0.50		07/09/10	XC
Carbon Tetrachloride	PPBv	ND	0.50		07/09/10	XC
Chlorobenzene	PPBv	ND	0.50		07/09/10	XC
Chlorodibromomethane	PPBv	ND	0.50		07/09/10	XC
Chloroethane	PPBv	1.4	0.50		07/09/10	XC
Chloroform	PPBv	ND	0.50		07/09/10	XC
Chloromethane	PPBv	ND	0.50		07/09/10	XC
Cyclohexane	PPBv	ND	0.50		07/09/10	XC
1,2-Dibromoethane	PPBv	ND	0.50		07/09/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.50		07/09/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.50		07/09/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.50		07/09/10	XC
Dichlorodifluoromethane	PPBv	0.51	0.50		07/09/10	XC
1,1-Dichloroethane	PPBv	13	0.50		07/09/10	XC
1,2-Dichloroethane	PPBv	ND	0.50		07/09/10	XC
1,1-Dichloroethylene	PPBv	5.3	0.50		07/09/10	XC
cis-1,2-Dichloroethylene	PPBv	11	0.50		07/09/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.50		07/09/10	XC
1,2-Dichloropropane	PPBv	ND	0.50		07/09/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.50		07/09/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.50		07/09/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.50		07/09/10	XC
Ethanol	PPBv	36	0.50		07/09/10	XC
Ethyl Acetate	PPBv	ND	0.50		07/09/10	XC
Ethylbenzene	PPBv	ND	0.50		07/09/10	XC
4-Ethyl Toluene	PPBv	ND	0.50		07/09/10	XC
n-Heptane	PPBv	ND	0.50		07/09/10	XC

RL = Reporting Limit

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NM = Not Measured

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KELLY CHATTERTON
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7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-5-070110

Sample ID : 10B00075 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Hexachlorobutadiene	PPBv	ND	0.50		07/09/10	XC
Hexane	PPBv	ND	0.50		07/09/10	XC
2-Hexanone	PPBv	ND	0.50		07/09/10	XC
Isopropanol	PPBv	22	0.50		07/09/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.50		07/09/10	XC
Methylene Chloride	PPBv	2.5	0.50		07/09/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	0.50		07/09/10	XC
Propene	PPBv	ND	5.0		07/09/10	XC
Styrene	PPBv	ND	0.50		07/09/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.50		07/09/10	XC
Tetrachloroethylene	PPBv	0.99	0.50		07/09/10	XC
Tetrahydrofuran	PPBv	13000	0.50		07/09/10	XC
Toluene	PPBv	ND	0.50		07/09/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.50		07/09/10	XC
1,1,1-Trichloroethane	PPBv	100	0.50		07/09/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.50		07/09/10	XC
Trichloroethylene	PPBv	220	0.50		07/09/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	1.3	0.50		07/09/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	0.50		07/09/10	XC
1,2,4-Trimethylbenzene	PPBv	ND	0.50		07/09/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.50		07/09/10	XC
Vinyl Acetate	PPBv	ND	0.50		07/09/10	XC
Vinyl Chloride	PPBv	1.2	0.50		07/09/10	XC
m/p-Xylene	PPBv	ND	1.0		07/09/10	XC
o-Xylene	PPBv	ND	0.50		07/09/10	XC
to-15 ug/m				EPA TO-15		
Acetone	ug/m3	6000	1.2		07/09/10	XC
Benzene	ug/m3	8.2	1.6		07/09/10	XC
Benzyl Chloride	ug/m3	ND	2.6		07/09/10	XC
Bromodichloromethane	ug/m3	ND	3.3		07/09/10	XC
Bromoform	ug/m3	ND	5.1		07/09/10	XC
Bromomethane	ug/m3	ND	1.9		07/09/10	XC
1,3-Butadiene	ug/m3	ND	1.1		07/09/10	XC
2-Butanone (MEK)	ug/m3	28000	1.5		07/09/10	XC
Carbon Disulfide	ug/m3	12	1.6		07/09/10	XC

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample #: EW-5-070110

Sample ID: 10B00075 ‡Sampled: 7/1/2010
Not Specified
Sample Matrix: AIR Sample Medium: SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	ND	3.1		07/09/10	XC
Chlorobenzene	ug/m3	ND	2.3		07/09/10	XC
Chlorodibromomethane	ug/m3	ND	4.3		07/09/10	XC
Chloroethane	ug/m3	3.6	1.3		07/09/10	XC
Chloroform	ug/m3	ND	2.4		07/09/10	XC
Chloromethane	ug/m3	ND	1.0		07/09/10	XC
Cyclohexane	ug/m3	ND	1.7		07/09/10	XC
1,2-Dibromoethane	ug/m3	ND	3.8		07/09/10	XC
1,2-Dichlorobenzene	ug/m3	ND	3.0		07/09/10	XC
1,3-Dichlorobenzene	ug/m3	ND	3.0		07/09/10	XC
1,4-Dichlorobenzene	ug/m3	ND	3.0		07/09/10	XC
Dichlorodifluoromethane	ug/m3	2.5	2.5		07/09/10	XC
1,1-Dichloroethane	ug/m3	53	2.0		07/09/10	XC
1,2-Dichloroethane	ug/m3	ND	2.0		07/09/10	XC
1,1-Dichloroethylene	ug/m3	21	2.0		07/09/10	XC
cis-1,2-Dichloroethylene	ug/m3	43	2.0		07/09/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	2.0		07/09/10	XC
1,2-Dichloropropane	ug/m3	ND	2.3		07/09/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	2.2		07/09/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	2.2		07/09/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	3.5		07/09/10	XC
Ethanol	ug/m3	68	0.90		07/09/10	XC
Ethyl Acetate	ug/m3	ND	1.8		07/09/10	XC
Ethylbenzene	ug/m3	ND	2.2		07/09/10	XC
4-Ethyl Toluene	ug/m3	ND	2.5		07/09/10	XC
n-Heptane	ug/m3	ND	2.0		07/09/10	XC
Hexachlorobutadiene	ug/m3	ND	5.3		07/09/10	XC
Hexane	ug/m3	ND	1.8		07/09/10	XC
2-Hexanone	ug/m3	ND	2.0		07/09/10	XC
Isopropanol	ug/m3	54	1.2		07/09/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	1.8		07/09/10	XC
Methylene Chloride	ug/m3	8.6	1.7		07/09/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	2.0		07/09/10	XC
Propene	ug/m3	ND	8.7		07/09/10	XC
Styrene	ug/m3	ND	2.1		07/09/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-5-070110

Sample ID : 10B00075 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	3.4		07/09/10	XC
Tetrachloroethylene	ug/m3	6.7	3.4		07/09/10	XC
Tetrahydrofuran	ug/m3	37000	1.5		07/09/10	XC
Toluene	ug/m3	ND	1.9		07/09/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	3.7		07/09/10	XC
1,1,1-Trichloroethane	ug/m3	550	2.7		07/09/10	XC
1,1,2-Trichloroethane	ug/m3	ND	2.7		07/09/10	XC
Trichloroethylene	ug/m3	1200	2.7		07/09/10	XC
Trichlorofluoromethane	ug/m3	7.4	2.8		07/09/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	3.8		07/09/10	XC
1,2,4-Trimethylbenzene	ug/m3	ND	2.5		07/09/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	2.5		07/09/10	XC
Vinyl Acetate	ug/m3	ND	1.8		07/09/10	XC
Vinyl Chloride	ug/m3	3.1	1.3		07/09/10	XC
m/p-Xylene	ug/m3	ND	4.3		07/09/10	XC
o-Xylene	ug/m3	ND	2.2		07/09/10	XC

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NM = Not Measured

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
 Page 9 of 49

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-6-070110

Sample ID : 10B00076 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	210	0.50		07/09/10	XC
Benzene	PPBv	ND	0.50		07/09/10	XC
Benzyl Chloride	PPBv	ND	0.50		07/09/10	XC
Bromodichloromethane	PPBv	ND	0.50		07/09/10	XC
Bromoform	PPBv	ND	0.50		07/09/10	XC
Bromomethane	PPBv	ND	0.50		07/09/10	XC
1,3-Butadiene	PPBv	ND	0.50		07/09/10	XC
2-Butanone (MEK)	PPBv	600	0.50		07/09/10	XC
Carbon Disulfide	PPBv	2.6	0.50		07/09/10	XC
Carbon Tetrachloride	PPBv	ND	0.50		07/09/10	XC
Chlorobenzene	PPBv	ND	0.50		07/09/10	XC
Chlorodibromomethane	PPBv	ND	0.50		07/09/10	XC
Chloroethane	PPBv	ND	0.50		07/09/10	XC
Chloroform	PPBv	0.75	0.50		07/09/10	XC
Chloromethane	PPBv	18	0.50		07/09/10	XC
Cyclohexane	PPBv	ND	0.50		07/09/10	XC
1,2-Dibromoethane	PPBv	ND	0.50		07/09/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.50		07/09/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.50		07/09/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.50		07/09/10	XC
Dichlorodifluoromethane	PPBv	ND	0.50		07/09/10	XC
1,1-Dichloroethane	PPBv	12	0.50		07/09/10	XC
1,2-Dichloroethane	PPBv	ND	0.50		07/09/10	XC
1,1-Dichloroethylene	PPBv	0.89	0.50		07/09/10	XC
cis-1,2-Dichloroethylene	PPBv	2.8	0.50		07/09/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.50		07/09/10	XC
1,2-Dichloropropane	PPBv	ND	0.50		07/09/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.50		07/09/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.50		07/09/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.50		07/09/10	XC
Ethanol	PPBv	8.2	0.50		07/09/10	XC
Ethyl Acetate	PPBv	ND	0.50		07/09/10	XC
Ethylbenzene	PPBv	ND	0.50		07/09/10	XC
4-Ethyl Toluene	PPBv	ND	0.50		07/09/10	XC
n-Heptane	PPBv	ND	0.50		07/09/10	XC

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‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-6-070110

Sample ID : 10B00076 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Hexachlorobutadiene	PPBv	ND	0.50		07/09/10	XC
Hexane	PPBv	ND	0.50		07/09/10	XC
2-Hexanone	PPBv	ND	0.50		07/09/10	XC
Isopropanol	PPBv	ND	0.50		07/09/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.50		07/09/10	XC
Methylene Chloride	PPBv	3.0	0.50		07/09/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	0.50		07/09/10	XC
Propene	PPBv	ND	5.0		07/09/10	XC
Styrene	PPBv	ND	0.50		07/09/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.50		07/09/10	XC
Tetrachloroethylene	PPBv	5.0	0.50		07/09/10	XC
Tetrahydrofuran	PPBv	14000	0.50		07/09/10	XC
Toluene	PPBv	ND	0.50		07/09/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.50		07/09/10	XC
1,1,1-Trichloroethane	PPBv	79	0.50		07/09/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.50		07/09/10	XC
Trichloroethylene	PPBv	130	0.50		07/09/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	1.2	0.50		07/09/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	0.50		07/09/10	XC
1,2,4-Trimethylbenzene	PPBv	ND	0.50		07/09/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.50		07/09/10	XC
Vinyl Acetate	PPBv	ND	0.50		07/09/10	XC
Vinyl Chloride	PPBv	0.68	0.50		07/09/10	XC
m/p-Xylene	PPBv	ND	1.0		07/09/10	XC
o-Xylene	PPBv	ND	0.50		07/09/10	XC
to-15 ug/m				EPA TO-15		
Acetone	ug/m3	490	1.2		07/09/10	XC
Benzene	ug/m3	ND	1.6		07/09/10	XC
Benzyl Chloride	ug/m3	ND	2.6		07/09/10	XC
Bromodichloromethane	ug/m3	ND	3.3		07/09/10	XC
Bromoform	ug/m3	ND	5.1		07/09/10	XC
Bromomethane	ug/m3	ND	1.9		07/09/10	XC
1,3-Butadiene	ug/m3	ND	1.1		07/09/10	XC
2-Butanone (MEK)	ug/m3	1800	1.5		07/09/10	XC
Carbon Disulfide	ug/m3	8.0	1.6		07/09/10	XC

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KELLY CHATTERTON
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107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : EW-6-070110

Sample ID : 10B00076 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR Sample Medium : SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	ND	3.1		07/09/10	XC
Chlorobenzene	ug/m3	ND	2.3		07/09/10	XC
Chlorodibromomethane	ug/m3	ND	4.3		07/09/10	XC
Chloroethane	ug/m3	ND	1.3		07/09/10	XC
Chloroform	ug/m3	3.7	2.4		07/09/10	XC
Chloromethane	ug/m3	38	1.0		07/09/10	XC
Cyclohexane	ug/m3	ND	1.7		07/09/10	XC
1,2-Dibromoethane	ug/m3	ND	3.8		07/09/10	XC
1,2-Dichlorobenzene	ug/m3	ND	3.0		07/09/10	XC
1,3-Dichlorobenzene	ug/m3	ND	3.0		07/09/10	XC
1,4-Dichlorobenzene	ug/m3	ND	3.0		07/09/10	XC
Dichlorodifluoromethane	ug/m3	ND	2.5		07/09/10	XC
1,1-Dichloroethane	ug/m3	47	2.0		07/09/10	XC
1,2-Dichloroethane	ug/m3	ND	2.0		07/09/10	XC
1,1-Dichloroethylene	ug/m3	3.5	2.0		07/09/10	XC
cis-1,2-Dichloroethylene	ug/m3	11	2.0		07/09/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	2.0		07/09/10	XC
1,2-Dichloropropane	ug/m3	ND	2.3		07/09/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	2.2		07/09/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	2.2		07/09/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	3.5		07/09/10	XC
Ethanol	ug/m3	15	0.90		07/09/10	XC
Ethyl Acetate	ug/m3	ND	1.8		07/09/10	XC
Ethylbenzene	ug/m3	ND	2.2		07/09/10	XC
4-Ethyl Toluene	ug/m3	ND	2.5		07/09/10	XC
n-Heptane	ug/m3	ND	2.0		07/09/10	XC
Hexachlorobutadiene	ug/m3	ND	5.3		07/09/10	XC
Hexane	ug/m3	ND	1.8		07/09/10	XC
2-Hexanone	ug/m3	ND	2.0		07/09/10	XC
Isopropanol	ug/m3	ND	1.2		07/09/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	1.8		07/09/10	XC
Methylene Chloride	ug/m3	10	1.7		07/09/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	2.0		07/09/10	XC
Propene	ug/m3	ND	8.7		07/09/10	XC
Styrene	ug/m3	ND	2.1		07/09/10	XC

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KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-6-070110

Sample ID : 10B00076 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	3.4		07/09/10	XC
Tetrachloroethylene	ug/m3	34	3.4		07/09/10	XC
Tetrahydrofuran	ug/m3	42000	1.5		07/09/10	XC
Toluene	ug/m3	ND	1.9		07/09/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	3.7		07/09/10	XC
1,1,1-Trichloroethane	ug/m3	430	2.7		07/09/10	XC
1,1,2-Trichloroethane	ug/m3	ND	2.7		07/09/10	XC
Trichloroethylene	ug/m3	730	2.7		07/09/10	XC
Trichlorofluoromethane	ug/m3	6.7	2.8		07/09/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	3.8		07/09/10	XC
1,2,4-Trimethylbenzene	ug/m3	ND	2.5		07/09/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	2.5		07/09/10	XC
Vinyl Acetate	ug/m3	ND	1.8		07/09/10	XC
Vinyl Chloride	ug/m3	1.7	1.3		07/09/10	XC
m/p-Xylene	ug/m3	ND	4.3		07/09/10	XC
o-Xylene	ug/m3	ND	2.2		07/09/10	XC

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KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-7-070110

Sample ID : 10B00077 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	10	0.10		07/09/10	XC
Benzene	PPBv	0.52	0.10		07/09/10	XC
Benzyl Chloride	PPBv	ND	0.10		07/09/10	XC
Bromodichloromethane	PPBv	ND	0.10		07/09/10	XC
Bromoform	PPBv	ND	0.10		07/09/10	XC
Bromomethane	PPBv	ND	0.10		07/09/10	XC
1,3-Butadiene	PPBv	ND	0.10		07/09/10	XC
2-Butanone (MEK)	PPBv	1.3	0.10		07/09/10	XC
Carbon Disulfide	PPBv	0.30	0.10		07/09/10	XC
Carbon Tetrachloride	PPBv	ND	0.10		07/09/10	XC
Chlorobenzene	PPBv	ND	0.10		07/09/10	XC
Chlorodibromomethane	PPBv	ND	0.10		07/09/10	XC
Chloroethane	PPBv	0.83	0.10		07/09/10	XC
Chloroform	PPBv	0.87	0.10		07/09/10	XC
Chloromethane	PPBv	ND	0.10		07/09/10	XC
Cyclohexane	PPBv	ND	0.10		07/09/10	XC
1,2-Dibromoethane	PPBv	ND	0.10		07/09/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.10		07/09/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.10		07/09/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.10		07/09/10	XC
Dichlorodifluoromethane	PPBv	0.45	0.10		07/09/10	XC
1,1-Dichloroethane	PPBv	79	0.10		07/09/10	XC
1,2-Dichloroethane	PPBv	ND	0.10		07/09/10	XC
1,1-Dichloroethylene	PPBv	0.20	0.10		07/09/10	XC
cis-1,2-Dichloroethylene	PPBv	170	0.10		07/09/10	XC
t-1,2-Dichloroethylene	PPBv	31	0.10		07/09/10	XC
1,2-Dichloropropane	PPBv	ND	0.10		07/09/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.10		07/09/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.10		07/09/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.10		07/09/10	XC
Ethanol	PPBv	17	0.10		07/09/10	XC
Ethyl Acetate	PPBv	ND	0.10		07/09/10	XC
Ethylbenzene	PPBv	ND	0.10		07/09/10	XC
4-Ethyl Toluene	PPBv	ND	0.10		07/09/10	XC
n-Heptane	PPBv	ND	0.10		07/09/10	XC

RL = Reporting Limit

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‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
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 WAKEFIELD, MA 01880

7/12/2010
 Page 14 of 49

Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-7-070110

Sample ID : 10B00077 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
				EPA TO-15		
to-15 ppbv						
Hexachlorobutadiene	PPBv	ND	0.10		07/09/10	XC
Hexane	PPBv	0.27	0.10		07/09/10	XC
2-Hexanone	PPBv	0.25	0.10		07/09/10	XC
Isopropanol	PPBv	0.88	0.10		07/09/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.10		07/09/10	XC
Methylene Chloride	PPBv	0.70	0.10		07/09/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	0.10		07/09/10	XC
Propene	PPBv	ND	1.0		07/09/10	XC
Styrene	PPBv	0.16	0.10		07/09/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.10		07/09/10	XC
Tetrachloroethylene	PPBv	76	0.10		07/09/10	XC
Tetrahydrofuran	PPBv	0.24	0.10		07/09/10	XC
Toluene	PPBv	1.3	0.10		07/09/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.10		07/09/10	XC
1,1,1-Trichloroethane	PPBv	46	0.10		07/09/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.10		07/09/10	XC
Trichloroethylene	PPBv	130	0.10		07/09/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	120	0.10		07/09/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	0.10		07/09/10	XC
1,2,4-Trimethylbenzene	PPBv	ND	0.10		07/09/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.10		07/09/10	XC
Vinyl Acetate	PPBv	ND	0.10		07/09/10	XC
Vinyl Chloride	PPBv	ND	0.10		07/09/10	XC
m/p-Xylene	PPBv	0.21	0.20		07/09/10	XC
o-Xylene	PPBv	ND	0.10		07/09/10	XC
				EPA TO-15		
to-15 ug/m						
Acetone	ug/m3	25	0.24		07/09/10	XC
Benzene	ug/m3	1.7	0.32		07/09/10	XC
Benzyl Chloride	ug/m3	ND	0.52		07/09/10	XC
Bromodichloromethane	ug/m3	ND	0.66		07/09/10	XC
Bromoform	ug/m3	ND	1.1		07/09/10	XC
Bromomethane	ug/m3	ND	0.38		07/09/10	XC
1,3-Butadiene	ug/m3	ND	0.22		07/09/10	XC
2-Butanone (MEK)	ug/m3	3.8	0.30		07/09/10	XC
Carbon Disulfide	ug/m3	0.93	0.32		07/09/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-7-070110

Sample ID : 10B00077 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	ND	0.62		07/09/10	XC
Chlorobenzene	ug/m3	ND	0.46		07/09/10	XC
Chlorodibromomethane	ug/m3	ND	0.86		07/09/10	XC
Chloroethane	ug/m3	2.2	0.26		07/09/10	XC
Chloroform	ug/m3	4.2	0.48		07/09/10	XC
Chloromethane	ug/m3	ND	0.20		07/09/10	XC
Cyclohexane	ug/m3	ND	0.34		07/09/10	XC
1,2-Dibromoethane	ug/m3	ND	0.76		07/09/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.60		07/09/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.60		07/09/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.60		07/09/10	XC
Dichlorodifluoromethane	ug/m3	2.2	0.50		07/09/10	XC
1,1-Dichloroethane	ug/m3	320	0.40		07/09/10	XC
1,2-Dichloroethane	ug/m3	ND	0.40		07/09/10	XC
1,1-Dichloroethylene	ug/m3	0.81	0.40		07/09/10	XC
cis-1,2-Dichloroethylene	ug/m3	660	0.40		07/09/10	XC
t-1,2-Dichloroethylene	ug/m3	120	0.40		07/09/10	XC
1,2-Dichloropropane	ug/m3	ND	0.46		07/09/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.44		07/09/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.44		07/09/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.70		07/09/10	XC
Ethanol	ug/m3	31	0.18		07/09/10	XC
Ethyl Acetate	ug/m3	ND	0.36		07/09/10	XC
Ethylbenzene	ug/m3	ND	0.44		07/09/10	XC
4-Ethyl Toluene	ug/m3	ND	0.50		07/09/10	XC
n-Heptane	ug/m3	ND	0.40		07/09/10	XC
Hexachlorobutadiene	ug/m3	ND	1.1		07/09/10	XC
Hexane	ug/m3	0.97	0.36		07/09/10	XC
2-Hexanone	ug/m3	1.0	0.40		07/09/10	XC
Isopropanol	ug/m3	2.2	0.24		07/09/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.36		07/09/10	XC
Methylene Chloride	ug/m3	2.4	0.34		07/09/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	0.40		07/09/10	XC
Propene	ug/m3	ND	1.8		07/09/10	XC
Styrene	ug/m3	0.67	0.42		07/09/10	XC

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-7-070110

Sample ID : 10B00077 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.68		07/09/10	XC
Tetrachloroethylene	ug/m3	510	0.68		07/09/10	XC
Tetrahydrofuran	ug/m3	0.70	0.30		07/09/10	XC
Toluene	ug/m3	4.8	0.38		07/09/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.74		07/09/10	XC
1,1,1-Trichloroethane	ug/m3	250	0.54		07/09/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.54		07/09/10	XC
Trichloroethylene	ug/m3	690	0.54		07/09/10	XC
Trichlorofluoromethane	ug/m3	690	0.56		07/09/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	0.76		07/09/10	XC
1,2,4-Trimethylbenzene	ug/m3	ND	0.50		07/09/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.50		07/09/10	XC
Vinyl Acetate	ug/m3	ND	0.36		07/09/10	XC
Vinyl Chloride	ug/m3	ND	0.26		07/09/10	XC
m/p-Xylene	ug/m3	0.93	0.86		07/09/10	XC
o-Xylene	ug/m3	ND	0.44		07/09/10	XC

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‡ See attached chain-of-custody record for time sampled



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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : EW-COMBINED-070110

Sample ID : 10B00078 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR Sample Medium : SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	6.8	0.10		07/09/10	XC
Benzene	PPBv	0.26	0.10		07/09/10	XC
Benzyl Chloride	PPBv	ND	0.10		07/09/10	XC
Bromodichloromethane	PPBv	ND	0.10		07/09/10	XC
Bromoform	PPBv	ND	0.10		07/09/10	XC
Bromomethane	PPBv	ND	0.10		07/09/10	XC
1,3-Butadiene	PPBv	ND	0.10		07/09/10	XC
2-Butanone (MEK)	PPBv	7.5	0.10		07/09/10	XC
Carbon Disulfide	PPBv	0.37	0.10		07/09/10	XC
Carbon Tetrachloride	PPBv	0.12	0.10		07/09/10	XC
Chlorobenzene	PPBv	ND	0.10		07/09/10	XC
Chlorodibromomethane	PPBv	ND	0.10		07/09/10	XC
Chloroethane	PPBv	3.6	0.10		07/09/10	XC
Chloroform	PPBv	1.7	0.10		07/09/10	XC
Chloromethane	PPBv	ND	0.10		07/09/10	XC
Cyclohexane	PPBv	ND	0.10		07/09/10	XC
1,2-Dibromoethane	PPBv	ND	0.10		07/09/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.10		07/09/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.10		07/09/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.10		07/09/10	XC
Dichlorodifluoromethane	PPBv	0.51	0.10		07/09/10	XC
1,1-Dichloroethane	PPBv	71	0.10		07/09/10	XC
1,2-Dichloroethane	PPBv	ND	0.10		07/09/10	XC
1,1-Dichloroethylene	PPBv	13	0.10		07/09/10	XC
cis-1,2-Dichloroethylene	PPBv	66	0.10		07/09/10	XC
t-1,2-Dichloroethylene	PPBv	1.4	0.10		07/09/10	XC
1,2-Dichloropropane	PPBv	ND	0.10		07/09/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.10		07/09/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.10		07/09/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.10		07/09/10	XC
Ethanol	PPBv	7.8	0.10		07/09/10	XC
Ethyl Acetate	PPBv	ND	0.10		07/09/10	XC
Ethylbenzene	PPBv	ND	0.10		07/09/10	XC
4-Ethyl Toluene	PPBv	ND	0.10		07/09/10	XC
n-Heptane	PPBv	ND	0.10		07/09/10	XC

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‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
MACTEC ENGINEERING & CONSULTING - MA
107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : EW-COMBINED-070110

Sample ID : 10B00078 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.68		07/09/10	XC
Tetrachloroethylene	ug/m3	640	0.68		07/09/10	XC
Tetrahydrofuran	ug/m3	65	0.30		07/09/10	XC
Toluene	ug/m3	0.41	0.38		07/09/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.74		07/09/10	XC
1,1,1-Trichloroethane	ug/m3	2000	0.54		07/09/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.54		07/09/10	XC
Trichloroethylene	ug/m3	1700	0.54		07/09/10	XC
Trichlorofluoromethane	ug/m3	440	0.56		07/09/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	0.76		07/09/10	XC
1,2,4-Trimethylbenzene	ug/m3	ND	0.50		07/09/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.50		07/09/10	XC
Vinyl Acetate	ug/m3	ND	0.36		07/09/10	XC
Vinyl Chloride	ug/m3	ND	0.26		07/09/10	XC
m/p-Xylene	ug/m3	ND	0.86		07/09/10	XC
o-Xylene	ug/m3	ND	0.44		07/09/10	XC

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‡ See attached chain-of-custody record for time sampled



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

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107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-1-070110

Sample ID : 10B00067 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	7.4	0.05		07/08/10	XC
Benzene	PPBv	0.14	0.05		07/08/10	XC
Benzyl Chloride	PPBv	ND	0.05		07/08/10	XC
Bromodichloromethane	PPBv	ND	0.05		07/08/10	XC
Bromoform	PPBv	ND	0.05		07/08/10	XC
Bromomethane	PPBv	ND	0.05		07/08/10	XC
1,3-Butadiene	PPBv	ND	0.05		07/08/10	XC
2-Butanone (MEK)	PPBv	1.1	0.05		07/08/10	XC
Carbon Disulfide	PPBv	ND	0.05		07/08/10	XC
Carbon Tetrachloride	PPBv	0.08	0.05		07/08/10	XC
Chlorobenzene	PPBv	ND	0.05		07/08/10	XC
Chlorodibromomethane	PPBv	ND	0.05		07/08/10	XC
Chloroethane	PPBv	ND	0.05		07/08/10	XC
Chloroform	PPBv	ND	0.05		07/08/10	XC
Chloromethane	PPBv	0.57	0.05		07/08/10	XC
Cyclohexane	PPBv	ND	0.05		07/08/10	XC
1,2-Dibromoethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
Dichlorodifluoromethane	PPBv	0.54	0.05		07/08/10	XC
1,1-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
cis-1,2-Dichloroethylene	PPBv	0.12	0.05		07/08/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloropropane	PPBv	ND	0.05		07/08/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.05		07/08/10	XC
Ethanol	PPBv	3.5	0.05		07/08/10	XC
Ethyl Acetate	PPBv	ND	0.05		07/08/10	XC
Ethylbenzene	PPBv	0.06	0.05		07/08/10	XC
4-Ethyl Toluene	PPBv	ND	0.05		07/08/10	XC
n-Heptane	PPBv	ND	0.05		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-1-070110

Sample ID : **10B00067** ‡Sampled : 7/1/2010
 Not Specified
 Sample Matrix: AIR Sample Medium : SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
				EPA TO-15		
to-15 ppbv						
Hexachlorobutadiene	PPBv	ND	0.05		07/08/10	XC
Hexane	PPBv	0.13	0.05		07/08/10	XC
2-Hexanone	PPBv	0.18	0.05		07/08/10	XC
Isopropanol	PPBv	0.30	0.05		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.05		07/08/10	XC
Methylene Chloride	PPBv	0.35	0.05		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	0.08	0.05		07/08/10	XC
Propene	PPBv	ND	0.50		07/08/10	XC
Styrene	PPBv	0.07	0.05		07/08/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.05		07/08/10	XC
Tetrachloroethylene	PPBv	0.16	0.05		07/08/10	XC
Tetrahydrofuran	PPBv	0.08	0.05		07/08/10	XC
Toluene	PPBv	0.26	0.05		07/08/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,1,1-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
Trichloroethylene	PPBv	0.08	0.05		07/08/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	0.26	0.05		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.07	0.05		07/08/10	XC
1,2,4-Trimethylbenzene	PPBv	0.09	0.05		07/08/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
Vinyl Acetate	PPBv	ND	0.05		07/08/10	XC
Vinyl Chloride	PPBv	ND	0.05		07/08/10	XC
m/p-Xylene	PPBv	0.28	0.10		07/08/10	XC
o-Xylene	PPBv	0.12	0.05		07/08/10	XC
				EPA TO-15		
to-15 ug/m						
Acetone	ug/m3	18	0.12		07/08/10	XC
Benzene	ug/m3	0.46	0.16		07/08/10	XC
Benzyl Chloride	ug/m3	ND	0.26		07/08/10	XC
Bromodichloromethane	ug/m3	ND	0.33		07/08/10	XC
Bromoform	ug/m3	ND	0.51		07/08/10	XC
Bromomethane	ug/m3	ND	0.19		07/08/10	XC
1,3-Butadiene	ug/m3	ND	0.11		07/08/10	XC
2-Butanone (MEK)	ug/m3	3.3	0.15		07/08/10	XC
Carbon Disulfide	ug/m3	ND	0.16		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled



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MACTEC ENGINEERING & CONSULTING - MA
107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-1-070110

Sample ID : 10B00067 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	0.52	0.31		07/08/10	XC
Chlorobenzene	ug/m3	ND	0.23		07/08/10	XC
Chlorodibromomethane	ug/m3	ND	0.43		07/08/10	XC
Chloroethane	ug/m3	ND	0.13		07/08/10	XC
Chloroform	ug/m3	ND	0.24		07/08/10	XC
Chloromethane	ug/m3	1.2	0.10		07/08/10	XC
Cyclohexane	ug/m3	ND	0.17		07/08/10	XC
1,2-Dibromoethane	ug/m3	ND	0.38		07/08/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
Dichlorodifluoromethane	ug/m3	2.7	0.25		07/08/10	XC
1,1-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,1-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
cis-1,2-Dichloroethylene	ug/m3	0.50	0.20		07/08/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloropropane	ug/m3	ND	0.23		07/08/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.35		07/08/10	XC
Ethanol	ug/m3	6.5	0.09		07/08/10	XC
Ethyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Ethylbenzene	ug/m3	0.27	0.22		07/08/10	XC
4-Ethyl Toluene	ug/m3	ND	0.25		07/08/10	XC
n-Heptane	ug/m3	ND	0.20		07/08/10	XC
Hexachlorobutadiene	ug/m3	ND	0.53		07/08/10	XC
Hexane	ug/m3	0.46	0.18		07/08/10	XC
2-Hexanone	ug/m3	0.75	0.20		07/08/10	XC
Isopropanol	ug/m3	0.74	0.12		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.18		07/08/10	XC
Methylene Chloride	ug/m3	1.2	0.17		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	0.35	0.20		07/08/10	XC
Propene	ug/m3	ND	0.87		07/08/10	XC
Styrene	ug/m3	0.31	0.21		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
MACTEC ENGINEERING & CONSULTING - MA
107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-1-070110

Sample ID : 10B00067 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.34		07/08/10	XC
Tetrachloroethylene	ug/m3	1.1	0.34		07/08/10	XC
Tetrahydrofuran	ug/m3	0.24	0.15		07/08/10	XC
Toluene	ug/m3	0.99	0.19		07/08/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.37		07/08/10	XC
1,1,1-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
Trichloroethylene	ug/m3	0.40	0.27		07/08/10	XC
Trichlorofluoromethane	ug/m3	1.4	0.28		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.53	0.38		07/08/10	XC
1,2,4-Trimethylbenzene	ug/m3	0.43	0.25		07/08/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
Vinyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Vinyl Chloride	ug/m3	ND	0.13		07/08/10	XC
m/p-Xylene	ug/m3	1.2	0.43		07/08/10	XC
o-Xylene	ug/m3	0.51	0.22		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled



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WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-2-070110

Sample ID : 10B00068 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR Sample Medium : SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	8.5	0.05		07/08/10	XC
Benzene	PPBv	0.15	0.05		07/08/10	XC
Benzyl Chloride	PPBv	ND	0.05		07/08/10	XC
Bromodichloromethane	PPBv	ND	0.05		07/08/10	XC
Bromoform	PPBv	ND	0.05		07/08/10	XC
Bromomethane	PPBv	0.06	0.05		07/08/10	XC
1,3-Butadiene	PPBv	ND	0.05		07/08/10	XC
2-Butanone (MEK)	PPBv	1.1	0.05		07/08/10	XC
Carbon Disulfide	PPBv	ND	0.05		07/08/10	XC
Carbon Tetrachloride	PPBv	0.08	0.05		07/08/10	XC
Chlorobenzene	PPBv	ND	0.05		07/08/10	XC
Chlorodibromomethane	PPBv	ND	0.05		07/08/10	XC
Chloroethane	PPBv	ND	0.05		07/08/10	XC
Chloroform	PPBv	ND	0.05		07/08/10	XC
Chloromethane	PPBv	0.58	0.05		07/08/10	XC
Cyclohexane	PPBv	ND	0.05		07/08/10	XC
1,2-Dibromoethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
Dichlorodifluoromethane	PPBv	0.53	0.05		07/08/10	XC
1,1-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
cis-1,2-Dichloroethylene	PPBv	0.15	0.05		07/08/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloropropane	PPBv	ND	0.05		07/08/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.05		07/08/10	XC
Ethanol	PPBv	4.0	0.05		07/08/10	XC
Ethyl Acetate	PPBv	ND	0.05		07/08/10	XC
Ethylbenzene	PPBv	0.07	0.05		07/08/10	XC
4-Ethyl Toluene	PPBv	ND	0.05		07/08/10	XC
n-Heptane	PPBv	0.19	0.05		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled



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 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-2-070110

Sample ID : 10B00068 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Hexachlorobutadiene	PPBv	ND	0.05		07/08/10	XC
Hexane	PPBv	0.14	0.05		07/08/10	XC
2-Hexanone	PPBv	0.17	0.05		07/08/10	XC
Isopropanol	PPBv	0.48	0.05		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.05		07/08/10	XC
Methylene Chloride	PPBv	0.36	0.05		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	0.12	0.05		07/08/10	XC
Propene	PPBv	ND	0.50		07/08/10	XC
Styrene	PPBv	0.08	0.05		07/08/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.05		07/08/10	XC
Tetrachloroethylene	PPBv	0.20	0.05		07/08/10	XC
Tetrahydrofuran	PPBv	0.09	0.05		07/08/10	XC
Toluene	PPBv	0.35	0.05		07/08/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,1,1-Trichloroethane	PPBv	0.05	0.05		07/08/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
Trichloroethylene	PPBv	0.10	0.05		07/08/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	0.28	0.05		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.12	0.05		07/08/10	XC
1,2,4-Trimethylbenzene	PPBv	0.10	0.05		07/08/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
Vinyl Acetate	PPBv	ND	0.05		07/08/10	XC
Vinyl Chloride	PPBv	ND	0.05		07/08/10	XC
m/p-Xylene	PPBv	0.30	0.10		07/08/10	XC
o-Xylene	PPBv	0.13	0.05		07/08/10	XC
to-15 ug/m				EPA TO-15		
Acetone	ug/m3	20	0.12		07/08/10	XC
Benzene	ug/m3	0.48	0.16		07/08/10	XC
Benzyl Chloride	ug/m3	ND	0.26		07/08/10	XC
Bromodichloromethane	ug/m3	ND	0.33		07/08/10	XC
Bromoform	ug/m3	ND	0.51		07/08/10	XC
Bromomethane	ug/m3	0.22	0.19		07/08/10	XC
1,3-Butadiene	ug/m3	ND	0.11		07/08/10	XC
2-Butanone (MEK)	ug/m3	3.4	0.15		07/08/10	XC
Carbon Disulfide	ug/m3	ND	0.16		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled



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107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-2-070110

Sample ID : 10B00068 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR Sample Medium : SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	0.52	0.31		07/08/10	XC
Chlorobenzene	ug/m3	ND	0.23		07/08/10	XC
Chlorodibromomethane	ug/m3	ND	0.43		07/08/10	XC
Chloroethane	ug/m3	ND	0.13		07/08/10	XC
Chloroform	ug/m3	ND	0.24		07/08/10	XC
Chloromethane	ug/m3	1.2	0.10		07/08/10	XC
Cyclohexane	ug/m3	ND	0.17		07/08/10	XC
1,2-Dibromoethane	ug/m3	ND	0.38		07/08/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
Dichlorodifluoromethane	ug/m3	2.6	0.25		07/08/10	XC
1,1-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,1-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
cis-1,2-Dichloroethylene	ug/m3	0.61	0.20		07/08/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloropropane	ug/m3	ND	0.23		07/08/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.35		07/08/10	XC
Ethanol	ug/m3	7.6	0.09		07/08/10	XC
Ethyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Ethylbenzene	ug/m3	0.29	0.22		07/08/10	XC
4-Ethyl Toluene	ug/m3	ND	0.25		07/08/10	XC
n-Heptane	ug/m3	0.80	0.20		07/08/10	XC
Hexachlorobutadiene	ug/m3	ND	0.53		07/08/10	XC
Hexane	ug/m3	0.49	0.18		07/08/10	XC
2-Hexanone	ug/m3	0.68	0.20		07/08/10	XC
Isopropanol	ug/m3	1.2	0.12		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.18		07/08/10	XC
Methylene Chloride	ug/m3	1.3	0.17		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	0.49	0.20		07/08/10	XC
Propene	ug/m3	ND	0.87		07/08/10	XC
Styrene	ug/m3	0.36	0.21		07/08/10	XC

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ND = Not Detected at or above the Reporting Limit

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‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
MACTEC ENGINEERING & CONSULTING - MA
107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
Page 28 of 49

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-2-070110

Sample ID : 10B00068 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.34		07/08/10	XC
Tetrachloroethylene	ug/m3	1.4	0.34		07/08/10	XC
Tetrahydrofuran	ug/m3	0.27	0.15		07/08/10	XC
Toluene	ug/m3	1.3	0.19		07/08/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.37		07/08/10	XC
1,1,1-Trichloroethane	ug/m3	0.28	0.27		07/08/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
Trichloroethylene	ug/m3	0.53	0.27		07/08/10	XC
Trichlorofluoromethane	ug/m3	1.6	0.28		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.94	0.38		07/08/10	XC
1,2,4-Trimethylbenzene	ug/m3	0.48	0.25		07/08/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
Vinyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Vinyl Chloride	ug/m3	ND	0.13		07/08/10	XC
m/p-Xylene	ug/m3	1.3	0.43		07/08/10	XC
o-Xylene	ug/m3	0.57	0.22		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled



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WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
Page 29 of 49

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-3-070110

Sample ID : 10B00069 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	8.9	0.05		07/08/10	XC
Benzene	PPBv	0.16	0.05		07/08/10	XC
Benzyl Chloride	PPBv	ND	0.05		07/08/10	XC
Bromodichloromethane	PPBv	ND	0.05		07/08/10	XC
Bromoform	PPBv	ND	0.05		07/08/10	XC
Bromomethane	PPBv	ND	0.05		07/08/10	XC
1,3-Butadiene	PPBv	ND	0.05		07/08/10	XC
2-Butanone (MEK)	PPBv	1.1	0.05		07/08/10	XC
Carbon Disulfide	PPBv	ND	0.05		07/08/10	XC
Carbon Tetrachloride	PPBv	0.09	0.05		07/08/10	XC
Chlorobenzene	PPBv	ND	0.05		07/08/10	XC
Chlorodibromomethane	PPBv	ND	0.05		07/08/10	XC
Chloroethane	PPBv	ND	0.05		07/08/10	XC
Chloroform	PPBv	ND	0.05		07/08/10	XC
Chloromethane	PPBv	0.58	0.05		07/08/10	XC
Cyclohexane	PPBv	ND	0.05		07/08/10	XC
1,2-Dibromoethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
Dichlorodifluoromethane	PPBv	0.55	0.05		07/08/10	XC
1,1-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
cis-1,2-Dichloroethylene	PPBv	0.13	0.05		07/08/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloropropane	PPBv	ND	0.05		07/08/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.05		07/08/10	XC
Ethanol	PPBv	3.7	0.05		07/08/10	XC
Ethyl Acetate	PPBv	ND	0.05		07/08/10	XC
Ethylbenzene	PPBv	0.07	0.05		07/08/10	XC
4-Ethyl Toluene	PPBv	ND	0.05		07/08/10	XC
n-Heptane	PPBv	ND	0.05		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-3-070110

Sample ID : 10B00069 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
				EPA TO-15		
to-15 ppbv						
Hexachlorobutadiene	PPBv	ND	0.05		07/08/10	XC
Hexane	PPBv	0.13	0.05		07/08/10	XC
2-Hexanone	PPBv	0.16	0.05		07/08/10	XC
Isopropanol	PPBv	0.31	0.05		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.05		07/08/10	XC
Methylene Chloride	PPBv	0.34	0.05		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	0.09	0.05		07/08/10	XC
Propene	PPBv	ND	0.50		07/08/10	XC
Styrene	PPBv	0.08	0.05		07/08/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.05		07/08/10	XC
Tetrachloroethylene	PPBv	0.17	0.05		07/08/10	XC
Tetrahydrofuran	PPBv	0.08	0.05		07/08/10	XC
Toluene	PPBv	0.29	0.05		07/08/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,1,1-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
Trichloroethylene	PPBv	0.09	0.05		07/08/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	0.26	0.05		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.07	0.05		07/08/10	XC
1,2,4-Trimethylbenzene	PPBv	0.09	0.05		07/08/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
Vinyl Acetate	PPBv	ND	0.05		07/08/10	XC
Vinyl Chloride	PPBv	ND	0.05		07/08/10	XC
m/p-Xylene	PPBv	0.29	0.10		07/08/10	XC
o-Xylene	PPBv	0.13	0.05		07/08/10	XC
				EPA TO-15		
to-15 ug/m						
Acetone	ug/m3	21	0.12		07/08/10	XC
Benzene	ug/m3	0.51	0.16		07/08/10	XC
Benzyl Chloride	ug/m3	ND	0.26		07/08/10	XC
Bromodichloromethane	ug/m3	ND	0.33		07/08/10	XC
Bromoform	ug/m3	ND	0.51		07/08/10	XC
Bromomethane	ug/m3	ND	0.19		07/08/10	XC
1,3-Butadiene	ug/m3	ND	0.11		07/08/10	XC
2-Butanone (MEK)	ug/m3	3.3	0.15		07/08/10	XC
Carbon Disulfide	ug/m3	ND	0.16		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-3-070110

Sample ID : 10B00069 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	0.57	0.31		07/08/10	XC
Chlorobenzene	ug/m3	ND	0.23		07/08/10	XC
Chlorodibromomethane	ug/m3	ND	0.43		07/08/10	XC
Chloroethane	ug/m3	ND	0.13		07/08/10	XC
Chloroform	ug/m3	ND	0.24		07/08/10	XC
Chloromethane	ug/m3	1.2	0.10		07/08/10	XC
Cyclohexane	ug/m3	ND	0.17		07/08/10	XC
1,2-Dibromoethane	ug/m3	ND	0.38		07/08/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
Dichlorodifluoromethane	ug/m3	2.7	0.25		07/08/10	XC
1,1-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,1-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
cis-1,2-Dichloroethylene	ug/m3	0.51	0.20		07/08/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloropropane	ug/m3	ND	0.23		07/08/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.35		07/08/10	XC
Ethanol	ug/m3	7.0	0.09		07/08/10	XC
Ethyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Ethylbenzene	ug/m3	0.29	0.22		07/08/10	XC
4-Ethyl Toluene	ug/m3	ND	0.25		07/08/10	XC
n-Heptane	ug/m3	ND	0.20		07/08/10	XC
Hexachlorobutadiene	ug/m3	ND	0.53		07/08/10	XC
Hexane	ug/m3	0.45	0.18		07/08/10	XC
2-Hexanone	ug/m3	0.67	0.20		07/08/10	XC
Isopropanol	ug/m3	0.76	0.12		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.18		07/08/10	XC
Methylene Chloride	ug/m3	1.2	0.17		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	0.38	0.20		07/08/10	XC
Propene	ug/m3	ND	0.87		07/08/10	XC
Styrene	ug/m3	0.34	0.21		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-3-070110

Sample ID : 10B00069 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.34		07/08/10	XC
Tetrachloroethylene	ug/m3	1.1	0.34		07/08/10	XC
Tetrahydrofuran	ug/m3	0.24	0.15		07/08/10	XC
Toluene	ug/m3	1.1	0.19		07/08/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.37		07/08/10	XC
1,1,1-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
Trichloroethylene	ug/m3	0.47	0.27		07/08/10	XC
Trichlorofluoromethane	ug/m3	1.5	0.28		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.54	0.38		07/08/10	XC
1,2,4-Trimethylbenzene	ug/m3	0.46	0.25		07/08/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
Vinyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Vinyl Chloride	ug/m3	ND	0.13		07/08/10	XC
m/p-Xylene	ug/m3	1.3	0.43		07/08/10	XC
o-Xylene	ug/m3	0.58	0.22		07/08/10	XC

RL = Reporting Limit

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-4-070110

Sample ID : 10B00070 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	13	0.05		07/08/10	XC
Benzene	PPBv	0.15	0.05		07/08/10	XC
Benzyl Chloride	PPBv	ND	0.05		07/08/10	XC
Bromodichloromethane	PPBv	ND	0.05		07/08/10	XC
Bromoform	PPBv	ND	0.05		07/08/10	XC
Bromomethane	PPBv	ND	0.05		07/08/10	XC
1,3-Butadiene	PPBv	ND	0.05		07/08/10	XC
2-Butanone (MEK)	PPBv	1.6	0.05		07/08/10	XC
Carbon Disulfide	PPBv	ND	0.05		07/08/10	XC
Carbon Tetrachloride	PPBv	0.08	0.05		07/08/10	XC
Chlorobenzene	PPBv	ND	0.05		07/08/10	XC
Chlorodibromomethane	PPBv	ND	0.05		07/08/10	XC
Chloroethane	PPBv	ND	0.05		07/08/10	XC
Chloroform	PPBv	ND	0.05		07/08/10	XC
Chloromethane	PPBv	0.57	0.05		07/08/10	XC
Cyclohexane	PPBv	ND	0.05		07/08/10	XC
1,2-Dibromoethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
Dichlorodifluoromethane	PPBv	0.52	0.05		07/08/10	XC
1,1-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
cis-1,2-Dichloroethylene	PPBv	0.11	0.05		07/08/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloropropane	PPBv	ND	0.05		07/08/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.05		07/08/10	XC
Ethanol	PPBv	4.6	0.05		07/08/10	XC
Ethyl Acetate	PPBv	ND	0.05		07/08/10	XC
Ethylbenzene	PPBv	0.07	0.05		07/08/10	XC
4-Ethyl Toluene	PPBv	ND	0.05		07/08/10	XC
n-Heptane	PPBv	0.05	0.05		07/08/10	XC

RL = Reporting Limit

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‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-4-070110

Sample ID : 10B00070 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Hexachlorobutadiene	PPBv	ND	0.05		07/08/10	XC
Hexane	PPBv	0.79	0.05		07/08/10	XC
2-Hexanone	PPBv	0.25	0.05		07/08/10	XC
Isopropanol	PPBv	0.75	0.05		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.05		07/08/10	XC
Methylene Chloride	PPBv	2.2	0.05		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	0.10	0.05		07/08/10	XC
Propene	PPBv	0.66	0.05		07/08/10	XC
Styrene	PPBv	0.07	0.05		07/08/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.05		07/08/10	XC
Tetrachloroethylene	PPBv	0.16	0.05		07/08/10	XC
Tetrahydrofuran	PPBv	0.08	0.05		07/08/10	XC
Toluene	PPBv	0.27	0.05		07/08/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,1,1-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
Trichloroethylene	PPBv	0.08	0.05		07/08/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	0.34	0.05		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.08	0.05		07/08/10	XC
1,2,4-Trimethylbenzene	PPBv	0.08	0.05		07/08/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
Vinyl Acetate	PPBv	ND	0.05		07/08/10	XC
Vinyl Chloride	PPBv	ND	0.05		07/08/10	XC
m/p-Xylene	PPBv	0.26	0.10		07/08/10	XC
o-Xylene	PPBv	0.12	0.05		07/08/10	XC
to-15 ug/m				EPA TO-15		
Acetone	ug/m3	31	0.12		07/08/10	XC
Benzene	ug/m3	0.47	0.16		07/08/10	XC
Benzyl Chloride	ug/m3	ND	0.26		07/08/10	XC
Bromodichloromethane	ug/m3	ND	0.33		07/08/10	XC
Bromoform	ug/m3	ND	0.51		07/08/10	XC
Bromomethane	ug/m3	ND	0.19		07/08/10	XC
1,3-Butadiene	ug/m3	ND	0.11		07/08/10	XC
2-Butanone (MEK)	ug/m3	4.8	0.15		07/08/10	XC
Carbon Disulfide	ug/m3	ND	0.16		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-4-070110

Sample ID : 10B00070 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	0.48	0.31		07/08/10	XC
Chlorobenzene	ug/m3	ND	0.23		07/08/10	XC
Chlorodibromomethane	ug/m3	ND	0.43		07/08/10	XC
Chloroethane	ug/m3	ND	0.13		07/08/10	XC
Chloroform	ug/m3	ND	0.24		07/08/10	XC
Chloromethane	ug/m3	1.2	0.10		07/08/10	XC
Cyclohexane	ug/m3	ND	0.17		07/08/10	XC
1,2-Dibromoethane	ug/m3	ND	0.38		07/08/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
Dichlorodifluoromethane	ug/m3	2.6	0.25		07/08/10	XC
1,1-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,1-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
cis-1,2-Dichloroethylene	ug/m3	0.44	0.20		07/08/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloropropane	ug/m3	ND	0.23		07/08/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.35		07/08/10	XC
Ethanol	ug/m3	8.7	0.09		07/08/10	XC
Ethyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Ethylbenzene	ug/m3	0.29	0.22		07/08/10	XC
4-Ethyl Toluene	ug/m3	ND	0.25		07/08/10	XC
n-Heptane	ug/m3	0.22	0.20		07/08/10	XC
Hexachlorobutadiene	ug/m3	ND	0.53		07/08/10	XC
Hexane	ug/m3	2.8	0.18		07/08/10	XC
2-Hexanone	ug/m3	1.0	0.20		07/08/10	XC
Isopropanol	ug/m3	1.8	0.12		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.18		07/08/10	XC
Methylene Chloride	ug/m3	7.7	0.17		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	0.43	0.20		07/08/10	XC
Propene	ug/m3	1.1	0.09		07/08/10	XC
Styrene	ug/m3	0.29	0.21		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

7/12/2010
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-4-070110

Sample ID : 10B00070 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.34		07/08/10	XC
Tetrachloroethylene	ug/m3	1.1	0.34		07/08/10	XC
Tetrahydrofuran	ug/m3	0.24	0.15		07/08/10	XC
Toluene	ug/m3	1.0	0.19		07/08/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.37		07/08/10	XC
1,1,1-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
Trichloroethylene	ug/m3	0.44	0.27		07/08/10	XC
Trichlorofluoromethane	ug/m3	1.9	0.28		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.59	0.38		07/08/10	XC
1,2,4-Trimethylbenzene	ug/m3	0.41	0.25		07/08/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
Vinyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Vinyl Chloride	ug/m3	ND	0.13		07/08/10	XC
m/p-Xylene	ug/m3	1.1	0.43		07/08/10	XC
o-Xylene	ug/m3	0.50	0.22		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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‡ See attached chain-of-custody record for time sampled

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Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-5-070110

Sample ID : 10B00071 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	7.8	0.05		07/08/10	XC
Benzene	PPBv	ND	0.05		07/08/10	XC
Benzyl Chloride	PPBv	ND	0.05		07/08/10	XC
Bromodichloromethane	PPBv	ND	0.05		07/08/10	XC
Bromoform	PPBv	ND	0.05		07/08/10	XC
Bromomethane	PPBv	ND	0.05		07/08/10	XC
1,3-Butadiene	PPBv	ND	0.05		07/08/10	XC
2-Butanone (MEK)	PPBv	0.71	0.05		07/08/10	XC
Carbon Disulfide	PPBv	ND	0.05		07/08/10	XC
Carbon Tetrachloride	PPBv	0.08	0.05		07/08/10	XC
Chlorobenzene	PPBv	ND	0.05		07/08/10	XC
Chlorodibromomethane	PPBv	ND	0.05		07/08/10	XC
Chloroethane	PPBv	ND	0.05		07/08/10	XC
Chloroform	PPBv	ND	0.05		07/08/10	XC
Chloromethane	PPBv	0.48	0.05		07/08/10	XC
Cyclohexane	PPBv	ND	0.05		07/08/10	XC
1,2-Dibromoethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
Dichlorodifluoromethane	PPBv	0.48	0.05		07/08/10	XC
1,1-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
cis-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloropropane	PPBv	ND	0.05		07/08/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.05		07/08/10	XC
Ethanol	PPBv	31	0.05		07/08/10	XC
Ethyl Acetate	PPBv	ND	0.05		07/08/10	XC
Ethylbenzene	PPBv	0.10	0.05		07/08/10	XC
4-Ethyl Toluene	PPBv	ND	0.05		07/08/10	XC
n-Heptane	PPBv	ND	0.05		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled



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

KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-5-070110

Sample ID : 10B00071 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Hexachlorobutadiene	PPBv	ND	0.05		07/08/10	XC
Hexane	PPBv	0.14	0.05		07/08/10	XC
2-Hexanone	PPBv	0.11	0.05		07/08/10	XC
Isopropanol	PPBv	0.76	0.05		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.05		07/08/10	XC
Methylene Chloride	PPBv	0.38	0.05		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	0.05		07/08/10	XC
Propene	PPBv	ND	0.50		07/08/10	XC
Styrene	PPBv	0.08	0.05		07/08/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.05		07/08/10	XC
Tetrachloroethylene	PPBv	ND	0.05		07/08/10	XC
Tetrahydrofuran	PPBv	ND	0.05		07/08/10	XC
Toluene	PPBv	0.19	0.05		07/08/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,1,1-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
Trichloroethylene	PPBv	ND	0.05		07/08/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	0.26	0.05		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.07	0.05		07/08/10	XC
1,2,4-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
Vinyl Acetate	PPBv	ND	0.05		07/08/10	XC
Vinyl Chloride	PPBv	ND	0.05		07/08/10	XC
m/p-Xylene	PPBv	0.28	0.10		07/08/10	XC
o-Xylene	PPBv	0.07	0.05		07/08/10	XC
to-15 ug/m				EPA TO-15		
Acetone	ug/m3	18	0.12		07/08/10	XC
Benzene	ug/m3	ND	0.16		07/08/10	XC
Benzyl Chloride	ug/m3	ND	0.26		07/08/10	XC
Bromodichloromethane	ug/m3	ND	0.33		07/08/10	XC
Bromoform	ug/m3	ND	0.51		07/08/10	XC
Bromomethane	ug/m3	ND	0.19		07/08/10	XC
1,3-Butadiene	ug/m3	ND	0.11		07/08/10	XC
2-Butanone (MEK)	ug/m3	2.1	0.15		07/08/10	XC
Carbon Disulfide	ug/m3	ND	0.16		07/08/10	XC

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-5-070110

Sample ID : 10B00071 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	0.53	0.31		07/08/10	XC
Chlorobenzene	ug/m3	ND	0.23		07/08/10	XC
Chlorodibromomethane	ug/m3	ND	0.43		07/08/10	XC
Chloroethane	ug/m3	ND	0.13		07/08/10	XC
Chloroform	ug/m3	ND	0.24		07/08/10	XC
Chloromethane	ug/m3	1.0	0.10		07/08/10	XC
Cyclohexane	ug/m3	ND	0.17		07/08/10	XC
1,2-Dibromoethane	ug/m3	ND	0.38		07/08/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
Dichlorodifluoromethane	ug/m3	2.4	0.25		07/08/10	XC
1,1-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,1-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
cis-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloropropane	ug/m3	ND	0.23		07/08/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.35		07/08/10	XC
Ethanol	ug/m3	58	0.09		07/08/10	XC
Ethyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Ethylbenzene	ug/m3	0.44	0.22		07/08/10	XC
4-Ethyl Toluene	ug/m3	ND	0.25		07/08/10	XC
n-Heptane	ug/m3	ND	0.20		07/08/10	XC
Hexachlorobutadiene	ug/m3	ND	0.53		07/08/10	XC
Hexane	ug/m3	0.48	0.18		07/08/10	XC
2-Hexanone	ug/m3	0.44	0.20		07/08/10	XC
Isopropanol	ug/m3	1.9	0.12		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.18		07/08/10	XC
Methylene Chloride	ug/m3	1.3	0.17		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	0.20		07/08/10	XC
Propene	ug/m3	ND	0.87		07/08/10	XC
Styrene	ug/m3	0.32	0.21		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-5-070110

Sample ID : 10B00071 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.34		07/08/10	XC
Tetrachloroethylene	ug/m3	ND	0.34		07/08/10	XC
Tetrahydrofuran	ug/m3	ND	0.15		07/08/10	XC
Toluene	ug/m3	0.70	0.19		07/08/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.37		07/08/10	XC
1,1,1-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
Trichloroethylene	ug/m3	ND	0.27		07/08/10	XC
Trichlorofluoromethane	ug/m3	1.5	0.28		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.55	0.38		07/08/10	XC
1,2,4-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
Vinyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Vinyl Chloride	ug/m3	ND	0.13		07/08/10	XC
m/p-Xylene	ug/m3	1.2	0.43		07/08/10	XC
o-Xylene	ug/m3	0.31	0.22		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-6-070110

Sample ID : 10B00072 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	5.9	0.05		07/08/10	XC
Benzene	PPBv	0.06	0.05		07/08/10	XC
Benzyl Chloride	PPBv	ND	0.05		07/08/10	XC
Bromodichloromethane	PPBv	ND	0.05		07/08/10	XC
Bromoform	PPBv	ND	0.05		07/08/10	XC
Bromomethane	PPBv	ND	0.05		07/08/10	XC
1,3-Butadiene	PPBv	ND	0.05		07/08/10	XC
2-Butanone (MEK)	PPBv	0.39	0.05		07/08/10	XC
Carbon Disulfide	PPBv	ND	0.05		07/08/10	XC
Carbon Tetrachloride	PPBv	0.09	0.05		07/08/10	XC
Chlorobenzene	PPBv	ND	0.05		07/08/10	XC
Chlorodibromomethane	PPBv	ND	0.05		07/08/10	XC
Chloroethane	PPBv	ND	0.05		07/08/10	XC
Chloroform	PPBv	0.07	0.05		07/08/10	XC
Chloromethane	PPBv	0.48	0.05		07/08/10	XC
Cyclohexane	PPBv	ND	0.05		07/08/10	XC
1,2-Dibromoethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
Dichlorodifluoromethane	PPBv	0.48	0.05		07/08/10	XC
1,1-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
cis-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloropropane	PPBv	ND	0.05		07/08/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.05		07/08/10	XC
Ethanol	PPBv	9.5	0.05		07/08/10	XC
Ethyl Acetate	PPBv	ND	0.05		07/08/10	XC
Ethylbenzene	PPBv	ND	0.05		07/08/10	XC
4-Ethyl Toluene	PPBv	ND	0.05		07/08/10	XC
n-Heptane	PPBv	0.34	0.05		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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KELLY CHATTERTON
 MACTEC ENGINEERING & CONSULTING - MA
 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-6-070110

Sample ID : 10B00072 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Hexachlorobutadiene	PPBv	ND	0.05		07/08/10	XC
Hexane	PPBv	0.38	0.05		07/08/10	XC
2-Hexanone	PPBv	ND	0.05		07/08/10	XC
Isopropanol	PPBv	0.41	0.05		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.05		07/08/10	XC
Methylene Chloride	PPBv	1.3	0.05		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	ND	0.05		07/08/10	XC
Propene	PPBv	ND	0.50		07/08/10	XC
Styrene	PPBv	0.06	0.05		07/08/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.05		07/08/10	XC
Tetrachloroethylene	PPBv	ND	0.05		07/08/10	XC
Tetrahydrofuran	PPBv	ND	0.05		07/08/10	XC
Toluene	PPBv	0.46	0.05		07/08/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,1,1-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
Trichloroethylene	PPBv	ND	0.05		07/08/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	0.27	0.05		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.07	0.05		07/08/10	XC
1,2,4-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
Vinyl Acetate	PPBv	ND	0.05		07/08/10	XC
Vinyl Chloride	PPBv	ND	0.05		07/08/10	XC
m/p-Xylene	PPBv	0.13	0.10		07/08/10	XC
o-Xylene	PPBv	ND	0.05		07/08/10	XC
to-15 ug/m				EPA TO-15		
Acetone	ug/m3	14	0.12		07/08/10	XC
Benzene	ug/m3	0.19	0.16		07/08/10	XC
Benzyl Chloride	ug/m3	ND	0.26		07/08/10	XC
Bromodichloromethane	ug/m3	ND	0.33		07/08/10	XC
Bromoform	ug/m3	ND	0.51		07/08/10	XC
Bromomethane	ug/m3	ND	0.19		07/08/10	XC
1,3-Butadiene	ug/m3	ND	0.11		07/08/10	XC
2-Butanone (MEK)	ug/m3	1.1	0.15		07/08/10	XC
Carbon Disulfide	ug/m3	ND	0.16		07/08/10	XC

RL = Reporting Limit

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NM = Not Measured

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-6-070110

Sample ID : 10B00072 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	0.55	0.31		07/08/10	XC
Chlorobenzene	ug/m3	ND	0.23		07/08/10	XC
Chlorodibromomethane	ug/m3	ND	0.43		07/08/10	XC
Chloroethane	ug/m3	ND	0.13		07/08/10	XC
Chloroform	ug/m3	0.36	0.24		07/08/10	XC
Chloromethane	ug/m3	1.0	0.10		07/08/10	XC
Cyclohexane	ug/m3	ND	0.17		07/08/10	XC
1,2-Dibromoethane	ug/m3	ND	0.38		07/08/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
Dichlorodifluoromethane	ug/m3	2.4	0.25		07/08/10	XC
1,1-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,1-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
cis-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloropropane	ug/m3	ND	0.23		07/08/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.35		07/08/10	XC
Ethanol	ug/m3	18	0.09		07/08/10	XC
Ethyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Ethylbenzene	ug/m3	ND	0.22		07/08/10	XC
4-Ethyl Toluene	ug/m3	ND	0.25		07/08/10	XC
n-Heptane	ug/m3	1.4	0.20		07/08/10	XC
Hexachlorobutadiene	ug/m3	ND	0.53		07/08/10	XC
Hexane	ug/m3	1.3	0.18		07/08/10	XC
2-Hexanone	ug/m3	ND	0.20		07/08/10	XC
Isopropanol	ug/m3	1.0	0.12		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.18		07/08/10	XC
Methylene Chloride	ug/m3	4.5	0.17		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	ND	0.20		07/08/10	XC
Propene	ug/m3	ND	0.87		07/08/10	XC
Styrene	ug/m3	0.24	0.21		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-6-070110

Sample ID : 10B00072 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.34		07/08/10	XC
Tetrachloroethylene	ug/m3	ND	0.34		07/08/10	XC
Tetrahydrofuran	ug/m3	ND	0.15		07/08/10	XC
Toluene	ug/m3	1.7	0.19		07/08/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.37		07/08/10	XC
1,1,1-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
Trichloroethylene	ug/m3	ND	0.27		07/08/10	XC
Trichlorofluoromethane	ug/m3	1.5	0.28		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.55	0.38		07/08/10	XC
1,2,4-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
Vinyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Vinyl Chloride	ug/m3	ND	0.13		07/08/10	XC
m/p-Xylene	ug/m3	0.58	0.43		07/08/10	XC
o-Xylene	ug/m3	ND	0.22		07/08/10	XC

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-7-070110

Sample ID : 10B00073 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ppbv				EPA TO-15		
Acetone	PPBv	17	0.05		07/08/10	XC
Benzene	PPBv	0.08	0.05		07/08/10	XC
Benzyl Chloride	PPBv	ND	0.05		07/08/10	XC
Bromodichloromethane	PPBv	ND	0.05		07/08/10	XC
Bromoform	PPBv	ND	0.05		07/08/10	XC
Bromomethane	PPBv	ND	0.05		07/08/10	XC
1,3-Butadiene	PPBv	ND	0.05		07/08/10	XC
2-Butanone (MEK)	PPBv	1.5	0.05		07/08/10	XC
Carbon Disulfide	PPBv	ND	0.05		07/08/10	XC
Carbon Tetrachloride	PPBv	0.08	0.05		07/08/10	XC
Chlorobenzene	PPBv	ND	0.05		07/08/10	XC
Chlorodibromomethane	PPBv	ND	0.05		07/08/10	XC
Chloroethane	PPBv	ND	0.05		07/08/10	XC
Chloroform	PPBv	ND	0.05		07/08/10	XC
Chloromethane	PPBv	0.65	0.05		07/08/10	XC
Cyclohexane	PPBv	ND	0.05		07/08/10	XC
1,2-Dibromoethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,3-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,4-Dichlorobenzene	PPBv	ND	0.05		07/08/10	XC
Dichlorodifluoromethane	PPBv	0.54	0.05		07/08/10	XC
1,1-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
cis-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
t-1,2-Dichloroethylene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichloropropane	PPBv	0.06	0.05		07/08/10	XC
cis-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
trans-1,3-Dichloropropene	PPBv	ND	0.05		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	0.05		07/08/10	XC
Ethanol	PPBv	20	0.05		07/08/10	XC
Ethyl Acetate	PPBv	ND	0.05		07/08/10	XC
Ethylbenzene	PPBv	0.10	0.05		07/08/10	XC
4-Ethyl Toluene	PPBv	ND	0.05		07/08/10	XC
n-Heptane	PPBv	0.12	0.05		07/08/10	XC

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

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‡ See attached chain-of-custody record for time sampled

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 WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-7-070110

Sample ID : 10B00073 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
				EPA TO-15		
to-15 ppbv						
Hexachlorobutadiene	PPBv	ND	0.05		07/08/10	XC
Hexane	PPBv	0.20	0.05		07/08/10	XC
2-Hexanone	PPBv	0.20	0.05		07/08/10	XC
Isopropanol	PPBv	2.4	0.05		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	PPBv	ND	0.05		07/08/10	XC
Methylene Chloride	PPBv	0.37	0.05		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	PPBv	0.10	0.05		07/08/10	XC
Propene	PPBv	ND	0.50		07/08/10	XC
Styrene	PPBv	0.16	0.05		07/08/10	XC
1,1,2,2-Tetrachloroethane	PPBv	ND	0.05		07/08/10	XC
Tetrachloroethylene	PPBv	ND	0.05		07/08/10	XC
Tetrahydrofuran	PPBv	ND	0.05		07/08/10	XC
Toluene	PPBv	2.2	0.05		07/08/10	XC
1,2,4-Trichlorobenzene	PPBv	ND	0.05		07/08/10	XC
1,1,1-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
1,1,2-Trichloroethane	PPBv	ND	0.05		07/08/10	XC
Trichloroethylene	PPBv	ND	0.05		07/08/10	XC
Trichlorofluoromethane (Freon 11)	PPBv	0.24	0.05		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	0.07	0.05		07/08/10	XC
1,2,4-Trimethylbenzene	PPBv	0.07	0.05		07/08/10	XC
1,3,5-Trimethylbenzene	PPBv	ND	0.05		07/08/10	XC
Vinyl Acetate	PPBv	ND	0.05		07/08/10	XC
Vinyl Chloride	PPBv	ND	0.05		07/08/10	XC
m/p-Xylene	PPBv	0.27	0.10		07/08/10	XC
o-Xylene	PPBv	0.10	0.05		07/08/10	XC
				EPA TO-15		
to-15 ug/m						
Acetone	ug/m3	41	0.12		07/08/10	XC
Benzene	ug/m3	0.27	0.16		07/08/10	XC
Benzyl Chloride	ug/m3	ND	0.26		07/08/10	XC
Bromodichloromethane	ug/m3	ND	0.33		07/08/10	XC
Bromoform	ug/m3	ND	0.51		07/08/10	XC
Bromomethane	ug/m3	ND	0.19		07/08/10	XC
1,3-Butadiene	ug/m3	ND	0.11		07/08/10	XC
2-Butanone (MEK)	ug/m3	4.3	0.15		07/08/10	XC
Carbon Disulfide	ug/m3	ND	0.16		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled



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KELLY CHATTERTON
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107 AUDUBON ROAD, BLDG. 2, SUITE 301
WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

Field Sample # : IA-7-070110

Sample ID : 10B00073 ‡Sampled : 7/1/2010
Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
Carbon Tetrachloride	ug/m3	0.50	0.31		07/08/10	XC
Chlorobenzene	ug/m3	ND	0.23		07/08/10	XC
Chlorodibromomethane	ug/m3	ND	0.43		07/08/10	XC
Chloroethane	ug/m3	ND	0.13		07/08/10	XC
Chloroform	ug/m3	ND	0.24		07/08/10	XC
Chloromethane	ug/m3	1.3	0.10		07/08/10	XC
Cyclohexane	ug/m3	ND	0.17		07/08/10	XC
1,2-Dibromoethane	ug/m3	ND	0.38		07/08/10	XC
1,2-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,3-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
1,4-Dichlorobenzene	ug/m3	ND	0.30		07/08/10	XC
Dichlorodifluoromethane	ug/m3	2.7	0.25		07/08/10	XC
1,1-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloroethane	ug/m3	ND	0.20		07/08/10	XC
1,1-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
cis-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
t-1,2-Dichloroethylene	ug/m3	ND	0.20		07/08/10	XC
1,2-Dichloropropane	ug/m3	0.30	0.23		07/08/10	XC
cis-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
trans-1,3-Dichloropropene	ug/m3	ND	0.22		07/08/10	XC
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	0.35		07/08/10	XC
Ethanol	ug/m3	39	0.09		07/08/10	XC
Ethyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Ethylbenzene	ug/m3	0.45	0.22		07/08/10	XC
4-Ethyl Toluene	ug/m3	ND	0.25		07/08/10	XC
n-Heptane	ug/m3	0.50	0.20		07/08/10	XC
Hexachlorobutadiene	ug/m3	ND	0.53		07/08/10	XC
Hexane	ug/m3	0.70	0.18		07/08/10	XC
2-Hexanone	ug/m3	0.82	0.20		07/08/10	XC
Isopropanol	ug/m3	5.8	0.12		07/08/10	XC
Methyl tert-Butyl Ether (MTBE)	ug/m3	ND	0.18		07/08/10	XC
Methylene Chloride	ug/m3	1.3	0.17		07/08/10	XC
4-Methyl-2-Pentanone (MIBK)	ug/m3	0.43	0.20		07/08/10	XC
Propene	ug/m3	ND	0.87		07/08/10	XC
Styrene	ug/m3	0.70	0.21		07/08/10	XC

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‡ See attached chain-of-custody record for time sampled

KELLY CHATTERTON
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 107 AUDUBON ROAD, BLDG. 2, SUITE 301
 WAKEFIELD, MA 01880

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Purchase Order No.: 200914545

Project Location: PROVIDENCE, RI (GORHAM SITE)
 Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
 Job Number: 3650080114.13

Field Sample # : IA-7-070110

Sample ID : 10B00073 ‡Sampled : 7/1/2010
 Not Specified
Sample Matrix: AIR **Sample Medium :** SUMMA

	Units	Results	RL	Method	Date Analyzed	Analyst
to-15 ug/m				EPA TO-15		
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.34		07/08/10	XC
Tetrachloroethylene	ug/m3	ND	0.34		07/08/10	XC
Tetrahydrofuran	ug/m3	ND	0.15		07/08/10	XC
Toluene	ug/m3	8.4	0.19		07/08/10	XC
1,2,4-Trichlorobenzene	ug/m3	ND	0.37		07/08/10	XC
1,1,1-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
1,1,2-Trichloroethane	ug/m3	ND	0.27		07/08/10	XC
Trichloroethylene	ug/m3	ND	0.27		07/08/10	XC
Trichlorofluoromethane	ug/m3	1.3	0.28		07/08/10	XC
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.54	0.38		07/08/10	XC
1,2,4-Trimethylbenzene	ug/m3	0.36	0.25		07/08/10	XC
1,3,5-Trimethylbenzene	ug/m3	ND	0.25		07/08/10	XC
Vinyl Acetate	ug/m3	ND	0.18		07/08/10	XC
Vinyl Chloride	ug/m3	ND	0.13		07/08/10	XC
m/p-Xylene	ug/m3	1.2	0.43		07/08/10	XC
o-Xylene	ug/m3	0.43	0.22		07/08/10	XC

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NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled



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WAKEFIELD, MA 01880

Purchase Order No.: 200914545

7/12/2010
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Project Location: PROVIDENCE, RI (GORHAM SITE)
Date Received: 7/2/2010

LIMS-BAT #: LIMIT-25351
Job Number: 3650080114.13

** END OF REPORT **

RL = Reporting Limit

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NM = Not Measured

* = See end of report for comments and notes applying to this sample

‡ See attached chain-of-custody record for time sampled



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 7/12/2010

Lims Bat # : LIMIT-25351

Page 1 of 15

QC Batch Number: BATCH-16678

Sample Id	Analysis	QC Analysis	Values	Units	Limits
10B00067					
	Acetone	Sample Amount	17.57	ug/m3	
		Duplicate Value	17.35	ug/m3	
		Duplicate RPD	1.27	%	
	Benzene	Sample Amount	0.45	ug/m3	
		Duplicate Value	0.45	ug/m3	
		Duplicate RPD	0.00	%	
	Carbon Tetrachloride	Sample Amount	0.52	ug/m3	
		Duplicate Value	0.57	ug/m3	
		Duplicate RPD	10.28	%	
	Ethylbenzene	Sample Amount	0.27	ug/m3	
		Duplicate Value	0.27	ug/m3	
		Duplicate RPD	1.57	%	
	Hexane	Sample Amount	0.46	ug/m3	
		Duplicate Value	0.41	ug/m3	
		Duplicate RPD	11.29	%	
	Isopropanol	Sample Amount	0.73	ug/m3	
		Duplicate Value	0.76	ug/m3	
		Duplicate RPD	3.26	%	
	2-Butanone (MEK)	Sample Amount	3.32	ug/m3	
		Duplicate Value	3.17	ug/m3	
		Duplicate RPD	4.44	%	
	4-Methyl-2-Pentanone (MIBK)	Sample Amount	0.34	ug/m3	
		Duplicate Value	0.35	ug/m3	
		Duplicate RPD	2.32	%	
	Styrene	Sample Amount	0.31	ug/m3	
		Duplicate Value	0.32	ug/m3	
		Duplicate RPD	2.66	%	
	Tetrachloroethylene	Sample Amount	1.05	ug/m3	
		Duplicate Value	1.13	ug/m3	
		Duplicate RPD	6.81	%	
	Toluene	Sample Amount	0.99	ug/m3	
		Duplicate Value	1.02	ug/m3	
		Duplicate RPD	3.35	%	
	Trichloroethylene	Sample Amount	0.40	ug/m3	
		Duplicate Value	0.41	ug/m3	
		Duplicate RPD	2.63	%	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Sample Amount	0.52	ug/m3	
		Duplicate Value	0.52	ug/m3	
		Duplicate RPD	0.00	%	
	Trichlorofluoromethane	Sample Amount	1.44	ug/m3	
		Duplicate Value	1.37	ug/m3	
		Duplicate RPD	5.16	%	
	o-Xylene	Sample Amount	0.51	ug/m3	



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 7/12/2010

Lims Bat # : LIMIT-25351

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QC Batch Number: BATCH-16678

Sample Id	Analysis	QC Analysis	Values	Units	Limits
10B00067					
	o-Xylene	Duplicate Value	0.53	ug/m3	
		Duplicate RPD	4.14	%	
	m/p-Xylene	Sample Amount	1.20	ug/m3	
		Duplicate Value	1.27	ug/m3	
		Duplicate RPD	5.61	%	
	Ethanol	Sample Amount	6.51	ug/m3	
		Duplicate Value	6.35	ug/m3	
		Duplicate RPD	2.45	%	
	Methylene Chloride	Sample Amount	1.20	ug/m3	
		Duplicate Value	1.21	ug/m3	
		Duplicate RPD	0.86	%	
	Chloromethane	Sample Amount	1.17	ug/m3	
		Duplicate Value	1.14	ug/m3	
		Duplicate RPD	2.31	%	
	1,2,4-Trimethylbenzene	Sample Amount	0.43	ug/m3	
		Duplicate Value	0.43	ug/m3	
		Duplicate RPD	0.00	%	
	cis-1,2-Dichloroethylene	Sample Amount	0.49	ug/m3	
		Duplicate Value	0.47	ug/m3	
		Duplicate RPD	4.91	%	
	Dichlorodifluoromethane	Sample Amount	2.65	ug/m3	
		Duplicate Value	2.53	ug/m3	
		Duplicate RPD	4.76	%	
	2-Hexanone	Sample Amount	0.74	ug/m3	
		Duplicate Value	0.81	ug/m3	
		Duplicate RPD	8.87	%	
	4-Bromofluorobenzene	Surrogate Recovery	101.87	%	70-130
	Tetrahydrofuran	Sample Amount	0.23	ug/m3	
		Duplicate Value	0.23	ug/m3	
		Duplicate RPD	0.00	%	
10B00068					
	4-Bromofluorobenzene	Surrogate Recovery	103.12	%	70-130
10B00069					
	4-Bromofluorobenzene	Surrogate Recovery	107.00	%	70-130
10B00070					
	4-Bromofluorobenzene	Surrogate Recovery	106.12	%	70-130
10B00071					
	4-Bromofluorobenzene	Surrogate Recovery	102.37	%	70-130
10B00072					
	4-Bromofluorobenzene	Surrogate Recovery	104.37	%	70-130
10B00073					
	4-Bromofluorobenzene	Surrogate Recovery	105.12	%	70-130
10B00074					

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 7/12/2010

Lims Bat # : LIMIT-25351

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QC Batch Number: BATCH-16678

Sample Id	Analysis	QC Analysis	Values	Units	Limits
10B00074	4-Bromofluorobenzene	Surrogate Recovery	105.37	%	70-130
BLANK-133056	Acetone	Blank	1.05	ug/m3	
	Benzene	Blank	<0.08	ug/m3	
	Carbon Tetrachloride	Blank	<0.16	ug/m3	
	Chloroform	Blank	<0.12	ug/m3	
	1,2-Dichloroethane	Blank	<0.10	ug/m3	
	1,4-Dichlorobenzene	Blank	<0.15	ug/m3	
	Ethyl Acetate	Blank	<0.09	ug/m3	
	Ethylbenzene	Blank	<0.11	ug/m3	
	Hexane	Blank	<0.09	ug/m3	
	Isopropanol	Blank	<0.06	ug/m3	
	2-Butanone (MEK)	Blank	0.09	ug/m3	
	4-Methyl-2-Pentanone (MIBK)	Blank	<0.10	ug/m3	
	Styrene	Blank	<0.11	ug/m3	
	Tetrachloroethylene	Blank	<0.17	ug/m3	
	Toluene	Blank	<0.10	ug/m3	
	1,1,1-Trichloroethane	Blank	<0.14	ug/m3	
	Trichloroethylene	Blank	<0.14	ug/m3	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<0.19	ug/m3	
	Trichlorofluoromethane	Blank	<0.14	ug/m3	
	o-Xylene	Blank	<0.11	ug/m3	
	m/p-Xylene	Blank	<0.22	ug/m3	
	1,2-Dichlorobenzene	Blank	<0.15	ug/m3	
	1,3-Dichlorobenzene	Blank	<0.15	ug/m3	
	1,1-Dichloroethane	Blank	<0.10	ug/m3	
	1,1-Dichloroethylene	Blank	<0.10	ug/m3	
	Ethanol	Blank	<0.48	ug/m3	
	4-Ethyl Toluene	Blank	<0.13	ug/m3	
	Methyl tert-Butyl Ether (MTBE)	Blank	<0.09	ug/m3	
	t-1,2-Dichloroethylene	Blank	<0.10	ug/m3	
	Vinyl Chloride	Blank	<0.07	ug/m3	
	Methylene Chloride	Blank	0.40	ug/m3	
	Chlorobenzene	Blank	<0.12	ug/m3	
	Chloromethane	Blank	<0.05	ug/m3	
	Bromomethane	Blank	<0.10	ug/m3	
	Chloroethane	Blank	<0.07	ug/m3	
	cis-1,3-Dichloropropene	Blank	<0.11	ug/m3	
	trans-1,3-Dichloropropene	Blank	<0.11	ug/m3	
	Chlorodibromomethane	Blank	<0.22	ug/m3	
	1,1,2-Trichloroethane	Blank	<0.14	ug/m3	
	Bromoform	Blank	<0.26	ug/m3	
	1,1,2,2-Tetrachloroethane	Blank	<0.17	ug/m3	

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Sample Id	Analysis	QC Analysis	Values	Units	Limits
BLANK-133056					
	Hexachlorobutadiene	Blank	<0.27	ug/m3	
	1,2,4-Trichlorobenzene	Blank	<0.19	ug/m3	
	1,2,4-Trimethylbenzene	Blank	<0.13	ug/m3	
	1,3,5-Trimethylbenzene	Blank	<0.13	ug/m3	
	Cyclohexane	Blank	<0.09	ug/m3	
	cis-1,2-Dichloroethylene	Blank	<0.10	ug/m3	
	1,2-Dichloropropane	Blank	<0.12	ug/m3	
	Dichlorodifluoromethane	Blank	<0.13	ug/m3	
	Benzyl Chloride	Blank	<0.13	ug/m3	
	Carbon Disulfide	Blank	<0.08	ug/m3	
	Vinyl Acetate	Blank	<0.09	ug/m3	
	2-Hexanone	Blank	<0.10	ug/m3	
	Bromodichloromethane	Blank	<0.17	ug/m3	
	1,2-Dibromoethane	Blank	<0.19	ug/m3	
	n-Heptane	Blank	<0.10	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Blank	<0.18	ug/m3	
	Tetrahydrofuran	Blank	<0.08	ug/m3	
	Propene	Blank	<0.44	ug/m3	
	1,3-Butadiene	Blank	<0.06	ug/m3	
LFBLANK-95385					
	Acetone	Lab Fort Blank Amt.	11.87	ug/m3	
		Lab Fort Blk. Found	12.24	ug/m3	
		Lab Fort Blk. % Rec.	103.10	%	50-150
	Benzene	Lab Fort Blank Amt.	15.95	ug/m3	
		Lab Fort Blk. Found	13.12	ug/m3	
		Lab Fort Blk. % Rec.	82.29	%	70-130
	Carbon Tetrachloride	Lab Fort Blank Amt.	31.45	ug/m3	
		Lab Fort Blk. Found	28.89	ug/m3	
		Lab Fort Blk. % Rec.	91.86	%	70-130
	Chloroform	Lab Fort Blank Amt.	24.33	ug/m3	
		Lab Fort Blk. Found	21.13	ug/m3	
		Lab Fort Blk. % Rec.	86.83	%	70-130
	1,2-Dichloroethane	Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	17.45	ug/m3	
		Lab Fort Blk. % Rec.	86.24	%	70-130
	1,4-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	35.74	ug/m3	
		Lab Fort Blk. % Rec.	118.90	%	70-130
	Ethyl Acetate	Lab Fort Blank Amt.	18.01	ug/m3	
		Lab Fort Blk. Found	15.20	ug/m3	
		Lab Fort Blk. % Rec.	84.38	%	50-150
	Ethylbenzene	Lab Fort Blank Amt.	21.67	ug/m3	
		Lab Fort Blk. Found	21.91	ug/m3	



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LFBLANK-95385	Ethylbenzene	Lab Fort Blk. % Rec.	101.12	%	70-130
	Hexane	Lab Fort Blank Amt.	17.62	ug/m3	
		Lab Fort Blk. Found	14.38	ug/m3	
	Isopropanol	Lab Fort Blk. % Rec.	81.62	%	70-130
		Lab Fort Blank Amt.	12.28	ug/m3	
		Lab Fort Blk. Found	9.68	ug/m3	
	2-Butanone (MEK)	Lab Fort Blk. % Rec.	78.78	%	50-150
		Lab Fort Blank Amt.	14.74	ug/m3	
		Lab Fort Blk. Found	12.15	ug/m3	
	4-Methyl-2-Pentanone (MIBK)	Lab Fort Blk. % Rec.	82.42	%	70-130
		Lab Fort Blank Amt.	20.48	ug/m3	
		Lab Fort Blk. Found	16.17	ug/m3	
	Styrene	Lab Fort Blk. % Rec.	78.97	%	70-130
		Lab Fort Blank Amt.	21.26	ug/m3	
		Lab Fort Blk. Found	21.75	ug/m3	
	Tetrachloroethylene	Lab Fort Blk. % Rec.	102.30	%	70-130
		Lab Fort Blank Amt.	33.90	ug/m3	
		Lab Fort Blk. Found	39.64	ug/m3	
	Toluene	Lab Fort Blk. % Rec.	116.94	%	70-130
		Lab Fort Blank Amt.	18.81	ug/m3	
		Lab Fort Blk. Found	18.86	ug/m3	
	1,1,1-Trichloroethane	Lab Fort Blk. % Rec.	100.28	%	70-130
		Lab Fort Blank Amt.	27.28	ug/m3	
		Lab Fort Blk. Found	23.89	ug/m3	
	Trichloroethylene	Lab Fort Blk. % Rec.	87.58	%	70-130
		Lab Fort Blank Amt.	26.87	ug/m3	
		Lab Fort Blk. Found	23.38	ug/m3	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Lab Fort Blk. % Rec.	87.02	%	70-130
		Lab Fort Blank Amt.	38.31	ug/m3	
		Lab Fort Blk. Found	34.79	ug/m3	
	Trichlorofluoromethane	Lab Fort Blk. % Rec.	90.79	%	70-130
		Lab Fort Blank Amt.	28.09	ug/m3	
		Lab Fort Blk. Found	25.27	ug/m3	
	o-Xylene	Lab Fort Blk. % Rec.	89.96	%	70-130
		Lab Fort Blank Amt.	21.71	ug/m3	
		Lab Fort Blk. Found	22.12	ug/m3	
	m/p-Xylene	Lab Fort Blk. % Rec.	101.86	%	70-130
		Lab Fort Blank Amt.	43.43	ug/m3	
		Lab Fort Blk. Found	42.43	ug/m3	
	1,2-Dichlorobenzene	Lab Fort Blk. % Rec.	97.70	%	70-130
		Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	35.31	ug/m3	
		Lab Fort Blk. % Rec.	117.46	%	70-130



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LFBLANK-95385	1,3-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	35.67	ug/m3	
		Lab Fort Blk. % Rec.	118.68	%	70-130
	1,1-Dichloroethane	Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	17.12	ug/m3	
		Lab Fort Blk. % Rec.	84.58	%	70-130
	1,1-Dichloroethylene	Lab Fort Blank Amt.	19.83	ug/m3	
		Lab Fort Blk. Found	17.44	ug/m3	
		Lab Fort Blk. % Rec.	87.92	%	70-130
Ethanol		Lab Fort Blank Amt.	9.42	ug/m3	
		Lab Fort Blk. Found	8.40	ug/m3	
		Lab Fort Blk. % Rec.	89.15	%	50-150
4-Ethyl Toluene		Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	26.03	ug/m3	
		Lab Fort Blk. % Rec.	105.90	%	50-150
Methyl tert-Butyl Ether (MTBE)		Lab Fort Blank Amt.	18.02	ug/m3	
		Lab Fort Blk. Found	15.26	ug/m3	
		Lab Fort Blk. % Rec.	84.69	%	70-130
t-1,2-Dichloroethylene		Lab Fort Blank Amt.	19.82	ug/m3	
		Lab Fort Blk. Found	16.90	ug/m3	
		Lab Fort Blk. % Rec.	85.26	%	70-130
Vinyl Chloride		Lab Fort Blank Amt.	12.78	ug/m3	
		Lab Fort Blk. Found	10.71	ug/m3	
		Lab Fort Blk. % Rec.	83.82	%	70-130
Methylene Chloride		Lab Fort Blank Amt.	17.36	ug/m3	
		Lab Fort Blk. Found	15.41	ug/m3	
		Lab Fort Blk. % Rec.	88.80	%	70-130
Chlorobenzene		Lab Fort Blank Amt.	23.02	ug/m3	
		Lab Fort Blk. Found	25.20	ug/m3	
		Lab Fort Blk. % Rec.	109.44	%	70-130
Chloromethane		Lab Fort Blank Amt.	10.32	ug/m3	
		Lab Fort Blk. Found	8.59	ug/m3	
		Lab Fort Blk. % Rec.	83.20	%	70-130
Bromomethane		Lab Fort Blank Amt.	19.40	ug/m3	
		Lab Fort Blk. Found	17.19	ug/m3	
		Lab Fort Blk. % Rec.	88.57	%	70-130
Chloroethane		Lab Fort Blank Amt.	13.19	ug/m3	
		Lab Fort Blk. Found	11.27	ug/m3	
		Lab Fort Blk. % Rec.	85.46	%	70-130
cis-1,3-Dichloropropene		Lab Fort Blank Amt.	22.69	ug/m3	
		Lab Fort Blk. Found	19.65	ug/m3	
		Lab Fort Blk. % Rec.	86.60	%	70-130
trans-1,3-Dichloropropene		Lab Fort Blank Amt.	22.69	ug/m3	



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LFBLANK-95385					
	trans-1,3-Dichloropropene	Lab Fort Blk. Found	19.63	ug/m3	
		Lab Fort Blk. % Rec.	86.52	%	70-130
	Chlorodibromomethane	Lab Fort Blank Amt.	42.59	ug/m3	
		Lab Fort Blk. Found	50.62	ug/m3	
		Lab Fort Blk. % Rec.	118.86	%	70-130
	1,1,2-Trichloroethane	Lab Fort Blank Amt.	27.28	ug/m3	
		Lab Fort Blk. Found	28.23	ug/m3	
		Lab Fort Blk. % Rec.	103.50	%	70-130
	Bromoform	Lab Fort Blank Amt.	51.69	ug/m3	
		Lab Fort Blk. Found	66.83	ug/m3	
		Lab Fort Blk. % Rec.	129.28	%	70-130
	1,1,2,2-Tetrachloroethane	Lab Fort Blank Amt.	34.33	ug/m3	
		Lab Fort Blk. Found	36.24	ug/m3	
		Lab Fort Blk. % Rec.	105.56	%	70-130
	Hexachlorobutadiene	Lab Fort Blank Amt.	53.33	ug/m3	
		Lab Fort Blk. Found	63.47	ug/m3	
		Lab Fort Blk. % Rec.	119.02	%	70-130
	1,2,4-Trichlorobenzene	Lab Fort Blank Amt.	37.10	ug/m3	
		Lab Fort Blk. Found	47.80	ug/m3	
		Lab Fort Blk. % Rec.	128.84	%	70-130
	1,2,4-Trimethylbenzene	Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	25.70	ug/m3	
		Lab Fort Blk. % Rec.	104.58	%	70-130
	1,3,5-Trimethylbenzene	Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	25.27	ug/m3	
		Lab Fort Blk. % Rec.	102.84	%	70-130
	Cyclohexane	Lab Fort Blank Amt.	17.21	ug/m3	
		Lab Fort Blk. Found	13.68	ug/m3	
		Lab Fort Blk. % Rec.	79.50	%	50-150
	cis-1,2-Dichloroethylene	Lab Fort Blank Amt.	19.82	ug/m3	
		Lab Fort Blk. Found	17.01	ug/m3	
		Lab Fort Blk. % Rec.	85.83	%	70-130
	1,2-Dichloropropane	Lab Fort Blank Amt.	23.10	ug/m3	
		Lab Fort Blk. Found	18.70	ug/m3	
		Lab Fort Blk. % Rec.	80.95	%	70-130
	Dichlorodifluoromethane	Lab Fort Blank Amt.	24.72	ug/m3	
		Lab Fort Blk. Found	22.01	ug/m3	
		Lab Fort Blk. % Rec.	89.04	%	70-130
	Benzyl Chloride	Lab Fort Blank Amt.	25.88	ug/m3	
		Lab Fort Blk. Found	27.64	ug/m3	
		Lab Fort Blk. % Rec.	106.78	%	70-130
	Carbon Disulfide	Lab Fort Blank Amt.	15.57	ug/m3	
		Lab Fort Blk. Found	13.50	ug/m3	



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LFBLANK-95385	Carbon Disulfide	Lab Fort Blk. % Rec.	86.73	%	70-130
	Vinyl Acetate	Lab Fort Blank Amt.	17.60	ug/m3	
		Lab Fort Blk. Found	13.29	ug/m3	
	2-Hexanone	Lab Fort Blk. % Rec.	75.50	%	70-130
		Lab Fort Blank Amt.	20.48	ug/m3	
		Lab Fort Blk. Found	17.19	ug/m3	
	Bromodichloromethane	Lab Fort Blk. % Rec.	83.96	%	50-150
		Lab Fort Blank Amt.	33.50	ug/m3	
		Lab Fort Blk. Found	29.28	ug/m3	
	1,2-Dibromoethane	Lab Fort Blk. % Rec.	87.40	%	70-130
		Lab Fort Blank Amt.	38.42	ug/m3	
		Lab Fort Blk. Found	41.43	ug/m3	
	n-Heptane	Lab Fort Blk. % Rec.	107.84	%	70-130
		Lab Fort Blank Amt.	20.49	ug/m3	
		Lab Fort Blk. Found	16.84	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Lab Fort Blk. % Rec.	82.20	%	50-150
		Lab Fort Blank Amt.	34.95	ug/m3	
		Lab Fort Blk. Found	30.46	ug/m3	
	Tetrahydrofuran	Lab Fort Blk. % Rec.	87.15	%	70-130
		Lab Fort Blank Amt.	14.74	ug/m3	
		Lab Fort Blk. Found	12.44	ug/m3	
	Propene	Lab Fort Blk. % Rec.	84.40	%	50-150
		Lab Fort Blank Amt.	8.60	ug/m3	
		Lab Fort Blk. Found	7.68	ug/m3	
	1,3-Butadiene	Lab Fort Blk. % Rec.	89.34	%	50-150
		Lab Fort Blank Amt.	11.06	ug/m3	
		Lab Fort Blk. Found	9.03	ug/m3	
		Lab Fort Blk. % Rec.	81.68	%	70-130

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10B00075	4-Bromofluorobenzene	Surrogate Recovery	107.87	%	70-130
10B00076	4-Bromofluorobenzene	Surrogate Recovery	109.87	%	70-130
10B00077	4-Bromofluorobenzene	Surrogate Recovery	106.50	%	70-130
10B00078	4-Bromofluorobenzene	Surrogate Recovery	103.87	%	70-130
BLANK-133057	Acetone	Blank	1.63	ug/m3	
	Benzene	Blank	<0.07	ug/m3	
	Carbon Tetrachloride	Blank	<0.13	ug/m3	
	Chloroform	Blank	<0.10	ug/m3	
	1,2-Dichloroethane	Blank	<0.08	ug/m3	
	1,4-Dichlorobenzene	Blank	<0.12	ug/m3	
	Ethyl Acetate	Blank	<0.08	ug/m3	
	Ethylbenzene	Blank	<0.09	ug/m3	
	Hexane	Blank	<0.08	ug/m3	
	Isopropanol	Blank	<0.05	ug/m3	
	2-Butanone (MEK)	Blank	<0.06	ug/m3	
	4-Methyl-2-Pentanone (MIBK)	Blank	<0.08	ug/m3	
	Styrene	Blank	<0.09	ug/m3	
	Tetrachloroethylene	Blank	<0.14	ug/m3	
	Toluene	Blank	<0.08	ug/m3	
	1,1,1-Trichloroethane	Blank	<0.11	ug/m3	
	Trichloroethylene	Blank	<0.11	ug/m3	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<0.16	ug/m3	
	Trichlorofluoromethane	Blank	<0.12	ug/m3	
	o-Xylene	Blank	<0.09	ug/m3	
	m/p-Xylene	Blank	<0.18	ug/m3	
	1,2-Dichlorobenzene	Blank	<0.12	ug/m3	
	1,3-Dichlorobenzene	Blank	<0.12	ug/m3	
	1,1-Dichloroethane	Blank	<0.08	ug/m3	
	1,1-Dichloroethylene	Blank	<0.08	ug/m3	
	Ethanol	Blank	<0.38	ug/m3	
	4-Ethyl Toluene	Blank	<0.10	ug/m3	
	Methyl tert-Butyl Ether (MTBE)	Blank	<0.08	ug/m3	
	t-1,2-Dichloroethylene	Blank	<0.08	ug/m3	
	Vinyl Chloride	Blank	<0.06	ug/m3	
	Methylene Chloride	Blank	0.34	ug/m3	
	Chlorobenzene	Blank	<0.10	ug/m3	
	Chloromethane	Blank	<0.04	ug/m3	
	Bromomethane	Blank	<0.08	ug/m3	
	Chloroethane	Blank	<0.06	ug/m3	



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BLANK-133057					
	cis-1,3-Dichloropropene	Blank	<0.09	ug/m3	
	trans-1,3-Dichloropropene	Blank	<0.09	ug/m3	
	Chlorodibromomethane	Blank	<0.18	ug/m3	
	1,1,2-Trichloroethane	Blank	<0.11	ug/m3	
	Bromoform	Blank	<0.21	ug/m3	
	1,1,2,2-Tetrachloroethane	Blank	<0.14	ug/m3	
	Hexachlorobutadiene	Blank	<0.22	ug/m3	
	1,2,4-Trichlorobenzene	Blank	<0.15	ug/m3	
	1,2,4-Trimethylbenzene	Blank	<0.10	ug/m3	
	1,3,5-Trimethylbenzene	Blank	<0.10	ug/m3	
	Cyclohexane	Blank	<0.07	ug/m3	
	cis-1,2-Dichloroethylene	Blank	<0.08	ug/m3	
	1,2-Dichloropropane	Blank	<0.10	ug/m3	
	Dichlorodifluoromethane	Blank	<0.10	ug/m3	
	Benzyl Chloride	Blank	<0.11	ug/m3	
	Carbon Disulfide	Blank	<0.07	ug/m3	
	Vinyl Acetate	Blank	<0.08	ug/m3	
	2-Hexanone	Blank	<0.08	ug/m3	
	Bromodichloromethane	Blank	<0.14	ug/m3	
	1,2-Dibromoethane	Blank	<0.16	ug/m3	
	n-Heptane	Blank	<0.08	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Blank	<0.14	ug/m3	
	Tetrahydrofuran	Blank	<0.06	ug/m3	
	Propene	Blank	<0.35	ug/m3	
	1,3-Butadiene	Blank	<0.05	ug/m3	
LFBLANK-95386					
	Acetone	Lab Fort Blank Amt.	11.87	ug/m3	
		Lab Fort Blk. Found	13.03	ug/m3	
		Lab Fort Blk. % Rec.	109.72	%	50-150
	Benzene	Lab Fort Blank Amt.	15.95	ug/m3	
		Lab Fort Blk. Found	13.10	ug/m3	
		Lab Fort Blk. % Rec.	82.14	%	70-130
	Carbon Tetrachloride	Lab Fort Blank Amt.	31.45	ug/m3	
		Lab Fort Blk. Found	31.70	ug/m3	
		Lab Fort Blk. % Rec.	100.82	%	70-130
	Chloroform	Lab Fort Blank Amt.	24.33	ug/m3	
		Lab Fort Blk. Found	21.70	ug/m3	
		Lab Fort Blk. % Rec.	89.18	%	70-130
	1,2-Dichloroethane	Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	19.06	ug/m3	
		Lab Fort Blk. % Rec.	94.18	%	70-130
	1,4-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	33.77	ug/m3	



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 7/12/2010

Lims Bat # : LIMIT-25351

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QC Batch Number: BATCH-16679

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-95386	1,4-Dichlorobenzene	Lab Fort Blk. % Rec.	112.36	%	70-130
	Ethyl Acetate	Lab Fort Blank Amt.	18.01	ug/m3	
		Lab Fort Blk. Found	15.34	ug/m3	
	Ethylbenzene	Lab Fort Blk. % Rec.	85.18	%	50-150
		Lab Fort Blank Amt.	21.67	ug/m3	
		Lab Fort Blk. Found	20.20	ug/m3	
	Hexane	Lab Fort Blk. % Rec.	93.20	%	70-130
		Lab Fort Blank Amt.	17.62	ug/m3	
		Lab Fort Blk. Found	15.20	ug/m3	
	Isopropanol	Lab Fort Blk. % Rec.	86.30	%	70-130
		Lab Fort Blank Amt.	12.28	ug/m3	
		Lab Fort Blk. Found	9.92	ug/m3	
	2-Butanone (MEK)	Lab Fort Blk. % Rec.	80.78	%	50-150
		Lab Fort Blank Amt.	14.74	ug/m3	
		Lab Fort Blk. Found	12.41	ug/m3	
	4-Methyl-2-Pentanone (MIBK)	Lab Fort Blk. % Rec.	84.17	%	70-130
		Lab Fort Blank Amt.	20.48	ug/m3	
		Lab Fort Blk. Found	16.81	ug/m3	
	Styrene	Lab Fort Blk. % Rec.	82.07	%	70-130
		Lab Fort Blank Amt.	21.26	ug/m3	
		Lab Fort Blk. Found	19.89	ug/m3	
	Tetrachloroethylene	Lab Fort Blk. % Rec.	93.53	%	70-130
		Lab Fort Blank Amt.	33.90	ug/m3	
		Lab Fort Blk. Found	34.99	ug/m3	
	Toluene	Lab Fort Blk. % Rec.	103.20	%	70-130
		Lab Fort Blank Amt.	18.81	ug/m3	
		Lab Fort Blk. Found	16.77	ug/m3	
	1,1,1-Trichloroethane	Lab Fort Blk. % Rec.	89.14	%	70-130
		Lab Fort Blank Amt.	27.28	ug/m3	
		Lab Fort Blk. Found	26.15	ug/m3	
	Trichloroethylene	Lab Fort Blk. % Rec.	95.86	%	70-130
		Lab Fort Blank Amt.	26.87	ug/m3	
		Lab Fort Blk. Found	23.89	ug/m3	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Lab Fort Blk. % Rec.	88.94	%	70-130
		Lab Fort Blank Amt.	38.31	ug/m3	
		Lab Fort Blk. Found	33.87	ug/m3	
	Trichlorofluoromethane	Lab Fort Blk. % Rec.	88.40	%	70-130
		Lab Fort Blank Amt.	28.09	ug/m3	
		Lab Fort Blk. Found	26.98	ug/m3	
	o-Xylene	Lab Fort Blk. % Rec.	96.03	%	70-130
		Lab Fort Blank Amt.	21.71	ug/m3	
		Lab Fort Blk. Found	21.10	ug/m3	
		Lab Fort Blk. % Rec.	97.16	%	70-130

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

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Lims Bat # : LIMIT-25351

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QC Batch Number: BATCH-16679

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-95386					
	m/p-Xylene	Lab Fort Blank Amt.	43.43	ug/m3	
		Lab Fort Blk. Found	42.04	ug/m3	
		Lab Fort Blk. % Rec.	96.80	%	70-130
	1,2-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	33.30	ug/m3	
		Lab Fort Blk. % Rec.	110.78	%	70-130
	1,3-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	33.81	ug/m3	
		Lab Fort Blk. % Rec.	112.48	%	70-130
	1,1-Dichloroethane	Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	17.08	ug/m3	
		Lab Fort Blk. % Rec.	84.40	%	70-130
	1,1-Dichloroethylene	Lab Fort Blank Amt.	19.83	ug/m3	
		Lab Fort Blk. Found	17.70	ug/m3	
		Lab Fort Blk. % Rec.	89.28	%	70-130
	Ethanol	Lab Fort Blank Amt.	9.42	ug/m3	
		Lab Fort Blk. Found	8.32	ug/m3	
		Lab Fort Blk. % Rec.	88.32	%	50-150
	4-Ethyl Toluene	Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	24.39	ug/m3	
		Lab Fort Blk. % Rec.	99.26	%	50-150
	Methyl tert-Butyl Ether (MTBE)	Lab Fort Blank Amt.	18.02	ug/m3	
		Lab Fort Blk. Found	15.03	ug/m3	
		Lab Fort Blk. % Rec.	83.39	%	70-130
	t-1,2-Dichloroethylene	Lab Fort Blank Amt.	19.82	ug/m3	
		Lab Fort Blk. Found	17.05	ug/m3	
		Lab Fort Blk. % Rec.	86.02	%	70-130
	Vinyl Chloride	Lab Fort Blank Amt.	12.78	ug/m3	
		Lab Fort Blk. Found	10.94	ug/m3	
		Lab Fort Blk. % Rec.	85.63	%	70-130
	Methylene Chloride	Lab Fort Blank Amt.	17.36	ug/m3	
		Lab Fort Blk. Found	15.12	ug/m3	
		Lab Fort Blk. % Rec.	87.10	%	70-130
	Chlorobenzene	Lab Fort Blank Amt.	23.02	ug/m3	
		Lab Fort Blk. Found	22.46	ug/m3	
		Lab Fort Blk. % Rec.	97.57	%	70-130
	Chloromethane	Lab Fort Blank Amt.	10.32	ug/m3	
		Lab Fort Blk. Found	8.84	ug/m3	
		Lab Fort Blk. % Rec.	85.62	%	70-130
	Bromomethane	Lab Fort Blank Amt.	19.40	ug/m3	
		Lab Fort Blk. Found	17.08	ug/m3	
		Lab Fort Blk. % Rec.	88.05	%	70-130
	Chloroethane	Lab Fort Blank Amt.	13.19	ug/m3	



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

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Sample Matrix Spikes and Matrix Spike Duplicates

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Method Blanks

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QC Batch Number: BATCH-16679

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-95386					
	Chloroethane	Lab Fort Blk. Found	11.06	ug/m3	
		Lab Fort Blk. % Rec.	83.85	%	70-130
	cis-1,3-Dichloropropene	Lab Fort Blank Amt.	22.69	ug/m3	
		Lab Fort Blk. Found	20.20	ug/m3	
		Lab Fort Blk. % Rec.	89.00	%	70-130
	trans-1,3-Dichloropropene	Lab Fort Blank Amt.	22.69	ug/m3	
		Lab Fort Blk. Found	20.85	ug/m3	
		Lab Fort Blk. % Rec.	91.87	%	70-130
	Chlorodibromomethane	Lab Fort Blank Amt.	42.59	ug/m3	
		Lab Fort Blk. Found	47.20	ug/m3	
		Lab Fort Blk. % Rec.	110.82	%	70-130
	1,1,2-Trichloroethane	Lab Fort Blank Amt.	27.28	ug/m3	
		Lab Fort Blk. Found	25.59	ug/m3	
		Lab Fort Blk. % Rec.	93.84	%	70-130
	Bromoform	Lab Fort Blank Amt.	51.69	ug/m3	
		Lab Fort Blk. Found	61.77	ug/m3	
		Lab Fort Blk. % Rec.	119.50	%	70-130
	1,1,2,2-Tetrachloroethane	Lab Fort Blank Amt.	34.33	ug/m3	
		Lab Fort Blk. Found	34.70	ug/m3	
		Lab Fort Blk. % Rec.	101.08	%	70-130
	Hexachlorobutadiene	Lab Fort Blank Amt.	53.33	ug/m3	
		Lab Fort Blk. Found	68.65	ug/m3	
		Lab Fort Blk. % Rec.	128.72	%	70-130
	1,2,4-Trichlorobenzene	Lab Fort Blank Amt.	37.10	ug/m3	
		Lab Fort Blk. Found	47.14	ug/m3	
		Lab Fort Blk. % Rec.	127.06	%	70-130
	1,2,4-Trimethylbenzene	Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	24.39	ug/m3	
		Lab Fort Blk. % Rec.	99.24	%	70-130
	1,3,5-Trimethylbenzene	Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	24.11	ug/m3	
		Lab Fort Blk. % Rec.	98.12	%	70-130
	Cyclohexane	Lab Fort Blank Amt.	17.21	ug/m3	
		Lab Fort Blk. Found	13.55	ug/m3	
		Lab Fort Blk. % Rec.	78.73	%	50-150
	cis-1,2-Dichloroethylene	Lab Fort Blank Amt.	19.82	ug/m3	
		Lab Fort Blk. Found	17.05	ug/m3	
		Lab Fort Blk. % Rec.	86.01	%	70-130
	1,2-Dichloropropane	Lab Fort Blank Amt.	23.10	ug/m3	
		Lab Fort Blk. Found	19.27	ug/m3	
		Lab Fort Blk. % Rec.	83.39	%	70-130
	Dichlorodifluoromethane	Lab Fort Blank Amt.	24.72	ug/m3	
		Lab Fort Blk. Found	23.57	ug/m3	



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

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Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 7/12/2010

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QC Batch Number: BATCH-16679

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-95386	Dichlorodifluoromethane	Lab Fort Blk. % Rec.	95.35	%	70-130
	Benzyl Chloride	Lab Fort Blank Amt.	25.88	ug/m3	
		Lab Fort Blk. Found	26.67	ug/m3	
	Carbon Disulfide	Lab Fort Blk. % Rec.	103.06	%	70-130
		Lab Fort Blank Amt.	15.57	ug/m3	
		Lab Fort Blk. Found	12.87	ug/m3	
	Vinyl Acetate	Lab Fort Blk. % Rec.	82.70	%	70-130
		Lab Fort Blank Amt.	17.60	ug/m3	
		Lab Fort Blk. Found	13.51	ug/m3	
	2-Hexanone	Lab Fort Blk. % Rec.	76.74	%	70-130
		Lab Fort Blank Amt.	20.48	ug/m3	
		Lab Fort Blk. Found	16.48	ug/m3	
	Bromodichloromethane	Lab Fort Blk. % Rec.	80.46	%	50-150
		Lab Fort Blank Amt.	33.50	ug/m3	
		Lab Fort Blk. Found	31.77	ug/m3	
	1,2-Dibromoethane	Lab Fort Blk. % Rec.	94.84	%	70-130
		Lab Fort Blank Amt.	38.42	ug/m3	
		Lab Fort Blk. Found	37.86	ug/m3	
	n-Heptane	Lab Fort Blk. % Rec.	98.54	%	70-130
		Lab Fort Blank Amt.	20.49	ug/m3	
		Lab Fort Blk. Found	17.37	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Lab Fort Blk. % Rec.	84.79	%	50-150
		Lab Fort Blank Amt.	34.95	ug/m3	
		Lab Fort Blk. Found	31.52	ug/m3	
	Tetrahydrofuran	Lab Fort Blk. % Rec.	90.17	%	70-130
		Lab Fort Blank Amt.	14.74	ug/m3	
		Lab Fort Blk. Found	12.27	ug/m3	
	Propene	Lab Fort Blk. % Rec.	83.22	%	50-150
		Lab Fort Blank Amt.	8.60	ug/m3	
		Lab Fort Blk. Found	7.92	ug/m3	
	1,3-Butadiene	Lab Fort Blk. % Rec.	92.08	%	50-150
		Lab Fort Blank Amt.	11.06	ug/m3	
		Lab Fort Blk. Found	9.29	ug/m3	
		Lab Fort Blk. % Rec.	84.04	%	70-130



QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates BATCH QC: Lab fortified Blanks and Duplicates
Sample Matrix Spikes and Matrix Spike Duplicates Standard Reference Materials and Duplicates
Method Blanks

Report Date: 7/12/2010 Lims Bat #: LIMIT-25351 Page 15 of 15

QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

QC BATCH NUMBER This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.
LIMITS Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.
Sample Amount Amount of analyte found in a sample.
Blank Method Blank that has been taken though all the steps of the analysis.
LFBLANK Laboratory Fortified Blank (a control sample)
STDADD Standard Added (a laboratory control sample)
Matrix Spk Amt Added Amount of analyte spiked into a sample
MS Amt Measured Amount of analyte found including amount that was spiked
Matrix Spike % Rec. % Recovery of spiked amount in sample.
Duplicate Value The result from the Duplicate analysis of the sample.
Duplicate RPD The Relative Percent Difference between two Duplicate Analyses.
Surrogate Recovery The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.
Sur. Recovery (ELCD) Surrogate Recovery on the Electrolytic Conductivity Detector.
Sur. Recovery (PID) Surrogate Recovery on the Photoionization Detector.
Standard Measured Amount measured for a laboratory control sample
Standard Amt Added Known value for a laboratory control sample
Standard % Recovery % recovered for a laboratory control sample with a known value.
Lab Fort Blank Amt Laboratory Fortified Blank Amount Added
Lab Fort Blk. Found Laboratory Fortified Blank Amount Found
Lab Fort Blk % Rec Laboratory Fortified Blank % Recovered
Dup Lab Fort Bl Amt Duplicate Laboratory Fortified Blank Amount Added
Dup Lab Fort Bl Fnd Duplicate Laboratory Fortified Blank Amount Found
Dup Lab Fort Bl % Rec Duplicate Laboratory Fortified Blank % Recovery
Lab Fort Blank Range Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).
Lab Fort Bl. Av. Rec. Laboratory Fortified Blank Average Recovery
Duplicate Sample Amt Sample Value for Duplicate used with Matrix Spike Duplicate
MSD Amount Added Matrix Spike Duplicate Amount Added (Spiked)
MSD Amt Measured Matrix Spike Duplicate Amount Measured
MSD % Recovery Matrix Spike Duplicate % Recovery
MSD Range Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries



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

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AIR SAMPLE CHAIN OF CUSTODY RECORD
 LIMIT: 25351

39 SPRUCE ST
 EAST LONGMEADOW, MA 01028

Company Name: MACTEC Engineering
 Address: 107 Audubon Rd, Suite 301
Wakefield, MA 01880

Attention: Kelly Chatterfen

Project Location: Providence, RI (Garhan Site)
 Sampled By: PSM

Proposal Provided? (For Billing purposes)
 Yes 3.3.09 proposal date

Telephone: (781) 245-6606
 Project # 365008014.13
 Client PO # 200914545

DATA DELIVERY (check one):
 FAX EMAIL WEBSITE CLIENT

Fax #: _____
 Email: Kchatterfen@maectec.com
 Format: EXCEL PDF GIS KEY OTHER

ONLY USE WHEN USING PUMPS

Field ID	Sample Description	Media	Lab #	Date Sampled		Total Minutes Sampled	Flow Rate M ³ /Min. or L/Min.	Volume M ³ or M ³	Matrix Code*	ANALYSIS REQUESTED	"Hg	Please fill out completely, sign, date and retain the yellow copy for your record.
				Start Date/Time	Stop Date/Time							
IA-1-070110		S	108	7-1-10 0800	7-1-10 0830	30	0.2	6	IA	X		Summa Canister ID: 1055 Flow Controller ID: 4067
IA-2-070110		S	00068	7-1-10 0801	7-1-10 0831	30	0.2	6	IA	X		Summa Canister ID: 1487 Flow Controller ID: 4089
IA-3-070110		S	00069	7-1-10 0803	7-1-10 0833	30	0.2	6	IA	X		Summa Canister ID: 1853 Flow Controller ID: 4097
IA-4-070110		S	00070	7-1-10 0805	7-1-10 0835	30	0.2	6	IA	X		Summa Canister ID: 1276 Flow Controller ID: 4085
IA-5-070110		S	00071	7-1-10 0823	7-1-10 0853	30	0.2	6	IA	X		Summa Canister ID: 1872 Flow Controller ID: 4077
IA-6-070110		S	00072	7-1-10 0856	7-1-10 0926	30	0.2	6	IA	X		Summa Canister ID: 1217 Flow Controller ID: 4103
IA-7-070110		S	00073	7-1-10 1100	7-1-10 1130	30	0.2	6	IA	X		Summa Canister ID: 1497 Flow Controller ID: 4106
AA-1-070110		S	00074	7-1-10 0808	7-1-10 0838	30	0.2	6	AMB	X		Summa Canister ID: 215-4-6 Flow Controller ID: 1004

Laboratory Comments:

CLIENT COMMENTS:

Relinquished by: (signature) [Signature] Date/Time: _____

Received by: (signature) [Signature] Date/Time: 7-2-10 1135

Relinquished by: (signature) [Signature] Date/Time: 7-2-10 1830

Received by: (signature) [Signature] Date/Time: 7/2/10 1830

Turnaround **
 7-Day
 10-Day
 Other _____

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

Regulations: CT Target Indoor Air
 Data Enhancement/RCP? Y N
 Enhanced Data Package Y N
 (Surcharge Applies)
 Required Detection Limits: CT Target Indoor Air Conc. (Commercial)
 Other: _____

*Matrix Code: _____ **Media Codes: _____

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

AIHA, NELAP & WBE/DBE Certified



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

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AIR SAMPLE CHAIN OF CUSTODY RECORD

REC'D

LIMIT: 25351

39 SPRUCE ST
 EAST LONGMEADOW, MA 01028

Company Name: MACEC Engineering
 Address: 107 Audubon Rd, Suite 301
Wakefield, MA 01880

Attention: Kelly Chatterton

Project Location: Residence, Rt 1 (Latham St)
 Sampled By: RSM

Proposal Provided? (For Billing purposes)
 Yes 3.3.09 proposal date

Telephone: (781) 245-6606
 Project # 3650080114.13
 Client PO # 200914545

DATA DELIVERY (check one):
 FAX EMAIL WEBSITE CLIENT

Fax #: _____
 Email: Kchatterton@macec.com **REDD**
 Format: EXCEL PDF GIS KEY OTHER

Date Sampled **ONLY USE WHEN USING PUMPS**

Field ID	Sample Description	Media	Lab #	Date	Stop	Total	Flow Rate	Volume	Matrix	ANALYSIS REQUESTED		Summa Canister ID	Flow Controller ID
										Minutes Sampled	M ³ /Min or L/Min		
EW-5-070110	S		105	7-1-10 0913	7-1-10 0943	30	0.2	6	S6	X		1879	4074
EW-6-070110	S		00076	7-1-10 0929	7-1-10 0959	30	0.2	6	S6	X		1317	4107
EW-7-070110	S		00077	7-1-10 1132	7-1-10 1202	30	0.2	6	S6	X		1494	4016
EW-Combined-070110	S		00078	7-1-10 0902	7-1-10 0932	30	0.2	6	S6	X		1320	4060

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

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

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

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

Turnaround **

7-Day

10-Day

Other

Regulations: CF Target Indoor Air (room)

Data Enhancement/RCP? Y N

Enhanced Data Package Y N

Required Detection Limits: CF Target Indoor Air Conc. (Commercial)

*Matrix Code:

SG= SOIL GAS

IA= INDOOR AIR

AMB=AMBIENT

**Media Codes:

S=summa can

TB=tedlar bag

P=PUF

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



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39 Spruce Street
East Longmeadow, MA
Phone: 1-413-525-2332
Fax: 1-413-525-6405

AIR ONLY RECEIPT CHECKLIST

CLIENT NAME: Mactec Eng.
RECEIVED BY: KS DATE: 7/2/10

- 1. Was chain of custody relinquished and signed? YES NO
- 2. Does Chain agree with samples? YES 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: AirLab

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	12
Tedlar Bags	
Regulators	12
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:

APPENDIX B

Analytical Laboratory Detection Limits



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

Analyte:

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



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



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APH COMPOUNDS

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



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EXTRA COMPOUNDS

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

OTHER COMPOUNDS

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