Stephen Frost, MSPH, CIH
Occupational Health and Safety Consultant
155 Aloha St., Suite 303
Seattle, WA 98109
Office: (206) 284-8857 / Cell: (206) 214-8990

July 16, 2009

Mr. Scott Hooton
P.O. Box 1837
Tacoma, WA 98401-1837

SUBJ: Results of Organic Vapor Sampling at Brown & Haley Candy Distribution Facility, Tacoma, WA.

Introduction

On 6-17-09, organic vapor air samples were collected at two locations within the Brown & Haley Candy Distribution Facility located at 1940 East 11th Street, Tacoma, WA. This sampling survey was initiated by concerns that certain chlorinated solvents contained within a shallow aquifer that underlies the site may be migrating as vapors through the site soils and contaminating the air inside of the building. A prior environmental assessment of the site conducted by Pacific Crest Environmental identified trichloroethene (TCE), tetrachloroethene (PCE), dichloroethene (DCE), and vinyl chloride, as the primary contaminants of concern. They further recommended that continuous, 24 hr. air samples be collected in the warehouse and main office area of the building using EPA approved sampling methods to determine if measurable concentrations of these solvent vapors could be detected. In the absence of apparent solvent sources within the building, positive sampling results would support a soil-vapor migration hypothesis.

Because the Brown & Haley facility is also an occupational work environment, the aforementioned air sampling was duplicated using National Institute of Occupational Safety and Health (NIOSH) approved sampling methods. These sampling methodologies, as well, as the results of the air sampling survey are discussed below.

Methodology

Two, continuous, 24 hour air samples were collected inside the distribution facility using 6 liter Summa canisters as per USEPA Method TO-15 SIM. One sample was located on a five foot high bookshelf in the main hallway servicing the office area in the northwest corner of the building (see Fig. 1). Another sample was located in the southeast corner of the warehouse on a six foot high stack of pallets near a series of groundwater wells that were installed to monitor the contaminated aquifer underlying the property. One other Summa canister was placed on a picnic bench located outside on the southwest side of the warehouse to establish normal background levels for the contaminants of concern at the site.

Sampling began at approximately 8 am on 6-17-09 and continued until 8 am the next day. The Summa canisters were then sealed and sent to Air Toxics Laboratories in Folsom,

CA for analysis. The results of their analysis are discussed below with their original analytical report included in Attachment 1.

Duplicate air samples using NIOSH Method 1003 were also collected side-by-side with the Summa canisters to provide air monitoring data that are comparable to occupational exposure standards, such as, OSHA Permissible Exposure Limits. This sampling methodology involved the use of low flow air sampling pumps to draw a continuous sample of air through 150 mg charcoal tubes to adsorb the contaminants from the air over an eight hour period (normal work shift). At the end of the sampling period, the tubes were sealed and sent to Galson Laboratories – an AIHA Accredited Laboratory - for analysis. Their sampling report is included in Attachment 2.

It should be noted that occupational exposure monitoring normally involves having potentially exposed workers wear the actual charcoal tube sampling device mentioned above for their 8 Hr. work shift. Although the sampling done in this case involved stationary, or area sampling, the data is generally representative of actual exposures that would occur for those employees working at the sample locations for their entire shift.

Results

Table 1 summarizes the results of the charcoal tube sampling that was conducted in the warehouse and main office area as per NIOSH approved methods. These results are generally comparable to OSHA Permissible Exposure Limits as they were collected over a representative, 8 hour work shift and therefore approximate the exposures that would have been incurred by employees working in the sampled areas.

The data clearly shows that all sample results were below the limit of detection for the analytical method used to analyze the samples. They were also orders of magnitude below the permissible exposure limit for each contaminant of concern. Furthermore, no significant differences in airborne concentrations were noted between the sample collected outside and those collected indoors.

Table 1: 8 Hr. Time Weight Average Charcoal Tube Sample Results

Sample #	Location	Contaminant	TWA_8 Conc. (ppm)[1]	PEL-TWA_8 (ppm)[2]
BH6170904	Outside on picnic bench on southwest side of building.	Vinyl Chloride	< 0.008	1.0
		1,2-Dichloroethene	< 0.078	200
		Trichloroethene	< 0.03	100
		Tetrachloroethene	< 0.02	100
BH6170905	On bookshelf in hallway at northwest corner of main office area.	Vinyl Chloride	< 0.008	1.0
		1,2-Dichloroethene	< 0.077	200
		Trichloroethene	< 0.03	100
		Tetrachloroethene	< 0.02	100
BH6170906	On stack of pallets at southeast corner of warehouse.	Vinyl Chloride	< 0.008	1.0
		1,2-Dichloroethene	< 0.075	200
		Trichloroethene	< 0.03	100
		Tetrachloroethene	< 0.02	100

[1] TWA_8 Conc. – Measured eight hour time-weighted-average concentration expressed in parts per million.

[2] PEL-TWA_8 – OSHA Permissible Exposure Limit – eight hour time-weighted-average conc. expressed in parts per million.

(<) Denotes the minimum detectable concentration, expressed in parts per million, for the contaminant of concern.

Table 2 summarizes the results of the Summa canister air sampling that was conducted over a 24 hour period in accordance with EPA sampling method TO-15 SIM. It should be noted that the Summa sampling protocol is significantly different than the charcoal tube sampling method discussed above and, as such, the results of these two methods are not directly comparable. With the EPA method, Summa sampling is conducted over a 24 hour period, detection limits are much lower than the charcoal tube method, results are expressed in parts per billion (ppb), and the purpose of the sampling is to assess the possible migration of contaminant vapors into the building - not evaluate their exposure risks to workers.

And to this end, the data show that none of the contaminants of concern were found at measurable concentrations outside of the building while trichloroethene and tetrachloroethene were detected in the office and warehouse areas at concentrations that ranged from 0.10 to 3.7 ppb. cis-1,2-Dichloroethene was also detected in the office area at a concentration of 0.039 ppb.

Table 2: 24 Hr. Summa Canister Sample Results as per EPA Method TO-15

Sample #	Location	Contaminant	24 Hr. Aver. Conc. (ppb)[1]
BH6170901	Outside on picnic bench on southwest side of building.	Vinyl Chloride	< 0.020
		cis-1,2-Dichloroethene	< 0.039
		trans-1,2-Dichloroethene	< 0.20
		Trichloroethene	< 0.039
		Tetrachloroethene	< 0.039
BH6170902	On bookshelf in hallway at northwest corner of main office area.	Vinyl Chloride	< 0.017
		cis-1,2-Dichloroethene	0.039
		trans-1,2-Dichloroethene	< 0.17
		Trichloroethene	0.10
		Tetrachloroethene	0.92
BH6170903	On stack of pallets at southeast corner of warehouse.	Vinyl Chloride	< 0.018
		cis-1,2-Dichloroethene	< 0.035
		trans-1,2-Dichloroethene	< 0.18
		Trichloroethene	0.22
		Tetrachloroethene	3.7

[1] 24 Hr, Aver. Conc. – Measured 24 hour average concentration expressed in parts per billion.
(<) Denotes the minimum detectable concentration, expressed in parts per billion, for the contaminant of concern.

EPA Method TO-15 includes analyses for 13 other substances in addition to those listed above (see lab report found in Attachment 1). However, it is beyond the scope of this study to discuss the results of those additional substances as they were not identified as contaminants of concern by the lead environmental assessor or evaluate the non-occupational exposure risks to the building occupants for any of the contaminants sampled.

Conclusion

There were no apparent sources of solvent contamination in the areas sampled. The fact that three of the five contaminants of concern (cis-DCE, TCE, and PCE) known to be associated with the underlying aquifer were detected inside the Brown & Haley facility suggests that solvent vapors could possibly be migrating through the site soils and entering the building. This notion is supported by the fact that none of the target solvents

were detected outside of the building and that TCE and PCE vapor concentrations measured directly above the monitoring well field inside the warehouse were much higher then those vapor concentrations found further away in the building's office area.

It should be stressed, however, that this notion is by no means certain. Only three samples were collected in this study at widely separated and distinct locations. Furthermore, measured vapor concentrations were very low (ppb range) and subject to local variations in temperature, airflow, surrounding work activities, and building construction. These sampling results are therefore preliminary and indicate the need for further testing to more completely evaluate the issue.

The data also show that although solvent vapors were detected inside the building, their concentrations were well below Permissible Exposure Limits and, as such, do not pose an occupational exposure risk to site workers. This conclusion assumes that the building occupants are healthy adult workers who spend an average of 8 hrs/day, 40 hrs/week at their jobs in accordance with the definition of permissible exposure limits.

In summary, additional environmental monitoring is recommended to further evaluate the possible migration of solvent vapors into the Brown & Haley Distribution Facility from the site soils underlying the building. Additional occupational exposure monitoring, however, is not indicated as vapor concentrations measured inside the building were well below legal exposure limits.

Respectfully Submitted By:

Stephen Frost, MSPH, CIH

FIGURE 1

Air Sampling Locations

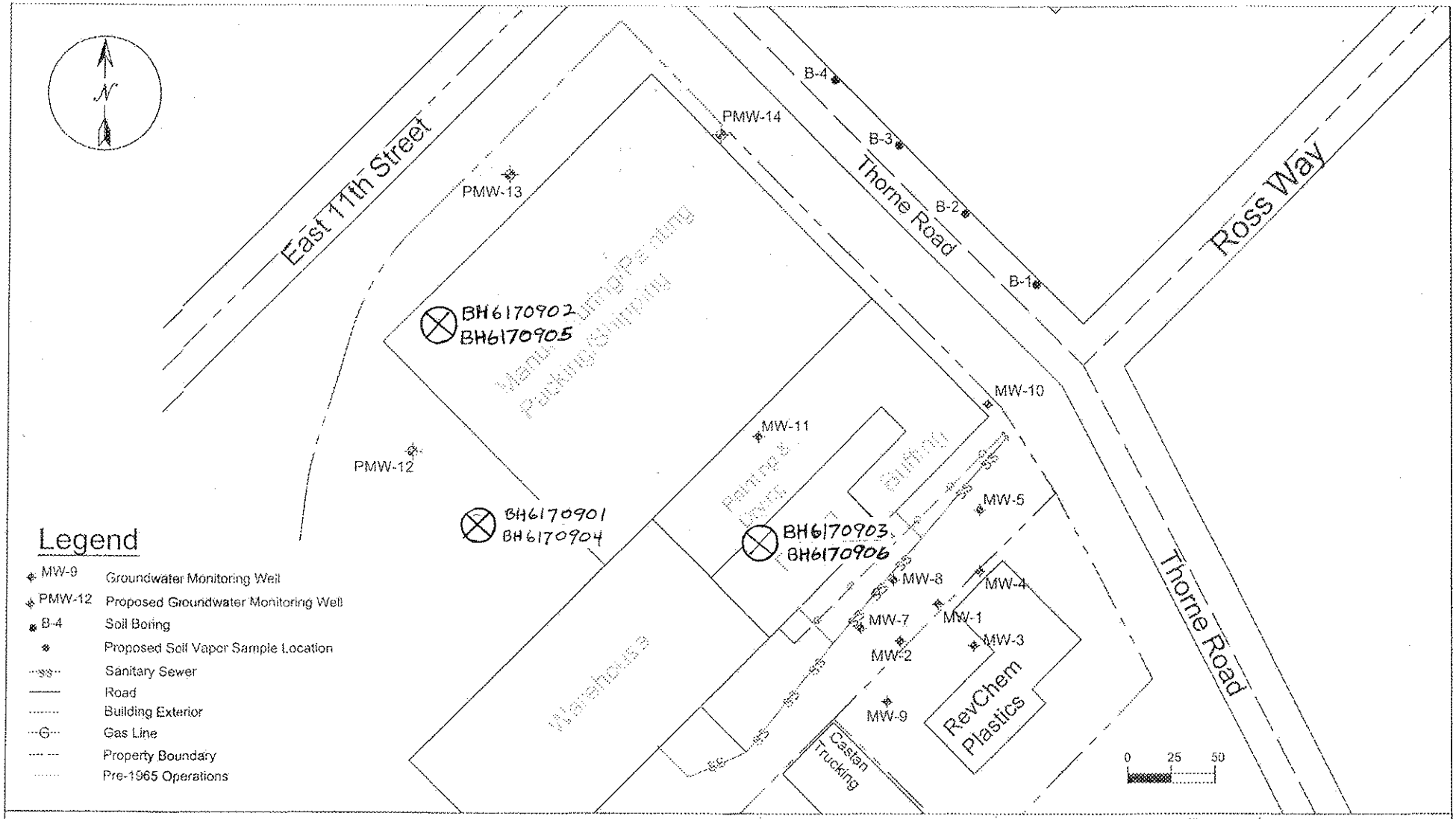

Figure 1
Site Plan with Proposed Monitoring Wells and AIR Sampling Locations
Sound Mattress and Felt Company Property/Shaub-Ellison Property
1940 East 11th Street/1132 Thorne Road Tacoma, Washington

Drawn By: AG/MB | Checked By: EC | Date: 01/04/09 | Project Number: 110-001

ATTACHMENT 1

Analytical Results from Air Toxics Laboratories

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SAMPLE#BH6170901(OUTSIDE AT SW-SIDE of BLDG)

Lab ID#: 0906550-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	z063019sim	Date of Collection:	6/17/09 8:36:00 AM
Dil. Factor:	1.96	Date of Analysis:	7/1/09 05:40 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.020	Not Detected	0.050	Not Detected
1,1-Dichloroethene	0.020	Not Detected	0.078	Not Detected
1,1-Dichloroethane	0.039	Not Detected	0.16	Not Detected
cis-1,2-Dichloroethene	0.039	Not Detected	0.16	Not Detected
1,1,1-Trichloroethane	0.039	Not Detected	0.21	Not Detected
Benzene	0.098	0.14	0.31	0.44
1,2-Dichloroethane	0.039	Not Detected	0.16	Not Detected
Trichloroethene	0.039	Not Detected	0.21	Not Detected
Toluene	0.039	0.30	0.15	1.1
1,1,2-Trichloroethane	0.039	Not Detected	0.21	Not Detected
Tetrachloroethene	0.039	Not Detected	0.26	Not Detected
Ethyl Benzene	0.039	0.040	0.17	0.17
m,p-Xylene	0.078	0.10	0.34	0.45
o-Xylene	0.039	0.047	0.17	0.20
1,1,2,2-Tetrachloroethane	0.039	Not Detected	0.27	Not Detected
trans-1,2-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Methyl tert-butyl ether	0.20	Not Detected	0.71	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	91	70-130

Air Toxics Ltd.
Laboratory Services Since 1989

Client Sample ID: SAMPLE#BH6170902(NW CORNER of OFFICE)

Lab ID#: 0906550-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	z063020sim	Date of Collection:	6/17/09 7:55:00 AM
Dil. Factor:	1.68	Date of Analysis:	7/1/09 06:16 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected	0.043	Not Detected
1,1-Dichloroethene	0.017	Not Detected	0.067	Not Detected
1,1-Dichloroethane	0.034	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.034	0.039	0.13	0.16
1,1,1-Trichloroethane	0.034	0.70	0.18	3.8
Benzene	0.084	0.16	0.27	0.51
1,2-Dichloroethane	0.034	Not Detected	0.14	Not Detected
Trichloroethene	0.034	0.10	0.18	0.56
Toluene	0.034	0.71	0.13	2.7
1,1,2-Trichloroethane	0.034	Not Detected	0.18	Not Detected
Tetrachloroethene	0.034	0.92	0.23	6.2
Ethyl Benzene	0.034	0.097	0.14	0.42
m,p-Xylene	0.067	0.28	0.29	1.2
o-Xylene	0.034	0.11	0.14	0.47
1,1,2,2-Tetrachloroethane	0.034	Not Detected	0.23	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	90	70-130

Air Toxics Ltd.
Laboratory Services Since 1989

Client Sample ID: SAMPLE#BH6170903(SE CORNER of WAREHOUSE)

Lab ID#: 0906550-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	z063021sim	Date of Collection:	6/17/09 8:15:00 AM
Dil. Factor:	1.75	Date of Analysis:	7/1/09 06:57 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
1,1-Dichloroethene	0.018	Not Detected	0.069	Not Detected
1,1-Dichloroethane	0.035	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
1,1,1-Trichloroethane	0.035	1.9	0.19	10
Benzene	0.088	0.43	0.28	1.4
1,2-Dichloroethane	0.035	Not Detected	0.14	Not Detected
Trichloroethene	0.035	0.22	0.19	1.2
Toluene	0.035	3.1	0.13	12
1,1,2-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	3.7	0.24	25
Ethyl Benzene	0.035	0.30	0.15	1.3
m,p-Xylene	0.070	0.97	0.30	4.2
o-Xylene	0.035	0.33	0.15	1.4
1,1,2,2-Tetrachloroethane	0.035	Not Detected	0.24	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	88	70-130

ATTACHMENT 2

Analytical Results from Galson Laboratories

GALSON LABORATORIES
6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

LABORATORY ANALYSIS REPORT

Client : Stephen Frost & Associates
Site : Brown & Haley Warehouse
Project No. : Brown & Haley

Date Sampled : 17-JUN-09
Date Received : 25-JUN-09
Date Analyzed : 27-JUN-09 - 30-JUN-09
Report ID : 614619

Account No.: 17625
Login No. : L195446

Client ID : BH6170904 **Lab ID : L195446-1** **Air Volume : 32.9 Liter**
Date Sampled : 06/17/09 **Date Analyzed : 06/30/09**

Parameter	LOQ ug	Front ug	Back ug	Total ug	Conc mg/m3	ppm
1,2-Dichloroethylene	10.	<10	<10	<10	<0.31	<0.078
Tetrachloroethylene	5	<5	<5	<5	<0.2	<0.02
Trichloroethylene	5	<5	<5	<5	<0.2	<0.03
Vinyl Chloride	0.7	<0.7	<0.7	<0.7	<0.02	<0.008

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media : 226-01

Submitted by: edv
Approved by : nkp
Date : 02-JUL-09 NYS DOH # : 11626
QC by: Tony D'Amico

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms
> -Greater Than ug -Micrograms l -Liters NS -Not Specified
NA -Not Applicable ND -Not Detected ppm -Parts per Million LOQ-Limit of Quantitation

Field sampling was not performed by Galson. Galson presents results based on sampling data provided by clients.

GALSON LABORATORIES
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

Client : Stephen Frost & Associates
Site : Brown & Haley Warehouse
Project No. : Brown & Haley

Date Sampled : 17-JUN-09
Date Received : 25-JUN-09
Date Analyzed : 27-JUN-09 - 30-JUN-09
Report ID : 614619

Account No.: 17625
Login No. : L195446

Client ID : BH6170905 **Lab ID : L195446-2** **Air Volume : 33.6 Liter**
Date Sampled : 06/17/09 **Date Analyzed : 06/30/09**

Parameter	LOQ ug	Front ug	Back ug	Total ug	Conc mg/m3	ppm
1,2-Dichloroethylene	10.	<10	<10	<10	<0.30	<0.077
Tetrachloroethylene	5	<5	<5	<5	<0.2	<0.02
Trichloroethylene	5	<5	<5	<5	<0.2	<0.03
Vinyl Chloride	0.7	<0.7	<0.7	<0.7	<0.02	<0.008

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media : 226-01

Submitted by: edv
Approved by : nkp
Date : 02-JUL-09 NYS DOH # : 11626
QC by: Tony D'Amico

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms
> -Greater Than ug -Micrograms l -Liters NS -Not Specified
NA -Not Applicable ND -Not Detected ppm -Parts per Million LOQ-Limit of Quantitation

Field sampling was not performed by Galson. Galson presents results based on sampling data provided by clients.

GALSON LABORATORIES
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

Client : Stephen Frost & Associates
Site : Brown & Haley Warehouse
Project No. : Brown & Haley

Date Sampled : 17-JUN-09
Date Received : 25-JUN-09
Date Analyzed : 27-JUN-09 - 30-JUN-09
Report ID : 614619

Account No.: 17625
Login No. : L195446

Client ID : BH6170906 **Lab ID : L195446-3** **Air Volume : 34.3 Liter**
Date Sampled : 06/17/09 **Date Analyzed : 06/30/09**

Parameter	LOQ ug	Front ug	Back ug	Total ug	Conc mg/m3	ppm
1,2-Dichloroethylene	10.	<10	<10	<10	<0.30	<0.075
Tetrachloroethylene	5	<5	<5	<5	<0.2	<0.02
Trichloroethylene	5	<5	<5	<5	<0.2	<0.03
Vinyl Chloride	0.7	<0.7	<0.7	<0.7	<0.02	<0.008

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media : 226-01

Submitted by: edv
Approved by : nkp
Date : 02-JUL-09 NYS DOH # : 11626
QC by: Tony D'Amico

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms
> -Greater Than ug -Micrograms l -Liters NS -Not Specified
NA -Not Applicable ND -Not Detected ppm -Parts per Million LOQ-Limit of Quantitation

Field sampling was not performed by Galson. Galson presents results based on sampling data provided by clients.

Air Toxics LTD.
Laboratory Services Since 1989

7/9/2009
Mr. Scott Hooton
Port of Tacoma
1 Sitcum Way

Tacoma WA 98421

Project Name: BROWN & HALEY
Project #:
Workorder #: 0906550

Dear Mr. Scott Hooton

The following report includes the data for the above referenced project for sample(s) received on 6/23/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner
Project Manager

LABORATORY NARRATIVE
Modified TO-15 SIM
Port of Tacoma
Workorder# 0906550

Three 6 Liter Summa Canister (SIM Certified) samples were received on June 23, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

The Chain of Custody (COC) information for samples SAMPLE#BH6170901(OUTSIDE AT SW-SIDE of BLDG), SAMPLE#BH6170902(NW CORNER of OFFICE) and SAMPLE#BH6170903(SE CORNER of WAREHOUSE) did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM

Client Sample ID: SAMPLE#BH6170901(OUTSIDE AT SW-SIDE of BLDG)

Lab ID#: 0906550-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.098	0.14	0.31	0.44
Toluene	0.039	0.30	0.15	1.1
Ethyl Benzene	0.039	0.040	0.17	0.17
m,p-Xylene	0.078	0.10	0.34	0.45
o-Xylene	0.039	0.047	0.17	0.20

Client Sample ID: SAMPLE#BH6170902(NW CORNER of OFFICE)

Lab ID#: 0906550-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.034	0.039	0.13	0.16
1,1,1-Trichloroethane	0.034	0.70	0.18	3.8
Benzene	0.084	0.16	0.27	0.51
Trichloroethene	0.034	0.10	0.18	0.56
Toluene	0.034	0.71	0.13	2.7
Tetrachloroethene	0.034	0.92	0.23	6.2
Ethyl Benzene	0.034	0.097	0.14	0.42
m,p-Xylene	0.067	0.28	0.29	1.2
o-Xylene	0.034	0.11	0.14	0.47

Client Sample ID: SAMPLE#BH6170903(SE CORNER of WAREHOUSE)

Lab ID#: 0906550-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.035	1.9	0.19	10
Benzene	0.088	0.43	0.28	1.4
Trichloroethene	0.035	0.22	0.19	1.2
Toluene	0.035	3.1	0.13	12
Tetrachloroethene	0.035	3.7	0.24	25
Ethyl Benzene	0.035	0.30	0.15	1.3
m,p-Xylene	0.070	0.97	0.30	4.2
o-Xylene	0.035	0.33	0.15	1.4

Client Sample ID: SAMPLE#BH6170903(SE CORNER of WAREHOUSE) Lab Duplicate

Lab ID#: 0906550-03AA

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SAMPLE#BH6170901(OUTSIDE AT SW-SIDE of BLDG)

Lab ID#: 0906550-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z063019sim**	**Date of Collection:**	**6/17/09 8:36:00 AM**
Dil. Factor:	**1.96**	**Date of Analysis:**	**7/1/09 05:40 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.020	Not Detected	0.050	Not Detected
1,1-Dichloroethene	0.020	Not Detected	0.078	Not Detected
1,1-Dichloroethane	0.039	Not Detected	0.16	Not Detected
cis-1,2-Dichloroethene	0.039	Not Detected	0.16	Not Detected
1,1,1-Trichloroethane	0.039	Not Detected	0.21	Not Detected
Benzene	0.098	0.14	0.31	0.44
1,2-Dichloroethane	0.039	Not Detected	0.16	Not Detected
Trichloroethene	0.039	Not Detected	0.21	Not Detected
Toluene	0.039	0.30	0.15	1.1
1,1,2-Trichloroethane	0.039	Not Detected	0.21	Not Detected
Tetrachloroethene	0.039	Not Detected	0.26	Not Detected
Ethyl Benzene	0.039	0.040	0.17	0.17
m,p-Xylene	0.078	0.10	0.34	0.45
o-Xylene	0.039	0.047	0.17	0.20
1,1,2,2-Tetrachloroethane	0.039	Not Detected	0.27	Not Detected
trans-1,2-Dichloroethene	0.20	Not Detected	0.78	Not Detected
Methyl tert-butyl ether	0.20	Not Detected	0.71	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	91	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SAMPLE#BH6170903(SE CORNER of WAREHOUSE)

Lab ID#: 0906550-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z063021sim**	**Date of Collection: 6/17/09 8:15:00 AM**	
Dil. Factor:	**1.75**	**Date of Analysis: 7/1/09 06:57 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
1,1-Dichloroethene	0.018	Not Detected	0.069	Not Detected
1,1-Dichloroethane	0.035	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
1,1,1-Trichloroethane	0.035	1.9	0.19	10
Benzene	0.088	0.43	0.28	1.4
1,2-Dichloroethane	0.035	Not Detected	0.14	Not Detected
Trichloroethene	0.035	0.22	0.19	1.2
Toluene	0.035	3.1	0.13	12
1,1,2-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	3.7	0.24	25
Ethyl Benzene	0.035	0.30	0.15	1.3
m,p-Xylene	0.070	0.97	0.30	4.2
o-Xylene	0.035	0.33	0.15	1.4
1,1,2,2-Tetrachloroethane	0.035	Not Detected	0.24	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	88	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0906550-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z063008sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/30/09 05:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
1,1-Dichloroethane	0.020	Not Detected	0.081	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
1,1,1-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
1,2-Dichloroethane	0.020	Not Detected	0.081	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
1,1,2-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
1,1,2,2-Tetrachloroethane	0.020	Not Detected	0.14	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	93	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0906550-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	**z063005sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/30/09 01:43 PM**	

Compound	%Recovery
Vinyl Chloride	124
1,1-Dichloroethene	128
1,1-Dichloroethane	122
cis-1,2-Dichloroethene	124
1,1,1-Trichloroethane	115
Benzene	113
1,2-Dichloroethane	129
Trichloroethene	106
Toluene	127
1,1,2-Trichloroethane	125
Tetrachloroethene	116
Ethyl Benzene	126
m,p-Xylene	130
o-Xylene	129
1,1,2,2-Tetrachloroethane	117
trans-1,2-Dichloroethene	122
Methyl tert-butyl ether	124

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	92	70-130