From: Toni Schoen <tschoen@keyengineering.com>
Sent: Tuesday, August 14, 2018 2:52 PM
To: Delwiche, Jim C - DNR
Subject: RE: Schaefer Brush BRRTS 02-68-563736 proposed scope of work
Attachments: Vapor Analytical Results April2018.pdf; Soil Analytical Results.pdf

Here is the soil and vapor data Jim.

From: Delwiche, Jim C - DNR <Jim.Delwiche@wisconsin.gov>
Sent: Wednesday, August 10, 2016 4:37 PM
To: Toni Schoen <tschoen@keyengineering.com>
Subject: RE: Schaefer Brush BRRTS 02-68-563736 proposed scope of work

Toni,

The proposed sampling plan for Schaefer Brush (attached below) has been approved with the following modification:

- Per our earlier conversation, please install two additional soil samples in the northwest corner of the property near MW-1. Locations per our discussion using Figure 2, Site Layout Map.

The purpose of the additional sampling is to confirm (or rule out) any potential source on the Schaefer Brush property.
Please reply or call with any questions.

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

James C. Delwiche
Hydrogeologist – Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
141 NW Barstow Street, Room 180, Waukesha, WI 53188
Phone: (262) 574-2145
Fax: (262) 574-2117
Jim.Delwiche@wisconsin.gov

dnr.wi.gov

From: Toni Schoen [mailto:tschoen@keyengineering.com]
Sent: Thursday, August 04, 2016 4:06 PM
To: Delwiche, Jim C - DNR
Cc: Jeffrey J. Mawicke; Sheri Reichart; slr@charter.net; Ken Wein
Subject: FW: Schaefer Brush BRRTS 02-68-563736 proposed scope of work
Importance: High

Jim,

Below is the proposed sampling plan for Schaefer Brush. Please review and comment.

Soil Sampling
Four soil borings are proposed to be advanced using a direct push drill rig to 10 feet below grade. Proposed boring locations are presented on the attached figure.

The soil will be logged in the field by a Key Engineering geologist. Each 2-foot interval will be field screened for volatile compounds using a photoionization detector (PID). One soil sample from 2 to 4 feet and from 8-10 feet for laboratory analysis of VOCs. The sample depths may vary if field observations and PID readings warrant.

Vapor Sampling
Three sub-slab vapor samples (VP-1 through VP-3) will be collected from under the building using the high-purge volume sampling method described in the "High Purge Volume Sampling – A New Paradigm for Subslab Soil Gas Monitoring" article by McAlary and others from the Ground Water Monitoring & Remediation magazine from 2010 (attached). Proposed vapor locations are presented on the attached figure.

A Shop-Vac 4040H will be used to apply a vacuum from under the slab at each vapor point. The Shop-Vac 4040H is an 8-gallon vacuum with 4.0 peak horsepower motor. We will use a smoke pen to check all fittings on the sampling apparatus for leaks. Additionally, two vacuum probes will be installed through the concrete floor to measure the radius of influence from each sub-slab vapor point using a micro-manometer. The vacuum probes will be installed 5 feet and 10 feet from the sub-slab vapor sample location.

Three sub-slab vapor samples will be collected in vacuum gas canisters fitted with a controller to limit vapor flow to no more than 200 ml/min (or 30-minute fill rate). The vapor samples will be analyzed using Method TO-15.

We will proceed with the above scope of work once we receive approval from the WDNR.

Thank you.

Toni

Ms. Toni Schoen
Senior Project Manager
Key Engineering Group, Ltd.
735 North Water Street, Suite 510
Milwaukee, WI 53202
Direct Telephone: (414) 225-0591
Fax: (414) 224-8383
Mobile: (414) 305-8474

www.keyengineering.com

From: Delwiche, Jim C - DNR [mailto:Jim.Delwiche@wisconsin.gov]
Sent: Monday, August 1, 2016 12:33 PM
To: Toni Schoen <tschoen@keyengineering.com>
Subject: Schaefer Brush BRRTS 02-68-563736

Hi Toni,

Based on the site investigation and remedial options review of the subject site, the WDNR has determined the following:

- Additional soil investigation will be necessary in the area north of soil sample SP-3. Three to four samples should be collected in the 2-4 and 8-10 foot range.
- A sub-slab vapor assessment will be necessary under the building in order to determine if a chlorinated vapor risk exists under the slab. This will also determine of a sub-slab source is present. Two or three slab samples should be collected in areas of potential sources (drains, storage areas).

If you have any questions regarding this correspondence of the site in general. Please reply or call me at (262) 574-2145.

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

James C. Delwiche
Hydrogeologist – Remdiation & Redevelopment Program
Wisconsin Department of Natural Resources
141 NW Barstow Street, Room 180, Waukesha, WI 53188
Phone: (262) 574-2145
Fax: (262) 574-2117
Jim.Delwiche@wisconsin.gov

dnr.wi.gov

Table 2. Soil Analytical Results
Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

PARAMETERS	Non-Industrial Direct Contact Residual Contaminant Level	Industrial Direct Contact Residual Contaminant Level	Protection of Groundwater Residual Contaminant Level	Background Threshold Value	SP-1		SP-2		SP-3		SP-4	SP-5		SP-6		SP-7	
Date Collected					4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	7/15/2015	7/15/2015	7/15/2015	7/15/2015
Depth (feet bgs)					4-6	10-12	2-4	6-8	2-4	8-10	2-4	2-4	8-10	2-4	4-6	2-4	8-10
Saturated(s)/Unsaturated(u)					u	u	u	u	u	u	u	u	u	u	u	u	u
Detected VOCs (mg/kg)																	
cis-1,2-Dichloroethene	156	2,040	0.0412	---	<0.025	<0.025	<0.025	<0.025	**0.045J**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	30.7	153	0.0045	---	<0.025	<0.025	<0.025	<0.025	**5.8**	**4.5**	**0.053J**	<0.025	<0.025	<0.025	<0.025	<0.025	**0.22**
Trichloroethene	1.26	8.81	0.0036	---	<0.025	<0.025	<0.025	<0.025	**0.044J**	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
PAHs (mg/kg)																	
Acenaphthene	3,590	45,200	---	---	0.012J	<0.0086	0.015J	0.014J	0.052J	0.02	<0.0088	NA	NA	<0.0090	<0.0086	<0.010	<0.0087
Acenaphthylene	---	---	---	---	<0.0080	<0.0077	<0.0082	<0.0078	<0.044	<0.0078	<0.0079	NA	NA	<0.0081	<0.0077	<0.0089	<0.0078
Anthracene	17,900	100,000	196.9492	---	0.066	<0.0089	0.05	0.065	0.18	0.049	<0.0091	NA	NA	<0.0093	<0.0089	<0.010	<0.0090
Benzo(a)anthracene	1.14	20.8	---	---	0.12	<0.0060	0.063	0.11	0.27	0.075	0.026	NA	NA	0.0095J	<0.0060	<0.0069	<0.0060
Benzo(a)pyrene	0.115	2.11	0.47	---	0.11	<0.0062	0.059	0.11	0.26	0.07	0.031	NA	NA	0.015J	<0.0061	<0.0071	<0.0062
Benzo(b)fluoranthene	1.15	21.1	0.2390	---	0.12	<0.0086	0.062	0.12	0.24	0.067	0.029	NA	NA	0.013J	<0.0086	<0.010	<0.0087
Benzo(g,h,i)perylene	---	---	---	---	0.08	<0.0066	0.036	0.075	0.160	0.045	0.023	NA	NA	0.013J	<0.0065	<0.0076	<0.0066
Benzo(k)fluoranthene	11.5	211	---	---	0.1	<0.0095	0.053	0.092	0.24	0.065	0.032	NA	NA	0.017J	<0.0095	<0.011	<0.0096
Chrysene	115	2,110	0.0721	---	0.14	<0.0080	0.079	0.13	**0.33**	**0.09**	0.035	NA	NA	0.016J	<0.0079	<0.0092	<0.0080
Dibenzo(a,h)anthracene	0.115	2.11	---	---	0.025	<0.0063	0.012J	0.024	0.050J	0.015J	<0.0064	NA	NA	<0.0066	<0.0063	<0.0073	<0.0064
Fluoranthene	2,390	30,100	88.8778	---	0.37	<0.0086	0.24	0.37	0.94	0.26	0.073	NA	NA	0.024	<0.0086	<0.010	<0.0087
Fluorene	2,390	30,100	14.8299	---	0.018	<0.0086	0.022	0.023	0.073J	0.025	<0.0088	NA	NA	<0.0090	<0.0086	<0.010	<0.0087
Indeno(1,2,3-cd)pyrene	1.15	21.1	---	---	0.074	<0.0066	0.036	0.069	0.15	0.041	0.02	NA	NA	0.011J	<0.0065	<0.0076	<0.0066
1-methylnaphthalene	17.6	72.7	---	---	<0.0090	<0.0086	0.010J	<0.0087	<0.049	<0.0087	<0.0088	NA	NA	<0.0090	<0.0086	0.063	<0.0087
2-methylnaphthalene	239	3,010	---	---	<0.0090	<0.0086	0.013J	<0.0087	<0.049	0.010J	<0.0088	NA	NA	<0.0090	<0.0086	0.084	<0.0087
Naphthalene	5.52	24.1	0.6582	---	<0.0090	<0.0086	<0.0092	<0.0087	<0.049	0.016J	<0.0088	NA	NA	<0.0090	<0.0086	0.063	<0.0087
Phenanthrene	---	---	---	---	0.26	<0.0086	0.23	0.29	0.87	0.26	0.032	NA	NA	<0.0090	<0.0086	<0.010	<0.0087
Pyrene	1,790	22,600	54.5455	---	0.28	<0.0086	0.17	0.26	0.67	0.19	0.054	NA	NA	0.019	<0.0086	<0.010	<0.0087
RCRA Metals (mg/kg)																	
Arsenic	0.677	3	0.584	8	3.1	<3.2	5.2	2.9J	4.7	<2.9	4.3	4.4	4.8	NA	NA	4.8	5.6
Barium	15,300	100,000	164.8	364	14.9	8.9	46.9	13.8	75.3	10.9	13.8	17.2	22.6	NA	NA	121	19.9
Cadmium	71.1	985	0.752	1	<0.070	0.15J	0.18J	0.16J	0.082J	0.18J	0.14J	0.17J	0.12J	NA	NA	<0.070	<0.069
Chromium	---	---	360000	44	9.0	6.1	14.2	9.2	18.5	8.8	8.8	12.4	9.7	NA	NA	27.1	12.1
Lead	400	800	27	52	3.5	3.2	5.1	8.0	9.3	3.8	3.5	4.6	4.8	NA	NA	11.5	3.3
Mercury	3.13	3.13	0.208	---	0.0065J	0.0031J	0.0084	0.0058J	0.013	0.0037J	0.0061J	0.0062J	0.0083J	NA	NA	0.028	0.0069
Selenium	391	5840	0.52	---	<0.82	<0.78	<0.79	<0.69	<0.84	<0.71	<0.75	<0.82	<0.82	NA	NA	<0.82	<0.80
Silver	391	5840	0.8491	---	<0.30	<0.28	<0.28	<0.25	<0.30	<0.26	<0.27	<0.29	<0.29	NA	NA	<0.30	<0.29

Notes:
Metal values are compared residual contaminant levels if the background threshold values are exceeded.
Bold values exceed protection of groundwater residual contaminant level.
Boxed values exceed industrial direct contact residual contaminant level.
--- - no standard established
J - Results between laboratory limit of detection and limit of quanitification
bgs - below ground surface
mg/kg - milligrams per kilogram
NA - not analyzed
RCRA - resource conservation recovery act
PAHs - polycyclic aromatic hydrocarbons
VOCs - volatile organic compounds

Table 2. Soil Analytical Results
Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

PARAMETERS	Non-Industrial Direct Contact Residual Contaminant Level	Industrial Direct Contact Residual Contaminant Level	Protection of Groundwater Residual Contaminant Level	Background Threshold Value	SP-8		SP-9		SP-10		SP-11		SP-12		SP-13	SP-14
Date Collected					7/15/2015	7/15/2015	7/15/2015	7/15/2015	7/15/2015	7/15/2015	7/15/2015	7/15/2015	7/15/2015	7/15/2015	7/17/2015	7/17/2015
Depth (feet bgs)					2-4	6-8	2-4	8-10	2-4	8-10	4-6	8-10	2-4	8-10	1-3	1-3
Saturated(s)/Unsaturated(u)					u	u	u	u	u	u	u	u	u	u	u	u
Detected VOCs (mg/kg)																
cis-1,2-Dichloroethene	156	2,040	0.0412	---	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	30.7	153	0.0045	---	**0.46**	**0.3**	<0.025	**0.25**	**0.043J**	**0.049J**	<0.025	**0.17**	**0.68**	**0.058J**	<0.025	<0.025
Trichloroethene	1.26	8.81	0.0036	---	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
PAHs (mg/kg)																
Acenaphthene	3,590	45,200	---	---	<0.0087	<0.0086	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
Acenaphthylene	---	---	---	---	<0.0078	<0.0077	NA	NA	<0.0078	<0.0077	NA	NA	NA	NA	NA	NA
Anthracene	17,900	100,000	196.9492	---	<0.0090	0.010J	NA	NA	<0.0090	<0.0089	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1.14	20.8	---	---	<0.0060	0.045	NA	NA	<0.0060	<0.0059	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.115	2.11	0.47	---	<0.0062	0.057	NA	NA	<0.0062	<0.0061	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1.15	21.1	0.2390	---	<0.0087	0.066	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	---	---	---	---	<0.0066	0.038	NA	NA	<0.0066	<0.0065	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	11.5	211	---	---	<0.0096	0.054	NA	NA	<0.0096	<0.0095	NA	NA	NA	NA	NA	NA
Chrysene	115	2,110	0.0721	---	<0.0081	0.063	NA	NA	<0.0081	<0.0079	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.115	2.11	---	---	<0.0064	0.012J	NA	NA	<0.0064	<0.0063	NA	NA	NA	NA	NA	NA
Fluoranthene	2,390	30,100	88.8778	---	<0.0087	0.12	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
Fluorene	2,390	30,100	14.8299	---	<0.0087	<0.0086	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1.15	21.1	---	---	<0.0066	0.033	NA	NA	<0.0066	<0.0065	NA	NA	NA	NA	NA	NA
1-methylnaphthalene	17.6	72.7	---	---	<0.0087	<0.0086	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
2-methylnaphthalene	239	3,010	---	---	<0.0087	<0.0086	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
Naphthalene	5.52	24.1	0.6582	---	<0.0087	<0.0086	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
Phenanthrene	---	---	---	---	<0.0087	0.047	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
Pyrene	1,790	22,600	54.5455	---	<0.0087	0.086	NA	NA	<0.0087	<0.0086	NA	NA	NA	NA	NA	NA
RCRA Metals (mg/kg)																
Arsenic	0.677	3	0.584	8	NA	NA	NA	NA	6.7J	2.8	NA	NA	NA	NA	NA	NA
Barium	15,300	100,000	164.8	364	NA	NA	NA	NA	14.7	9	NA	NA	NA	NA	NA	NA
Cadmium	71.1	985	0.752	1	NA	NA	NA	NA	0.11J	<0.067	NA	NA	NA	NA	NA	NA
Chromium	---	---	360000	44	NA	NA	NA	NA	6.5	6.4	NA	NA	NA	NA	NA	NA
Lead	400	800	27	52	NA	NA	NA	NA	4.4	3.7	NA	NA	NA	NA	NA	NA
Mercury	3.13	3.13	0.208	---	NA	NA	NA	NA	0.0036J	<0.0032	NA	NA	NA	NA	NA	NA
Selenium	391	5840	0.52	---	NA	NA	NA	NA	<0.70	<0.78	NA	NA	NA	NA	NA	NA
Silver	391	5840	0.8491	---	NA	NA	NA	NA	<0.25	<0.28	NA	NA	NA	NA	NA	NA

Notes:
Metal values are compared residual contaminant levels if the background threshold values are exceeded
Bold values exceed protection of groundwater residual contaminant level.
Boxed values exceed industrial direct contact residual contaminant level.
--- - no standard established
J - Results between laboratory limit of detection and limit of quanitification
bgs - below ground surface
mg/kg - milligrams per kilogram
NA - not analyzed
RCRA - resource conservation recovery act
PAHs - polycyclic aromatic hydrocarbons
VOCs - volatile organic compounds

Table 2. Soil Analytical Results
Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

PARAMETERS	Non-Industrial Direct Contact Residual Contaminant Level	Industrial Direct Contact Residual Contaminant Level	Protection of Groundwater Residual Contaminant Level	Background Threshold Value	SP-15		SP-16		SP-17		SP-18		SP-19		SP-20	
Date Collected					8/29/2016		8/29/2016		8/29/2016		8/29/2016		8/29/2016		8/29/2016	
Depth (feet bgs)					2-4	8-10	2-4	8-10	2-4	8-10	2-4	8-10	2-4	8-10	2-4	8-10
Saturated(s)/Unsaturated(u)					u	u	u	u	u	u	u	u	u	u	u	u
Detected VOCs (mg/kg)																
cis-1,2-Dichloroethene	156	2,040	0.0412	---	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.036	<0.025
Tetrachloroethene	30.7	153	0.0045	---	**1.8**	**0.17**	<0.025	**0.026J**	**0.078**	**0.18**	**0.064J**	<0.025	<0.025	<0.025	<0.036	<0.025
Trichloroethene	1.26	8.81	0.0036	---	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.036	<0.025
PAHs (mg/kg)																
Acenaphthene	3,590	45,200	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	---	---	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	17,900	100,000	196.9492	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1.14	20.8	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.115	2.11	0.47	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1.15	21.1	0.2390	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	---	---	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	11.5	211	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	115	2,110	0.0721	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.115	2.11	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,390	30,100	88.8778	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,390	30,100	14.8299	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1.15	21.1	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-methylnaphthalene	17.6	72.7	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-methylnaphthalene	239	3,010	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	5.52	24.1	0.6582	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	---	---	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1,790	22,600	54.5455	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RCRA Metals (mg/kg)																
Arsenic	0.677	3	0.584	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	15,300	100,000	164.8	364	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	71.1	985	0.752	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	---	---	360000	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	400	800	27	52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	3.13	3.13	0.208	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	391	5840	0.52	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	391	5840	0.8491	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Metal values are compared residual contaminant levels if the background threshold values are exceeded
Bold values exceed protection of groundwater residual contaminant level.
Boxed values exceed industrial direct contact residual contaminant level.
--- - no standard established
J - Results between laboratory limit of detection and limit of quanitification
bgs - below ground surface
mg/kg - milligrams per kilogram
NA - not analyzed
RCRA - resource conservation recovery act
PAHs - polycyclic aromatic hydrocarbons
VOCs - volatile organic compounds

Table 2. Soil Analytical Results
Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

PARAMETERS	Non-Industrial Direct Contact Residual Contaminant Level	Industrial Direct Contact Residual Contaminant Level	Protection of Groundwater Residual Contaminant Level	Background Threshold Value	SP-21			SP-22			SP-23			SP-24		
Date Collected					3/14/2017			3/14/2017			3/14/2017			3/14/2017		
Depth (feet bgs)					2-4	8-10	22-24	2-4	14-16	18-20	2-4	14-16	18-20	2-4	14-16	18-20
Saturated(s)/Unsaturated(u)					u	u	u	u	u	u	u	u	u	u	u	u
Detected VOCs (mg/kg)																
cis-1,2-Dichloroethene	156	2,040	0.0412	---	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	30.7	153	0.0045	---	**0.62**	**0.20**	**0.37**	**0.38**	**0.53**	**0.65**	**0.30**	**0.083**	**0.10**	**0.062J**	**0.23**	**0.34**
Trichloroethene	1.26	8.81	0.0036	---	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
PAHs (mg/kg)																
Acenaphthene	3,590	45,200	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	---	---	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	17,900	100,000	196.9492	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1.14	20.8	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.115	2.11	0.47	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1.15	21.1	0.2390	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	---	---	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	11.5	211	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	115	2,110	0.0721	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	0.115	2.11	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	2,390	30,100	88.8778	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	2,390	30,100	14.8299	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1.15	21.1	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-methylnaphthalene	17.6	72.7	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-methylnaphthalene	239	3,010	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	5.52	24.1	0.6582	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	---	---	---	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1,790	22,600	54.5455	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RCRA Metals (mg/kg)																
Arsenic	0.677	3	0.584	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	15,300	100,000	164.8	364	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	71.1	985	0.752	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	---	---	360000	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	400	800	27	52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	3.13	3.13	0.208	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	391	5840	0.52	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	391	5840	0.8491	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Metal values are compared residual contaminant levels if the background threshold values are exceeded
Bold values exceed protection of groundwater residual contaminant level.
Boxed values exceed industrial direct contact residual contaminant level.
--- - no standard established
J - Results between laboratory limit of detection and limit of quanitification
bgs - below ground surface
mg/kg - milligrams per kilogram
NA - not analyzed
RCRA - resource conservation recovery act
PAHs - polycyclic aromatic hydrocarbons
VOCs - volatile organic compounds

Table 2. Soil Analytical Results
Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

PARAMETERS	Non-Industrial Direct Contact Residual Contaminant Level	Industrial Direct Contact Residual Contaminant Level	Protection of Groundwater Residual Contaminant Level	Background Threshold Value	MW-1	MW-3		MW-6	
Date Collected					4/15/2015	7/15/2015	7/15/2015	9/16/2015	9/16/2015
Depth (feet bgs)					2-4	2-4	12.5-15	2-4	6-8
Saturated(s)/Unsaturated(u)					u	u	u	u	u
Detected VOCs (mg/kg)									
cis-1,2-Dichloroethene	156	2,040	0.0412	---	NA	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	30.7	153	0.0045	---	NA	<0.025	**0.12**	<0.025	<0.025
Trichloroethene	1.26	8.81	0.0036	---	NA	<0.025	<0.025	<0.025	<0.025
PAHs (mg/kg)									
Acenaphthene	3,590	45,200	---	---	NA	<0.010	<0.0088	<0.0086	NA
Acenaphthylene	---	---	---	---	NA	<0.0091	<0.0079	<0.0077	NA
Anthracene	17,900	100,000	196.9492	---	NA	<0.011	<0.0091	<0.0089	NA
Benzo(a)anthracene	1.14	20.8	---	---	NA	<0.0070	<0.0061	0.025	NA
Benzo(a)pyrene	0.115	2.11	0.47	---	NA	<0.0072	<0.0063	0.032	NA
Benzo(b)fluoranthene	1.15	21.1	0.2390	---	NA	<0.010	<0.0088	0.034	NA
Benzo(g,h,i)perylene	---	---	---	---	NA	<0.0077	<0.0067	0.025	NA
Benzo(k)fluoranthene	11.5	211	---	---	NA	<0.011	<0.0097	0.032	NA
Chrysene	115	2,110	0.0721	---	NA	<0.0094	<0.0081	0.041	NA
Dibenzo(a,h)anthracene	0.115	2.11	---	---	NA	<0.0074	<0.0064	0.0065J	NA
Fluoranthene	2,390	30,100	88.8778	---	NA	<0.010	<0.0088	0.074	NA
Fluorene	2,390	30,100	14.8299	---	NA	<0.010	<0.0088	<0.0086	NA
Indeno(1,2,3-cd)pyrene	1.15	21.1	---	---	NA	<0.0077	<0.0067	0.021	NA
1-methylnaphthalene	17.6	72.7	---	---	NA	<0.010	<0.0088	<0.0086	NA
2-methylnaphthalene	239	3,010	---	---	NA	<0.010	<0.0088	<0.0086	NA
Naphthalene	5.52	24.1	0.6582	---	NA	<0.010	<0.0088	<0.0086	NA
Phenanthrene	---	---	---	---	NA	<0.010	<0.0088	0.026	NA
Pyrene	1,790	22,600	54.5455	---	NA	<0.010	<0.0088	0.057	NA
RCRA Metals (mg/kg)									
Arsenic	0.677	3	0.584	8	6.4	NA	NA	NA	NA
Barium	15,300	100,000	164.8	364	94.8	NA	NA	NA	NA
Cadmium	71.1	985	0.752	1	<0.088	NA	NA	NA	NA
Chromium	---	---	360000	44	25.9	NA	NA	NA	NA
Lead	400	800	27	52	14.7	NA	NA	NA	NA
Mercury	3.13	3.13	0.208	---	0.031	NA	NA	NA	NA
Selenium	391	5840	0.52	---	<1.0	NA	NA	NA	NA
Silver	391	5840	0.8491	---	<0.37	NA	NA	NA	NA

Notes:
Metal values are compared residual contaminant levels if the background threshold values are exceeded
Bold values exceed protection of groundwater residual contaminant level.
Boxed values exceed industrial direct contact residual contaminant level.
--- - no standard established
J - Results between laboratory limit of detection and limit of quanitification
bgs - below ground surface
mg/kg - milligrams per kilogram
NA - not analyzed
RCRA - resource conservation recovery act
PAHs - polycyclic aromatic hydrocarbons
VOCs - volatile organic compounds

Vapor Analytical Results

Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

Sample Type - Background Air (BA), Ambient Air (AA), or Sub-Slab (SS)	LARGE COMMERCIAL Target Sub-Slab Vapor Risk Screening Levels	LARGE COMMERCIAL Target Indoor Air Vapor Action Levels	SS	AA	SS	AA	SS	AA
Sample I.D.			KVP-1	IA-1	KVP-2	IA-2	KVP-3	IA-3
Pressurization System Operation			Pre-Installation					
Duration of Sample Collection (hrs)			0.5	24	0.5	24	0.5	24
Date Collected			8/22/2016	9/27/2016	8/22/2016	9/27/2016	8/22/2016	9/27/2016
Detected VOCs (ug/m^3) by EPA Method TO-15								
Acetone	14,000,000	140,000	173	10.9	208	7.4	315	14.1
Benzene	1,600	16	1.8	0.71	5.3	0.74	5.8	0.96
Bromomethane	2,200	22	<0.60	<0.48	<0.60	<0.48	1.3J	<0.50
2-Butanone (MEK)	2,200,000	22,000	9.6	3.3J	16.0	<0.35	10.5	9.0
Carbon disulfide	310,000	3,100	2.0	<0.16	0.83J	<0.16	2.0	<0.16
Carbon tetrachloride	2,000	20	0.81J	2.0J	<0.37	2.0J	0.73J	2.0J
Chloroform	530	5.3	2.2	<0.29	14.5	<0.29	1.6	<0.31
Chloromethane	39,000	390	<0.21	<0.17	0.76J	<0.17	<0.21	<0.17
Cyclohexane	2,600,000	26,000	5.4	0.82J	8.2	<0.49	14.8	1.0J
1,2-Dichlorobenzene	88,000	880	<0.98	<0.79	<0.98	<0.79	<0.98	<0.82
1,3-Dichlorobenzene	--	---	<1.0	<0.82	<1.0	4.6J	<1.0	<0.85
1,4-Dichlorobenzene	1,100	11	41.8	60.5	11.9	3.3	5.3J	23.9
Dichlorodifluoromethane	44,000	440	3.1	4.3	28.4	1.9	3.0	1.7
1,1-Dichloroethane	7,700	77	<0.30	<0.24	2.3	<0.24	<0.30	<0.25
1,2-Dichloroethane	470	4.7	<0.39	<0.32	2.4	<0.32	1.4J	<0.33
1,1-Dichloroethene	88,000	880	<0.46	<0.37	3.7	<0.37	<0.46	<0.38
cis-1,2-Dichloroethene	--	---	100	<0.38	13,800J	0.91J	5.1	<0.40
trans-1,2-Dichloroethene	--	---	4.0	<0.40	29.9	<0.60	<0.74	<0.62
Ethanol	--	---	49.1	23.8	69.1	<0.41	93.5	53.1
Ethyl acetate	31,000	310	2.6J	1.6	4.4	<0.54	3.4J	1.2
Ethylbenzene	4,900	49	13.2	1.5	15.1	1.8	22.5	1.5
4-Ethyltoluene	--	---	13.0	2.1J	13.8	<0.29	16.0	2.1J
N-Heptane	--	---	4.1	1.0J	5.3	0.83J	11.2	1.4
Hexachloro-1,3-butadiene	--	---	4.2	<1.0	<1.2	<1.0	<1.2	<1.0
n-Hexane	310,000	3,100	2.2	1.9	4.4	1.4	10.3	2.1
Methylene Chloride	260,000	2,600	7.5	16.9	41.5	5.1J	3.5J	10.2
4-Methyl-2-pentanone (MIBK)	1,300,000	13,000	16.6	<0.34	14.6	<0.34	17.0	<0.35
Naphthalene	360	3.6	154	4.1	112	3.8J	102	4.9
2-Propanol	--	---	14.3	7.3	12.6	<0.37	20.5	7.6
Propylene	1,300,000	13,000	<0.26	<0.21	<0.26	<0.21	<0.26	<0.22
Styrene	440,000	4,400	6.5	3.0J	4.9	3.3J	4.6	19.6
Tetrachloroethene	18,000	180	116	86	**404,000**	306	**20,400**	119
Tetrahydrofuran	--	---	6.1	<0.18	9.2	<0.18	10.9	<0.19
Toluene	2,200,000	22,000	137	9.7	149	4.0	596	39.4
1,2,4-Trichlorobenzene	880	8.8	10.1	<1.4	9.5	<1.4	<1.7	<1.5

Vapor Analytical Results

Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

Sample Type - Background Air (BA), Ambient Air (AA), or Sub-Slab (SS)	LARGE COMMERCIAL Target Sub-Slab Vapor Risk Screening Levels	LARGE COMMERCIAL Target Indoor Air Vapor Action Levels	SS	AA	SS	AA	SS	AA
Sample I.D.			**KVP-1**	**IA-1**	**KVP-2**	**IA-2**	**KVP-3**	**IA-3**
Pressurization System Operation			**Pre-Installation**					
Duration of Sample Collection (hrs)			**0.5**	**24**	**0.5**	**24**	**0.5**	**24**
Date Collected			**8/22/2016**	**9/27/2016**	**8/22/2016**	**9/27/2016**	**8/22/2016**	**9/27/2016**
Detected VOCs (ug/m^3) by EPA Method TO-15								
1,1,1-Trichloroethane	2,200,000	22,000	3.9	<0.38	24.9	<0.38	5.9	<0.40
Trichloroethene	880	8.8	257	3.0	**9,710J**	1.5	60.0	1.2
Trichlorofluoromethane	310,000	3,100	2.4	1.4J	2.5	1.4J	2.7	1.3J
1,1,2-Trichlorotrifluoroethane	---	---	72.0	0.78J	8,530J	1.5J	1.2J	0.71J
1,2,4-Trimethylbenzene	3,100	31	66.7	3.1J	49.0	<0.19	59.5	2.6J
1,3,5-Trimethylbenzene	--	---	15.6	2.1J	13.9	1.8J	16.1	1.8J
Vinyl Acetate	88,000	880	3.1J	0.70J	3.8	<0.51	5.3	<0.53
Vinyl Chloride	2,800	28	<0.37	<0.30	5.4	<0.30	<0.37	<0.31
m&p-Xylene	44,000	440	48.0	3.4	49.5	2.8	75.3	3.7
o-Xylene	44,000	440	23.0	1.4	23.7	<0.54	32.6	1.6

Data compared to large commerical levels. Building is greater than 25,000 square feet.

Background and indoor air samples are compared to target indoor air action levels

Sub-slab samples are compare to target sub-slab vapor risk screening levels

Bold values exceed the target sub-slab vapor risk screening levels

Boxed values exceeded the target indoor air action levels

- - No Target Vapor Risk Screning Level established by the United States Environmental Protection Agency

J - Estimated concentration

ug/m^3 = Micrograms per cubic meter

Vapor Action Levels based on USEPA Regional Screening Levels (RSLs), December 2015

Sub-slab samples were collected using the high purge volume sampling methodology.

All vapor samples collected into 6 liter Summa canisters

Vapor Analytical Results

Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

Sample Type - Background Air (BA), Ambient Air (AA), or Sub-Slab (SS)	LARGE COMMERCIAL Target Sub-Slab Vapor Risk Screening Levels	LARGE COMMERCIAL Target Indoor Air Vapor Action Levels	SS	AA	SS	AA	SS	AA	SS	AA
Sample I.D.			**KVP-4**	**IA-4**	**KVP-5**	**IA-5**	**KVP-6**	**IA-6**	**KVP-7**	**IA-7**
Pressurization System Operation			**Pre-Installation**							
Duration of Sample Collection (hrs)			**0.5**	**24**	**0.5**	**24**	**0.5**	**24**	**0.5**	**24**
Date Collected			**3/16/2017**	**3/21/2017**	**3/16/2017**	**3/21/2017**	**3/16/2017**	**3/21/2017**	**3/16/2017**	**3/21/2017**
Detected VOCs (ug/m^3) by EPA Method TO-15										
Acetone	14,000,000	140,000	30.1	140	35.1	81.5	38.0	111	388	97.8
Benzene	1,600	16	4.3	1.8	31.3	2.1	3.8	2.3	6.5	1.9
Bromomethane	2,200	22	<0.62	<0.46	<0.62	<0.46	<0.66	<0.45	<0.54	<0.46
2-Butanone (MEK)	2,200,000	22,000	14.5	65.0	13.5	36.3	10	52.1	61.4	28.7
Carbon disulfide	310,000	3,100	1.2J	<0.15	<0.20	<0.15	<0.21	<0.15	1.6	<0.15
Carbon tetrachloride	2,000	20	<0.39	<0.29	<0.39	<0.29	<0.41	<0.28	<0.34	<0.29
Chloroform	530	5.3	2.6	<0.28	0.56J	<0.28	<0.40	<0.27	<0.33	<0.28
Chloromethane	39,000	390	<0.22	<0.16	0.33J	<0.16	<0.23	<0.16	<0.19	<0.16
Cyclohexane	2,600,000	26,000	4.4	3.1	6.8	3.3	12.1	3.1	6.6	3.3
1,2-Dichlorobenzene	88,000	880	<1.0	2.2J	<1.0	<0.76	<1.1	<0.74	<0.90	<0.76
1,3-Dichlorobenzene	--	---	<1.1	<0.79	<1.1	<0.79	<1.1	<0.76	<0.93	<0.79
1,4-Dichlorobenzene	1,100	11	31.1	231	17.6	77.7	4.9J	92.7	22.8	178
Dichlorodifluoromethane	44,000	440	1.3J	3.8	1.7J	2.7	1.6J	3.0	2.1	3.7
1,1-Dichloroethane	7,700	77	<0.32	<0.23	<0.32	<0.23	<0.33	<0.23	<0.27	<0.23
1,2-Dichloroethane	470	4.7	<0.41	<0.31	<0.41	<0.31	<0.43	<0.30	<0.36	<0.31
1,1-Dichloroethene	88,000	880	<0.48	<0.35	<0.48	<0.35	<0.50	<0.34	<0.42	<0.35
cis-1,2-Dichloroethene	--	---	41.1	<0.37	5.8	<0.37	<0.52	<0.35	1.2J	<0.37
trans-1,2-Dichloroethene	--	---	3.3	<0.57	<0.77	<0.57	<0.81	<0.55	<0.67	<0.57
Ethanol	--	---	51.6	414	56.3	145	92.6	172	360	317
Ethyl acetate	31,000	310	<0.70	6.1	5.1	4.4	1.1J	4.9	39.6	2.5
Ethylbenzene	4,900	49	86.4	5.4	131	3.4	221	4.3	118	5.5
4-Ethyltoluene	--	---	10.7	3.1J	11.5	2.4J	16.0	2.8J	20.3	3.3J
N-Heptane	--	---	6.3	6.3	7.4	7.6	9.5	6.9	6.4	6.2
Hexachloro-1,3-butadiene	--	---	4.3J	<0.97	<1.3	<0.97	<1.4	<0.94	<1.1	<0.97
n-Hexane	310,000	3,100	4.5	13.0	5.8	<0.53	8.3	<0.51	9.2	<0.53
Methylene Chloride	260,000	2,600	14.8	429	10	85.1	10.3	126	34.0	687
4-Methyl-2-pentanone (MIBK)	1,300,000	13,000	<0.44	<0.32	1.1J	<0.32	1.7J	<0.31	1.7J	<0.32
Naphthalene	360	3.6	15.0	<0.45	17.1	<0.45	11.7	<0.44	146	<0.45
2-Propanol	--	---	4.5J	23.6	4.8J	12.7	4.8J	14.2	815	14.5
Propylene	1,300,000	13,000	<0.27	<0.20	<0.27	<0.20	<0.29	71.3	<0.24	<0.20
Styrene	440,000	4,400	10.5	7.8	11.6	7.4	4.4	8.9	11.2	7.2
Tetrachloroethene	18,000	180	**32,100**	152	7,580	107	214	92.7	**11,500**	122
Tetrahydrofuran	--	---	5.0	5.9	5.8	4.2	7.4	5.1	29.9	5.3
Toluene	2,200,000	22,000	153	306	117	135	94.3	193	129	323
1,2,4-Trichlorobenzene	880	8.8	6.3J	<1.4	<1.8	<1.4	<1.9	<1.3	<1.6	<1.4

Vapor Analytical Results

Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

Sample Type - Background Air (BA), Ambient Air (AA), or Sub-Slab (SS)	LARGE COMMERCIAL Target Sub-Slab Vapor Risk Screening Levels	LARGE COMMERCIAL Target Indoor Air Vapor Action Levels	SS	AA	SS	AA	SS	AA	SS	AA
Sample I.D.			**KVP-4**	**IA-4**	**KVP-5**	**IA-5**	**KVP-6**	**IA-6**	**KVP-7**	**IA-7**
Pressurization System Operation			**Pre-Installation**							
Duration of Sample Collection (hrs)			**0.5**	**24**	**0.5**	**24**	**0.5**	**24**	**0.5**	**24**
Date Collected			**3/16/2017**	**3/21/2017**	**3/16/2017**	**3/21/2017**	**3/16/2017**	**3/21/2017**	**3/16/2017**	**3/21/2017**
Detected VOCs (ug/m^3) by EPA Method TO-15										
1,1,1-Trichloroethane	2,200,000	22,000	6.8	<0.37	<0.50	<0.37	<0.52	<0.36	6.0	<0.37
Trichloroethene	880	8.8	95.9	38.1	29.6	9.7	<0.59	14.4	25.6	55.8
Trichlorofluoromethane	310,000	3,100	<0.27	<0.20	1.0J	<0.20	<0.28	1.4J	1.0J	1.4J
1,1,2-Trichlorotrifluoroethane	---	---	344	1.1J	197	0.88J	0.85J	0.72J	10.2	0.94J
1,2,4-Trimethylbenzene	3,100	31	31.4	8.1	31.7	6.1	41.0	6.5	107	8.4
1,3,5-Trimethylbenzene	--	---	6.9	2.9J	7.2	2.5J	9.8	2.7J	20.4	3.0J
Vinyl Acetate	88,000	880	1.1J	<0.49	3.2	2.0	<0.70	2.2	2.9	<0.49
Vinyl Chloride	2,800	28	<0.39	<0.29	<0.39	<0.29	<0.41	<0.28	<0.34	<0.29
m&p-Xylene	44,000	440	52.0	19.9	54.6	12.5	79.6	16.1	54.7	21.7
o-Xylene	44,000	440	22.8	5.4	24.3	3.8	35.6	4.7	25.0	5.8

Data compared to large commerical levels. Building is greater than 25,000 square feet.

Background and indoor air samples are compared to target indoor air action levels

Sub-slab samples are compare to target sub-slab vapor risk screening levels

Bold values exceed the target sub-slab vapor risk screening levels

Boxed values exceeded the target indoor air action levels

- - No Target Vapor Risk Screning Level established by the United States Environmental Protect

J - Estimated concentration

ug/m^3 = Micrograms per cubic meter

Vapor Action Levels based on USEPA Regional Screening Levels (RSLs), December 2015

Sub-slab samples were collected using the high purge volume sampling methodology.

All vapor samples collected into 6 liter Summa canisters

Vapor Analytical Results

Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

Sample Type - Background Air (BA), Ambient Air (AA), or Sub-Slab (SS)	LARGE COMMERCIAL Target Sub-Slab Vapor Risk Screening Levels	LARGE COMMERCIAL Target Indoor Air Vapor Action Levels	BA	BA	AA	AA	AA	AA
Sample I.D.			BA-1	BA-2	IA-8	IA-9	IA-10	IA-11
Pressurization System Operation			Pre-Installation					
Duration of Sample Collection (hrs)			8	8	8	8	8	8
Date Collected			1/16/2018	1/16/2018	1/16/2018	1/16/2018	1/16/2018	1/16/2018
Detected VOCs (ug/m^3) by EPA Method TO-15								
Acetone	14,000,000	140,000	4.8	4.7	139	39.5	27.6	46.1
Benzene	1,600	16	0.39J	0.41J	1.6	1.2	1.3J	1.4
Bromomethane	2,200	22	<0.29	<0.30	<0.32	<0.32	<0.52	<0.33
2-Butanone (MEK)	2,200,000	22,000	<0.29	<0.29	<0.31	13.2	8.5	19.3
Carbon disulfide	310,000	3,100	<0.25	<0.26	<0.28	<0.28	<0.45	<0.28
Carbon tetrachloride	2,000	20	<0.45	<0.46	<0.49	<0.49	<0.80	<0.50
Chloroform	530	5.3	<0.33	<0.33	<0.36	<0.36	<0.58	<0.36
Chloromethane	39,000	390	0.80	0.80	1.3	0.79	0.60J	0.57J
Cyclohexane	2,600,000	26,000	<0.32	1.3	1.5	2.2	2.2	2.5
1,2-Dichlorobenzene	88,000	880	<0.46	<0.47	<0.51	<0.51	<0.82	<0.52
1,3-Dichlorobenzene	--	---	<0.66	<0.67	<0.72	<0.72	<1.2	<0.74
1,4-Dichlorobenzene	1,100	11	<0.31	<0.32	8.2	201	49.8	93.4
Dichlorodifluoromethane	44,000	440	1.5	1.4J	2.5	1.8	1.5J	2.0
1,1-Dichloroethane	7,700	77	<0.30	<0.31	<0.33	<0.33	<0.53	<0.33
1,2-Dichloroethane	470	4.7	<0.28	<0.29	<0.31	<0.31	<0.50	<0.31
1,1-Dichloroethene	88,000	880	<0.33	<0.34	<0.37	<0.37	<0.60	<0.37
cis-1,2-Dichloroethene	--	---	<0.48	<0.49	<0.53	<0.53	<0.86	<0.54
trans-1,2-Dichloroethene	--	---	<0.42	<0.42	<0.46	<0.46	<0.74	<0.47
Ethanol	--	---	2.4J	2.5J	56.3	307	59.1	116
Ethyl acetate	31,000	310	<0.28	<0.28	1.9	2.4	1.9	2.4
Ethylbenzene	4,900	49	<0.24	<0.25	0.70J	2.2	1.1J	1.6
4-Ethyltoluene	--	---	<0.30	<0.31	<0.33	0.87J	<0.54	<0.34
N-Heptane	--	---	<0.30	<0.30	0.93J	3.4	3.2	3.6
Hexachloro-1,3-butadiene	--	---	<1.2	<1.3	<1.3	<1.3	<2.2	<1.4
n-Hexane	310,000	3,100	<0.47	<0.48	142	3.2	3.9	3.8
Methylene Chloride	260,000	2,600	<2.1	<2.2	488	107	47.0	70.8
4-Methyl-2-pentanone (MIBK)	1,300,000	13,000	<0.50	<0.51	<0.55	<0.55	<0.90	<0.56
Naphthalene	360	3.6	<0.84	<0.86	<0.93	<0.93	<1.5	<0.94
2-Propanol	--	---	<1.8	<1.8	<1.9	<1.9	12.0	13.0
Propylene	1,300,000	13,000	<0.22	<0.23	<0.24	<0.24	<0.40	<0.25
Styrene	440,000	4,400	<0.24	<0.24	0.76J	9.6	16.7	12.2
Tetrachloroethene	18,000	180	<0.40	<0.41	6.4	92.3	75.0	85.0
Tetrahydrofuran	--	---	<0.39	<0.39	<0.42	3.1	2.3	4.6
Toluene	2,200,000	22,000	<0.22	0.63J	32.9	54.1	32.2	63.6
1,2,4-Trichlorobenzene	880	8.8	<1.4	<1.4	<1.5	<1.5	<2.4	<1.5

Vapor Analytical Results

Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

Sample Type - Background Air (BA), Ambient Air (AA), or Sub-Slab (SS)	LARGE COMMERCIAL Target Sub-Slab Vapor Risk Screening Levels	LARGE COMMERCIAL Target Indoor Air Vapor Action Levels	BA	BA	AA	AA	AA	AA
Sample I.D.			BA-1	BA-2	IA-8	IA-9	IA-10	IA-11
Pressurization System Operation			Pre-Installation					
Duration of Sample Collection (hrs)			8	8	8	8	8	8
Date Collected			1/16/2018	1/16/2018	1/16/2018	1/16/2018	1/16/2018	1/16/2018
Detected VOCs (ug/m^3) by EPA Method TO-15								
1,1,1-Trichloroethane	2,200,000	22,000	<0.48	<0.49	<0.53	<0.53	<0.86	<0.54
Trichloroethene	880	8.8	<0.38	<0.39	1.2J	12.5	5.2	8.6
Trichlorofluoromethane	310,000	3,100	0.96J	<0.60	1.4J	1.1J	<1.1	0.98J
1,1,2-Trichlorotrifluoroethane	---	---	<0.52	<0.53	<0.57	<0.57	<0.93	<0.58
1,2,4-Trimethylbenzene	3,100	31	<0.24	<0.25	1.8	3.6	1.9J	2.8
1,3,5-Trimethylbenzene	--	---	<0.58	<0.59	<0.64	0.81J	<1.0	<0.65
Vinyl Acetate	88,000	880	<0.23	<0.24	<0.26	<0.26	<0.42	<0.26
Vinyl Chloride	2,800	28	<0.18	<0.18	<0.20	<0.20	<0.32	<0.20
m&p-Xylene	44,000	440	<0.49	<0.50	2.6J	6.4	3.0J	5.1
o-Xylene	44,000	440	<0.52	<0.53	0.99J	2.1	1.3J	1.7

Data compared to large commerical levels. Building is greater than 25,000 square feet.

Background and indoor air samples are compared to target indoor air action levels

Sub-slab samples are compare to target sub-slab vapor risk screening levels

Bold values exceed the target sub-slab vapor risk screening levels

Boxed values exceeded the target indoor air action levels

- - No Target Vapor Risk Screning Level established by the United States Environmental Protect

J - Estimated concentration

ug/m^3 = Micrograms per cubic meter

Vapor Action Levels based on USEPA Regional Screening Levels (RSLs), December 2015

Sub-slab samples were collected using the high purge volume sampling methodology.

All vapor samples collected into 6 liter Summa canisters

Vapor Analytical Results

Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

Sample Type - Background Air (BA), Ambient Air (AA), or Sub-Slab (SS)	LARGE COMMERCIAL Target Sub-Slab Vapor Risk Screening Levels	LARGE COMMERCIAL Target Indoor Air Vapor Action Levels	AA	AA	AA	AA	AA	AA	AA
Sample I.D.			IA-12	IA-13	IA-14	IA-15	IA-16	IA-17	IA-18
Pressurization System Operation			Post Installation						
Duration of Sample Collection (hrs)			8	8	8	8	8	8	8
Date Collected			4/6/2018	4/6/2018	4/6/2018	4/6/2018	4/6/2018	4/6/2018	4/6/2018
Detected VOCs (ug/m^3) by EPA Method TO-15									
Acetone	14,000,000	140,000	70.8	63.3	97.2	90.8	93.0	72.8	82.3
Benzene	1,600	16	1.3	1.3	2.3	2.5	2.4	1.4	2.2
Bromomethane	2,200	22	<0.44	<0.32	<0.32	<0.31	<0.33	<0.32	<0.32
2-Butanone (MEK)	2,200,000	22,000	19.7	19.5	19.5	19.1	22.9	22.7	25.1
Carbon disulfide	310,000	3,100	<0.38	<0.28	<0.28	<0.27	<0.29	<0.28	<0.28
Carbon tetrachloride	2,000	20	<0.67	0.51J	0.59J	<0.47	0.56J	<0.49	<0.49
Chloroform	530	5.3	<0.49	<0.36	<0.36	<0.34	<0.37	<0.36	<0.36
Chloromethane	39,000	390	<0.28	<0.21	1.4	<0.20	<0.22	<0.21	<0.21
Cyclohexane	2,600,000	26,000	2.5	2.5	6.0	6.8	6.2	3.4	5.7
1,2-Dichlorobenzene	88,000	880	2.3J	2.3	<0.51	<0.49	<0.52	<0.51	2.5
1,3-Dichlorobenzene	--	---	<0.99	<0.72	<0.72	<0.69	<0.75	<0.72	<0.72
1,4-Dichlorobenzene	1,100	11	211	226	163	143	178	217	211
Dichlorodifluoromethane	44,000	440	3.6	3.4	3.1	3.0	3.2	3.2	3.3
1,1-Dichloroethane	7,700	77	<0.45	<0.33	<0.33	<0.32	<0.34	<0.33	<0.33
1,2-Dichloroethane	470	4.7	0.47J	0.41J	<0.31	0.53J	0.50J	0.49J	0.49J
1,1-Dichloroethene	88,000	880	<0.50	<0.37	<0.37	<0.35	<0.38	<0.37	<0.37
cis-1,2-Dichloroethene	--	---	<0.72	<0.53	<0.53	<0.51	<0.55	<0.53	<0.53
trans-1,2-Dichloroethene	--	---	<0.63	<0.46	<0.46	<0.44	<0.47	<0.46	<0.46
Ethanol	--	---	305	297	222	234	282	295	329
Ethyl acetate	31,000	310	2.0	1.8	2.4	3.3	2.5	2.1	2.7
Ethylbenzene	4,900	49	2.7	2.7	6.7	7.4	8.9	3.6	4.7
4-Ethyltoluene	--	---	0.95J	0.84J	2.5	2.6	3.2	1.4J	2.0
N-Heptane	--	---	3.8	3.6	7.0	7.9	7.3	4.5	6.0
Hexachloro-1,3-butadiene	--	---	<1.8	<1.3	<1.3	<1.3	<1.4	<1.3	<1.3
n-Hexane	310,000	3,100	2.4	2.3	7.0	7.8	7.1	2.8	7.3
Methylene Chloride	260,000	2,600	42.8	40.4	29.6	29.8	33.9	39.6	39.6
4-Methyl-2-pentanone (MIBK)	1,300,000	13,000	<0.75	<0.55	<0.55	0.68J	<0.57	<0.55	<0.55
Naphthalene	360	3.6	5.7	4.7	5.2	5.1	6.2	4.9	6.4
2-Propanol	--	---	15.0	12.6	11.9	14.7	12.4	11.2	13.8
Propylene	1,300,000	13,000	<0.33	<0.24	<0.24	<0.23	<0.25	<0.24	<0.24
Styrene	440,000	4,400	7.5	7.9	36.1	36.6	29.3	11.3	12.7
Tetrachloroethene	18,000	180	30.0	32.2	118	87.7	63.5	39.5	41.2
Tetrahydrofuran	--	---	1.9	1.8	<0.42	<0.41	3.5	2.1	3.9
Toluene	2,200,000	22,000	66.8	66.6	85.4	90.2	111	80.4	96.2
1,2,4-Trichlorobenzene	880	8.8	<2.0	<1.5	<1.5	<1.4	<1.5	<1.5	<1.5

Vapor Analytical Results

Schaefer Brush, 1101 South Prairie Avenue, Waukesha, Wisconsin

Sample Type - Background Air (BA), Ambient Air (AA), or Sub-Slab (SS)	LARGE COMMERCIAL Target Sub-Slab Vapor Risk Screening Levels	LARGE COMMERCIAL Target Indoor Air Vapor Action Levels	AA	AA	AA	AA	AA	AA	AA
Sample I.D.			**IA-12**	**IA-13**	**IA-14**	**IA-15**	**IA-16**	**IA-17**	**IA-18**
Pressurization System Operation			**Post Installation**						
Duration of Sample Collection (hrs)			**8**	**8**	**8**	**8**	**8**	**8**	**8**
Date Collected			**4/6/2018**	**4/6/2018**	**4/6/2018**	**4/6/2018**	**4/6/2018**	**4/6/2018**	**4/6/2018**
Detected VOCs (ug/m^3) by EPA Method TO-15									
1,1,1-Trichloroethane	2,200,000	22,000	<0.73	<0.53	<0.53	<0.51	<0.55	<0.53	<0.53
Trichloroethene	880	8.8	4.1	4.8	3.7	3.6	4.2	4.5	4.7
Trichlorofluoromethane	310,000	3,100	1.8J	1.6J	1.7J	1.6J	1.5J	1.5J	1.6J
1,1,2-Trichlorotrifluoroethane	---	---	0.92J	0.81J	1.0J	1.1J	0.84J	0.84J	0.84J
1,2,4-Trimethylbenzene	3,100	31	4.0	4.0	9.1	9.7	11.4	5.4	10.8
1,3,5-Trimethylbenzene	--	---	1.2J	1.0J	2.5	2.6	3.2	1.5J	2.1
Vinyl Acetate	88,000	880	1.7	0.88J	2.1	0.81J	1.6	1.6	1.9
Vinyl Chloride	2,800	28	<0.27	<0.20	<0.20	<0.19	<0.20	<0.20	<0.20
m&p-Xylene	44,000	440	8.9	8.9	27.3	30.6	37.3	13.4	17.8
o-Xylene	44,000	440	3.0	3.1	9.2	10.1	12.5	4.5	5.8

Data compared to large commerical levels. Building is greater than 25,000 square feet.

Background and indoor air samples are compared to target indoor air action levels

Sub-slab samples are compare to target sub-slab vapor risk screening levels

Bold values exceed the target sub-slab vapor risk screening levels

Boxed values exceeded the target indoor air action levels

- - No Target Vapor Risk Screning Level established by the United States Environmental Protect

J - Estimated concentration

ug/m^3 = Micrograms per cubic meter

Vapor Action Levels based on USEPA Regional Screening Levels (RSLs), December 2015

Sub-slab samples were collected using the high purge volume sampling methodology.

All vapor samples collected into 6 liter Summa canisters