KSingh | Engineers Scientists Consultants

MEMORANDUM

DATE	:	June 17, 2023
TO	:	Shane LaFave / Roers Companies, LLC
FROM	:	Pratap Singh, Ph.D., PE / KSingh
SUBJECT	:	Weekly Progress Report for Week Ending 06/17/2023 Community Within the Corridor - East Block
COPY TO	:	Que El-Amin / Scott Crawford, Inc., Robert Reineke, PE, Robert Fedorchak, PE Project #40441B

The purpose of this memorandum is to summarize the work performed as a part of the emergency response for the referenced project for the week ending 06/17/2023. This document is intended to serve two purposes:

1. Summarizing the tasks performed during the past week, and
2. The action items for the following week.

The following tasks were performed this week which are summarized below:

1. Task #1 – GC Testing by KSingh
   KSingh continues to work on conducting gas chromatograph (GC) testing for measurement of TCE in various units of the East Block focused on the first floor. The focus of testing for TCE is concentrated in units that have detected elevated levels of TCE. Attachment A is comprised of Figure 1 for reference of Unit locations and blowers, with the test results of TCE shown in Tables 1 to 5.

   A comprehensive data table of Indoor Air Monitoring Data for TCE is provided in Table 7 (Attachment C). Note that highlighted cell values in green indicate levels that are **lower** than the vapor risk screening levels for **residential** facilities. Graphs showing comprehensive data can be found in Attachment D. The findings of portable discrete testing for TCE are as follows:

   - TCE detections ranged from 0.98 µg/m^3 to 3.47 µg/m^3 in Unit 1045 with an average of 2.1 µg/m^3.
   - TCE detections ranged from 2.4 µg/m^3 to 5.3 µg/m^3 in Unit 1050.
   - TCE was **below detection limit** in the Mechanical Room (1052) where the concrete was filled in under the water pipe going out of the wall onto 32nd Street.
   - TCE detections were **below detection limit** in the First Floor Hallway.
   - Units 1039, 1040, and 1041 had concentrations of TCE **below detection limit**.
   - Sub-slab vapor concentrations taken from various locations saw a decline in the levels after installation of the Obar Fan in the 1B-NW Garage. For example, sub-slab TCE detections

were 1443 µg/m^3 in Unit 1050 and 750 µg/m^3 in Unit 1045 in the previous week that dropped to 303 µg/m^3 and 272 µg/m^3 (refer to Table 5 in the attachment).

- Continuous monitoring was started in Units 1045 and 1050 which are displayed in Attachment D in Figure 2. The continuous monitoring data supports the information gathered from discrete sampling.
- Overall, there was a **significant decline** in the indoor air concentrations in all the residential and utility units on the 1st floor of buildings 1B-W, 1B-SW, and 1B-S.

2. Task #2 – Installation of Ball Valve to Power House
   Horner Plumbing installed a ball valve in the Powerhouse to address the lack of vacuum under the Northern Mechanical Room.

3. Task #3 – Electrical and Plumbing Connection for Blower #s 6 and 7
   Horner Plumbing and Roman Electric are working on providing the plumbing and electrical connection to start two Obar Blowers on the roof. This task is nearing completion. The two additional blowers are anticipated to bring depressurization in the area south of the tunnel.

4. Task #4 – Installation of Permanent Blowers #1 and 2
   One permanent blower was installed by Fliteway Technology in the northern VMS. The second one is placed on the site and awaiting further electrical connection.

5. Task #5 – Coordination with Patriot Engineering
   Robert Fedorchak of Patriot Engineering is providing technical support to depressurize the VMS. Patriot has been consulting with CWC and KSingh on a weekly basis to assess the VMS and develop next steps for optimal performance.

6. Task #6 – VMS Operations and Troubleshooting
   - Three blowers continue to function properly. Fliteway Technology replaced one north temporary 10-HP blower with a permanent 10-HP blower. Replacement of the second temporary blower will require additional electrical power line. Fliteway and KSingh are monitoring the operations of the VMS.
   - **The addition of the fourth blower in the SW Garage (Blower #5) has greatly improved the performance of the VMS.**
   - Installation of new vapor pins in the common area of the garage and the gym area resulted in evidence of depressurization along the active VMS. The results of vacuum measurements are shown in Table 6 in Attachment B.
   - High vacuum was observed in the Fitness Center (1054) and the Mechanical Room (1052) while the Units in the Building 1B-SW had little to no vacuum.

Action Items for Week of June 18, 2023 – June 24, 2023
KSingh plans to perform the following tasks in the upcoming week:

1. Fliteway will replace the second temporary North Blower #2 with a permanent blower next week. Both blowers are 10-HP and yield about 500 cfm each at 14 inches of water vacuum.
2. Two OBAR Fans (GBR-89) were delivered last week, and electrical and piping connections are in progress. Installation of these blowers (Blower #s 6 and 7) is likely to depressurize the southwest

portion of the building. With this installation, it is anticipated that we will have a minimum depressurization of 0.004 inch of water throughout the building. Our goal is to depressurize the building at 0.01 inches of water.

3. Focus efforts on Unit 1045 and Northern Mechanical Room depending on installation of new blowers.
4. Continue discrete sampling in the various impacted units and add results to comprehensive table.
5. Continue continuous sampling of Units 1045 and 1050.
6. Conduct vacuum measurements at strategic locations within the buildings.
7. Continue to prepare comprehensive figures showing indoor air data using Tableau software.
8. Finalize work plan for the potential use of Biochar as an option for corrective action.

Attachments

KSingh has included the following attachments, figures and tables for reference:

- Attachment A: Summary of Monitoring Results by Date
    - Figure 1 – CWC EB Level 1 Map and Blower Locations
    - Tables 1-5 – Indoor Air Monitoring Results by Date
- Attachment B/Table 6: Comprehensive Vacuum Measurements (inches H2O)
- Attachment C/Table 7: Comprehensive Data Table – Indoor Air
- Attachment D/Table 8: Comprehensive Data Table – Sub-Slab Vapor TCE
- Attachment E: Figures 2-6 of TCE Levels through June 16, 2023
- Attachment F: Relevant Photos of Work Performed this Week

Attachment A
Summary of Monitoring Results by Date

East Building Level 1

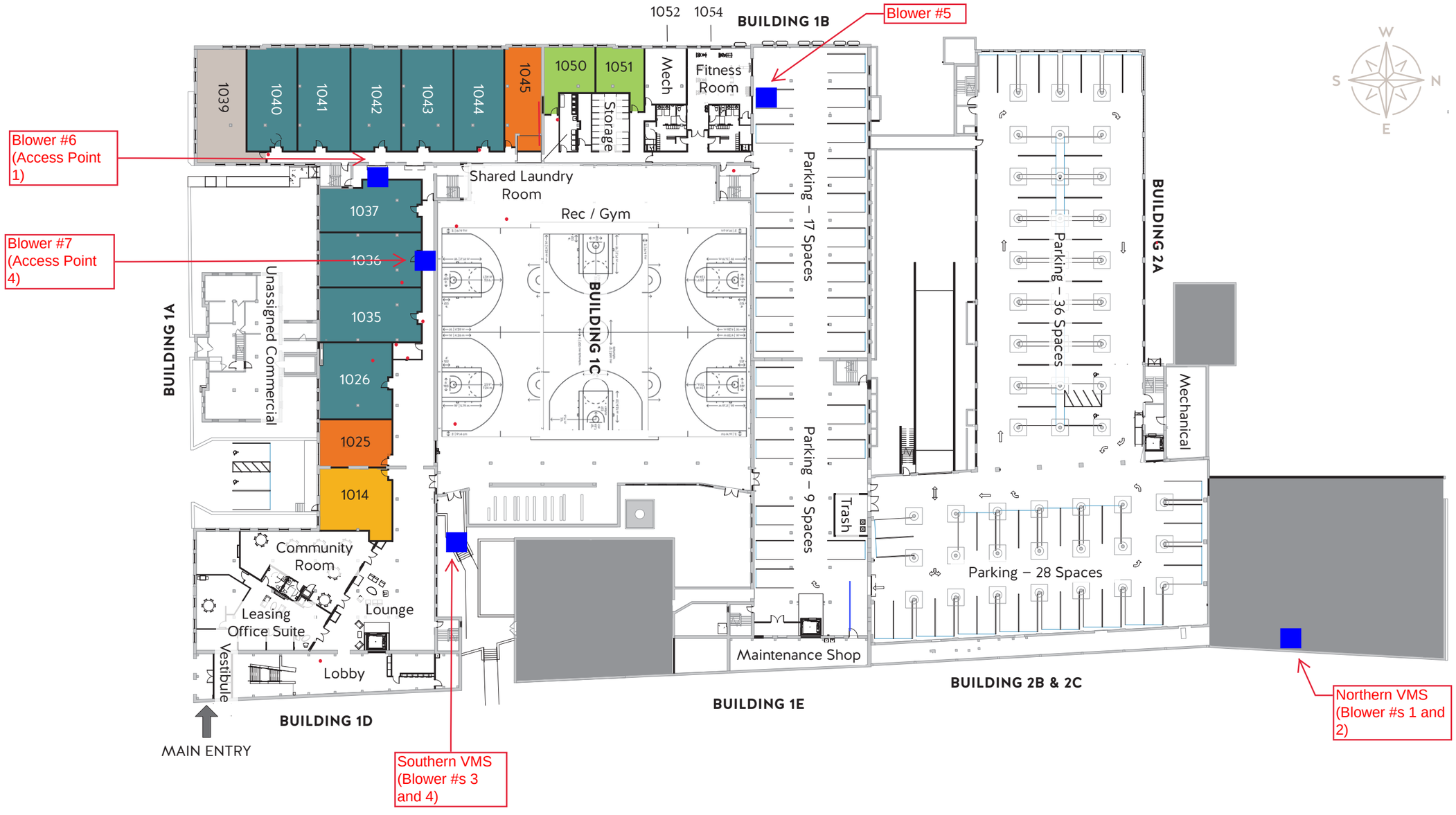


Figure 1 - CWC EB Level 1 Map and Blower Locations

Attachment A
Monitoring Results by Date
On-site EPA Method TO-14 Data from Indoor Air Samples

Instrument: SRI 8610 Gas Chromatograph with ECD

Operator: KSingh

Table 1: Monitoring Results from 06/12/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu g/m^3$)	PCE ($\mu g/m^3$)
IA - 751	SSD 1	10:10	21.7	2.3
IA - 752	SSD 2	10:22	18.4	2.7
IA - 753	Obar Fan Exhaust	10:30	422	2.5
IA - 754	N Mechanical Room	10:38	7.7	ND
IA - 755	NW Garage	10:57	0.85	ND
IA - 756	Unit 2014	11:11	0.36	ND
IA - 757	Unit 3014	11:19	0.35	1.2
IA - 758	3rd Fl Hallway	11:27	0.47	ND
IA - 759	Unit 3045	11:35	0.22	ND
IA - 760	Unit 3056	11:44	0.3	ND
Reporting Limit (µg/m3)			0.6	0.6
ND Indicates Not Detected at listed reporting level				

Table 2: Monitoring Results from 06/13/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu g/m^3$)	PCE ($\mu g/m^3$)
IA - 761	SW Garage	11:37	0.3	ND
IA - 762	SE Garage	11:49	0.23	ND
IA - 763	NW Garage	11:58	0	ND
IA - 764	NE Garage	12:06	0.27	ND
IA - 765	N Mechanical Room	12:15	3.4	ND
IA - 766	Basketball 3	12:23	0.24	ND
IA - 767	Unit 1054	12:32	0.29	ND
IA - 768	Stairwell 4	12:40	0.24	ND
IA - 769	Stairwell 3	12:48	0.23	ND
IA - 770	1st Fl Hallway	12:56	0.24	ND
IA - 771	Unit 1058	13:35	0.21	ND
IA - 772	Unit 1006	13:48	0.21	ND
IA - 773	Unit 2059	14:04	0	ND
IA - 774	Unit 3059	14:28	0	ND
IA - 775	1048 Pin	14:44	705	3.14
IA - 776	1049 Pin	14:54	15.8	ND
IA - 777	N Mech Room Pin	15:02	20.36	5.9
IA - 778	Unit 1053	16:03	9.9	ND
IA - 779	Unit 1052	16:11	2.7	ND
IA - 780	Unit 1044	16:19	4.1	ND
IA - 781	Unit 1042	16:27	1.8	ND
Reporting Limit (µg/m3)			0.6	0.6
ND Indicates Not Detected at listed reporting level				

Table 3: Monitoring Results from 06/14/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu g/m^3$)	PCE ($\mu g/m^3$)
IA - 781	SSD 3	12:38	12.5	ND
IA - 782	SSD 4	12:45	21.2	ND
IA - 783	N Blower Exhaust	12:53	19.6	ND
IA - 784	Unit 1055	13:01	0.5	ND
IA - 785	Unit 1054	13:08	0.55	ND
IA - 786	Unit 1053	13:15	0.2	ND
IA - 787	Unit 1052	13:23	0.36	ND
IA - 788	Unit 1051	13:31	0.38	ND
IA - 789	Unit 1049	13:39	0.58	ND
IA - 790	Unit 1048	13:47	0.43	ND
IA - 791	Unit 1050	13:55	0	ND
IA - 792	Unit 1044	14:03	1.85	ND
IA - 793	Unit 1043	14:11	0.32	ND
Reporting Limit (µg/m3)			0.6	0.6
ND Indicates Not Detected at listed reporting level				

Table 4: Monitoring Results from 06/15/2023

All samples from sub-surface taken from the vapor pins

Sample ID	Sample Location	Sample Time	TCE ($\mu g/m^3$)	PCE ($\mu g/m^3$)
IA - 794	1055	12:29	46.5	ND
IA - 795	1054	12:36	0.8	ND
IA - 796	1053	12:44	102.3	ND
IA - 797	Oppo. 1054	12:51	58.9	ND
IA - 798	Stairwell 4	12:58	252.5	0.63
IA - 799	1052	13:07	63.9	ND
IA - 800	1051	13:14	47.3	ND
IA - 801	1050	13:21	303.4	ND
IA - 802	Out 1050	13:28	113.1	ND
IA - 803	1049	13:37	2.6	ND
IA - 804	1048	13:44	679	2.7
IA - 805	1045	13:52	271.6	3.97
IA - 806	Out 1044	14:00	380.5	36.8
IA - 807	1043	14:08	178.5	240.4
IA - 808	1042	14:25	15.93	0.6
IA - 809	1041	14:36	108.7	1.7
IA - 810	1040	14:55	11.7	0.7
IA - 811	1039	15:03	62.2	2.1
IA - 812	1037	15:11	240.4	96.5
IA - 813	1036	15:19	17.2	31.2
IA - 814	Basketball 1	15:27	452.4	25.5
Reporting Limit (µg/m3)			0.6	0.6
ND Indicates Not Detected at listed reporting level				

Table 5: Monitoring Results from 06/16/2023

All samples from sub-surface taken from the vapor pins

Sample ID	Sample Location	Sample Time	TCE ($\mu g/m^3$)	PCE ($\mu g/m^3$)
IA - 815	1035	15:51	0.8	ND
IA - 816	1035 - out	15:59	87	3.2
IA - 817	1058 E	16:07	433.8	70.6
IA - 818	1058 W	16:15	73.3	6.04
IA - 819	1026	16:23	16.7	3.5
IA - 820	1025	16:31	2.2	0.4
IA - 821	1014	16:39	23.9	2.7
IA - 822	1011	16:47	17.5	0.46
IA - 823	SE Lobby	16:55	0.46	0.22
IA - 824	BB 5	17:03	58.9	6.34
IA - 825	BB 2	17:11	30.8	17.8
IA - 826	BB 3	17:19	2.2	2.7
IA - 827	BB 4	17:27	2.6	3.7
IA - 828	SE Garage	17:38	10.3	0.56
IA - 829	SW Garage	17:46	227.4	0.5
IA - 830	NE Garage	17:59	24.8	0.4
IA - 831	NW Garage	18:06	141.5	18.9
IA - 832	N Mech Room	18:14	60.2	0.9
Reporting Limit (µg/m3)			0.6	0.6
ND Indicates Not Detected at listed reporting level				

Attachment B

Table 6: Comprehensive Vacuum Measurements (inches H_2O)

Note	Obar @ 50%	Obar @ 75%				
Date	12-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun
Time	8:30	12:30	16:30	9:30	11:30	15:30
Location						
1055	-0.233	-0.368	-0.354	-0.363	-0.367	-0.365
1054	-0.483	-0.727	-0.737	-0.735	-0.745	-0.741
1053	-0.263	-0.397	-0.397	-0.399	-0.405	-0.411
Oppo. 1054	-0.161	-0.247	-0.251	-0.256	-0.251	-0.256
Stairwell 4	0	0	0	0	0	0
1052	-0.47	-0.727	-0.729	-0.728	-0.734	-0.735
1051	-0.105	-0.171	-0.168	-0.165	-0.171	-0.176
1049	-0.107	-0.159	-0.156	-0.175	-0.171	-0.17
1048	-0.037	-0.064	-0.068	-0.068	-0.054	-0.066
1050	-0.055	-0.103	-0.109	-0.081	-0.079	-0.074
Out 1050	-0.062	-0.064	-0.072	-0.106	-0.107	-0.102
1045	-0.029	-0.03	-0.031	-0.045	-0.033	-0.044
Out 1044	-0.051	-0.067	-0.067	-0.073	-0.054	-0.071
1043	0	0	0	0	0	0
1042	0	0	0	0	0	0
1041	0	0	0	0	0	0
1040	0	0	0	0	0	0
Out 1040	-0.014	-0.022	-0.021	0	0	0
1039	0	0	0	0	0	0
1037	-0.008	-0.007	-0.008	0	0	0
1036	-0.022	-0.026	-0.026	0	0	0

Note	Obar @ 50%	Obar @ 75%				
Date	12-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun
Time	8:30	12:30	16:30	9:30	11:30	15:30
Location						
1035	-0.024	-0.014	-0.019	-0.004	-0.016	-0.02
Out 1035	-0.002	0	0	-0.01	0	0
1058 E	-0.019	-0.021	-0.022	-0.003	-0.018	-0.009
1058 W	-0.025	-0.022	-0.021	0.011	-0.014	-0.007
1026	-0.035	-0.029	-0.033	-0.025	-0.029	-0.031
1025	-0.052			-0.042	-0.04	-0.223
1014	-0.213	-0.217	-0.218	-0.216	-0.226	-0.576
SE Lobby	-0.583	-0.586	-0.591	-0.576	-0.584	-0.013
1011						-0.07
BB 1	0	-0.021	-0.022	-0.011	-0.009	-0.003
BB 2	0	0	0	0	0	-0.046
BB 3	-0.059	-0.034	-0.031	-0.045	-0.041	-13
BB 4						-0.024
BB 5						-0.021
SW Garage						0
SE Garage						0
NW Garage						0
NE Garage						-0.106
N Mech Room						0
SSD 1	-13	-13	-13	-13	-13	-10
SSD 2	-10	-10	-10	-10	-10	-8
SSD 3				-8	-8	
SSD 4				-10		

Attachment C
Comprehensive Data Table – Indoor Air

Community Within the Corridor - East Block

Table 7 - Discrete Sampling Test Results

Sample Location	30-Mar	31-Mar	1-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	15-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr
1045 Entry Floor Hole			400																					
1045 North Wall			360																					
1045 Wood Column			1500								352													
1050 South Wall Hole			8000																					
1st Floor Hallway Center	15				3.5	17.7	64	25	81.1	35		42.7	63.3	106	181	147	8.5	22.4	7.4	7.8		4.7	17.7	2.7
1st Floor Hallway North	10																							
1st Floor Hallway South	5.2																							
2081 Hallway		0																						
2nd Floor Corridor North		0																						
2nd Floor Corridor South		0																						
2nd Floor Hallway Center	0.7											3	3.6											
2nd Floor Hallway North	0.8	0																						
2nd Floor Hallway South	0.8																							
Stairwell 2	3.2	2																		4.5				2.9
2nd Floor Stairwell 4		0																			12.4			
2nd Floor Stairwell 8		0																						
3rd Floor Corridor			0																					
3rd Floor Hallway Center			0									3.3	2											
3rd Floor Hallway South	0																							
3rd Floor Stairwell 2	3.4					2.1																		
Stairwell 3			0.6																					
3rd Floor Stairwell 4			0.7																		11.2			
Basket Ball Court	0.3																				12			
Basket Ball Court 2	0																					7.5	6.3	
Basket Ball Court 3																								
Basket Ball Court 4																								
Elevator	0																							
Fitness Center										49.6	43.7		28.1							29.3				
Front Lobby		0																			4			
NW Garage	0.6																							
N Garage	0																					0		
SE Garage	0.8																							7.7
Hallway Outside 3021			0																					
Hallway Outside 3035			0																					
Hallway Outside 3065			0.7																					
N Mechanical Room										6.26	2.4	5.9	14.8	7	7.3	7.2	5.3	7.9		10	7	7.2	7.8	4.5
Men's Locker Room						60.7	123		122		428	82.9				161	131		23.7	28.3				
Women's Locker Room																								
Powerhouse																						0.7	3.2	
Unit 1002 - Postboxes																								
Unit 1006	0.3	0															4.3			1.4				
SSD Vent Pipe #1 - S - 7.5 HP			13	22	24.5	22	24.8	24	26.7	26.2	28	28	30.3	31.4	34.6	28.2	36.4	33.1	35.2	32		31.4	28.6	
SSD Vent Pipe #2 - S - 10 HP			26	30	21.9	16.4	18.7	17.2	44.4	19.5	19	47.7	29.3	57.8	20.5	21.1	19.8	21.4	20.9	20.7		20.6	28.5	
SSD Vent Pipe #3 - N - 7.5 HP					17.6	2.2	3	5	3.3	3	4.3	11.9	7.17	16.7	11.3	9.4	8.1	5.3	6.1	7.2		43.5	6.1	
SSD Vent Pipe #4 - N - 10 HP					41.2	29.5	33	39	37	38.7	39.1	29.3	44	41.9	36.8	38.2	35	42.8	43.1	46.3		5.7	44.4	
SW Garage																	11.3	21					20.3	
Stairwell 4	1.6					2.2			2.7	2.6				14.4			7							
Stairwell 6																								
Stairwell 7																								
Unit 1011																								
Unit 1014										0														
Unit 1025	0							0.96									3.6						4.8	
Unit 1026	0.3									0														
Unit 1035	0.3																							
Unit 1036	0.5																							
Unit 1037	2									0.9														
Unit 1039	4.7									11.4	8										3.4			
Unit 1040	10.3			12.7							14.5					21.2	22.6							
Unit 1041	11.6							19.9		16.8	14.4													
Unit 1042	11.4									16.2	15.2											12.6		9.3
Unit 1043	17.6					21.6	31.3				24													
Unit 1044	56					77	95			69.7	84.5					85.8		45.6		53.3				
Unit 1045	350		293	298	287	272	267	279	28.9	230	352	236	151.5	124	336	115	283	61	127	116	112	221	51.3	26.6
Unit 1048																								
Unit 1049																								
Unit 1050	160		137	143	110	348	280	108	135	114	706	145	60	118	142	149	110	77.8	131	138	152	113	71.7	199
Unit 1051	19					23		25.4			45.3													
Unit 1052					72.5	88.7	96.6	95.7	128	103	88.6	51.4	38.4			70.5			57.2	70.3		72		20.2
Unit 1056					24.8																	44		
Unit 1057																								
Unit 1058																								
Unit 1079																								
Unit 2014																								
Unit 2015																								
Unit 2016		0																						
Unit 2017		0																						
Unit 2022		0																						
Unit 2025		0																						
Unit 2036		0																			0			
Unit 2037		0																						
Unit 2039		0										2.5	2.5											
Unit 2040		0						0													0			
Unit 2042		0																						
Unit 2043	0.4	0																						
Unit 2044		0																						
Unit 2045	23	18				8		9	2.9			3.7	5.2											
Unit 2049																								
Unit 2056	60	52				42.2	24.7	49.2	9.6			3.4	6.6								1.5			
Unit 2057		4.7																						
Unit 2058	3.8	4.2				8.5			3.8															
Unit 2059	0.3	0																						
Unit 2061		0																						

Sample Location	1-May	2-May	3-May	4-May	5-May	8-May	9-May	10-May	11-May	12-May	15-May	16-May	17-May	18-May	19-May	22-May	23-May	24-May	25-May	26-May	30-May	31-May
1045 Entry Floor Hole																						
1045 North Wall																						
1045 Wood Column																						
1050 South Wall Hole																						
1st Floor Hallway Center		14	9	3.5	2.3		3.49							21.2	3.48	5.39				2.38	3.6	
1st Floor Hallway North																						
1st Floor Hallway South									0.947	1.92	1.96		0									
2081 Hallway																						
2nd Floor Corridor North																						
2nd Floor Corridor South																						
2nd Floor Hallway Center								4.69			4.2									2.74		
2nd Floor Hallway North																						
2nd Floor Hallway South																						
Stairwell 2								4.15														
2nd Floor Stairwell 4						7.19																
2nd Floor Stairwell 8																						
3rd Floor Corridor																						
3rd Floor Hallway Center											1.7									1.71		
3rd Floor Hallway South																						
3rd Floor Stairwell 2				2.35																		
Stairwell 3								3.9														
3rd Floor Stairwell 4																						
Basket Ball Court														1.84			8.96					
Basket Ball Court 2		2.2		3	2.3	0.624			1.02					1.53			0					
Basket Ball Court 3														1.56			0.536					
Basket Ball Court 4														0.816			0.734					
Elevator																						
Fitness Center								29				33.8	21	21	24.5	16.6		42.5	15.1		24.2	
Front Lobby																						
NW Garage													14			0.62						
N Garage										1.78			0.607		0	0.63		0.776				
SE Garage																6.6		0.6				
Hallway Outside 3021																						
Hallway Outside 3035																						
Hallway Outside 3065																						
N Mechanical Room	13.7	11.5			10.1	10.9	11.8		6.89		10.7						0.737					
Men's Locker Room	58	31.6					53.3				52.3	7.62							21.7			
Women's Locker Room					45														25.8			
Powerhouse																						
Unit 1002 - Postboxes																					0	
Unit 1006	2.97							2.4			1.7						0.737				0	
SSD Vent Pipe #1 - S - 7.5 HP	26.1	27.9			25.7		26.2		21.9				27.01		26.7			7.04				19.6
SSD Vent Pipe #2 - S - 10 HP	1.2				20		15.7		18.7				18.2		19.3			11.1				33.8
SSD Vent Pipe #3 - N - 7.5 HP	8.6				5.9		4.97		0				3.47		3.41			1.85				4.8
SSD Vent Pipe #4 - N - 10 HP	38.3				37.7		22.4		4.83				31.1		21.9			4.7				20.2
SW Garage	25.2			26.1		23.6	25.5		21.4				0.683	1.15	0	7.84						
Stairwell 4		12								6			9.03									
Stairwell 6																						
Stairwell 7																						
Unit 1011								2.61	0													
Unit 1014																					0	
Unit 1025																	1.1	0		0	0	
Unit 1026								1.67	0	0											0.7	
Unit 1035																					1.1	
Unit 1036								1.37									4.59			2.37	1.2	
Unit 1037																						3.7
Unit 1039			1.4									5.18				6.06			1.19			8.1
Unit 1040								11.2	7.37			7.25							5.29			11.5
Unit 1041				13								7.07							9.13			10.9
Unit 1042	15.5					11.9	13.1			8.22	13.6	6.61	0.53		1.42	5.16		3.88	10.1		5.3	
Unit 1043												117							12.2			11.7
Unit 1044												37.6							29.3			37.8
Unit 1045	90.3	132	121		220	38.4	33.8		17.2	14.3	22.6	9.82	60.7		14.9	24.1	46.3	13.7	38.1		103	26
Unit 1048										86.2							45.7					
Unit 1049					142			159		96.9							66.1		21.4			30.3
Unit 1050	231	194	186	95.5	174	67.5	297		80.2	75.7	228	77.9		103	90.7	90.9	88.5	147	170		116	78.4
Unit 1051												52.7						39.8	18.2			
Unit 1052	73.6	62.6	340		76		70.7					55.7					32		16.8			21.1
Unit 1056																						
Unit 1057																					0	
Unit 1058																	1.46			0		
Unit 1079											152											
Unit 2014			48.8							0												
Unit 2015								0.77														
Unit 2016																						
Unit 2017																						
Unit 2022																						
Unit 2025																						
Unit 2036																						
Unit 2037																						
Unit 2039								0.77														
Unit 2040																						
Unit 2042				2.5																		
Unit 2043																						
Unit 2044																						
Unit 2045			19.1			1.36					0.99			1.97		2.99				11.8		
Unit 2049										1.07												
Unit 2056											1.11			5.89		11.5				66.4		
Unit 2057						1.24			0.64													
Unit 2058				2.9																		
Unit 2059																						
Unit 2061																						

Sample Location	1-Jun	5-Jun	7-Jun	8-Jun	9-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun
1045 Entry Floor Hole										
1045 North Wall										
1045 Wood Column										
1050 South Wall Hole										
1st Floor Hallway Center							0.24			
1st Floor Hallway North										
1st Floor Hallway South					0.4					
2081 Hallway										
2nd Floor Corridor North										
2nd Floor Corridor South										
2nd Floor Hallway Center					0.42					
2nd Floor Hallway North										
2nd Floor Hallway South										
Stairwell 2										
2nd Floor Stairwell 4										
2nd Floor Stairwell 8										
3rd Floor Corridor										
3rd Floor Hallway Center						0.47				
3rd Floor Hallway South										
3rd Floor Stairwell 2										
Stairwell 3					0.1		0.23			
3rd Floor Stairwell 4										
Basket Ball Court					2.65					
Basket Ball Court 2										
Basket Ball Court 3							0.24			
Basket Ball Court 4										
Elevator										
Fitness Center	16.1	4.2		0.4			0.29	0.55		
Front Lobby										
NW Garage						0.85	0			
N Garage							0.27			
SE Garage							0.23			
Hallway Outside 3021										
Hallway Outside 3035										
Hallway Outside 3065										
N Mechanical Room	1.5					7.7	3.4			
Men's Locker Room				0.5				0.2		
Women's Locker Room				0.4				0.5		
Powerhouse										
Unit 1002 - Postboxes										
Unit 1006							0.21			
SSD Vent Pipe #1 - S - 7.5 HP						21.7				
SSD Vent Pipe #2 - S - 10 HP						18.4				
SSD Vent Pipe #3 - N - 7.5 HP										
SSD Vent Pipe #4 - N - 10 HP										
SW Garage							0.3			
Stairwell 4		3			0.34		0.24			
Stairwell 6										
Stairwell 7										
Unit 1011										
Unit 1014					0.21					
Unit 1025					0.31					
Unit 1026										
Unit 1035					0.22					
Unit 1036			6.9		0.26					
Unit 1037					0.46					
Unit 1039				0.7	0.3					
Unit 1040				0.6						
Unit 1041					0.51					
Unit 1042		4	19.2	0.8						
Unit 1043					0.53			0.32		
Unit 1044		65.2	11.7	1.7				1.85		
Unit 1045	23.3		14.4	2.4	5.26	3.84	3.33	2.99	2.88	2.57
Unit 1048	121	19.8	13.5	0.33				0.43		
Unit 1049	21.8	23.6		1.2				0.58		
Unit 1050	60.4	27.3	10.3	3.4	3.05	2.28	1.95	2.12	2.17	1.62
Unit 1051	16.9				0.76			0.38		
Unit 1052	14.5			0.23				0.36		
Unit 1056	14.6									
Unit 1057										
Unit 1058							0.21			
Unit 1079										
Unit 2014						0.35				
Unit 2015										
Unit 2016										
Unit 2017										
Unit 2022										
Unit 2025										
Unit 2036										
Unit 2037										
Unit 2039										
Unit 2040										
Unit 2042										
Unit 2043										
Unit 2044										
Unit 2045					0.52					
Unit 2049										
Unit 2056					1					
Unit 2057										
Unit 2058										
Unit 2059										
Unit 2061										

Unit 2062		0																																																						
Unit 2064	0					1																								1.78																										
Unit 2077	0					1.6																						1.7		0.838																										
Unit 2111		0																																								0														
Unit 3014																																																				0.35				
Unit 3015			0					0																																																
Unit 3023																																			0																					
Unit 3025																					0																																			
Unit 3035			0																																																					
Unit 3036			0																																																					
Unit 3037			0					2	ND																																															
Unit 3039			0										1.8																																											
Unit 3040			0																		0																																			
Unit 3041			0																									2.45																												
Unit 3042			0																																																					
Unit 3043			0																																																					
Unit 3044		0																																																						
Unit 3045		6.6										2.7	2.7																	0										3.75				8.11												
Unit 3056	6	9.6				2.4		5.13	0.9			2.4	2.4								0																			1.21				6.99								0.22				
Unit 3057		0																												0																						0.3				
Unit 3058			0																																																					
Unit 3059			0																																																					
Unit 3061			0																																																					
Unit 3062			0																																																					
Unit 3063																														0																										
Unit 3092																												1.67																												

Attachment D
Table 8: Comprehensive Data Table – Sub-Slab Vapor TCE

Green cells indicate the VRSL levels below the DNR limit of 70 ug/m3			
Location		**Week of 6/3**	**Week of 6/17**
1055	**Women's Locker Room**		46.5
1054	**Fitness Room**	596	0.8
1053	**Men's Locker Room**		102.3
Oppo. 1054			58.9
Stairwell 4			252.5
1052	**Mechanical Room**		63.9
1051			47.3
1049	**Storage Room**	426	2.6
1048	**Laundry Room**	322	679
1050		1443	303.4
Out 1050		971	113.1
1045		750	271.6
Out 1044		456	380.5
1043			178.5
1042		11.8	15.93
1041			108.7
1040		1.6	11.7
1039		23.5	62.2
1037			240.4
1036			17.2
1035			0.8
1035 - out			87
1058 E	**Electric Room**		433.8
1058 W	**Electric Room**		73.3
1026			16.7
1025			2.2
1014			23.9
1011	**Conference Room**		17.5
SE Lobby	**Near Exit**	**328**	0.46
BB 5	**Center of the Gym**		58.9
BB 2	**South part of the Gym**		30.8
BB 3	**SE part of the Gym**		2.2
BB 4			2.6
SE Garage			10.3
SW Garage			227.4
NE Garage			24.8
NW Garage			141.5
N Mech Room			60.2

Attachment E
Figures of TCE Levels through June 16, 2023

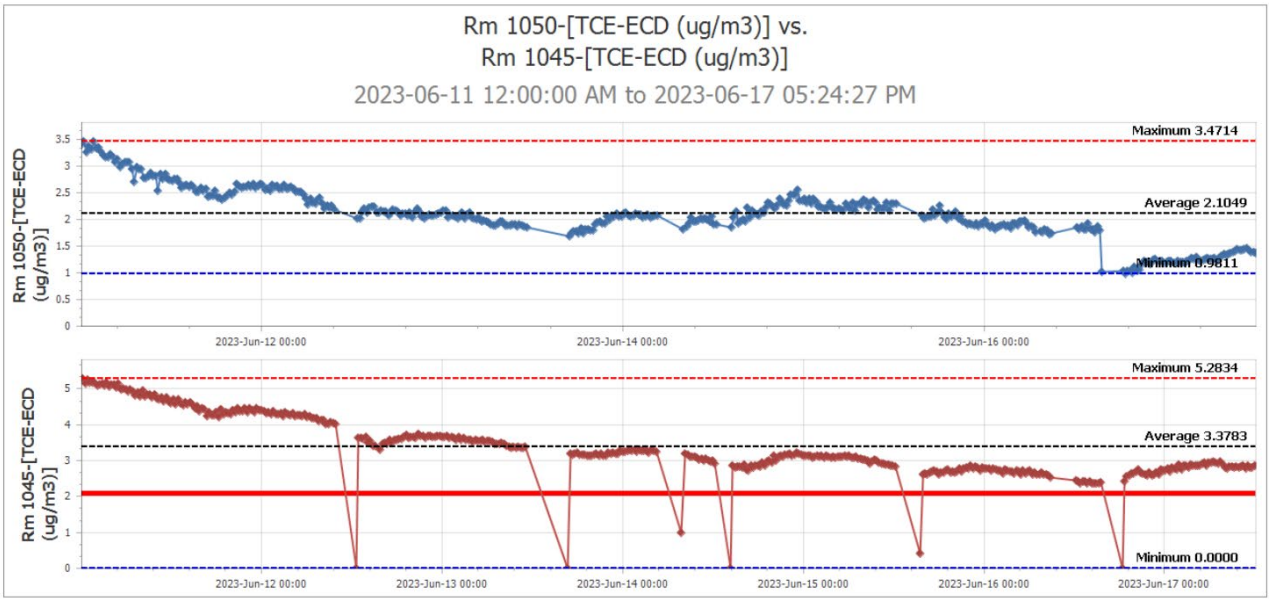


Figure 2 – Continuous Monitoring Data for Units 1045 and 1050 since June 11, 2023

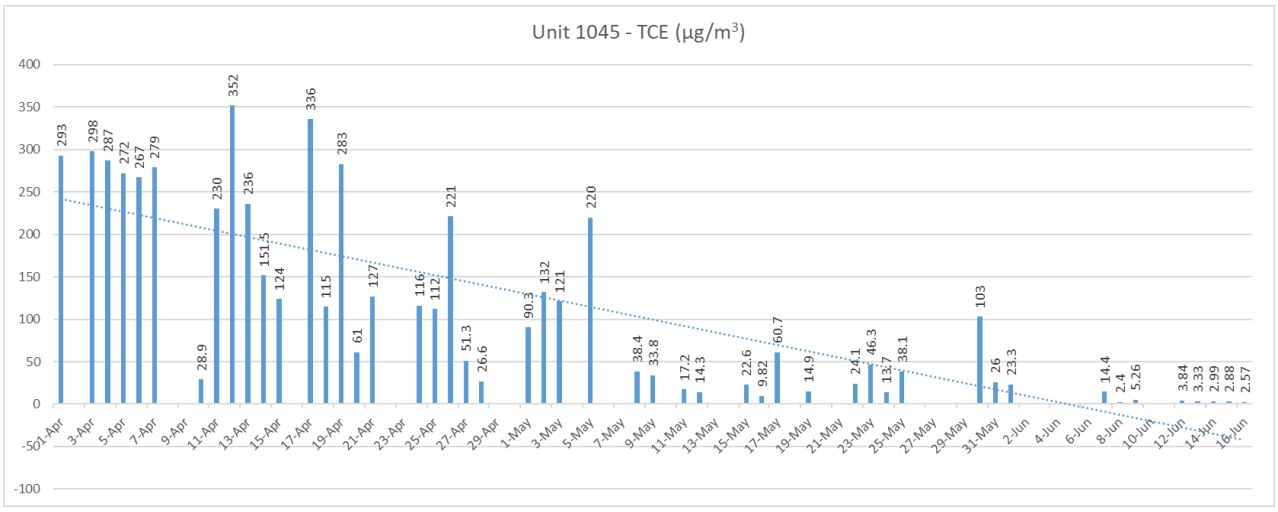


Figure 3 – YTD Data of TCE Concentration in Unit 1045

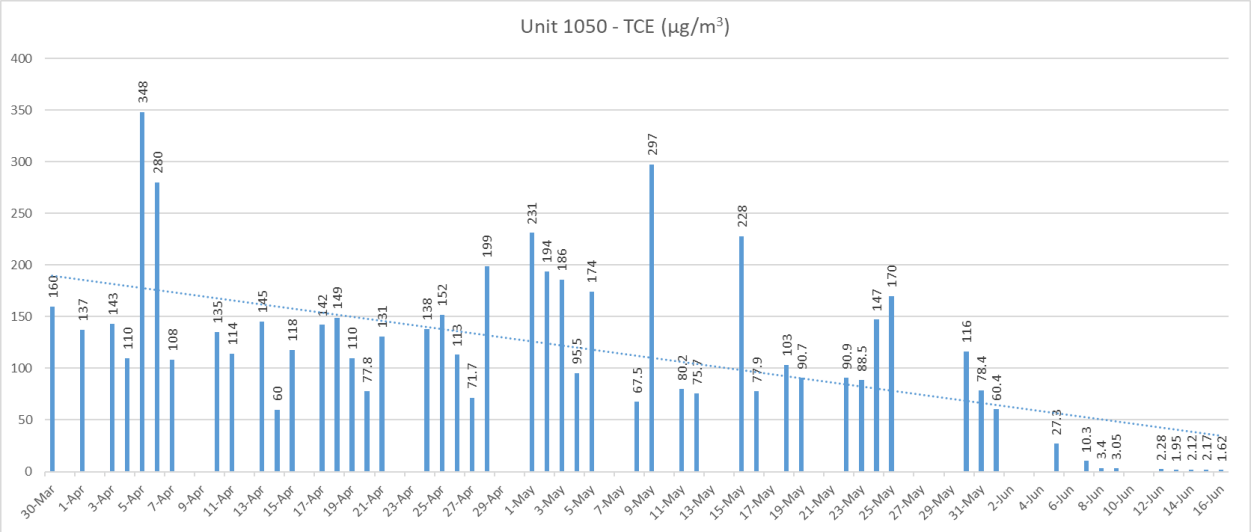


Figure 4 – YTD Data of TCE Concentration in Unit 1050

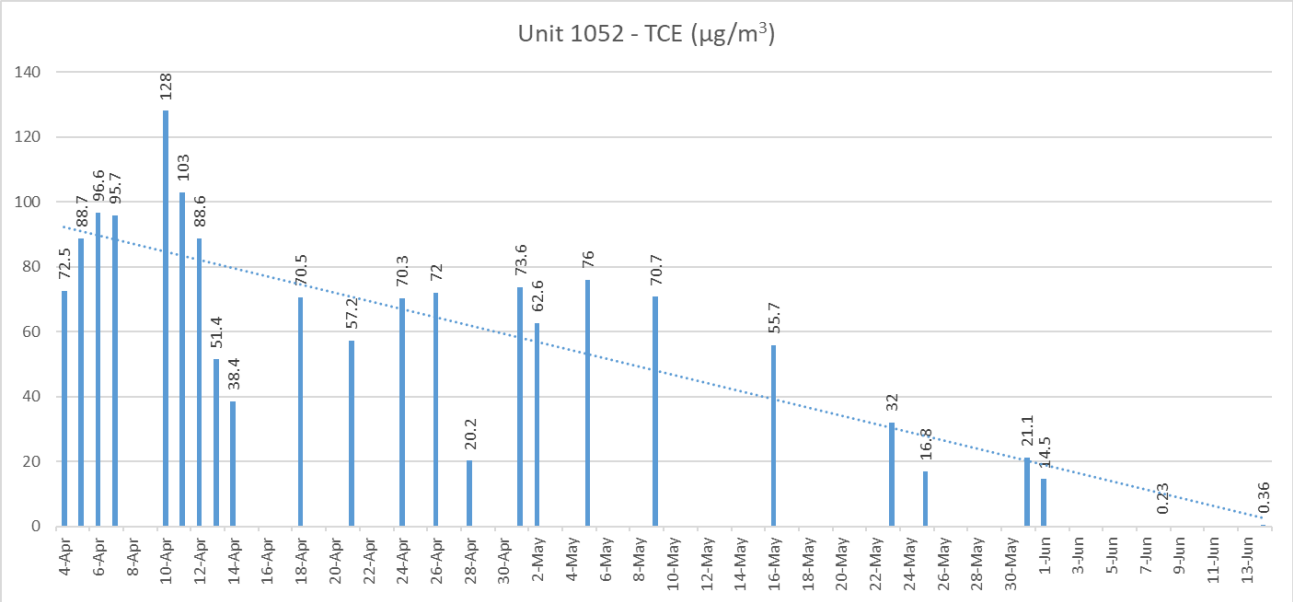


Figure 5 – YTD Data of TCE Concentration in Unit 1052

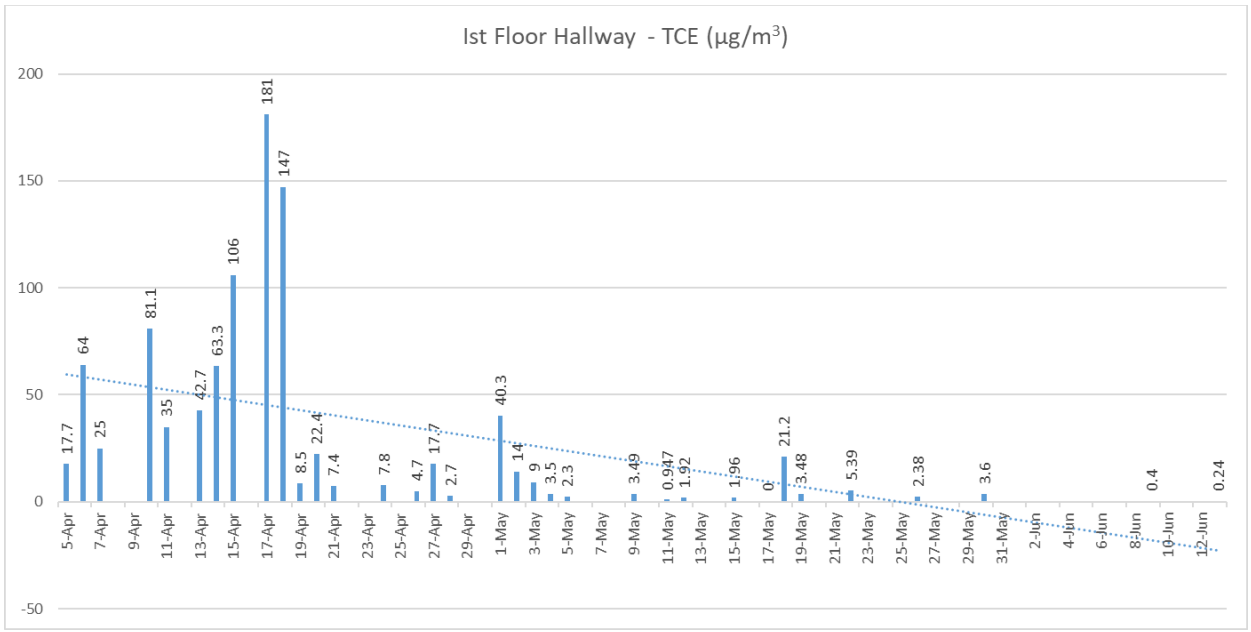
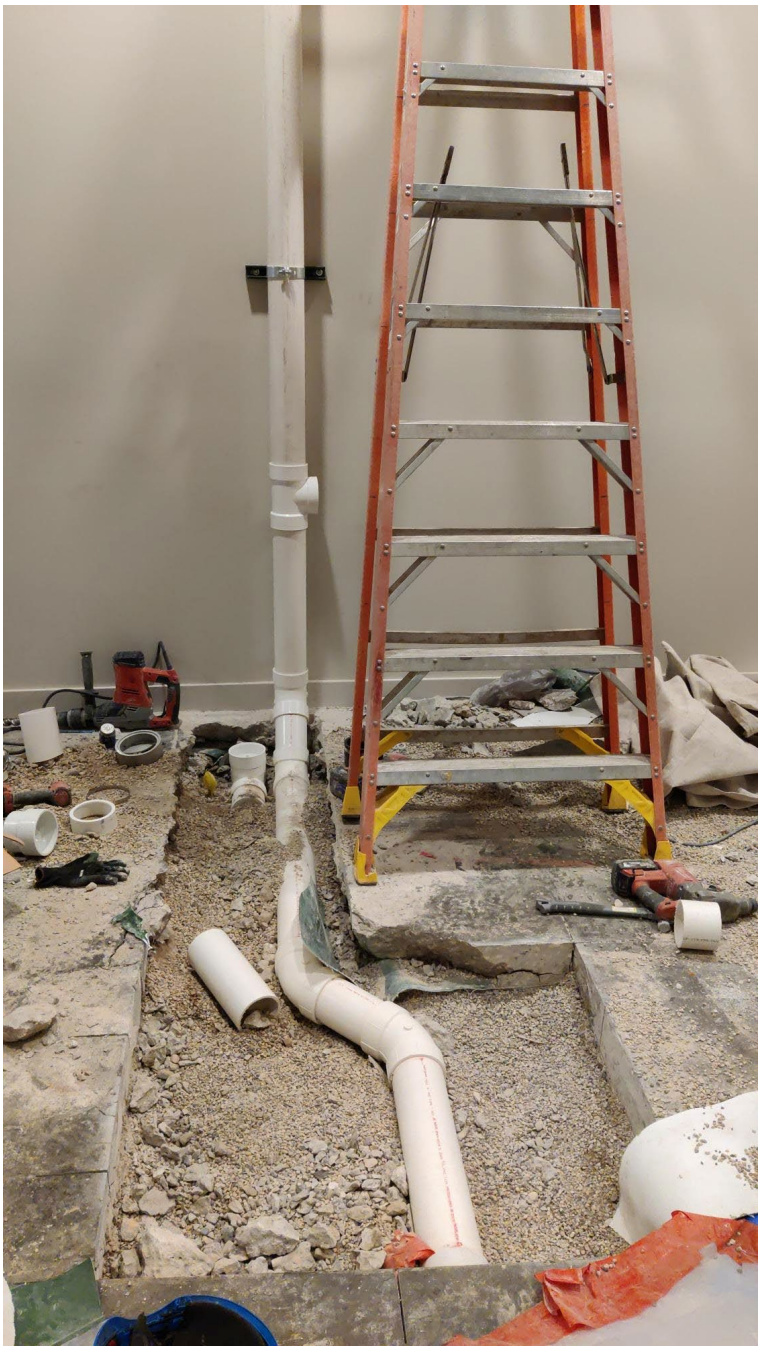


Figure 6 – YTD Data of TCE Concentration in 1st Floor Hallway

Attachment F
Relevant Photos

Picture 1 – Installation of 1 Permanent Blower

Picture 2 – Valve Connection in Powerhouse



Picture 3 – Preparation for Additional Blower at Access Point 1

Picture 4 - Preparation for Additional Blower at Access Point 1

Picture 5 - Plumbing and electrical for Access Points 1 and 4 going up to the roof

Picture 6 – GBR 89 Blowers on the Roof that are connected to Access Points 1 and 4