

### **MEMORANDUM**

DATE: November 18, 2023

TO : Shane LaFave / Roers Companies, LLC

FROM : Pratap Singh, Ph.D., PE / KSingh

SUBJECT: Weekly Report for the Week Ending 11/18/2023

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 report the test results and provide a summary of the work performed for the referenced project for the week ending 11/18/2023. The following tasks were performed throughout the week:

### 1. Task #1 - Blower Fan Exhaust Sampling

Samples were collected from blower exhaust of all 11 operational blowers. All blowers had a cumulative blow rate of about 4200 cfm leading to about 0.13 lbs removal of TCE in the second week of November. Blower 9 had an elevated reading on account of the construction work in Units 1044 and 1045. The extraction point at Blower 11 in the SW Garage has damage resulting in lower cfm. It will be fixed in the coming weeks. Since March, we have successfully removed about 2.8 lbs. of TCE from the site. The individual blower exhaust rates and their corresponding actual TCE removal with Year-To-Date exhaust quantities can be seen in Tables 1 and 2. The layout of the floor plan with the placement of blowers can be found in Figure 1.

### 2. Task #2 – Additional Excavation Work

Excavation work commenced in the non-hazardous areas of Units 1044, 1045, and 1050 area on 11/13/2023 and will be completed on 11/20/2023. Approximately 20 cu. yards were excavated. Biochar was lightly spread over the exposed soil and the floor to control the indoor air TCE concentration.

Four soil borings were conducted in the hallway outside the storage room and the laundry room to determine the hazardous characteristics of the soil. A summary report will be provided next week once all the test results are received. The pictures from the excavation activity and the corresponding air quality readings can be found in Attachment A.

#### 3. Task #3 – Hazardous Waste Management

Permitting for hazardous waste disposal is complete and the excavation of hazardous soils will begin in the week of 11/27. The excavated hazardous soil will be disposed of by US Ecology, Michigan. Current excavation work and disposal is limited to the non-hazardous area.

### **Attachments**

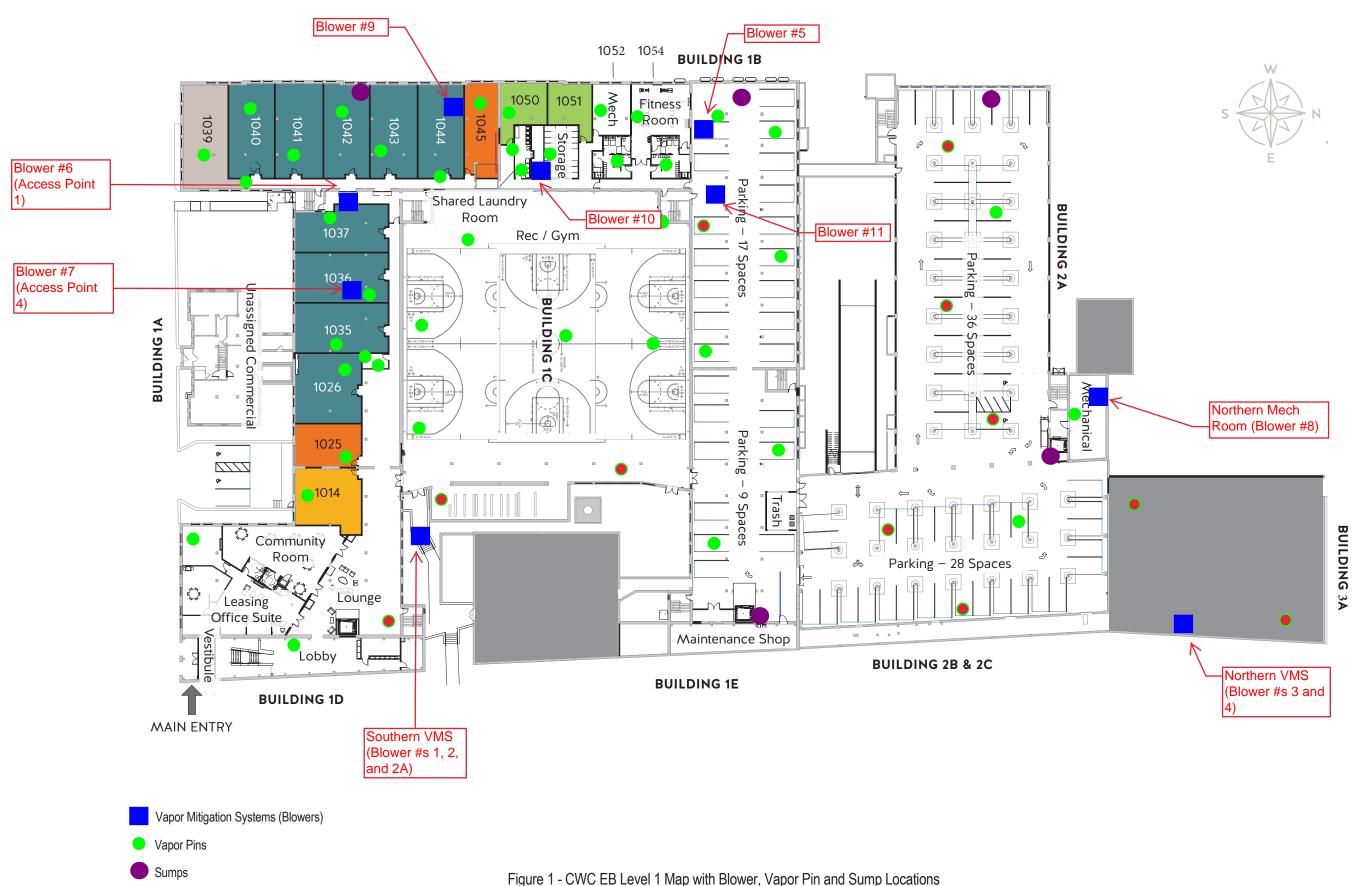
KSingh has included the following figures, tables, and pictures for reference:

- Figure 1: CWC EB Floor Plan
- Table 1: Blower Fan Exhaust Data Table for November
- Table 2: Blower Fan Exhaust Data Table since March
- Attachment A: Indoor Air Quality and Pictures of areas of Excavation



# East Building Level 1

Prospective Vapor Pins



**Table 1: Blower Fan Exhaust Data Table for November** 

GC TCE Measurements of Blower Effluent and Estimated Removal Rates							
	Date: November 16, 2023						
Blower No.	Pipe Diameter	Exhaust Velocity	Flow Rate	TCE Concentration	TCE Removal Rate	TCE Removal	
	inches	fpm	cfm	ug/m3	lbs/day	lbs	
1	4	4666	407	2.12	0.000078	0.000543	
2	4	4882	426	11.72	0.000449	0.003142	
2A	4	4626	404	16.3	0.000592	0.004141	
3 and 4	6	5886	1156	9.7	0.001008	0.007054	
5	4	4981	435	262.5	0.010257	0.071801	
6	4	3898	340	80.2	0.002452	0.017167	
7	4	2973	259	14.42	0.000336	0.002354	
8	4	2796	244	23	0.000504	0.003531	
9	4	2225	194	79.8	0.001393	0.009750	
10	4	2677	234	61.1	0.001283	0.008982	
11	4	906	79	50.4	0.000358	0.002508	
			4178		Total	0.13	

**Table 2: Blower Fan Exhaust Data Table since March** 

TCE Measurements of Blower Effluent and Removal									
TCE Removal (lbs in Month)									
Blower No.	Blower No. May June July August September October November Total								
1	0.0172	0.0619	0.0250	0.0039	0.0049	0.0033	0.0022	0.1184	
2	0.0313	0.0206	0.0190	0.0149	0.0144	0.0166	0.0093	0.1261	
2A				0.0277	0.0201	0.0170	0.0134	0.0782	
3+4	0.0241	0.0154	0.0387	0.0471	0.0220	0.0154	0.0237	0.1864	
5		0.4196	0.2556	0.3277	0.1883	0.3067	0.2130	1.7108	
6		0.0229	0.0085	0.0886	0.0445	0.0669	0.0465	0.2780	
7		0.0093	0.0210	0.0179	0.0000	0.0212	0.0047	0.0741	
8		0.0015		0.0052	0.0066	0.0035	0.0907	0.1075	
9				0.0001	0.0004	0.0011	0.0159	0.0174	
10					0.0003	0.0011	0.0102	0.0116	
11					0.0252	0.0292	0.0106	0.0650	
Total	0.0726	0.5511	0.3677	0.5330	0.3267	0.4821	0.4403	2.7735	
Cumulative Flow Rate (cfm)	1342	2078	2766	3523	3817	4422	4316	22264	



# Attachment A Indoor Air Quality Readings and Pictures



Date:	11/13/2023
Testing Performed by:	K. Singh & Associates, Inc., Ph: 262-821-1171
Engineer on Site:	Sameer Neve, Ph.D., ENV SP, Cell: 551-262-9210
Signature:	Januar

No.	Location	Time	TCE Reading (ppb)	>25 ppm
1	BB1 Gym	8:30	< 0.6	No
2	Unit 1045	8:40	1.49	No
3	Unit 1045	11:00	63.2	No
4	Unit 1045	13:15	36.7	No
5	N Mech Room	15:10	2.1	No
6	Unit 1045	15:15	18.2	No
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				

<sup>\*\*</sup> Note that Workplace Safety Limit for TCE by OSHA is 100 ppm and NIOSH is 25 ppm.





<sup>\*\*</sup> It is strongly recommended to wear a fit-tested respirator in the construction areas, and to wear appropriate Personal Protective Equipment at all times.

<sup>\*\*</sup>For more information on TCE, please scan the QR Code or visit these links: <a href="https://www.dhs.wisconsin.gov/chemical/trichloroethylene.htm">https://www.dhs.wisconsin.gov/chemical/trichloroethylene.htm</a> and <a href="https://www.epa.gov/sites/default/files/2016-09/documents/trichloroethylene.pdf">https://www.epa.gov/sites/default/files/2016-09/documents/trichloroethylene.pdf</a>

Date:	11/14/2023
Testing Performed by:	K. Singh & Associates, Inc., Ph: 262-821-1171
Engineer on Site:	Sameer Neve, Ph.D., ENV SP, Cell: 551-262-9210
Signature:	Junes

No.	Location	Time	TCE Reading (ppb)	>25 ppm
1	Unit 1045	8:38	14.12	No
2	Unit 1045	10:27	73.7	No
3	N Mech Room	11:00	2.96	No
4	Unit 1045	13:02	25.5	No
5	Unit 1050	13:10	119.8	No
6	N Mech Room	15:37	2.6	No
7	Unit 1050	15:42	59.6	No
8	Unit 1045	15:49	42.8	No
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11				
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14				
15				
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Date:	11/15/2023
Testing Performed by:	K. Singh & Associates, Inc., Ph: 262-821-1171
Engineer on Site:	Sameer Neve, Ph.D., ENV SP, Cell: 551-262-9210
Signature:	Januar

No.	Location	Time	TCE Reading (ppb)	>25 ppm
1	NW Garage	7:21	0.88	No
2	N Mech Room	7:29	2.12	No
3	Unit 1050	7:45	13.6	No
4	Unit 1050	9:18	117.4	No
5	N Mech Room	9:45	1.41	No
6	Unit 1050	11:26	188.9	No
7	Unit 1050	13:00	173	No
8	Unit 1050	15:06	117.7	No
9	N Mech Room	15:12	1.36	No
10				
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12				
13				
14				
15				
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Date:	11/16/2023
Testing Performed by:	K. Singh & Associates, Inc., Ph: 262-821-1171
Engineer on Site:	Sameer Neve, Ph.D., ENV SP, Cell: 551-262-9210
Signature:	Jumes

No.	Location	Time	TCE Reading (ppb)	>25 ppm
1	Unit 1050	7:18	51.2	No
2	N Mech Room	7:37	1.4	No
3	Unit 1050	10:41	207.4	No
4	Unit 1050	12:55	205.6	No
5	Unit 1044	13:02	62.2	No
6	Loading Dock 1st Floor	13:49	0.86	No
7	Loading Dock Basement	14:26	1.2	No
8	N Mech Room	14:02	1.44	No
9	Unit 1044	15:55	45.7	No
10				
11				
12				
13				
14				
15				
16				
17				
18				

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Date:	11/17/2023
Testing Performed by:	K. Singh & Associates, Inc., Ph: 262-821-1171
Engineer on Site:	Sameer Neve, Ph.D., ENV SP, Cell: 551-262-9210
Signature:	Jumes

No.	Location	Time	TCE Reading (ppb)	>25 ppm
1	Unit 1044	7:25	29.4	No
2	N Mech Room	8:40	2.04	No
3	Unit 1044	9:15	54.9	No
4	Unit 1044	11:39	22.7	No
5	Unit 1045	12:08	32.4	No
6	Unit 1045	14:05	74.2	No
7	N Mech Room	14:52	2.21	No
8	Unit 3037	13:55	0.74	No
9	Unit 3038	14:06	0.92	No
10	Unit 3039	14:14	< 0.6	No
11	Unit 3045	14:33	1.04	No
12	Unit 3056	14:39	0.66	No
13	Unit 2037	15:00	0.52	No
14	Unit 2038	15:04	1.9	No
15	Unit 2039	15:09	0.74	No
16	Unit 2045	15:14	9.8	No
17	Unit 2056	15:18	14.38	No
18				

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Picture 1 – Excavated Area in Unit 1044



Picture 2 – Excavated Area in Unit 1045





Picture 3 – Excavated Area in Unit 1050





Picture 4 – Excavated Area in Unit 1050

