

## MEMORANDUM

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DATE : September 30, 2023

TO : Shane LaFave / Roers Companies, LLC

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

SUBJECT : Weekly Test Results for the Week Ending 09/30/2023  
Community Within the Corridor - East Block

COPY TO : Que El-Amin / Scott Crawford, Inc., Robert Reineke, PE, Robert Fedorchak, PE  
Project #40441B

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The purpose of this memorandum is to report the test results and provide a summary of the work performed as a part of the emergency response for the referenced project for the week ending 09/30/2023. The following tasks were performed throughout the week:

1. Task #1 - Blower Fan Exhaust Sampling

Samples were collected from the blower exhaust of all operational blowers including the recently added blowers 10 and 11. All blowers had a cumulative blow rate of about 4400 cfm leading to about 0.13 lbs removal of TCE in the fourth week of September. Blower 7 that was out of order was restored and was back in operation. Due to the ongoing excavation work, Blowers 8, 9, and 10 are currently functioning as an exhaust for the indoor air as compared to the others that are connected to the VMS. Since March, we have successfully removed about 1.85 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.

No indoor air TCE measurements were taken this week as there was no construction activity in the indoor areas or families moving out.

### 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 September
- Table 2: Blower Fan Exhaust Data Table since March



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

GC TCE Measurements of Blower Effluent and TCE Removal						
Date: September 28, 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	4.12	0.000151	0.001056
2	4	4961	433	15.72	0.000612	0.004283
2A	4	4843	423	19.22	0.000730	0.005112
3 and 4	6	5689	1117	8.12	0.000815	0.005708
5	4	5197	454	283.52	0.011559	0.080914
6	4	4351	380	80	0.002731	0.019115
7	4	2106	184	19.72	0.000326	0.002281
8	4	4252	371	7.62	0.000254	0.001779
9	4	1970	172	2.13	0.000033	0.000230
10	4	2736	239	1.1	0.000024	0.000165
11	4	2933	256	60.14	0.001384	0.009686
			<b>4434</b>		<b>Total</b>	<b>0.13</b>

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

TCE Measurements of Blower Effluent and Removal						
TCE Removal (lbs in Month)						
Blower No.	May	June	July	August	September	Total
1	0.0172	0.0619	0.0250	0.0039	0.0049	0.1129
2	0.0313	0.0206	0.0190	0.0149	0.0144	0.1002
2A				0.0277	0.0201	0.0478
3+4	0.0241	0.0154	0.0387	0.0471	0.0220	0.1473
5		0.4196	0.2556	0.3277	0.1883	1.1911
6		0.0229	0.0085	0.0886	0.0445	0.1646
7		0.0093	0.0210	0.0179	0.0000	0.0482
8		0.0015		0.0052	0.0066	0.0133
9				0.0001	0.0004	0.0005
10					0.0003	0.0003
11					0.0252	0.0252
<b>Total</b>	<b>0.0726</b>	<b>0.5511</b>	<b>0.3677</b>	<b>0.5330</b>	<b>0.3267</b>	<b>1.8511</b>
<b>Cumulative Flow Rate (cfm)</b>	1342	2078	2766	3523	3817	<b>13526</b>