

## MEMORANDUM

---

DATE : May 13, 2023

TO : Shane LaFave / Roers Companies, LLC

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

SUBJECT : Weekly Progress Report for Week Ending 05/13/2023  
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 05/13/2023. 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 & Hartman

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. The test results of TCE are shown in Tables 1 to 5 in Attachment A. Comprehensive data tables of Indoor Air Monitoring Data for TCE is provided in Attachment C. The findings of portable discrete testing for TCE are as follows:

- TCE detections ranged from 14 ug/m<sup>3</sup> to 38 ug/m<sup>3</sup> in unit 1045. This was about a 60% decrease in the concentration of TCE from previous weeks owing to improved ventilation.
- TCE detections ranged from 68 ug/m<sup>3</sup> to 297 ug/m<sup>3</sup> in Unit 1050. A higher level (297 ug/m<sup>3</sup>) was observed in the bathroom of the unit where the wooden column was observed to have big cracks that were sealed recently.
- TCE was detected at 71 ug/m<sup>3</sup> in Unit 1052 where the concrete needs to be filled in under water pipe going out the wall onto the 32<sup>nd</sup> Street. This number was improved after an open pipe coming out of the floor was sealed.
- TCE detections ranged from 1 ug/m<sup>3</sup> to 3.5 ug/m<sup>3</sup> in the First Floor Hallway. This was about a 90% reduction from the previous values due to continued space ventilation.
- TCE detections ranged from 10 ug/m<sup>3</sup> to 14 ug/m<sup>3</sup> in the North Mechanical Room.
- The two north blowers detections of TCE ranged from 0 ug/m<sup>3</sup> to 22 ug/m<sup>3</sup>.
- The two south blowers detections of TCE ranged from 16 ug/m<sup>3</sup> to 26 ug/m<sup>3</sup>.

2. Task #2 – Site Visit with WNDR, DNS and DHS

A site visit of the East Block and West Block was conducted by WNDR along with other agencies on May 10, 2023. CWC representatives and KSingh were present as well.

3. Task #3 – Water Disposal

KSingh coordinated with MMSD and disposed of 825 gallons water recovered through the blowers into the Combined Sewer system under MMSD NOI 21-019. KSingh provided oversight.

4. Task #4 – VMS Operations and Troubleshooting

The following tasks were performed:

- Discrete sampling using portable GC was performed this week to monitor TCE concentrations in strategic units in the complex.
- All four blowers are functioning. Fliteway Technologies and KSingh are monitoring the operations of the VMS.
- Water extraction from the blowers has reduced significantly and no water was extracted throughout the week as compared to previous weeks.
- The vacuum measurements in the 1st floor hallway in Buildings 1B-SW and 1B-W continue to be 0, while those in the Gym have consistent negative values between – 0.023 to – 0.118 in H<sub>2</sub>O. The vacuum measurement near the exit of 3100 W. Center Street was between - 0.723 to -0.831 in H<sub>2</sub>O.
- A new vapor pin was installed in the North Mechanical room in the previous week, but no vacuum was detected. Vacuum measurements from all the blowers were also noted to be between – 9 and – 16 inches of water. Sealing of the vapor extraction point in the neighboring powerhouse building is necessary to induce vacuum.
- New vapor pins were installed in Units 1026, 1036, and 1058. The readings at these locations indicated vacuum in these units due to the South blowers. These units are apparently unaffected by the presence of water in the system. The results of vacuum measurements are shown in Table 6 in Attachment B.
- CWC coordinated with sealing contractors to continue efforts for sealing gaps between masonry walls and flooring, cracks and holes in the flooring and walls, open pipes and cracked wood columns.

**Action Items for Week of May 14, 2023 – May 20, 2023**

KSingh plans to perform the following tasks in the upcoming week:

1. Continue to develop scope of work and specifications for Horner Plumbing to extract water from SSDS system.
2. Continue to develop scope of work for Fliteway Technologies to install additional blowers.
3. Start sump construction.
4. Hire a contractor to start CCTV inspection.
5. Continue discrete sampling in the various impacted units and add results to comprehensive table.
6. Continue working with CWC to address sealing issues and unfinished conditions.
7. Conduct vacuum measurements at strategic locations within the buildings.
8. Continue to prepare comprehensive figure showing indoor air data.

**Attachment A**  
**Summary of Monitoring Results by Date**

**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 5/8/2023**

Sample ID	Sample Location	Sample Time	TCE (µg/m <sup>3</sup> )	PCE (µg/m <sup>3</sup> )	Comments
IA - 444	Unit 1042	11:00	11.9	ND	Living Room
IA - 445	Unit 1050	11:15	67.5	ND	Living Room
IA - 446	N Mech room	11:25	10.9	ND	
IA - 447	Unit 2057	11:37	1.24	ND	Living Room
IA - 448	Basketball Court 2	11:58	0.624	ND	
IA - 449	Unit 2077	12:08	0.838	ND	Bathroom
IA - 450	Unit 1045	12:28	38.4	ND	Living Room
IA - 451	Unit 2045	12:36	1.36	ND	
IA - 452	SSD 5	12:57	23.6	ND	
IA - 453	Unit 2064	13:06	1.78	ND	Bathroom
IA - 454	Unit 3057	13:21	ND	ND	Kitchen
IA - 455	Unit 3045	13:29	ND	ND	
IA - 456	Stairwell 4 2nd floor	13:39	7.19	ND	
IA - 457	Unit 3063	13:49	ND	ND	Living Room
Reporting Limit (µg/m <sup>3</sup> )			0.6	0.6	
ND Indicates Not Detected at listed reporting level					

**Table 2: Monitoring Results from 5/9/2023**

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
IA - 458	Unit 1042	10:44	13.1	ND	Living Room
IA - 459	Unit 1050	11:40	297	ND	Bathroom
IA - 460	Unit 1045	11:56	33.8	ND	Living Room
IA - 461	Unit 1052	12:04	70.7	ND	Mechanical Room
IA - 462	Unit 1053	12:15	53.3	ND	Men's Locker Room
IA - 463	N Mech room	12:23	11.8	ND	
IA - 464	SSD 1 – South 7.5 HP	13:08	26.2	1.69	
IA - 465	SSD 2 – South 10 HP	13:23	15.7	1.47	
IA - 466	SSD 3 – North 7.5 HP	13:39	4.97	ND	
IA - 467	SSD 4 – North 10 HP	13:47	22.4	ND	
IA - 468	1st Hallway	14:25	3.49	ND	
IA - 469	SSD 5	14:50	25.5	ND	
Reporting Limit ( $\mu\text{g}/\text{m}^3$ )			0.6	0.6	
ND Indicates Not Detected at listed reporting level					

**Table 3: Monitoring Results from 5/10/2023**

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
IA - 470	Unit 1050	9:49	240	ND	
IA - 471	Fitness Center	9:57	29	ND	
IA - 472	Unit 1011	10:06	2.61	ND	Conference Room
IA - 473	Unit 1006	10:15	2.4	ND	Office Lobby
IA - 474	Unit 1026	10:28	1.67	ND	
IA - 475	Unit 1036	10:37	1.37	ND	
IA - 476	Unit 1040	10:46	11.2	ND	
IA - 477	Laundry Room	10:55	156	ND	
IA - 478	Stairwell 2	11:03	4.15	ND	
IA - 479	2nd Floor Hallway	11:12	4.69	ND	
IA - 480	Unit 2015	11:21	0.77	ND	
IA - 481	Unit 2039	11:31	0.77	ND	
IA - 482	Stairwell 3	11:45	3.9	ND	
IA - 483	Unit 1049	12:36	159	ND	Storage Room
Reporting Limit ( $\mu\text{g}/\text{m}^3$ )			0.6	0.6	
ND Indicates Not Detected at listed reporting level					

**Table 4: Monitoring Results from 5/11/2023**

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
IA - 484	Unit 1050	15:36	80.2	ND	
IA - 485	Unit 1045	15:49	17.2	ND	
IA - 486	SSD 4 – North 10 HP	15:57	4.83	ND	
IA - 487	SSD 3 – North 7.5 HP	16:06	ND	ND	
IA - 488	SSD 1 – South 7.5 HP	16:15	21.9	ND	
IA - 489	SSD 2 – South 10 HP	16:24	18.7	ND	
IA - 490	Unit 1026	16:32	ND	ND	
IA - 491	Unit 1040	16:42	7.37	ND	
IA - 492	Unit 2057	16:51	0.64	ND	
IA - 493	Basketball Court 2	17:00	1.02	ND	
IA - 494	SSD 5	17:09	21.4	ND	
IA - 495	N Mech room	17:18	6.89	ND	
IA - 496	SE Hallway	17:27	0.947	ND	
IA - 497	Unit 1011	17:36	ND	ND	Storage Room
Reporting Limit ( $\mu\text{g}/\text{m}^3$ )			0.6	0.6	
ND Indicates Not Detected at listed reporting level					

**Table 5: Monitoring Results from 5/12/2023**

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
IA - 498	Unit 1050	13:36	75.7	ND	Bathroom
IA - 499	Unit 1048	13:45	86.2	ND	Column
IA - 500	Unit 2049	13:54	1.07	ND	
IA - 501	Unit 2014	14:02	ND	ND	
IA - 502	NW Garage	14:10	1.78	ND	
IA - 503	N Lobby	14:18	0.912	ND	
IA - 504	Unit 1045	14:27	14.3	ND	
IA - 505	Unit 1042	14:35	8.22	ND	
IA - 506	N Blowers	14:55	ND	ND	3A Basement
IA - 507	SW Hallway	15:03	1.92	ND	
IA - 508	Unit 1049	15:12	96.9	ND	
IA - 509	Stairwell 4	15:21	6	ND	
IA - 510	N Mech Room	15:30	7.15	ND	
IA - 511	Unit 1026	15:38	ND	ND	Living Room
Reporting Limit ( $\mu\text{g}/\text{m}^3$ )			0.6	0.6	
ND Indicates Not Detected at listed reporting level					

## Attachment B

**Table 6: Comprehensive Vacuum Measurements (inches H<sub>2</sub>O)**

<b>Location</b>	<b>8-May</b>	<b>9-May</b>	<b>10-May</b>	<b>11-May</b>	<b>12-May</b>
Unit 1040	0	0	-0.002	0	0
Unit 1044	0	0	0	0	0
Unit 1050	0	0	0	0	0
Stairwell 4	0	0	0	0	0
Baseball Court - 1	-0.057	-0.046	-0.060	-0.060	-0.060
Baseball Court - 2	-0.023	-0.027	-0.028	-0.035	-0.024
Baseball Court - 3	-0.106	-0.103	-0.104	-0.118	-0.112
Exit 3100 W Center St	-0.73	-0.723	-0.811	-0.802	-0.831
SSD 1 – South 7.5 HP	-16	-16	-16	-15	-16
SSD 2 – South 10 HP	-11	-11	-15	-15	-15
SSD 3 – North 7.5 HP	-9	-9	-9	-9	-9
SSD 4 – North 10 HP	-13	-13	-13	-13	-13
N Mech Room	0	0	0	0	0
Unit 1026	-0.024	-0.034	-0.036	-0.041	-0.043
Unit 1036	0	0	0	0	0
Unit 1058	-0.01	-0.007	-0.013	-0.017	-0.025



**Attachment C**  
**Comprehensive Data Tables**



