

MEMORANDUM

DATE : April 8, 2023

TO : Shane LaFave / Roers Companies, LLC

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

SUBJECT : Weekly Progress Report for Week Ending 4/8/2023
Community Within the Corridor - East Block

COPY TO : Que El-Amin / Scott Crawford, Inc., 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 4/8/2023. 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.

Three basic tasks were performed this week which are summarized below:

1. Task #1 – Preparation of Written Response to WDNR

KSingh assisted CWC in preparing a response to WDNR based on WDNR's request dated March 31, 2023. The response was submitted by CWC on 04/07/2023.

2. Task #2 – GC Testing by KSingh & Hartman

Hartman in association with KSingh is working on conducting GC testing for measurement of TCE in various units of the East Block between the first and the third floors. 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. The findings of portable discrete testing for TCE are as follows:

- Floor 1 has the highest concentrations of TCE particularly in and around Units 1045 – 1052. The highest TCE was detected at 108 ug/m³ and 278 ug/m³ in Units 1045 and 1050.
- The concentrations are observed to reduce both vertically as we ascend floors, and horizontally as we move away from Units 1045 and 1050.
- TCE was detected at elevated levels in the Men's Locker Room and First Floor hallway as well.
- It is confirmed by portable GC testing that the most impacted area are Units 1045 and 1050 in conjunction with some localized detections in the Men's Locker Room etc.
- As of 04/08/2023, sufficient negative pressure is not being maintained in the impacted areas of the building.

3. Task #3 – VMS Operations and Troubleshooting

The following tasks were performed:

- Checked functionality of blowers. One out of the four blowers was not functional in the beginning of the week. Fliteway Technologies was contacted to correct the situation. They mobilized to the site and made all blowers functional, and they are in operation.
- The performance of the blowers was impaired partly because knockout tanks for each blower were nearly full including all four tote tanks. KSingh provided an additional ten drums to empty the tote tanks. Both the tote tanks and the knockout drums were emptied. The performance of the blowers is being monitored both remotely and by periodic site visits. As of 04/08/2023, all blowers were functioning as designed. Approximately 40 to 50 gallons of water is generated from the blowers every day.
- Two samples of water from the tanks were collected and sent for environmental testing for VOCs. The water stored in drums will be disposed of per State regulations.
- Based on the vacuum measurements, the northern portion of the building is maintaining sufficient vacuum except near the North Mechanical Room.
- KSingh staff documented the impacted areas for visible potential pathways for vapor to migrate into the various units. These visual observations included gaps between masonry walls and flooring, cracks and holes in the flooring and walls, open pipes and cracked wood columns. These areas of concern have been provided to CWC in order to implement sealing of the cracks.
- KSingh continues to provide ongoing visual assessment of the different rooms where gaps have been discovered and is documenting these issues with photos and an issues log.

Action Items for Week of April 9 – 15, 2023

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

1. Continue discrete sampling in the various impacted units
2. Work with CWC to address issues documented in the issues log
3. Conduct vacuum measurements at strategic locations within the buildings
4. Work with CWC to prepare an Emergency Corrective Action Plan
5. Discuss Vapor Mitigation System with NRPP-certified radon contractor
6. Identify access areas in order to extract excess water
7. Work with CWC to seal areas of concern in the impacted units

Attachment A
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 4/03/2023

Sample ID	Sample Location	Analysis Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA – 102	Unit 1040	16:52	12.7	ND ¹
IA – 103	SSD 2	17:00	30	2.6
IA – 104	SSD 1	17:09	22	2.1

Table 2: Monitoring Results from 4/04/2023

Sample ID	Sample Location	Analysis Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA – 105	SSD 3	11:48	14.3	ND
IA – 106	SSD 4	11:55	13.9	ND
IA – 114	SSD 1	15:49	24.5	1.85
IA – 115	SSD 2	15:57	21.9	2.6
IA – 116	Unit 1056	16:06	24.8	ND
IA – 117	Unit 1052	16:14	72.5	ND
IA – 118	SSD 3	16:30	17.6	ND
IA – 119	SSD 4	16:37	41.2	0.82

¹ ND = Concentration below 0.6 $\mu\text{g}/\text{m}^3$. Applicable to the entire document.

Table 3: Monitoring Results from 4/05/2023

Sample ID	Sample Location	Analysis Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA – 120	Unit 1052	11:07	88.7	ND
IA – 121	Unit 1043	11:14	21.6	ND
IA – 122	Unit 1044	11:21	77	ND
IA – 123	Unit 1051	11:29	23	ND
IA – 124	Men's Locker Room	11:40	60.7	ND
IA – 125	Unit 2056	11:47	42.2	ND
IA – 126	Unit 2058	11:55	8.5	ND
IA – 127	1 st Floor Hallway Center	12:03	17.7	ND
IA – 128	3 rd Floor Stairwell 2	12:11	2.1	ND
IA – 129	Unit 3056	12:20	2.4	ND
IA – 130	Unit 2045	12:28	8	ND
IA – 131	SSD 1	12:37	22	2
IA – 132	SSD 2	12:45	16.4	2.7
IA – 133	SSD 3	12:59	2.2	ND
IA – 134	SSD 4	13:10	29.5	0.7
IA – 135	Stairwell 4	13:18	2.2	ND
IA – 136	Unit 2064	13:30	1	ND
IA – 137	Unit 2077	13:40	1.6	ND

Table 4: Monitoring Results from 4/06/2023

Sample ID	Sample Location	Analysis Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA – 138	Unit 1052	9:54	96.6	ND
IA – 139	Unit 1043	10:02	31.3	ND
IA – 140	Unit 1044	10:10	95	ND
IA – 141	Men's Locker Room	10:20	123	ND
IA – 142	Unit 2056	10:30	24.7	ND
IA – 143	1st Floor Hallway Center	10:40	64	ND
IA – 144	SSD 1 – South 7.5 HP	10:50	24.8	2.4
IA – 145	SSD 2 – South 10 HP	11:00	18.7	3
IA – 146	SSD 3 – North 7.5 HP	11:10	3	ND
IA – 147	SSD 4 – North 10 HP	11:20	33	0.6

Table 5: Monitoring Results from 4/07/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA – 148	Unit 1052	10:10	95.7	ND
IA – 149	Unit 1051	10:20	25.4	ND
IA – 150	Unit 1025	10:30	0.96	ND
IA – 151	Unit 1041	10:40	19.9	ND
IA – 152	1st Floor Hallway Center	10:50	25	ND
IA – 153	Unit 2056	11:00	49.2	ND
IA – 154	Unit 2045	11:10	9	ND
IA – 155	Unit 2040	11:20	ND	0.6
IA – 156	Unit 3056	11:30	5.13	ND
IA – 157	Unit 3015	11:40	ND	ND
IA – 158	Unit 3037	11:50	2	ND
IA – 159	SSD 1 – South 7.5 HP	12:00	24	1.8
IA – 160	SSD 2 – South 10 HP	12:10	17.2	2.5
IA – 161	SSD 3 – North 7.5 HP	12:20	39	0.6
IA – 162	SSD 4 – North 10 HP	12:30	5	ND
IA – 163	Unit 1045	12:40	279	ND
IA – 164	Unit 1050	12:50	108	ND
Reporting Limit ($\mu\text{g}/\text{m}^3$):			0.6	0.6
ND Indicates Not Detected at listed reporting level				