

## MEMORANDUM

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DATE : May 6, 2023

TO : Shane LaFave / Roers Companies, LLC

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

SUBJECT : Weekly Progress Report for Week Ending 05/06/2023  
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 summarize the work performed as a part of the emergency response for the referenced project for the week ending 05/06/2023. 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 90 ug/m<sup>3</sup> to 220 ug/m<sup>3</sup> in unit 1045.
- TCE detections ranged from 95 ug/m<sup>3</sup> to 231 ug/m<sup>3</sup> in Unit 1050.
- TCE detections ranged from 2 ug/m<sup>3</sup> and 13 ug/m<sup>3</sup> in the Basketball court (Gym) area.
- TCE detections ranged from 62 ug/m<sup>3</sup> to 340 ug/m<sup>3</sup> in Unit 1052.
- TCE detections ranged from 2 ug/m<sup>3</sup> to 40 ug/m<sup>3</sup> on First Floor Hallway.
- TCE detections ranged from 10 ug/m<sup>3</sup> to 14 ug/m<sup>3</sup> in the North Mechanical Room.
- The two south blowers are showing detections of TCE ranging from 20 ug/m<sup>3</sup> to 28 ug/m<sup>3</sup> which indicates source removal is taking place.
- The two north blowers detections of TCE ranged from 6 ug/m<sup>3</sup> to 38 ug/m<sup>3</sup>.

2. Task #2 – Plumbing Alterations to SSDS by Horner Plumbing

Horner Plumbing accessed the SSDS solid piping run that passes through the tunnel connecting the East Block with the West Block buildings using confined space entry procedures. The piping was

accessed, and 20 to 30 gallons of water was removed from the piping run. A piping and airtight sump was set up to allow water to drain from the piping run in the future.

3. Task #3 – Site Meeting Between KSingh and Continuum Architects to Discuss Storm Drainage

KSingh and Continuum Architects met to discuss the storm water infiltration issue. As noted in previous submittals to WDNR, storm water is entering the SSDS system and impacting the performance of the Vapor Mitigation System. The focus of the site visit was the portion of the East Block that had TCE exceedances. The visit included a walk of the perimeter of this area and the interior of this area.

The following key observations were noted:

- Exterior grade appears to be pitched away from the building face for the most part; however, there were two unfinished areas that were on the south end and east end of the east block respectively that are back pitched toward the building face/foundation. There is no overhang of the roof or canopy to divert stormwater in these areas.
- One of the two exterior areas that is back pitched to the building is immediately adjacent to the VMS blowers and the VMS pipe exit point from the building. In this area, there are 3-4 roof downspouts. This roof drainage system is a gutter with the majority of the roof pitched toward the gutter system. The gutters lead to several downspouts that are on the façade of the building. One of the roof downspouts outlets to unfinished grade. The run-off from this downspout has created channel in the soil/gravel area and it flows directly toward the building face ~3-4' away from the VMS pipe exiting the building.
- The other roof downspouts in this area are buried underground. One of these buried connections is reportedly to an existing pipe and the direction of the buried existing pipe is unknown. The other buried connection is a new connection to a new buried pipe that runs under the building slab. It is unclear if this pipe has pressure rated connections under the slab. It is also unclear what the capacity of this pipe is based only on visual observation. Based on feedback from representatives onsite, it is unknown exactly where this pipe goes under the slab.

These items are being further assessed and addressed as a part of the work that we are doing related the Emergency Corrective Action Plan that is currently being reviewed by WDNR.

4. Task #4 – Exhaust Piping Modifications

Horner Plumbing installed additional exhaust piping and the existing 10 HP South Blower and the existing 7.5 HP South Blower both exhaust at an adequate distance above the roofline to comply with WDNR requirements.

5. Task #5 – Water Disposal Arrangements

KSingh coordinated with MMSD and has scheduled disposal of water recovered through the blowers into the Combined Sewer system under MMSD NOI 21-019. Fliteway Technologies will provide a forklift for moving drums and complete emptying of drums. KSingh will provide oversight.

6. Task #6 – 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 continue to be 0, while those in the Gym have consistent negative values between  $-0.009$  to  $-0.1$  in  $H_2O$ . The vacuum measurement near the exit of 3100 W. Center Street was between  $-0.725$  to  $-0.746$  in  $H_2O$ .
- Vacuum measurements from all the blowers were also noted to be between  $-9$  and  $-15$  inches  $H_2O$ .
- 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  $-15$ . The results of vacuum measurements are shown in Table 6 in Attachment B.
- New vapor pins were installed in Units 1026, 1036, and 1058. The readings at these locations indicated a presence of vacuum owing to the close proximity to the South blowers.
- KSingh staff continued to document 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 were provided to CWC to implement sealing of the cracks.

### **Action Items for Week of May 7, 2023 – May 13, 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. Continue discrete sampling in the various impacted units and add results to comprehensive table.
4. Dispose stored water into MMSD sewer system under existing NOI.
5. Continue working with CWC to address sealing issues and unfinished conditions.
6. Conduct vacuum measurements at strategic locations within the buildings.
7. Continue to prepare comprehensive figure showing indoor air data.
8. Test 2 water samples from drums for chloride and fluoride to assess leakage of water supply lines.
9. Meet with WDNR for site visit.
10. Continue to identify and line up contractors to perform construction services while WDNR is reviewing the proposed corrective action plan.

**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 5/1/2023**

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
100 ppbv		14:42	1.03	0.6	
100 ppbv		14:50	53	42	
IA - 388	Unit 1045	14:58	90.3	6.7	Hole in the Brick wall
IA - 389	Unit 1050	15:06	231	2.2	Bathroom
IA - 390	Unit 1042	15:14	15.5	1.8	
IA - 391	Basketball Court	15:22	12.8	1.5	Near Stairwell 3
IA - 392	1st Floor Hallway	15:30	40.3	1.2	Near Stairwell 4
IA - 393	Unit 1052	15:38	73.6	0.7	Near drain
IA - 394	Unit 1053	15:46	58	0.8	
IA - 395	SSD 5	15:54	25.2	0.6	
IA - 396	Unit 1006	16:02	2.97	0.65	
IA - 397	N Mech room	16:10	13.7	0.6	After sealing with foam
IA - 398	SSD 1 – South 7.5 HP	16:18	26.1	3.6	
IA - 399	SSD 2 – South 10 HP	16:26	1.2	0.6	
IA - 400	SSD 3 – North 7.5 HP	16:39	8.6	0.6	
IA - 401	SSD 4 – North 10 HP	16:47	38.3	1.3	
Reporting Limit ( $\mu\text{g}/\text{m}^3$ )			0.6	0.6	
ND Indicates Not Detected at listed reporting level					

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

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
IA - 402	Unit 1045	11:53	132	ND	Bedroom
IA - 403	Unit 1050	12:02	194	ND	Bathroom
IA - 404	1st Floor Hallway	12:11	14	ND	
IA - 405	Unit 1052	12:30	62.6	ND	Near drain
IA - 406	Stairwell 4	12:38	12	ND	
IA - 407	Basketball Court 2	12:47	2.2	ND	Near Blowers
IA - 408	SSD 1 – South 7.5 HP	12:58	27.9	2.43	
IA - 409	N Mech room	14:26	11.5	ND	
IA - 410	Unit 1053	14:35	31.6	ND	
Reporting Limit ( $\mu\text{g}/\text{m}^3$ )			0.6	0.6	

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

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
10 ppbv		14:36	10.5	8.2	100x
IA - 411	Unit 1045	14:44	121	ND	Bedroom
IA - 412	Unit 1050	14:52	186	ND	Bathroom
IA - 413	Unit 1039	15:00	1.4	ND	Brickwall
IA - 414	1st Floor Hallway	15:08	9	ND	
IA - 415	Unit 1052	15:16	340	ND	Near drain
IA - 416	Stairwell 4	15:27	886	ND	Vapor Pin
IA - 417	Unit 2045	15:32	19.1	2.43	
IA - 418	Unit 2014		48.8	ND	
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 5/4/2023**

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
10 ppbv		14:42	10.5	8	100x
IA - 419	Unit 1041	14:58	13	0.9	Kitchen Column
IA - 420	Ist Hallway	15:06	3.5	ND	Floor crack
IA - 421	Unit 2042	15:14	2.5	ND	Kitchen Column
IA - 422	Unit 2058	15:22	2.9	ND	Outside wall
IA - 423	Unit 3056	15:30	1.95	ND	Kitchen Column
IA - 424	Unit 3041	15:38	2.45	ND	Kitchen Column
IA - 425	Basketball Court	15:46	3	ND	St. 3
IA - 426	SSD 5	15:54	26.1	ND	
IA - 427	Unit 2077	16:02	1.73	ND	Bathroom
IA - 428	SE Entrance Heating	16:10	2.52	ND	Heating Vent
IA - 429	Unit 3092	16:18	1.67	ND	
IA - 430	3rd Stairwell 2	16:26	2.35	ND	
IA - 431	Unit 1050	16:39	95.5	ND	Wall with 1045
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 5/5/2023**

Sample ID	Sample Location	Sample Time	TCE ( $\mu\text{g}/\text{m}^3$ )	PCE ( $\mu\text{g}/\text{m}^3$ )	Comments
IA - 432	Unit 1045	10:22	220	ND	Bedroom wall
IA - 433	Unit 1050	10:30	174	ND	Bathroom
IA - 434	Unit 1052	10:38	76	ND	Column crack
IA - 435	Unit 1055	10:46	45	ND	Women's Locker Room
IA - 436	Unit 1049	11:57	142	ND	Storage Room
IA - 437	1st Floor Hallway	12:05	2.3	ND	
IA - 438	Basketball Court 2	12:13	2.3	ND	
IA - 439	N Mech room	12:33	10.1	ND	
IA - 440	SSD 3 – North 7.5 HP	12:47	5.9	ND	
IA - 441	SSD 4 – North 10 HP	12:55	37.7	ND	
IA - 442	SSD 2 – South 10 HP	13:03	20	1.4	
IA - 443	SSD 1 – South 7.5 HP	13:20	25.7	1.7	
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**

**Community Within the Corridor - East Block**

**Table 6 - Comprehensive Vacuum Measurements**

Location	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	1-May	2-May	3-May	4-May	5-May
Unit 1040	0	0.008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit 1044	0	0.006	0	0	0	0	0.012	0	0	0	0	0	0	0	0	0	0	0	0
Unit 1050	0	0.011	0	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stairwell 4	0	0.005	0	-0.008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baseball Court - 1	-0.057	-0.045	-0.035	-0.051	-0.052	-0.052	-0.017	-0.052	-0.052	-0.048	-0.044	-0.055	-0.052	-0.039	-0.037	-0.048	-0.049	-0.054	-0.048
Baseball Court - 2	-0.023	-0.016	0	-0.028	-0.025	-0.033	0	-0.022	-0.019	-0.026	-0.011	-0.016	-0.022	-0.017	-0.009	-0.035	-0.035	-0.046	-0.035
Baseball Court - 3	-0.107	-0.104	-0.086	-0.102	-0.102	-0.101	-0.036	-0.102	-0.099	-0.099	-0.102	-0.1	-0.097	-0.088	-0.074	-0.094	-0.099	-0.1	-0.099
Exit 3100 W Center St			-0.81	-0.844	-0.845	-0.804	-0.314	-0.85	-0.845	-0.845	-0.825	-0.835	-0.725	-0.731	-0.727	-0.725	-0.745	-0.746	-0.735
SSD 1 – South 7.5 HP												-17	-15	-15	-16	-16	-16	-15	-16
SSD 2 – South 10 HP												-15	-10	-11	-12	-11	-11	-11	-11
SSD 3 – North 7.5 HP												-9	-9	-9	-9	-9	-9	-9	-9
SSD 4 – North 10 HP												-13	-13	-12	-12	-12	-12	-11	-12
N Mech Room														0	0	0.005	0	0	0
Unit 1026																		-0.036	-0.039
Unit 1036																		-0.001	0
Unit 1058																		-0.0002	-0.001

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

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	1-May	2-May	3-May	4-May	5-May
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		14	9	3.5	2.3
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																						2.35	
3rd Floor 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		2.2	3	2.3	
Elevator	0																												
Fitness Center									49.6	43.7		28.1									29.3								
Front Lobby		0																				4							
Garage	0.6																												
N Garage	0																						0						
Garage Tunnel	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	13.7	11.5			10.1	
Men's Locker Room						60.7	123		122		428	82.9				161	131		23.7	28.3					58	31.6			
Women's Locker Room																													45
Powerhouse																						0.7	3.2						
Sales Office at Machine	0.3	0																								2.97			
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		26.1	27.9			25.7
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		1.2				20
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		8.6				5.9
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		38.3				37.7
SSD Vent Pipe #5 - Prospective																	11.3	21						20.3		25.2		26.1	
Stairwell 4	1.6					2.2			2.7	2.6				14.4			7										12		
Stairwell 6																													
1049 - Store Room																													142
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								1.4				
Unit 1040	10.3			12.7						14.5						21.2	22.6														
Unit 1041	11.6							19.9		16.8	14.4																	13			
Unit 1042	11.4									16.2	15.2											12.6		9.3	15.5						
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	90.3	132	121		220		
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	231	194	186	95.5	174		
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	73.6	62.6	340		76		
Unit 1056					24.8																	44									
Unit 2014																												48.8			
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																											2.5		
Unit 2043	0.4	0																													
Unit 2044		0																													
Unit 2045	23	18				8	9	2.9			3.7	5.2																19.1			
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																					2.9		
Unit 2059	0.3	0																													
Unit 2061		0																													
Unit 2062		0																													
Unit 2064	0					1																									
Unit 2077	0					1.6																							1.7		
Unit 2111		0																													
Unit 3015			0					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																		
Unit 3056	6	9.6				2.4		5.13	0.9			2.4	2.4								0										



Table 8 - Comparative Blower Emissions

Sample Location	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	1-May	2-May	3-May	4-May	5-May
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		26.1	27.9			25.7
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		1.2				20
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		8.6				5.9
SSD Vent Pipe #4 - N - 10 HP			41.2	29.5	33	39	19.2	38.7	39.1	29.3	44	41.9	36.8	38.2	35	42.8	43.1	46.3		5.7	44.4		38.3				37.7

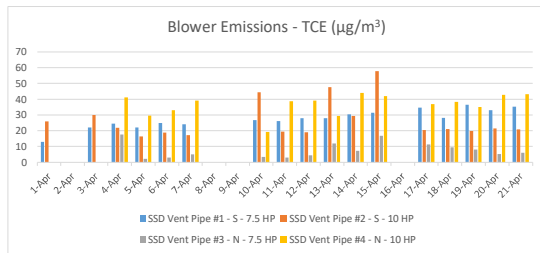
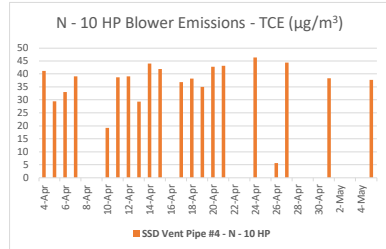
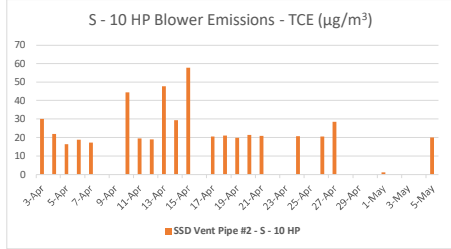
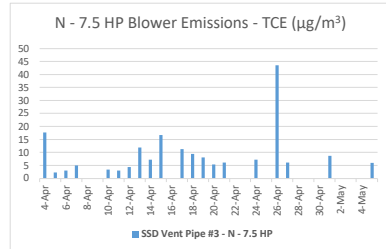
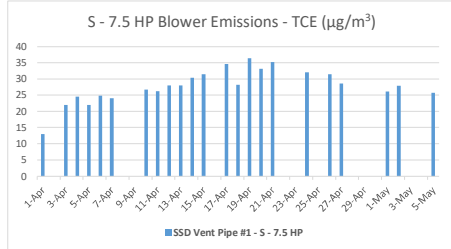


Table 9 - Comparative TCE Concentrations in Impacted Units

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	1-May	2-May	3-May	4-May	5-May	
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	283	51.3	26.6	90.3	132	121	4-May	220
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	231	194	186	95.5	174	
Unit 1052					72.5	88.7	96.6	95.7	128	103	88.6	51.4	38.4							57.2	70.3		72		20.2	73.6	62.6	340	76	
1st Floor Hallway Center						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	40.3	14	9	3.5	2.3	
Men's Locker Room						60.7	123		122		428	82.9				161	131		23.7	28.3					58	31.6				

