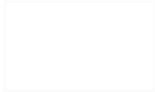


# **ISTR Operations Monthly Progress Report**

Reporting Period: 10/1/20 through 10/31/20



**Operable Unit 3 VOC Source Area Remedy  
Former Grumman Settling Ponds, Bethpage, NY**

NYSDEC Site No. 130003A

November 18, 2020

# In-Situ Thermal Remediation (ISTR) Operations Monthly Progress Report

---

Prepared per Section 8.2 of the OU3 Remedial Action Work Plan (RAWP) and DER-10, Section 5.7(b):

1. Remedy Progress / Performance Monitoring
2. Ambient Air and Noise Monitoring
3. Significant Activities
4. Schedule / Proposed Modifications
5. Pending RAWP Modifications
6. Data Tables

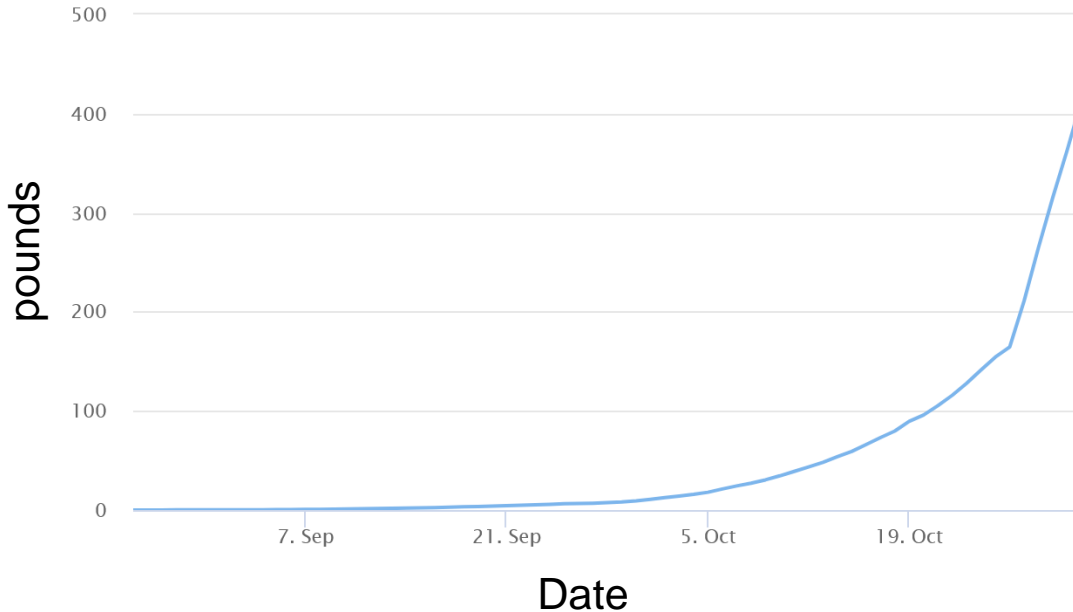
## ISTR Operations Summary

- Air emissions comply with criteria specified in the RAWP
- No exceedances of NYSDEC Community Air Monitoring Plan (CAMP) action levels
- No ambient air monitoring results above target screening levels
- Liquid discharges comply with criteria specified in the RAWP

## Reporting Period: October 2020

System Startup	8/26/2020
Days of Operation Since Startup	67
Cumulative Mass Removed, lbs	413

### Cumulative TVOC Mass Removed

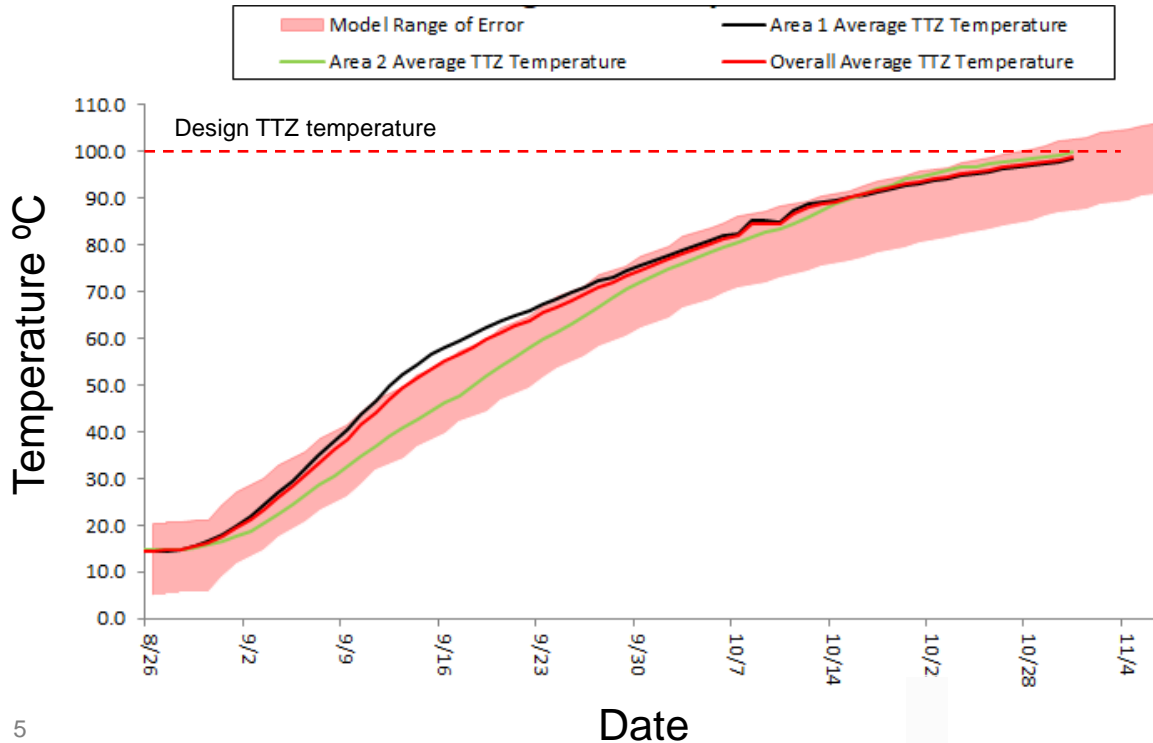


Estimated 413 lbs of total volatile organic compounds (TVOCs) removed through end of October

Cumulative TVOC mass is the sum of the following:

- Photoionization detector (PID) TVOC vapor mass
- Liquid TVOC mass
- Condensed non-aqueous phase liquid (NAPL) mass

### Cumulative Temperature Progression

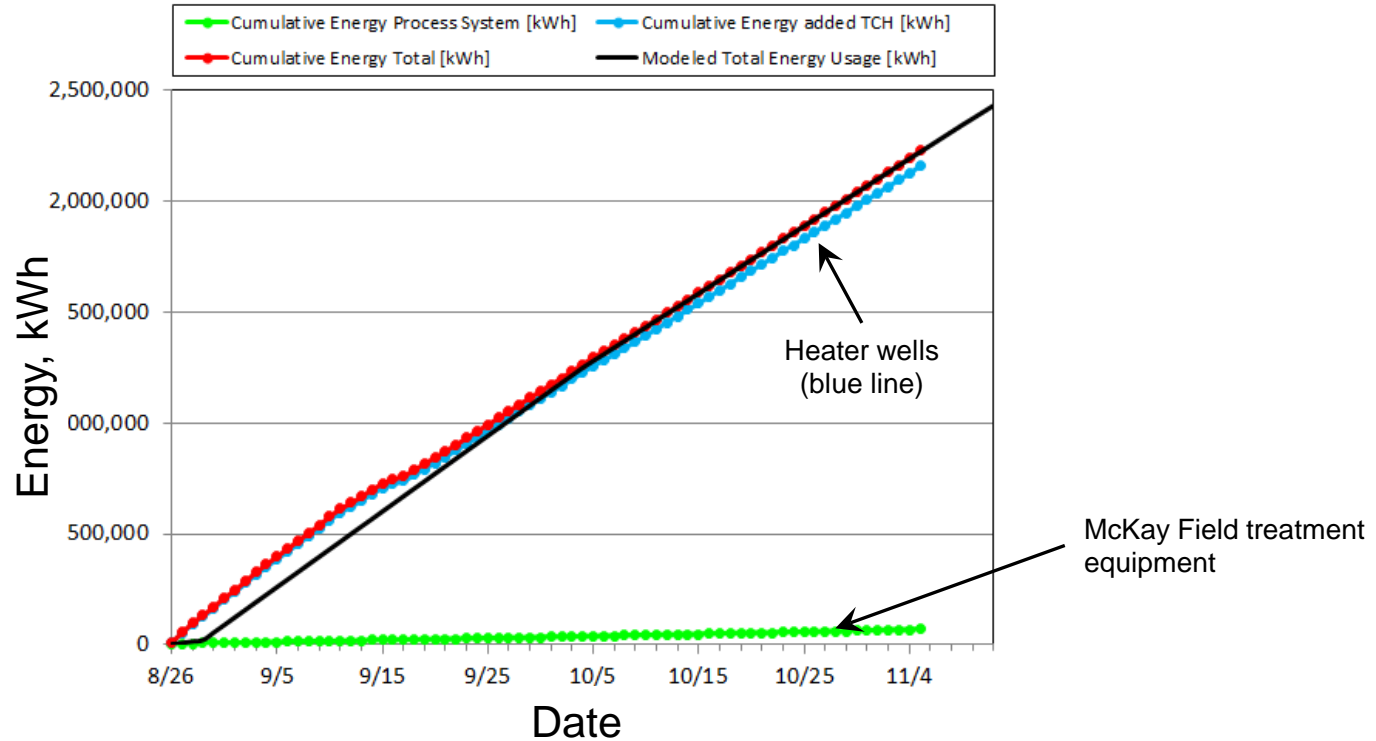


Target treatment zone (TTZ) design temperature is 100°C

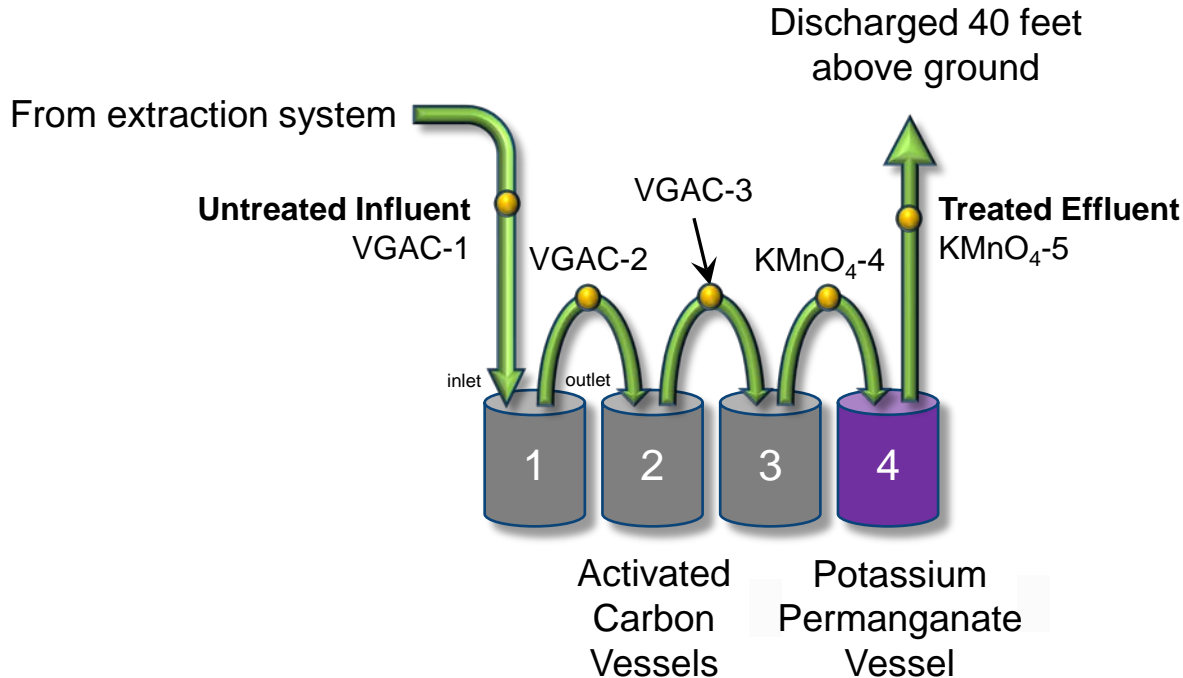
Average temperature through October 31:

- Area 1 = 98°C
- Area 2 = 100°C

### Energy Use



## Vapor Treatment System



● Vapor Treatment System  
Sampling Locations

## Vapor Treatment System

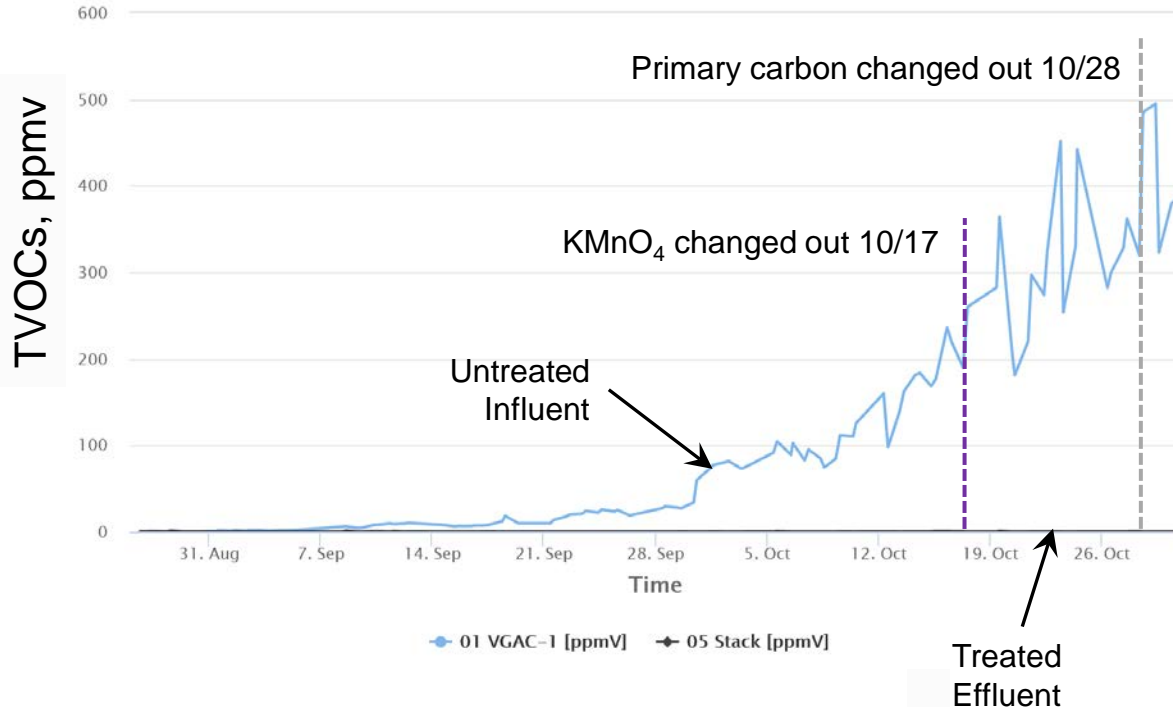
Air emissions meet treatment criteria in the RAWP:

- Stack concentrations less than 7.6 mg/m<sup>3</sup> for TCE and 1.9 mg/m<sup>3</sup> design limits for vinyl chloride throughout October.
- Greater than 90% removal of trichloroethylene (TCE) and vinyl chloride (with one exception for vinyl chloride on 10/27).
  - Carbon changeout conducted 10/28, and subsequent detector tube readings confirmed >90% vinyl chloride removal.
  - Also, ambient air samples collected on 10/28 covering the previous 7 days were all below reporting limits for vinyl chloride (0.037 – 0.040 ug/m<sup>3</sup>).

*Routine operations analytical results provided in Table 1*



### Vapor Treatment System

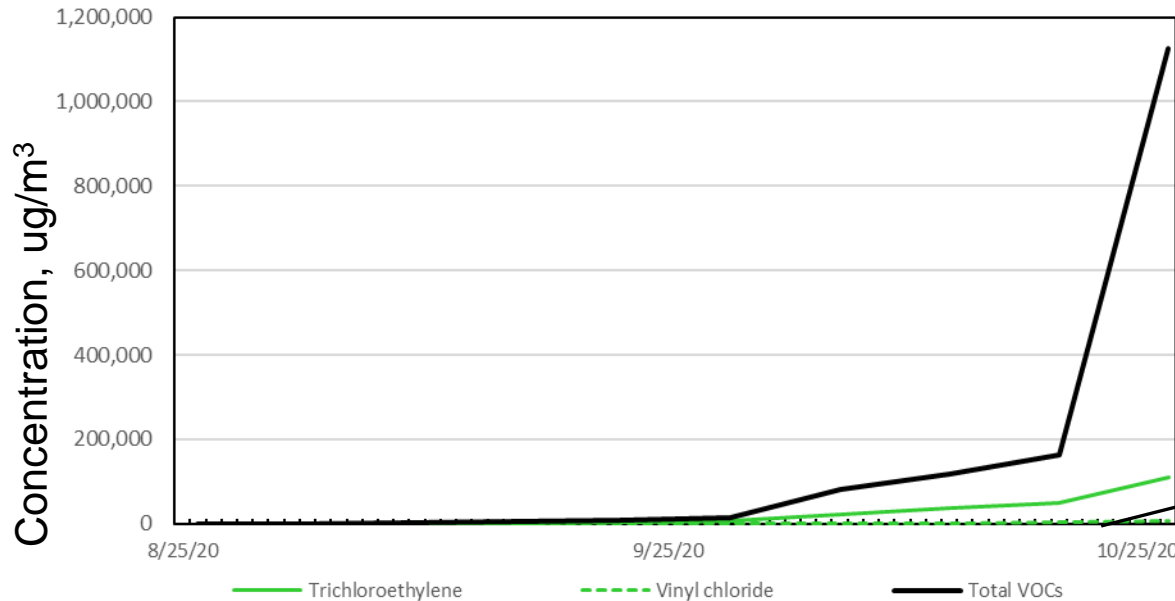


TVOC concentration (PID) at end of reporting period:

- Influent = 382 ppmv (max 495 ppmv)
- Effluent = 0 ppmv (max 0.9 ppmv)

## Vapor Treatment System Influent

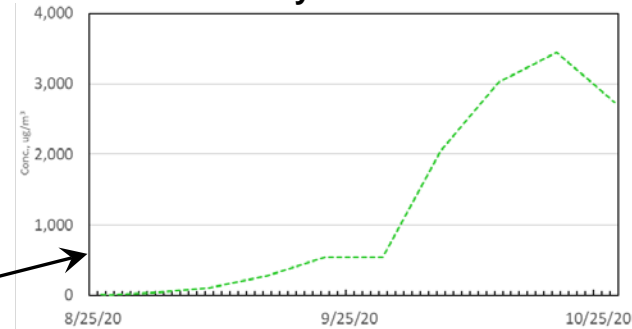
VGAC-1 (System Influent - Position 1)



Influent concentrations (Summa) on 10/27:

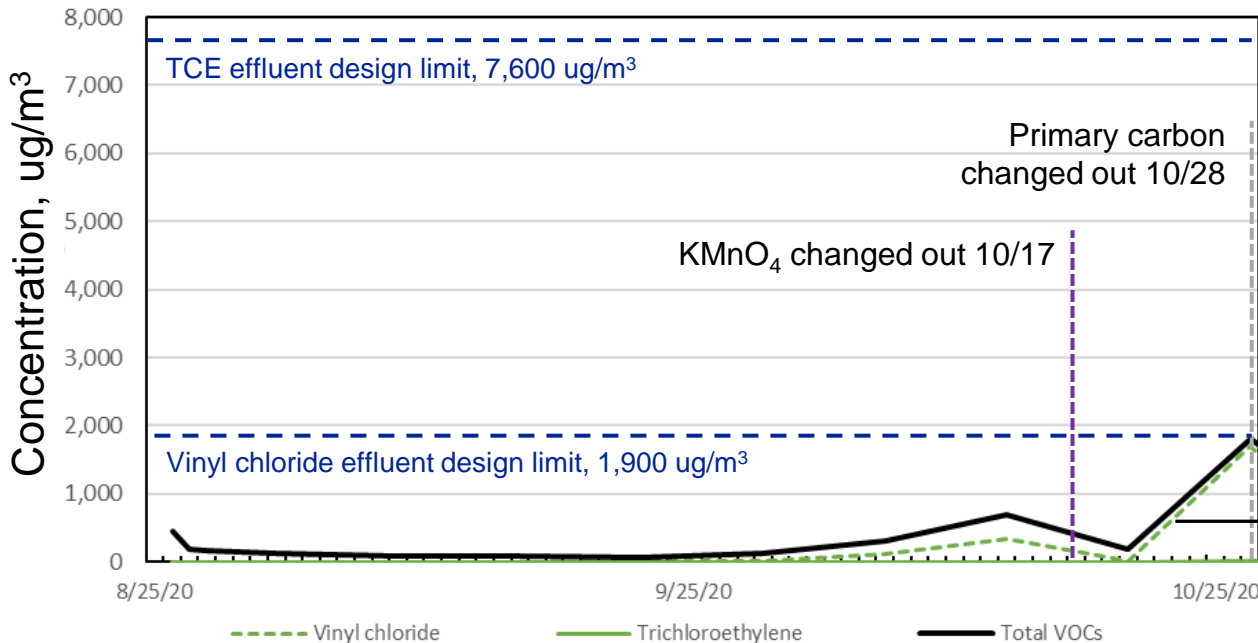
- TVOCs = 1,130,000  $\mu\text{g}/\text{m}^3$
- TCE = 111,000  $\mu\text{g}/\text{m}^3$
- Vinyl chloride = 2,740  $\mu\text{g}/\text{m}^3$

Vinyl chloride



### Vapor Treatment System Effluent

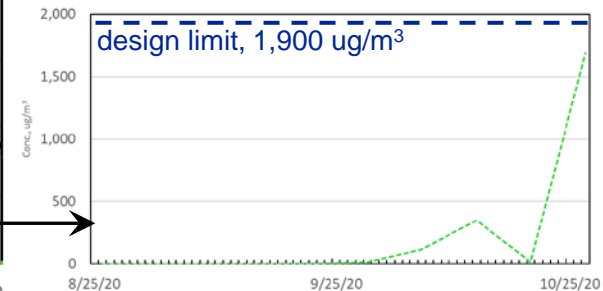
KMNO4-5 (System Effluent - Position 5)



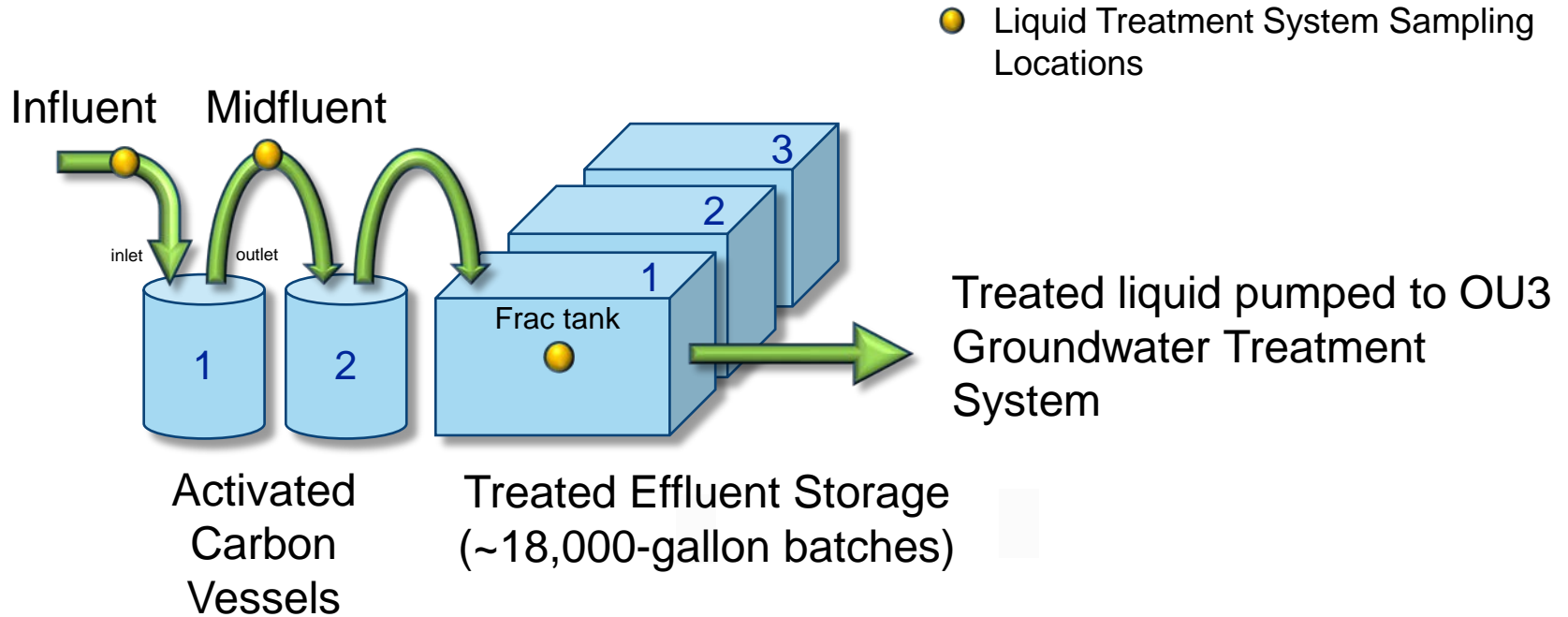
Effluent concentrations (Summa) on 10/27:

- TVOCs = 1,800  $\mu\text{g}/\text{m}^3$
- TCE = 12  $\mu\text{g}/\text{m}^3$
- Vinyl chloride = 1,690  $\mu\text{g}/\text{m}^3$

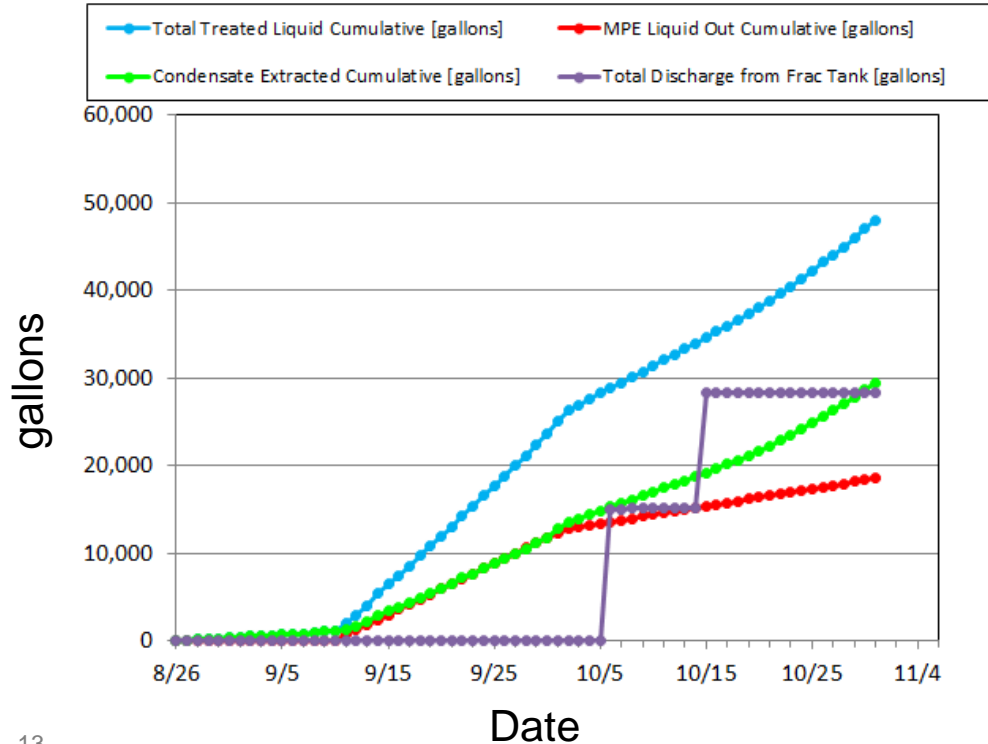
Vinyl chloride



### Liquid Treatment System



### Cumulative Liquid Produced



28,271 gallons treated water discharged to OU3 groundwater treatment system in October:

- Frac tank 1 sampled 9/22, discharged 10/6
- Frac tank 2 sampled 10/6, discharged 10/15

*Analytical results provided in Table 2*

# Ambient Air PID Monitoring

PID levels comply with Community Air Monitoring Plan (CAMP) criteria in the RAWP:

- PID readings recorded continuously at locations AMP-1 through 4
- Results emailed daily to the State and Town of Oyster Bay (Monday through Saturday)
- PID monitoring results did not exceed NYSDEC's CAMP action level (5 ppm TVOCs for a 15-minute average)

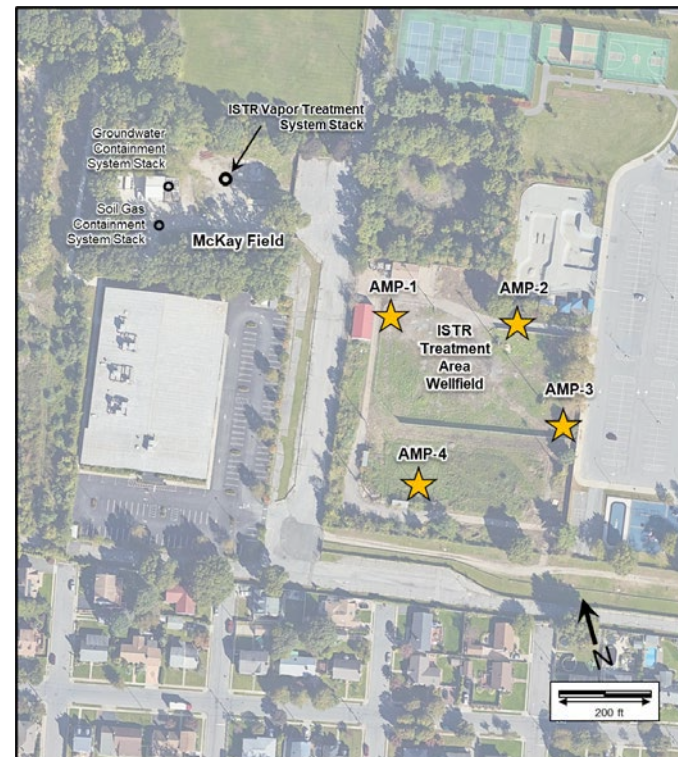


# Ambient Air Summa Canister Monitoring

Summa canister levels comply with ambient air criteria in the RAWP:

- Summa canister samples collected 10/1, 10/7, 10/10, 10/16, 10/21, and 10/28
- Results emailed to the State and Town of Oyster Bay
- Summa canister results for compounds of interest (COIs) lower than target screening levels in the CAMP
- Summa canister results for non-COIs also lower than target screening levels calculated using CAMP-specified protocol

*Analytical results provided in Table 3*

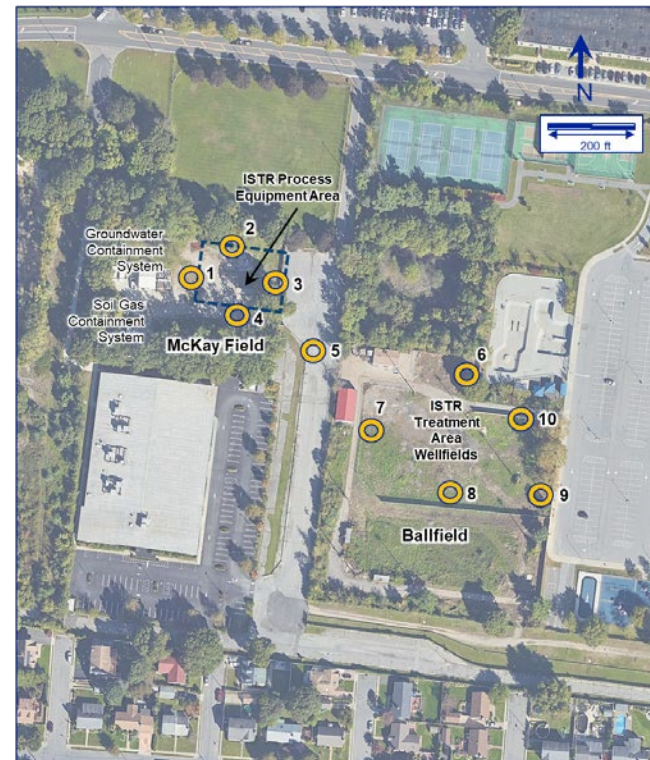
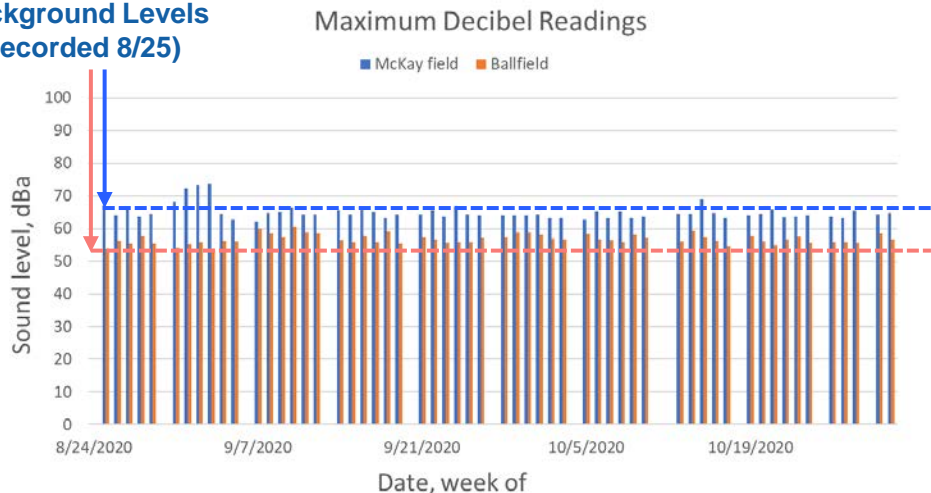


# Noise Monitoring

Sound levels comply with noise criteria in the RAWP:

- All readings <80 dBa action level during October
- Readings discontinued 11/6 as approved during 11/4 monthly update

**Background Levels  
(recorded 8/25)**





## Significant Activities

---

### Major equipment repairs and significant downtime

- No major equipment repairs or significant downtime
- Potassium permanganate vessel changed out 10/17
- Vapor-phase carbon changed out 10/28
- Liquid-phase carbon changed out 10/30

## Planned Significant Activities During Next Two Months

Continue routine system operations, monitoring, and maintenance

# Schedule

Activity	RAWP Schedule	Current Status
Remedial System Operation	Q3/20 – Q1/21	On schedule
Post-Treatment Confirmation Sampling	Q1/21	On schedule
Remedy Cool-down	Q1/21-Q2-21	On schedule
Equipment Removal & Site Restoration	Q2/21	On schedule

No significant delays or corrective actions required

No schedule modifications anticipated

# Pending RAWP Modifications

---

**Frac tank discharge criteria**

**Liquid effluent analytical method for 1,4-dioxane**

**Percent removal criterion for vinyl chloride**

# Data Tables

---

**Table 1. Vapor Treatment System Air Sampling Results  
Routine Monitoring - October 2020**

Compound (ug/m <sup>3</sup> )	Sample ID:	VGAC-1	VG	KMNO4-5	Percent Removed			
	Lab Sample ID: Date Sampled:	JD14212-1 10/6/2020	JD14212-2 10/6/2020	JD14212-3 10/6/2020				
1,1,1-Trichloroethane	<	93	<	0.71	<	0.71		
1,1-Dichloroethane	<	23	<	0.19	<	0.19		
1,1-Dichloroethylene		<b>416</b>	<	0.27	<	0.27		
1,2,4-Trimethylbenzene	<	330	<	2.6	<	2.6		
1,3,5-Trimethylbenzene	<	84	<	0.64	<	0.64		
1,4-Dioxane*	<	94	<	0.76	<	0.76		
2,2,4-Trimethylpentane	<	51	<	0.41	<	0.41		
2-Hexanone	<	74	<	0.61	<	0.61		
4-Ethyltoluene	<	74	<	0.59	<	0.59		
Acetone*		<b>4,370</b>		<b>47.5</b>		<b>69.6</b>		
Benzene		<b>303</b>	<b>J</b>	<	0.15	<	0.15	
Bromoform	<	200	<	1.6	<	1.6		
Carbon disulfide	<	37	<	0.29	<	0.29		
Carbon tetrachloride	<	75	<	0.59	<	0.59		
Chloroethane	<	63		<b>1.6</b>	<b>J</b>	<	0.50	
Chloroform	<	49	<	0.39	<	0.39		
Chloromethane*	<	16		<b>17</b>		<b>16</b>		
cis-1,2-Dichloroethylene		<b>13,900</b>	<	0.19	<	0.19		
Cyclohexane		<b>250</b>	<b>J</b>	<	0.3	<	0.3	
Dichlorodifluoromethane	<	41		<b>2.3</b>	<b>J</b>		<b>2.3</b>	<b>J</b>
Ethanol	<	210		<b>15</b>		<b>20.7</b>		
Ethyl acetate	<	68		<b>50.7</b>		<b>58.7</b>		
Ethylbenzene		<b>1,130</b>		<b>1.8</b>	<b>J</b>	<	0.26	
Heptane		<b>2,440</b>	<	0.29	<	0.29		
Hexane		<b>1,620</b>	<	0.15	<	0.15		
Isopropyl alcohol*	<	79	<	0.64		<b>11</b>		
m,p-Xylene		<b>2,430</b>		<b>6.5</b>		<b>2.7</b>	<b>J</b>	
m-Dichlorobenzene	<	57	<	0.46	<	0.46		
Methyl ethyl ketone		<b>891</b>		<b>5.6</b>		<b>7.4</b>		
Methyl isobutyl ketone	<	74	<	0.57	<	0.57		
Methylene chloride*	<	25	<	0.2	<	0.2		
o-Xylene		<b>704</b>		<b>3.3</b>	<b>J</b>	<	0.3	
Propylene*		<b>495</b>		<b>534</b>	<	0.11		
Styrene	<	40	<	0.32	<	0.32		
Tertiary butyl alcohol	<	21		<b>2.5</b>		<b>4.5</b>		
Tetrachloroethylene	<	100		<b>1.1</b>	<	0.81		
Tetrahydrofuran	<	74	<	0.59	<	0.59		
Toluene		<b>26,000</b>		<b>3.1</b>		<b>2.1</b>	<b>J</b>	
trans-1,2-Dichloroethylene	<	15	<	0.11	<	0.11		
Trichloroethylene		<b>23,600</b>		<b>0.81</b>	<b>J</b>	<	0.41	100%
Trichlorofluoromethane	<	79	<	0.62	<	0.62		
Vinyl acetate	<	60	<	0.49	<	0.49		
Vinyl chloride*		<b>2,050</b>		<b>798</b>		<b>114</b>		
Xylenes (total)		<b>3,130</b>		<b>9.6</b>		<b>2.7</b>	<b>J</b>	
<b>TVOCs</b>		<b>80,600</b>		<b>1,490</b>		<b>309</b>		

Footnotes:

ug/mg<sup>3</sup> micrograms per cubic meter

\* Compound is poorly adsorbed by activated carbon.

< Compound was not detected at or above the indicated value.

J Detected concentration is less than the quantitation limit.

TVOCs Total volatile organic compounds

Detections are **bolded**.

**Table 1. Vapor Treatment System Air Sampling Results  
Routine Monitoring - October 2020**

Compound (ug/m <sup>3</sup> )	Sample ID:	VGAC-1	VGAC-3	KMNO4-5	Percent Removed
	Lab Sample ID: Date Sampled:	JD14620-1 10/13/2020	JD14620-2 10/13/2020	JD14620-3 10/13/2020	
1,1,1-Trichloroethane		<b>274</b>	< 3.6	< 0.71	
1,1-Dichloroethane		<b>170</b> J	< 0.93	< 0.19	
1,1-Dichloroethylene		<b>805</b>	< 1.3	< 0.27	
1,2,4-Trimethylbenzene		< 38	< 3.2	< 0.64	
1,3,5-Trimethylbenzene		< 39	< 3.3	< 0.64	
1,4-Dioxane*		< 43	< 3.6	< 0.76	
2,2,4-Trimethylpentane		<b>1,450</b>	< 2.1	< 0.41	
2-Hexanone		< 35	< 3.0	< 0.61	
4-Ethyltoluene		< 34	< 2.9	< 0.59	
Acetone*		<b>7,060</b>	<b>11</b>	<b>24.9</b>	
Benzene		<b>277</b>	< 0.77	<b>5.8</b>	
Bromoform		< 91	< 7.8	< 1.6	
Carbon disulfide		<b>153</b>	< 1.5	< 0.29	
Carbon tetrachloride		< 35	< 3.0	< 0.59	
Chloroethane		< 29	< 2.6	< 0.50	
Chloroform		< 23	< 2.0	< 0.39	
Chloromethane*		<b>69.0</b> J	<b>20</b>	<b>25.2</b>	
cis-1,2-Dichloroethylene		<b>15,700</b>	< 0.91	< 0.19	
Cyclohexane		<b>537</b>	< 1.5	< 0.30	
Dichlorodifluoromethane		< 19	< 1.6	<b>3.1</b> J	
Ethanol		<b>1,270</b>	< 8.3	<b>8.1</b>	
Ethyl acetate		< 32	<b>73.4</b>	<b>139</b>	
Ethylbenzene		<b>167</b> J	< 1.3	< 0.26	
Heptane		<b>3,250</b>	< 1.4	< 0.29	
Hexane		<b>5,570</b>	< 0.74	< 0.15	
Isopropyl alcohol*		<b>26,300</b>	< 3.2	<b>5.4</b>	
m,p-Xylene		<b>352</b>	< 3.0	<b>2.4</b> J	
m-Dichlorobenzene		< 27	< 2.3	< 0.46	
Methyl ethyl ketone		<b>1,090</b>	< 2.5	<b>2.6</b>	
Methyl isobutyl ketone		< 35	< 3.0	< 0.57	
Methylene chloride*		<b>733</b>	< 1.0	< 0.20	
o-Xylene		<b>109</b> J	< 1.5	< 0.30	
Propylene*		<b>598</b>	<b>400</b>	<b>120</b>	
Styrene		<b>115</b> J	< 1.6	< 0.32	
Tertiary butyl alcohol		<b>207</b>	< 0.85	< 0.17	
Tetrachloroethylene		<b>280</b>	< 4.2	< 0.81	
Tetrahydrofuran		< 35	< 2.9	< 0.59	
Toluene		<b>11,800</b>	< 1.1	<b>8.3</b>	
trans-1,2-Dichloroethylene		<b>165</b> J	< 0.59	< 0.11	
Trichloroethylene		<b>36,600</b>	< 2.0	<b>3.6</b>	100%
Trichlorofluoromethane		< 37	< 3.1	< 0.62	
Vinyl acetate		< 28	< 2.4	< 0.49	
Vinyl chloride*		<b>3,020</b>	<b>1,650</b>	<b>348</b>	
Xylenes (total)		<b>460</b>	< 1.5	<b>2.4</b> J	
<b>TVOCs</b>		<b>118,100</b>	<b>2,150</b>	<b>696</b>	

Footnotes:

ug/mg<sup>3</sup> micrograms per cubic meter

\* Compound is poorly adsorbed by activated carbon.

< Compound was not detected at or above the indicated value.

J Detected concentration is less than the quantitation limit.

TVOCs Total volatile organic compounds

Detections are **bolded**.

**Table 1. Vapor Treatment System Air Sampling Results  
Routine Monitoring - October 2020**

Compound (ug/m <sup>3</sup> )	Sample ID:	VGAC-1	VGAC-3	KMNO4-5	Percent Removed
	Lab Sample ID: Date Sampled:	JD14988-1 10/20/2020	JD14988-2 10/20/2020	JD14988-3 10/20/2020	
1,1,1-Trichloroethane		<b>139</b> J	< 3.3	< 0.71	
1,1-Dichloroethane		<b>210</b>	< 0.85	< 0.19	
1,1-Dichloroethylene		<b>1,180</b>	< 1.2	< 0.27	
1,2,4-Trimethylbenzene		< 41	< 2.9	< 0.64	
1,3,5-Trimethylbenzene		< 42	< 2.9	< 0.64	
1,4-Dioxane*		< 47	< 3.4	< 0.76	
2,2,4-Trimethylpentane		<b>2,720</b>	< 1.8	< 0.41	
2-Hexanone		< 38	< 2.7	< 0.61	
4-Ethyltoluene		< 37	< 2.6	< 0.59	
Acetone*		<b>6,340</b>	<b>79.3</b>	<b>56.8</b>	
Benzene		<b>393</b>	< 0.67	<b>1.3</b> J	
Bromoform		< 99	< 6.9	< 1.6	
Carbon disulfide		<b>140</b> J	< 1.3	< 0.29	
Carbon tetrachloride		< 38	< 2.6	< 0.59	
Chloroethane		< 32	< 2.3	<b>1.7</b> J	
Chloroform		< 25	< 1.8	< 0.39	
Chloromethane*		<b>50.8</b> J	<b>36.3</b>	<b>27.5</b>	
cis-1,2-Dichloroethylene		<b>23,600</b>	< 0.83	< 0.19	
Cyclohexane		<b>898</b>	< 1.4	< 0.30	
Dichlorodifluoromethane		< 21	< 1.5	<b>2.6</b> J	
Ethanol		<b>923</b>	<b>64.3</b>	<b>53.9</b>	
Ethyl acetate		<b>382</b>	< 2.4	<b>6.1</b>	
Ethylbenzene		<b>1,120</b>	< 1.2	< 0.26	
Heptane		<b>8,280</b>	< 1.3	< 0.29	
Hexane		<b>4,550</b>	< 0.67	< 0.15	
Isopropyl alcohol*		<b>14,600</b>	< 2.9	<b>12</b>	
m,p-Xylene		<b>1,960</b>	< 2.6	< 0.61	
m-Dichlorobenzene		< 29	< 2.0	< 0.46	
Methyl ethyl ketone		<b>979</b>	<b>9.4</b> J	<b>5.0</b>	
Methyl isobutyl ketone		< 38	< 2.7	< 0.57	
Methylene chloride*		<b>479</b>	< 0.90	<b>3.2</b>	
o-Xylene		<b>434</b>	< 1.3	< 0.30	
Propylene*		<b>543</b>	<b>519</b>	< 0.11	
Styrene		< 20	< 1.4	< 0.32	
Tertiary butyl alcohol		<b>165</b>	<b>22</b>	<b>4.5</b>	
Tetrachloroethylene		<b>208</b>	< 3.7	< 0.81	
Tetrahydrofuran		< 38	< 2.7	< 0.59	
Toluene		<b>39,900</b>	< 0.98	<b>1.5</b> J	
trans-1,2-Dichloroethylene		<b>312</b>	< 0.52	< 0.11	
Trichloroethylene		<b>50,800</b>	< 1.8	< 0.41	100%
Trichlorofluoromethane		< 40	< 2.9	< 0.62	
Vinyl acetate		< 31	< 2.2	< 0.49	
Vinyl chloride*		<b>3,450</b>	<b>4,580</b>	<b>14</b>	
Xylenes (total)		<b>2,400</b>	< 1.3	< 0.30	
<b>TVOCs</b>		<b>164,800</b>	<b>5,310</b>	<b>190</b>	

Footnotes:

ug/mg<sup>3</sup> micrograms per cubic meter

\* Compound is poorly adsorbed by activated carbon.

< Compound was not detected at or above the indicated value.

J Detected concentration is less than the quantitation limit.

J1 One or more analytical issues noted.

TVOCs Total volatile organic compounds

Detections are **bolded**.

**Table 1. Vapor Treatment System Air Sampling Results  
Routine Monitoring - October 2020**

Compound (ug/m <sup>3</sup> )	Sample ID:	VGAC-1	VGAC-3	KMNO4-5	Percent Removed		
	Lab Sample ID: Date Sampled:	JD15302-1 10/27/2020	JD15302-2 10/27/2020	JD15302-3 10/27/2020			
1,1,1-Trichloroethane	<	250	<	25	<	3.6	
1,1-Dichloroethane	<	65	<	6.5	<	0.93	
1,1-Dichloroethylene		<b>1,140</b>	<	9.1	<	1.3	
1,2,4-Trimethylbenzene	<	220	<	22	<	3.2	
1,3,5-Trimethylbenzene	<	220	<	22	<	3.3	
1,4-Dioxane*	<	250	<	25	<	3.6	
2,2,4-Trimethylpentane		<b>2,570</b>	<	14	<	2.1	
2-Hexanone	<	200	<	20	<	3.0	
4-Ethyltoluene	<	200	<	20	<	2.9	
Acetone*		<b>34,700</b>	<b>382</b>	<b>27.3</b>			
Benzene		<b>968</b>	<	5.1	<	0.77	
Bromoform	<	520	<	52	<	7.8	
Carbon disulfide		<b>445</b> J	<	10	<	1.5	
Carbon tetrachloride	<	200	<	20	<	3.0	
Chloroethane	<	170	<	17	<	2.6	
Chloroform	<	130	<	13	<	2.0	
Chloromethane*		<b>555</b> J	<b>44.4</b> J	<b>43.6</b>			
cis-1,2-Dichloroethylene		<b>30,400</b>	<	6.3	<	0.91	
Cyclohexane		<b>2,090</b>	<	10	<	1.5	
Dichlorodifluoromethane	<	110	<	11	<	1.6	
Ethanol		<b>25,200</b>	<b>254</b>	<b>8.3</b>			
Ethyl acetate	<	180	<	18	<	2.7	
Ethylbenzene		<b>6,170</b>	<	8.7	<	1.3	
Heptane		<b>11,000</b>	<	9.8	<	1.4	
Hexane		<b>92,700</b>	<b>1,800</b>	<b>0.74</b>			
Isopropyl alcohol*		<b>632,000</b> E	<b>6,070</b>	<b>11</b>			
m,p-Xylene		<b>16100</b>	<	20	<b>11</b> J		
m-Dichlorobenzene	<	160	<	16	<	2.3	
Methyl ethyl ketone		<b>1,880</b>	<	17	<	2.5	
Methyl isobutyl ketone		<b>1,000</b> J	<	20	<	3.0	
Methylene chloride*		<b>3,510</b>	<	6.9	<	1.0	
o-Xylene		<b>4,820</b>	<	10	<	1.5	
Propylene*	<	36	<b>557</b>	<b>0.55</b>			
Styrene		<b>800</b> J	<	11	<	1.6	
Tertiary butyl alcohol		<b>1,500</b>	<	5.8	<	0.85	
Tetrachloroethylene		<b>3,230</b>	<	28	<	4.2	
Tetrahydrofuran	<	200	<	20	<	2.9	
Toluene		<b>139,000</b>	<	7.2	<b>11</b> J		
trans-1,2-Dichloroethylene	<	39	<	3.9	<	0.59	
Trichloroethylene		<b>111,000</b>	<b>48</b>	<b>12</b>		100%	
Trichlorofluoromethane	<	210	<	21	<	3.1	
Vinyl acetate	<	160	<	16	<	2.4	
Vinyl chloride*		<b>2,740</b>	<b>8,380</b>	<b>1,690</b>			
Xylenes (total)		<b>20,900</b>	<	10	<b>11</b> J		
<b>TVOCs</b>		<b>1,125,000</b>	<b>17,500</b>	<b>1,810</b>			

Footnotes:

ug/mg<sup>3</sup> micrograms per cubic meter

\* Compound is poorly adsorbed by activated carbon.

< Compound was not detected at or above the indicated value.

J Detected concentration is less than the quantitation limit.

J1 One or more analytical issues noted.

E Detected concentration exceeds the highest calibration standard.

TVOCs Total volatile organic compounds

Detections are **bolded**.



Table 2. Liquid Treatment System Sampling Results - October 2020

Analyte	Sample ID:	LGAC-INF-20201006	LGAC-MID-20201006	FRAC2-A4272-20201006	LGAC-INF-20201026	LGAC-MID-20201026
	Lab Sample ID:	JD14200-1 / 1A	JD14200-2 / 2A	JD14200-3 / 3A	JD15252-1 / 1A	JD15252-2 / 2A
	Date Sampled:	10/6/2020	10/6/2020	10/6/2020	10/26/2020	10/26/2020
<b>Volatile Organic Compounds (ug/L, detections only):</b>						
1,1-Dichloroethane		1.8	< 0.57	< 0.57	< 0.57	< 0.57
2-Butanone (MEK)		240	< 6.9	< 6.9	261	< 6.9
2-Hexanone		17.6	< 2.0	< 2.0	18.4	< 2.0
4-Methyl-2-pentanone (MIBK)		7.2	< 1.9	< 1.9	9.8	< 1.9
Acetone*		1,170	< 6.0	< 6.0	1,350	42.2
Benzene		0.95	< 0.43	< 0.43	0.89	< 0.43
cis-1,2-Dichloroethene		276	< 0.51	< 0.51	124	< 0.51
Ethylbenzene		6.2	< 0.6	< 0.6	12.3	< 0.60
m,p-Xylene		15.9	< 0.78	< 0.78	41.1	< 0.78
o-Xylene		9.7	< 0.59	< 0.59	24.5	< 0.59
Toluene		239	< 0.53	< 0.53	154	< 0.53
trans-1,2-Dichloroethene		< 0.54	< 0.54	< 0.54	1.7	< 0.54
Trichloroethene		50.6	< 0.53	< 0.53	107	< 0.53
Vinyl chloride*		7.2	< 0.79	< 0.79	1.0	< 0.79
Xylene (total)		25.6	< 0.59	< 0.59	65.6	< 0.59
TVOCs		2,040	0	0	2,110	42.2
<b>Semivolatile Organic Compounds (ug/L, detections only):</b>						
1,1'-Biphenyl		1.0	< 0.20	< 0.21	2.4	< 0.22
1,4-Dioxane		13.3	< 0.63	< 0.66	35.3	< 0.67
2,4-Dimethylphenol		52.5	< 2.3	< 2.4	286	< 2.5
2-Methylnaphthalene		0.60	J < 0.20	< 0.21	2.0	< 0.22
2-Methylphenol		34.2	< 0.85	< 0.89	231	< 0.91
3&4-Methylphenol		70.9	< 0.84	< 0.88	758	< 0.90
Acetophenone		39.6	< 0.20	< 0.21	62.3	< 0.21
Anthracene		0.25	J < 0.20	< 0.21	0.73	J < 0.22
Benzaldehyde		8.1	< 0.28	< 0.29	24.8	< 0.30
Benzo(a)anthracene		< 0.20	< 0.19	< 0.20	0.26	J < 0.21
Carbazole		< 0.23	< 0.22	< 0.23	0.58	J < 0.23
Chrysene		< 0.18	< 0.17	< 0.18	0.20	J < 0.18
Dibenzofuran		< 0.22	< 0.21	< 0.22	0.53	J < 0.23
Dimethyl phthalate		2.7	< 0.21	< 0.22	8.1	< 0.22
Fluoranthene		0.73	J < 0.16	< 0.17	3.3	< 0.17
Fluorene		0.82	J < 0.16	< 0.17	0.64	J < 0.18
Naphthalene		1.9	< 0.22	< 0.23	3.6	< 0.24
Phenanthrene		3.2	< 0.17	< 0.18	7.8	< 0.18
Phenol		45.6	< 0.37	< 0.39	422	< 0.40
Pyrene		0.54	J < 0.21	< 0.22	2.3	< 0.22
<b>Semivolatile Organic Compounds (SIM) (ug/L):</b>						
1,4-Dioxane		-	< 0.048	< 0.050	31	< 0.051
<b>Polychlorinated Biphenyls (ug/L):</b>						
Aroclor 1016		< 0.097	< 0.098	< 0.097	< 0.10	< 0.10
Aroclor 1221		< 0.21	< 0.21	< 0.21	< 0.22	< 0.22
Aroclor 1232		< 0.13	< 0.13	< 0.13	< 0.14	< 0.14
Aroclor 1242		< 0.11	< 0.11	< 0.11	< 0.12	< 0.12
Aroclor 1248		2.7	< 0.063	< 0.062	3.4	< 0.066
Aroclor 1254		4.1	< 0.21	< 0.20	1.4	< 0.22
Aroclor 1260		< 0.075	< 0.076	< 0.075	< 0.081	< 0.080
Aroclor 1262		< 0.096	< 0.097	< 0.096	< 0.10	< 0.10
Aroclor 1268		< 0.086	< 0.087	< 0.086	< 0.092	< 0.091
<b>Metals (mg/L):</b>						
Iron (Method 200.7)		32,100	< 100	392	17,300	2,690
Manganese (Method 200.7)		583	831	310	462	349
Mercury (Method 6010)		< 0.20	< 0.20	< 0.20	< 0.20	0.24
<b>General Chemistry (mg/L):</b>						
Nitrogen, Nitrate		< 0.11	< 0.11	0.16	< 0.11	< 0.11
Nitrogen, Nitrate + Nitrite		< 0.10	< 0.10	0.16	< 0.10	< 0.10
Nitrogen, Nitrite		0.011	< 0.010	< 0.010	0.015	< 0.010
Nitrogen, Total Kjeldahl		2.2	0.90	0.86	6.4	2.4

**Footnotes:**

- ug/L micrograms per liter
- mg/L milligrams per liter
- \* Poorly adsorbed on activated carbon.
- < Analyte was not detected at or above the indicated value.
- J Detected concentration is less than the laboratory quantitation limit.

TVOCs Total volatile organic compounds  
Detections are **bolded**.

**Table 3: Ambient Air Laboratory Results (2020-09-25 through 2020-10-01)**

Analyte	Target Screening Level (µg/m <sup>3</sup> ) <sup>1,3</sup>	95% of Concentration Distribution NYSDOH Background Air (µg/m <sup>3</sup> ) <sup>2</sup>	Ambient Air Concentration (µg/m <sup>3</sup> )				
			Sample Location				
			AMP-01	AMP-02	AMP-03*	AMP-04	AMP-02-DUP
<b>Site-specific Compounds of Interest<sup>1</sup></b>							
1,1,1-Trichloroethane	520	0.7	< 0.16	< 0.16	< 0.15	< 0.20	< 0.16
1,1-Dichloroethane	45	< 0.25	< 0.12	< 0.12	< 0.11	< 0.14	< 0.12
1,1-Dichloroethene	8	<0.25	< 0.060	< 0.058	< 0.055	< 0.071	< 0.058
1,2-Dichloroethane	3	< 0.25	< 0.12	< 0.12	< 0.11	< 0.14	< 0.12
Benzene	8	5.8	<b>0.30</b>	<b>0.31</b>	<b>0.41</b>	<b>0.29</b>	<b>0.29</b>
Ethyl-benzene	29	1.9	< 0.13	< 0.13	< 0.12	< 0.16	< 0.13
m,p-Xylene	10	3.1	< 0.26	< 0.25	<b>0.28</b>	< 0.31	< 0.25
o-Xylene	10	2.3	< 0.13	< 0.13	<b>0.12 J</b>	< 0.16	< 0.13
Tetrachloroethene	30	1.6	< 0.21	< 0.20	< 0.19	< 0.24	< 0.20
Toluene	521	21	<b>0.49</b>	<b>0.59</b>	<b>0.70</b>	<b>0.53</b>	<b>0.56</b>
trans-1,2-Dichloroethene	82	NA2	< 0.60	< 0.58	< 0.55	< 0.71	< 0.58
Trichloroethene	2	0.5	< 0.16	< 0.16	< 0.15	< 0.19	< 0.16
Vinyl Chloride	8	< 0.25	< 0.039	< 0.037	< 0.035	< 0.046	< 0.037
<b>Other Compounds<sup>3</sup></b>							
1,1,2,2-Tetrachloroethane	1.3	< 0.25	< 0.21	< 0.20	< 0.19	< 0.24	< 0.20
1,1,2-Trichloroethane	0.21	< 0.25	< 0.16	< 0.16	< 0.15	< 0.20	< 0.16
1,2-Dibromoethane (EDB)	0.12	< 0.25	< 0.23	< 0.22	< 0.21	< 0.28	< 0.22
1,4-Dichlorobenzene	7	0.8	< 0.18	< 0.18	< 0.16	< 0.22	< 0.18
Carbon Tetrachloride	12	1	<b>0.49</b>	<b>0.52</b>	<b>0.50</b>	<b>3.4</b>	<b>0.49</b>
Chloroethane	NA1	0.4	< 0.20	< 0.19	< 0.18	< 0.24	< 0.19
Chloroform	3	0.5	< 0.15	< 0.14	<b>0.16</b>	< 0.17	< 0.14
Chloromethane	310	4.6	< 1.6	< 1.5	< 1.4	< 1.8	< 1.5
cis-1,2-Dichloroethene	NA1	< 0.25	< 0.12	< 0.12	< 0.11	< 0.14	< 0.12
Freon 114	NA1	1.3	< 0.21	< 0.20	< 0.19	< 0.25	< 0.20
Freon 12	100	11	<b>2.9</b>	<b>3.1</b>	<b>2.9</b>	<b>2.8</b>	<b>2.8</b>
Methyl tert-butyl ether	260	NA2	< 0.55	< 0.53	< 0.50	< 0.64	< 0.53

**Notes:** µg/m<sup>3</sup> - micrograms per cubic meter

< - indicates not detected at or above the indicated value

J - indicates sample result is estimated

**Bold** - indicates detections

R - rejected after data validation

NA1 - no criteria given in the EPA RSL Calculator

NA2 - NYSDOH did not include this compound in the guidance document<sup>2</sup>

\* - sample collected over a 3-day period because of low vacuum

<sup>1</sup> Target Screening Levels for site-specific compounds of interest provided in Bethpage Ambient Air Monitoring Plan and are based on a one-year exposure duration (B&B Engineers & Geologists of New York, P.C., May 2020)

<sup>2</sup> NYSDOH Outdoor Air Background Values from Appendix C (Table C1) of Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)

<sup>3</sup> Target Screening Levels for other compounds calculated using the EPA RSL calculator with the same inputs as described in the Bethpage Ambient Air Monitoring Plan

**Table 3: Ambient Air Laboratory Results (2020-10-01 through 2020-10-07)**

Analyte	Target Screening Level (µg/m³) <sup>1,3</sup>	95% of Concentration Distribution NYSDOH Background Air (µg/m³) <sup>2</sup>	Ambient Air Concentration (µg/m³)				
			Sample Location				
			AMP-01	AMP-02*	AMP-03	AMP-04**	AMP-03-DUP
<b>Site-specific Compounds of Interest<sup>1</sup></b>							
1,1,1-Trichloroethane	520	0.7	< 0.19	< 0.15	< 0.16	< 0.14J	< 0.16
1,1-Dichloroethane	45	< 0.25	< 0.14	< 0.11	< 0.12	< 0.10J	< 0.12
1,1-Dichloroethene	8	<0.25	< 0.068	< 0.055	< 0.057	< 0.050J	< 0.058
1,2-Dichloroethane	3	< 0.25	< 0.14	< 0.11	< 0.12	< 0.10J	< 0.12
Benzene	8	5.8	<b>0.58</b>	<b>0.49</b>	<b>0.44</b>	<b>0.82J</b>	<b>0.45</b>
Ethyl-benzene	29	1.9	<b>0.16</b>	<b>0.15</b>	<b>0.13</b>	<b>0.20J</b>	<b>0.13</b>
m,p-Xylene	10	3.1	<b>0.48</b>	<b>0.43</b>	<b>0.38</b>	<b>0.57J</b>	<b>0.37</b>
o-Xylene	10	2.3	<b>0.19</b>	<b>0.20</b>	<b>0.15</b>	<b>0.22J</b>	<b>0.14</b>
Tetrachloroethene	30	1.6	<b>0.24</b>	< 0.19	< 0.20	< 0.17J	< 0.20
Toluene	521	21	<b>1.3</b>	<b>1.0</b>	<b>0.87</b>	<b>1.3J</b>	<b>0.85</b>
trans-1,2-Dichloroethene	82	NA2	< 0.68	< 0.55	< 0.57	< 0.50J	< 0.58
Trichloroethene	2	0.5	< 0.18	< 0.15	< 0.15	< 0.14J	< 0.16
Vinyl Chloride	8	< 0.25	< 0.044	< 0.035	< 0.037	< 0.032J	< 0.038
<b>Other Compounds<sup>3</sup></b>							
1,1,2,2-Tetrachloroethane	1.3	< 0.25	< 0.24	< 0.19	< 0.20	< 0.17J	< 0.20
1,1,2-Trichloroethane	0.21	< 0.25	< 0.19	< 0.15	< 0.16	< 0.14J	< 0.16
1,2-Dibromoethane (EDB)	0.12	< 0.25	< 0.26	< 0.21	< 0.22	< 0.20J	< 0.22
1,4-Dichlorobenzene	7	0.8	< 0.21	< 0.16	< 0.17	< 0.15J	< 0.18
Carbon Tetrachloride	12	1	<b>0.46</b>	<b>0.51</b>	<b>0.48</b>	<b>0.49J</b>	<b>0.48</b>
Chloroethane	NA1	0.4	< 0.23	< 0.18	< 0.19	< 0.17J	< 0.19
Chloroform	3	0.5	< 0.17	<b>0.16</b>	<b>0.15</b>	<b>0.22J</b>	<b>0.14</b>
Chloromethane	310	4.6	< 1.8	< 1.4	< 1.5	< 1.3J	< 1.5
cis-1,2-Dichloroethene	NA1	< 0.25	< 0.14	< 0.11	< 0.11	< 0.10J	< 0.12
Freon 114	NA1	1.3	< 0.24	< 0.19	< 0.20	< 0.18J	< 0.20
Freon 12	100	11	<b>2.8</b>	<b>2.9</b>	<b>2.7</b>	<b>2.8J</b>	<b>2.7</b>
Methyl tert-butyl ether	260	NA2	< 0.62	< 0.50	< 0.52	< 0.46J	< 0.53

**Notes:** µg/m³ - micrograms per cubic meter  
 < - indicates not detected at or above the indicated value  
 J - indicates sample result is estimated  
**Bold** - indicates detections  
 R - rejected after data validation  
 NA1 - no criteria given in the EPA RSL Calculator  
 NA2 - NYSDOH did not include this compound in the guidance document<sup>2</sup>  
 \* - sample collected over a 5-day period because of low vacuum  
 \*\* - cannister vacuum disappated to zero over a 3-day period

<sup>1</sup> Target Screening Levels for site-specific compounds of interest provided in Bethpage Ambient Air Monitoring Plan and are based on a one-year exposure duration (B&B Engineers & Geologists of New York, P.C., May 2020)

<sup>2</sup> NYSDOH Outdoor Air Background Values from Appendix C (Table C1) of Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)

<sup>3</sup> Target Screening Levels for other compounds calculated using the EPA RSL calculator with the same inputs as described in the Bethpage Ambient Air Monitoring Plan

**Table 3: Ambient Air Laboratory Results (2020-10-07 through 2020-10-10)**

Analyte	Target Screening Level (µg/m <sup>3</sup> ) <sup>1,3</sup>	95% of Concentration Distribution NYSDOH Background Air (µg/m <sup>3</sup> ) <sup>2</sup>	Ambient Air Concentration (µg/m <sup>3</sup> )				
			Sample Location				
			AMP-01	AMP-02	AMP-03	AMP-04	AMP-01-DUP
<b>Site-specific Compounds of Interest<sup>1</sup></b>							
1,1,1-Trichloroethane	520	0.7	< 0.17	< 0.16	< 0.17	< 0.17	< 0.17
1,1-Dichloroethane	45	< 0.25	< 0.13	< 0.12	< 0.12	< 0.13	< 0.12
1,1-Dichloroethene	8	< 0.25	< 0.063	< 0.060	< 0.061	< 0.063	< 0.061
1,2-Dichloroethane	3	< 0.25	< 0.13	< 0.12	< 0.12	< 0.13	< 0.12
Benzene	8	5.8	<b>0.36</b>	<b>0.37</b>	<b>0.36</b>	<b>0.34</b>	<b>0.38</b>
Ethyl-benzene	29	1.9	< 0.14	< 0.13	< 0.13	< 0.14	< 0.13
m,p-Xylene	10	3.1	<b>0.34</b>	<b>0.32</b>	<b>0.28</b>	< 0.27	<b>0.33</b>
o-Xylene	10	2.3	< 0.14	< 0.13	< 0.13	< 0.14	< 0.13
Tetrachloroethene	30	1.6	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Toluene	521	21	<b>0.75</b>	<b>0.77</b>	<b>0.67</b>	<b>0.59</b>	<b>0.73</b>
trans-1,2-Dichloroethene	82	NA2	< 0.63	< 0.60	< 0.61	< 0.63	< 0.61
Trichloroethene	2	0.5	< 0.17	< 0.16	< 0.17	< 0.17	< 0.17
Vinyl Chloride	8	< 0.25	< 0.040	< 0.039	< 0.040	< 0.040	< 0.040
<b>Other Compounds<sup>3</sup></b>							
1,1,2,2-Tetrachloroethane	1.3	< 0.25	< 0.22	< 0.21	< 0.21	< 0.22	< 0.21
1,1,2-Trichloroethane	0.21	< 0.25	< 0.17	< 0.16	< 0.17	< 0.17	< 0.17
1,2-Dibromoethane (EDB)	0.12	< 0.25	< 0.24	< 0.23	< 0.24	< 0.24	< 0.24
1,4-Dichlorobenzene	7	0.8	< 0.19	< 0.18	< 0.19	< 0.19	< 0.19
Carbon Tetrachloride	12	1	<b>0.48</b>	<b>0.50</b>	<b>0.49</b>	<b>0.49</b>	<b>0.49</b>
Chloroethane	NA1	0.4	< 0.21	< 0.20	< 0.20	< 0.21	< 0.20
Chloroform	3	0.5	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Chloromethane	310	4.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
cis-1,2-Dichloroethene	NA1	< 0.25	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Freon 114	NA1	1.3	< 0.22	< 0.21	< 0.22	< 0.22	< 0.22
Freon 12	100	11	<b>2.7</b>	<b>2.8</b>	<b>2.7</b>	<b>2.8</b>	<b>2.7</b>
Methyl tert-butyl ether	260	NA2	< 0.57	< 0.55	< 0.56	< 0.57	< 0.56

**Notes:**

µg/m<sup>3</sup> - micrograms per cubic meter

**Bold** - indicates detections

R - rejected after data validation

< - indicates not detected at or above the indicated value

NA1 - no criteria given in the EPA RSL Calculator

J - indicates sample result is estimated

NA2 - NYSDOH did not include this compound in the guidance document<sup>2</sup>

<sup>1</sup> Target Screening Levels for site-specific compounds of interest provided in Bethpage Ambient Air Monitoring Plan and are based on a one-year exposure duration (B&B Engineers & Geologists of New York, P.C., May 2020)

<sup>2</sup> NYSDOH Outdoor Air Background Values from Appendix C (Table C1) of Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)

<sup>3</sup> Target Screening Levels for other compounds calculated using the EPA RSL calculator with the same inputs as described in the Bethpage Ambient Air Monitoring Plan

**Table 3: Ambient Air Laboratory Results (2020-10-10 through 2020-10-16)**

Analyte	Target Screening Level (µg/m <sup>3</sup> ) <sup>1,3</sup>	95% of Concentration Distribution NYSDOH Background Air (µg/m <sup>3</sup> ) <sup>2</sup>	Ambient Air Concentration (µg/m <sup>3</sup> )				
			Sample Location				
			AMP-01	AMP-02	AMP-03	AMP-04	AMP-04-DUP
<b>Site-specific Compounds of Interest<sup>1</sup></b>							
1,1,1-Trichloroethane	520	0.7	< 0.32	< 0.16	< 0.18	< 0.21	< 0.21 R
1,1-Dichloroethane	45	< 0.25	< 0.24	< 0.12	< 0.13	< 0.15	< 0.15 R
1,1-Dichloroethene	8	<0.25	< 0.12	< 0.057	< 0.064	< 0.076	<b>0.66 R</b>
1,2-Dichloroethane	3	< 0.25	< 0.24	< 0.12	< 0.13	< 0.15	< 0.15 R
Benzene	8	5.8	< 0.48	<b>0.32</b>	<b>0.3</b>	<b>0.31</b>	<b>0.41 R</b>
Ethyl-benzene	29	1.9	< 0.26	<b>0.14</b>	< 0.14	< 0.16	< 0.16 R
m,p-Xylene	10	3.1	<b>0.57</b>	<b>0.39</b>	<b>0.38</b>	<b>0.39</b>	<b>0.4 R</b>
o-Xylene	10	2.3	< 0.26	<b>0.15</b>	<b>0.14</b>	<b>0.18</b>	<b>0.19 R</b>
Tetrachloroethene	30	1.6	< 0.4	<b>0.2</b>	< 0.22	<b>0.42</b>	<b>3.1 R</b>
Toluene	521	21	<b>2</b>	<b>0.68</b>	<b>0.58</b>	<b>0.65</b>	<b>0.66 R</b>
trans-1,2-Dichloroethene	82	NA2	< 1.2	< 0.57	< 0.64	< 0.76	< 0.76 R
Trichloroethene	2	0.5	< 0.32	<b>0.42</b>	<b>0.32</b>	<b>0.49</b>	<b>5.6 R</b>
Vinyl Chloride	8	< 0.25	< 0.076	< 0.037	< 0.041	<b>0.25</b>	<b>12 R</b>
<b>Other Compounds<sup>3</sup></b>							
1,1,2,2-Tetrachloroethane	1.3	< 0.25	< 0.41	< 0.2	< 0.22	< 0.26	< 0.26 R
1,1,2-Trichloroethane	0.21	< 0.25	< 0.32	< 0.16	< 0.18	< 0.21	< 0.21 R
1,2-Dibromoethane (EDB)	0.12	< 0.25	< 0.46	< 0.22	< 0.25	< 0.29	< 0.29 R
1,4-Dichlorobenzene	7	0.8	< 0.36 J	< 0.17 J	< 0.19 J	< 0.23 J	< 0.23 R
Carbon Tetrachloride	12	1	<b>0.47</b>	<b>0.55</b>	<b>0.53</b>	<b>0.52</b>	<b>0.54 R</b>
Chloroethane	NA1	0.4	< 0.39	< 0.19	< 0.21	< 0.25	< 0.25 R
Chloroform	3	0.5	< 0.29	<b>0.15</b>	<b>0.15 J</b>	< 0.19	< 0.19 R
Chloromethane	310	4.6	< 3.1	< 1.5	< 1.7	< 2	< 2 R
cis-1,2-Dichloroethene	NA1	< 0.25	< 0.24	< 0.11	< 0.13	<b>0.15 J</b>	<b>2.1 R</b>
Freon 114	NA1	1.3	< 0.42	< 0.2	< 0.22	< 0.27	< 0.27 R
Freon 12	100	11	<b>2.1</b>	<b>2.2</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1 R</b>
Methyl tert-butyl ether	260	NA2	< 1.1	< 0.52	< 0.58	< 0.69	< 0.69 R

**Notes:**

µg/m<sup>3</sup> - micrograms per cubic meter

**Bold** - indicates detections

R - rejected after data validation

< - indicates not detected at or above the indicated value

NA1 - no criteria given in the EPA RSL Calculator

J - indicates sample result is estimated

NA2 - NYSDOH did not include this compound in the guidance document<sup>2</sup>

<sup>1</sup> Target Screening Levels for site-specific compounds of interest provided in Bethpage Ambient Air Monitoring Plan and are based on a one-year exposure duration (B&B Engineers & Geologists of New York, P.C., May 2020)

<sup>2</sup> NYSDOH Outdoor Air Background Values from Appendix C (Table C1) of Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)

<sup>3</sup> Target Screening Levels for other compounds calculated using the EPA RSL calculator with the same inputs as described in the Bethpage Ambient Air Monitoring Plan

**Table 3: Ambient Air Laboratory Results (2020-10-16 through 2020-10-21)**

Analyte	Target Screening Level (µg/m <sup>3</sup> ) <sup>1,3</sup>	95% of Concentration Distribution NYSDOH Background Air (µg/m <sup>3</sup> ) <sup>2</sup>	Ambient Air Concentration (µg/m <sup>3</sup> )				
			Sample Location				
			AMP-01	AMP-02	AMP-03	AMP-04	AMP-04-DUP
<b>Site-specific Compounds of Interest<sup>1</sup></b>							
1,1,1-Trichloroethane	520	0.7	< 0.18	< 0.19	< 0.18	< 0.18	< 0.18
1,1-Dichloroethane	45	< 0.25	< 0.14	< 0.14	< 0.13	< 0.14	< 0.14
1,1-Dichloroethene	8	<0.25	< 0.067	< 0.068	< 0.065	< 0.067	< 0.067
1,2-Dichloroethane	3	< 0.25	< 0.14	< 0.14	< 0.13	< 0.14	< 0.14
Benzene	8	5.8	<b>0.42</b>	<b>0.40</b>	<b>0.40</b>	<b>0.41</b>	<b>0.38</b>
Ethyl-benzene	29	1.9	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.14</b>
m,p-Xylene	10	3.1	<b>0.46</b>	<b>0.46</b>	<b>0.44</b>	<b>0.45</b>	<b>0.44</b>
o-Xylene	10	2.3	<b>0.18</b>	<b>0.18</b>	<b>0.17</b>	<b>0.21</b>	<b>0.17</b>
Tetrachloroethene	30	1.6	< 0.23	< 0.23	< 0.22	< 0.23	< 0.23
Toluene	521	21	<b>0.88</b>	<b>0.85</b>	<b>0.81</b>	<b>0.78</b>	<b>0.75</b>
trans-1,2-Dichloroethene	82	NA2	< 0.67	< 0.68	< 0.65	< 0.67	< 0.67
Trichloroethene	2	0.5	<b>0.58</b>	<b>0.89</b>	<b>0.54</b>	<b>0.50</b>	<b>0.49</b>
Vinyl Chloride	8	< 0.25	< 0.043	< 0.044	< 0.042	< 0.043	< 0.043
<b>Other Compounds<sup>3</sup></b>							
1,1,2,2-Tetrachloroethane	1.3	< 0.25	< 0.23	< 0.23	< 0.22	< 0.23	< 0.23
1,1,2-Trichloroethane	0.21	< 0.25	< 0.18	< 0.19	< 0.18	< 0.18	< 0.18
1,2-Dibromoethane (EDB)	0.12	< 0.25	< 0.26	< 0.26	< 0.25	< 0.26	< 0.26
1,4-Dichlorobenzene	7	0.8	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Carbon Tetrachloride	12	1	<b>0.50</b>	<b>0.50</b>	<b>0.52</b>	<b>0.48</b>	<b>0.52</b>
Chloroethane	NA1	0.4	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Chloroform	3	0.5	< 0.16	< 0.17	< 0.16	< 0.16	< 0.16
Chloromethane	310	4.6	< 1.7	< 1.8	< 1.7	< 1.7	< 1.7
cis-1,2-Dichloroethene	NA1	< 0.25	< 0.13	< 0.14	< 0.13	< 0.13	< 0.13
Freon 114	NA1	1.3	< 0.23	< 0.24	< 0.23	< 0.23	< 0.23
Freon 12	100	11	<b>2.0</b>	<b>2.0</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>
Methyl tert-butyl ether	260	NA2	< 0.60	< 0.62	< 0.59	< 0.60	< 0.60

**Notes:**

µg/m<sup>3</sup> - micrograms per cubic meter

**Bold** - indicates detections

R - rejected after data validation

< - indicates not detected at or above the indicated value

NA1 - no criteria given in the EPA RSL Calculator

J - indicates sample result is estimated

NA2 - NYSDOH did not include this compound in the guidance document<sup>2</sup>

<sup>1</sup> Target Screening Levels for site-specific compounds of interest provided in Bethpage Ambient Air Monitoring Plan and are based on a one-year exposure duration (B&B Engineers & Geologists of New York, P.C., May 2020)

<sup>2</sup> NYSDOH Outdoor Air Background Values from Appendix C (Table C1) of Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)

<sup>3</sup> Target Screening Levels for other compounds calculated using the EPA RSL calculator with the same inputs as described in the Bethpage Ambient Air Monitoring Plan

**Table 3: Ambient Air Laboratory Results (2020-10-22 through 2020-10-28)**

Analyte	Target Screening Level (µg/m <sup>3</sup> ) <sup>1,3</sup>	95% of Concentration Distribution NYSDOH Background Air (µg/m <sup>3</sup> ) <sup>2</sup>	Ambient Air Concentration (µg/m <sup>3</sup> )				
			Sample Location				
			AMP-01	AMP-02	AMP-03*	AMP-04	AMP-02-DUP
<b>Site-specific Compounds of Interest<sup>1</sup></b>							
1,1,1-Trichloroethane	520	0.7	< 0.17	< 0.17	< 0.17	< 0.16	< 0.17
1,1-Dichloroethane	45	< 0.25	< 0.12	< 0.13	< 0.13	< 0.12	< 0.13
1,1-Dichloroethene	8	<0.25	< 0.061	< 0.062	< 0.063	< 0.057	< 0.062
1,2-Dichloroethane	3	< 0.25	< 0.12	< 0.13	< 0.13	< 0.12	< 0.13
Benzene	8	5.8	<b>0.28</b>	<b>0.28</b>	<b>0.43</b>	<b>0.27</b>	<b>0.26</b>
Ethyl-benzene	29	1.9	< 0.13	< 0.14	<b>0.59</b>	< 0.12	< 0.14
m,p-Xylene	10	3.1	<b>0.30</b>	<b>0.29</b>	<b>1.8</b>	< 0.25	<b>0.27</b>
o-Xylene	10	2.3	< 0.13	< 0.14	<b>0.83</b>	< 0.12	< 0.14
Tetrachloroethene	30	1.6	< 0.21	< 0.21	<b>0.22</b>	< 0.20	< 0.21
Toluene	521	21	<b>0.64</b>	<b>0.66</b>	<b>1.5</b>	<b>0.54</b>	<b>0.67</b>
trans-1,2-Dichloroethene	82	NA2	< 0.61	< 0.62	< 0.63	< 0.57	< 0.62
Trichloroethene	2	0.5	<b>0.35</b>	<b>0.68</b>	<b>0.27</b>	<b>0.23</b>	<b>0.70</b>
Vinyl Chloride	8	< 0.25	< 0.039	< 0.040	< 0.040	< 0.037	< 0.040
<b>Other Compounds<sup>3</sup></b>							
1,1,2,2-Tetrachloroethane	1.3	< 0.25	< 0.21	< 0.21	< 0.22	< 0.20	< 0.21
1,1,2-Trichloroethane	0.21	< 0.25	< 0.17	< 0.17	< 0.17	< 0.16	< 0.17
1,2-Dibromoethane (EDB)	0.12	< 0.25	< 0.24	< 0.24	< 0.24	< 0.22	< 0.24
1,4-Dichlorobenzene	7	0.8	< 0.18	< 0.19	< 0.19	< 0.17	< 0.19
Carbon Tetrachloride	12	1	<b>0.55</b>	<b>0.58</b>	<b>0.54</b>	<b>0.59</b>	<b>0.60</b>
Chloroethane	NA1	0.4	< 0.20	< 0.20	< 0.21	< 0.19	< 0.20
Chloroform	3	0.5	< 0.15	< 0.15	< 0.15	< 0.14	< 0.15
Chloromethane	310	4.6	< 1.6	< 1.6	<b>1.8</b>	< 1.5	< 1.6
cis-1,2-Dichloroethene	NA1	< 0.25	< 0.12	< 0.12	< 0.12	< 0.11	< 0.12
Freon 114	NA1	1.3	< 0.22	< 0.22	< 0.22	< 0.20	< 0.22
Freon 12	100	11	<b>2.2</b>	<b>2.1</b>	<b>1.8</b>	<b>2.2</b>	<b>2.2</b>
Methyl tert-butyl ether	260	NA2	< 0.56	< 0.56	< 0.57	< 0.52	< 0.56
<p><b>Notes:</b> µg/m<sup>3</sup> - micrograms per cubic meter            &lt; - indicates not detected at or above the indicated value            Bold - indicates detections            J - indicates sample result is estimated</p> <p>R - rejected after data validation            NA1 - no criteria given in the EPA RSL Calculator            NA2 - NYSDOH did not include this compound in the guidance document<sup>2</sup>            * - sample collected over a 5-day period because of low vacuum</p> <p><sup>1</sup> Target Screening Levels for site-specific compounds of interest provided in Bethpage Ambient Air Monitoring Plan and are based on a one-year exposure duration (B&amp;B Engineers &amp; Geologists of New York, P.C., May 2020)  <sup>2</sup> NYSDOH Outdoor Air Background Values from Appendix C (Table C1) of Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)  <sup>3</sup> Target Screening Levels for other compounds calculated using the EPA RSL calculator with the same inputs as described in the Bethpage Ambient Air Monitoring Plan</p>							