NORTHROP GRUMMAN

ISTR Operations Monthly Progress Report

Reporting Period: March 2022

Operable Unit 3 VOC Source Area Remedy
Former Grumman Settling Ponds, Bethpage, NY
NYSDEC Site No. 130003A
May 4, 2022

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

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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
3. Significant Activities
4. Schedule / Proposed Modifications
5. Data Tables

Remedy Progress / Performance Monitoring March 2022

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ISTR Operations Summary

- Vapor treatment system air emissions are shown on slide 7.
- Site-wide air emissions will be reported in the next OM&M reports for the OU3 SGCS and GWCS and compared to the emissions limits specified in the 8/12/21 “Proposed Modifications to the OU3 SGCS.”
- No liquid discharges to the OU3 GWCS.

Reporting Period: March 2022

System Startup	8/26/2020
Days of Operation Since Startup	583
Estimated cumulative TVOC Mass Removed before Crossover to OU3 SGCS (through 10/18/21), lbs	1,366
Estimated cumulative TVOC Mass Removed after Crossover to OU3 SGCS (through 3/28/22), lbs	10.6
Average TVOC Mass Recovery Rate for Reporting Period, lb/day	0.07

Remedy Progress / Performance Monitoring March 2022

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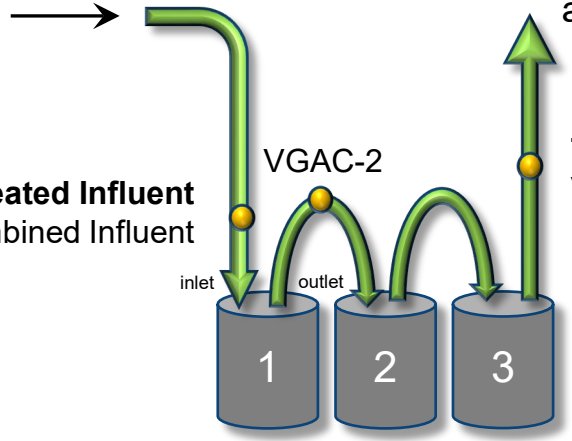
Vapor Treatment System following Crossover

From extraction system:
- SGCS Header
- ISTR Wellfield Influent



- Vapor Treatment System Sampling Locations, 5 total

Remedy Progress / Performance Monitoring March 2022

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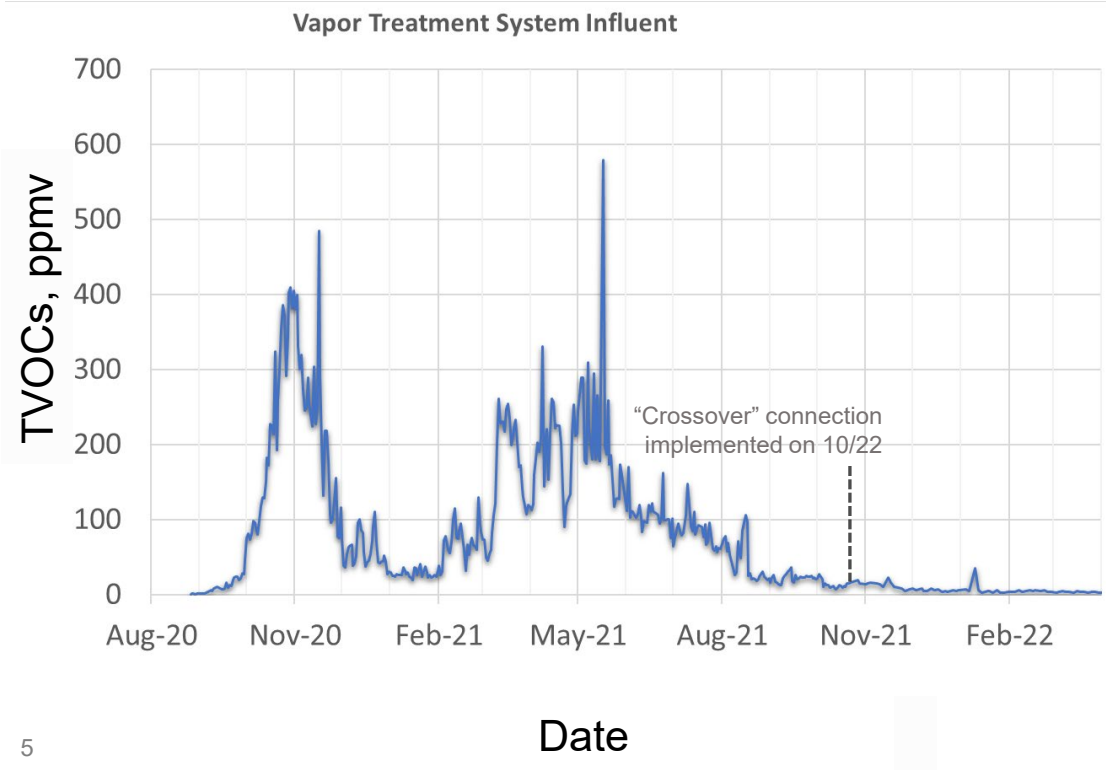
Vapor Treatment System Influent (PID)



Influent TVOC concentration (PID) on March 28*:

- 3.8 ppmv

Maximum influent TVOC concentration (PID) during March reporting period:

- 5.1 ppmv (March 7)

** Influent concentration for ISTR wellfield vapor stream only*

Remedy Progress / Performance Monitoring March 2022

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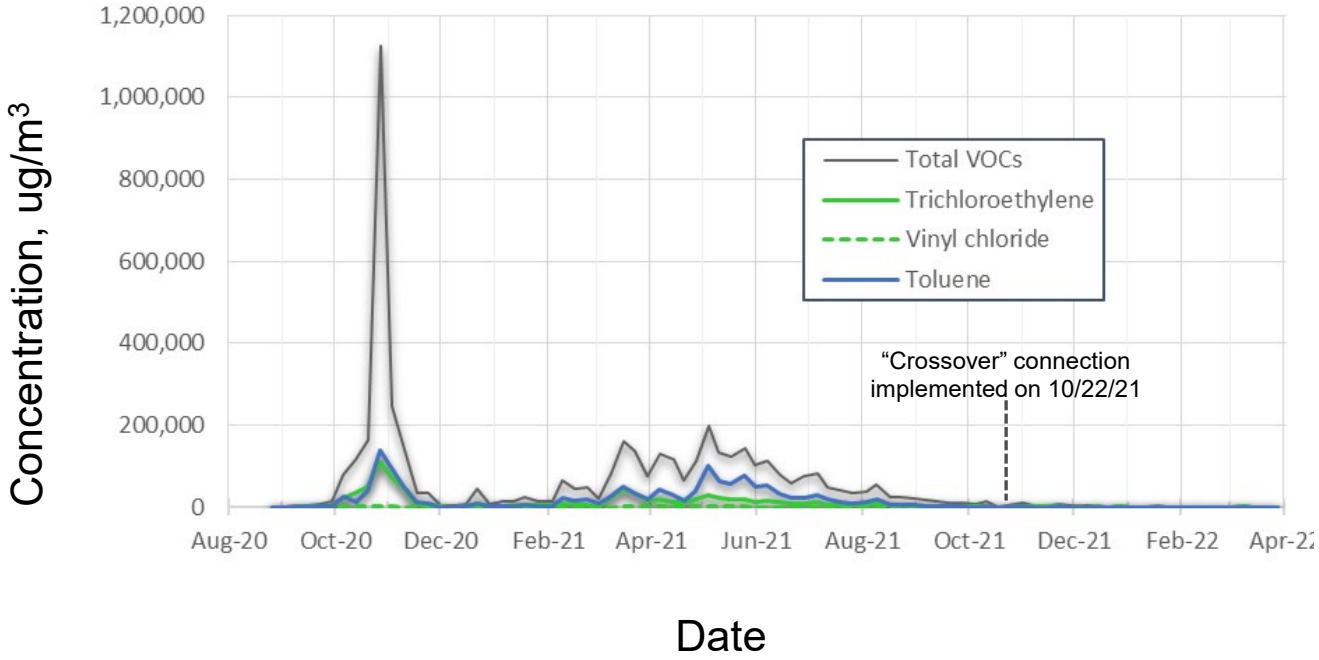
Vapor Treatment System Influent (Summa)



Influent concentrations (Summa) on 3/28*:

- TVOCs = 1,968 ug/m^3
- TCE = 726 ug/m^3
- Vinyl chloride = 42 ug/m^3

* *Influent sample collected from the "Wellfield Influent" sampling location starting 11/1/21*

Vapor treatment system analytical results for March provided in Table 1

Remedy Progress / Performance Monitoring March 2022

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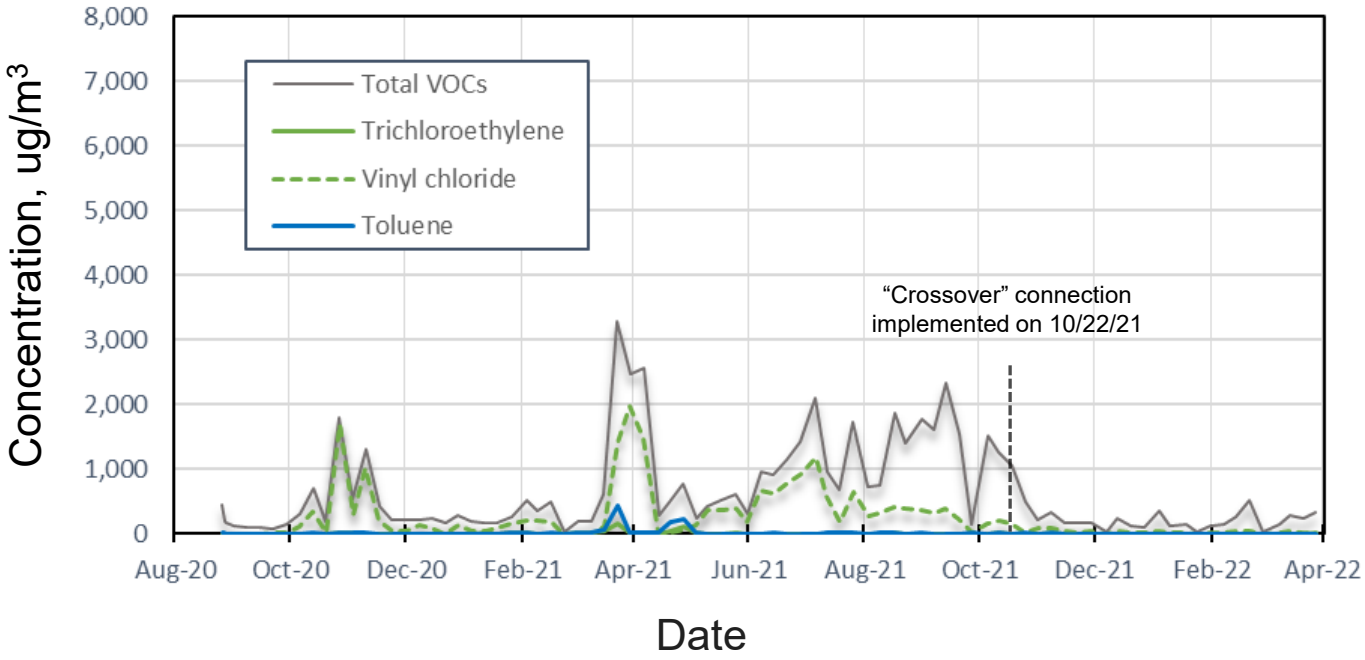
Vapor Treatment System Effluent (Summa)



Effluent concentrations (Summa) on 3/28*:

- TVOCs = 332 ug/m^3
- TCE = 5.4 ug/m^3
- Vinyl chloride = 24 ug/m^3

* *Effluent sample collected from the "VGAC-4" sampling location starting 11/1/21*

Vapor treatment system analytical results for March provided in Table 1

Remedy Progress / Performance Monitoring
March 2022

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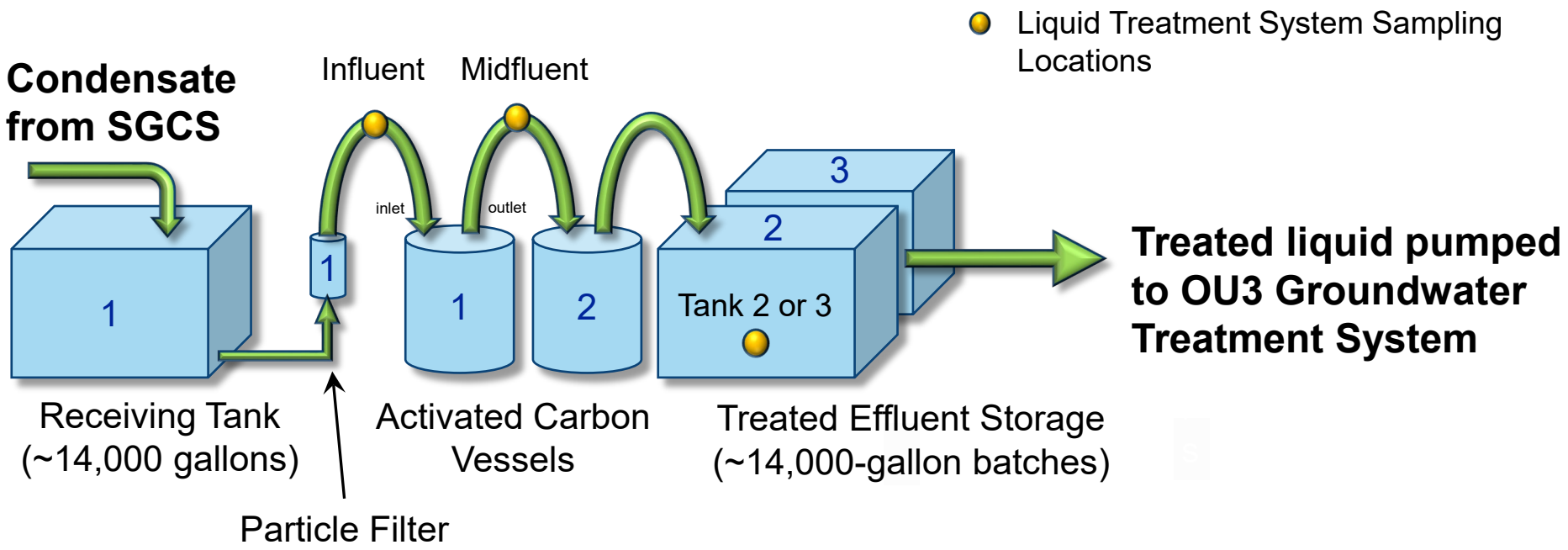
Liquid Treatment System



Remedy Progress / Performance Monitoring March 2022

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Cumulative Liquid Produced

- No treated effluent discharged to OU3 groundwater treatment system during reporting period.
- Cumulative total volume extracted and treated to date: ~268,704 gallons.

Significant Activities
March 2022

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Major equipment repairs and significant downtime:

- None.

Other significant activities:

- Continued to purge water from shallow VEWs.

Planned Significant Activities During Next Two Months

- Maintain vapor extraction and treatment system operation, monitoring, and maintenance at the modified OU3 SGCS in preparation for system shutdown.
- Continue purging water from shallow VEWs.

Schedule

Activity	RAWP Schedule	Current Status
Remedial System Operation	Q3/20 – Q1/21	Q3/20 – Q2/22
Post-Treatment Confirmation Sampling	Q1/21	Complete
Remedy Cool-down	Q1/21-Q2-21	Q1/21 – Q2/22
Equipment Removal & Site Restoration	Q2/21	Q3/22

Pending RAWP Modifications

None


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Table 1. Vapor Treatment System Air Sampling Results
Routine Monitoring

Compound (ug/m^3)	Sample ID:	WELLFIELD INFLUENT A	COMBINED INFLUENT	VGAC-2	DUPLICATE (VGAC-2)	VGAC-4
	Lab Sample ID:	JD41023-1	JD41023-2	JD41023-3	JD41023-5	JD41023-4
	Date Sampled:	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022
1,1,1-Trichloroethane		< 0.82	1.0 J	< 0.82	< 0.82	< 0.82
1,1,2,2-Tetrachloroethane		< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
1,1,2-Trichloroethane		< 0.82	< 0.82	< 0.82	< 0.82	< 0.82
1,1-Dichloroethane		8.5	4.9	1.9 J	3.0 J	3.0 J
1,1-Dichloroethylene		5.2	2.3	< 0.95	< 0.95	< 0.95
1,2,4-Trichlorobenzene		< 3.6	< 3.6	< 3.6	< 3.6	< 3.6
1,2,4-Trimethylbenzene		7.9	< 1.7	< 1.7	< 1.7	< 1.7
1,2-Dibromoethane (EDB)		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane		< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
1,2-Dichloropropane		< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
1,3,5-Trimethylbenzene		6.4	< 1.6	< 1.6	< 1.6	< 1.6
1,3-Butadiene		< 0.75	< 0.75	< 0.75	< 0.75	< 0.75
1,4-Dioxane		< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
2,2,4-Trimethylpentane		16	6.5	< 1.8	< 1.8	< 1.8
2-Chlorotoluene		< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
2-Hexanone		16	< 2.4	< 2.4	< 2.4	< 2.4
3-Chloropropene		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Ethyltoluene		7.9	< 1.9	< 1.9	< 1.9	< 1.9
Acetone (2-Propanone)		252	99.1	29.7	35.2	17
Benzene		2.7	< 0.80	< 0.80	< 0.80	< 0.80
Benzyl Chloride		< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
Bromodichloromethane		< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
Bromoethene		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform		< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
Bromomethane		< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Carbon disulfide		4.4	1.8 J	< 0.56	1.4 J	4.0
Carbon tetrachloride		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene		< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Chloroethane		< 0.71	< 0.71	< 0.71	< 0.71	< 0.71
Chloroform		2.0 J	11	3.8 J	7.3	6.8
Chloromethane		1.7	1.2 J	1.6 J	1.3 J	1.7
cis-1,2-Dichloroethylene		472	199	63.8	130	39
cis-1,3-Dichloropropene		< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Cyclohexane		5.9	2.3 J	< 1.5	< 1.5	< 1.5
Dibromochloromethane		< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Dichlorodifluoromethane		2.0 J	1.9 J	< 0.64	1.9 J	2.1 J
Ethanol		9.4	5.8	64.4	21.9	7.5
Ethyl Acetate		6.5	3.0	5.0	7.6	6.5
Ethylbenzene		69.9	17	< 1.0	< 1.0	< 1.0
Freon 113		< 0.92	< 0.92	< 0.92	< 0.92	< 0.92
Freon 114		< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Heptane		23	8.2	< 1.5	< 1.5	< 1.5
Hexachlorobutadiene		< 2.7	< 2.7	< 2.7	< 2.7	< 2.7
Hexane		2.0 J	< 1.6	2.7 J	< 1.6	< 1.6
Isopropyl Alcohol		< 1.4	5.9	48.2	15	11
m,p-Xylene		192	42	< 2.4	< 2.4	< 2.4
m-Dichlorobenzene		< 0.96	< 0.96	< 0.96	< 0.96	< 0.96
Methyl ethyl ketone		74.9	26	1.5 J	< 1.3	2.3 J
Methyl Isobutyl Ketone		5.3	< 1.2	< 1.2	< 1.2	< 1.2
Methyl Tert Butyl Ether		< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Methylene chloride		3.5	2.7 J	8.7	< 0.76	3.3
Methylmethacrylate		< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
o-Dichlorobenzene		< 3.7	< 3.7	< 3.7	< 3.7	< 3.7
o-Xylene		62.5	13	< 1.3	< 1.3	< 1.3
p-Dichlorobenzene		< 4.6	< 4.6	< 4.6	< 4.6	< 4.6
Propylene		22.5	10	5.3	10	10
Styrene		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Tertiary Butyl Alcohol		3.3	1.5 J	1.4 J	< 1.1	< 1.1
Tetrachloroethylene		5.8	2.4	< 0.38	< 0.38	< 0.38
Tetrahydrofuran		< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Toluene		848	249	6.0	< 0.87	1.8 J
trans-1,2-Dichloroethylene		16	7.1	2.5 J	4.4	1.8 J
trans-1,3-Dichloropropene		< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Trichloroethylene		1000	413	23	49	1.5
Trichlorofluoromethane		< 0.79	< 0.79	< 0.79	< 0.79	< 0.79
Vinyl Acetate		< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
Vinyl chloride		59.6	24	12	20	20
Xylenes (total)		255	55.6	< 1.3	< 1.3	< 1.3
Total (TO-15)		3,215	1,162	282	308	139

Footnotes:

ug/mg3 micrograms per cubic meter

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

J Detected concentration is less than the quantitation limit.

TVOCs Total volatile organic compounds

Table 1. Vapor Treatment System Air Sampling Results
Routine Monitoring

Compound (ug/m³)	Sample ID:	WELLFIELD INFLUENT A	COMBINED INFLUENT	VGAC-2	VGAC-4
	Lab Sample ID:	JD41291-1	JD41291-5	JD41291-3	JD41291-4
	Date Sampled:	3/14/2022	3/14/2022	3/14/2022	3/14/2022
1,1,1-Trichloroethane		< 0.82	< 0.82	3.9	< 0.82
1,1,2,2-Tetrachloroethane		< 1.3	< 1.3	< 1.3	< 1.3
1,1,2-Trichloroethane		< 0.82	< 0.82	< 0.82	< 0.82
1,1-Dichloroethane		5.7	3.3	9.3	9.3
1,1-Dichloroethylene		2.9	1.7	3.4	4.0
1,2,4-Trichlorobenzene		< 3.6	< 3.6	< 3.6	< 3.6
1,2,4-Trimethylbenzene		3.3 J	2.5 J	< 1.7	< 1.7
1,2-Dibromoethane (EDB)		< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane		< 1.1	< 1.1	< 1.1	< 1.1
1,2-Dichloropropane		< 1.2	< 1.2	< 1.2	< 1.2
1,3,5-Trimethylbenzene		2.7 J	< 1.6	< 1.6	< 1.6
1,3-Butadiene		< 0.75	< 0.75	< 0.75	< 0.75
1,4-Dioxane		< 1.7	< 1.7	< 1.7	< 1.7
2,2,4-Trimethylpentane		9.8	4.2	2.9 J	< 1.8
2-Chlorotoluene		< 1.5	< 1.5	< 1.5	< 1.5
2-Hexanone		12	< 2.4	< 2.4	< 2.4
3-Chloropropene		< 1.0	< 1.0	< 1.0	< 1.0
4-Ethyltoluene		2.9 J	< 1.9	< 1.9	< 1.9
Acetone (2-Propanone)		203	115	134	24.7
Benzene		3.1	< 0.80	< 0.80	< 0.80
Benzyl Chloride		< 2.6	< 2.6	< 2.6	< 2.6
Bromodichloromethane		< 0.80	< 0.80	< 0.80	< 0.80
Bromoethene		< 1.0	< 1.0	< 1.0	< 1.0
Bromoform		< 2.9	< 2.9	< 2.9	< 2.9
Bromomethane		< 1.1	< 1.1	< 1.1	< 1.1
Carbon disulfide		3.0	< 0.56	2.8	6.5
Carbon tetrachloride		< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene		< 1.4	< 1.4	< 1.4	< 1.4
Chloroethane		< 0.71	< 0.71	< 0.71	< 0.71
Chloroform		< 0.73	8.8	27	24
Chloromethane		1.2 J	1.8	1.3 J	1.5 J
cis-1,2-Dichloroethylene		287	133	420	130
cis-1,3-Dichloropropene		< 1.1	< 1.1	< 1.1	< 1.1
Cyclohexane		3.2	< 1.5	3.0	< 1.5
Dibromochloromethane		< 1.8	< 1.8	< 1.8	< 1.8
Dichlorodifluoromethane		< 0.64	2.4 J	< 0.64	2.3 J
Ethanol		13	38.3	19.6	16
Ethyl Acetate		7.9	< 1.5	< 1.5	< 1.5
Ethylbenzene		30	15	< 1.0	< 1.0
Freon 113		< 0.92	< 0.92	< 0.92	< 0.92
Freon 114		< 1.4	< 1.4	< 1.4	< 1.4
Heptane		11	4.9	< 1.5	< 1.5
Hexachlorobutadiene		< 2.7	< 2.7	< 2.7	< 2.7
Hexane		1.7 J	< 1.6	< 1.6	< 1.6
Isopropyl Alcohol		< 1.4	14	21	15
m,p-Xylene		71.7	35	< 2.4	< 2.4
m-Dichlorobenzene		< 0.96	< 0.96	< 0.96	< 0.96
Methyl ethyl ketone		60.5	21	5.3	1.8 J
Methyl Isobutyl Ketone		4.5	1.9 J	< 1.2	< 1.2
Methyl Tert Butyl Ether		< 1.2	< 1.2	< 1.2	< 1.2
Methylene chloride		3.4	7.3	5.2	5.6
Methylmethacrylate		< 1.1	< 1.1	< 1.1	< 1.1
o-Dichlorobenzene		< 3.7	< 3.7	< 3.7	< 3.7
o-Xylene		25	14	< 1.3	< 1.3
p-Dichlorobenzene		< 4.6	< 4.6	< 4.6	< 4.6
Propylene		17.9	5.3	< 0.98	6.4
Styrene		< 2.0	< 2.0	< 2.0	< 2.0
Tertiary Butyl Alcohol		5.5	3.9	8.8	< 1.1
Tetrachloroethylene		4.7	2.2	< 0.38	< 0.38
Tetrahydrofuran		< 1.1	< 1.1	1.7 J	< 1.1
Toluene		346	153	6.0	< 0.87
trans-1,2-Dichloroethylene		10	4.4	11	4.8
trans-1,3-Dichloropropene		< 1.8	< 1.8	< 1.8	< 1.8
Trichloroethylene		650	272	586	< 0.41
Trichlorofluoromethane		< 0.79	2.9	2.2 J	3.7
Vinyl Acetate		< 1.6	2.6 J	< 1.6	1.6 J
Vinyl chloride		35.5	17	23	30.7
Xylenes (total)		96.4	49.1	< 1.3	< 1.3
Total (TO-15)		1,838	888	1,297	288

Footnotes:

ug/mg3 micrograms per cubic meter

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

J Detected concentration is less than the quantitation limit.

TVOCs Total volatile organic compounds

Table 1. Vapor Treatment System Air Sampling Results
Routine Monitoring

Compound (ug/m^3)	Sample ID:	WELLFIELD INFLUENT A		COMBINED INFLUENT		VGAC-2		VGAC-4	
	Lab Sample ID:	JD41683-1		JD41683-3		JD41683-4		JD41683-5	
	Date Sampled:	3/21/2022		3/21/2022		3/21/2022		3/21/2022	
1,1,1-Trichloroethane		< 0.82		< 0.82		< 0.82		< 0.82	
1,1,2,2-Tetrachloroethane		< 1.3		< 1.3		< 1.3		< 1.3	
1,1,2-Trichloroethane		< 0.82		< 0.82		< 0.82		< 0.82	
1,1-Dichloroethane		**7.3**		**4.9**		< 0.93		< 0.93	
1,1-Dichloroethylene		**3.6**		**1.8**		< 0.95		< 0.95	
1,2,4-Trichlorobenzene		< 3.6		< 3.6		< 3.6		< 3.6	
1,2,4-Trimethylbenzene		**2.1**	J	**4.6**		< 1.7		< 1.7	
1,2-Dibromoethane (EDB)		< 3.0		< 3.0		< 3.0		< 3.0	
1,2-Dichloroethane		< 1.1		< 1.1		< 1.1		< 1.1	
1,2-Dichloropropane		< 1.2		< 1.2		< 1.2		< 1.2	
1,3,5-Trimethylbenzene		< 1.6		**3.4**	J	< 1.6		< 1.6	
1,3-Butadiene		< 0.75		< 0.75		< 0.75		< 0.75	
1,4-Dioxane		< 1.7		< 1.7		< 1.7		< 1.7	
2,2,4-Trimethylpentane		**8.9**		**4.7**		< 1.8		< 1.8	
2-Chlorotoluene		< 1.5		< 1.5		< 1.5		< 1.5	
2-Hexanone		**7.4**		< 2.4		< 2.4		< 2.4	
3-Chloropropene		< 1.0		< 1.0		< 1.0		< 1.0	
4-Ethyltoluene		**2.2**	J	**3.5**	J	< 1.9		< 1.9	
Acetone (2-Propanone)		**186**		**84.3**		**2.6**		**21**	
Benzene		**3.8**		< 0.80		**8.0**		< 0.80	
Benzyl Chloride		< 2.6		< 2.6		< 2.6		< 2.6	
Bromodichloromethane		< 0.80		< 0.80		< 0.80		< 0.80	
Bromoethene		< 1.0		< 1.0		< 1.0		< 1.0	
Bromoform		< 2.9		< 2.9		< 2.9		< 2.9	
Bromomethane		< 1.1		< 1.1		< 1.1		< 1.1	
Carbon disulfide		**3.4**		**1.5**	J	< 0.56		**3.4**	
Carbon tetrachloride		< 1.0		< 1.0		< 1.0		< 1.0	
Chlorobenzene		< 1.4		< 1.4		< 1.4		< 1.4	
Chloroethane		< 0.71		< 0.71		< 0.71		< 0.71	
Chloroform		**1.9**	J	**12**		< 0.73		**10**	
Chloromethane		**1.7**		**1.5**	J	< 0.74		< 0.74	
cis-1,2-Dichloroethylene		**375**		**198**		**7.1**		**75.7**	
cis-1,3-Dichloropropene		< 1.1		< 1.1		< 1.1		< 1.1	
Cyclohexane		**3.4**		**1.6**	J	< 1.5		< 1.5	
Dibromochloromethane		< 1.8		< 1.8		< 1.8		< 1.8	
Dichlorodifluoromethane		**2.8**	J	**2.7**	J	< 0.64		**2.9**	J
Ethanol		**14**		**8.7**		< 3.0		**19**	
Ethyl Acetate		< 1.5		**14**		< 1.5		**17**	
Ethylbenzene		**17**		**21**		**3.6**		< 1.0	
Freon 113		< 0.92		< 0.92		< 0.92		< 0.92	
Freon 114		< 1.4		< 1.4		< 1.4		< 1.4	
Heptane		**8.6**		**5.3**		< 1.5		< 1.5	
Hexachlorobutadiene		< 2.7		< 2.7		< 2.7		< 2.7	
Hexane		**3.1**		< 1.6		< 1.6		< 1.6	
Isopropyl Alcohol		**72.0**		**29.5**		< 1.4		**68.3**	
m,p-Xylene		**40**		**56.9**		**4.3**		< 2.4	
m-Dichlorobenzene		< 0.96		< 0.96		< 0.96		< 0.96	
Methyl ethyl ketone		**48.1**		**23**		< 1.3		< 1.3	
Methyl Isobutyl Ketone		**2.9**	J	< 1.2		< 1.2		< 1.2	
Methyl Tert Butyl Ether		< 1.2		< 1.2		< 1.2		< 1.2	
Methylene chloride		**3.8**		**3.8**		< 0.76		**5.2**	
Methylmethacrylate		< 1.1		< 1.1		< 1.1		< 1.1	
o-Dichlorobenzene		< 3.7		< 3.7		< 3.7		< 3.7	
o-Xylene		**13**		**21**		< 1.3		< 1.3	
p-Dichlorobenzene		< 4.6		< 4.6		< 4.6		< 4.6	
Propylene		**25.9**		**8.4**		< 0.98		**9.1**	
Styrene		< 2.0		< 2.0		< 2.0		< 2.0	
Tertiary Butyl Alcohol		**4.5**		**2.0**	J	< 1.1		< 1.1	
Tetrachloroethylene		**3.6**		**5.4**		< 0.38		< 0.38	
Tetrahydrofuran		< 1.1		< 1.1		< 1.1		< 1.1	
Toluene		**253**		**188**		**3.3**		< 0.87	
trans-1,2-Dichloroethylene		**13**		**6.7**		< 1.1		**3.6**	
trans-1,3-Dichloropropene		< 1.8		< 1.8		< 1.8		< 1.8	
Trichloroethylene		**650**		**461**		< 0.41		< 0.41	
Trichlorofluoromethane		< 0.79		< 0.79		< 0.79		< 0.79	
Vinyl Acetate		< 1.6		< 1.6		< 1.6		< 1.6	
Vinyl chloride		**47.0**		**16**		< 0.72		**12**	
Xylenes (total)		**53.4**		**78.2**		**4.3**		< 1.3	
Total (TO-15)		**1,829**		**1,196**		**28.9**		**247**	

Footnotes:

ug/mg3 micrograms per cubic meter

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

J Detected concentration is less than the quantitation limit.

TVOCs Total volatile organic compounds

Table 1. Vapor Treatment System Air Sampling Results
Routine Monitoring

Compound (ug/m^3)	Sample ID:	WELLFIELD INFLUENT A	COMBINED INFLUENT	VGAC-2	VGAC-4
	Lab Sample ID:	JD42095-1	JD42095-2	JD42095-3	JD42095-4
	Date Sampled:	3/28/2022	3/28/2022	3/28/2022	3/28/2022
1,1,1-Trichloroethane		< 0.82	< 0.82	**2.6**	< 0.82
1,1,2,2-Tetrachloroethane		< 1.3	< 1.3	< 1.3	< 1.3
1,1,2-Trichloroethane		< 0.82	< 0.82	< 0.82	< 0.82
1,1-Dichloroethane		**8.1**	**4.0**	**8.9**	**7.7**
1,1-Dichloroethylene		**3.7**	< 0.95	**2.8**	**2.6**
1,2,4-Trichlorobenzene		< 3.6	< 3.6	< 3.6	< 3.6
1,2,4-Trimethylbenzene		**1.9** J	< 1.7	< 1.7	< 1.7
1,2-Dibromoethane (EDB)		< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane		< 1.1	< 1.1	< 1.1	< 1.1
1,2-Dichloropropane		< 1.2	< 1.2	< 1.2	< 1.2
1,3,5-Trimethylbenzene		< 1.6	< 1.6	< 1.6	< 1.6
1,3-Butadiene		< 0.75	< 0.75	< 0.75	< 0.75
1,4-Dioxane		< 1.7	< 1.7	< 1.7	< 1.7
2,2,4-Trimethylpentane		< 1.8	**7.0**	**2.8** J	< 1.8
2-Chlorotoluene		< 1.5	< 1.5	< 1.5	< 1.5
2-Hexanone		**4.5**	**2.8** J	< 2.4	< 2.4
3-Chloropropene		< 1.0	< 1.0	< 1.0	< 1.0
4-Ethyltoluene		< 1.9	< 1.9	< 1.9	< 1.9
Acetone (2-Propanone)		**128**	**48.5**	**40.4**	**19**
Benzene		**3.5**	< 0.80	< 0.80	< 0.80
Benzyl Chloride		< 2.6	< 2.6	< 2.6	< 2.6
Bromodichloromethane		< 0.80	< 0.80	< 0.80	< 0.80
Bromoethene		< 1.0	< 1.0	< 1.0	< 1.0
Bromoform		< 2.9	< 2.9	< 2.9	< 2.9
Bromomethane		< 1.1	< 1.1	< 1.1	< 1.1
Carbon disulfide		**2.8**	< 0.56	**1.4** J	**3.0**
Carbon tetrachloride		< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene		< 1.4	< 1.4	< 1.4	< 1.4
Chloroethane		< 0.71	< 0.71	< 0.71	< 0.71
Chloroform		< 0.73	**7.3**	**19**	**20**
Chloromethane		**1.5** J	**1.0** J	< 0.74	**1.0** J
cis-1,2-Dichloroethylene		**376**	**153**	**298**	**153**
cis-1,3-Dichloropropene		< 1.1	< 1.1	< 1.1	< 1.1
Cyclohexane		**3.1**	**7.2**	**3.0**	< 1.5
Dibromochloromethane		< 1.8	< 1.8	< 1.8	< 1.8
Dichlorodifluoromethane		**2.2** J	**2.2** J	**2.3** J	**2.7** J
Ethanol		**35.0**	**14**	**28.3**	**36.2**
Ethyl Acetate		**14**	**18**	< 1.5	**17**
Ethylbenzene		**24**	**11**	< 1.0	< 1.0
Freon 113		< 0.92	< 0.92	< 0.92	< 0.92
Freon 114		< 1.4	< 1.4	< 1.4	< 1.4
Heptane		**16**	**9.0**	< 1.5	< 1.5
Hexachlorobutadiene		< 2.7	< 2.7	< 2.7	< 2.7
Hexane		**2.4** J	**25**	**2.1** J	< 1.6
Isopropyl Alcohol		**16**	**3.4**	**14**	**16**
m,p-Xylene		**57.3**	**29**	< 2.4	< 2.4
m-Dichlorobenzene		< 0.96	< 0.96	< 0.96	< 0.96
Methyl ethyl ketone		**31.6**	**11**	**2.5**	**2.5**
Methyl Isobutyl Ketone		**2.8** J	< 1.2	< 1.2	< 1.2
Methyl Tert Butyl Ether		< 1.2	< 1.2	< 1.2	< 1.2
Methylene chloride		**3.2**	**8.3**	**2.7** J	**2.8**
Methylmethacrylate		< 1.1	< 1.1	< 1.1	< 1.1
o-Dichlorobenzene		< 3.7	< 3.7	< 3.7	< 3.7
o-Xylene		**20**	**11**	< 1.3	< 1.3
p-Dichlorobenzene		< 4.6	< 4.6	< 4.6	< 4.6
Propylene		**21.6**	**9.1**	**10**	**12**
Styrene		< 2.0	< 2.0	< 2.0	< 2.0
Tertiary Butyl Alcohol		**5.2**	**1.7** J	**3.6**	< 1.1
Tetrachloroethylene		**4.3**	**2.8**	< 0.38	< 0.38
Tetrahydrofuran		< 1.1	< 1.1	< 1.1	< 1.1
Toluene		**399**	**150**	**2.1** J	**1.5** J
trans-1,2-Dichloroethylene		**13**	**4.8**	**8.3**	**5.6**
trans-1,3-Dichloropropene		< 1.8	< 1.8	< 1.8	< 1.8
Trichloroethylene		**726**	**308**	**433**	**5.4**
Trichlorofluoromethane		< 0.79	< 0.79	< 0.79	< 0.79
Vinyl Acetate		< 1.6	< 1.6	< 1.6	< 1.6
Vinyl chloride		**41.7**	**13**	**19**	**24**
Xylenes (total)		**76.9**	**40**	< 1.3	< 1.3
Total (TO-15)		**1,968**	**862**	**907**	**332**

Footnotes:

ug/mg3 micrograms per cubic meter

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

J Detected concentration is less than the quantitation limit.

TVOCs Total volatile organic compounds