

ANNUAL PROGRESS REPORT FOR THE OPERATION, MAINTENANCE, AND MONITORING SERVICES

Fort Schuyler Management Corporation (Site No. V00619-9)

312 Abby St, Buffalo NY, 14210

PROGRESS REPORT No. 23 REPORTING PERIOD ENDING DECEMBER 31, 2022

Project Description

This Annual Progress Report has been prepared for the Fort Schuyler Management Corporation Groundwater Pre-Treatment System (GWPTS) located at 312 Abby Street, Buffalo, NY in accordance with the requirements of the Site Management Plan and at the request of the NYSDEC. In accordance with our NYSDEC-approved Modification Request (dated April 25, 2011), this Progress Report covers one-year operation and maintenance of the GWPTS from January 1, 2022 through December 31, 2022.

1.0 Treatment Statistics

- Approximately 8,253,400 gallons of groundwater was collected and treated over the current monitoring period averaging 22,605 gallons per day.
- System was on-line for approximately 92% of the time.
- System was off-line for approximately 8% of the time for routine maintenance and other minor issues listed below.
- Approximately 264.7 pounds of tar was generated from the oil/water separator, equating to approximately 22 pounds per month. Based on this monthly quantity (less than 220 pound per calendar month) a Hazardous Waste Report is not required because FSMC's RiverBend Site is considered a Very Small Quantity Generator (VSQG) in accordance with Part 371.1(f). For comparison, on average approximately 641 pounds of tar per year is generated based on data collected from 2012 through current year of operation.

2.0 General Schedule of Maintenance Activities Undertaken

- Regular Maintenance Items
 - o 2 bag filter changes/week or as necessary.
 - o Carbon filtration vessel back-washing: 2 times per week or as necessary.
 - o Decant tar from separator: 2 times per week or as necessary.
- January 5, 2022 Flow meter was calibrated and totalized set to zero.
- January 25, 2022 Restart system after changing clogged bag filters.
- March 18, 2022 Restart system after changing clogged bag filters.
- May 30, 2022 Restart system after changing clogged bag filters. Restart system after changing clogged bag filters.
- May thru October 2022 Mowed grass area and weed trimmed fence line around the treatment building, as necessary.



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- June 17, 2022 System off for carbon change. During carbon change the subcontractor had a mechanical problem and could not return until June 22, 2022.
 The system was restarted on June 22, 2022.
- June 22, 2022 Changed the carbon in lead vessel #2. Lead and lag vessels were reversed at that time (vessel #2 became the lag and #1 the lead).
- May 17, 2022 Annual certification/inspection associated with the Periodic Review Report (PRR) in accordance with DER-10 was performed by B&L.
- June 9 thru 16, 2022 Fox Fence, Inc. made repairs perimeter fence.
- June 2022 ORC monitoring in Area III was performed.
- June 2022 Long-Term Groundwater Monitoring was performed in Areas I, II, and III.
- July 1, 2022 Benchmark Civil/Environmental Engineering & Geology, PLLC took over operation, maintenance, and monitoring services for the GWPTS.
- October 20 and 21, 2022 Mowed final cover and weed trimmed penetrations associated with the Area II Containment Cell.
- November 29, 2022 PS-1 communications and control to treatment system repaired. Reactivate PS-1 pump.
- December 2022 ORC monitoring in Area III was performed.
- December 13, 2022 Changed the carbon in lead vessel #1. Lead and lag vessels were reversed at that time (vessel #1 will become the lag and #2 the lead).

3.0 Attachments/Logs

- Attachment 1: Graph of monitored flows through treatment system for 2022
- Attachment 2: Maintenance Logs for 2022 (12/20/21 thru 01/06/23)
- Attachment 3: Generated Volume of Tar Material for 2022

MONITORED FLOWS VS. TIME





Min.

Max.

Ave.

0

2,318,235

822,943

		2022	
Month	GPMo	GPD	GPM
January	858,117	27,681	19
February	1,090,247	37,595	26
March	499,770	16,122	11
April	999,879	33,329	23
May	1,099,543	35,469	25
June	622,766	20,759	14
July	713,044	23,001	16
August	354,102	11,423	8
September	277,135	9,238	6
October	506,781	16,348	11
November	513,324	17,111	12
December	718,692	23,184	16
Total	8,253,400		
Min.	277,135	9,238	6
Max.	1,099,543	37,595	26
Ave.	687,783	22,605	16
Since August 2	008:		
Total	130,847,897	NA	

0

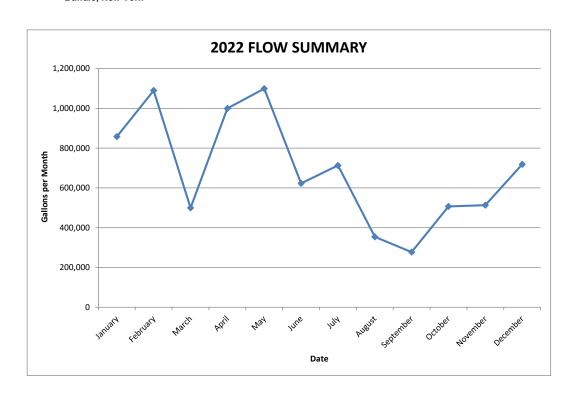
77,104

27,042

ATTACHMENT 1

MONITORED FLOWS v. TIME 2022

Groundwater Pre-Treatment System (GWPTS)
Fort Schyuler Management Corporation
(Site No. V00619-9)
Buffalo, New York

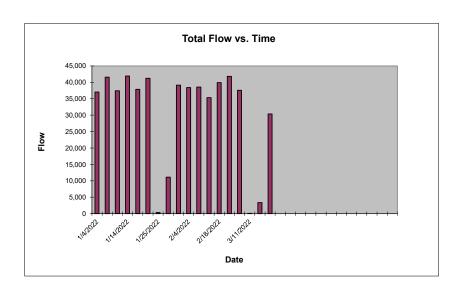




MONITORED FLOWS v. TIME FIRST QUARTER 2022

Groundwater Pre-Treatment System (GWPTS) Fort Schyuler Management Corporation Buffalo, New York

75,840 3,394 3,152 8,892 0,334 4,045 5,318 8,584 5,137 0,357 34,531 46,434 06,049 98,831	37,043 41,585 37,440 41,913 37,861 41,237 318 11,089 39,138 38,407 38,544 35,317 39,904 41,826
3,152 8,892 0,334 4,045 5,318 8,584 5,137 0,357 34,531 46,434 06,049 98,831	37,440 41,913 37,861 41,237 318 11,089 39,138 38,407 35,317 39,904
8,892 0,334 4,045 5,318 8,584 5,137 0,357 34,531 46,434 06,049 98,831	41,913 37,861 41,237 318 11,089 39,138 38,407 38,544 35,317 39,904
0,334 4,045 5,318 8,584 5,137 0,357 34,531 46,434 06,049 98,831	37,861 41,237 318 11,089 39,138 38,407 38,544 35,317 39,904
4,045 5,318 8,584 5,137 0,357 34,531 46,434 06,049 98,831	41,237 318 11,089 39,138 38,407 38,544 35,317 39,904
5,318 8,584 5,137 0,357 34,531 46,434 06,049 98,831	318 11,089 39,138 38,407 38,544 35,317 39,904
8,584 5,137 0,357 34,531 46,434 06,049 98,831	11,089 39,138 38,407 38,544 35,317 39,904
5,137 0,357 34,531 46,434 06,049 98,831	39,138 38,407 38,544 35,317 39,904
0,357 34,531 46,434 06,049 98,831	38,407 38,544 35,317 39,904
34,531 46,434 06,049 98,831	38,544 35,317 39,904
46,434 06,049 98,831	35,317 39,904
06,049 98,831	39,904
98,831	
	41,826
61,810	37,568
62,615	115
86,017	3,343
98,601	30,369



Total Quarterly Flow: 2,448,134 gallons Ave. Quarterly Flow: 27,133 gallons/day

JANUARY		
858,117	gallons/month	
31	days	
27,681	gallons/day	
19	gallons/min	

FEBRUARY		
1,090,247	gallons/month	
29	days	
37,595	gallons/day	
26	gallons/min	

MARCH		
499,770	gallons/month	
31	days	
16,122	gallons/day	
11	gallons/min	

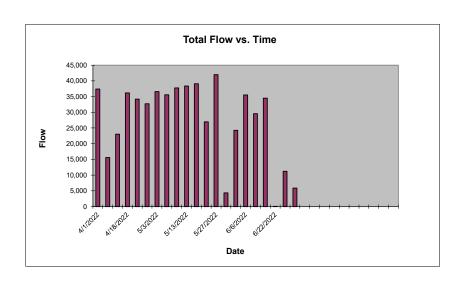
Notes:



MONITORED FLOWS v. TIME SECOND QUARTER 2022

Groundwater Pre-Treatment System (GWPTS) Fort Schyuler Management Corporation Buffalo, New York

Date	Total Flow	Daily Avg
4/1/2022	2,560,217	37,374
4/8/2022	2,669,324	15,587
4/13/2022	2,784,549	23,045
4/18/2022	2,965,443	36,179
4/22/2022	3,102,218	34,194
4/28/2022	3,298,480	32,710
5/3/2022	3,481,260	36,556
5/6/2022	3,587,969	35,570
5/10/2022	3,738,995	37,757
5/13/2022	3,854,070	38,358
5/17/2022	4,010,408	39,085
5/20/2022	4,091,302	26,965
5/27/2022	4,385,032	41,961
5/30/2022	4,398,023	4,330
6/3/2022	4,495,056	24,258
6/6/2022	4,601,562	35,502
6/14/2022	4,837,903	29,543
6/17/2022	4,941,320	34,472
6/22/2022	4,941,586	53
6/28/2022	5,008,988	11,234
6/30/2022	5,020,789	5,901



Total Quarterly Flow: 2,722,188 gallons Ave. Quarterly Flow: 29,852 gallons/day

APRIL	
999,879	gallons/month
30	days
33,329	gallons/day
23	gallons/min

MAY	
1,099,543	gallons/month
31	days
35,469	gallons/day
25	gallons/min

JUNE	
622,766	gallons/month
30	days
20,759	gallons/day
14	gallons/min

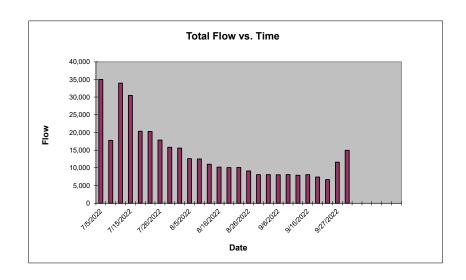
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MONITORED FLOWS v. TIME THIRD QUARTER 2022

Groundwater Pre-Treatment System (GWPTS) Fort Schyuler Management Corporation Buffalo, New York

Date	Total Flow	Daily Avg
7/5/2022	5,195,757	34,994
7/8/2022	5,249,060	17,768
7/11/2022	5,350,968	33,969
7/15/2022	5,472,799	30,458
7/19/2022	5,554,124	20,331
7/22/2022	5,615,047	20,308
7/26/2022	5,686,372	17,831
7/29/2022	5,733,833	15,820
8/2/2022	5,796,076	15,561
8/5/2022	5,833,836	12,587
8/9/2022	5,883,828	12,498
8/12/2022	5,916,814	10,995
8/16/2022	5,957,618	10,201
8/19/2022	5,987,856	10,079
8/23/2022	6,028,298	10,111
8/26/2022	6,055,668	9,123
8/30/2022	6,087,935	8,067
9/2/2022	6,112,178	8,081
9/6/2022	6,144,342	8,041
9/9/2022	6,168,594	8,084
9/13/2022	6,200,087	7,873
9/16/2022	6,224,359	8,091
9/20/2022	6,253,891	7,383
9/23/2022	6,273,870	6,660
9/27/2022	6,320,211	11,585
9/30/2022	6,365,070	14,953



Total Quarterly Flow: 1,344,281 gallons Ave. Quarterly Flow: 14,554 gallons

JULY		
713,044	gallons/month	
31	days	
23,001	gallons/day	
16	gallons/min	

AUGUST		
354,102	gallons/month	
31	days	
11,423	gallons/day	
8	gallons/min	

SEPTEMBER									
277,135	gallons/month								
30	days								
9,238	gallons/day								
6	gallons/min								

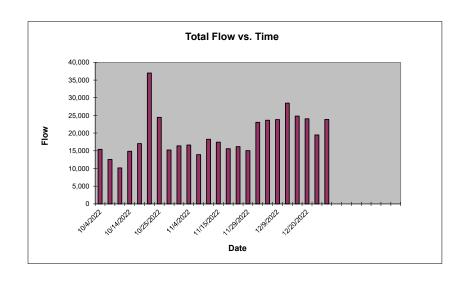
Notes:



MONITORED FLOWS v. TIME FOURTH QUARTER 2022

Groundwater Pre-Treatment System (GWPTS) Fort Schyuler Management Corporation Buffalo, New York

Date	Total Flow	Daily Avg
10/4/2022	6,426,683	15,403
10/7/2022	6,464,294	12,537
10/11/2022	6,504,878	10,146
10/14/2022	6,549,460	14,861
10/18/2022	6,617,560	17,025
10/21/2022	6,728,472	36,971
10/25/2022	6,826,197	24,431
10/28/2022	6,871,851	15,218
11/1/2022	6,937,472	16,405
11/4/2022	6,987,371	16,633
11/8/2022	7,042,925	13,889
11/11/2022	7,097,628	18,234
11/15/2022	7,167,331	17,426
11/22/2022	7,276,471	15,591
11/25/2022	7,325,048	16,192
11/29/2022	7,385,175	15,032
12/2/2022	7,454,336	23,054
12/6/2022	7,548,933	23,649
12/9/2022	7,620,350	23,806
12/13/2022	7,734,187	28,459
12/16/2022	7,808,681	24,831
12/20/2022	7,904,772	24,023
12/29/2022	8,079,985	19,468
12/30/2022	8,103,867	23,882
		,



Total Quarterly Flow: 1,738,797 gallons Ave. Quarterly Flow: 18,881 gallons

OCTOBER										
506,781	gallons/month									
31	days									
16,348	gallons/day									
11	gallons/min									

NOVEMBER									
gallons/month									
days									
gallons/day									
gallons/min									

DECEMBER									
718,692	gallons/month								
31	days								
23,184	gallons/day								
16	gallons/min								

Notes:

FIELD LOGS





MAINTENANCE LOG Area II: Former Donner Hann Coke Plant Parcel

Fort Schuyler Management Corporation RiverBend Site Buffalo, New York

1/5/2022 ** Flow mater calibrated + reset to zero (max reading 10777200 gols)

	2	Flow Meter	Lead	Tank	Back Flush Bag Filter Change			Bag Press	sure (PSI)	Decant Oil Seperator	Tar in Drum	Drum		Check Check		
	Date	Reading	Tank 1	Tank 2	Tank 1	Tank 2	Tank 1	Tank 2	Before	After	Caparatar	(inches)	Before	After	-	
	1-7 - 70 21	12222 686	/		1	/	1	/	26.8	23.6	/	10	16.4	61,5	1	1
*	17-17-21	1077 4403	ų.	/				1	24,4	21.7	/	10	44.2	77.9	1 V	V
	16 6 6	10557700		1		1	1	1	26.7	22.8	/	10	15.2	105 H	1	1~
	17 21 71	1067.7667		5	1	. /		/	265	225	~	10	12.4	65.4	+V	1-
	12-51-21	10627664		~					2		-		BURNON	189	1	1
	1-4-22	10775840		11	1	/	/	V	25.3	21.8	/	10	33.4	689	1	1
XX	1-7-22	173 294		1	1	/	1	/	24,7	21.7	V	10	110	6X.7	-	- 1
,	1-4-22	753767		1	./	./		/	24.5	21.8	IV,	100	38,4	70.6	1	1
-	1-11-22	17		1		1	1	/	24.0	21.9	/	63	50.7	65.8	-	- 1
-	1-19-02	398892		. /	1			V.	26.6	12.7	/	10	12,2		-	/ /
	1-18-22			7	/	1/	/	1	24.5	21,5		10	32.6	65.8	V	- 1
H	1-21-22	674045		~	1	1	1	1	261	22.5	/	10	29,7	68.9	V	
Д	-25-22	645518			./	1	/	1	26,0	122,0		10	28.4	78.3	-	11
1	-28-22	TOY		/		- V	1./	/	24.4	21.5	/	10	32.3	650	- 4	1 N
2	2-1-22	86513+		1	1	1	/	1	24.5	-12.3	/	10	50.	67	5 ×	44
2	-4-22	980357		~	-	~	1	1	228	21.6	. /	LD	46.2	65,	8	
2	-8-22	1(34531		V	VI	1	1	1	26.6	1223	1 /	10	13.2	- 64,	1 ~	
2	-14-12	1346434	3	N	V	~	1	1	25.3		7	10	36.1	631	0 -	/ V
2-	18-22	1506049		V		V	- V	1	239		/ /	11	58.1	69	2	/ V
12	25-22	798831		V	~	V	V	1	-	2016		1	34.	8 66	6	/ /
2	4-17.	20/-1810		/	/	V,	1	1V		1 72		11	18.	6 68		11
3.	11 - 72	2062615		/	5	/	1		26.	-		- 11	11.	3 68	.0	/ /
2.	18 32			/	1		/	1	27.0			11	15,	4 64	5	V
3-	18-11	208601+	1,000	1	./	1	1	/	26.	3 22.	1	- 11	17	2 59	4	./ \
3-	25-22	2748 601		V/	1	./	1	/	25	6 22	6 1	1	11			1
4-	1-22 7	560217		V/		/	./	1	26,	2 23	2 /	1	29.	1 62	12	1
4-	8-12/2	669324		V		/	1	1		2 22	8 1	1	19	0 6		1
ш.	13-17 2	484549		/	/	1	- V	1	26,	1 22	9 2	1	1 13		0.7	1
11	17-22 9	965443		/	/	/	1	-	Annual Contract of the last of	1 23	7	- 1	1 24	1.2 6		1
14-	7-11-3			/	1	/	/	1	26	-	2			1.6 5	9.5	V
14-1	4-4- 2	and a		/	/	1	~	1	26.	1 23	, V			X.7 6	3.4	V
14-2	8-64 3	298 480		/	-	1	/	V	26	3 23	1	-		9.2	3.1	V
15-	3 -22 3	321760		V/	-	V/	1	1/	26	5 11	5	/ 1	4	115	110	1
5-6	2-12 75	7969		V	V	-1	1	1	26	1 22	.3		1 2	5.7	61.7	
15-10	-22 37	ZX 995		V	V_		-	-	-	-		1.1		1 1	2/21	11

* carbon in Tank #1 changed on 12/21/2021



* Carbon Change on 6-17-22 Tank #2 +06-22-22

MAINTENANCE LOG Area II: Former Donner Hann Coke Plant Parcel

Fort Schuyler Management Corporation RiverBend Site Buffalo, New York

	Flow Meter	Lead	f Tank	Back	Flush	Bag F Cha	ilter nge	Bag Pressu		Decant Oil Seperator	Tar in Drum	Instantane		Sump Flow Check	PS Flow Check	
7-5-22	Reading 3854070 4010408 4091302 4385032 4385032 4495056 4601562 4837403 4941320 4941386 5008988 5020789 5195757 5249060 5350968	Tank 1	Tank 2	Tank 1	Tank 2	Tank 1	Tank2 / / / / / / / / / / / / / / / / / /	24,4 24,9 26,1 24,2 26,2 26,4 25,4 26,4 26,5 24,8 26,2 27,5 24,2	After 21.9 21.7 22.5 22.0 22.7 23.6 22.8 22.8 22.8 22.9 21.4 23.9 12.3 20.5 20.7 20.6	Seperator V V V V V V V V V V V V V V V V V V V	(inches) 11 11 12 12 12 12 12 12 12 1	Before 3(g, 3(e, V) 3(e, V) 45.3 12.8 14.5 16.5 16.7 16.2 13.8 13.9 22.4 0 26.9	Atter 61.8 63.3 61.2 58.3 55.0 54.6 58.8 55.2 60.2 58.6 67.3 73.2	7 /		
					*											

BENCHMARK & TURNKEY

Fort Schuyler Management Corporation
RiverBend Site - Water Treatment Plant

				178	
Mai	inte	ana	nc	e l	oa

	Employee	Flow Meter	Lead	Tank Back Flush		Change			Decant Oil Tar in		Instantaneous Flow (GPM)		Sump Flow	PS Flow Check	
Date	Initials	Reading	Tank 1	Tank 2	Tank 1	Tank 2	Both Bags	Before	After	Separator	(inches)	Before	After	Check	,
7-15-22	BMG	5472799			V	V	V	22.6	20.8	V	10	52	68		V
7-19-22		5554124	~		V			22.7	21.1	V	-	62	68	-	V
7-22-22	CWE	5615047	V		V	V	V	23.2	22.0	V		64	71	~	V
7-26-22	Cast	5686372	V	1000	V		V,	22.4	22,7	V		64	7/	/	V
7-29-22	CWE/	5733833	~		~	1		227	22.5	V	11	70	72	V	7
8-2-22	wig	5796076	V		V	FIG TO 10	V	23.0	22.1	/	-	-	7/2	V	-
7-5-22	with	5833836	V		V	/	V	23.1	22.4	1	-	69	15	V	1
1-9-22	ewe	5183128	V		V	1000	V	23.	22.0	4	11	68	172	1	V
12-22	CWE	5916814	V		V	V	0	22.9	22.4	-	- 0	63	15	1	1
-16-22	CWB	5957618	V		V	/	~	23.1	22.2	1		67	74	1	1
-19-22	awy	5987856	V		V	~	V	23.1	22.8	1	-	67	74	V	V
-23-22	CWE	6028298	~	-	V	V	V	23.2	22.4		M	68	72	~	V
-26-22	CWE	6055668	~		V	~	V	23.1	224			67	75		1
-30-22	Cul	6087935	-		~	V	1	23,1	22.5		Elements.	68	74	V	-
2-22	aut	6112178	V		1		1	237	224		- 27	68	75	V	/
6-22	0013	6144342	V		~	11/	1	23.2	222	- 1	11	66	75	~	1
9-22	CWE	6168594	V		. /	1	1	337	22.4	V	-	67	76	V	1
17-22	CUSE	6200037	-		~	~	~	73.	224			6.7	72	-	1
021	CWE				V	-	1	237	- 22.9	1	100 -0	48	73	~	1
NO-FF		6273870	V	010 6 3	1 1/	V	1	234	A 4 5	/	14	69	73	V	V
23-22	CIVE	6370711	~	1,100	V	E IN	1	73.5	224	1		68	74	1	V
11-11	CMB	1215000			V	V	/	235	122.	3 /	-	66	72	V	1
30-22	CUB	6365070			1/		1	33.	22.5	3 /	917-11	66	13		1
1 41		6464294	7	-	1/	V	V	22.6	21.9	3 ~	19	62	74	-	-
7-22		6504878	-		1-	E SA	V	23.3	22.9	8 V	-	66	73	_	
~	4	549460	10		1	1	1	23.4	22.	8 V		63	72	-	- 1
4-22			V		V	1	V	32,9	22.	6 V	-	62	72	V	10
10		6728472	V		v	1/	V	351	22.9	1	20	51	69	-	10
21-22			V		V		V	23,3	23.0) V	7 -	54	68	1	1
25-22		6826197	7		V	1	1	23.6	22.	7 /		55	71	1	1
28-22		6971991	1		7		/	23	7 27 1	6 V	-	62	72		1
4-22		6984371	V		1/	1	V	23 4	92	7 /	20	62	72		1 1

Notes

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Templotes

BENCHMARK & TURNKEY

Fort Schuyler Management Corporation RiverBend Site - Water Treatment Plant

Maintenance Log

E STATE	Employee	Flow Meter	Lead	Tank	Back	Flush	Bag Filter Change	Bag Pres	sure (PSI)	Decant Oil	Tar in Drum	Instantaneou	is Flow (GPM)	Sump Flow Check	PS Flow Check
Date	Initials	Reading	Tank 1	Tank 2	Tank 1	Tank 2	Both Bags	Before	After	Separator	(inches)	Before	After	Olleck	-
11-8-22	CWES	7042925	/		V		V	22.8	22.7	V	21	61	71	1	1
1-11-22	CWE	7097628	V		V	V	V	23.1	22.7	1		57	123	1	1=
-15 -22	CWE	7167331	1		V		/	23.7	234	V		409	65	1	V
-22-22	10 715	7276471	1		V	V	V	34.2	236	i	31/25	57	64	1	V
-25-22	[CWZ]	73 25648	1		V	E	V	23.1	23.5	1	-	54	65	V	1
29-22	CWE	7385175	~		V	/	V	246	23.1	V		37	65	V	
6-22	CUB	7454336	/			7		23.5	25,4	1	26	ble	67	-	- 1
6-22	CWE	7620350	·V		.)	ノ	V	241	23.4	1V		NIA	68	V	- 1
		7734187		/			V	NA	226	V	-	63	68	-	1
		7808681		~	V	1/	~	23,7	23.1	V			70	V	
6-22	CNR	7808681		/	V	1/	1	24.0	231	V	1	100	67.8		
20-22	cure 1	7904772		1/	1/	V	V	26.7	27.4	0.00	26	32		-	/
2-29-22		8079985		2	/	./	V	24,1	24.0		-	57,	64.4	1	-
1-30-22	Cust	8103867		V	V	1		NA	24,0	V	-	14/0	66.1	V	
-4-23	CWE,	5247105		-	V	~	/	24.2	23.6	·V	-	6	68.3		
-6-23	ask	00002189		-	-	-								-	
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Notes: 12/13 Carbon I chazed out Carbon.
1-6-23 Colibrate flow meter may 8291520 gallour result to zero.

GENERATED VOLUME OF TAR MATERIAL





GENERATED VOLUME OF TAR MATERIAL 2022

Groundwater Pre-Treatment System (GWPTS)
Fort Schyuler Management Corporation
(Site No. V00619-9)
Buffalo, New York

Month	Volume of Tar (pounds)
January	0.0
February	0.0
March	0.0
April	0.0
May	0.0
June	0.0
July	16.5
August	0.0
September	49.6
October	99.3
November	82.7
December	16.5

Total: 264.7 pounds Drums: 0.55

2022 Statistics

Min. 0.0 pounds per month Max. 99.3 pounds per month Ave. 22.1 pounds per month

Annual Statistics Since 2012

Min. 66.2 pounds per year Max. 2535.4 pounds per year Ave. 641.2 pounds per year

