

May 10, 2023

Mr. Steven Moeller
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

**RE: First Quarter 2023 – Status Report
Former Stauffer Management Company LLC Site
Lewiston, New York
Langan Project No.: 130117301**

Dear Mr. Moeller:

Attached is the status report for the first quarter of 2023 activities at the Stauffer Management Company LLC site in Lewiston, New York. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) has conducted the operation, maintenance, and monitoring activities for the treatment system on behalf of Stauffer Management Company (SMC). No new changes to system operation, monitoring, or reporting are being requested as part of this status report.

Please call me if you need any additional information or if you have comments.

Sincerely,

**Langan Engineering, Environmental, Surveying,
Landscape Architecture and Geology, D.P.C.**



Matthew Ambrusch, PE, MBA
Senior Project Manager – Remediation Technology

MW:ma

Enclosure(s): Table 1 – System Extraction and Discharge Flow Rates
Table 2 – Weekly Mid-Carbon Sampling Results
Table 3 – Monthly Influent Sampling Results
Table 4 – Monthly Effluent Sampling Results
Table 5 – Quarterly Effluent (SPDES) Sampling Results

cc: Kurt Batsel (Dextra Group)
John-Paul Rossi (SMC)
Stewart Abrams, PE (Langan)

1. Operation and Maintenance Activities

Between January 1 and March 31, 2023, treatment system operations, consisting of the extraction of groundwater via 11 extraction wells, continued. The chemical feed system has been running continuously since initiating operation on February 11, 2019. The operation of the chemical feed system has proven effective at prolonging bag filter change-outs with no observed decrease in treatment system performance.

Per the New York State Department of Environmental Conservation (NYSDEC) Order on Consent Case No. CO 1-20181004 executed by the NYSDEC on June 12, 2019, wastes generated on site as a result of the operation of the treatment system are managed as U-listed hazardous waste.

1.1 Groundwater Extraction Wells

Groundwater extraction continued at wells EW-1R through EW-6, DPA-202, DPA-203, OW-3 and LR-66, except during minor periods of planned downtime due to bag filter change-outs, carbon exchanges, and other general maintenance tasks. Outside of these downtimes, all extraction wells, except DPA-201, EW-1R, EW-3, OW-3 and LR-66, have been operational at full and continuous capacity throughout the reporting quarter. DPA-201 remained off-line due to a lack of sufficient groundwater in the well to support pumping. Depth to groundwater will continue to be measured periodically at this well; the pump will be recommissioned when groundwater levels return to a suitable level for sustained pumping. The pump at EW-1R was shut down on January 5, 2023 due to pump motor failure likely caused by corrosion; the pump continues to remain inoperable pending procurement of a new pump and motor. The pump at EW-3 was shut down on January 5, 2023, due to an electrical short caused by vermin, and was inoperable until the electrical repairs were made on February 6, 2023. The pumps at OW-3 and LR-66 have been operable throughout the quarter, however, the filters/regulators are experiencing progressing oil and particulate clogging which has reduced the air flow to the pumps. These filters have since been replaced and extraction rates for both wells have been restored as of March 31, 2023.

Approximately 4,284,000 gallons of water were recovered from the extraction wells during the quarter, resulting in an average flow rate of approximately 31.8 gallons per minute as measured by the combined data from the well-specific influent flow meters. A summary of the system totalizer readings is provided as **Table 1**.

1.2 Groundwater Treatment System

Chemical feed delivery system operations continued throughout the quarter. Disposal of accumulated spent bag filters was completed on March 2, 2023. A liquid-phase granular activated carbon (GAC) exchange was completed on January 12, 2023.

General system maintenance of the treatment system and other miscellaneous tasks were also completed during the quarter, as needed, to maintain normal and safe system operations.

2. Sampling

The following sampling events were conducted during the first quarter of 2023:

Semi-monthly Volatile Organic Compound (VOC) Mid-Carbon Sampling: Semi-monthly samples were collected at the midpoint of carbon treatment between the lead and lag treatment vessels. The samples were collected to assess breakthrough of contaminants from the lead carbon vessel. **Table 2** presents the sampling results.

Contaminants were detected in the mid-carbon sampling beginning November 16, 2022. However, elevated contaminant concentrations (i.e., total mid-carbon concentration approaching 10% of the total influent concentration) were not detected until December 15, 2022. Therefore, a lead carbon change-out was performed on January 12, 2023, as reported in the Fourth Quarter 2022 Status Report dated February 6, 2023. After the carbon change, elevated concentrations were again detected starting on March 9, 2023 and continuing until a carbon exchange was performed on April 20, 2023. A summary of the mid-carbon constituent detections is provided below.

- Elevated chloroform concentrations (up to 460 micrograms per liter [µg/L]) were detected starting on December 1, 2022 and continued until the carbon exchange on January 12, 2023. Elevated chloroform concentrations (up to 620 µg/L) were again detected starting on February 15, 2023 and continued until the carbon exchange on April 20, 2023.
- Elevated methylene chloride concentrations (up to 73 µg/L) were detected starting on December 1, 2022 and continued until the carbon exchange on January 12, 2023. Elevated methylene chloride concentrations (up to 67 µg/L) were again detected starting on January 17, 2023 and continued until the carbon exchange on April 20, 2023.
- Elevated carbon tetrachloride concentrations (up to 61 µg/L) were detected starting on December 1, 2022 and continued until the carbon exchange on January 12, 2023. Elevated carbon tetrachloride concentrations (up to 42 µg/L) were again detected starting on March 9, 2023 and continued until the carbon exchange on April 20, 2023.

Monthly Influent VOC Sampling: **Table 3** presents the results of the monthly combined influent VOC sampling. Carbon disulfide, carbon tetrachloride, chloroform, methylene chloride, tetrachloroethene, and trichloroethene were all detected above their respective groundwater quality criteria. The highest concentrations were observed during the March 17, 2023 sampling event, with a total site-specific parameter list VOC concentration of 7,990 µg/L.

Monthly Effluent VOC Sampling: **Table 4** presents the results of the monthly effluent VOC sampling. Throughout the quarter, all VOC concentrations were under both their respective daily discharge limit and their respective method detection limits.

Quarterly Effluent Sampling: The New York State Pollutant Discharge Elimination System (SPDES) equivalent semi-volatile organic compounds, metals, and total recoverable phenolic parameters were collected on February 15, 2023. **Table 5** presents the effluent SPDES equivalent sampling results. Chromium was detected at a concentration of 41 µg/L; discharge of chromium was below the pounds-per-day SPDES mass-based equivalent discharge limit. Lead was detected at an estimated concentration of 6.3 µg/L; discharge of lead was below the pounds-per-day SPDES mass-based equivalent discharge limit. Zinc was detected at an

estimated concentration of 4.3 µg/L; discharge of zinc was below the pounds-per-day SPDES mass-based equivalent discharge limit. No other metals were detected. Semi-volatile organic compounds were non-detect for the quarter. Total recoverable phenolics were detected at an estimated concentration of 3.5 µg/L; discharge of total recoverable phenolics was below the discharge concentration limit. Per the results of this sampling, all compounds in the system effluent included in this sampling event were detected below their applicable discharge limits.

3. Deliverables in the First Quarter

- 2022 Annual OM&M Report submitted to the NYSDEC.
- 2022 Annual Hazardous Waste Report submitted to the NYSDEC.
- March 2, 2023 spent bag filter event Generator Copy of Hazardous Waste Manifest provided to the NYSDEC and Michigan Department of Environmental Quality.
- January 12, 2023 carbon exchange event Generator Copy of Hazardous Waste Manifest provided to the NYSDEC and the Pennsylvania Department of Environmental Protection.

4. Second Quarter 2023 Planned Events

- Treatment system operations will continue through the second quarter of 2023.
- The chemical feed system will continue to operate full-time through the second quarter of 2023; optimizations will be made, as necessary.
- Routine treatment system sampling and maintenance will continue throughout the second quarter of 2023.
- The change-out of the lead GAC vessel, completed on April 20, 2023, will be reported on in the next quarterly report.
- Spent bag filters will be disposed of off site.
- Bag filter housings will be replaced.

TABLES

Table 1
System Extraction and Discharge Flow Rates
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
5/10/2023

Date	Duration of Operation Since Last Monitoring Event	Totalizer Readings											
		EW-1		EW-2		EW-3		EW-4/T-4		EW-5/DPA-201		EW-6	
		Totalizer	Calculated Flow Rate	Totalizer	Calculated Flow Rate	Totalizer	Calculated Flow Rate	Totalizer	Calculated Flow Rate	Totalizer	Calculated Flow Rate	Totalizer	Calculated Flow Rate
		Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM
12/21/2022	8,640	964,891	0.64	7,505,458	7.55	8,294,477	0.14	403,430	0.64	8,963,159	9.66	4,616,235	3.49
1/5/2023	21,600	966,656	0.08	7,631,132	5.82	8,361,228	3.09	414,387	0.51	9,119,164	7.22	4,656,969	1.89
1/17/2023	17,280	966,656	0.00	7,746,247	6.66	8,378,022	0.97	424,928	0.61	9,276,432	9.10	4,713,385	3.26
1/27/2023	14,400	966,656	0.00	7,839,102	6.45	8,393,018	1.04	433,678	0.61	9,419,722	9.95	4,756,840	3.02
2/6/2023	14,400	966,656	0.00	7,935,506	6.69	8,559,405	11.55	443,118	0.66	9,570,147	10.45	4,785,450	1.99
2/16/2023	14,400	966,656	0.00	8,045,570	7.64	8,842,343	19.65	451,661	0.59	9,714,386	10.02	4,809,515	1.67
3/1/2023	18,720	966,656	0.00	8,198,748	8.18	9,202,946	19.26	462,559	0.58	9,874,699	8.56	4,829,948	1.09
3/13/2023	17,280	966,656	0.00	8,326,159	7.37	9,549,083	20.03	473,417	0.63	10,038,069	9.45	4,836,539	0.38
3/24/2023	15,840	966,656	0.00	8,442,593	7.35	9,845,152	18.69	484,884	0.72	10,190,602	9.63	4,881,985	2.87
4/4/2023	15,840	966,656	0.00	8,545,085	6.47	10,113,730	16.96	494,696	0.62	10,324,446	8.45	4,903,207	1.34
Totals / Averages		0	0.01	913,953	6.96	1,752,502	12.36	80,309	0.61	1,205,282	9.20	246,238	1.95

Notes:
GPM - gallons per minute
NR - no reading recorded
1. Grey boxes denote calculated data
2. Calculated flow rates assume the well was operating at all times within that particular operational timeframe.

Table 1
System Extraction and Discharge Flow Rates
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
5/10/2023

Date	Duration of Operation Since Last Monitoring Event	Totalizer Readings											
		DPA-202		DPA-203		OW-3		LR-66		Sum of Influent		Effluent	
		Totalizer	Calculated Flow Rate	Totalizer	Calculated Flow Rate	Totalizer	Calculated Flow Rate	Totalizer	Calculated Flow Rate	Sum of Totalizers	Sum of Flow Rates	Totalizer	Calculated Flow Rate
		Minutes	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons
12/21/2022	8,640	218,286	0.58	3,727	0.011	10,047,962	0.000	968,345	0.001	41,985,970	22.7	61,370,149	21.2
1/5/2023	21,600	231,064	0.59	3,805	0.004	10,047,962	0.000	977,972	0.446	42,410,339	19.6	61,937,527	26.3
1/17/2023	17,280	244,268	0.76	3,962	0.009	10,047,962	0.000	982,272	0.249	42,784,134	21.6	62,233,862	17.1
1/27/2023	14,400	255,366	0.77	3,993	0.002	10,047,962	0.000	982,383	0.008	43,098,720	21.8	62,657,462	29.4
2/6/2023	14,400	260,477	0.35	4,052	0.004	10,047,962	0.000	982,395	0.001	43,555,168	31.7	62,871,984	14.9
2/16/2023	14,400	260,447	0.00	4,052	0.000	10,047,962	0.000	983,000	0.042	44,125,592	39.6	63,437,814	39.3
3/1/2023	18,720	273,079	0.67	4,053	0.000	10,047,962	0.000	983,957	0.051	44,844,607	38.4	63,873,214	23.3
3/13/2023	17,280	285,000	0.69	4,080	0.002	10,047,962	0.000	983,957	0.000	45,510,922	38.6	64,293,331	24.3
3/24/2023	15,840	297,769	0.81	4,084	0.000	10,047,962	0.000	983,957	0.000	46,145,644	40.1	64,669,558	23.8
4/4/2023	15,840	309,808	0.76	4,140	0.004	10,048,120	0.010	983,958	0.000	46,693,846	34.6	65,005,243	21.2
Totals / Averages		78,744	0.60	335	0.00	158	0.00	5,986	0.09	4,283,507	31.79	3,067,716	24.39

Notes:
GPM - gallons per minute
NR - no reading recorded
1. Grey boxes denote calculated data
2. Calculated flow rates assume the well was operating at all times within that particular operational timeframe.

Table 2
Semi-monthly Mid-Carbon Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
5/10/2023

Analyte	CAS Number	Discharge Limit (Daily Maximum)	Location	CBT	CBT	CBT	CBT	CBT	CBT
			Sample Name	CBT-010523	CBT-011723	CBT-020623	CBT-021523	CBT-030923	CBT-031723
			Sample Date	1/5/2023	1/17/2023	2/6/2023	2/15/2023	3/9/2023	3/17/2023
			Unit	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds									
Benzene	71-43-2	10	ug/l	<8.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Carbon Disulfide	75-15-0	Monitor	ug/l	<8.0 U	<1.0 U	<1.0 U	<1.0 U	0.58 J	<1.0 U
Carbon Tetrachloride	56-23-5	10	ug/l	61	<1.0 U	<1.0 U	<1.0 U	27	42
Chlorobenzene	108-90-7	10	ug/l	<8.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Chloroform	67-66-3	10	ug/l	460	<1.0 U	<1.0 U	8.8	380	620 D
Methylene Chloride	75-09-2	10	ug/l	73	1.2	12	31	67	48
Tetrachloroethene (PCE)	127-18-4	10	ug/l	<8.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Toluene	108-88-3	10	ug/l	<8.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Trichloroethene (TCE)	79-01-6	10	ug/l	<8.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Total Concentration	--	NS	ug/l	590	1.2	12	40	470	710

Notes:
Results compared to Discharge Limit (Daily Maximum)
CAS - Chemical Abstract Service
NS - No standard
ug/l - Microgram per liter

Qualifiers:
U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample

Exceedance Summary:
10 - Result exceeds Discharge Limit (Daily Maximum)
10 - MDL or RL greater than the applicable standard



Table 3
Monthly Influent Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
5/10/2023

Analyte	CAS Number	NYSDEC TOGs	Location	INF	INF	INF
			Sample Name	INF-011723	INF-021523	INF-031723
			Sample Date	1/17/2023	2/15/2023	3/17/2023
			Unit	Result	Result	Result
Volatile Organic Compounds						
Benzene	71-43-2	1	ug/l	<50 U	<100 U	<100 U
Carbon Disulfide	75-15-0	60	ug/l	58	100	170
Carbon Tetrachloride	56-23-5	5	ug/l	5400 D	4400	6000
Chlorobenzene	108-90-7	5	ug/l	<50 U	<100 U	<100 U
Chloroform	67-66-3	7	ug/l	1800	1500	1700
Methylene Chloride	75-09-2	5	ug/l	55	<100 U	49 J
Tetrachloroethene (PCE)	127-18-4	5	ug/l	150	100	120
Toluene	108-88-3	5	ug/l	<50 U	<100 U	<100 U
Trichloroethene (TCE)	79-01-6	5	ug/l	67	84 J	82 J
Total Concentration	--	NS	ug/l	7530	6100	7990

Notes:
Groundwater sample results were compared to the NYSDEC Title 6 of the Official Compilation of NYCRR Part 703.5 and the NYSDEC TOGS 1.1.1
NYSDEC - New York State Department of Environmental Conservation
TOGS - Technical and Operational Guidance Series
CAS - Chemical Abstract Service
NS - No standard
ug/l - Microgram per liter

Qualifiers:
D - Indicates an identified compound in an analysis that has been diluted. This flag alerts the data user to any differences between the
J – The analyte was positively identified and the associated numerical value
U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results

Exceedance Summary:
10 - Result exceeds NYSDEC TOGs
10 - MDL or RL greater than the applicable standard



Table 4
Monthly Effluent Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
5/10/2023

Analyte	CAS Number	Discharge Limit (Daily Maximum)	Location	EFF	EFF	EFF
			Sample Name	EFF-011723	EFF-021523	EFF-031723
			Sample Date	1/17/2023	2/15/2023	3/17/2023
			Unit	Result	Result	Result
Volatile Organic Compounds						
Benzene	71-43-2	10	ug/l	<1.0 U	<1.0 U	<1.0 U
Carbon Disulfide	75-15-0	Monitor	ug/l	<1.0 U	<1.0 U	<1.0 U
Carbon Tetrachloride	56-23-5	10	ug/l	<1.0 U	<1.0 U	<1.0 U
Chlorobenzene	108-90-7	10	ug/l	<1.0 U	<1.0 U	<1.0 U
Chloroform	67-66-3	10	ug/l	<1.0 U	<1.0 U	<1.0 U
Methylene Chloride	75-09-2	10	ug/l	<1.0 U	<1.0 U	<1.0 U
Tetrachloroethene (PCE)	127-18-4	10	ug/l	<1.0 U	<1.0 U	<1.0 U
Toluene	108-88-3	10	ug/l	<1.0 U	<1.0 U	<1.0 U
Trichloroethene (TCE)	79-01-6	10	ug/l	<1.0 U	<1.0 U	<1.0 U
Total Concentration	—	NS	ug/l	ND	ND	ND

Notes:
Results compared to Discharge Limit (Daily Maximum)
CAS - Chemical Abstract Service
NS - No standard
ug/l - Microgram per liter
ND - Not detected

Qualifiers:
U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results

Exceedance Summary:

10

 - Result exceeds Discharge Limit (Daily Maximum)
10 - MDL or RL greater than the applicable standard

Table 5
Quarterly Effluent (SPDES) Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
5/10/2023

Analyte	CAS Number	Discharge Limit (Daily Maximum)	Location	EFF	Discharge Rate
			Sample Name	EFF-021523	
			Sample Date	2/15/2023	
			Unit	Result	lbs/day
Semi-Volatile Organic Compounds					
2,4-Dichlorophenol	120-83-2	1	ug/l	<5.0 U	-
Hexachloroethane	67-72-1	5	ug/l	<5.0 U	-
Naphthalene	91-20-3	10	ug/l	<5.0 U	-
Metals					
Arsenic	7440-38-2	0.036*	ug/l	<15 U	-
Chromium, Total	7440-47-3	0.072*	ug/l	41	0.0086
Copper	7440-50-8	0.1*	ug/l	<10 U	-
Lead	7439-92-1	0.16*	ug/l	6.3 J	0.0013
Nickel	7440-02-0	0.072*	ug/l	<10 U	-
Selenium	7782-49-2	0.48*	ug/l	<25 U	-
Zinc	7440-66-6	0.86*	ug/l	4.3 BJ	0.0009
General Chemistry					
Phenolics, Total Recoverable	TOTPHEN	10	ug/l	3.5 J	0.0007

Notes:

* - Limit is in pounds per day (lbs/day)
Results compared to Discharge Limit (Daily Maximum)
CAS - Chemical Abstract Service
ug/l - Microgram per liter

Qualifiers:

B - Indicates the analyte is detected in the associated blank as well and the sample.
J – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Exceedance Summary:

- 10 - Result exceeds Discharge Limit (Daily Maximum)
- 10 - MDL or RL greater than the applicable standard

