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August 15, 2023

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

RE: Second 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 second 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 April 1 and June 30, 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 and EW-1R, 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, motor, electrical cable, and down-hole tubing were replaced on June 15, 2023. Prior to installation, the well was also cleaned with an acid-based well cleaner, surged, and pumped until clear water was yielded. To reduce the potential for future pump and motor failures in EW-1R, the pump and motor were replaced with an "Environmental" rated pump/motor/cable combination and the 2-inch stainless steel drop-pipe was replaced with 1-inch HDPE tubing to facilitate more frequent maintenance.

Approximately 3,950,000 gallons of water were recovered from the extraction wells during the quarter, resulting in an average flow rate of approximately 29.5 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 July 7, 2023. A liquid-phase granular activated carbon (GAC) exchange was completed on April 20, 2023.

Two new, seven-bag capacity, stainless steel filter housings were installed to replace the worn single-bag (5) and seven-bag (1) units. The existing units were becoming tedious to maintain and prone to leakage. The replacement housings and all associated plumbing, instrumentation, and controls were brought online on May 15, 2023. At the same time, the plumbing associated with the municipal potable water connection was replaced, including the flow meter, backflow preventor, and controls to reduce leaks and maintenance needs. This work did not have

significant impact on the extraction and treatment system operations as downtime was limited to a few hours over the course of a few days.

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 second 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 January 17, 2023. However, elevated contaminant concentrations (i.e., total mid-carbon concentration approaching 10% of the total influent concentration) were not detected until March 9, 2023 and continued until a lead carbon change-out was performed on April 20, 2023, as reported in the First Quarter 2023 Status Report dated May 10, 2023. After the carbon change, contaminants were detected starting on May 18, 2023. Elevated contaminant concentrations were again detected starting July 7, 2023; another carbon change has been scheduled for the second half of July and will be reported in the Third Quarter 2023 Status Report. A summary of the mid-carbon constituent detections is provided below.

- Elevated chloroform concentrations (up to 1400 micrograms per liter [µg/L]) were detected starting on February 15, 2023 and continued until the carbon exchange on April 20, 2023. Elevated chloroform concentrations (up to 190 µg/L) were again detected starting on June 9, 2023.
- Elevated methylene chloride concentrations (up to 74 µg/L) were detected until the carbon exchange on April 20, 2023. Elevated methylene chloride concentrations (up to 37 µg/L) were again detected starting on May 18, 2023.
- Elevated carbon tetrachloride concentrations (up to 88 µg/L) were detected starting on March 9, 2023 and continued until the carbon exchange on April 20, 2023. Elevated carbon tetrachloride concentrations (up to 8 µg/L) were again detected starting on June 9, 2023.
- Minor carbon disulfide concentrations (up to an estimated 2.8 µg/L) were detected sporadically throughout the reporting period.

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 April 20, 2023 sampling event, with a total site-specific parameter list VOC concentration of 6,950 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 with the exception of chloroform, which was detected below its daily discharge limit at a concentration of 8.2 µg/L during the April 20, 2023 sampling event.

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 May 18, 2023. **Table 5** presents the effluent SPDES equivalent sampling results. Chromium was detected at a concentration of 1.6 µg/L; discharge of chromium was below the pounds-per-day SPDES mass-based equivalent discharge limit. Copper was detected at an estimated concentration of 3.5 µg/L; discharge of copper was below the pounds-per-day SPDES mass-based equivalent discharge limit. Nickel was detected at an estimated concentration of 1.4 µg/L; discharge of nickel was below the pounds-per-day SPDES mass-based equivalent discharge limit. Zinc was detected at an estimated concentration of 8.3 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 and total recoverable phenolics were non-detect for the quarter. 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 Second Quarter

- April 20, 2023 carbon exchange event Generator Copy of Hazardous Waste Manifest provided to the NYSDEC and the Pennsylvania Department of Environmental Protection.
- Response to NYSDEC Comments on 2022 Annual OM&M Report.

4. Third Quarter 2023 Planned Events

- Treatment system operations will continue through the third quarter of 2023.
- The chemical feed system will continue to operate full-time through the third quarter of 2023; optimizations will be made, as necessary.
- Routine treatment system sampling and maintenance will continue throughout the third quarter of 2023.
- The change-out of the lead GAC vessel, scheduled for late July, will be reported on in the next quarterly report.
- The disposal of spent bag filters, completed July 7, 2023, will be reported on in the next quarterly report.

TABLES

Table 1
System Extraction and Discharge Flow Rates
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
8/15/2023

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
	Minutes	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM
3/24/2023	15,840	966,656	0.00	8,442,593	7.35	9,845,152	18.7	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	17.0	494,696	0.62	10,324,446	8.45	4,903,207	1.34
4/20/2023	23,040	966,656	0.00	8,700,546	6.75	10,534,137	18.2	511,154	0.71	10,528,791	8.87	4,930,868	1.20
5/4/2023	20,160	966,656	0.00	8,813,161	5.59	10,823,346	14.3	521,212	0.50	10,661,000	6.56	4,946,277	0.76
5/12/2023	11,520	966,656	0.00	8,888,495	6.54	10,992,727	14.7	530,000	0.76	10,738,567	6.73	4,956,133	0.86
5/24/2023	17,280	966,656	0.00	9,019,414	7.58	11,209,843	12.6	537,993	0.46	10,850,275	6.46	4,971,830	0.91
6/2/2023	12,960	966,656	0.00	9,117,847	7.60	11,341,144	10.1	545,600	0.59	10,925,276	5.79	4,983,626	0.91
6/15/2023	18,720	968,201	0.08	9,249,425	7.03	11,494,404	8.19	556,238	0.57	11,016,099	4.85	4,998,969	0.82
6/29/2023	20,160	991,757	1.17	9,390,181	6.98	11,635,055	6.98	567,841	0.58	11,103,958	4.36	5,014,312	0.76
Totals / Averages		**25,101**	**0.14**	**947,588**	**6.88**	**1,789,903**	**13.4**	**82,957**	**0.61**	**913,356**	**6.86**	**132,327**	**1.16**

Notes:
GPM - gallons per minute
1. Grey boxes denote calculated data
2. Calculated flow rates assume the well was operating at all times within that particular operational timeframe.

Prepared by: MW
Reviewed by: MA
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Table 1
System Extraction and Discharge Flow Rates
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
8/15/2023

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	GPM
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
4/20/2023	23,040	324,814	0.65	4,177	0.002	10,048,456	0.015	984,066	0.005	47,533,665	36.5	65,512,472	22.0
5/4/2023	20,160	335,766	0.54	4,257	0.004	10,048,619	0.008	984,175	0.005	48,104,469	28.3	65,870,310	17.7
5/12/2023	11,520	342,513	0.59	4,278	0.002	10,048,619	0.000	984,175	0.000	48,452,163	30.2	66,113,114	21.1
5/24/2023	17,280	344,888	0.14	4,371	0.005	10,048,797	0.010	985,458	0.074	48,939,525	28.2	66,700,866	34.0
6/2/2023	12,960	345,058	0.01	4,413	0.003	10,048,799	0.000	985,459	0.000	49,263,878	25.0	67,176,913	36.7
6/15/2023	18,720	351,825	0.36	4,466	0.003	10,048,799	0.000	985,612	0.008	49,674,038	21.9	67,813,330	34.0
6/29/2023	20,160	358,258	0.32	4,466	0.000	10,048,799	0.000	985,612	0.000	50,100,239	21.1	68,464,210	32.3
Totals / Averages		**60,489**	**0.46**	**382**	**0.003**	**837**	**0.005**	**1,655**	**0.010**	**3,954,595**	**29.5**	**3,794,652**	**27.0**

Notes:
GPM - gallons per minute
1. Grey boxes denote calculated data
2. Calculated flow rates assume the well was operating at all times within that particular operational timeframe.

Prepared by: MW
Reviewed by: MA
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Table 2
Semi-monthly Mid-Carbon Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
8/15/2023

Analyte	CAS Number	Discharge Limit (Daily Maximum)	Location	CBT	CBT	CBT	CBT	CBT	CBT
			Sample Name	CBT-040423	CBT-042023	CBT- 050423	CBT-051823	CBT-060923	CBT-061923
			Sample Date	4/4/2023	4/20/2023	5/4/2023	5/18/2023	6/9/2023	6/19/2023
			Unit	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds									
Benzene	71-43-2	10	ug/l	<10 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Carbon Disulfide	75-15-0	Monitor	ug/l	2.8 J	0.30 J	<1.0 U	0.29 J	<1.0 U	0.95 J
Carbon Tetrachloride	56-23-5	**10**	ug/l	**88**	2.5	<1.0 U	<1.0 U	0.97 J	8
Chlorobenzene	108-90-7	10	ug/l	<10 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Chloroform	67-66-3	**10**	ug/l	**1400 D**	**31**	<1.0 U	<1.0 U	**16**	**190 D**
Methylene Chloride	75-09-2	**10**	ug/l	**74**	2.5	<1.0 U	0.97 J	**14**	**37**
Tetrachloroethene (PCE)	127-18-4	10	ug/l	<10 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Toluene	108-88-3	10	ug/l	<10 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Trichloroethene (TCE)	79-01-6	10	ug/l	<10 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Total Concentration	--	NS	ug/l	1565	36	ND	1.3	31	236

Notes:
Results compared to Discharge Limit (Daily Maximum)
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 concentrations reported the two analyses.

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

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

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Table 3
Monthly Influent Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
8/15/2023

Analyte	CAS Number	NYSDEC TOGs	Location	INF	INF	INF
			Sample Name	INF-042023	INF-051823	INF-061923
			Sample Date	4/20/2023	5/18/2023	6/19/2023
			Unit	Result	Result	Result
Volatile Organic Compounds						
Benzene	71-43-2	1	ug/l	<100 U	<4.0 U	<50 U
Carbon Disulfide	75-15-0	**60**	ug/l	**61 J**	26	**890**
Carbon Tetrachloride	56-23-5	**5**	ug/l	**5000**	**3200 D**	**3000**
Chlorobenzene	108-90-7	5	ug/l	<100 U	<4.0 U	<50 U
Chloroform	67-66-3	**7**	ug/l	**1700**	**1200 D**	**1200**
Methylene Chloride	75-09-2	**5**	ug/l	**70 J**	**50**	**120**
Tetrachloroethene (PCE)	127-18-4	**5**	ug/l	**68 J**	**63**	**60**
Toluene	108-88-3	5	ug/l	<100 U	<4.0 U	<50 U
Trichloroethene (TCE)	79-01-6	**5**	ug/l	**51 J**	**77**	**80**
Total Concentration	--	NS	ug/l	6950	4616	5350

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

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Table 4
Monthly Effluent Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
8/15/2023

Analyte	CAS Number	**Discharge Limit (Daily Maximum)**	Location	EFF	EFF	EFF
			Sample Name	EFF-042023	EFF-051823	EFF-061923
			Sample Date	4/20/2023	5/18/2023	6/19/2023
			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	8.2	<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	8.2	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

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Table 5
Quarterly Effluent (SPDES) Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
8/15/2023

Analyte	CAS Number	**Discharge Limit (Daily Maximum)**	Location	EFF	Discharge Rate
			Sample Name	EFF-051823	
			Sample Date	5/18/2023	
			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	1.6 J	0.000
Copper	7440-50-8	0.1*	ug/l	3.5 J	0.001
Lead	7439-92-1	0.16*	ug/l	<10 U	-
Nickel	7440-02-0	0.072*	ug/l	1.4 J	0.000
Selenium	7782-49-2	0.48*	ug/l	<25 U	-
Zinc	7440-66-6	0.86*	ug/l	8.3 BJ	0.002
General Chemistry					
Phenolics, Total Recoverable	TOTPHEN	10	ug/l	<10 U	-

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

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