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December 12, 2023

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

RE: Third 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 third 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).

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)
Matthew Wenrick, PE (Langan)

1. Operation and Maintenance Activities

Between July 1 and September 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 rigid drop-pipe was replaced with 1-inch HDPE tubing to facilitate more frequent maintenance. EW-1R has since shut down again, as of July 26, 2023, with similar issues. An alternative pump type coupled with a sacrificial anode (to protect against galvanic corrosion) are being procured as a replacement.

Approximately 3,800,000 gallons of water were recovered from the extraction wells during the quarter, resulting in an average flow rate of approximately 22.6 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 August 29, 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.

We currently prepare quarterly status reports (such as this report), an annual operation, maintenance, and monitoring (OM&M) report, and a triennial periodic review report. Langan

proposes the suspension of the quarterly status reports at the start of 2024, such that the Q4 2023 status report would be the last quarterly status report submission. The data typically reported on in the quarterly status reports would still be collected, tabulated, and evaluated throughout the year, and would continue to be reported on in the annual OM&M report.

2. Sampling

The following sampling events were conducted during the third 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 May 18, 2023. However, elevated contaminant concentrations (i.e., total mid-carbon concentration approaching 10% of the total influent concentration) were not detected until July 7, 2023 and continued until a lead carbon change-out was performed on August 29, 2023. After the carbon change, contaminants were detected starting on October 5, 2023. A summary of the mid-carbon constituent detections is provided below.

- Elevated chloroform concentrations (up to 500 micrograms per liter [µg/L]) were detected starting on June 9, 2023 and continued until the carbon exchange on August 29, 2023. Elevated chloroform concentrations (up to 11 µg/L) were again detected starting on October 5, 2023.
- Elevated methylene chloride concentrations (up to 55 µg/L) were detected until the carbon exchange on August 29, 2023.
- Minor carbon disulfide concentrations (up to an estimated 1.2 µg/L) were detected sporadically throughout the reporting period until the carbon exchange on August 29, 2023.
- Minor carbon tetrachloride concentration (up to an estimated 2.6 µg/L) was detected on October 5, 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 July 7, 2023 sampling event, with a total site-specific parameter list VOC concentration of 5,376 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 October 5, 2023; five days following the end of the reporting period. Another quarterly SPDES sample will be collected during the next reporting period

and reported as the Q4 2023 sampling results. **Table 5** presents the effluent SPDES equivalent sampling results. Lead was detected at an estimated concentration of 5.9 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 8.6 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 not detected. Total recoverable phenolics were detected at a concentration of 47 µg/L; therefore, discharge of total recoverable phenolics exceeded the discharge limit of 10 µg/L. This sample was collected while drilling fluids resulting from onsite drilling activities were being treated (and discharged) via the treatment system. These drilling activities included the installation of two onsite monitoring wells in the northwest corner of the site (R-80 and IR-80), as well as the installation of an onsite extraction well east of the existing treatment building (EW-7). Upon further investigation, the phenolics present in common drilling fluids are the likely source of the discrete elevated total recoverable phenolics concentration. The treatment of the drilling fluids was a limited occurrence and is no longer occurring. This will be further monitored in future quarterly effluent sampling events.

3. Deliverables in the Third Quarter

- July 7, 2023 spent bag filter event Generator Copy of Hazardous Waste Manifest provided to the NYSDEC and Michigan Department of Environmental Quality.
- August 29, 2023 carbon exchange event Generator Copy of Hazardous Waste Manifest provided to the NYSDEC and the Pennsylvania Department of Environmental Protection.

4. Fourth Quarter 2023 Planned Events

- Treatment system operations will continue through the fourth quarter of 2023.
- The chemical feed system will continue to operate full-time through the fourth quarter of 2023; optimizations will be made, as necessary.
- Routine treatment system sampling and maintenance will continue throughout the fourth quarter of 2023.
- The EW-1R pump will be replaced, depending on equipment and contractor availability.
- The change-out of the lead GAC vessel is expected to occur in November or December of 2023.
- The disposal of spent bag filters is planned to occur before mid-November 2023.
- The annual groundwater sampling event will take place.

TABLES

Table 1
System Extraction and Discharge Flow Rates
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
11/17/2023

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
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
7/14/2023	21,600	1,013,791	1.02	9,537,057	6.80	11,766,570	6.09	580,117	0.57	11,196,071	4.26	5,030,080	0.73
8/7/2023	34,560	1,013,791	0.00	9,876,331	9.82	11,943,851	5.13	593,413	0.38	11,361,615	4.79	5,062,722	0.94
8/16/2023	12,960	1,013,791	0.00	9,992,904	8.99	12,003,479	4.60	601,112	0.59	11,466,907	8.12	5,074,866	0.94
9/14/2023	41,760	1,013,791	0.00	10,245,472	6.05	12,320,167	7.58	623,960	0.55	11,718,870	6.03	5,178,341	2.48
9/28/2023	20,160	1,013,791	0.00	10,409,925	8.16	12,502,147	9.03	633,036	0.45	11,811,170	4.58	5,259,414	4.02
10/23/2023	36,000	1,013,791	0.00	10,685,396	7.65	12,792,048	8.05	639,539	0.18	11,985,941	4.85	5,355,526	2.67
Totals / Averages		**22,034**	**0.31**	**1,295,215**	**7.78**	**1,156,993**	**6.78**	**71,698**	**0.47**	**881,983**	**5.29**	**341,214**	**1.79**

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
11/17/2023

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
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
7/14/2023	21,600	364,181	0.27	4,466	0.000	10,048,799	0.000	985,612	0.000	50,526,744	19.7	69,085,916	28.8
8/7/2023	34,560	370,101	0.17	4,545	0.002	10,048,807	0.000	985,627	0.000	51,260,803	21.2	70,030,292	27.3
8/16/2023	12,960	370,101	0.00	4,545	0.000	10,049,718	0.070	985,627	0.000	51,563,050	23.3	70,441,546	31.7
9/14/2023	41,760	386,788	0.40	4,645	0.002	10,049,718	0.000	985,766	0.003	52,527,518	23.1	71,601,049	27.8
9/28/2023	20,160	390,080	0.16	4,707	0.003	10,049,724	0.000	985,859	0.005	53,059,853	26.4	72,104,791	25.0
10/23/2023	36,000	390,750	0.02	4,709	0.000	10,049,722	0.000	987,339	0.041	53,904,761	23.5	72,927,347	22.8
Totals / Averages		**32,492**	**0.19**	**243**	**0.00**	**923**	**0.01**	**1,727**	**0.01**	**3,804,522**	**22.63**	**4,463,137**	**27.96**

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
11/17/2023

Analyte	CAS Number	**Discharge Limit (Daily Maximum)**	Location	CBT	CBT	CBT	CBT	CBT	CBT	CBT
			Sample Name	CBT-070723	CBT-071523	CBT-080723	CBT-081623	CBT-090823	CBT-091923	CBT-100523
			Sample Date	7/7/2023	7/15/2023	8/7/2023	8/16/2023	9/8/2023	9/19/2023	10/5/2023
			Unit	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds										
Benzene	71-43-2	10	ug/l	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<1.0 U	<1.0 U
Carbon Disulfide	75-15-0	Monitor	ug/l	0.98 J	<5.0 U	1.2 J	<5.0 U	<5.0 U	<1.0 U	<1.0 U
Carbon Tetrachloride	56-23-5	10	ug/l	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<1.0 U	2.6
Chlorobenzene	108-90-7	10	ug/l	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<1.0 U	<1.0 U
Chloroform	67-66-3	**10**	ug/l	**200**	**200**	**320**	**500**	<5.0 U	<1.0 U	**11**
Methylene Chloride	75-09-2	**10**	ug/l	**55**	**31**	**25**	**38**	<5.0 U	<1.0 U	1.8
Tetrachloroethene (PCE)	127-18-4	10	ug/l	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<1.0 U	<1.0 U
Toluene	108-88-3	10	ug/l	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<1.0 U	<1.0 U
Trichloroethene (TCE)	79-01-6	10	ug/l	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<1.0 U	<1.0 U
Total Concentration	--	NS	ug/l	255.98	231	346.2	538	ND	ND	ND

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

Qualifiers:

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
11/17/2023

Analyte	CAS Number	NYSDEC TOGs	Location	INF	INF	INF	INF
			Sample Name	INF-070723	INF-081623	INF-091923	INF-100523
			Sample Date	7/7/2023	8/16/2023	9/19/2023	10/5/2023
			Unit	Result	Result	Result	Result
Volatile Organic Compounds							
Benzene	71-43-2	1	ug/l	<50 U	<50 U	<50 U	<50 U
Carbon Disulfide	75-15-0	**60**	ug/l	**880**	**110**	29 J	**100**
Carbon Tetrachloride	56-23-5	**5**	ug/l	**3100**	**2600**	**2400**	**2300**
Chlorobenzene	108-90-7	5	ug/l	<50 U	<50 U	<50 U	<50 U
Chloroform	67-66-3	**7**	ug/l	**1200**	**1100**	**1100**	**960**
Methylene Chloride	75-09-2	**5**	ug/l	**75**	**45 J**	**63**	**39 J**
Tetrachloroethene (PCE)	127-18-4	**5**	ug/l	**54**	**61**	**59**	**47 J**
Toluene	108-88-3	5	ug/l	<50 U	<50 U	<50 U	<50 U
Trichloroethene (TCE)	79-01-6	**5**	ug/l	**67**	**74**	**71**	**73**
Total Concentration	--	NS	ug/l	5376	3990	3722	3519

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:
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

Prepared by: MW
Reviewed by: MA
\\langan.com\data\LAW\data3\130117301\Project Data_Discipline\Environmental\Reports\Quarterly Reports\2023 Q3\Tables\2023-1026 Table 2-5 Analytical Results

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Table 4
Monthly Effluent Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
11/17/2023

Analyte	CAS Number	**Discharge Limit (Daily Maximum)**	Location	EFF	EFF	EFF	EFF
			Sample Name	EFF-070723	EFF-081623	EFF-091923	EFF-100523
			Sample Date	7/7/2023	8/16/2023	9/19/2023	10/5/2023
			Unit	Result	Result	Result	Result
Volatile Organic Compounds							
Benzene	71-43-2	10	ug/l	<1.0 U	<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	<1.0 U
Carbon Tetrachloride	56-23-5	10	ug/l	<1.0 U	<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	<1.0 U
Chloroform	67-66-3	10	ug/l	<1.0 U	<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	<1.0 U
Tetrachloroethene (PCE)	127-18-4	10	ug/l	<1.0 U	<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	<1.0 U
Trichloroethene (TCE)	79-01-6	10	ug/l	<1.0 U	<1.0 U	<1.0 U	<1.0 U
Total Concentration	--	NS	ug/l	ND	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

Prepared by: MW
Reviewed by: MA
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Table 5
Quarterly Effluent (SPDES) Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
11/17/2023

Analyte	CAS Number	**Discharge Limit (Daily Maximum)**	Location	EFF	Discharge Rate
			Sample Name	EFF-100523	
			Sample Date	10/5/2023	
			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	<4.0 U	-
Copper	7440-50-8	0.1*	ug/l	<10 U	-
Lead	7439-92-1	0.16*	ug/l	5.9 J	0.0012
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	8.6 J	0.0018
General Chemistry					
Phenolics, Total Recoverable	TOTPHEN	10	ug/l	47	-

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:
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

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