LANGAN

Technical Excellence
Practical Experience
Client Responsiveness

February 3, 2020

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

RE: Fourth Quarter 2019 – Status Report
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301

Dear Mr. Sadowski:

Attached is the status report for the Fourth Quarter 2019 activities at the Stauffer Management Company LLC site in Lewiston, New York. 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
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 October 1 and December 31, 2019, 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 NYSDEC Order of 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 listed U hazardous waste.

1.1 Groundwater Extraction Wells

Groundwater extraction continued at wells EW-1 through EW-6, DPA-202, DPA-203, OW-3, and LR-66. Extraction wells EW-1, EW-3, EW-5, EW-6, DPA-202, DPA-203, and LR-66 have been operational at full and continuous capacity throughout the reporting quarter with the exceptions of planned downtime due to two liquid phase carbon exchanges on October 14th and December 23rd, 2019.

The following extraction wells have been operational at a reduced capacity or have had modifications or repairs performed during this reporting quarter:

- EW-2 flow meter displaying error. Pump malfunction was eliminated as the potential issue as its operation was verified.
- EW-4, a pneumatic pump, experienced brief periods of downtime while the pneumatic delivery system components were trouble-shot, cleaned or replaced.
- Extraction performance in OW-3 continues to be poor due to insufficient groundwater recovery in the well.

The operation of these wells is still being monitored – the replacement of instrumentation for wells EW-2 and EW-4 is being evaluated and will be completed, as needed, to maintain operation.

The following extraction wells did not operate during this reporting quarter:

- DPA-201 remains offline and groundwater has not been recovered at an appreciable pumping level. This well will continue to be periodically measured for depth to water, and the pump will be recommissioned once groundwater levels return to a suitable level for sustained pumping.

Approximately 3,770,000 gallons of water were recovered from the extraction wells during the quarter, resulting in an average flow rate of approximately 29.1 gpm. 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. A disposal of spent bag filters and sump solids resulting from system operations was completed on November 15, 2019. In addition to the operational waste, historical wastes previously left on site, including spent vapor phase carbon, spent epoxy, and sulfamic acid, were also disposed of off site on November

15, 2019. Waste classification samples were collected for each waste stream, as appropriate, and the wastes were disposed of off site accordingly. Liquid phase carbon exchanges also took place on October 14 and December 23, 2019, by draining the lead carbon vessel of water to a holding tank, pneumatically extracting the spent carbon to the carbon hauling vehicle, refilling the vessel with 10,000 pounds of fresh carbon, and finally reconfiguring the treatment train so that the previously lag carbon vessel operates as the lead carbon vessel before restarting the system.

General system maintenance to well-specific manifold instrumentation, pneumatic distribution and control system, heat trace and insulation was also completed throughout the quarter, as needed, to maintain normal system operations.

1.3 Area A Soil-Vapor Extraction (SVE) System

As indicated in the previous quarterly updates, the Area A soil-vapor extraction (SVE) system was shut down in early August 2014 and remains shut down, but in a standby operable mode. The NYSDEC indicated that to approve the request to permanently terminate the SVE operations, an Environmental Easement (EE) was required on the property as part of the remedial process. Stauffer Management Company LLC (SMC) prepared the EE documents, which were signed by SMC on April 28, 2015, and by the NYSDEC on August 24, 2015. The final EE was filed with Niagara County on September 4, 2015.

A Site Management Plan (SMP) was submitted to the NYSDEC on May 25, 2017, which includes provisions for removing the SVE system. Per email correspondence with Brian Sadowski dated September 3, 2019, the previously prepared SMP requires updates to reflect changes in system operation (i.e., chemical feed system) and oversight (i.e., change in project consultants). These revisions are being incorporated and a revised SMP will be submitted to the NYSDEC for review and approval. Upon approval of the SMP by the NYSDEC, the Area A SVE system will be decommissioned.

2. Sampling

During the fourth quarter of 2019, we conducted the following sampling events:

Weekly Volatile Organic Compound (VOC) Mid-Carbon Sampling: Weekly samples are collected at the midpoint of carbon treatment between the lead and lag treatment vessels. The samples are 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 starting October 14, 2019, immediately following the carbon exchange; however, elevated contaminant concentrations (i.e., total mid-carbon concentration greater than 10% of the total influent concentration) were detected in mid-carbon samples between November 18, and December 16, 2019, representative of contaminant breakthrough in the lead carbon vessel. Accordingly, a GAC change-out was scheduled for December 23, 2019. A summary of the mid-carbon constituent detections is provided below.

- Elevated chloroform concentrations (up to 1,500 microgram per liter [µg/L]) were detected on November 4, 2019 and continued until the December carbon exchange.

- Elevated methylene chloride concentrations (up to 84 µg/L) were detected on November 4, 2019 and continued until the December carbon exchange.
- Elevated carbon tetrachloride concentrations (up to 97 µg/L) were detected on November 4, 2019 and continued until the December carbon exchange.

Monthly Influent VOC Sampling: **Table 3** presents the combined influent VOC sampling results. 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 October 14, 2019 sampling, with a total site-specific parameter list VOC concentration of 13,670 µg/L.

Monthly Effluent VOC Sampling: **Table 4** presents the results of the effluent VOC sampling. All VOC concentrations were under their respective daily discharge limit, the majority of which, with the exception of chloroform, were under their respective method detection limits throughout the quarter.

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 November 13, 2019, for the fourth quarter. **Table 5** presents the effluent SPDES equivalent sampling results. Chromium was detected at an estimated concentration of 0.0024 milligrams per liter (mg/L). Zinc was detected at an estimated concentration of 0.0049 mg/L, however this compound was also found in the lab blank analysis. As depicted in **Table 5**, discharge of chromium and zinc were below the respective pounds-per-day SPDES equivalent discharge limit. Semi-volatiles were non-detect for the quarter. Total Recoverable Phenolics were detected at an estimated concentration of 0.0091 mg/L, however this was also detected in the lab blank analysis. Per the results of this sampling, all compounds in the system effluent were detected below their applicable discharge limits.

With the Area A SVE blower shut down, no influent vapor samples were collected in the fourth quarter of 2019.

3. Request to Modify Sampling Frequency and Included Wells

Langan understands that SMC requested a reduction in the number of monitoring wells to be sampled as part of the annual groundwater sampling during a June 7, 2016 conference call with the NYSDEC. Langan repeated this request, in writing, in the First Quarter 2018 Status Report (June 22, 2018) and provided additional information to the NYSDEC in a June 29, 2018 email to Brian Sadowski. SMC is awaiting a NYSDEC response to the request to remove several monitoring wells from the annual sampling list. This request will be further evaluated, and potentially modified, as part of the additional hydrogeological investigations being completed on site.

4. Deliverables in the Fourth Quarter

- November 15, 2019 bag filter disposal event Generator Copy of Hazardous Waste Manifest to the NYSDEC and the MIDEQ.

- October 14 and December 23, 2019 carbon exchange event Generator Copy of Hazardous Waste Manifest to the NYSDEC and the PADEP.

5. First Quarter 2020 Planned Events

- Treatment system operations will continue through the first quarter of 2020.
- The chemical-feed system will continue to operate full time through the first quarter of 2020, and optimizations will be made, as necessary.
- Routine treatment-system sampling and maintenance will continue throughout the first quarter of 2020.
- Change-out of lead GAC vessel.
- Disposal of bag filters.
- Submit revised SMP to the NYSDEC.

TABLES

Table 1
System Extraction and Discharge Flow Rates
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
2/3/2020

Date	Duration of Operation Since Last Monitoring Event	Totalizer Readings									
		EW-1		EW-2		EW-3		EW-4/T-4		EW-5/DPA-201	
		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
9/30/2019	38880	7950774	0.99	34251064	0.00	1425500	2.03	9827541	0.04	91877888	2.84
10/7/2019	25920	7986161	1.37	34251064	0.00	1520250	3.66	9828888	0.05	91999845	4.71
10/14/2019	20160	8018969	1.63	34251064	0.00	1627317	5.31	9830355	0.07	92000020	0.01
10/21/2019	20160	8051272	1.60	34251064	0.00	1730913	5.14	9831822	0.07	92000217	0.01
10/28/2019	20160	8075815	1.22	34251064	0.00	1814035	4.12	9833388	0.08	92000311	0.00
11/4/2019	20160	8109370	1.66	34251064	0.00	1926872	5.60	9834977	0.08	92000449	0.01
11/18/2019	30240	8169424	1.99	34251064	0.00	2146959	7.28	9838403	0.11	92000700	0.01
11/25/2019	30240	8198984	0.98	34251064	0.00	2269789	4.06	9840407	0.07	92000738	0.00
12/2/2019	20160	8224856	1.28	34251064	0.00	2380072	5.47	9842147	0.09	92001001	0.01
12/9/2019	20160	8251740	1.33	34251064	0.00	2492273	5.57	9842174	0.00	92001166	0.01
12/16/2019	20160	8278103	1.31	34251064	0.00	2617915	6.23	9843532	0.07	92001179	0.00
12/23/2019	20160	8304534	1.31	34251064	0.00	2737271	5.92	9843542	0.00	92001238	0.00
12/30/2019	20160	8330656	1.30	34251064	0.00	2857128	5.95	9843582	0.00	92001469	0.01

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.

Table 1
System Extraction and Discharge Flow Rates
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
2/3/2020

Date	Duration of Operation Since Last Monitoring Event	Totalizer Readings											
		EW-6		DPA-202		DPA-203		OW-3		LR-66		Effluent	
		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
9/30/2019	38880	1996628	0.02	67487	0.03	45532	0.07	1641	0.00	138194	0.34	18699029	10.29
10/7/2019	25920	1997149	0.02	67843	0.01	45532	0.00	1641	0.00	146444	0.32	19156715	17.66
10/14/2019	20160	1998527	0.07	68243	0.02	45632	0.00	1641	0.00	154797	0.41	19452455	14.67
10/21/2019	20160	2000066	0.08	68320	0.00	47627	0.10	1641	0.00	162533	0.38	19733229	13.93
10/28/2019	20160	2000806	0.04	68408	0.00	48121	0.02	1641	0.00	170481	0.39	19953255	10.91
11/4/2019	20160	2002726	0.10	69542	0.06	48369	0.01	1641	0.00	178587	0.40	20256342	15.03
11/18/2019	30240	2004815	0.07	70985	0.05	48419	0.00	1641	0.00	195440	0.56	20823047	18.74
11/25/2019	30240	2004714	0.00	71286	0.01	48438	0.00	1641	0.00	196569	0.04	21114808	9.65
12/2/2019	20160	2006487	0.09	72952	0.08	48560	0.01	1641	0.00	199051	0.12	21390367	13.67
12/9/2019	20160	2007167	0.03	75484	0.13	48725	0.01	1641	0.00	208162	0.45	21655564	13.15
12/16/2019	20160	2007938	0.04	77890	0.12	48725	0.00	1641	0.00	215803	0.38	21934638	13.84
12/23/2019	20160	2009473	0.08	78352	0.02	48757	0.00	1641	0.00	220770	0.25	22207740	13.55
12/30/2019	20160	2010706	0.06	79314	0.05	48901	0.01	1641	0.00	229003	0.41	22465402	12.78

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
\\langan.com\data\LAW\data3\130117301\Project Data_Discipline\Environmental\Treatment System OM&M\Master Extraction Volume Data.xlsx

LANGAN

Table 2
Weekly Mid-Carbon Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
2/3/2020

			SAMPLE LOCATION	MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON		
			LANGAN SAMPLE ID	CBT_100719			CBT_ 10 14 19			CBT_102119			CBT_1028189			CBT_11.4.19			CBT__ 111319		
			LAB SAMPLE ID	480-160417-1			480-160824-2			480-161252-1			480-161681-1			480-162071-1-DL			480-162578-2		
			SAMPLING DATE	10/07/2019 08:05:00			10/14/2019 15:35:00			10/21/2019 07:45:00			10/28/2019 09:05:00			11/04/2019 08:00:00			11/13/2019 09:20:00		
			SAMPLE TYPE	Water			Water			Water			Water			Water			Water		
Analyte	**CAS Number**	**Discharge Limit (Daily Maximum)**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Volatile Organic Compounds (µg/L)																				
Benzene	71-43-2	10	8.2	U	8.2	0.41	U	0.41	0.41	U	0.41	0.41	U	0.41	0.41	U	0.41	0.41	U	0.41
Carbon Disulfide	75-15-0	Monitor	3.8	U	3.8	0.76	J	0.19	0.29	J	0.19	0.80	J	0.19	1.3		0.19	0.92	J	0.19
Carbon Tetrachloride	56-23-5	10	**14**	J	5.4	0.27	U	0.27	0.27	U	0.27	0.27	U	0.27	**20**		0.27	**15**		0.27
Chlorobenzene	108-90-7	10	15	U	15	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
Chloroform	67-66-3	10	**1800**	F1	6.8	0.34	U	0.34	0.34	U	0.34	0.80	J	0.34	**100**	D	0.68	**190**	D	1.4
Methylene Chloride	75-09-2	10	**170**		8.8	2.4		0.44	1.8		0.44	3.5		0.44	**19**		0.44	**24**	B	0.44
Tetrachloroethene	127-18-4	10	7.2	U	7.2	0.36	U	0.36	0.36	U	0.36	0.36	U	0.36	0.36	U	0.36	0.36	U	0.36
Toluene	108-88-3	10	10	U	10	0.51	U	0.51	0.51	U	0.51	0.51	U	0.51	0.51	U	0.51	0.51	U	0.51
Trichloroethene	79-01-6	10	9.2	U	9.2	0.46	U	0.46	0.46	U	0.46	0.46	U	0.46	0.46	U	0.46	0.46	U	0.46
Total Concentration	--	--	1984.0			3.2			2.1			5.1			140			230		

Notes:
Q: data qualifier
MDL: method detection limit
RL: reporting limit
J: result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value
B: compound found in blank and sample
U: indicates the analyte was analyzed for, but not detected
D: sample results obtained from a dilution
F1: MS and/or MSD Recovery outside acceptance limits
µg/L: microgram per liter

1. Concentrations shown in **BOLD** type face exceed limits

Table 2
Weekly Mid-Carbon Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
2/3/2020

	SAMPLE LOCATION		MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON		
	LANGAN SAMPLE ID		CBT 11-18-19			CBT11-25-19			CBT_12-2-19			CBT- 12-9-19			CBT-12-16-19			CBT-122319			CBT_12-30-19		
	LAB SAMPLE ID		480-162853-1			480-163258-1			480-163510-1			480-163870-1			480-164300-1			480-164602-2			480-164722-1		
	SAMPLING DATE		11/18/2019 08:00:00			11/25/2019008:35:00			12/2/2019 8:30			12/9/2019 7:30			12/16/2019 7:30			12/23/2019 15:30			12/30/2019 8:35		
	SAMPLE TYPE		Water			Water			Water			Water			Water			Water			Water		
Analyte	**CAS Number**	**Discharge Limit (Daily Maximum)**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Volatile Organic Compounds (µg/L)																							
Benzene	71-43-2	10	0.82	U	0.82	0.82	U	0.82	8.2	U	8.2	4.1	U	4.1	4.1	U	4.1	0.41	U	0.41	0.41	U	0.41
Carbon Disulfide	75-15-0	Monitor	1.7	J	0.38	1.3	J	0.38	3.8	U	3.8	1.9	U	1.9	1.9	U	1.9	0.51	J	0.19	0.90	J	0.19
Carbon Tetrachloride	56-23-5	10	**51**		0.54	**65**		0.54	**47**		5.4	**47**		2.7	**97**		2.7	0.41	J	0.27	0.27	U	0.27
Chlorobenzene	108-90-7	10	1.5	U	1.5	1.5	U	1.5	15	U	15	7.5	U	7.5	7.5	U	7.5	0.75	U	0.75	0.75	U	0.75
Chloroform	67-66-3	10	**410**	D F1	3.4	**670**	D	3.4	**900**		6.8	**1100**	F1 D	6.8	**1500**	D	6.8	0.56	J	0.34	0.34	U	0.34
Methylene Chloride	75-09-2	10	**44**		0.88	**48**		0.88	**62**		8.8	**84**		4.4	**84**	B	4.4	0.44	U	0.44	0.44	U	0.44
Tetrachloroethene	127-18-4	10	0.72	U	0.72	0.72	U	0.72	7.2	U	7.2	3.6	U	3.6	3.6	U	3.6	0.36	U	0.36	0.36	U	0.36
Toluene	108-88-3	10	1.0	U	1.0	1	U	1	10	U	10	5.1	U	5.1	5.1	U	5.1	0.51	U	0.51	0.51	U	0.51
Trichloroethene	79-01-6	10	0.92	U	0.92	0.92	U	0.92	9.2	U	9.2	4.6	U	4.6	4.6	U	4.6	0.46	U	0.46	0.46	U	0.46
Total Concentration	--	--	507			784			1009			1231			1681			1.5			0.90		

Notes:
Q: data qualifier
MDL: method detection limit
RL: reporting limit
J: result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value
B: compound found in blank and sample
U: indicates the analyte was analyzed for, but not detected
D: sample results obtained from a dilution
F1: MS and/or MSD Recovery outside acceptance limits
µg/L: microgram per liter

1. Concentrations shown in **BOLD** type face exceed limits

Table 3
Monthly Influent Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
2/3/2020

		SAMPLE LOCATION	INFLUENT			INFLUENT			INFLUENT		
		LANGAN SAMPLE ID	INF_ 10 14 19			INF__ 111319			INF_122319		
		LAB SAMPLE ID	480-160824-1			480-162578-3			480-164602-1		
		SAMPLING DATE	10/14/2019 15:30:00			11/13/2019 09:25:00			12/23/2019 15:30		
		SAMPLE TYPE	Water			Water			Water		
		DILUTION FACTOR	80			80			125		
Analyte	**CAS Number**	**NYSDEC Groundwater Criteria**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Volatile Organic Compounds (µg/L)											
Benzene	71-43-2	0.7	33	U	33	33	U	33	51	U	51
Carbon Disulfide	75-15-0	50	**4000**	F1	15	**7000**	D F1	24	**1500**		24
Carbon Tetrachloride	56-23-5	5	**6800**	F1	22	**3300**		22	**3400**		34
Chlorobenzene	108-90-7	5	60	U	60	60	U	60	94	U	94
Chloroform	67-66-3	7	**2500**	F1	27	**1700**		27	**1400**		43
Methylene Chloride	75-09-2	5	**210**		35	**410**	B	35	**100**	J	55
Tetrachloroethene	127-18-4	5	**89**		29	**48**	J	29	**45**	U	45
Toluene	108-88-3	5	41	U	41	41	U	41	64	U	64
Trichloroethene	79-01-6	5	**71**	J	37	**74**	J	37	58	U	58
Total Concentration	--	--	13,670			12,532			6,400		

Notes:
NYSDEC: New York State Department of Environmental
Q: data qualifier
MDL: method detection limit
RL: reporting limit
J: result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value
B: compound found in blank and sample
U: indicates the analyte was analyzed for, but not detected
F1: MS and/or MSD Recovery is outsdie acceptance limits
µg/L: microgram per liter

1. Concentrations shown in **BOLD** type face exceed limits

Table 4
Monthly Effluent Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
2/3/2020

		LOCATION	EFFLUENT			EFFLUENT			EFFLUENT		
		LANGAN SAMPLE ID	EFF_ 10 14 19			EFF__ 111319			EFF_122319		
		LAB SAMPLE ID	480-160824-3			480-162578-1			480-164602-3		
		SAMPLING DATE	10/14/2019 15:40:00			11/13/2019 09:15:00			12/23/2019 15:30		
		SAMPLE TYPE	Water			Water			Water		
Analyte	**CAS Number**	**Discharge Limit (Daily Maximum)**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**	**Result**	**Q**	**MDL**
Volatile Organic Compounds (µg/L)											
Benzene	71-43-2	10	0.41	U	0.41	0.41	U	0.41	0.41	U	0.41
Carbon Disulfide	75-15-0	Monitor	0.25	J	0.19	0.19	U	0.19	0.19	U	0.19
Carbon Tetrachloride	56-23-5	10	0.27	U	0.27	0.27	U	0.27	0.27	U	0.27
Chlorobenzene	108-90-7	10	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
Chloroform	67-66-3	10	6.4		0.34	0.34	U	0.34	2.7		0.34
Methylene Chloride	75-09-2	10	0.44	U	0.44	1.3	B	0.44	0.44	U	0.44
Tetrachloroethene	127-18-4	10	0.36	U	0.36	0.36	U	0.36	0.36	U	0.36
Toluene	108-88-3	10	0.51	U	0.51	0.51	U	0.51	0.51	U	0.51
Trichloroethene	79-01-6	10	0.46	U	0.46	0.46	U	0.46	0.46	U	0.46
Total Concentration	–	–	6.7			1.3			2.7		

Notes:
Q: data qualifier
MDL: method detection limit
RL: reporting limit
J: result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value
U: indicates the analyte was analyzed for, but not detected
B: Compound was found in blank and sample
µg/L: microgram per liter

1. Concentrations shown in **BOLD** type face exceed limits

Prepared by: MW
Reviewed by: MA
\\langan.com\data\LAW\data3\130117301\Project Data_Discipline\Environmental\Reports\Quarterly Reports\2019 Q4\Tables\Table 2-5 Analytical Results_MA.xlsx

LANGAN

Table 5
Quarterly Effluent (SPDES) Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
2/3/2020

		LOCATION LANGAN SAMPLE ID LAB SAMPLE ID SAMPLING DATE SAMPLE TYPE	EFFLUENT EFF__ 111319 480-162578-1 11/13/2019 09:15:00 Water			Discharge Rate
Analyte	**CAS Number**	**Discharge Limit (Daily Maximum)**	**Result**	**Q**	**MDL**	**lbs/day**
Semi-Volatile Organic Compounds (µg/L)						
2,4-Dichlorophenol	120-83-2	10	0.51	U	0.51	NA
Hexachloroethane	67-72-1	10	0.59	U	0.59	NA
Naphthalene	91-20-3	10	0.76	U	0.76	NA
Metals (mg/L)						
Arsenic	7440-38-2	0.036*	0.0056	U	0.0056	0.0012
Chromium	7440-47-3	0.072*	0.0024	J	0.0010	0.0005
Copper	7440-50-8	0.1*	0.0016	U	0.0016	0.0003
Lead	7439-92-1	0.16*	0.0030	U	0.0030	0.0006
Nickel	7440-02-0	0.072*	0.0013	U	0.0013	0.0003
Selenium	7782-49-2	0.48*	0.0087	U	0.0087	0.0018
Zinc	7440-66-6	0.86*	0.0049	J B	0.0015	0.0010
Total Recoverable Phenolics (mg/L)						
Phenolics, Total Recoverable	STL00166	0.01	0.0091	J B	0.0050	NA

Notes:
SPDES - State Pollutant Discharge Elimination System
Q: data qualifier
MDL: method detection limit
RL: reporting limit
J: result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value
B: compound found in blank and sample
U: indicates the analyte was analyzed for, but not detected
µg/L: microgram per liter
mg/L: milligram per liter
lbs/day: pounds per day (at assumed average of 35 gallons per minute)
NA: not applicable
* discharge limits for metals are in lbs/day

1. Concentrations shown in **BOLD** type face exceed limits