LANGAN

Technical Excellence
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July 29, 2019

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

RE: Second 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 Second 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
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, 2019, treatment system operations, consisting of the extraction of groundwater via 11 extraction wells were continued. Per the NYSDEC approval letter dated February 8, 2019, Langan initiated and has maintained the operation of the chemical-feed system to mitigate filter fouling caused by scale deposits and biological activity. 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 dated 29 May 2019, wastes generated on site will now be managed as listed U and P 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, and DPA-203 have been operational at full and continuous capacity throughout the reporting quarter.

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

- EW-2 was found to frequently be in a fault condition and required resetting. The water level controller was recalibrated on April 30, 2019 and the average flow rate was brought back to approximately 5.3 gpm.
- The solenoid valve at OW-3 was replaced on April 30, 2019. Extraction performance in OW-3 continues to be poor due to insufficient groundwater recovery in the well. The average extraction flow rate of OW-3 was less than 0.06 gpm.
- The flow meters for extraction wells LR-66 and DPA-203 were replaced on May 22, 2019. The average extraction flow rate of LR-66 and DPA-203 throughout the quarter was approximately 0.78 gpm and 0.34 gpm, respectively.
- DPA-202 was pulled on May 22, 2019 for an inspection that revealed pump clogging with sediment and a broken safety cable. The pump was cleaned and the cable was replaced. The average extraction flow rate of DPA-202 after cleaning was approximately 0.31 gpm.

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

- Upon review of the recorded flow totalizer readings for EW-4 at the end of the month, it was determined the well had experienced negative flow during the month of April. This was investigated further and it was determined the well-specific check valve had incurred damage and was not properly preventing reverse flow to the well. Once identified, the well was taken offline, the check valve was replaced, and the well was brought back online – this was completed May 3, 2019 (within a week of identifying the problem). However, due to a low water level throughout the quarter, this well did not recover any groundwater throughout the second 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 4,790,000 gallons of water were recovered from the extraction wells during the quarter, resulting in an average flow rate of approximately 36.0 gpm. A summary of the system totalizer readings is provided as **Table 1**.

1.2 Groundwater Treatment System

A granular activated carbon (GAC) change-out was completed on June 4, 2019; this event involved removing and replacing the spent GAC in the lead 10,000-pound vessel and shifting the lag vessel to the lead position. Before operating the chemical-feed system full time, as part of routine system operations, short-term interruptions (approximately 2 hours each) took place up to three times a week to replace bag filters upstream of the GAC vessels. After initiating the chemical-feed system full time, bag-filter change-outs have been reduced to once per week, thereby reducing extraction-system downtime. Negative impacts to the treatment system performance resulting from operating the chemical feed have not occurred.

Required repairs and maintenance to well-specific manifold instrumentation were completed this quarter, as necessary – this included installing new check valves, solenoid valves, and flow meters, as outlined above in Section 1.1.

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. Upon approval of the SMP by the NYSDEC, the Area A SVE system will be decommissioned.

2. Sampling

During the second 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.

Elevated contaminant concentrations were detected in mid-carbon samples between May 2, 2019 and May 29, 2019, representative of contaminant breakthrough in the lead carbon vessel. Accordingly, a GAC change-out was conducted on June 4, 2019, resulting in a reduction in VOC concentrations in the mid-carbon samples in subsequent sampling events. A summary of the mid-carbon constituent detections is provided below.

- Elevated methylene chloride concentrations (up to 110 microgram per liter [µg/L]) were detected on May 23, 2019.
- Elevated chloroform concentrations (up to 1,400 µg/L) were detected on May 29, 2019.
- Elevated carbon tetrachloride concentrations (up to 8.3 µg/L) were detected on May 29, 2019.

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 June 19, 2019 sampling, with a total site-specific parameter list VOC concentration of 13,014 µg/L.

Monthly Effluent VOC Sampling: **Table 4** presents the results of the effluent VOC sampling. All VOC concentrations 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 May 23, 2019, for the second quarter. **Table 5** presents the effluent SPDES equivalent sampling results. Copper was detected at an estimated concentration of 0.0019 milligrams per liter. As depicted in **Table 5**, discharge of copper was below the respective pounds-per-day SPDES equivalent discharge limit. Semi-volatile and total recoverable phenolics were non-detect for the quarter.

With the Area A SVE blower shut down, no influent vapor samples were collected in the second 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 an NYSDEC response to the request to remove several monitoring wells from the annual sampling list. This request will be further evaluated as part of the proposed additional hydrogeologic investigations to be completed on site.

4. Deliverables in the Second Quarter

- June 4, 2019 GAC change-out event Generator Copy of Hazardous Waste Manifest

5. Third Quarter 2019 Planned Events

- Treatment system operations will continue through the third quarter of 2019.

- The chemical-feed system will continue to operate full time through the third quarter of 2019, and optimizations will be made, as necessary.
- Routine treatment-system sampling and maintenance will continue throughout the third quarter of 2019.
- Disposal of spent bag filters as a listed U and P hazardous waste.
- 2019 annual groundwater sampling event.
- Extraction well disinfection and cleaning event is targeted to occur at the end of July – pump repairs and replacement will take place, as necessary.

TABLES

Table 1
System Extraction and Discharge Flow Rates
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
7/29/2019

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	Pulses	Calculated Flow from DPA-201
	Minutes	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM	Gallons	GPM	#	GPM
3/27/2019	20160	7568491	1.57	33550903	0.00	9189784	9.81	21877.5	0.07	90113274	9.59	3559	0.00
4/2/2019	8640	7570984	0.29	33551940	0.12	9273788	9.72	9983713	-4.42	90215462	11.83	3559	0.00
4/12/2019	14400	7589178	1.26	33570204	1.27	9428934	10.77	9923876	-4.16	90363072	10.25	3559	0.00
4/19/2019	10080	7602542	1.33	33571002	0.08	9540534	11.07	9883978.3	-3.96	90461880	9.80	3559	0.00
4/23/2019	5760	7609613	1.23	33572683	0.29	9615486	13.01	9862893.1	-3.66	90514127	9.07	3559	0.00
4/30/2019	10080	7621914	1.22	33598833	2.59	9736256	11.98	9826579	-3.60	90608479	9.36	3559	0.01
5/3/2019	4320	7626583	1.08	33617737	4.38	9788858	12.18	9820175.1	-1.48	90643147	8.03	3559	0.03
5/6/2019	4320	7630930	1.01	33633369	3.62	9820175.5	7.25	9820175.5	0.00	90685815	9.88	3559	0.03
5/15/2019	12960	7668491	2.90	33710727	5.97	9971544	11.68	9820176.7	0.00	90815934	10.04	3559	0.00
5/21/2019	8640	7669814	0.15	33762617	6.01	64128.5	10.72	9820176	0.00	90890875	8.67	3559	0.00
5/28/2019	10080	7677915	0.80	33819053	5.60	155940.8	9.11	9820176.1	0.00	90963194	7.17	3559	0.00
6/3/2019	8640	7698277	2.36	33871760	6.10	243120.3	10.09	9820175	0.00	91043074	9.25	3559	0.00
6/11/2019	11520	7703562	0.46	33937792	5.73	353746.9	9.60	9820175	0.00	91064108	1.83	3559	0.00
6/17/2019	8640	7716388	1.48	33990327	6.08	445684.1	10.64	9820175.5	0.00	91071012	0.80	3559	0.00
6/24/2019	10080	7729838	1.33	34051261	6.05	547626.1	10.11	9820175.5	0.00	91121402	5.00	3559	0.00
7/2/2019	11520	7746298	1.43	34124650	6.37	672738.3	10.86	9820175.4	0.00	91128148	0.59	3559	0.00

Notes:
GPM - gallons per minute
indicates negative flow

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
7/29/2019

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
3/27/2019	20160	1242747	2.12	173.8	0.00	3981.1	0.12	3.5	0.00	25490.00	0.00	10592163	31.68
4/2/2019	8640	1255916	1.52	165.1	0.00	4086.1	0.01	3.5	0.00	25490.00	0.00	10817688	26.10
4/12/2019	14400	1316393	4.20	165.1	0.00	4169.3	0.01	3.5	0.00	25490.00	0.00	11266977	31.20
4/19/2019	10080	1375498	5.86	165.1	0.00	5584.1	0.14	3.5	0.00	25490.00	0.00	11602397	33.28
4/23/2019	5760	1414193	6.72	186.2	0.00	5586.8	0.00	3.5	0.00	25490.00	0.00	11801079	34.49
4/30/2019	10080	1482515	6.78	165.1	0.00	5564.6	0.00	3.5	0.00	25490.00	0.00	12182213	37.81
5/3/2019	4320	1505594	5.34	168.8	0.00	7117.5	0.36	4.2	0.00	25745.00	0.06	12334570	35.27
5/6/2019	4320	1538338	7.58	168.8	0.00	11343.1	0.98	4.1	0.00	25745.00	0.00	12536201	46.67
5/15/2019	12960	1618825	6.21	29048.1	2.23	14202.8	0.22	4.1	0.00	25745.00	0.00	13157512	47.94
5/21/2019	8640	1661882	4.98	29028.2	0.00	14218.3	0.00	5.2	0.00	25745.00	0.00	13543798	44.71
5/28/2019	10080	1706528	4.43	37697.0	0.86	14542.7	0.03	227.5	0.02	6297.50	0.62	13932240	38.54
6/3/2019	8640	1748231	4.83	45521.5	0.91	14517.4	0.00	718.5	0.06	13441.10	0.83	14317108	44.54
6/11/2019	11520	1791359	3.74	46702.5	0.10	19928.1	0.47	1264.9	0.05	22775.20	0.81	14659788	29.75
6/17/2019	8640	1835497	5.11	46703.1	0.00	46703.1	3.10	1492.1	0.03	29739.50	0.81	14914003	29.42
6/24/2019	10080	1888622	5.27	46784.1	0.01	46784.1	0.01	1589.1	0.01	38315.80	0.85	15259632	34.29
7/2/2019	11520	1936858	4.19	46810.3	0.00	47372.5	0.05	1854.7	0.02	47372.50	0.79	15607302	30.18

Notes:
GPM - gallons per minute
indicates negative flow

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
Weekly Mid-Carbon Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
7/29/2019

			SAMPLE LOCATION	MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON		
			LANGAN SAMPLE ID	CBT-432019			CBT_4122019			CBT-4192019			CBT_4242019			CBT_522019			CBT-582019		
			LAB SAMPLE ID	480-151419-1			480-151923-1			480-152580-1			480-152571-2			480-152941-1			480-153341-1		
			SAMPLING DATE	04/03/2019 13:20:00			04/12/2019 14:20:00			04/19/2019 16:00:00			04/24/2019 15:05:00			05/02/2019 09:25:00			05/08/2019 13:00:00		
			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	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	0.41	U	0.41
Carbon Disulfide	75-15-0	Monitor	0.19	U	0.19	0.19	U	0.19	0.19	U	0.19	0.19	U	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	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	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
Chloroform	67-66-3	10	0.34	U	0.34	0.34	U	0.34	0.34	U	0.34	0.34	U	0.34	11		0.34	94	D	0.68
Methylene Chloride	75-09-2	10	0.44	U	0.44	0.44	U	0.44	0.44	J	0.44	1.5		0.44	12		0.44	41	B	0.44
Tetrachloroethene	127-18-4	10	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	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	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	0.46	U	0.46	0.46	U	0.46	0.46	U	0.46
Total Concentration	--	--	0.0			0.0			0.44			1.5			23.0					

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
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
7/29/2019

		SAMPLE LOCATION	MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON			MID-CARBON		
		LANGAN SAMPLE ID	CBT 515 2019			CBT.5232019			CBT_5292019			CBT-662019			CBT_6122019			CBT-6192019		
		LAB SAMPLE ID	480-153834-1			480-154082-1			480-154257-1			480-154603-1			480-154923-1			480-155312-2		
		SAMPLING DATE	05/15/2019 16:00:00			5/23/2019 8:00			05/29/2019 12:00:00			06/06/2019 12:00:00			06/12/2019 10:30:00			06/19/2019 10:10:00		
		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	0.82	U	0.82	4.1	U	4.1	4.1	U	4.1	0.41	U	0.41	0.41	U	0.41	0.41	U	0.41
Carbon Disulfide	75-15-0	Monitor	0.71	J B	0.38	1.9	U	1.9	1.9	U	1.9	0.19	U	0.19	0.19	U	0.19	0.19	U	0.19
Carbon Tetrachloride	56-23-5	10	1.8	J	0.54	7.9	J	2.7	8.3	J	2.7	0.27	U	0.27	0.27	U	0.27	0.27	U	0.27
Chlorobenzene	108-90-7	10	1.5	U	1.5	7.5	U	7.5	7.5	U	7.5	0.75	U	0.75	0.75	U	0.75	0.75	U	0.75
Chloroform	67-66-3	10	540	D	3.4	1100	D	6.8	1400	D	6.8	0.34	U	0.34	0.34	U	0.34	0.34	U	0.34
Methylene Chloride	75-09-2	10	79		0.88	110		4.4	78		4.4	0.44	U	0.44	0.44	U	0.44	0.44	U	0.44
Tetrachloroethene	127-18-4	10	0.72	U	0.72	3.6	U	3.6	3.6	U	3.6	0.36	U	0.36	0.36	U **	0.36	0.36	U	0.36
Toluene	108-88-3	10	1.0	U	1.0	5.1	U	5.1	5.1	U	5.1	0.51	U	0.51	0.51	U	0.51	0.51	U	0.51
Trichloroethene	79-01-6	10	0.92	U	0.92	4.6	U	4.6	4.6	U	4.6	0.46	U	0.46	0.46	U	0.46	0.46	U	0.46
Total Concentration	--	--	81.5			119.8			86.3											

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
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
7/29/2019

		SAMPLE LOCATION	INFLUENT			INFLUENT			INFLUENT		
		LANGAN SAMPLE ID	INF_4242019			INF_5232019			INF-6192019		
		LAB SAMPLE ID	480-152571-1			480-154082-1			480-155312-1		
		SAMPLING DATE	04/24/2019 15:00:00			5/23/2019 8:00			06/19/2019 10:00:00		
		SAMPLE TYPE	Water			Water			Water		
		DILUTION FACTOR	80			80			80		
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	33	U	33
Carbon Disulfide	75-15-0	50	**790**		15	**4,900**		15	**5,000**		15
Carbon Tetrachloride	56-23-5	5	**4,500**		22	**4,600**		22	**5,600**		22
Chlorobenzene	108-90-7	5	60	U	60	60	U	60	60	U	60
Chloroform	67-66-3	7	**2,000**		27	**2,000**		27	**2,100**		27
Methylene Chloride	75-09-2	5	75	J	35	77	J	35	**140**		35
Tetrachloroethene	127-18-4	5	**110**		29	**110**		29	**88**		29
Toluene	108-88-3	5	41	U	41	41	U	41	41	U	41
Trichloroethene	79-01-6	5	70	J	37	67	J	37	**86**		37
Total Concentration	--	--	7,545		NA	11,754		NA	13,014		NA

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
µg/L: microgram per liter
NA: not applicable

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

Prepared by: MW
Reviewed by: MA
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Table 4
Monthly Effluent Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
7/29/2019

		LOCATION	EFFLUENT			EFFLUENT			EFFLUENT		
		LANGAN SAMPLE ID	EFF_4242019			EFF.5232019			EFF-6192019		
		LAB SAMPLE ID	480-152571-3			480-154082-3			480-155312-3		
		SAMPLING DATE	04/24/2019 15:10:00			5/23/2019 8:10			06/19/2019 10:15:00		
		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	0.19	U	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	0.34	U	0.34	0.34	U	0.34	0.34	U	0.34
Methylene Chloride	75-09-2	10	0.44	U	0.44	0.44	U	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	--	--	0.0		NA	0.0		NA	0.0		NA

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
µg/L: microgram per liter
NA: not applicable

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

Table 5
Quarterly Effluent (SPDES) Sampling Results
Former Stauffer Management Company, LLC
Lewiston, New York
Langan Project No.: 130117301
7/29/2019

		LOCATION	EFFLUENT			Discharge Rate
		LANGAN SAMPLE ID	EFF.5232019			
		LAB SAMPLE ID	480-154082-3			
		SAMPLING DATE	5/23/2019 8:10			
		SAMPLE TYPE	Water			
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*	0.0010	U	0.0010	0.0002
Copper	7440-50-8	0.1*	0.0019	J	0.0016	0.0004
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*	0.0015	U	0.0015	0.0003
Total Recoverable Phenolics (mg/L)						
Phenolics, Total Recoverable	STL00166	0.01	0.0051	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

Prepared by: MW
Reviewed by: MA
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