

November 12, 2020

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

**RE: Third Quarter 2020 – Status Report  
Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301**

Dear Mr. Sadowski:

Attached is the status report for the Third Quarter 2020 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 July 1 and September 30, 2020, 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 U-listed 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, 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 a well disinfection event completed the weeks of July 20<sup>th</sup> and 27<sup>th</sup> and a liquid phase carbon exchange completed on September 24, 2020.

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

- The well pump in EW-2, after replacement of the non-functional, electromagnetic flow meter with a temporary mechanical flow meter, was found to be defective and was replaced during the disinfection event in late July.
- The pneumatic pump at EW-4 continues to experience reduced performance due to fouling of piping and manifold components by suspended solids.
- EW-6 was experiencing control issues, which limited the extraction rate. This was mitigated this reporting period by replacing the pressure transducer in the well.
- Extraction performance in OW-3 continues to be reduced due to insufficient groundwater recovery in the well.

The operation of these wells is still being monitored. EW-2 and EW-6, based on operational data, are running close to full capacity. The optimization of well EW-4 is being evaluated and will be completed, as needed, to maintain operation.

The following extraction well 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 3,580,000 gallons of water were recovered from the extraction wells during the quarter, resulting in an average flow rate of approximately 28.3 gpm. A summary of the system totalizer readings is provided as **Table 1**.

## **1.2 Groundwater Treatment System**

A site-wide recovery well disinfection and cleaning event was completed between July 20, 2020 and July 28, 2020. In addition to disinfecting (with bleach and muriatic acid) and surging the recovery wells themselves, all associated submersible pumps were disassembled, cleaned, inspected, and reassembled (or replaced) prior to reinstallation into their respective wells. Any solids and water recovered as a result of these activities were routed to central on-site storage tanks. All recovery wells, EW-1, EW-2, EW-3, EW-4, EW-5, EW-6, DPA-201, DPA-202, DPA-203, OW-3 and LR-66, were cleaned and disinfected.

Chemical feed delivery system operations continued throughout the quarter. Disposal of spent bag filters was completed on September 9, 2020. A liquid phase carbon exchange took place on September 24, 2020, 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 reconfiguring the treatment train so that the previously lagging carbon vessel now operates as the lead carbon vessel before restarting the system.

General system maintenance of the well-specific manifold instrumentation, the pneumatic distribution and control system, and other miscellaneous components of the treatment system and building was also completed during the quarter, as needed, to maintain normal and safe system operations.

## **1.3 Area A Soil Vapor Extraction 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 have been incorporated and a revised SMP was submitted to the NYSDEC on June 16, 2020. Comments on the revised SMP were received from the NYSDEC on September 21, 2020. Upon submission and approval of the revised SMP by the NYSDEC, the Area A SVE system will be decommissioned.

## **2. Sampling**

During the third quarter of 2020, we conducted the following sampling events:

Weekly Volatile Organic Compound (VOC) Mid-Carbon Sampling: Weekly 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 starting July 14, 2020; however, elevated contaminant concentrations (i.e., total mid-carbon concentration greater than 10% of the total influent concentration) were not detected in mid-carbon samples until September 9, 2020 and September 14, 2020, representative of contaminant breakthrough in the lead carbon vessel. Accordingly, a carbon change-out was performed on September 24, 2020. A summary of the mid-carbon constituent detections is provided below.

- Elevated chloroform concentrations (up to 500 micrograms per liter [µg/L]) were detected on August 18, 2020 and continued until the September carbon exchange.
- Elevated methylene chloride concentrations (up to 130 µg/L) were detected on July 14, 2020 and continued until the September carbon exchange.

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 September 9, 2020 sampling, with a total site-specific parameter list VOC concentration of 10,126 µg/L.

Monthly Effluent VOC Sampling: **Table 4** presents the results of the monthly effluent VOC sampling. All VOC concentrations were under their respective daily discharge limit, the majority of which, with the exception of carbon disulfide and methylene chloride, 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 August 11, 2020, for the third quarter. **Table 5** presents the effluent SPDES equivalent sampling results. Total chromium and zinc were detected at an estimated concentration of 1.1 µg/L and 9.2 µg/L, respectively. As depicted in **Table 5**, discharge of total 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 9.5 µg/L for the quarter. 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 third quarter of 2020.

### **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.

Langan also submitted to the NYSDEC a Groundwater Monitoring Program Passive Sampling Work Plan on June 30, 2020, which proposed the completion of a side-by-side analysis of the currently employed typical low flow sampling methodology and a passive sampling methodology (HydraSleeves™) during the 2020 annual groundwater sampling event in an effort to evaluate the efficacy of the passive sampling methodology as an alternative sampling approach; this was approved by the NYSDEC on July 14, 2020. This sampling plan was executed during the week of August 24<sup>th</sup>, 2020 and the data will be presented in the 2020 Annual OM&M Report.

#### **4. Deliverables in the Third Quarter**

- September 9, 2020 bag filter disposal event Generator Copy of Hazardous Waste Manifest provided to the NYSDEC and the MIDEQ.
- September 24, 2020 carbon exchange event Generator Copy of Hazardous Waste Manifest provided to the NYSDEC and the PADEP.
- 2020 CSM Summary Update Report dated August 26, 2020 provided to the NYSDEC.

#### **5. Fourth Quarter 2020 Planned Events**

- Treatment system operations will continue through the fourth quarter of 2020.
- The chemical feed system will continue to operate full time through the fourth quarter of 2020; optimizations will be made, as necessary.
- Routine treatment system sampling and maintenance will continue throughout the fourth quarter of 2020.
- A change-out of the lead GAC vessel will be completed.
- Spent bag filters will be disposed of offsite.
- The installation of system upgrades will be completed.

# TABLES

**Table 1**  
**System Extraction and Discharge Flow Rates**  
Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301  
11/12/2020

| Date              | Duration of Operation Since<br>Last Monitoring Event | Totalizer Readings |                         |           |                         |           |                         |           |                         |              |                         |           |                         |
|-------------------|------------------------------------------------------|--------------------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|--------------|-------------------------|-----------|-------------------------|
|                   |                                                      | EW-1               |                         | EW-2      |                         | EW-3      |                         | EW-4/T-4  |                         | EW-5/DPA-201 |                         | EW-6      |                         |
|                   |                                                      | Totalizer          | Calculated Flow<br>Rate | Totalizer | Calculated Flow<br>Rate | Totalizer | Calculated Flow<br>Rate | Totalizer | Calculated Flow<br>Rate | Totalizer    | Calculated Flow<br>Rate | Totalizer | Calculated Flow<br>Rate |
|                   | Minutes                                              | Gallons            | GPM                     | Gallons   | GPM                     | Gallons   | GPM                     | Gallons   | GPM                     | Gallons      | GPM                     | Gallons   | GPM                     |
| 7/7/2020          | 11520                                                | 9032232            | 1.74                    | 34251064  | 0.00                    | 6048551   | 9.19                    | 9879284   | 0.06                    | 94827050     | 17.71                   | 2048143   | 0.00                    |
| 7/14/2020         | 10080                                                | 9035062            | 0.28                    | 64        | 0.01                    | 6139204   | 8.99                    | 9879508   | 0.02                    | 95017080     | 18.85                   | 2048210   | 0.01                    |
| 7/29/2020         | 21600                                                | 9041786            | 0.31                    | 16089     | 0.74                    | 6226451   | 4.04                    | 9880516   | 0.05                    | 95185348     | 7.79                    | 2048219   | 0.00                    |
| 8/11/2020         | 18720                                                | 9125992            | 4.50                    | 262894    | 13.18                   | 6408247   | 9.71                    | 9881500   | 0.05                    | 95271072     | 4.58                    | 2048325   | 0.01                    |
| 8/18/2020         | 10080                                                | 9176388            | 5.00                    | 373402    | 10.96                   | 6493826   | 8.49                    | 9882580   | 0.11                    | 95407773     | 13.56                   | 2048325   | 0.00                    |
| 8/27/2020         | 12960                                                | 9241300            | 5.01                    | 522487    | 11.50                   | 6611956   | 9.11                    | 9884640   | 0.16                    | 95494695     | 6.71                    | 2050483   | 0.17                    |
| 9/1/2020          | 7200                                                 | 9275060            | 4.69                    | 602079    | 11.05                   | 6672590   | 8.42                    | 9885674   | 0.14                    | 95575227     | 11.19                   | 2050793   | 0.04                    |
| 9/9/2020          | 11520                                                | 9331212            | 4.87                    | 736498    | 11.67                   | 6779415   | 9.27                    | 9887379   | 0.15                    | 95602034     | 2.33                    | 2054490   | 0.32                    |
| 9/14/2020         | 7200                                                 | 9367900            | 5.10                    | 817914    | 11.31                   | 6850428   | 9.86                    | 9888592   | 0.17                    | 95602172     | 0.02                    | 2064715   | 1.42                    |
| 9/25/2020         | 15840                                                | 9446884            | 4.99                    | 978406    | 10.13                   | 6986931   | 8.62                    | 9890799   | 0.14                    | 95791783     | 11.97                   | 2067869   | 0.20                    |
| 10/6/2020         | 15840                                                | 9525750            | 4.98                    | 1143596   | 10.43                   | 7136376   | 9.43                    | 9893119   | 0.15                    | 95846332     | 3.44                    | 2086874   | 1.20                    |
| Totals / Averages |                                                      | 493518             | 3.77                    | 1143532   | 8.27                    | 1087825   | 8.65                    | 13835     | 0.11                    | 1019282      | 8.92                    | 38731     | 0.31                    |

**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**  
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Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301  
11/12/2020

| Date              | Duration of Operation Since<br>Last Monitoring Event | Totalizer Readings |                         |           |                         |           |                         |           |                         |           |                         |
|-------------------|------------------------------------------------------|--------------------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|
|                   |                                                      | DPA-202            |                         | DPA-203   |                         | OW-3      |                         | LR-66     |                         | Effluent  |                         |
|                   |                                                      | Totalizer          | Calculated Flow<br>Rate | Totalizer | Calculated Flow<br>Rate | Totalizer | Calculated<br>Flow Rate | Totalizer | Calculated Flow<br>Rate | Totalizer | Calculated Flow<br>Rate |
|                   | Minutes                                              | Gallons            | GPM                     | Gallons   | GPM                     | Gallons   | GPM                     | Gallons   | GPM                     | Gallons   | GPM                     |
| 7/7/2020          | 11520                                                | 106329             | 0.24                    | 56188     | 0.01                    | 1641      | 0.00                    | 426820    | 0.91                    | 29768154  | 26.80                   |
| 7/14/2020         | 10080                                                | 108016             | 0.17                    | 58069     | 0.19                    | 1641      | 0.00                    | 436637    | 0.97                    | 30043826  | 27.35                   |
| 7/29/2020         | 21600                                                | 109007             | 0.05                    | 60262     | 0.10                    | 1641      | 0.00                    | 446218    | 0.44                    | 30316002  | 12.60                   |
| 8/11/2020         | 18720                                                | 112045             | 0.16                    | 62214     | 0.10                    | 1641      | 0.00                    | 463840    | 0.94                    | 30878549  | 30.05                   |
| 8/18/2020         | 10080                                                | 113227             | 0.12                    | 63331     | 0.11                    | 1641      | 0.00                    | 472827    | 0.89                    | 31245317  | 36.39                   |
| 8/27/2020         | 12960                                                | 114806             | 0.12                    | 64240     | 0.07                    | 1641      | 0.00                    | 480912    | 0.62                    | 31640391  | 30.48                   |
| 9/1/2020          | 7200                                                 | 115162             | 0.05                    | 64874     | 0.09                    | 1641      | 0.00                    | 485188    | 0.59                    | 31898155  | 35.80                   |
| 9/9/2020          | 11520                                                | 116789             | 0.14                    | 65819     | 0.08                    | 1641      | 0.00                    | 492251    | 0.61                    | 32184167  | 24.83                   |
| 9/14/2020         | 7200                                                 | 117638             | 0.12                    | 66002     | 0.03                    | 1641      | 0.00                    | 496277    | 0.56                    | 32370283  | 25.85                   |
| 9/25/2020         | 15840                                                | 118744             | 0.07                    | 66179     | 0.01                    | 1641      | 0.00                    | 505930    | 0.61                    | 32895836  | 33.18                   |
| 10/6/2020         | 15840                                                | 119621             | 0.06                    | 66978     | 0.05                    | 1641      | 0.00                    | 512917    | 0.44                    | 33345016  | 28.36                   |
| Totals / Averages |                                                      | 13292              | 0.12                    | 10790     | 0.08                    | 0         | 0.00                    | 86097     | 0.69                    | 3576862   | 28.33                   |

**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 2**  
**Weekly Mid-Carbon Sampling Results**  
Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301  
11/12/2020

| Analyte                    | CAS Number | Discharge Limit (Daily Maximum) | Location      | CBT          |   |    |      |    | CBT          |   |    |      |    | CBT          |   |    |      |    | CBT          |   |    |      |    |
|----------------------------|------------|---------------------------------|---------------|--------------|---|----|------|----|--------------|---|----|------|----|--------------|---|----|------|----|--------------|---|----|------|----|
|                            |            |                                 | Sample ID     | CBT-070720   |   |    |      |    | CBT_071420   |   |    |      |    | CBT_080420   |   |    |      |    | CBT_081120   |   |    |      |    |
|                            |            |                                 | Sample Date   | 7/7/2020     |   |    |      |    | 7/14/2020    |   |    |      |    | 8/4/2020     |   |    |      |    | 8/11/2020    |   |    |      |    |
|                            |            |                                 | Lab Sample ID | 480-172024-2 |   |    |      |    | 480-172364-1 |   |    |      |    | 480-173313-1 |   |    |      |    | 480-173710-2 |   |    |      |    |
|                            |            |                                 | Unit          | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF |
| Volatile Organic Compounds |            |                                 |               |              |   |    |      |    |              |   |    |      |    |              |   |    |      |    |              |   |    |      |    |
| Benzene                    | 71-43-2    | 10                              | ug/l          | 0.41         | U | 1  | 0.41 | 1  | 0.41         | U | 1  | 0.41 | 1  | 0.41         | U | 1  | 0.41 | 1  | 0.41         | U | 1  | 0.41 | 1  |
| Carbon Disulfide           | 75-15-0    | Monitor                         | ug/l          | 1.6          |   | 1  | 0.19 | 1  | 0.57         | J | 1  | 0.19 | 1  | 0.19         | U | 1  | 0.19 | 1  | 1.1          |   | 1  | 0.19 | 1  |
| Carbon Tetrachloride       | 56-23-5    | 10                              | ug/l          | 0.27         | U | 1  | 0.27 | 1  | 0.33         | J | 1  | 0.27 | 1  | 0.27         | U | 1  | 0.27 | 1  | 0.27         | U | 1  | 0.27 | 1  |
| Chlorobenzene              | 108-90-7   | 10                              | ug/l          | 0.75         | U | 1  | 0.75 | 1  | 0.75         | U | 1  | 0.75 | 1  | 0.75         | U | 1  | 0.75 | 1  | 0.75         | U | 1  | 0.75 | 1  |
| Chloroform                 | 67-66-3    | 10                              | ug/l          | 0.69         | J | 1  | 0.34 | 1  | 0.34         | U | 1  | 0.34 | 1  | 0.34         | U | 1  | 0.34 | 1  | 6.6          |   | 1  | 0.34 | 1  |
| Methylene Chloride         | 75-09-2    | 10                              | ug/l          | 7.4          |   | 1  | 0.44 | 1  | 22           |   | 1  | 0.44 | 1  | 46           |   | 1  | 0.44 | 1  | 39           |   | 1  | 0.44 | 1  |
| Tetrachloroethene (PCE)    | 127-18-4   | 10                              | ug/l          | 0.36         | U | 1  | 0.36 | 1  | 0.36         | U | 1  | 0.36 | 1  | 0.36         | U | 1  | 0.36 | 1  | 0.36         | U | 1  | 0.36 | 1  |
| Toluene                    | 108-88-3   | 10                              | ug/l          | 0.51         | U | 1  | 0.51 | 1  | 0.51         | U | 1  | 0.51 | 1  | 0.51         | U | 1  | 0.51 | 1  | 0.51         | U | 1  | 0.51 | 1  |
| Trichloroethene (TCE)      | 79-01-6    | 10                              | ug/l          | 0.46         | U | 1  | 0.46 | 1  | 0.46         | U | 1  | 0.46 | 1  | 0.46         | U | 1  | 0.46 | 1  | 0.46         | U | 1  | 0.46 | 1  |
| Total Concentration        | –          | –                               | ug/l          | 9.69         |   |    |      |    | 22.9         |   |    |      |    | 46           |   |    |      |    | 46.7         |   |    |      |    |

**Exceedance Summary:**

- 1 - Result exceeds Criteria
- 1 - MDL or RL greater than the applicable standard

**Notes:**

Q: data qualifier

MDL: method detection limit

RL: reporting limit

DF: dilution factor

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

µg/L: microgram per liter

**Table 2**  
**Weekly Mid-Carbon Sampling Results**  
Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301  
11/12/2020

| Analyte                    | CAS Number | Discharge Limit (Daily Maximum) | Location      | CBT          |   |    |      |    | CBT          |   |    |      |    | CBT          |   |    |      |    | CBT          |   |    |      |    |
|----------------------------|------------|---------------------------------|---------------|--------------|---|----|------|----|--------------|---|----|------|----|--------------|---|----|------|----|--------------|---|----|------|----|
|                            |            |                                 | Sample ID     | CBT_081820   |   |    |      |    | CBT_082520   |   |    |      |    | CBT_090120   |   |    |      |    | CBT_090920   |   |    |      |    |
|                            |            |                                 | Sample Date   | 8/18/2020    |   |    |      |    | 8/25/2020    |   |    |      |    | 9/1/2020     |   |    |      |    | 9/9/2020     |   |    |      |    |
|                            |            |                                 | Lab Sample ID | 480-173928-1 |   |    |      |    | 480-174204-1 |   |    |      |    | 480-174548-1 |   |    |      |    | 480-174922-2 |   |    |      |    |
|                            |            |                                 | Unit          | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF |
| Volatile Organic Compounds |            |                                 |               |              |   |    |      |    |              |   |    |      |    |              |   |    |      |    |              |   |    |      |    |
| Benzene                    | 71-43-2    | 10                              | ug/l          | 0.41         | U | 1  | 0.41 | 1  | 0.82         | U | 2  | 0.82 | 2  | 0.82         | U | 2  | 0.82 | 2  | 1.6          | U | 4  | 1.6  | 4  |
| Carbon Disulfide           | 75-15-0    | Monitor                         | ug/l          | 0.51         | J | 1  | 0.19 | 1  | 1.5          | J | 2  | 0.38 | 2  | 0.38         | U | 2  | 0.38 | 2  | 0.76         | U | 4  | 0.76 | 4  |
| Carbon Tetrachloride       | 56-23-5    | 10                              | ug/l          | 0.27         | U | 1  | 0.27 | 1  | 0.54         | U | 2  | 0.54 | 2  | 0.98         | J | 2  | 0.54 | 2  | 1.1          | U | 4  | 1.1  | 4  |
| Chlorobenzene              | 108-90-7   | 10                              | ug/l          | 0.75         | U | 1  | 0.75 | 1  | 1.5          | U | 2  | 1.5  | 2  | 1.5          | U | 2  | 1.5  | 2  | 3            | U | 4  | 3    | 4  |
| Chloroform                 | 67-66-3    | 10                              | ug/l          | 64           |   | 1  | 0.34 | 1  | 120          |   | 2  | 0.68 | 2  | 280          | D | 5  | 1.7  | 5  | 450          |   | 8  | 2.7  | 8  |
| Methylene Chloride         | 75-09-2    | 10                              | ug/l          | 110          |   | 2  | 0.88 | 2  | 110          |   | 2  | 0.88 | 2  | 120          |   | 2  | 0.88 | 2  | 130          |   | 4  | 1.8  | 4  |
| Tetrachloroethene (PCE)    | 127-18-4   | 10                              | ug/l          | 0.36         | U | 1  | 0.36 | 1  | 0.72         | U | 2  | 0.72 | 2  | 0.72         | U | 2  | 0.72 | 2  | 1.4          | U | 4  | 1.4  | 4  |
| Toluene                    | 108-88-3   | 10                              | ug/l          | 0.51         | U | 1  | 0.51 | 1  | 1            | U | 2  | 1    | 2  | 1            | U | 2  | 1    | 2  | 2            | U | 4  | 2    | 4  |
| Trichloroethene (TCE)      | 79-01-6    | 10                              | ug/l          | 0.46         | U | 1  | 0.46 | 1  | 0.92         | U | 2  | 0.92 | 2  | 0.92         | U | 2  | 0.92 | 2  | 1.8          | U | 4  | 1.8  | 4  |
| Total Concentration        | --         | --                              | ug/l          | 174.5        |   |    |      |    | 231.5        |   |    |      |    | 401          |   |    |      |    | 580          |   |    |      |    |

**Exceedance Summary:**

- 1 - Result exceeds Criteria
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**Notes:**

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DF: dilution factor  
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  
µg/L: microgram per liter

**Table 2**  
**Weekly Mid-Carbon Sampling Results**  
Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301  
11/12/2020

| Analyte                    | CAS Number | Discharge Limit (Daily Maximum) | Location      | CBT          |   |    |      |    | CBT          |   |    |      |    | CBT          |   |    |      |    |  |
|----------------------------|------------|---------------------------------|---------------|--------------|---|----|------|----|--------------|---|----|------|----|--------------|---|----|------|----|--|
|                            |            |                                 | Sample ID     | CBT_091420   |   |    |      |    | CBT_092520   |   |    |      |    | CBT_092920   |   |    |      |    |  |
|                            |            |                                 | Sample Date   | 9/14/2020    |   |    |      |    | 9/25/2020    |   |    |      |    | 9/29/2020    |   |    |      |    |  |
|                            |            |                                 | Lab Sample ID | 480-175098-1 |   |    |      |    | 480-175647-1 |   |    |      |    | 480-175753-1 |   |    |      |    |  |
|                            |            |                                 | Unit          | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF |  |
| Volatile Organic Compounds |            |                                 |               |              |   |    |      |    |              |   |    |      |    |              |   |    |      |    |  |
| Benzene                    | 71-43-2    | 10                              | ug/l          | 1.6          | U | 4  | 1.6  | 4  | 0.41         | U | 1  | 0.41 | 1  | 0.41         | U | 1  | 0.41 | 1  |  |
| Carbon Disulfide           | 75-15-0    | Monitor                         | ug/l          | 0.76         | U | 4  | 0.76 | 4  | 0.19         | U | 1  | 0.19 | 1  | 0.19         | U | 1  | 0.19 | 1  |  |
| Carbon Tetrachloride       | 56-23-5    | 10                              | ug/l          | 2            | J | 4  | 1.1  | 4  | 0.27         | U | 1  | 0.27 | 1  | 0.27         | U | 1  | 0.27 | 1  |  |
| Chlorobenzene              | 108-90-7   | 10                              | ug/l          | 3            | U | 4  | 3    | 4  | 0.75         | U | 1  | 0.75 | 1  | 0.75         | U | 1  | 0.75 | 1  |  |
| Chloroform                 | 67-66-3    | 10                              | ug/l          | 500          |   | 10 | 3.4  | 10 | 0.34         | U | 1  | 0.34 | 1  | 0.34         | U | 1  | 0.34 | 1  |  |
| Methylene Chloride         | 75-09-2    | 10                              | ug/l          | 100          |   | 4  | 1.8  | 4  | 4.6          |   | 1  | 0.44 | 1  | 5.5          |   | 1  | 0.44 | 1  |  |
| Tetrachloroethene (PCE)    | 127-18-4   | 10                              | ug/l          | 1.4          | U | 4  | 1.4  | 4  | 0.36         | U | 1  | 0.36 | 1  | 0.36         | U | 1  | 0.36 | 1  |  |
| Toluene                    | 108-88-3   | 10                              | ug/l          | 2            | U | 4  | 2    | 4  | 0.51         | U | 1  | 0.51 | 1  | 0.51         | U | 1  | 0.51 | 1  |  |
| Trichloroethene (TCE)      | 79-01-6    | 10                              | ug/l          | 1.8          | U | 4  | 1.8  | 4  | 0.46         | U | 1  | 0.46 | 1  | 0.46         | U | 1  | 0.46 | 1  |  |
| Total Concentration        | --         | --                              | ug/l          | 602          |   |    |      |    | 4.6          |   |    |      |    | 5.5          |   |    |      |    |  |

**Exceedance Summary:**

- 1 - Result exceeds Criteria
- 1 - MDL or RL greater than the applicable standard

**Notes:**

Q: data qualifier  
MDL: method detection limit  
RL: reporting limit  
DF: dilution factor  
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  
µg/L: microgram per liter

**Table 3**  
**Monthly Influent Sampling Results**  
Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301  
11/12/2020

| Analyte                           | CAS Number | Discharge Limit (Daily Maximum) | Location      | INF          |   |    |     |    | INF          |   |    |     |    | INF          |   |     |     |     |
|-----------------------------------|------------|---------------------------------|---------------|--------------|---|----|-----|----|--------------|---|----|-----|----|--------------|---|-----|-----|-----|
|                                   |            |                                 | Sample ID     | INF-070720   |   |    |     |    | INF_081120   |   |    |     |    | INF_090920   |   |     |     |     |
|                                   |            |                                 | Sample Date   | 7/7/2020     |   |    |     |    | 8/11/2020    |   |    |     |    | 9/9/2020     |   |     |     |     |
|                                   |            |                                 | Lab Sample ID | 480-172024-1 |   |    |     |    | 480-173710-1 |   |    |     |    | 480-174922-1 |   |     |     |     |
|                                   |            |                                 | Unit          | Result       | Q | RL | MDL | DF | Result       | Q | RL | MDL | DF | Result       | Q | RL  | MDL | DF  |
| <b>Volatile Organic Compounds</b> |            |                                 |               |              |   |    |     |    |              |   |    |     |    |              |   |     |     |     |
| Benzene                           | 71-43-2    | 10                              | ug/l          | 21           | U | 50 | 21  | 50 | 21           | U | 50 | 21  | 50 | 21           | U | 50  | 21  | 50  |
| Carbon Disulfide                  | 75-15-0    | Monitor                         | ug/l          | 1,800        |   | 50 | 9.5 | 50 | 2,500        |   | 50 | 9.5 | 50 | 6,000        |   | 130 | 24  | 125 |
| Carbon Tetrachloride              | 56-23-5    | 10                              | ug/l          | 2,300        |   | 50 | 14  | 50 | 1,900        |   | 50 | 14  | 50 | 2,700        |   | 50  | 14  | 50  |
| Chlorobenzene                     | 108-90-7   | 10                              | ug/l          | 38           | U | 50 | 38  | 50 | 38           | U | 50 | 38  | 50 | 38           | U | 50  | 38  | 50  |
| Chloroform                        | 67-66-3    | 10                              | ug/l          | 1,000        |   | 50 | 17  | 50 | 1,000        |   | 50 | 17  | 50 | 1,200        |   | 50  | 17  | 50  |
| Methylene Chloride                | 75-09-2    | 10                              | ug/l          | 22           | U | 50 | 22  | 50 | 86           |   | 50 | 22  | 50 | 140          |   | 50  | 22  | 50  |
| Tetrachloroethene (PCE)           | 127-18-4   | 10                              | ug/l          | 46           | J | 50 | 18  | 50 | 29           | J | 50 | 18  | 50 | 37           | J | 50  | 18  | 50  |
| Toluene                           | 108-88-3   | 10                              | ug/l          | 26           | U | 50 | 26  | 50 | 26           | U | 50 | 26  | 50 | 26           | U | 50  | 26  | 50  |
| Trichloroethene (TCE)             | 79-01-6    | 10                              | ug/l          | 63           |   | 50 | 23  | 50 | 35           | J | 50 | 23  | 50 | 49           | J | 50  | 23  | 50  |
| Total Concentration               |            | NS                              | ug/l          | 5,209        |   |    |     |    | 5,550        |   |    |     |    | 10,126       |   |     |     |     |

**Exceedance Summary:**

- 1 - Result exceeds Criteria
- 1 - MDL or RL greater than the applicable standard

**Notes:**

Q: data qualifier  
MDL: method detection limit  
RL: reporting limit  
DF: dilution factor  
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  
ug/L: microgram per liter

**Table 4**  
**Monthly Effluent Sampling Results**  
Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301  
11/12/2020

| Analyte                    | CAS Number | Discharge Limit<br>(Daily Maximum) | Location      | EFF          |   |    |      |    | EFF          |   |    |      |    | EFF          |   |    |      |    |
|----------------------------|------------|------------------------------------|---------------|--------------|---|----|------|----|--------------|---|----|------|----|--------------|---|----|------|----|
|                            |            |                                    | Sample ID     | EFF-070720   |   |    |      |    | EFF_081120   |   |    |      |    | EFF_090920   |   |    |      |    |
|                            |            |                                    | Sample Date   | 7/7/2020     |   |    |      |    | 8/11/2020    |   |    |      |    | 9/9/2020     |   |    |      |    |
|                            |            |                                    | Lab Sample ID | 480-172024-3 |   |    |      |    | 480-173710-3 |   |    |      |    | 480-174922-3 |   |    |      |    |
|                            |            |                                    | Unit          | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF | Result       | Q | RL | MDL  | DF |
| Volatile Organic Compounds |            |                                    |               |              |   |    |      |    |              |   |    |      |    |              |   |    |      |    |
| Benzene                    | 71-43-2    | 10                                 | ug/l          | 0.41         | U | 1  | 0.41 | 1  | 0.41         | U | 1  | 0.41 | 1  | 0.41         | U | 1  | 0.41 | 1  |
| Carbon Disulfide           | 75-15-0    | Monitor                            | ug/l          | 2.7          |   | 1  | 0.19 | 1  | 2.3          |   | 1  | 0.19 | 1  | 0.19         | U | 1  | 0.19 | 1  |
| Carbon Tetrachloride       | 56-23-5    | 10                                 | ug/l          | 0.27         | U | 1  | 0.27 | 1  | 0.27         | U | 1  | 0.27 | 1  | 0.27         | U | 1  | 0.27 | 1  |
| Chlorobenzene              | 108-90-7   | 10                                 | ug/l          | 0.75         | U | 1  | 0.75 | 1  | 0.75         | U | 1  | 0.75 | 1  | 0.75         | U | 1  | 0.75 | 1  |
| Chloroform                 | 67-66-3    | 10                                 | ug/l          | 0.66         | J | 1  | 0.34 | 1  | 0.34         | U | 1  | 0.34 | 1  | 0.34         | U | 1  | 0.34 | 1  |
| Methylene Chloride         | 75-09-2    | 10                                 | ug/l          | 0.44         | U | 1  | 0.44 | 1  | 0.56         | J | 1  | 0.44 | 1  | 2.7          |   | 1  | 0.44 | 1  |
| Tetrachloroethene (PCE)    | 127-18-4   | 10                                 | ug/l          | 0.36         | U | 1  | 0.36 | 1  | 0.36         | U | 1  | 0.36 | 1  | 0.36         | U | 1  | 0.36 | 1  |
| Toluene                    | 108-88-3   | 10                                 | ug/l          | 0.51         | U | 1  | 0.51 | 1  | 0.51         | U | 1  | 0.51 | 1  | 0.51         | U | 1  | 0.51 | 1  |
| Trichloroethene (TCE)      | 79-01-6    | 10                                 | ug/l          | 0.46         | U | 1  | 0.46 | 1  | 0.46         | U | 1  | 0.46 | 1  | 0.46         | U | 1  | 0.46 | 1  |
| Total Concentration        | --         | --                                 | ug/l          | 3.36         |   |    |      |    | 2.86         |   |    |      |    | 2.7          |   |    |      |    |

**Exceedance Summary:**

- 1** - Result exceeds Criteria  
**1** - MDL or RL greater than the applicable standard

**Notes:**

Q: data qualifier  
MDL: method detection limit  
RL: reporting limit  
DF: dilution factor  
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  
µg/L: microgram per liter

**Table 5**  
**Quarterly Effluent (SPDES) Sampling Results**  
Former Stauffer Management Company, LLC  
Lewiston, New York  
Langan Project No.: 130117301  
11/12/2020

| Analyte                         | CAS Number | Discharge Limit<br>(Daily Maximum) | Location      | EFF          |   |    |      |    | Discharge<br>Rate |
|---------------------------------|------------|------------------------------------|---------------|--------------|---|----|------|----|-------------------|
|                                 |            |                                    | Sample ID     | EFF 081120   |   |    |      |    |                   |
|                                 |            |                                    | Sample Date   | 8/11/2020    |   |    |      |    |                   |
|                                 |            |                                    | Lab Sample ID | 480-173710-3 |   |    |      |    |                   |
|                                 |            |                                    | Unit          | Result       | Q | RL | MDL  | DF | lbs/day           |
| Semi-Volatile Organic Compounds |            |                                    |               |              |   |    |      |    |                   |
| 2,4-Dichlorophenol              | 120-83-2   | 10                                 | ug/l          | 0.53         | U | 5  | 0.53 | 1  | NA                |
| Hexachloroethane                | 67-72-1    | 10                                 | ug/l          | 0.61         | U | 5  | 0.61 | 1  | NA                |
| Naphthalene                     | 91-20-3    | 10                                 | ug/l          | 0.79         | U | 5  | 0.79 | 1  | NA                |
| Metals                          |            |                                    |               |              |   |    |      |    |                   |
| Arsenic                         | 7440-38-2  | 0.036*                             | ug/l          | 5.6          | U | 15 | 5.6  | 1  | 0.0012            |
| Chromium, Total                 | 7440-47-3  | 0.072*                             | ug/l          | 1.1          | J | 4  | 1    | 1  | 0.0002            |
| Copper                          | 7440-50-8  | 0.1*                               | ug/l          | 1.6          | U | 10 | 1.6  | 1  | 0.0003            |
| Lead                            | 7439-92-1  | 0.16*                              | ug/l          | 3            | U | 10 | 3    | 1  | 0.0006            |
| Nickel                          | 7440-02-0  | 0.072*                             | ug/l          | 1.3          | U | 10 | 1.3  | 1  | 0.0003            |
| Selenium                        | 7782-49-2  | 0.48*                              | ug/l          | 8.7          | U | 25 | 8.7  | 1  | 0.0018            |
| Zinc                            | 7440-66-6  | 0.86*                              | ug/l          | 9.2          | J | 10 | 1.5  | 1  | 0.0019            |
| General Chemistry               |            |                                    |               |              |   |    |      |    |                   |
| Phenolics, Total Recoverable    | TOTPHEN    | 10                                 | ug/l          | 9.5          | J | 10 | 3.5  | 1  | NA                |

**Exceedance Summary:**

- 1 - Result exceeds Criteria  
1 - MDL or RL greater than the applicable standard

**Notes:**

SPDES - State Pollutant Discharge Elimination System

Q: data qualifier

MDL: method detection limit

RL: reporting limit

DF: dilution factor

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

µg/L: microgram 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