Progress/Inspection Report No. 5
J&H Holding Company, LLC
491 Wortman Avenue, Brooklyn, NY 11208
Brownfield Cleanup Program Site No. C224139
Reporting Period: September 2017

1. Introduction

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) submits this progress/inspection report on behalf of J&H Holding Company, LLC (the "Participant"). In accordance with Section 7.1 of the Site Management Plan (SMP), which was approved by the New York State Department of Environmental Conservation (NYSDEC) on June 28, 2017, this progress/inspection report summarizes work performed at the Former Watermark Designs Facility (the "Site") during September 2017. The Final Engineering Report (FER) was submitted to the NYSDEC on May 25, 2017, and in accordance with the Brownfield Cleanup Agreement (BCA) submission of Monthly Brownfield Cleanup Program (BCP) Progress Reports is no longer required for the Site.

The Site (Block 4384, Lots 31 & 36) is located at 491 Wortman Avenue in Brooklyn, New York (Figure 1) and consists of a rectangular shaped lot that is about 19,000 square feet (±0.44 acres). The Site is located in an area zoned for industrial/manufacturing use and is bound by Wortman Street to the south, Linwood Street to the west, Essex Street to the east, and a one-story building to the north. Currently, a one-story building with a partial basement covers the entire Site footprint. The one-story building is comprised of a warehouse (i.e., the western portion) and office space and a smaller warehouse (i.e. the eastern portion).

2. Remedial Actions Relative to the Site during this Reporting Period

On September 27, 2017, Langan recorded process and performance monitoring data for the air sparge and soil vapor extraction (AS/SVE) system. As part of the monthly inspection, vapor samples were collected prior to the lead vapor-phase granular activated carbon (vGAC) unit (i.e., influent) and after the lag vGAC unit (i.e., effluent). Routine equipment maintenance, including greasing the blower and checking the belt tensions, was performed.

3. Actions Relative to the Site Anticipated for the Next Reporting Period

The following activities are planned:

- Continued operation, maintenance and monitoring (OM&M) of the AS/SVE system

4. Approved Activity Modifications (changes of work scope and/or schedule)

None

5. Results of Sampling, Testing and Other Relevant Data

OM&M sampling was performed as follows:

- An influent vapor sample was collected from the AS/SVE system and analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method TO-15.
- An effluent vapor sample was collected from the AS/SVE system and analyzed for VOCs via USEPA Method TO-15.

Samples were analyzed by Alpha Analytical of Westborough, MA. Alpha is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory.

Based on the results of the most recent OM&M sampling, the AS/SVE system is functioning in compliance with Policy DAR-1: Guidelines for the Control of Toxic Ambient Air Contaminants (DAR-1).

The following tables are attached to this progress report; analytical lab reports are available upon request. The tables summarize the data collected and the functionality of the AS/SVE system, including mass of VOCs removed from the subsurface based on photoionization detector (PID) readings and laboratory data, as well as, the alarm history.

- Table1: AS/SVE System Vapor Sampling Results
- Table 2: AS/SVE System Mass Removal – PID Data
- Table 3: AS/SVE System Mass Removal – Laboratory Data
- Table 4: AS/SVE System DAR-1 Compliance – September 27, 2017
- Table 5: AS/SVE System Alarm History

6. Deliverables Submitted During This Reporting Period

None

7. Information Regarding Percentage of Completion

OM&M of the AS/SVE system is ongoing.

As of October 5, 2017 and since inception, the SVE system operated for 15,832 hours (92% uptime), and the AS system operated for 15,362 hours (90% uptime).

8. Unresolved Delays Encountered or Anticipated That May Affect the Schedule and Mitigation Efforts

None

9. Citizen Participation Plan Activities during This Reporting Period

None

10. Activities Anticipated in Support of the CPP for the Next Reporting Period

None

11. Miscellaneous Information

Issuance of a certificate of completion is anticipated before the end of October 2017.

TABLES

TABLE 1: AS/SVE SYSTEM VAPOR SAMPLING RESULTS
FORMER WATERMARK DESIGNS FACILITY
BROOKLYN, NEW YORK
LANGAN PROJECT NO. 170329301
BROWNFIELD CLEANUP PROGRAM SITE NO. C224139

LOCATION	vGAC INFLUENT		vGAC EFFLUENT	
SAMPLE ID	INFLUENT_092717		EFFLUENT_092717	
LAB SAMPLE ID	L1734565-01		L1734565-02	
SAMPLE DATE	9/27/2017		9/27/2017	
Volatile Organic Compounds (ug/m^3)				
1,1,1-Trichloroethane	11.5	U	2.3	U
1,1,2,2-Tetrachloroethane	14.5	U	2.9	U
1,1,2-Trichloroethane	11.5	U	2.3	U
1,1-Dichloroethane	8.5	U	1.7	U
1,1-Dichloroethene	8.4	U	1.7	U
1,2,4-Trichlorobenzene	15.7	U	3.1	U
1,2,4-Trimethylbenzene	10.4	U	2.1	U
1,2-Dibromoethane	16.2	U	3.2	U
1,2-Dichlorobenzene	12.7	U	2.5	U
1,2-Dichloroethane	8.5	U	1.7	U
1,2-Dichloropropane	62.9		1.9	U
1,3,5-Trimethylbenzene	10	U	2.1	U
1,3-Butadiene	4.7	U	0.9	U
1,3-Dichlorobenzene	12.7	U	2.5	U
1,4-Dichlorobenzene	12.7	U	2.5	U
1,4-Dioxane	7.6	U	1.5	U
2,2,4-Trimethylpentane	9.9	U	2.0	U
2-Butanone	15.5	U	3.1	U
2-Hexanone	8.7	U	1.7	U
3-Chloropropene	6.6	U	1.3	U
4-Ethyltoluene	10.4	U	2.1	U
4-Methyl-2-pentanone	22	U	4	U
Acetone	58.4		39.0	
Benzene	6.7	U	4.3	
Benzyl chloride	10.9	U	2.2	U
Bromodichloromethane	14.1	U	2.8	U
Bromoform	21.8	U	4.3	U
Bromomethane	8.2	U	1.6	U
Carbon disulfide	6.6	U	2.2	
Carbon tetrachloride	13.3	U	2.6	U
Chlorobenzene	9.7	U	1.9	U
Chloroethane	5.6	U	1.1	U
Chloroform	10.3	U	2.2	
Chloromethane	4.4	U	1.3	
cis-1,2-Dichloroethene	8.4	U	8.5	
cis-1,3-Dichloropropene	9.6	U	1.9	U
Cyclohexane	7.3	U	1.4	U
Dibromochloromethane	18.0	U	3.6	U
Dichlorodifluoromethane	10.4	U	2.3	
Ethanol	99.1	U	19.6	U
Ethyl Acetate	19.0	U	3.8	U
Ethylbenzene	9.2	U	1.8	U
Freon-113	16.2	U	3	U
Freon-114	14.7	U	2.9	U
Heptane	8.7	U	1.7	U
Hexachlorobutadiene	22.5	U	4.5	U
Isopropanol	12.9	U	3.4	
Methyl tert butyl ether	8	U	1.5	U
Methylene chloride	18.3	U	6.0	
n-Hexane	10.4		11.8	
o-Xylene	9.2	U	1.8	U
p/m-Xylene	18.3	U	3.6	U
Styrene	9	U	1.8	U
Tertiary butyl Alcohol	15.9	U	3.2	U
Tetrachloroethene	271		2.8	U
Tetrahydrofuran	15.5	U	3.1	U
Toluene	7.95	U	2.38	
trans-1,2-Dichloroethene	8.37	U	1.66	U
trans-1,3-Dichloropropene	9.58	U	1.9	U
Trichloroethene	656		2.25	U
Trichlorofluoromethane	11.9	U	2.35	U
Vinyl bromide	9.23	U	1.83	U
Vinyl chloride	5.39	U	1.07	U

NOTES:
1. ug/m^3 = micrograms per cubic meter
2. vGAC = vapor-phase granular activated carbon
3. Samples collected at the "vGAC INFLUENT" were collected before to the lead vGAC vessel.
4. Samples collected at the "vGAC EFFLUENT" were collected after the lag vGAC vessel.

Q is the Qualifier Column with definitions as follows:
B = The analyte was detected in the batch blank.
U = The analyte was not detected at or above the level indicated.

TABLE 2: AS/SVE SYSTEM MASS REMOVAL - PID DATA
FORMER WATERMARK DESIGNS FACILITY
BROOKLYN, NEW YORK
LANGAN PROJECT NO. 170329301
BROWNFIELD CLEANUP PROGRAM SITE NO. C224139

DATE	INFLUENT CONCENTRATION (ppmv)	SVE BLOWER FLOWRATE (scfm)	EFFLUENT CONCENTRATION (ppmv)	TOTAL OPERATIONAL HOURS	AVERAGE MOLECULAR WEIGHT	MASS REMOVAL RATE (lbs/hr)	TOTAL MASS REMOVED FROM SUBSURFACE (lbs)	CUMULATIVE MASS REMOVED FROM SUBSURFACE (lbs)
10/21/2015	55.0	688	1.8	30	100	0.57	17.02	17.02
10/26/2015	8.3	650	0.6	150	100	0.08	9.31	26.34
11/6/2015	5.5	560	0.0	383	100	0.05	11.13	37.46
11/30/2015	1.9	593	0.3	958	100	0.01	8.46	45.92
12/28/2015	3.7	570	0.0	1,548	100	0.03	19.29	65.21
1/27/2016	1.2	525	0.5	2,180	100	0.01	3.60	68.81
2/24/2016	2.5	578	0.0	2,854	100	0.02	15.10	83.91
3/30/2016	0.2	550	0.0	3,693	100	0.002	1.43	85.34
4/29/2016	2.0	571	0.0	4,322	100	0.018	11.14	96.48
5/26/2016	0.4	600	0.0	4,972	100	0.004	2.42	98.90
6/29/2016	0.5	600	0.0	5,784	100	0.005	3.78	102.68
7/28/2016	3.0	600	0.0	6,431	100	0.028	18.06	120.73
8/31/2016	2.7	600	0.0	7,110	100	0.025	17.05	137.79
9/29/2016	7.5	760	2.0	7,802	100	0.065	44.85	182.63
10/31/2016	0.0	520	0.0	8,516	100	0.000	0.00	182.63
11/29/2016	0.0	560	0.0	9,211	100	0.000	0.00	182.63
12/28/2016	0.0	520	0.0	9,884	100	0.000	0.00	182.63
1/25/2017	2.8	600	0.0	10,530	100	0.026	16.83	199.46
3/7/2017	0.1	360	0.0	11,186	100	0.001	0.37	199.82
4/27/2017	0.0	600	0.0	12,185	100	0.000	0.00	199.82
5/25/2017	0.8	600	0.0	12,760	100	0.008	4.42	204.24
6/28/2017	0.04	600	0.0	13,575	100	0.000	0.33	204.57
7/21/2017	0.0	600	0.0	14,060	100	0.000	0.00	204.57
8/25/2017	0.0	600	0.0	14,852	100	0.000	0.00	204.57
9/27/2017	0.7	600	0.08	15,641	100	0.006	4.55	209.12

NOTES:
1. Blower flowrate is recorded from PDI-701 pitot tube flow indicator located on the blower discharge line.
2. The influent and effluent concentrations are based on the PID readings.
3. Mass Removal rate (lb/hr) = ((Conc in ppmv)(flowrate scfm)(MW)(60 min/hr)) / ((387)(1,000,000)).
4. PID = photoionization detector
5. ppmv = parts per million volume
6. scfm = standard cubic feet per minute
7. lbs/hr = pounds per hour
8. lbs = pounds
9. SVE = soil vapor extraction

TABLE 3: AS/SVE SYSTEM MASS REMOVAL - LABORATORY DATA
FORMER WATERMARK DESIGNS FACILITY
BROOKLYN, NEW YORK
LANGAN PROJECT NO. 170329301
BROWNFIELD CLEANUP PROGRAM SITE NO. C224139

DATE	INFLUENT CONCENTRATION (ug/m3)	SVE BLOWER FLOWRATE (scfm)	EFFLUENT CONCENTRATION (ug/m3)	TOTAL OPERATIONAL HOURS	INFLUENT RATE (mg/min)	EFFLUENT RATE (mg/min)	REMOVAL RATE (mg/min)	MASS REMOVED FROM SUBSURFACE (lbs)	TOTAL MASS REMOVED FROM SUBSURFACE (lbs)	MASS REMOVED BY CARBON (lbs)	TOTAL MASS REMOVED BY CARBON (lbs)
10/20/2015	114,348	640	9,241	12	2049.12	165.60	1883.52	3.25	3.25	2.99	2.99
10/21/2015	32,758	688	1,129	30	631.05	21.75	609.30	1.50	4.76	1.45	4.44
10/26/2015	7,027	650	383	150	127.89	6.97	120.92	2.03	6.79	1.92	6.36
11/30/2015	3,144	593	426	958	52.20	7.07	45.13	5.58	12.36	4.82	11.18
12/28/2015	3,357	570	230	1,548	53.58	3.67	49.91	4.18	16.55	3.89	15.08
1/27/2016	621	525	183	2,180	9.13	2.69	6.44	0.76	17.31	0.54	15.62
2/24/2016	1,454	578	283	2,854	23.53	4.58	18.94	2.10	19.41	1.69	17.31
3/30/2016	825	550	75	3,693	12.71	1.16	11.55	1.41	20.82	1.28	18.59
4/29/2016	482	571	112	4,322	7.70	1.79	5.91	0.64	21.46	0.49	19.08
5/26/2016	1,169	600	162	4,972	19.64	2.73	16.91	1.69	23.15	1.45	20.53
6/29/2016	1,865	600	190	5,784	31.33	3.19	28.14	3.37	26.51	3.02	23.56
7/28/2016	3,706	600	232	6,431	62.26	3.90	58.36	5.33	31.84	4.99	28.55
8/31/2016	4,798	600	135	7,110	80.61	2.26	78.35	7.24	39.08	7.04	35.59
9/29/2016	1,045	760	179	7,802	22.24	3.81	18.43	2.04	41.12	1.69	37.27
10/31/2016	922	520	91	8,516	13.42	1.32	12.10	1.27	42.38	1.14	38.42
11/29/2016	790	560	167	9,211	12.38	2.62	9.76	1.14	43.52	0.90	39.31
12/28/2016	282	520	123	9,884	4.11	1.79	2.32	0.37	43.89	0.21	39.52
1/25/2017	4.7	600	5.6	10,530	0.08	0.09	-0.02	0.01	43.89	0.00	39.52
3/7/2017	762	360	120	11,186	7.68	1.21	6.47	0.67	44.56	0.56	40.08
4/27/2017	1,008	600	86	12,185	16.93	1.44	15.49	2.24	46.80	2.05	42.13
5/25/2017	771	600	48	12,760	12.95	0.81	12.15	0.99	47.78	0.92	43.05
6/28/2017	754	600	69	13,575	12.66	1.16	11.50	1.36	49.15	1.24	44.29
7/21/2017	2,434	600	235	14,060	40.89	3.95	36.94	2.62	51.77	2.37	46.66
8/25/2017	1,334	600	246	14,852	22.41	4.13	18.28	2.35	54.12	1.91	48.58
9/27/2017	1,059	600	83	15,641	17.79	1.39	16.40	1.86	55.98	1.71	50.29

NOTES:
1. Blower flowrate is recorded from PDI-701 pitot tube flow indicator located on the blower discharge line.
2. The influent and effluent concentrations are based on the lab analytical data and not the PID readings.
3. ug/m3 = micrograms per cubic meter
4. scfm = standard cubic feet per minute
5. mg/min = milligrams per minute
6. lbs = pounds
7. SVE = soil vapor extraction
8. VGAC = vapor-phase granular activated carbon

TABLE 4: AS/SVE SYSTEM DAR-1 COMPLIANCE
FORMER WATERMARK DESIGNS FACILITY
BROOKLYN, NEW YORK
LANGAN PROJECT NO. 170329301
BROWNFIELD CLEANUP PROGRAM NO. C224139

SAMPLING DATE: **9/27/2017**

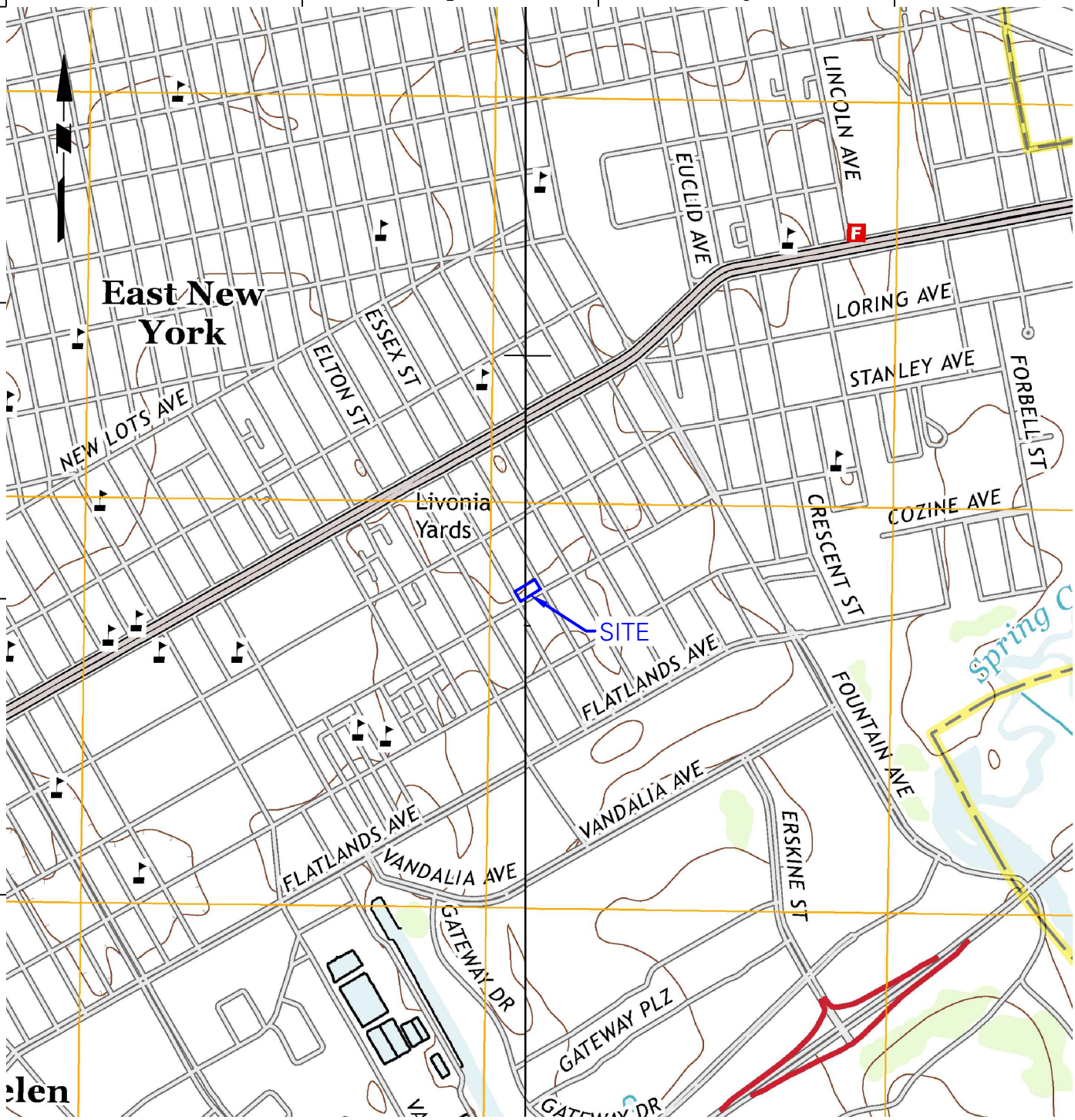
CHEMICAL COMPOUND	CARBON EFFLUENT CONCENRATION MEASURED ($\mu g/m^3$)	EMISSION FLOWRATE MEASURED (SCFM)	(m^3/min)	OUTLET CONCENTRATION (Q_p) (lb/hr)	OUTLET CONCENTRATION (Q_a) (lb/yr)	MAX ANNUAL IMPACT (C_a) ($\mu g/m^3$)	MAX POTENTIAL IMPACT (C_p) ($\mu g/m^3$)	MAX SHORT-TERM IMPACT (C_{st}) ($\mu g/m^3$)	DAR-1 STANDARDS SGC ($\mu g/m^3$)	AGC ($\mu g/m^3$)	EMISSION RESTRICTION REQUIRED (if C_p>AGC and C_a<AGC)	SGC EMISSION EXCEEDANCE (if C_{st}>SGC)	AGC EMISSION EXCEEDANCE (if C_a>AGC)
Volatile Organics, USEPA TO-15 Full List (ug/m^3)													
Acetone	39	600	16.9902	8.75E-05	7.66E-01	6.89E-03	6.88E-03	4.47E-01	180,000	30,000	NO	NO	NO
Benzene	4.25	600	16.9902	9.53E-06	8.35E-02	7.51E-04	7.50E-04	4.87E-02	1,300	0.13	NO	NO	NO
Carbon disulfide	2.22	600	16.9902	4.98E-06	4.36E-02	3.92E-04	3.92E-04	2.55E-02	6,200	700	NO	NO	NO
Chloroform	2.21	600	16.9902	4.96E-06	4.34E-02	3.90E-04	3.90E-04	2.53E-02	150	0.04	NO	NO	NO
Chloromethane	1.31	600	16.9902	2.94E-06	2.57E-02	2.31E-04	2.31E-04	1.50E-02	6,200	700	NO	NO	NO
cis-1,2-Dichloroethylene	8.45	600	16.9902	1.90E-05	1.66E-01	1.49E-03	1.49E-03	9.69E-02	--	63	NO	No Standard	NO
Dichlorodifluoromethane	2.25	600	16.9902	5.05E-06	4.42E-02	3.97E-04	3.97E-04	2.58E-02	--	12,000	NO	No Standard	NO
Isopropanol	3.39	600	16.9902	7.60E-06	6.66E-02	5.99E-04	5.98E-04	3.89E-02	98,000	7,000	NO	NO	NO
Methylene chloride	6.01	600	16.9902	1.35E-05	1.18E-01	1.06E-03	1.06E-03	6.89E-02	14,000	60	NO	NO	NO
n-Hexane	11.8	600	16.9902	2.65E-05	2.32E-01	2.08E-03	2.08E-03	1.35E-01	--	700	NO	No Standard	NO
Toluene	2.38	600	16.9902	5.34E-06	4.68E-02	4.20E-04	4.20E-04	2.73E-02	37,000	5,000	NO	NO	NO

NOTES AND QUALIFIERS:
1. Table only displays chemical compounds with detectable concentrations.
2. Concentrations below reporting limit (non detect) are assumed to be zero.
3. Air samples were analyzed for USEPA TO-15 compounds
4. All equations are referenced in NYSDEC, Division of Air Resources, Air Guide 1, Guidelines for the Control of Toxic Ambient Air Contaminants (11/12/97). Standard Point Source Method calculations were used.
5. Values in table are compared to DAR-1 Annual Guideline Concentrations (AGC)/Short-Term Guideline Concentrations (SGC) Tables dated February 28, 2014.
6. DAR-1 AGC and/or SGC values listed as "--" means there is no AGC or SGC standard for that compound.
7. SCFM = standard cubic feet per minute
8. Blower flowrate is recorded from PDI-701 pitot tube flow indicator located on the blower discharge line.
9. ug/m^3 = micrograms per cubic meter
10. m^3/min = cubic meter per minute
11. lb/hr = pounds per hour
12. lb/yr = pounds per year

TABLE 5: AS/SVE SYSTEM ALARM HISTORY
FORMER WATERMARK DESIGNS FACILITY
BROOKLYN, NEW YORK
LANGAN PROJECT NO. 170329301
BROWNFIELD CLEANUP PROGRAM NO. C224139

DATE	ALARM	ALARM DESCRIPTION	REASON	REMEDY
10/23/2015	PAL-2501	Compressor Low Pressure Alarm	Uncertain of the reason. There may be a power fluctuation that trips the low pressure alarm, which shuts the AS system down.	On-site observation confirmed that this was a false alarm and was not caused by compressor failure or a breach in the air sparge manifold. The alarm was manually reset.
10/28/2015	LAH-7301	Storage Tank High Level Alarm	The SVE system began to extract a larger volume of water than previously anticipated.	The storage tank was emptied into nine 55-gallon drums, and the SVE system vacuum has been optimized to extract a lesser volume of water.
11/5/2015	PAL-2501	Compressor Low Pressure Alarm	Caused by the air sparge compressor on/off time, which won't allow "OFF" time to be set to zero and therefore, the compressor cannot run continuously.	The air compressor timer has been by-passed and the compressor operation is linked to the SVE system operation. If the SVE system is operational, the compressor will operate unless a different AS system alarm has been triggered.
11/17/2015	PAL-2501	Compressor Low Pressure Alarm	This was an alarm test that was performed to ensure that the update to the Programmable Logic Controller (PLC) was successful.	The PLC update was successful and the air sparge compressor can run continuously. The air compressor timer is no longer being bypassed.
12/23/2015	LAH-7301	Storage Tank High Level Alarm	Following optimization, which included increasing the AS rate and the SVE system flow rate, the SVE system began to extract a larger volume of water than previously anticipated.	The storage tank was emptied into three 55-gallon drums. Both the AS and SVE system flow rates were adjusted in an effort to reduce excess water collection by the SVE system.
12/25/2015	LAH-7301	Storage Tank High Level Alarm	Following optimization, which included increasing the AS rate and the SVE system flow rate, the SVE system began to extract a larger volume of water than previously anticipated.	The storage tank was emptied into three 55-gallon drums. Both the AS and SVE system flow rates were adjusted in an effort to reduce excess water collection by the SVE system.
1/7/2016	LAH-7301	Storage Tank High Level Alarm	Following continued optimization of AS/SVE system, the SVE system began to extract a larger volume of water than anticipated.	The storage tank was emptied into eight 55-gallon drums. Both the AS and SVE system flow rates were adjusted in an effort to reduce excess water collection by the SVE system.
1/17/2016	LAH-7301	Storage Tank High Level Alarm	Following continued optimization of AS/SVE system, the SVE system began to extract a larger volume of water than anticipated.	The storage tank was emptied. Both the AS and SVE system flow rates were adjusted in an effort to reduce excess water collection by the SVE system.
2/1/2016	TAH-2501	Air Compressor High Temperature Alarm	The AS system is operating close to the alarm set point so that as much warm air as possible is continuously injected into the subsurface. A slight change in the air flow rate and/or ambient temperature most likely caused the rise in discharge air temperature.	The alarm was cleared and the AS system was restarted at a lower speed. The compressor speed was ramped up incrementally throughout the day until the previous set point was reached. The heat exchanger flow and AS manifold temperature are being monitored on a daily basis in an effort to prevent tripping the high temperature alarm again.
4/3/2016	PAL-701	Blower Influent High Pressure Alarm	The alarm was most likely triggered due to power fluctuations caused by high wind conditions.	The alarm was cleared and the SVE system was restarted at a higher frequency. The system was monitored remotely for the remainder of the day.
4/29/2016	TAH-2501	Air Compressor High Temperature Alarm	The AS system is operating close to the alarm set point so that as much warm air as possible is continuously injected into the subsurface. A slight change in the air flow rate and/or ambient temperature most likely caused the rise in discharge air temperature.	The alarm was cleared and the AS system was restarted. At restart, the allowable flow through the AS system was increased to alleviate the pressure on the air compressor discharge line. The heat exchanger flow and AS manifold temperature are being monitored on a daily basis in an effort to prevent tripping the high temperature alarm again.
8/9/2016	PAH-702	SVE System Effluent High Pressure Alarm	Anomalously high pressures were not noted on the SVE system discharge during the remote or on-site inspections. It is likely that the SVE effluent pressure switch needs to be recalibrated following almost a year's worth of continuous use.	The SVE system was restarted at a lower frequency and monitored on-site for about two hours.
8/26/2016	FAL-701	Blower Low Flow Alarm	The alarm was triggered due to a loose relay switch.	The switch was tightened during the August 31, 2016 monthly inspection and the system was restarted without further issue.
12/27/2016	PAL-2501	Compressor Low Pressure Alarm	The alarm was triggered due to a mechanical failure at the air compressor (i.e., the belts tore).	The air compressor belts were replaced on January 9, 2017 and the system was restarted.
3/7/2017	FAL-401	Transfer Pump Low Flow Alarm	The alarm was likley triggered due to the fluctuating volume of water extracted by the SVE system.	The AS/SVE system was restarted. Both the AS and SVE system flow rates were adjusted in an effort to reduce excess water collection by the SVE system.
3/8/2017	Low PLC Battery	Low Programmable Loigc Controller (PLC) Battery	The alarm was triggered because the PLC battery can no longer hold a charge.	The PLC battery was replaced on March 10, 2017.
3/24/2017	VFDA-701	SVE System Variable Frequency Drive (VFD) Alarm	The alarm was triggered because the SVE system blower was not functioning within the intended parameters.	The blower was visually inspected, a piece of debris caught in the belts was removed, and the system was restarted.
7/4/2017	TAH-2501	Air Compressor High Temperature Alarm	The AS system is operating close to the alarm set point so that as much warm air as possible is continuously injected into the subsurface. A slight change in the air flow rate and/or ambient temperature most likely caused the rise in discharge air temperature.	The alarm was cleared and the AS system was restarted. At restart, the allowable flow through the AS system was increased to alleviate the pressure on the air compressor discharge line. The heat exchanger flow and AS manifold temperature are being monitored on a daily basis in an effort to prevent tripping the high temperature alarm again.
8/2/2017	FAL-701	Blower Low Flow Alarm	The alarm was likely triggered by a momentary power surge.	The alarm was cleared and the AS/SVE system was restarted. The system was monitored remotely for the remainder of the day.

FIGURES



LEGEND:

APPROXIMATE SITE BOUNDARY

NOTE: BASE MAPS ARE REFERENCED FROM THE UNITED STATES GEOLOGICAL SURVEY (USGS) TOPOGRAPHIC QUADRANGLE MAPS FOR BROOKLYN AND JAMAICA.

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Project
491 WORTMAN AVENUE
BLOCK No. 4384, LOT Nos. 31 & 36
BROOKLYN
KINGS NEW YORK

Figure Title
SITE LOCATION MAP

Project No. 170329301	Figure 1
Date 04/18/2015	
Scale N.T.S.	
Drawn By MLR / Checked By GN	
Submission Date	Sheet 1 of 3

Filename: \\langan.com\data\NYC\data3\170329301\Cadd Data - 170329301\SheetFiles\Monthly Report 22\Figure 1 - Site Location Map - Updated.dwg Date: 5/9/2017 Time: 12:48 User: mrogers Style Table: Langan.stb Layout: Site Location Map