# akrf

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10.30.2024

Mr. Christopher Allan New York State Department of Environmental Conservation Division of Environmental Remediation 47-40 21st Street Long Island City, New York, 11101

#### Re: Quarterly Monitoring Report – 2024 3<sup>rd</sup> Quarter 975 Nostrand Avenue, Brooklyn, NY NYSDEC Site No: C224335

## Dear Mr. Allan:

This Quarterly Monitoring Report has been prepared by AKRF, Inc. (AKRF) to summarize routine monitoring activities performed at the 975 Nostrand Avenue site located in Brooklyn, New York (the "Site"), also identified as Block 1309, Lot 6 on the New York City Tax Map. The Site is situated on an approximately 1.369-acre parcel bounded to the north by a vacant lot (under construction); to the east by Clove Road, followed by multi-family residential buildings; to the south by mixed residential and commercial uses; and to the west by Nostrand Avenue, followed by mixed residential and commercial uses and Sullivan Place. A Site location map is provided as Figure 1 and a Site plan is provided as Figure 2.

On December 21, 2021, Nostrand Green LLC entered into a Brownfield Cleanup Agreement (BCA) (Index No. C224335-12-21) with NYSDEC as a Volunteer to remediate the Site. The Site was remediated to a Track 2 Restricted Residential Use Cleanup and will be used for residential and commercial uses. A Certificate of Completion (CoC) was issued by NYSDEC in December 2023.

Soil vapor beneath the Site remains contaminated with the chlorinated volatile organic compound (VOC) tetrachloroethylene (PCE). Remedial activities were completed between July 2022 and September 2023 and included soil removal, underground storage tank (UST) removal, installation of a cut-off wall/barrier to prevent off-site vapor migration, installation of below ground components of an active sub-slab depressurization system (SSDS), and a soil vapor extraction (SVE) system (SVES). The SVES has operated continuously at the Site since November 2023. The aboveground components of the SSDS are currently being installed during building construction and the system will be activated upon building completion.

Site management activities are ongoing since issuance of the CoC. This report summarizes the following inspection and monitoring activities performed at the Site during the third quarter of 2024 between July 1 and September 30:

- Three monthly SVES inspections (July through September 2024);
- One quarterly inspection of the SSDS (September 2024); and,

This quarterly monitoring report includes the associated field inspection logs. In accordance with the SMP, further assessment (and recommendations, if necessary) will be provided in the annual Periodic Review Report (PRR). It is noted that subsequent monitoring reports will only include a summary of activities within the quarter and will not include a summary of activities prior to issuance of the CoC.

## **SVES Operation and Maintenance**

#### SVES Monitoring

Initial startup of the SVES occurred in November 2023; and the contractor updated/changed some of the system components in the second quarter. Monthly inspections were performed on the system between July and September 2024 to monitor and evaluate the system performance.

Monthly SVES inspections comprised the following activities:

- Confirmation that the blower is operating, and air is discharging through the exhaust piping;
- Checking the moisture separator tank;
- Recording SVE blower operation and variable-frequency drive (VFD) readings;
- Recording pre- and post-filter vacuum readings;
- Recording post-blower pressure levels;
- Field-screening for relative concentrations of VOCs at the granular activated carbon (GAC) vessel influent, intermediate, and effluent ports; and
- Recording vacuum readings at each SVE manifold leg and the monitoring points.

During the inspections, the vacuum, pressure, and air flow rate readings on the SVE blower and individual SVE lines were lower than historic ranges (but still within acceptable ranges), since the system is currently operating at a reduced capacity due to persistent high temperature issues (first encountered and reported in the second quarter). Troubleshooting efforts to resolve the high temperature issues and ensure the SVES operates at full capacity are ongoing.

Additionally, field-screening for relative concentrations of VOCs at the GAC vessel intermediate and effluent ports during the September 2024 inspection reported detectable VOC concentrations (maximum of 2.1 parts per million); therefore, a GAC vessel change out is scheduled to be performed in October 2024. No other significant changes were observed. The SVES layout is shown on Figure 3. Inspection logs are provided in Attachment A.

The system shutdown reported in the second quarter (starting June 24, 2024) due to high pressure issues continued into the third quarter (until July 16, 2024). The system was restarted on July 16, 2024, and had to be shut down for short periods of time on multiple occasions to perform regular maintenance, troubleshooting, and repairs, as needed.

#### **SSDS Operation and Maintenance**

An active SSDS will be operated at the Site to mitigate the potential for soil vapor intrusion into the new building. The SSDS will induce a negative pressure (i.e., vacuum) beneath the newly constructed building slab. The underground elements of the SSDS were installed beneath the building slab following remedial excavation, prior to receipt of the CoC. The SSDS layout is shown on Figure 4. In accordance with the SMP, inspections of the SSDS are to be conducted on a quarterly basis following issuance of the CoC. The third SSDS inspection was conducted on September 24, 2024. All installed elements were noted to be in good condition.

Aboveground construction of the SSDS elements was conducted between July and September 2024, and construction is expected to continue in October 2024, including installation and pressure testing of both SSDS manifolds, and installation of SSDS suction fans on the roof of the building.

# **Scheduled Activities**

AKRF will continue conducting monthly SVES inspections through December 2024. The next round of extracted vapor sampling from the SVES is expected in November 2024.

If you have any questions regarding the information presented herein, please contact Ashutosh Sharma at (646) 388-9865 or <u>asharma@akrf.com</u>.

Sincerely, AKRF, Inc.

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Ashutosh Sharma Vice President

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Axel Schwendt Vice President

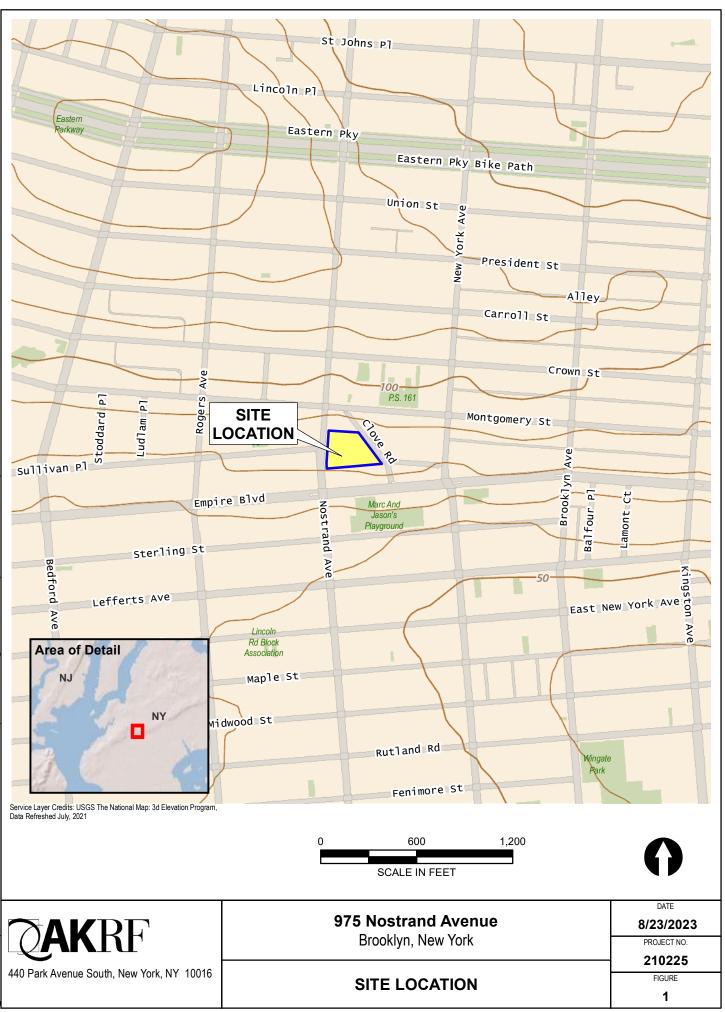
Attachments: Figure 1 S

Figure 1	Site Location
Figure 2	BCP Site Plan and Sample Location Plan
Figure 3	SVES Layout Plan
Figure 4	SSDS Layout Plan

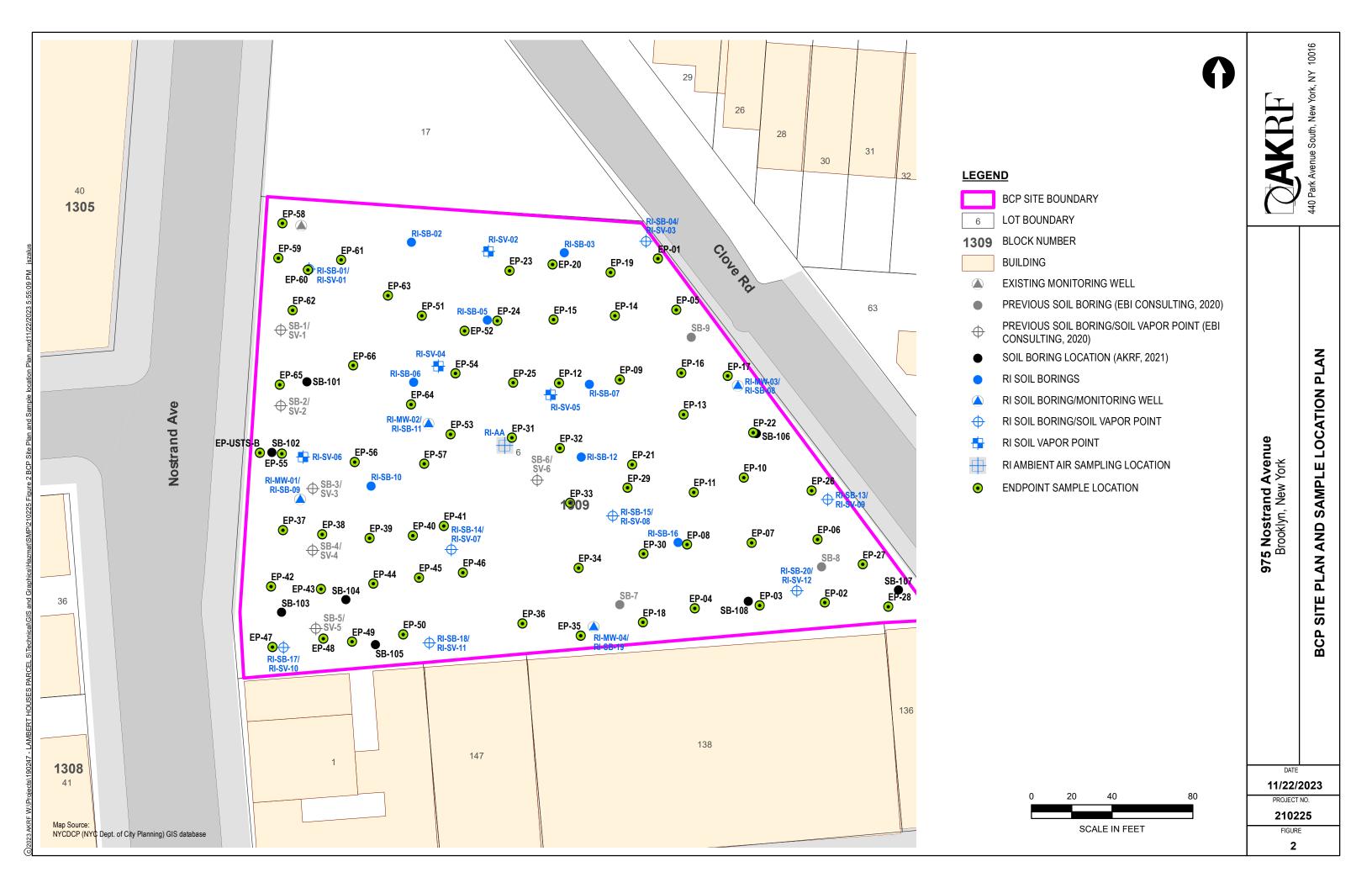
Attachment A SVES Inspection Logs

cc (electronic copy only):

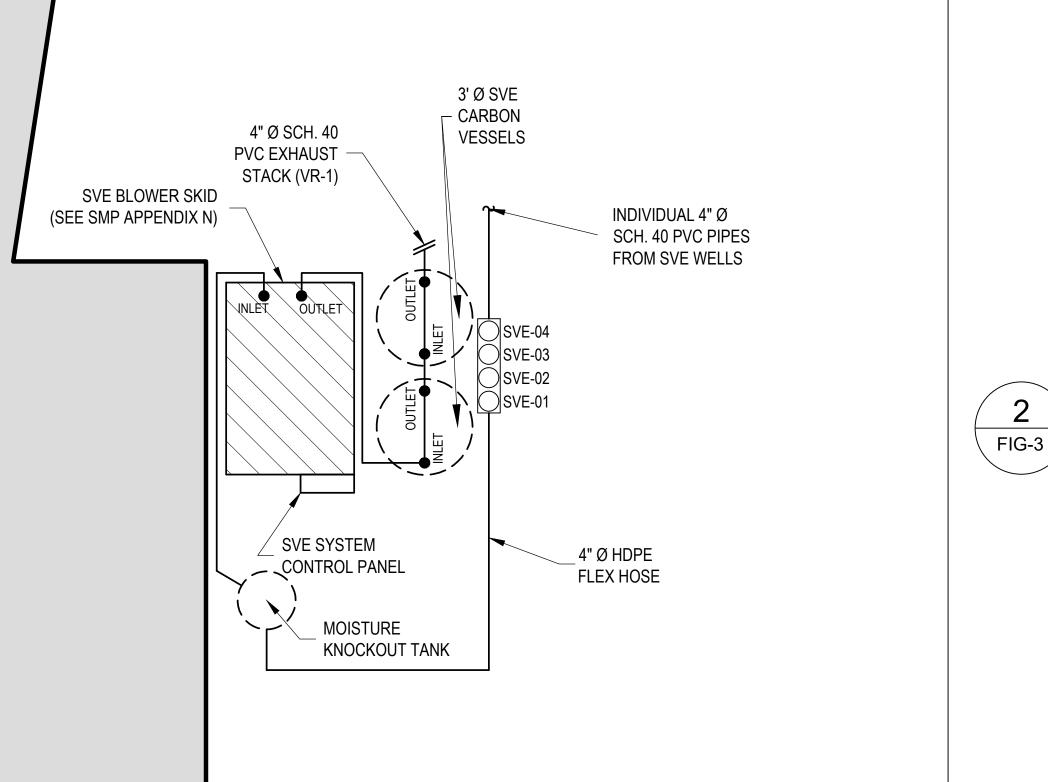
Cris-Sandra Maycock– NYSDEC Sally Rushford – NYSDOH Marlee Busching-Truscott – Nostrand Green LLC Rebecca Kinal – AKRF FIGURES



iszalu 10:32:53 AM map ocation Site Figure 1 and Graphics/SAR\210225 GIS NOSTRAND AVENUE/ **323 AKRF** 

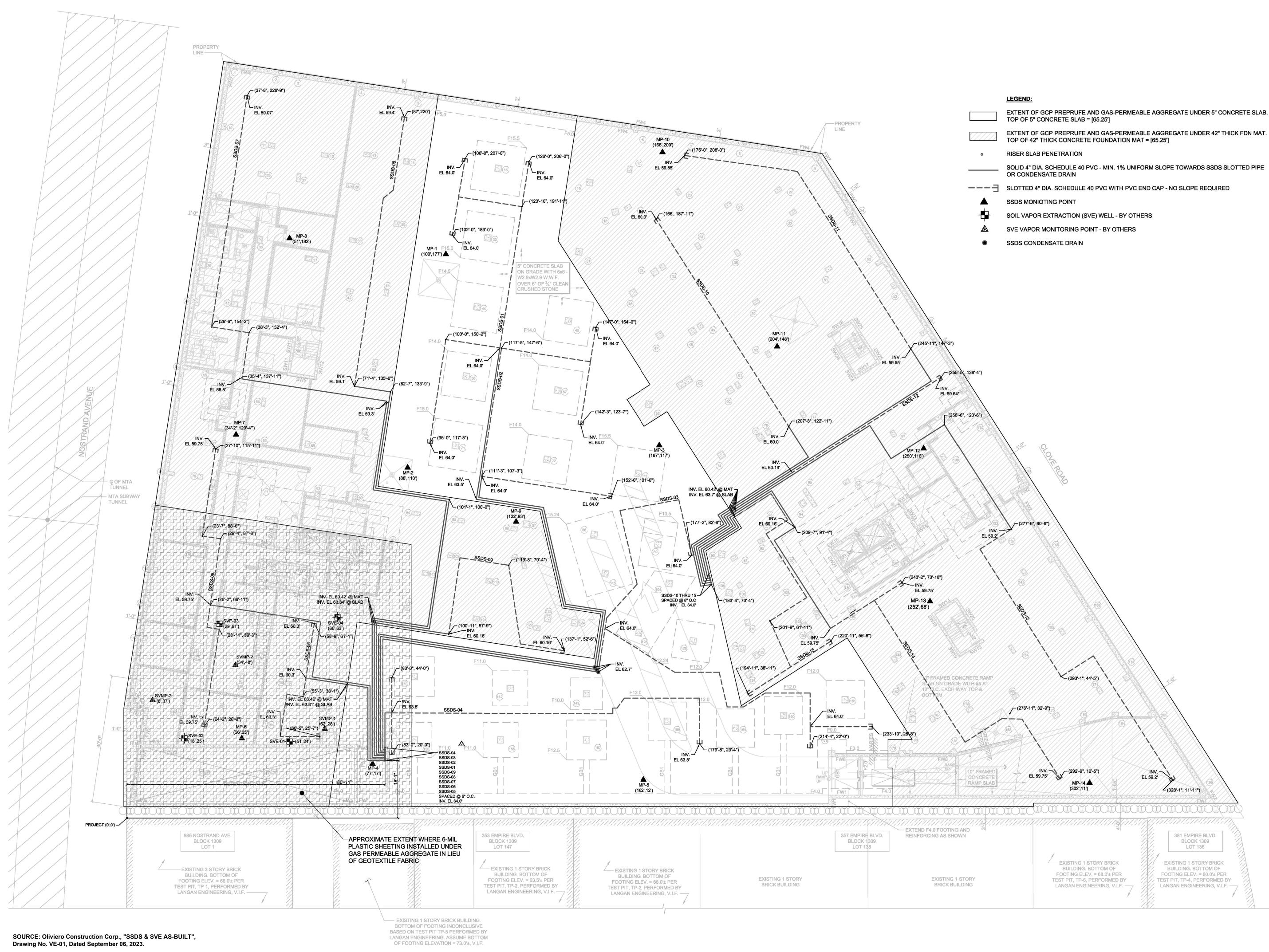


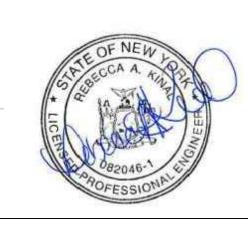


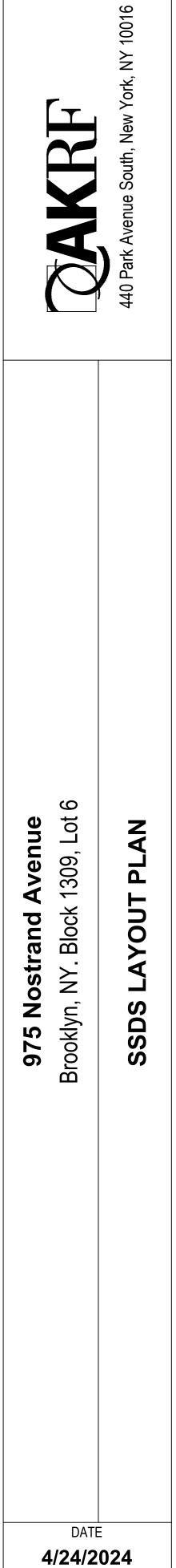


SVE VAPOR MONITORING POINT LOCATIONS					
ID	COLUMN LOCATION ROOM				
SVMP-01	144	GARAGE (SOUTH)			
SVMP-02	143	RETAIL STORAGE			
SVMP-03	153	GAS ROOM			









PROJECT NO.

210225

FIGURE

ATTACHMENT A SVES INSPECTION LOGS

SVE INSPECTION LOG MONTHLY SOIL VAPOR EXTRACTION SYSTEM INSPECTION						
975 Nostrand Avenue, Brooklyn, NY						
Inspector Name: M. Bates	pector Name: M. Bates Date: 7/25/2024					
Time IN: 07:00	Time OUT: 12					
	GENERAL					
Weather: Cloudy Temperature: 8-	4 F Barometric Pressure:	30.09 Equipment 80 F Room Temperature:				
When was the last rain event? 7/13/2024		·				
Is the SVE blower currently operating? Yes	No (circle one)					
If no, ALERT PROJECT MANAGER and		on:				
What is the VFD setting? 36 Hz						
If under 30 Hz, ALERT PROJECT MANA	GER:					
Is condensate in the knockout tank gauge be	low the low-high float sensor?	Yes / No (circle one)				
If no, ALERT PROJECT MANAGER and	manually drain knockout tank					
Is transfer pump working? Yes / No (circle o	ne)					
If no, ALERT PROJECT MANAGER.						
Is 50-gallon drum full? Yes / No (circle one)						
If yes, acknowledge alarm on panel and A	ALERT PROJECT MANAGER.					
Any evidence of system tampering, vandalis		one)				
If yes, ALERT PROJECT MANAGER and p	lease note findings:					
Any evidence of system tampering, vandalis	-	ck? Yes /No (circle one)				
If yes, ALERT PROJECT MANAGER and pl	lease note findings:					
Notes: This SV/E Inspection Log should be a	amplated along with the compli	ng log for cook compling event				
Notes: This SVE Inspection Log should be of PID - Photoionization Detector; ppm - parts p						
Comments:						
l	Emergency Contact Informatio	n l				
Name	Title	Contact Number				
Ashutosh Sharma Joseph Kohl Riggs	AKRF Project Manager Owner's Representative	646-388-9865 (office) 718-473-9663 (office)				

	MONT	HLY SOIL VAPO	E INSPECTION DR EXTRACTIO trand Avenue, E	N SYSTEM IN	SPECTION
CALL	. PROJECT MANA	AGER IF READIN	SVE Operatio		TYPICAL RANGE (IN GRAY)
Pre-Blower Inlet Temperat		Post-Blower Outlet Temperature (°F): 70-110°F			Knockout Tank Vacuum (Inches of water column): 0-90 inH2O
75		110			14
Pre-filter Vacuum (Inches) 0-90 inH2O	of water column):	Post-filter Vacuu 0-90 inH2O	m (Inches of wa	ater column):	Post-Blower Pressure (Inches of water column): 0-90 inH2O
22			20		29
GAC Influent PID (ppm):		GAC Intermedia	te PID (ppm):		GAC Effluent PID (ppm):
		Less than GAC	Influent PID		0 ppm
0.5		ND			ND
Monitoring Location	Vacuum Reading "H2O Between 0 and 90 "H2O	Air Flow Reading "H2O Between 0.000 and 0.050 "H2O	Air Flow Reading CFM		Notes
SVE-01	1.533	NR	NR		
SVE-02	1.52	NR	NR		
SVE-03	1.53	NR	NR		
SVE-04	1.499	NR	NR		
SVMP-01	0.111				
SVMP-02	0.139				
SVMP-03	0.116				

SVE INSPECTION LOG MONTHLY SOIL VAPOR EXTRACTION SYSTEM INSPECTION 975 Nostrand Avenue, Brooklyn, NY							
Inspector Nam	Dector Name: M. Bates Date: 8/27/2024						
Time IN: 08:00	-	Time OUT: 13					
		GENERAL					
Weather: Sunny							
When was the I	ast rain event? 8/26/24						
	ver currently operating? Yes / FPROJECT MANAGER and	No (circle one) please list reason/alarm conditio	on:				
What is the VF[	D setting? 36 Hz						
If under 30 H	Hz, ALERT PROJECT MANA	GER:					
	n the knockout tank gauge be FPROJECT MANAGER and	low the low-high float sensor? manually drain knockout tank	Yes / No (circle one)				
	p working? <b>Yes</b> / No (circle o ſ PROJECT MANAGER.	ne)					
ls 50-gallon dru	m full? Yes / No (circle one)						
lf yes, ackno	wledge alarm on panel and A	LERT PROJECT MANAGER.					
Any evidence o	f system tampering, vandalisi	n or damage? Yes / No (circle	one)				
-	PROJECT MANAGER and pl						
-	f system tampering, vandalisi PROJECT MANAGER and pl	n or damage to the exhaust sta ease note findings:	ck? Yes /No (circle one)				
			ng log for each sampling event. GAC - Granular Activated Carbo	n			
		d to reduce stress on blower.					
l I		Emergency Contact Information	n	T			
	Name	Title	Contact Number				
	Ashutosh Sharma	AKRF Project Manager	646-388-9865 (office)				
	Joseph Kohl Riggs	Owner's Representative	718-473-9663 (office)				

	MONT	HLY SOIL VAPO	E INSPECTION OR EXTRACTION trand Avenue, E	N SYSTEM IN	ISPECTION
CALL	PROJECT MAN	AGER IF READIN	SVE Operatio		TYPICAL RANGE (IN GRAY)
Pre-Blower Inlet Temperatu		Post-Blower Outlet Temperature (°F): 70-110°F			Knockout Tank Vacuum (Inches of water column): 0-90 inH2O
75		105			6.5
Pre-filter Vacuum (Inches o 0-90 inH2O	f water column):	Post-filter Vacuu 0-90 inH2O	im (Inches of wa	ater column):	Post-Blower Pressure (Inches of water column): 0-90 inH2O
6			3		29
GAC Influent PID (ppm):		GAC Intermedia	te PID (ppm):		GAC Effluent PID (ppm):
		Less than GAC Influent PID			0 ppm
3.7	3.7		ND		ND
Monitoring Location	Vacuum Reading "H2O Between 0 and 90 "H2O	Air Flow Reading "H2O Between 0.000 and 0.050 "H2O	Air Flow Reading CFM		Notes
SVE-01	3.666	NR	NR		
SVE-02	3.663	NR	NR		
SVE-03	3.701	NR	NR		
SVE-04	3.501	NR	NR		
SVMP-01	0.075				
SVMP-02	0.101				
SVMP-03	0.088				

	SVE INSPECTION LOG MONTHLY SOIL VAPOR EXTRACTION SYSTEM INSPECTION					
		975 Nostrand Avenue,	Brooklyn, NY			
Inspector Nan	Dector Name: M. Bates Date: 9/24/2024					
Time IN: 09:00		Time OUT: 13				
		GENERAL				
Weather: Cloue	dy Temperature: 72	2 F Barometric Pressure:	30.16	Equipment Room Temperature:	72 F	
When was the	last rain event? 8/30/2024			ľ		
ls the SV/E blow	wer currently operating? Yes /	No (circlo opo)				
		please list reason/alarm condition	on:			
What is the VF	D setting? 36 Hz					
If under 30	Hz, ALERT PROJECT MANA	GER:				
Is condensate	in the knockout tank gauge be	low the low-high float sensor?	Yes / No (circ	le one)		
If no, ALER	T PROJECT MANAGER and	manually drain knockout tank				
ls transfer pum	p working? Yes / No (circle o	ne)				
If no, ALER	T PROJECT MANAGER.					
Is 50-gallon dru	um full? Yes / No (circle one)					
lf yes, ackn	owledge alarm on panel and A	LERT PROJECT MANAGER.				
Any evidence (	of system tampering, vandalis	n or damage? Yes / No (circle	one)			
-	PROJECT MANAGER and pl		one)			
		-				
Any evidence of	of system tampering, vandalisi	n or damage to the exhaust sta	ck? Yes /No	(circle one)		
-	PROJECT MANAGER and pl	-				
		ompleted along with the sampli				
PID - Photoion Comments:	ization Detector; ppm - parts p	er million; NA - Not applicable;	GAC - Granu	lar Activated Carbor	1	
		Emergency Contact Information	n			
	Name	Title		ntact Number	l	
	Ashutosh Sharma Joseph Kohl Riggs	AKRF Project Manager Owner's Representative		88-9865 (office) 73-9663 (office)		

	MONT	HLY SOIL VAPO	E INSPECTIO DR EXTRACTI trand Avenue,	ON SYSTEM IN	SPECTION	
CALL	PROJECT MAN	AGER IF READIN	SVE Operati		TYPICAL RANGE (IN GRAY)	
Pre-Blower Inlet Temperatu		Post-Blower Outlet Temperature (°F): 70-110°F			Knockout Tank Vacuum (Inches of water column): 0-90 inH2O	
80			105		0	
Pre-filter Vacuum (Inches o 0-90 inH2O	f water column):	Post-filter Vacuu 0-90 inH2O	m (Inches of w	/ater column):	Post-Blower Pressure (Inches of water column): 0-90 inH2O	
7			3		32	
GAC Influent PID (ppm):		GAC Intermediate PID (ppm):			GAC Effluent PID (ppm):	
		Less than GAC Influent PID			0 ppm	
5.0	5.0		2.1		1.2	
Monitoring Location	Vacuum Reading "H2O Between 0 and 90 "H2O	Air Flow Reading "H2O Between 0.000 and 0.050 "H2O	Air Flow Reading CFM	Notes		
SVE-01	3.625	NR	4.95	readings based on velocicalc probe		
SVE-02	3.583	NR	3.06	readings based on velocicalc probe		
SVE-03	3.64	NR	6.01	readings based on velocicalc probe		
SVE-04	3.541	NR	2.27	readings based on velocicalc probe		
SVMP-01	0.082					
SVMP-02	0.118					
SVMP-03	0.094					