NYSDEC BROWNFIELD CLEANUP PROGRAM

Community Air Monitoring Plan – BCP # C224329

April 28, 2022

conducted at:

585 Union Street
577-599 Union Streeet (also known as 586 Sackett Street)
Brooklyn, New York
County Tax Map Designation: *Block 433; Lot 28*

Submitted to:

Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York, 12233-7020

Prepared For:

Gowanus Union Street LLC
19 West 24th Street, 12th Floor
New York, NY, 10010

IEC Project # 14729

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CERTIFICATION

I, Xin Yuan am a Professional Engineer (PE) as defined in §43-140. I have primary direct responsibility for implementation of the Community Air Management Plan (CAMP) for the (585 Union Street, Brooklyn, NY) Site (DEC Site # C224329).

I certify that the CAMP has a plan for handling the prevention of exposure to the public from potential contaminant releases resulting from on-site investigative or remedial activities.

Xin Yuan, P.E.

Name

Signature Xin Yuan

4-29-2022

Date

LIST OF ACRONYMS

Acronym	Definition
DER	Division of Environmental Remediation
CAMP	Community Air Monitoring Unit
Mcg/m3	Micrograms Per Cubic Meter
NYS DEC	New York State Department of Environmental Conservation
NYS DOH	New York State Department of Health
PID	Photoionization Detector
PM-10	Particulate Matter Less Than 10 Micrometers in Size
PPM	Parts Per Million
VOC	Volatile Organic Compound

1 INTRODUCTION

Impact Environmental Closures, Inc (IEC) prepared this Community Air Monitoring Plan (CAMP) to protect the community from any potential airborne releases that could result from field activities associated with construction activities for development (foundation installations, support of excavation, etc.) or remediation activities (remedial investigations or remedial action) at the property located at 577-599 Union Street, Brooklyn, New York, herein referred to as the "Site". This work is being performed under the auspices of the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program, DEC Project # C224329. This document has been prepared in accordance with the NYSDEC Program Policy Division of Environmental Remediation (DER)-10/Technical Guidance for Site Investigation and Remediation, dated May 3, 2010.

The CAMP is intended to protect off-site receptors and those not directly involved with remedial activities from potential airborne contaminant releases that result directly from investigative or remedial activities.

1.1 Objectives

The overall objectives of this document are as follows:

- Prevent exposure to the public from potential contaminant releases resulting from on-site investigative or remedial activities;
- Specify monitoring and documentation requirements; and
- Provide contingency details.

2 MONITORING

2.1 Community Air Monitoring Plan

Real-time air monitoring for volatile organic compounds (VOCs) and particulate levels with instrumentation and visual monitoring of fugitive dust migration will be performed at the perimeter of the exclusion zone or work area. Continuous monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, the installation of soil borings or monitoring wells and demolition of contaminated or potentially contaminated structures.

Periodic monitoring for VOCs will be performed during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. Periodic monitoring during sample collection, for instance, will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well bailing/purging, and taking a reading prior to leaving a sample location. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence. Exceedances of action levels observed during performance of the CAMP will be reported to the DEC Project Manager and included in the Daily Report.

2.2 VOC Monitoring, Response Levels, and Actions

VOCs will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis during invasive work. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using a photoionization detector (PID). The PID will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

All 15-minute readings must be recorded and be available for DEC personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

2.3 Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.

2.4 Meteorological Monitoring

Meteorological monitoring will take place on a daily basis. It will consist of temperature, wind direction, and general atmospheric conditions (i.e. rain, snow, etc.). These parameters will be evaluated each morning and recorded in the field notebook. Wind direction should be monitored throughout the day so that upwind and downwind sampling locations can be adjusted if necessary.

All readings will be recorded and be available for DEC personnel to review.

3 DOCUMENTATION

During the implementation of the CAMP, the following information will be recorded and maintained:

- Climatological conditions including temperature wind direction, and other atmospheric conditions along with the date and time of observations;
- Calibration of field instruments;
- VOC 15-min readings as well as instantaneous readings, if necessary; All particulate readings; and
- Any exceedances to the response levels and the respective corrective actions.

VOC 15-min readings will be available for review by the State (DEC and NYSDOH) if requested. All particulate readings will be made available for review if requested.

APPENDICES

585 Union Street, Brooklyn, New York

APPENDIX A
CAMP Daily Status Report Sheet

585 Union Street, Brooklyn, New York

IMPACT ENVIRONMENTAL | 170 Keyland Court | Bohemia | New York | 11716 | 631.269.8800

DAILY STATUS REPORT

Prepared by: _____

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	
TEMP.	< 32		32-50		50-70		70-85		> 85	

DEC Project. No.		DEC Site No.		Date:	
Project Name:					

Environmental Consultant: Impact Environmental Closures, Inc 170 Keyland Court Bohemia, NY 11716.	**Environmental Safety Officer:**
General Contractor:	**Site Manager/ Supervisor:**
Work Activities Performed (Since Last Report)	
Working In Area:	

Samples Collected (Since Last Report):
Air Monitoring (Since Last Report): Prestart Conditions – PID = ___0.0__ppm, Dust = _____ mg/m^3@ High Conditions – PID = __0.0__ ppm @ Dust = __mg/m^3 @
Problems Encountered:
Planned Activities for the Next Day/ Week:

SOIL DISPOSAL INFORMATION

Facility #: **Name/ Location:** **Type of Waste:**	Facility:		Facility:		Facility:	
(# of Trucks, # of Cu.Yds.)	Trucks	Cu. Yds.	Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today						
Weekly Total						
Total to Date						

SOIL IMPORTED INFORMATION

Facility #: **Name/ Location:** **Type of Import:**	Facility:		Facility:		Facility:	
(# of Trucks, # of Cu.Yds.)	Trucks	Cu. Yds.	Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today						
Weekly Total						
Total to Date						

Site Grid Map

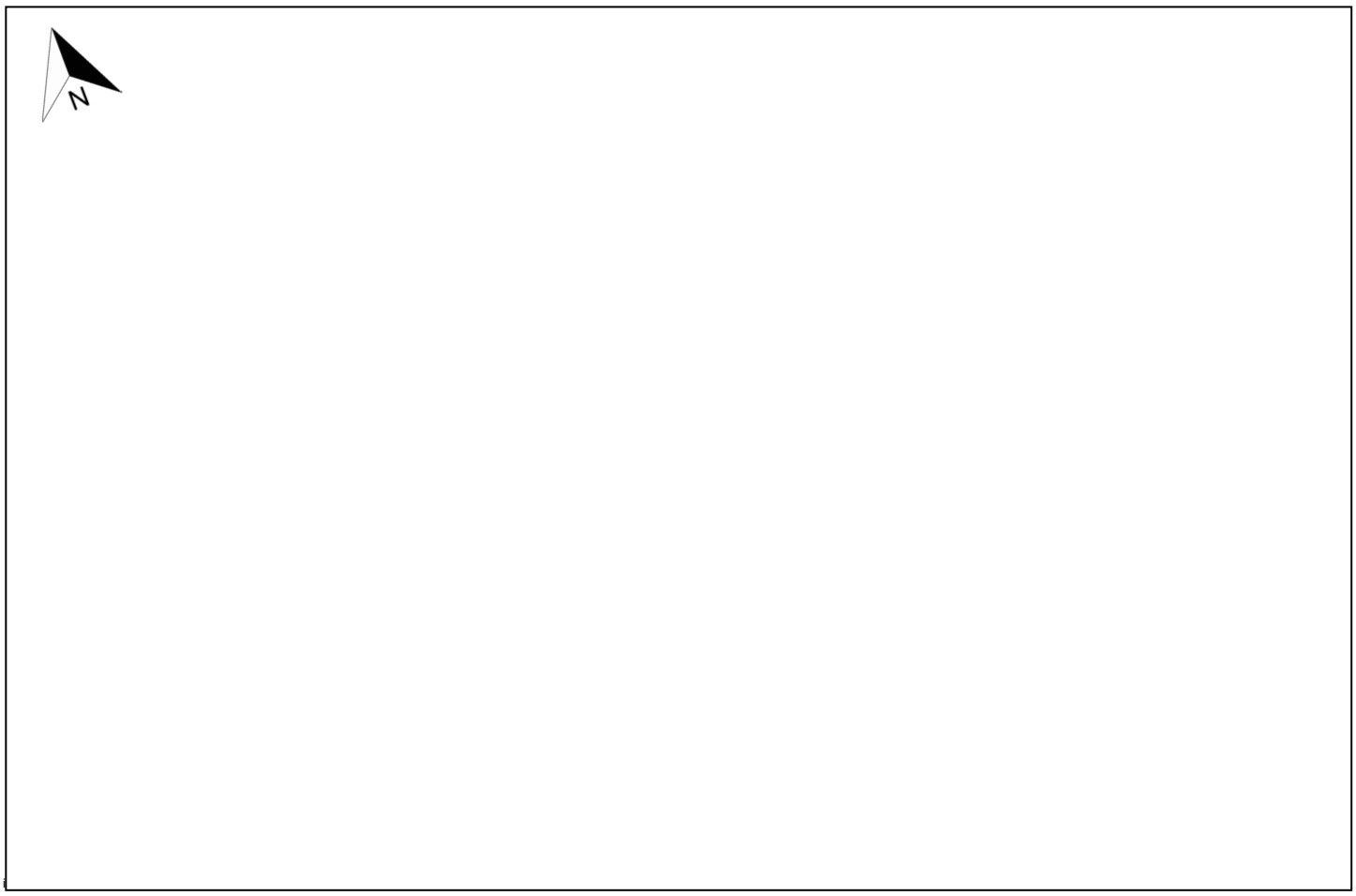

Photo Log

Photo 1 –	
Photo 2-	

Photo 3 –	

APPENDIX B
On-site Dust and Volatile Organic Vapor Monitoring Log

585 Union Street, Brooklyn, New York

On- Site Dust and Volatile Organic Vapor Monitoring

Project: _____ Job No.: _____

Location: _____ On-site Personnel: _____

Day & Date: _____ Weather: _____

	AM	PM	Sample Interval: 15 minutes	
Wind Direction			Background Reading (particulates)	**mg/m^3**
Temperature Range:		°F	Background Reading (organic vapors)	**ppm**
Calibration Dates:	Particulate Meters:		Photoionization Detector:	
Action Level/Response:	Organic vapors: > 5ppm above background levels/ 15 minute readings			
	Particulates: 0.100 mg/m^3 above up wind reading/15 minute period			

Time	Particulate levels:		ORGANIC VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
0700				
0715				
0730				
0745				
0800				
0815				
0830				
0845				
0900				
0915				
0930				
0945				
1000				
1015				
1030				
1045				
1100				
1115				
1130				
1145				
1200				

Project: _____ Job No.: _____

Location: _____ Day & Date: _____

Time	Particulate levels:		ORGANIC VAPOR LEVELS	NOTES
	UPWIND (mg/m^3)	DOWNWIND (mg/m^3)	(ppm)	
1215				
1230				
1245				
1300				
1315				
1330				
1345				
1400				
1415				
1430				
1445				
1500				
1515				
1530				
1545				
1600				
1615				
1630				
1645				
1700				