FORMER SUNBELT EQUIPMENT

25 KENT AVENUE BROOKLYN, NEW YORK Block 2282, Lot 1

SITE MANAGEMENT PLAN

NYSDEC Site Number: C224207

Prepared for:

19 Kent Acquisition LLC c/o R. Bruce Balderson, Rubinstein Partners 2929 Arch Street, 28th Floor Philadelphia, PA 19104 (215) 563-3558 rfurches@rubinsteinpartners.com

Prepared by:



Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

DECEMBER 2017

CERTIFICATIONS

I, Ariel Czemerinski, certify that I am currently a NYS registered professional engineer and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

		THE CZEMERINOS
076508	12/14/17	E WAR WOOD TO THE
NYS Professional Engineer #	Date	Signature 076508

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LIST OF ACRONYMS

Acronym	Definition Definition
AMC	AMC Engineering
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
CQMP	Construction Quality Management Plan
DUSR	Data Usability Statement Report
EBC	Environmental Business Consultants
FER	Final Engineering Report
HDPE	High Density Polyethylene
IRM	Interim Remedial Measure
NYC	New York City
NYCDEP	New York City Department of Environmental Protection
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PS	Public School
PVC	Polyvinyl Chloride
RAO	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
RSCOs	Recommended Site Cleanup Objectives
SCG	Standards, Criteria, and Guidelines
SMMP	Soil/Materials Management Plan
SSDS	Sub-slab Depressurization System
SWPPP	Stormwater Pollution Prevention Plan
SVOCs	Semi-Volatile Organic Compounds
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, maintenance and reporting activities required by this Site Management Plan:

Site Identification: Institutional Controls:	Site No: C224207 - Former Sunbelt Equipment 25 Kent Avenue, Brooklyn, New York 11249 1. The portions of the property covered by the environmental easement may be used for restricted residential, commercial, and industrial uses as indicated in the easement and in the detailed sections below (subject to applicable zoning). The balance of the Site that is not covered by the environmental easement has been remediated to Track 1 unrestricted use standards and no use restrictions apply (see environmental easement);
	 2. IC - A Site-Specific Environmental Easement will be recorded for the Track 2 portions of the Site that requires the following: The Track 2 portion of the Site designated as EP81 may be used for: restricted residential, commercial, or industrial use; The Track 2 portion of the Site designated as EP5 may be used for: commercial, or industrial use; The use of groundwater underlying the Track 2 portions of the Site is prohibited without necessary water quality treatment as determined by the NYSDOH to render it safe for its intended purpose, and the user must first notify and obtain written approval to do so from the Department; Compliance with the Environmental Easement by the Grantee and the Grantee's successors is required; The Owner of the Track 2 portions of the Site must, on the frequency required in Table 3 of this SMP, submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed on the Track 2 portions of the Site are unchanged from the previous certification or that any changes to the controls were approved by DEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitute a violation or failure to comply with the controls. All future activities that will disturb remaining contaminated material under the Track 2 portions of the Site must be conducted in accordance with this SMP; Maintenance and inspection, and reporting of the Site shall be performed as defined in this SMP; Access to the Track 2 portions of the Site must be provided to

agents, employees or other representatives of the State of N		
York with reasonable prior notice to the property owner to assu		
compliance with the restrictions identified by the Environmen Easement; and		
• Vegetable gardens and farming on the Track 2 portions of the S are prohibited.		
Inspections:	Frequency	
Site inspection of the Track 2 portions of the Site	Annually	
Reporting:		
1. Periodic Review Report	Every 5	
1. I chould heview hepott	years	

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Former Sunbelt Equipment Site located in Brooklyn, New York (hereinafter referred to as the "Site"). See Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP) Site No. C224207 which is administered by New York State Department of Environmental Conservation (NYSDEC).

19 Kent Development LLC entered into a Brownfield Cleanup Agreement (BCA) as a Volunteer Applicant on May 22, 2015, with the NYSDEC to remediate the Site. On December 24, 2015, 19 Kent Development LLC conveyed the Site to 19 Kent Acquisition LLC, which was added to the BCA as a Volunteer Applicant on January 5, 2016, and is the current Remedial Party. 19 Kent Partners LLC, an affiliate of 19 Kent Acquisition LLC, was added to the BCA as a Volunteer Applicant on January 7, 2016. A figure showing the Site location and boundaries of this Site is provided in Figure 2. The boundaries of the Track 2 portions of the Site that are subject to the Environmental Easement and this SMP are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix A.

After completion of the remedial work, some contamination was left at the Track 2 portions of this Site, which is hereafter referred to as "remaining contamination". Institutional Controls (ICs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Kings County Clerk, requires compliance with this SMP and all ICs placed on the Track 2 portions of the Site.

This SMP was prepared to manage remaining contamination at the Track 2 portions of the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

 This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC); and

Failure to comply with this SMP is also a violation of Environmental Conservation Law,
 6NYCRR Part 375 and the BCA (Index #C224207-03-15; Site #C224207) for the Site,
 and thereby subject to applicable penalties.

All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the Site is provided in Appendix B of this SMP.

This SMP was prepared by AMC Engineering, PLLC (AMC), on behalf of 19 Kent Acquisition LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May, 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs that are required by the Environmental Easement for the Site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: post-remedial removal of contaminated sediment or soil, or other significant change to the site conditions. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER -10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.

- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ICs.

Any change in the ownership of the Track 2 portions of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the Brownfield Cleanup Agreement (BCA) and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Track 2 portions of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1 on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of Site-related contact information is provided in Appendix B.

Table 1: Notifications*

Name	Contact Information	
NYSDEC Project Manager	scott.deyette@dec.ny.gov; (518) 402-9794	
Scott Deyette	scott.dcycttc@dec.ny.gov, (318) 402-9794	
NYSDEC Regional Chief, Superfund and		
Brownfield Cleanup Section	jane.oconnell@dec.ny.gov; (718) 482-4599	
Jane O'Connell		
NYSDEC Site Control Chief	Kelly.Lewandowski@dec.ny.gov; (518) 402-	
Kelly Lewandowski	9553	

^{*} Note: Notifications are subject to change and will be updated as necessary.

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2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The Site is located in Brooklyn, Kings County, New York, and is identified as Block 2282 and Lot 1 on the New York City Tax Map (see Figure 2). The Site is an approximately 1.83-acre area and is bounded by North 13th Street to the north, North 12th Street to the south, Wythe Avenue to the east, and Kent Avenue to the west (see Figure 2 – Site Layout Map). The boundaries of the Track 2 portions of the Site that are subject to the Environmental Easement and this SMP are more fully described in Appendix A – Environmental Easement. The owner of the Site parcel at the time of issuance of this SMP is:

19 Kent Acquisition LLC2929 Arch StreetPhiladelphia, Pennsylvania 19104

2.2 Physical Setting

2.2.1 Land Use

The Site is being developed with a new 10-story commercial building which will cover the entire Site. Once the building is completed, it will include a 2-level cellar parking garage, retail space on the first floor, a health care facility on floors 2 through 9, and office space on the 10th floor. The Site is zoned M1-2

The area surrounding the property is highly urbanized and predominantly consists of older heavy industry properties along the waterfront east to Kent and Wythe Avenues. Many of these properties are being renovated and repurposed, such as the City park to the west or redeveloped with new commercial buildings such as hotels, office and retail space. The areas east of Wythe Avenue have been undergoing a transformation as former industrial properties are being redeveloped for residential use. This transformation was related to the upzoning of many commercial industrial properties to residential as part of the Greenpoint-Willamsburg Rezoning Action.

2.2.2 Geology

Regional maps created by the United States Geological Survey (USGS) show bedrock as an igneous intrusive known as the Ravenswood granodiorite of middle Ordovician to middle Cambrian age. Soil borings on the site have not encountered bedrock and it is presumed to lie more than 70 feet below ground surface. Unconsolidated sediments overlie the bedrock and consist of Pleistocene-aged sand, gravel, and silt clays deposited by glacial-fluvial activity. Nonnative fill materials consisting of dredge spoils, rubble and/or other materials have historically been used to reinforce and extend shoreline areas and to raise and improve the drainage of low-lying areas. Soil at the Site consisted of historic fill material, specifically a silty non-native fill with bricks, coal ash, and other rubble, to a depth of approximately 8 to 12 feet below the surface. The historic fill material was underlain by native brown fine sand with silt and some clay, with a peat layer present just above this layer at some locations.

2.2.3 Hydrogeology

Prior to redevelopment, groundwater at the Site was present under water table conditions at a depth of approximately 5 to 12 feet below grade. Local flow at the Site appeared to be to the southeast (Figure 3). However, it is highly likely that overall flow was westward towards the East River. Redevelopment required excavation of the entire Site to an approximate depth of 22 feet below sidewalk grade to construct the new buildings mat slab. Therefore, the new building's cellar and mat slab is installed at least 12 feet below groundwater.

2.3 Investigation and Remedial History

The Site is located on a portion of the former Pratt Manufacturing Co. operations dating to 1887, and identified as the Standard Oil Company by 1905, with several aboveground petroleum storage tanks on the Site. By 1945, this facility had been demolished. Sometime between 1942 and 1951, Sunbelt Equipment, a construction equipment rental company, began occupying the property.

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 7.0 - References.

Prior to entry into the BCP, four listed LTANKS and NYSPILLS incidents were investigated and addressed to the satisfaction of the Department, as summarized in the Remedial Investigation Report, dated December 2014, which documented the Remedial Investigation ("RI") conducted at the Site in November and December of 2014. Activities completed during the RI included:

- Sampling for non-petroleum contaminants such as pesticides, PCBs, and metals in soil and groundwater, including the analysis of soil and groundwater samples;
- Soil sampling and analysis for petroleum compounds in soil samples from test pit locations;
- The installation of groundwater monitoring wells;
- The collection and analysis of groundwater samples for petroleum compounds; and
- The collection of analysis of soil gas and indoor air samples for VOCs from soil gas sampling locations.

The results of the RI sampling identified petroleum VOC and SVOC contamination throughout much of the Site. The historic use of the Site as a petroleum works and as an equipment maintenance/storage facility resulted in discharges of gasoline and diesel fuel/fuel oil, which contaminated large areas of the Site with elevated levels of VOCs and SVOCs. Releases likely occurred from multiple sources, including subsurface releases from underground storage tanks (USTs) and piping, and surface spills related to fueling operations, equipment maintenance, fuel transfer, and damaged and leaking heavy equipment. Thus, the source areas comprised multiple areas of the Site, including the southwest corner, the north-central area, the south-central area, and the northeast corner. Elevated levels of hazardous metals, including arsenic, barium, copper, mercury, selenium, zinc, and lead, were present in the historic fill materials throughout the Site.

The RI found shallow groundwater to be impacted with petroleum VOCs in the western third of the Site, with the greatest impact located in the southwest corner of the Site, where elevated naphthalene was also detected.

Soil gas sampling identified generally low levels of petroleum-related volatile organic compounds (BTEX), though elevated levels of light-end petroleum compounds including heptane, hexane, and cyclo-hexane were reported in several locations. Chlorinated VOCs (CVOCs) were also reported in almost all of the soil gas samples. The Remedial Investigation

Report concluded that the CVOC soil gas appeared to be migrating onto the Site in vapor form from an off-Site source.

A Remedial Action Work Plan (RAWP) was prepared by AMC in December 2014, and revised in July 2015. The RAWP selected a Track 1 remedy for the Site consisting of the removal of all on-site soils which exceed the Unrestricted Use Soil Cleanup Objectives (SCOs), and provided for a Track 2 remedy to the extent Track 1 SCOs could not be achieved. The Department approved this remedy in its Decision Document of July 2015.

Implementation of the remedy included the following:

- Excavation of soil/fill exceeding Track 1 Unrestricted Use SCOs to development depths which averaged 24 feet below grade, with deeper remedial excavation in certain areas where end point samples at development depth exceeded Unrestricted Use SCOs;
- Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during all intrusive Site work;
- Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of Track 1 SCOs;
- Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State, and local rules and regulations for handling, transport, and disposal;
- Dewatering and treatment of petroleum-impacted groundwater before discharging to the NYC sewer system under a NYCDEP sewer discharge permit;
- Import of ³/₄" clean stone and ³/₄" recycled concrete aggregate to be used for backfill below the building's concrete mat slab in compliance with: (1) chemical limitations and other specifications listed in the RAWP, and (2) all Federal, State, and local rules and regulations for handling and transport of material;
- In two areas in the southwestern corner of the Site, end point samples exceeded Track 1
 SCOs, and samples obtained from test pits indicated that VOC impacts exceeding Track 1
 SCOs extended to a depth below levels that could be safely excavated;
- Development and implementation of a Site Management Plan for long term management of remaining contamination below the Track 2 portions of the Site which includes plans for: (1) Institutional Controls, (2) inspections and (3) reporting; and

• An Environmental Easement recorded on the two Track 2 portions of the Site will ensure implementation of the SMP.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document dated July 28, 2015, are as follows:

2.4.1 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.

2.4.2 Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

2.4.3 Soil Vapor

RAOs for Public Health Protection

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor

intrusion into buildings at the Site.

2.5 Remaining Contamination

2.5.1 *Soil*

Soil above Track 1 Unrestricted Use SCOs remains below the 36 inch thick concrete mat slab within the Track 2 portions of the Site. The Track 1 Unrestricted Use SCO exceedences consist of the VOCs benzene and ethylbenzene. Benzene was detected at a concentration of 700 ppb at the final excavation depth in the EP5 area, and at 750 ppb at the final excavation depth in the EP81 area. Deeper soil samples from below the final excavation depth were collected from the two Track 2 portions of the Site from test pits excavated to 6.5 feet (EP5) and 7 feet (EP81).

From the test pit excavated within the EP5 area, soil samples were collected representing the intervals 1 ft (EP5.1), 2 ft (EP5.2), 2.5 ft (EP5.3), 3 ft (EP5.3), 3.5 ft (EP5.4), 4 ft (EP5@4ft), 5ft (EP5@5ft), and 6.5ft (EP5@6.5 ft). Benzene was detected above the Track 1 Unrestricted Use SCO (60 ppb) within each of the soil samples, ranging in concentration from 300 ppb to 7,900 ppm. Ethylbenzene was only detected above the Track 1 Unrestricted Use SCO (1,000 ppb) within soil sample EP5@6.5ft (1,900 ppb).

From the test pit excavated within the EP81 area, soil samples were collected representing the intervals 1 ft (EP81.1), 2 ft (EP81.2), 5 ft (EP81@5ft), 6ft (EP81@6ft), and 7ft (EP81@7 ft). Benzene was detected above the Track 1 Unrestricted Use SCO within each of the soil samples, ranging in concentration from 340 ppb to 2,200 ppb.

The Track 1 Unrestricted Use SCO exceedences of benzene and ethylbenzene were encountered below a 3ft layer of peat moss and clay, and at depths greater than 15 feet below the groundwater table. Therefore, the Track 1 Unrestricted Use SCO exceedences of benzene and ethylbenzene are believed to be associated with an off-Site source which migrated onto the Site when the water table was approximately 15 feet lower than it is at the present time. The contaminants were forced upward as the water table rose and were entrained in the clay through the upward pressure gradient.

Table 2 and Figure 4 summarize the results of all soil samples collected that exceed Track 1 Unrestricted Use SCOs at the Site after completion of remedial action.

3.0 INSTITUTIONAL CONTROL PLAN

3.1 General

Since remaining contamination exists at the Track 2 portions of the Site, Institutional Controls (ICs) are required to protect human health and the environment. This IC Plan describes the procedures for the implementation and management of all ICs at the Site. The IC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all ICs on the Site;
- The basic implementation and intended role of each IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of ICs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix C) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the ICs required by the Site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs is required by the RAWP to: (1) prevent future exposure to remaining contamination; and, (2) limit the use and development of the Track 2 portions of the Site to restricted residential, commercial, or industrial uses only (as further described below), consistent with applicable zoning. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on Figure 2.

These ICs are:

• The Track 2 portion of the Site designated as EP81 may be used for: restricted residential, commercial, or industrial use;

- The Track 2 portion of the Site designated as EP5 may be used for: commercial, or industrial use;
- All ICs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the Track 2 portions of the Site is prohibited without necessary water quality treatment as determined by the NYSDOH to render it safe for its intended purpose, and the user must first notify and obtain written approval to do so from the Department;
- Compliance with the Environmental Easement by the Grantee and the Grantee's successors is required;
- The Owner of the Track 2 portions of the Site must, on the frequency required in Table 3 of this SMP, submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by DEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitute a violation or failure to comply with the controls.
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Maintenance and inspection, and reporting of the Site inspection shall be performed as defined in this SMP;
- Access to the Track 2 portions of the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement; and
- Vegetable gardens and farming on the Track 2 portions of the Site are prohibited.

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4.0 MAINTENANCE AND INSPECTION PLAN

4.1 General

The Site remedy does not rely on any mechanical systems, such as groundwater treatment systems, sub-slab depressurization systems or air sparge/soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not included in this SMP.

4.2 Annual Site Inspection

Site inspections for the Track 2 portions of the Site will be performed at a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site inspections will also be performed after all severe weather conditions. During these inspections, an inspection form will be completed as provided in Appendix D – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs;
- An evaluation of the Site;
- General site conditions at the time of the inspection;
- The site inspection activities being conducted; and
- Confirm that site records are up to date.

Site inspections for the Track 2 portions of the Site will be conducted and documented annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- If the Track 2 portions of the Site continues to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria; and
- If site records are complete and up to date.

Reporting requirements are outlined in Section 6.0 of this SMP.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster occurs, verbal notice to the NYSDEC must be given by noon of the following

day. In addition, an inspection of the Site will be conducted within 5 days of the event by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event, and include a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

Unscheduled inspections may take place when a suspected failure has been reported or an emergency occurs that is deemed likely to affect the Site.

A complete list of inspection activities is provided in the Inspection Checklist, provided in Appendix D - Site Management Forms.

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5.0 PERIODIC ASSESSMENTS/EVALUATIONS

5.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

This section provides a summary of vulnerability assessments that will be conducted for the site during periodic assessments, and briefly summarizes the vulnerability of the site to severe storms/weather events and associated flooding.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the Site is located adjacent to, or slightly within, a moderate risk flood zone to the west and to the north, and adjacent to a high risk flood zone (subject to 1% 100-year annual flood) in the east, northwest, and northeast areas of the property. The Site is served by the NYC Municipal sewer system and the completed building will meet all NYC building codes for drainage. Therefore, the Site is not considered to be vulnerable to storm events related to climate change.

5.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the site during site management, and as reported in the Periodic Review Report (PRR).

5.2.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System Optimization (RSO), or at

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any time that the Project Manager feels appropriate, e.g. during significant maintenance events or in conjunction with storm recovery activities.

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

5.2.2 Frequency of Inspections

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to inspect the Site have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

As part of this effort, consideration shall be given to:

- Reduced site visits;
- Coordination/consolidation of activities to maximize foreman/labor time; and
- Use of mass transit for Site visits, where available.

6.0. REPORTING REQUIREMENTS

6.1 Site Management Reports

All Site management inspection, maintenance and monitoring events will be recorded on the appropriate Site management form provided in Appendix D. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 3 and summarized in the Periodic Review Report.

Table 3. Schedule of Interim Inspection Reports

Task/Report	Frequency*	
Site Inspection	Annually, and as needed.	
Periodic Review Report	Every 5 years	

^{*} The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.

All interim inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Copies of all field forms completed (e.g., inspection logs);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;

- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

6.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the frequency of submittal will be determined by the Department. In the event that the Track 2 portions of the Site are subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses all Track 2 portions of the Site described in Appendix A - Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period.

- Identification, assessment and certification of all ICs required by the remedy for the Site.
- Results of the required Site inspections and severe condition inspections, if applicable.
- All applicable Site management forms and other records generated for the Site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- A site evaluation, which includes the following:
 - o The compliance of the remedy with the requirements of the site-specific RAWP and Decision Document;

- o Any new conclusions or observations regarding Site contamination based on inspections;
- o Recommendations regarding any necessary changes to the remedy; and
- o The overall performance and effectiveness of the remedy.

6.2.1 Certification of Institutional Controls

Following the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"For each institutional control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional controls required by the remedial program was performed under my direction;
- The institutional controls employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment:
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- *Use of the site is compliant with the environmental easement;*
- No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid;
- The assumptions made in the qualitative exposure assessment remain valid;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, , of , am certifying as Designated Site Representative for the site."

The signed certification will be included in the Periodic Review Report.

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located and the NYSDOH Bureau of Environmental Exposure Investigation. The Periodic Review Report may need to be submitted in hard-copy format, as requested by the NYSDEC project manager.

6.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional control, a Corrective Measures Work Plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by the NYSDEC.

7.0 REFERENCES

Former Sunbelt Equipment BCP No. C224207 Remedial Action Work Plan, prepared by ACM Engineering, dated December 2014, revised July 2015

Decision Document, Former Sunbelt Equipment, Brownfield Cleanup Program Site No. C224207, prepared by NYSDEC Division of Environmental Remediation, dated July 2015

6NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation".

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

TABLES

Former Sunbelt Equipment C224207 Site Management Plan

Table 1: Notifications*

Name	Contact Information
NYSDEC Project Manager Scott Deyette	scott.deyette@dec.ny.gov; (518) 402-9794
NYSDEC Regional Chief, Superfund and Brownfield Cleanup Section Jane O'Connell	jane.oconnell@dec.ny.gov; (718) 482-4599
NYSDEC Site Control Chief Kelly Lewandowski	Kelly.Lewandowski@dec.ny.gov; (518) 402-9553

^{*} Note: Notifications are subject to change and will be updated as necessary.

TABLE 2 Site Management Plan Remaining Soil Sample Exceedences

COMPOUND	Range In Exceedences	Frequency of Detection	EP5	EP5.1	EP5.2	EP5.3	EP5.4	EP5 @ 4ft	EP5 @ 5ft	EP5 @ 6.5ft
			Final Excavation Depth	1ft Below Final Excavation Depth	2ft Below Final Excavation Depth	3ft Below Final Excavation Depth	3.5ft Below Final Excavation Depth	4ft Below Final Excavation Depth	5ft Below Final Excavation Depth	6.5ft Below Final Excavation Depth
			6/16/2017	6/16/2017	6/16/2017	6/23/2017	6/23/2017	7/5/2017	7/5/2017	7/5/2017
Sample Results in ug/L										
Benzene	300-7,900 ppb	8	700	390	850	300	1,100	2,400	3,700	7,900
Ethylbenzene	1,900 ppb	1	-	-	-	-	-	-	-	1,900

		Frequency of Detection	EP81	EP81.1	EP81.2	EP81 @ 5ft	EP81 @ 6ft	EP81 @ 7ft
COMPOUND	Range In Exceedences							
			6/28/2017	6/28/2017	6/28/2017	7/5/2017	7/5/2017	7/5/2017
Sample Results in ug/L								
Benzene	340-2,200	6	750	510	340	460	1,400	2,200

Notes:

* - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives

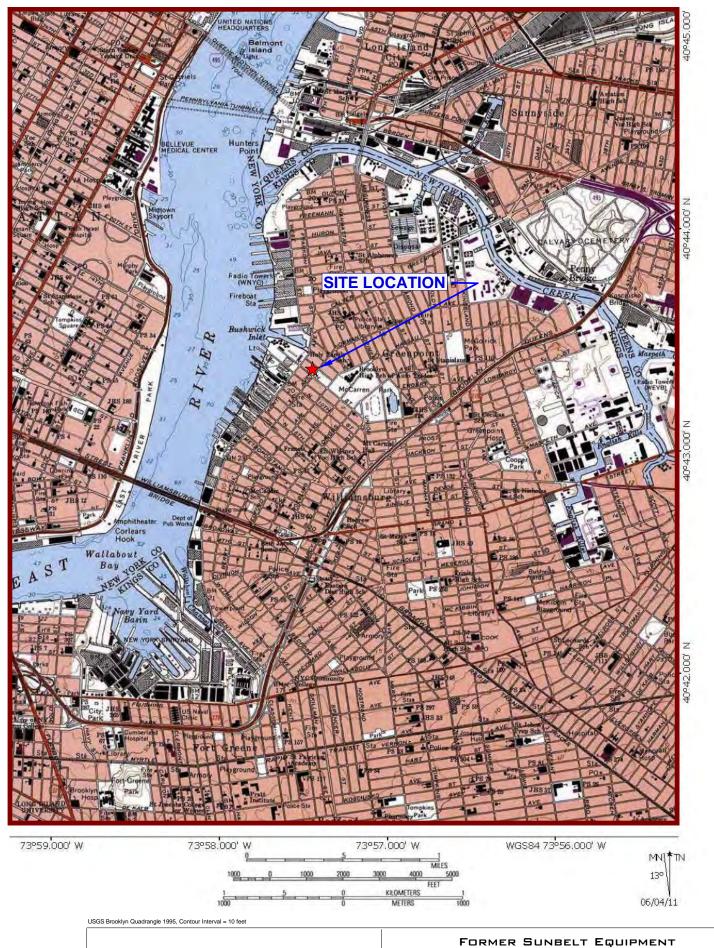
Bold/highlighted- Indicated exceedance Above Track 1 SCOs

Former Sunbelt Equipment C224207 Site Management Plan

Table 3. Schedule of Interim Inspection Reports

Task/Report	Frequency*
Site Inspection	Annually, and as needed.
Periodic Review Report	Every 5 years

FIGURES



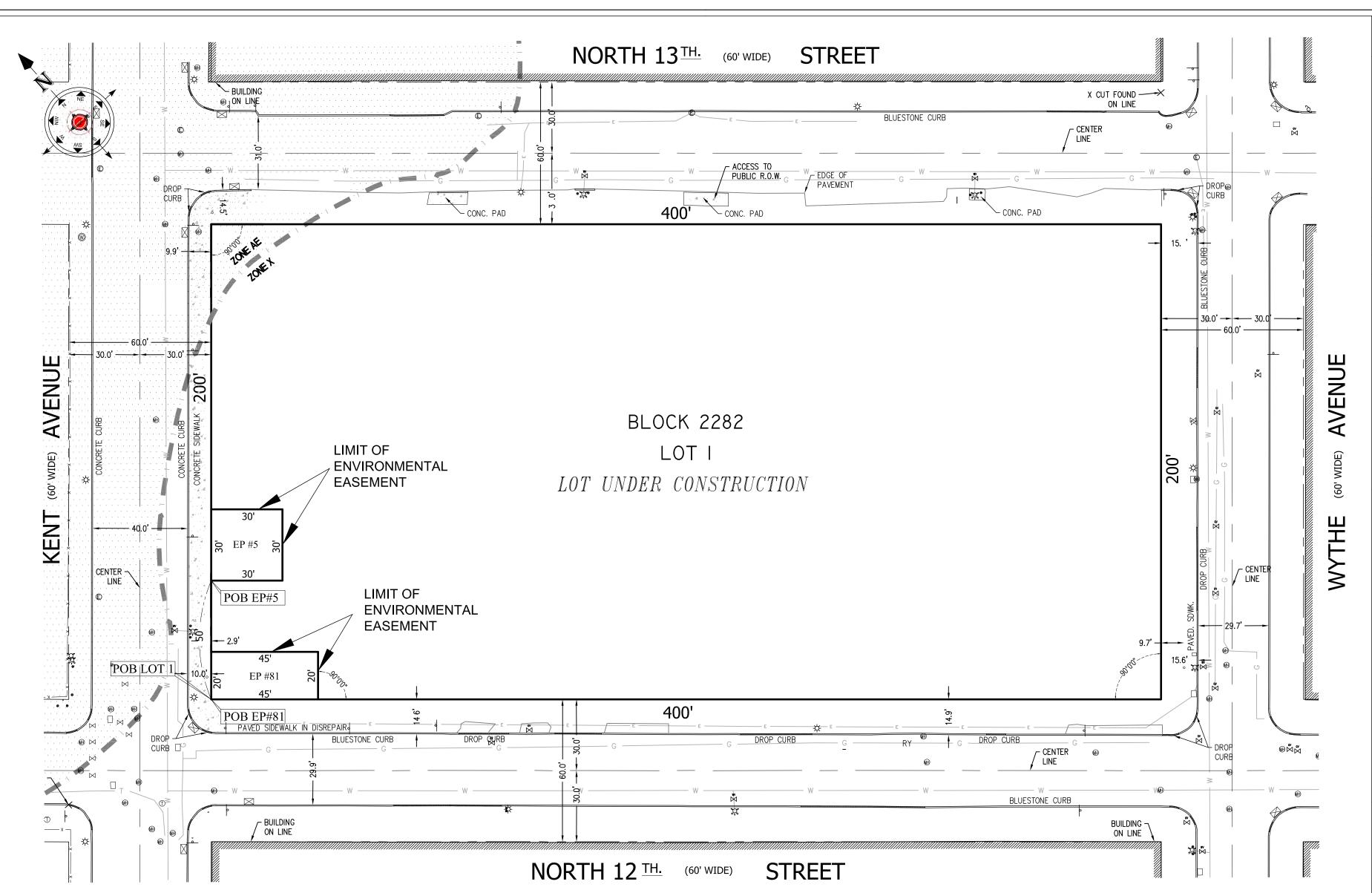


Phone 631.504.6000 631. 924 .2870

FIGURE 1

SITE LOCATION MAP

25 KENT AVENUE, BROOKLYN, NY



— LEGEND —

- (

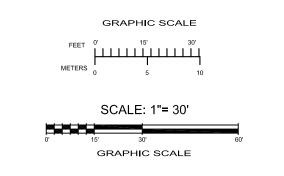
MAP OF PROPERTY LOCATED

25 KENT AVENUE BROOKLYN, N.Y.

DATE	DESCRIPTION
JULY 21, 2017	ENVIRONMENTAL EASEMENT

BLOCK	2282
	1
SECTION	
COUNTY	KINGS
DWG BY	A.G.
CHKD BY	A.S.
SCALE	1"- 25

NOTE: Unauthorized alterations or additions to this survey is a violation of section 7209 of the New York State education law. Copies of this survey map not bearing the land surveyor's inked seal or embossed seal shall not be considered to be a valid true copy. Guarantees or certifications indicated hereon shall run only to the person for whom the survey is prepared, and on his behalf to the title company, governmental agency and lending institution listed hereon, and to the assignees of the lending institution. Guarantees or certification are not transferable to additional institutions or subsequent owners.



LEGAL DESCRIPTION -BLOCK-2281 LOT- 1

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF BROOKLYN, COUNTY OF KINGS, CITY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE NORTHERLY SIDE OF NORTH 12TH STREET AND THE EASTERLY SIDE OF KENT AVENUE: RUNNING THENCE NORTHERLY ALONG THE EASTERLY SIDE OF KENT AVENUE, 200 FEET TO THE CORNER FORMED BY THE INTERSECTION OF THE EASTERLY SIDE OF KENT AVENUE AND THE SOUTHERLY SIDE OF NORTH 13TH STREET; THENCE EASTERLY ALONG THE SOUTHERLY SIDE OF NORTH 13TH STREET. 400 FEET TO THE WESTERLY SIDE OF WYTHE AVENUE; THENCE SOUTHERLY ALONG THE WESTERLY SIDE OF WYTHE AVENUE, 200 FEET TO THE NORTHERLY SIDE OF NORTH 12TH STREET; THENCE WESTERLY ALONG THE NORTHERLY SIDE OF NORTH 12TH STREET, 400 FEET TO THE POINT OR PLACE OF BEGINNING.

LEGAL DESCRIPTION - EP #81 LOCATION

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF BROOKLYN, COUNTY OF KINGS, CITY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE NORTHERLY SIDE OF NORTH 12TH STREET AND THE EASTERLY SIDE OF KENT AVENUE: RUNNING THENCE NORTHERLY ALONG THE EASTERLY SIDE OF KENT AVENUE, 20 FEET; THENCE EASTERLY 45 FEET; THENCE SOUTHERLY 20 FEET TO THE NORTHERLY SIDE OF NORTH 12TH STREET; THENCE WESTERLY 45 FEET TO THE POINT OF BEGINNING.

LEGAL DESCRIPTION - EP #5 LOCATION

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH OF BROOKLYN, COUNTY OF KINGS, CITY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT A POINT 50 FEET NORTHERLY FROM THE CORNER FORMED BY THE INTERSECTION OF THE NORTHERLY SIDE OF NORTH 12TH STREET AND THE EASTERLY SIDE OF KENT AVENUE: RUNNING THENCE NORTHERLY ALONG THE EASTERLY SIDE OF KENT AVENUE, 30 FEET; THENCE EASTERLY 30 FEET; THENCE SOUTHERLY 30 FEET; THENCE WESTERLY 30 FEET TO THE POINT OF BEGINNING.

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law. The engineering and institutional controls for this Easement are set forth in the Site Management Plan(SMP). A copy of SMP must be obtained by any party with an interest in the property. The SMP can be obtained from NYS Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov.

EMPIRE STATE LAYOUT, INC.

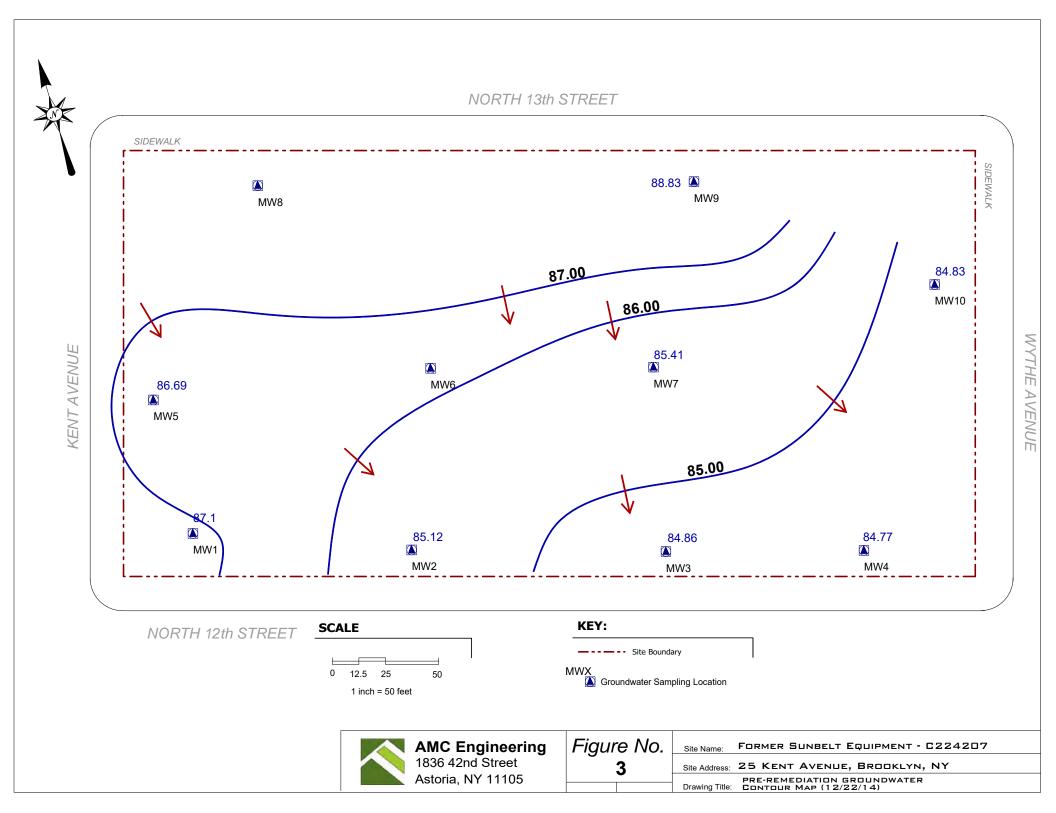


TEL 516-679-7970 FAX 516-679-7971 2209 MERRICK ROAD SUITE 202 MERRICK, NY 11566

TEL. 212-868-1000

MANHATTAN OFFICE

VISIT US AT: WWW.EMPIRESTATELAYOUT.COM



Astoria, NY 11105

Drawing Title: REMAINING SOIL EXCEEDENCES MAP

<u>APPENDIX A</u> Environmental Easement

County: Kings Site No: C224207 Brownfield Cleanup Agreement Index : C224207-03-15 as last amended January 7, 2016

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36

OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 27 day of October, 2017, between Owner(s) 19 Kent Acquisition LLC, having an office at c/o Rubenstein Partners, 2929 Arch Street, 28th Floor, Philadelphia, Pennsylvania 19104, County of Philadelphia, State of Pennsylvania (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 25 Kent Street (a/k/a 19 Kent Avenue) in the City of New York, County of Kings and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 2282 Lot 1, being the same as that property conveyed to Grantor by deed dated December 24, 2015 and recorded in the City Register of the City of New York as CRFN # 2015000463551. The property subject to this Environmental Easement (the "Controlled Property") comprises a portion of the lot and is approximately 0.04 +/- acres, and is hereinafter more fully described in the Land Title Survey dated July 21, 2017 prepared by Vincent Teutonico, L.L.S. of Empire State Layout, Inc., which will be attached to the Site Management Plan. The Controlled Property description is broken down into two distinct areas and is identified as "EP #81 LOCATION" and "EP #5 LOCATION" set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation

established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C224207-03-15 as last amended January 7, 2016, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

- 1. <u>Purposes</u>. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.
- 2. <u>Institutional and Engineering Controls</u>. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.
 - A. (1) The Controlled Property may be used for:

Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv) for that property described in Schedule "A" as "EP #81 LOCATION"; and Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv) for that property described in Schedule "A" as "EP #5 LOCATION"

- (2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment_as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

County: Kings Site No: C224207 Brownfield Cleanup Agreement Index : C224207-03-15 as last amended January 7, 2016

- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- (7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.
- B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.
- C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

- D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.
- E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

- F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.
- G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:
- (1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).
 - (2) the institutional controls and/or engineering controls employed at such site:
 - (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
- (iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
- (3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
- (4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
- (5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- (6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and
 - (7) the information presented is accurate and complete.
- 3. <u>Right to Enter and Inspect</u>. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.
- 4. <u>Reserved Grantor's Rights</u>. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:
- A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

County: Kings Site No: C224207 Brownfield Cleanup Agreement Index: C224207-03-15 as last amended January 7, 2016

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

- A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.
- B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.
- C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.
- D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.
- 6. <u>Notice</u>. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to: Site Number: C224207

Office of General Counsel

NYSDEC 625 Broadway

Albany New York 12233-5500

With a copy to: Site Control Section

Division of Environmental Remodiation

Division of Environmental Remediation NYSDEC 625 Broadway Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

- 7. <u>Recordation</u>. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 8. <u>Amendment</u>. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

Remainder of Page Intentionally Left Blank

County: Kings Site No: C224207 Brownfield Cleanup Agreement Index: C224207-03-15 as last amended January 7, 2016

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

19 Kent Acquisition LLC:

By:

Print Name: Craig G. Zolot

Title: Principal

Date: 10-18-2017

Grantor's Acknowledgment

STATE OF Ruusylvauia)) ss: COUNTY OF Philadelphia)

On the ______ day of ______, in the year 20 17, before me, the undersigned, personally appeared ______, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL

Sarah E. Turowski, Notary Public
City of Philadelphia, Philadelphia County
My Commission Expires Sept. 29, 2018

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

County: Kings Site No: C224207 Brownfield Cleanup Agreement Index : C224207-03-15 as last amended January 7, 2016

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

Robert W. Schick, Director

Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK) ss: COUNTY OF ALBANY)

On the 27 day of 26. , in the year 20. , before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

1/ 1

State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146

Commission Expires August 22, 20

SCHEDULE "A" PROPERTY DESCRIPTION

LEGAL DESCRIPTION - EP #81 LOCATION (Track 2 Restricted Residential)

All that certain plot, piece or parcel of land, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the northerly side of North 12th Street and the easterly side of Kent Avenue;

RUNNING THENCE northerly along the easterly side of Kent Avenue 20 feet;

THENCE easterly 45 feet;

THENCE southerly 20 feet to the northerly side of North 12th Street;

THENCE westerly 45 feet to the point of BEGINNING.

Said location contains 900 SF or 0.02 acres of land.

LEGAL DESCRIPTION – EP # 5 LOCATION (Track 2 Commercial)

All that certain plot, piece or parcel of land, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at a point 50 feet northerly from the corner formed by the intersection of the northerly side of North 12th street and the easterly side of Kent Avenue;

RUNNING THENCE northerly along the easterly side of Kent Avenue, 30 feet;

THENCE easterly 30 feet;

THENCE southerly 30 feet;

THENCE westerly 30 feet to the point of BEGINNING.

Said location contains 900 SF or 0.02 acres of land.

APPENDIX B List of Site Contacts

LIST OF SITE CONTACTS

General Emergencies 911 NYC Police 911 NYC Fire Department 911 NYC Department of Health 212-676-2400 Woodhull Medical Center (Hospital) 718-963-8000 Poison Control 800-222-1222 National Response Center 800-424-8802 NYSDEC Spills Hotline 800-457-7362

Project Contacts

Remedial Party Rick Furches 215-563-3558 NYSDEC Project Manager Scott Deyette 518-402-9794 NYSDOH Project Manager Krista Anders 518-402-7880 EBC Project Manager Kevin Brussee 631-504-6000 EBC BCP Program Manager Charles Sosik 631-504-6000 EBC Site Safety Officer Chawinie Miller 631-504-6000 Remedial Engineer Ariel Czemerinski 516-987-1662 Christine Leas 212-421-2150 Attorney

APPENDIX C Excavation Work Plan

EXCAVATION WORK PLAN

E-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the NYSDEC. Table B-1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in **Attachment A**.

Table 1: Notifications*

Name	Contact Information
Scott Deyette	518-402-9794, Scott.Deyette@dec.ny.gov
Jane O'Connell	718-482-4599, Jane.Oconnell@dec.ny.gov
Kelly Lewandowski	518-402-9581, Kelly.Lewandowski@dec.ny.gov

^{*} Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal
 extent, plans for site re-grading, intrusive elements or utilities to be installed within the
 Track 2 portions of the Site, and estimated volumes of contaminated soil to be excavated,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix F of the Site Management Plan,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

E-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

Further discussion of off-Site disposal of materials and on-site reuse is provided in Section E-5 of this Attachment.

E-3 STOCKPILE METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

E-4 MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

The qualified environmental professional will be responsible for ensuring that all outbound trucks will be cleaned as needed before leaving the site until the activities performed under this section are complete. Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

E-5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with covers. If loads contain wet material capable of producing free liquid, truck liners will be used. All trucks will be inspected prior to leaving the site. Trucks will be dry brushed when possible to remove collected soil.

Truck transport routes are as follows (see **Figure E1**):

• ENTERING SITE – from the Brooklyn Queens Expressway heading south: take the Metropolitan Avenue Exit and turn right heading west on Metropolitan Avenue to Kent Avenue. Turn right, heading north on Kent Avenue to the Site entrance on the right (10 blocks).

• EXITING SITE – Turn right onto Wythe Avenue heading south to Metropolitan Avenue (10 blocks). Turn left onto Metropolitan Avenue heading east to the Brooklyn Queens Expressway. Pass between the Brooklyn-Queens Expressway and turn left on Meeker Avenue. Continue on the on-ramp of the Brooklyn-Queens Expressway.

All trucks loaded with site materials will exit the vicinity of the Site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

E-6 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include:

waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

E-7 MATERIALS REUSE ON-SITE

Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in **Table E1**. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines. This soil will undergo a testing program to confirm that it meets unrestricted SCOs prior to unregulated disposal or reuse on-site. Confirmation testing of clean soils will be in accordance with DER-10 as follows:

Contaminant	VOCs	SVOCs, Inorganics & PCBs/Pesticides		
Soil Quantity	Discrete Samples	Composite	Discrete	
(cubic yards)			Samples/Composite	
0-50	1	1	Each composite sample	
50-100	2	1	for analysis is created from 3-5 discrete samples from representative locations in the fill.	
100-200	3	1		
200-300	4	1		
300-400	4	2		
400-500	5	2		
500-800	6	2		
800-1000	7	2		
	Add an additional 2 VOC and 1 composite for each additional			
1000	1000 Cubic yards or consult with DER			

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain onsite. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

E-8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, but will be managed off-site unless approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

E-9 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. Request to Import/Reuse Fill or Soil form, which can be found at:

http://www.dec.ny.gov/regulations/67386.html and will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in **Table E-1**. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Fill and stone materials which can be certified as virgin mined material from a permitted mine or quarry will not require testing assuming adequate documentation is obtained and submitted to the NYSDEC for approval. Under no circumstances will fill materials be imported to the site without prior approval from the NYSDEC Project Manager. If sufficient documentation is not obtained, fill materials will be tested in accordance with the sampling frequency outlined in DER-10 table 5.4(e)10. Sample analysis will include TCL VOCs, TCL SVOCs, PCBs, Pesticides and TAL metals. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC.

Trucks entering the site with imported soils will be securely covered with covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

E-10 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

E-11 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during postremedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of the SMP.

E-12 COMMUNITY AIR MONITORING PLAN

The CAMP provides measures for protection for the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial work) from potential airborne contaminant releases resulting from remedial activities at construction sites.

The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that the remedial work did not spread contamination off-site through the air. The primary concerns for this site are nuisance odors and dust particulates.

Exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers and included in the Daily Report. The complete CAMP developed for this site is included in **Attachment F** of the project SMP.

E-13 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site and on-site. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

E-14 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

E-15 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all excavation work.

A plan will be developed and utilized by the contractor for all excavation work to ensure compliance with local noise control ordinances.



APPENDIX D Site Management Forms

SITE INSPECTION CHECKLIST

Site Inspection Checklist 25 Kent Avenue Brooklyn, NY Block 2282, Lot 1

Date:Time:		
Inspector Name/Organization:		
Visual Inspection of Concrete Mat Slab		
Inspect concrete/pavement for cracks, perforations and patching		
Describe General Condition of Concrete		
Describe any Cracks or New Penetrations		
Describe any Patching		
Repairs Needed and / or Maintenance at this time?		
Signature:	Date:	

APPENDIX E Community Air Monitoring Plan

COMMUNITY AIR MONITORING PLAN FORMER SUNBELT EQUIPMENT

25 KENT AVENUE BROOKLYN NEW YORK Block 2282, Lot 1

FORMER SUNBELT EQUIPMENT

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APPENDICES

Appendix A Action Limit Report

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been prepared for use during activities that disturb the building slab/foundation of the Track 2 areas of the new building constructed at 25 Kent Avenue. The CAMP provides measures for protection for the on-site workers and building occupants and downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the investigation activities) from potential airborne contaminant releases resulting from investigative activities at the site.

Compliance with this CAMP is required during all activities associated with drilling and sampling activities that have the potential to generate airborne particulate matter and volatile organic compounds (VOCs). These activities include drilling and soil and groundwater sampling. This CAMP has been prepared to ensure that investigation activities do not adversely affect passersby, residents, or workers in the area immediately surrounding the Site and to preclude or minimize airborne migration of investigation-related contaminants to off-site areas.

1.1 **Regulatory Requirements**

This CAMP was established in accordance with the following requirements:

- New York State Department of Health's (NYSDOH) Generic Community Air Monitoring Plan as presented in DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC May 3, 2010). This guidance specifies that a community air-monitoring program shall be implemented to protect the surrounding community and to confirm that the work does not spread contamination off-site through the air;
- New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Memorandum (TAGM) #4031 - Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites: This guidance provides a basis for developing and implementing a fugitive dust suppression and particulate monitoring program as an element of a hazardous waste site's health and safety program.

2.0 AIR MONITORING

Volatile organic compounds (VOCs) are the constituents of concern at the Site. The appropriate method to monitor air for these constituents during remediation activities is through real-time VOC and air particulate (dust) monitoring.

2.1 **Meteorological Data**

At a minimum, wind direction will be evaluated at the start of each workday, noon of each workday, and the end of each workday. These readings will be utilized to position the monitoring equipment in appropriate upwind and downwind locations.

2.2 **Community Air Monitoring Requirements**

To establish ambient air background concentrations, air will be monitored at several locations around the site perimeter before activities begin. These points will be monitored periodically in series during the site work. When the drilling area is within 20 feet of potentially exposed populations or occupied structures, the perimeter monitoring points will be located to represent the nearest potentially exposed individuals at the downwind location.

Fugitive respirable dust will be monitored using a MiniRam Model PDM-3 aerosol monitor (or equivalent). Air will be monitored for VOCs with a portable Ionscience 3000 photoionization detector (PID), or equivalent. All air monitoring data will be documented in a site log book by the designated site safety officer. The site safety officer or delegate must ensure that air monitoring instruments are calibrated and maintained in accordance with manufacturer's specifications. All instruments will be zeroed daily and checked for accuracy. A daily log will be kept. If additional monitoring is required, the protocols will be developed and appended to this plan

3.0 VOC MONITORING, RESPONSE LEVELS, AND ACTIONS

Volatile organic compounds (VOCs) will be monitored within the work area and at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present.

The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should 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 15minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can 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 must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can 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 must be shutdown. All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

All readings will be recorded and made available for NYSDEC and NYSDOH personnel to review. If an exceedance of the Action Limits occurs, an Action Limit Report, as shown in Appendix A, will be completed.

3.1 **Potential Corrective Measures and VOC Suppression Techniques**

If the 15-minute integrated VOC level at the downwind location persists at a concentration that exceeds the upwind level by more than 5 ppm but less than 25 ppm during remediation activities, then vapor suppression techniques will be employed. The following techniques, or others, may be employed to mitigate the generation and migration of fugitive organic vapors:

- Collection of purge water in covered containers;
- storage of excess sample and drill cuttings in drums or covering with plastic

4.0 PARTICULATE MONITORING

Air monitoring for particulates (i.e., dust) will be performed continuously during drilling activities using both air monitoring equipment and visual observation at upwind and downwind locations. Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM₁₀) and capable of integrating (averaging) over periods of 15 minutes or less will be set up at upwind (i.e., background) and downwind locations, at heights approximately four to five feet above land surface (i.e., the breathing zone). Monitoring equipment will be MIE Data Ram monitors, or equivalent. The audible alarm on the particulate monitoring device will be set at 90 micrograms per cubic meter (μg/m₃). This setting will allow proactive evaluation of worksite conditions prior to reaching the action level of 100 µg/m³ above background. The monitors will be calibrated at least once per day prior to work activities and recalibrated as needed thereafter. In addition, fugitive dust migration will be visually assessed during all intrusive work activities.

The following summarizes particulate action levels and the appropriate responses:

- If the downwind PM-10 particulate level is 100 μg/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 must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 μg/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 μg/m³ above the upwind level, work must be stopped and an evaluation of activities initiated. Work can resume provided that dust suppression measures (as described in Section 2.3.1 below) and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 μg/m³ of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review. If an exceedance of the Action Limits occurs, an Action Limit Report as shown in Appendix A will be completed.

4.1 **Potential Particulate Suppression Techniques**

If the integrated particulate level at the downwind location exceeds the upwind level by more than 100 μg/m³ at any time during drilling activities, then dust suppression techniques will be employed. The following techniques, or others, may be employed to mitigate the generation and migration of fugitive dusts:

- Placement of drill cuttings in drums or covering stockpiles with plastic;
- Misting of the drilling area with a fine water spray from a hand-held spray bottle

Work may continue with dust suppression techniques provided that downwind PM₁₀ levels are not more than 150 µg/m³ greater than the upwind levels.

There may also be situations where the dust is generated by drilling activities and migrates to downwind locations, but is not detected by the monitoring equipment at or above the action level. Therefore, if dust is observed leaving the working area, dust suppression techniques such as those listed above will be employed.

If dust suppression techniques do not lower particulates to below 150 μg/m³, or visible dust persists, work will be suspended until appropriate corrective measures are identified and implemented to remedy the situation.

All air monitoring readings will be recorded in the field logbook and will be available for the NYSDEC and NYSDOH personnel to review.

5.0 DATA QUALITY ASSURANCE

5.1 Calibration

Instrument calibration shall be documented on instrument calibration and maintenance sheets or in the designated field logbook. All instruments shall be calibrated as required by the manufacturer. Calibration checks may be used during the day to confirm instrument accuracy. Duplicate readings may be taken to confirm individual instrument response.

5.2 **Operations**

All instruments shall be operated in accordance with the manufacturer's specifications. Manufacturers' literature, including an operations manual for each piece of monitoring equipment will be maintained on-site by the SSO for reference.

5.3 **Data Review**

The SSO will interpret all monitoring data based the established criteria and his/her professional judgment. The SSO shall review the data with the PM to evaluate the potential for worker exposure, upgrades/downgrades in level of protection, comparison to direct reading instrumentation and changes in the integrated monitoring strategy.

Monitoring and sampling data, along with all sample documentation will be periodically reviewed by the PM.

RECORDS AND REPORTING 6.0

All air readings must be recorded on daily air monitoring log sheets and made available for review by personnel from NYSDEC and NYSDOH.

Daily Air Monitoring Log

Project Name: F	ormer Sunbelt Ed	quipment		Date: _		
Project Location:	25 Kent Avenue,	Brooklyn, NY		BCP Si	te No. C224207	
Temperature:		Wind Speed:	Wind D	Direction:	_	
Background Data	: Upwind - PID	ppm	Dust Meter 1	mg/m^3		
	Downwind - PID	ppm	Dust Meter 2	mg/m^3		
Г	10/	7		• •		
Time	PID - ppm	Zone Dust - mg/m^3	PID - ppm	wind Dust - mg/m^3	PID - ppm	nwind Dust - mg/m^3
Activities Performed	d:		1			<u> </u>

<u>APPENDIX – F</u> Health and Safety Plan

FORMER SUNBELT EQUIPMENT

25 KENT AVENUE BROOKLYN NEW YORK Block 2282, Lot 1

HEALTH AND SAFETY PLAN

JULY 2017

Prepared By:



HEALTH AND SAFETY PLAN

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STATEMENT OF COMMITMENT

This Health and Safety Plan (HASP) has been prepared for use during activities that disturb the building slab/foundation, or rear courtyard slabs to ensure that workers are not exposed to risks from hazardous materials.

This HASP, which applies to persons present at the site actually or potentially exposed to hazardous materials, describes emergency response procedures for actual and potential chemical hazards. This HASP is also intended to inform and guide personnel entering the work area or exclusion zone. Persons are to acknowledge that they understand the potential hazards and the contents of this Health and Safety policy by signing off on receipt of their individual copy of the document. Contractors and suppliers are retained as independent contractors and are responsible for ensuring the health and safety of their own employees.

1.0 INTRODUCTION AND SITE ENTRY REQUIREMENTS

This document describes the health and safety guidelines developed by Environmental Business Consultants (EBC) to ensure that workers are not exposed to risks from hazardous materials during activities that disturb the building slab. In accordance with the Occupational Safety and Health Administration (OSHA) 29 CFR Part 1910.120 Hazardous Waste Operations and Emergency Response Final rule, this HASP, including the attachments, addresses safety and health hazards related to subsurface sample collection activities and is based on the best information available. The HASP may be revised by EBC at the request of the client and/or a regulatory agency upon receipt of new information regarding site conditions. Changes will be documented by written amendments signed by EBC's project manager, site safety officer and/or the EBC health and safety consultant.

1.1 Training Requirements

Personnel entering the exclusion zone or decontamination zone are required to be certified in health and safety practices for hazardous waste site operations as specified in the Federal OSHA Regulations CFR 1910.120e (revised 3/6/90).

Paragraph (e - 3) of the above referenced regulations requires that all on-site management personnel directly responsible for or who supervise employees engaged in hazardous waste operations, must initially receive 8 hours of supervisor training related to managing hazardous waste work.

Paragraph (e - 8) of the above referenced regulations requires that workers and supervisors receive 8 hours of refresher training annually on the items specified in Paragraph (e-1) and/or (e-3).

Additionally all on-site personnel must receive adequate site-specific training in the form of an on-site Health and Safety briefing prior to participating in field work with emphasis on the following:

- Protection of the adjacent community from hazardous vapors and / or dust which may be released during intrusive activities.
- Identification of chemicals known or suspected to be present on-site and the health effects and hazards of those substances.
- The need for vigilance in personnel protection, and the importance of attention to proper use, fit and care of personnel protective equipment.
- Decontamination procedures.

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- Site control including work zones, access and security.
- Hazards and protection against heat or cold.
- The proper observance of daily health and safety practices, such as entry and exit of work zones and site. Proper hygiene during lunch, break, etc.
- Emergency procedures to be followed in case of fire, explosion and sudden release of hazardous gases.



Health and Safety meetings will be conducted on a daily basis and will cover protective clothing and other equipment to be used that day, potential and chemical and physical hazards, emergency procedures, and conditions and activities from the previous day.

1.2 Site Safety Plan Acceptance, Acknowledgment and Amendments

The project superintendent and the site safety officer are responsible for informing personnel (EBC employees and/or owner or owners representatives) entering the work area of the contents of this plan and ensuring that each person signs the safety plan acknowledging the on-site hazards and procedures required to minimize exposure to adverse effects of these hazards. A copy of the Acknowledgement Form is included in **Appendix A**.

Site conditions may warrant an amendment to the HASP. Amendments to the HASP are acknowledged by completing forms included in **Appendix B**.

1.3 **Key Personnel - Roles and Responsibilities**

Personnel responsible for implementing this Health and Safety Plan are:

Name	Title	Address	Contact
			Numbers
Mr. Kevin Brussee	EBC	1808 Middle Country	(631) 504-6000
	Project Manager	Road	(631) 338-1749
		Ridge, NY 11961	
Mr. Kevin Waters	Site Safety Officer	1808 Middle Country	(631) 504-6000
		Road	(516) 287-9023
		Ridge, NY 11961	

The project manager is responsible for overall project administration and, with guidance from the site safety officer, for supervising the implementation of this HASP. The site safety officer will conduct daily (tail gate or tool box) safety meetings at the project site and oversee daily safety issues. Each subcontractor and supplier (defined as an OSHA employer) is also responsible for the health and safety of its employees. If there is any dispute about health and safety or project activities, on-site personnel will attempt to resolve the issue. If the issue cannot be resolved at the site, then the project manager will be consulted.

The site safety officer is also responsible for coordinating health and safety activities related to hazardous material exposure on-site. The site safety officer is responsible for the following:

- 1. Educating personnel about information in this HASP and other safety requirements to be observed during site operations, including, but not limited to, decontamination procedures, designation of work zones and levels of protection, air monitoring, fit testing, and emergency procedures dealing with fire and first aid.
- 2. Coordinating site safety decisions with the project manager.
- 3. Designating exclusion, decontamination and support zones on a daily basis.
- 4. Monitoring the condition and status of known on-site hazards and maintaining and implementing the air quality monitoring program specified in this HASP.
- 5. Maintaining the work zone entry/exit log and site entry/exit log.



6. Maintaining records of safety problems, corrective measures and documentation of chemical exposures or physical injuries (the site safety officer will document these conditions in a bound notebook and maintain a copy of the notebook on-site).

The person who observes safety concerns and potential hazards that have not been addressed in the daily safety meetings should immediately report their observations/concerns to the site safety officer or appropriate key personnel.



2.0 SITE BACKGROUND AND SCOPE OF WORK

Two areas of the Site were remediated to Track 2, and the balance of the Site was remediate to Track 1 Unrestricted Use SCOs. The Site was remediated in accordance with the remedy selected by the Remedial Action Work Plan dated December 2014 (revised July 2015), and the Decision Document dated July 28, 2015. The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the implemented remedy:

- 1. Excavation of soil/fill exceeding Track 1 Unrestricted Use SCOs to development depths which averaged 24 feet below grade, with deeper remedial excavation in certain areas where end point samples at development depth exceeded Unrestricted Use SCOs;
- 2. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during all intrusive Site work;
- 3. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of Track 1 SCOs;
- 4. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State, and local rules and regulations for handling, transport, and disposal;
- 5. Dewatering and treatment of petroleum-impacted groundwater before discharging to the NYC sewer system under a NYCDEP sewer discharge permit;
- 6. Import of ³/₄" clean stone and ³/₄" recycled concrete aggregate to be used for backfill below the building's concrete mat slab in compliance with: (1) chemical limitations and other specifications listed in the RAWP, and (2) all Federal, State, and local rules and regulations for handling and transport of material;
- 7. In two areas in the southwestern corner of the Site, the VOC benzene was detected above Track 1 SCOs in end point samples. Samples obtained from test pits indicated that VOC impacts exceeding Track 1 SCOs extended to a depth below levels that could be safely excavated. Therefore, in those two areas, are designated as Track 2;
- 8. Development and implementation of a Site Management Plan for long term management of remaining contamination below the Track 2 portions of the Site which includes plans for: (1) Institutional Controls, (2) monitoring, (3) inspections and (4) reporting; and
- 9. An Environmental Easement has been recorded on the two Track 2 portions of the Site to ensure implementation of the SMP.

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3.0 SITE HAZARD EVALUATION

This section identifies the hazards associated with the proposed scope of work, general physical hazards that can be expected at most sites; and presents a summary of documented or potential chemical hazards at the site. Every effort must be made to reduce or eliminate these hazards. Those that cannot be eliminated must be guarded against using engineering controls and/or personal protective equipment.

This HASP has been developed for work performed at the site in association with a Phase II subsurface investigation. The primary hazards to the field crew will be physical hazards related to sample collection procedures and equipment, and chemical exposures to the sampling crew from exposure to potential contaminants which may be present at the site.

3.1 Physical Hazards

3.1.1 Tripping Hazards

An area of risk associated with on-site activities are presented by uneven ground, concrete, curbstones or equipment which may be present at the site thereby creating a potential tripping hazard. During intrusive work, care should be taken to mark or remove any obstacles within the exclusion zone.

3.1.2 Cuts and Lacerations

Field activities that involve drilling and boring equipment may result in cuts or lacerations from machinery and tools used in collecting samples, cutting disposable tubing and opening acetate sleeves and liners. A first aid kit approved by the American Red Cross will be available during all subsurface investigative activities.

3.1.3 Lifting Hazards

Improper lifting by workers is one of the leading causes of industrial injuries. Field workers and drillers may be required to lift heavy objects such as drilling tools, buckets of decontamination water, cement, etc. Therefore, all members of the field crew should be trained in the proper methods of lifting heavy objects. All workers should be cautioned against lifting objects too heavy for one person.

3.1.4 Utility Hazards

Before conducting any subsurface boring or sampling, the drilling contractor will be responsible for locating and verifying all existing utilities at each excavation.

3.1.5 Traffic Hazards

All traffic, vehicular and pedestrian, shall be maintained and protected at all times consistent with local, state and federal agency regulations regarding such traffic and in accordance with NYCDOT guidelines. The drilling contractor shall carry on his operations without undue interference or delays to traffic. The drilling contractor shall furnish all labor, materials, guards, barricades, signs, lights, and anything else necessary to maintain traffic and to protect his work and the public, during operations.

3.2 Work in Extreme Temperatures

Work under extremely hot or cold weather conditions requires special protocols to minimize the chance that employees will be affected by heat or cold stress.

3.2.1 Heat Stress

The combination of high ambient temperature, high humidity, physical exertion, and personal protective apparel, which limits the dissipation of body heat and moisture, can cause heat stress.

The following prevention, recognition and treatment strategies will be implemented to protect personnel from heat stress. Personnel will be trained to recognize the symptoms of heat stress and to apply the appropriate treatment.

1. Prevention

- a. Provide plenty of fluids. Available in the support zone will be a 50% solution of fruit punch and water or plain water.
- b. Work in Pairs. Individuals should avoid undertaking any activity alone.
- c. Provide cooling devices. A spray hose and a source of water will be provided to reduce body temperature, cool protective clothing and/or act as a quick-drench shower in case of an exposure incident.
- d. Adjustment of the work schedule. As is practical, the most labor-intensive tasks should be carried out during the coolest part of the day.

2. Recognition and Treatment

a. Heat Rash (or prickly heat):

Cause: Continuous exposure to hot and humid air, aggravated by chafing

clothing.

Symptoms: Eruption of red pimples around sweat ducts accompanied by

intense itching and tingling.

Treatment: Remove source or irritation and cool skin with water or wet cloths.

b. Heat Cramps (or heat prostration)

Cause: Profuse perspiration accompanied by inadequate replenishment of

body water and electrolytes.

Symptoms: Muscular weakness, staggering gait, nausea, dizziness, shallow

breathing, pale and clammy skin, approximately normal body

temperature.

Treatment: Perform the following while making arrangement for transport to a

medical facility. Remove the worker to a contamination reduction zone. Remove protective clothing. Lie worker down on back in a cool place and raise feet 6 to 12 inches. Keep warm, but loosen all clothing. If conscious, provide sips of salt-water solution, using one teaspoon of salt in 12 ounces of water. Transport to a medical

facility.

c. Heat Stroke

Cause: Same as heat exhaustion. This is also an extremely serious

condition.



Symptoms: Dry and hot skin, dry mouth, dizziness, nausea, headache and rapid

pulse.

Treatment: Cool worker immediately by immersing or spraying with cool

water or sponge bare skin after removing protective clothing.

Transport to hospital.

3.2.2 Cold Exposure

Exposure to cold weather, wet conditions and extreme wind-chill factors may result in excessive loss of body heat (hypothermia) and /or frostbite. To guard against cold exposure and to prevent cold injuries, appropriate warm clothing should be worn, warm shelter must be readily available, rest periods should be adjusted as needed, and the physical conditions of on-site field personnel should be closely monitored. Personnel and supervisors working on-site will be made aware of the signs and symptoms of frost bite and hypothermia such as shivering, reduced blood pressure, reduced coordination, drowsiness, impaired judgment, fatigue, pupils dilated but reactive to light and numbing of the toes and fingers.

3.3 Chemical Hazards

3.3.1 Soil Exposure

There is documented contamination consisting of VOCs in soil at the Site, originating from an off-Site source.

The primary routes of exposure to these contaminants are from groundwater are ingestion and absorption. **Appendix** C includes information sheets for suspected chemicals that may be encountered at the site.

Respirable Dust and Direct Contact with Soil

Dust may be generated by any activities that disturbs the cellar slab. If visible observation detects elevated levels of dust, a program of wetting will be employed by the site safety officer. If elevated dust levels persist, the site safety office will employ dust monitoring using a particulate monitor (Miniram or equivalent). If monitoring detects concentrations greater than the OSHA action level of $5{,}000~\mu\text{g/m}^3$ over daily background, the site safety officer will take corrective actions as defined herein, including the use of water for dust suppression and if this is not effective, requiring workers to wear APRs with efficiency particulate air (HEPA) cartridges.

Absorption pathways for dust and direct contact with soil and groundwater will be mitigated with the implementation of latex gloves, hand washing and decontamination exercises when necessary.

Organic Vapors

The site safety officer will periodically monitor organic vapors with a Photoionization Detector (PID) during groundwater sampling to determine whether organic vapor concentrations exceed action levels shown below.

PID Response	Action
Sustained readings of 5 ppm or greater	Shut down equipment and allow area to vent. Resume when readings return to background
Sustained readings of 5 ppm or greater that do not subside after venting	Implement Vapor Release Plan (Section 6.8). Re-evaluate respiratory protection as upgrade may be required.



4.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) shall be selected in accordance with OSHA 29 CFR 1910.120(c), (g), and 1910.132. Protective equipment shall be NIOSH approved and respiratory protection shall conform to OSHA 29 CFR Part 1910.133 and 1910.134 specifications; head protection shall conform to 1910.135; eye and face protection shall conform to 1910.133; and foot protection shall conform to 1910.136. The only true difference among the levels of protection from D thru B is the addition of the type of respiratory protection. It is anticipated that work will be performed in Level D PPE.

4.1 Level D

Level D PPE shall be donned when the atmosphere contains no known hazards and work functions preclude splashes, immersion, or the potential for inhalation of, or contact with, hazardous concentrations of harmful chemicals. Level D PPE consists of:

- standard work uniform, coveralls, or tyvek, as needed;
- steel toe and steel shank work boots;
- high visibility safety vest;
- hard hat:
- gloves, as needed;
- safety glasses;
- hearing protection;
- equipment replacements are available as needed.

4.2 Level C

Level C PPE shall be donned when the concentrations of measured total organic vapors in the breathing zone exceed background concentrations (using a portable OVA, or equivalent), but are less than 5 ppm. The specifications on the APR filters used must be appropriate for contaminants identified or expected to be encountered. Level C PPE shall be donned when the identified contaminants have adequate warning properties and criteria for using APR have been met. Level C PPE consists of:

- chemical resistant or coated tyvek coveralls;
- steel-toe and steel-shank workboots;
- high visibility safety vest;
- chemical resistant overboots or disposable boot covers;
- disposable inner gloves (surgical gloves);
- disposable outer gloves;
- full face APR fitted with organic vapor/dust and mist filters or filters appropriate for the identified or expected contaminants;
- hard hat;
- splash shield, as needed; and,

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ankles/wrists taped with duct tape.



The site safety officer will verify if Level C is appropriate by checking organic vapor concentrations using compound and/or class-specific detector tubes.

The exact PPE ensemble is decided on a site-by-site basis by the Site Safety Officer with the intent to provide the most protective and efficient worker PPE.

4.3 Activity-Specific Levels of Personal Protection

The required level of PPE is activity-specific and is based properties of identified or expected contaminants. It is expected that excavation work would be performed in Level D. If air monitoring results indicate the necessity to upgrade (sustained VOCs above 5 ppm in the breathing zone) the level of protection engineering controls (i.e. Facing equipment away from the wind and placing site personnel upwind of excavations, active venting, etc.) will be implemented before requiring the use of respiratory protection.



SITE CONTROL 5.0

5.1 **Work Zones**

The primary purpose of site controls is to establish the perimeter of a hazardous area, to reduce the migration of contaminants into clean areas, and to prevent access or exposure to hazardous materials by unauthorized persons. When operations are to take place involving hazardous materials, the site safety officer will establish an exclusion zone, a decontamination zone, and a support zone. These zones "float" (move around the site) depending on the tasks being performed on any given day. The site safety officer will outline these locations before work begins and when zones change. The site safety officer records this information in the site log book.

Tasks requiring OSHA 40-hour Hazardous Waste Operations and Emergency Response Operations training are carried out in the exclusion zone. The exclusion zone is defined by the site safety officer but will typically be a 50-foot area around work activities. Gross decontamination (as determined by the site Health and Safety Officer) is conducted in the exclusion zone; all other decontamination is performed in the decontamination zone.

Protective equipment is removed in the decontamination zone. Disposable protective equipment is stored in receptacles staged in the decontamination zone, and non-disposable equipment is decontaminated. All personnel and equipment exit the exclusion zone through the decontamination zone. If a decontamination trailer is provided the first aid equipment, an eye wash unit, and drinking water are kept in the decontamination trailer.

The support zone is used for vehicle parking, daily safety meetings, and supply storage. Eating, drinking, and smoking are permitted only in the support zone. When a decontamination trailer is not provided, the eye wash unit, first aid equipment, and drinking water are kept at a central location designated by the site safety officer.

6.0 CONTINGENCY PLAN/EMERGENCY RESPONSE PLAN

Site personnel must be prepared in the event of an emergency. Emergencies can take many forms: illnesses, injuries, chemical exposure, fires, explosions, spills, leaks, releases of harmful contaminants, or sudden changes in the weather.

Emergency telephone numbers and a map to the hospital will be posted in the command post. Site personnel should be familiar with the emergency procedures, and the locations of site safety, first aid, and communication equipment.

6.1 **Emergency Equipment On-site**

Private telephones: Site personnel.

Two-way radios: Site personnel where necessary.

Emergency Alarms: On-site vehicle horns*. First aid kits: On-site, in vehicles or office. Fire extinguisher: On-site, in office or on equipment.

911

Emergency Telephone Numbers 6.2

General Emergencies

Ocheral Efficigencies	911
New York City Police	911
Woodhull Medical Center (hospital)	(718) 963-8000
NYSDEC Spills Division	1-800-457-7362
NYSDEC Division of Env. Remediation	1-718-482-4900
NYCDEP	1-718-699-9811
NYC Department of Health	1-212-788-4711
NYC Fire Department	911
National Response Center	1-800-424-8802
Poison Control	1-800-222-1222
Site Safety Officer	1-631-504-6000
Alternate Site Safety Officer	1-631-504-6000

6.3 Personnel Responsibilities During an Emergency

The project manager is primarily responsible for responding to and correcting any emergency situations. However, in the absence of the project manager, the site safety officer shall act as the project manager's on-site designee and perform the following tasks:

Take appropriate measures to protect personnel including: withdrawal from the exclusion zone, evacuate and secure the site, or upgrade/downgrade the level of protective clothing and respiratory protection;

^{*} Horns: Air horns will be supplied to personnel at the discretion of the project superintendent or site safety officer.

- Ensure that appropriate federal, state, and local agencies are informed and emergency response plans are coordinated. In the event of fire or explosion, the local fire department should be summoned immediately. If toxic materials are released to the air, the local authorities should be informed in order to assess the need for evacuation;
- Ensure appropriate decontamination, treatment, or testing for exposed or injured personnel;
- Determine the cause of incidents and make recommendations to prevent recurrence; and,
- Ensure that all required reports have been prepared.

The following key personnel are planned for this project:

Project Manager Mr. Kevin Brussee (631) 504-6000 Site Safety Officer Mr. Kevin Waters (631) 504-6000 Alternate Mr. Charles Sosik (631) 504-6000

6.4 **Medical Emergencies**

A person who becomes ill or injured in the exclusion zone will be decontaminated to the maximum extent possible. If the injury or illness is minor, full decontamination will be completed and first aid administered prior to transport. First aid will be administered while waiting for an ambulance or paramedics. A Field Accident Report (Appendix D) must be filled out for any injury.

A person transporting an injured/exposed person to a clinic or hospital for treatment will take the directions to the hospital (Appendix D) and information on the chemical(s) to which they may have been exposed (Appendix C).

6.5 Fire or Explosion

In the event of a fire or explosion, the local fire department will be summoned immediately. The site safety officer or his designated alternate will advise the fire commander of the location, nature and identification of the hazardous materials on-site. If it is safe to do so, site personnel may:

- use fire fighting equipment available on site; or,
- remove or isolate flammable or other hazardous materials that may contribute to the fire.



6.6 Evacuation Routes

Evacuation routes established by work area locations for each site will be reviewed prior to commencing site operations. As the work areas change, the evacuation routes will be altered accordingly, and the new route will be reviewed.

Under extreme emergency conditions, evacuation is to be immediate without regard for equipment. The evacuation signal will be a continuous blast of a vehicle horn, if possible, and/or by verbal/radio communication. When evacuating the site, personnel will follow these instructions:

- Keep upwind of smoke, vapors, or spill location.
- Exit through the decontamination corridor if possible.
- If evacuation through the decontamination corridor is not possible, personnel should remove contaminated clothing once they are in a safe location and leave it near the exclusion zone or in a safe place.
- The site safety officer will conduct a head count to ensure that all personnel have been evacuated safely. The head count will be correlated to the site and/or exclusion zone entry/exit log.
- If emergency site evacuation is necessary, all personnel are to escape the emergency situation and decontaminate to the maximum extent practical.

6.7 Spill Control Procedures

Spills associated with site activities may be attributed to project equipment and include gasoline, diesel and hydraulic oil. In the event of a leak or a release, site personnel will inform their supervisor immediately, locate the source of spillage and stop the flow if it can be done safely. A spill containment kit including absorbent pads, booms and/or granulated speedy dry absorbent material will be available to site personnel to facilitate the immediate recovery of the spilled material. Daily inspections of site equipment components including hydraulic lines, fuel tanks, etc. will be performed by their respective operators as a preventative measure for equipment leaks and to ensure equipment soundness. In the event of a spill, site personnel will immediately notify the NYSDEC (1-800-457-7362), and a spill number will be generated.

6.8 Vapor Release Plan

If work zone organic vapor (excluding methane) exceeds 5 ppm, then a downwind reading will be made either 200 feet from the work zone or at the property line, whichever is closer. If readings at this location exceed 5 ppm over background, the work will be stopped.

If 5 ppm of VOCs are recorded over background on a PID at the property line, then an off-site reading will be taken within 20 feet of the nearest residential or commercial property, whichever is closer. If efforts to mitigate the emission source are unsuccessful for 30 minutes, then the designated site safety officer will:

- contact the local police;
- continue to monitor air every 30 minutes, 20 feet from the closest off-site property. If two successive readings are below 5 ppm (non-methane), off-site air monitoring will be halted.
- All property line and off site air monitoring locations and results associated with vapor releases will be recorded in the site safety log book.

APPENDIX A SITE SAFETY ACKNOWLEDGEMENT FORM

DAILY BREIFING SIGN-IN SHEET

Date:	Person Conducting Briefing:	
Project Name and Location:		
1. AWARENESS (topics discussed, spec	cial safety concerns, recent incidents, etc):	
		
2. OTHER ISSUES (HASP changes, atter	ndee comments, etc):	
	<u> </u>	
3. ATTENDEES (Print Name):		
1.	11.	
2.	12.	
3.	13.	
4.	14.	
5.	15.	
6.	16.	
7.	17.	
8.	18.	
9.	19.	
10.	20.	

APPENDIX B SITE SAFETY PLAN AMENDMENTS



SITE SAFETY PLAN AMENDMENT FORM

Site Safety Plan Amendment #:		
Site Name:		
Reason for Amendment:		
Alternative Procedures:		
Required Changes in PPE:		
<u></u>		
Project Superintendent (signature)	Date	
Health and Safety Consultant (signature)	Date	
Site Safety Officer (signature)	Date	

APPENDIX C CHEMICAL HAZARDS

CHEMICAL HAZARDS

The attached International Chemical Safety Cards are provided for contaminants of concern that have been identified in soils and/or groundwater at the site.



BENZENE ICSC: 0015











Cyclohexatriene
Benzol C_6H_6 Molecular mass: 78.1

ICSC # 0015 CAS # 71-43-2 RTECS # <u>CY1400000</u> UN # 1114

EC # 601-020-00-8 May 06, 2003 Peer reviewed



TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive. Risk of fire and explosion: see Chemical Dangers.	Closed system, ventilation, explosion- proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling. Use non-sparking handtools. Prevent build-up of electrostatic charges (e.g., by grounding).	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION	Dizziness. Drowsiness. Headache. Nausea. Shortness of breath. Convulsions. Unconsciousness.	Ventilation, local exhaust, or breathin protection.	Fresh air, rest. Refer for medical attention.
•SKIN	MAY BE ABSORBED! Dry skin. Redness. Pain. (Further see Inhalation). Protective gloves. Protective		Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
•EYES	Redness. Pain.	Face shield, or eye protection in combination with breathing protection	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Sore throat. Vomiting. (Further see Inhalation). Do not eat, drink, or smoke during work.		Rinse mouth. Do NOT induce vomiting. Refer for medical attention.
CDILLA CE DICROCA I CEODA CE DA CIVA CINC O LA DELL'INC			

SPILLAGE DISPOSAL **STORAGE** PACKAGING & LABELLING Remove all ignition sources. Collect leaking Fireproof. Separated from food and feedstuffs Do not transport with food and feedstuffs. and spilled liquid in sealable containers as far oxidants halogens Note: E F symbol as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. T symbol Do NOT wash away into sewer. Do NOT let R: 45-46-11-36/38-48/23/24/25-65 this chemical enter the environment. Personal S: 53-45 protection: complete protective clothing UN Hazard Class: 3 including self-contained breathing apparatus. UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0015

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

BENZENE ICSC: 0015

I	PHYSICAL STATE; APPEARANCE: COLOURLESS LIQUID, WITH CHARACTERISTIC	ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation
M	ODOUR.	through the skin and by ingestion
P	PHYSICAL DANGERS: The vapour is heavier than air and may travel along the	INHALATION RISK: A harmful contamination of the air can be reached very
О	ground; distant ignition possible. As a result of flow, agitation, etc., electrostatic charges can be generated.	quickly on evaporation of this substance at 20°C.
R	CHEMICAL DANGERS:	EFFECTS OF SHORT-TERM EXPOSURE: The substance is irritating to the eyes the skin and the
T	Reacts violently with oxidants, nitric acid, sulfuric acid and halogens causing fire and explosion hazard. Attacks	respiratory tract Swallowing the liquid may cause aspiration into the lungs with the risk of chemical
A	plastic and rubber.	pneumonitis. The substance may cause effects on the central nervous system, resulting in lowering of
N	OCCUPATIONAL EXPOSURE LIMITS: TLV: 0.5 ppm as TWA 2.5 ppm as STEL (skin) A1 BEI	consciousness Exposure far above the occupational exposure limit value may result in unconsciousness death
T	(ACGIH 2004). MAK: H Carcinogen category: 1 Germ cell mutagen group: 3A	EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
D	(DFG 2004). OSHA PEL: 1910.1028 TWA 1 ppm ST 5 ppm See	The liquid defats the skin. The substance may have effects on the bone marrow immune system, resulting in a
A	Appendix F NIOSH REL: Ca TWA 0.1 ppm ST 1 ppm See Appendix	decrease of blood cells. This substance is carcinogenic to humans.
Т	A NIOSH IDLH: Ca 500 ppm See: 71432	
A		
PHYSICAL PROPERTIES	Boiling point: 80°C Melting point: 6°C Relative density (water = 1): 0.88 Solubility in water, g/100 ml at 25°C: 0.18 Vapour pressure, kPa at 20°C: 10 Relative vapour density (air = 1): 2.7	Relative density of the vapour/air-mixture at 20°C (air = 1): 1.2 Flash point: -11°C c.c. Auto-ignition temperature: 498°C Explosive limits, vol% in air: 1.2-8.0 Octanol/water partition coefficient as log Pow: 2.13
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms.	
	NOTES	
	ges enhances the harmful effect. Depending on the degree of exposure limit value is exceeded is insufficient.	f exposure, periodic medical examination is indicated. The
William State of the state of t	1	Transport Emergency Card: TEC (R)-30S1114 / 30GF1-II NEPA Code: H2: F3: R0

NFPA Code: H2; F3; R0

ADDITIONAL INFORMATION

ICSC: 0015 **BENZENE** (C) IPCS, CEC, 1994

IMPORTANT LEGAL NOTICE:

Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

ETHYLBENZENE











Ethylbenzol Phenylethane EB C_8H_{10} / $C_6H_5C_2H_5$ Molecular mass: 106.2

ICSC # 0268 CAS # 100-41-4 RTECS # <u>DA0700000</u>

UN # 1175

EC # 601-023-00-4 March 13, 1995 Validated



ICSC: 0268

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion- proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling.	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT GENERATION OF MISTS!	
•INHALATION	Cough. Dizziness. Drowsiness. Headache.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Dry skin. Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness. Pain. Blurred vision.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	(Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Ventilation. Collect leaking liquid in covered containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer. Personal protection: A filter respirator for organic gases and vapours.		F symbol Xn symbol R: 11-20 S: 2-16-24/25-29 UN Hazard Class: 3 UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0268

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

ETHYLBENZENE ICSC: 0268

COLOURLESS LIQUID , WITH AROMATIC ODOUR. P PHYSICAL DANGERS: The vapour mixes well with air, explosive mixtures are easily formed. R CHEMICAL DANGERS: Reacts with strong oxidants. Attacks plastic and rubber. TLV: 100 ppm as TWA 125 ppm as STEL A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued (ACGIH 2005). MAK: skin absorption (H); Carcinogen category: 3A; (DFG 2004). OSHA PEL:: TWA 100 ppm (435 mg/m³) NIOSH REL: TWA 100 ppm (435 mg/m³) NIOSH REL: TWA 100 ppm 10% LEL See: 100414 T A PHYSICAL PROPERTIES Boiling point: 136°C Melting point: 95°C Melting point: 95°C Auto-ignition temperature: 432°C explosive limits, volve in mitatation of its vapour, through the skin and by ingestion. The substance can be absorbed into the body by inhalation of its vapour, through the skin and by ingestion. INHALATION RISK: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C. EFFECTS OF SHORT-TERM EXPOSURE: The substance is irritating to the eyes the skin and the respiratory tract Swallowing the liquid may cause aspiration into the ups with the risk of chemical pneumonitis. The substance is irritating to the eyes the skin and the respiratory tract Swallowing the liquid may cause aspiration into the ups with the risk of chemical pneumonitis. The substance is irritating to the eyes the skin and the respiratory tract Swallowing the liquid may cause aspiration into the ups with the risk of chemical pneumonitis. The substance is irritating to the eyes the skin and the respiratory tract Swallowing the liquid may cause aspiration into the ups with the risk of chemical pneumonitis. The substance may cause effects on the central nervous system Exposure far above the OEL could cause lower of the ups with the risk of chemical pneumonitis. The substance may cause effects on the central nervous system Exposure far above the OEL could cause lower of the vapour/air-mixture at 20°C (air = 1): 1.02 EFFECTS OF LONG-TERM EXPOSURE: A Relative density of the va	I	PHYSICAL STATE; APPEARANCE:	ROUTES OF EXPOSURE:
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		The substance is harmful to aquatic organisms.	
The odour warning when the exposure limit value is exceeded is insufficient.		NOTES	
θ	The odour warning who	en the exposure limit value is exceeded is insufficient.	

Transport Emergency Card: TEC (R)-30S1175 or 30GF1-I+II

NFPA Code: H2; F3; R0

ADDITIONAL INFORMATION

ICSC: 0268 ETHYLBENZENE

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APPENDIX D HOSPITAL INFORMATION AND MAP FIELD ACCIDENT REPORT



FIELD ACCIDENT REPORT

This report is to be filled out by the designated Site Safety Officer after EVERY accident.

PROJECT NAME		PROJECT. NO		
Date of Accident	Time	Report By		
Type of Accident (Check One):				
() Vehicular	() Personal	() Property		
Name of Injured		DOB or Age		
How Long Employed				
Names of Witnesses				
Description of Accident				
Action Taken				
Did the Injured Lose Any Time?		(Days/Hrs.)?		
Was Safety Equipment in Use Shoes, etc.)?	e at the Time of the	Accident (Hard Hat, Safety Glasses,	Gloves,	Safety
	S sole responsibility	to process his/her claim through his/		lth and
INDICATE STREET NAMES, D	ESCRIPTION OF VE	HICLES, AND NORTH ARROW		

HOSPITAL INFORMATION AND MAP

The hospital nearest the site is:

WOODHUL MEDICAL CENTER

760 Broadway, Brooklyn, New York 11206 718-963-8000

2.2 Miles - About 11 Minutes

