FORMER PFIZER PROPERTY
SITE B - OPERABLE UNIT 3

73-87 GERRY STREET
BROOKLYN NEW YORK
Block 2266 Lots 45, 46, 47, 48, 49 and 50

Site Management Plan

NYSDEC VCP Site No. V00350

Prepared for:
Congregation Oholei Shloma
517 Flushing Avenue
Brooklyn, New York 11205

AMC Engineering PLLC
1836 42nd Street
Astoria, NY 11105
516-417-8588

Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date
0	January 4, 2017	Original Submission	
1	June 28, 2023	Updated with As-Built Details for Lot 45 (87 Gerry St)	
2	May 17, 2024	Updated Details and Inspection Schedule for Lot 49 (77 Gerry St)	

JANUARY 2017
REVISED MAY 2024

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APPENDICES

LIST OF ACRONYMS

Acronym	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

CERTIFICATIONS

I _____ 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).

_____	_____	_____
NYS Professional Engineer #	Date	Signature

ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan for OU3:

Site Identification:	Site No: V00350 - Former Pfizer Property Site B – Operable Unit 3 73-87 Gerry Street, Brooklyn, New York 11206
Institutional Controls:	1. The property may be used for restricted residential, commercial, and industrial uses;
	2. IC • The property may be used for: restricted residential use; • All ECs must be operated and maintained as specified in this SMP; • All ECs must be inspected at a frequency and in a manner defined in the SMP; • 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 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; • Environmental or public health monitoring must be performed as defined in this SMP; • Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP; • Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP; • Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP; • 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 the Environmental Easement; • The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 5, and any potential impacts that are identified must be monitored or mitigated; and • Vegetable gardens and farming on the site are prohibited.
	3. All ECs must be inspected at a frequency and in a manner defined in the SMP. This statement is to be included here if there are ECs per the site's remedial program.
Engineering Controls:	1. Cover system
	2. Sub-Slab Depressurization System

Inspections:	**Frequency**
1. Cover inspection – Cellar Slab Lot 49 (formally Lots 49 & 50)	Annually
2. Cover inspection – Front and Rear Courtyard Slabs, Cellar Slab Lot 45	Annually
3. Cover inspection – Cellar and Rear Courtyard Concrete Slabs Lots 46, 47, and 48	Annually
3. Sub-Slab Depressurization System Lots 46, 47 and 48	Annually
Monitoring:	
1. Cover inspection – Cellar Slab Lot 49 (formally Lots 49 & 50)	Annually
2. Cover inspection – Front and Rear Courtyard Slabs, Cellar Slab Lot 45	Annually
3. Cover inspection – Cellar and Rear Courtyard Concrete Slabs Lots 46, 47, and 48	Annually
4. Sub-Slab Depressurization System Lots 46, 47 and 48	Annually
Maintenance:	
1. SSDS System – Blower Maintenance – Lots 45, 46, 47 and 48	As needed
Reporting:	
2. Composite Cover Monitoring	Annually
3. SSDS Monitoring	Annually
4. Periodic Review Report	Annually

Further descriptions of the above requirements are provided in detail in the latter sections of this *Site Management Plan* for OU3.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Former Pfizer Property Site B – Operable Unit 3 Site located in Brooklyn, New York (hereinafter referred to as the "Site"). The six lots comprising Operable Unit 3 identified as Block 2266 Lots 45-50 are part of a Voluntary Cleanup Agreement (Index Agreement No. D2-0010-0703) between the New York State Department of Environmental Conservation (DEC) and Pfizer Inc, YGS, Inc., and Oholei Shloma to investigate and remediate properties currently or formerly owned by Pfizer under the New York State Voluntary Cleanup Program (VCP). The agreement was executed on September 19, 2003, and was subsequently amended on March 22, 2011, and September 19, 2012.

A *Remedial Action Work Plan* dated November 2014 (Revised February 2015) was prepared by AMC Engineering PLLC on behalf of Congregation Oholei Shloma (current owner) for the Former Pfizer Site B – Operable Unit 3 (OU3) property located at 73-87 Gerry Street. OU3 is comprised of Block 2266, Lots 45, 46, 47, 48, 49, and 50. Remedial activities performed on Lots 46, 47 and 48 in 2015 and 2016 in accordance with the *Remedial Action Work Plan* were detailed in a *Construction Completion Report* certified by AMC Engineering (dated April 2017). A *Site Management Plan* (January 2017) was prepared by AMC Engineering for all six lots comprising OU3 to outline the Engineering Controls (Cover System and Sub-Slab Depressurization System) and all ongoing required inspections, monitoring, maintenance, and reporting. Remedial activities performed on Lot 45 from 2018 to 2022 under the *Site Management Plan* (January 2017) and were detailed in a *Construction Completion Report* certified by AMC Engineering (dated April 2023).

The *Site Management Plan* for OU3 has been updated (Updated June 26, 2023) by AMC Engineering, PLLC to outline the changes to the Engineering Controls (Cover System and Sub-Slab Depressurization System) for Lot 45, and includes the current Engineering Controls (Cover System and Sub-Slab Depressurization System) for all six lots comprising OU3 and outlines all ongoing required inspections, monitoring, maintenance, and reporting.

The *Site Management Plan* for OU3 has been updated again (May 17, 2024) by AMC Engineering, PLLC to update the existing site conditions and Engineering Controls (Cover System) for Lot 49 (formerly Lots 49 and 50), and includes the current Engineering Controls for all six lots comprising OU3 and outlines all ongoing required inspections, monitoring, maintenance, and reporting.

Figures showing the Site location and boundaries of the Site are provided as **Figures 1** and **2**. The boundaries of the Site are more fully described in the metes and bounds description that is part of the Deed Restriction (**Appendix B)**.

After completion of the remedial work, some contamination was left at the Site, which is hereafter referred to as "remaining contamination". Institutional and Engineering Controls (ICs/ECs) 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 ECs and ICs placed on the Site.

This SMP was prepared to manage remaining contamination at 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 Deed Restriction. 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 VCA (Index Agreement No. D2-0010-0703, Site No. V00350) 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 C** of this SMP.

This SMP was prepared by AMC Engineering, PLLC (AMC), on behalf of Congregation Oholei Shloma, 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 and/or ECs 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: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, 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 VCA, 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 or EC that reduces or has the potential to reduce the effectiveness of an EC, 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 that reduces or has the potential to reduce the effectiveness of ECs in place at

the Site, 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 ECs.

Any change in the ownership 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 Voluntary Cleanup Agreement, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 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 **Appendix C.**

Table 1: Notifications*

Name	**Contact Information**
Project Manager Madeleine Babick	Madeleine.Babick@dec.ny.gov718-482-4992
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.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The addresses for the Site are listed as 73-85 Gerry Street, Brooklyn, New York 11206. The Site is located in the City of New York and Borough of Brooklyn (Kings County) as shown on **Figure 1**. The Site is located on the north side of Gerry Street between Throop Avenue and Harrison Avenue and is designated as Block 2266 and Lots 45, 46, 47, 48, and 49 (formerly 49 and 50) on the Brooklyn Tax Map. Combined, the six lots consist of 140 feet of street frontage on Gerry Street. Each of the lots has a depth of 100 feet deep for a total of 14,000 square feet (0.32 acres) (see **Figure 2**). The boundaries of the Site are fully described in **Appendix A**: Survey Map, Metes and Bounds. The owners of the parcel comprising the Site at the time of issuance of this updated SMP are listed below:

Lot 45	Lot 46	Lot 47	Lot 48	Lot 49
75-83 Gerry LLC	Berish Ekstein	Simon Strulovic	Yoel Kaufman	Congregation Divrei Yoel
144 Spencer St, Suite 612 Brooklyn, NY 11205	85 Gerry Street Brooklyn, NY 11206	83 Gerry Street Brooklyn, NY 11206	81 Gerry Street Brooklyn, NY 11206	144 Spencer St, Suite 612 Brooklyn, NY 11205

2.2 Physical Setting

2.2.1 Land Use

The Site consists of three new 4-story two-family buildings with concrete capped rear courtyards constructed on Lots 46, 47, and 48, one new 6-story residential building with concrete capped front and rear courtyards on Lot 45, and one new 5-story residential building with concrete capped cellar on Lot 49 (formerly Lots 49 and 50). The Site is zoned R7A. Site occupants include residents of new residential buildings.

The area immediately surrounding the Site has historically been used for heavy commercial operations such as fleet maintenance, metal fabrication and auto repair shops. However, a significant number of new residential construction projects have recently begun, following an area wide rezoning completed by the City in 2005. Surrounding land use includes new residential buildings to the northwest, a new school and planned playground to the southwest (on OU-2 of

this VCP site), vacant lots and new residential construction to the northeast and vacant lots and the vacant former Pfizer D building to the southeast (on OU-1 of this VCP Site).

2.2.2 Geology

The geologic and hydrogeologic conditions were reported by Roux as follows:

Three distinct geologic strata were encountered at the Site from land surface to a depth of approximately 24 feet below land surface (ft bls), and include:

- A brown sand stratum (i.e., fill material). This stratum was identified with an approximate thickness of 8 ft.
- A green clay/silt stratum that underlies the fill material with an approximate thickness of 2 ft to 3 ft. This stratum was identified throughout the site except in the areas where it was excavated during the performance of the Interim Remedial Measure (IRM).
- A brown fine to medium sand stratum with minor amounts of silt and gravel that underlies the clay layer (where present). This stratum was identified throughout the site; however, its thickness was not determined.

The fill material is characterized as predominately fine to coarse sand, some concrete, brick, and slag fragments, trace to some gravel, and trace clay. Note that the majority of the fill on Lots 46, 47 and 48 was removed for construction of the new buildings and excavation for several mercury hot-spots in the rear courtyards, and the majority of the fill material was previously excavated to a depth of 10 feet below grade from Lot 49 in 2002.

The lithology north of the Site along Wallabout Street was examined during the SSI. The upper stratum in this area consists of bottom fining brown to gray sand, with increasing amounts of silt from land surface to approximately 15 ft bls. This upper stratum is underlain by laminated fine sand, silt, and clay. The thickness of this stratum was not determined during the SSI.

A geologic cross section is shown on **Figure 3**.

2.2.3 Hydrogeology

During previous investigations, the estimated groundwater flow direction at the Site was to the north. The estimated overall northerly direction of the groundwater flow is consistent with previous investigations and the regional groundwater flow direction (USGS, 1979) (**Figure 4)**.

2.3 Investigation and Remedial History

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 8.0 - References.

- An Environmental Site Assessment (ESA) was performed to identify any environmental concerns associated with Site B that may present a risk to human health or the environment. The results of the Site B ESA were reported in the document titled "Environmental Site Assessment on Site B" (Roux Associates, 1996). Based on the Site inspection results, four areas of Site B were identified by Roux Associates for further investigation during the ESA. These areas included Lot I, the southwest portion of the concrete slab, the location of the former aboveground fuel oil tank (located in the former basement), and the location of a former roof drainpipe (located in the eastern portion of Site B).
- An investigation was performed to address data gaps identified in the ESA. The results were reported in the document titled "Results of the Supplemental Investigation at Site B" (Roux Associates, 1997a). The results indicated that volatile organic compounds (VOCs) and metals were detected in the fill material and perched groundwater. Additionally, the fill material was determined to be non-hazardous. The results of the Limited Risk Assessment (LRA) indicated that the presence of chemicals at the concentrations detected in the fill material at Site B do not pose a current or future risk under occupational or construction activities.
- An investigation that further delineated the petroleum-related impacts at Site B was performed in 1997. The results of the delineation work were reported in a September 4, 1997 Technical Memorandum: Summary of Toxicity Characteristic Leaching Procedure Testing Delineation Soil Borings at Site B (Roux Associates, 1997b).

- Pfizer performed a Phase I and Phase II Limited Site Investigation in February 2003 and April 2003, respectively, to address data gaps prior to the development of an SSI Work Plan. The Phase I LSI included the performance of a geophysical survey, a test pit program, and onsite characterization of groundwater quality; Phase II addressed upgradient groundwater quality, a vertical delineation of groundwater impacts, and confirmation of the groundwater quality onsite (Roux Associates, 2003).
- The Site B IRM Investigation Report was prepared and submitted on June 9, 2003 (Roux Associates, 2003).
- A two part Subsurface Investigation was completed in March 2005 (Roux). The findings were as follows:
  - The nature (VOCs, SVOCs and metals) and extent of soil impacts have been adequately categorized at Site B. The VOC source areas have been removed as part of the 2002 IRM. Residual levels of VOCs do not exceed the NYSDEC RSCOs.
  - Although SVOC and metal levels in soil at Site B exceed NYSDEC RSCOs, no further investigation or remediation of SVOCs and metals in soil at Site B is warranted because The vertical distribution and the various concentrations of SVOCs and metals do not exhibit a specific pattern, are typical components in historical fill; are not constituents of a release, and are ubiquitous in urban environments (i .e., Brooklyn, New York).
  - Residual levels of mercury and lead have been characterized as non-hazardous In nature.
  - There is currently little to no potential for persons (receptors) to be exposed to soil at the Site because the Site has limited activity occurring on it and is almost entirely covered by crushed stone.
  - Based on the Site's proposed future use as an adult trade school and adjacent parking lot, there will be little to no potential for persons to contact soil at the Site once redevelopment is complete.
  - Future workers at the Site engaged in soil-moving and excavation activities are not expected to be exposed to unacceptable levels of Site-related chemicals.
  - The nature (CVOCs) and extent of soil vapor impacts have been adequately categorized at Site B.

- The passive loss of soil vapor from undisturbed soil to ambient air is not typically considered as a viable pathway for outdoor exposure.

- Focused Investigation and Additional Remedy Evaluation for MW3 and MW7 Areas (Roux Associates 2009). The findings were as follows:
  - Historical elevated concentrations of CVOCs (i.e., greater than 1,000 ppb) observed at monitoring wells MW-3 and MW-7 are due to dissolved CVOCs present from 15 ft bls to the confining clay unit in the vicinity of the two monitoring wells;
  - Addressing the elevated CVOCs in the groundwater proximate to monitoring wells MW-3 and MW-7 should be sufficient to meet the first two objectives toward achieving Site closure because there are no soil impacts due to CVOCs (i.e., no DNAPL) from 15 ft bls to the confining clay unit in the vicinity of the two monitoring wells;
  - The vertical extent of CVOC impacts in the vicinity of monitoring wells MW-3 and MW-7 has been delineated (i.e., from 15 ft bls to the confining clay unit at approximately 27 to 28 ft bls), but horizontal delineation is incomplete;
  - Soil vapor concentrations of PCE have decreased significantly from the levels detected in 2004 and 2005.
- Quarterly Sampling Progress Report - February through April 2012 (Roux). On February 23 and 24, 2012, a comprehensive groundwater gauging and sampling round was completed from onsite monitoring wells MW-3, MW-5, MW-6R, MW-7, MW-8, MW-14, MW-15, and MW-17, and offsite monitoring wells MW-1R, MW-9, MW-10, MW-11, MW-12, MW-16, MW-18, MW-19, and MW-20. On February 23, 2012, a two-hour duration soil vapor sample was collected from soil vapor sampling points SV-P1 and SV-P2, and an ambient air sample was collected from the upwind Site boundary. Findings were as follows:
  - VOC concentrations in groundwater at the up gradient, down gradient, and on-Site monitoring wells were generally consistent with historical data.
  - Soil vapor concentrations at SV-P1 and SV-P2 were generally consistent with the data reported in previous progress reports.
- Construction Completion Report – April, 2017 (AMC Engineering). The Site (Lots 46, 47, and 48) was remediated in accordance with the remedy selected by the Remedial

Action Work Plan dated November 2014 (revised February 2015), and the Decision Document dated February 20, 2015. Excavation was performed at the Site to soil/fill exceeding Restricted Residential Use SCOs and in areas where Restricted Residential Use SCOs were not achieved, an engineered composite cover system was installed. The Site will be used for restricted residential use. The remedy included the following elements:

1. Excavation of soil/fill exceeding Restricted Residential Use SCOs to the extent practical on Lots 46, 47, and 48;
2. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
3. Collection and analysis of end-point samples from Lots 46, 47, and 48 to evaluate the performance of the remedy with respect to attainment of Track 4 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. Import of 3/4" clean stone for us as backfill below the building slabs in accordance with all Federal, State and local rules and regulations for handling and transport of material;
6. Installation of a sub-slab depressurization system and vapor barrier beneath each of the three new buildings constructed on Lots 46, 47, and 48;
7. Construction of a composite cover system consisting of 2 inches of asphalt across all of Lots 49 and 50, the former concrete loading dock and 2 inches of asphalt across all of Lot 45, a minimum of 6 inch thick concrete slab in the cellar of each of the three new buildings on Lots 46, 47, and 48, and a 6 inch thick concrete slab covering the rear courtyards behind each of the buildings on Lots 46, 47, and 48;
8. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Deed Restriction which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting; and
9. Execution and recording of a Deed Restriction to ensure implementation of the SMP and that the Site is only used for allowable uses following remediation.

10. Lot 45, consisting of a partially concrete-covered site, was capped with a minimum of 2" of asphalt, and all other exposed concrete was patched where cracked and repaired.
11. Vacant lots 49 and 50 were capped with a min. of 2" of asphalt.
12. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Deed Restriction which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting; and
13. Execution and recording of a Deed Restriction to ensure implementation of the SMP and that the Site is only used for allowable uses following remediation.

- Construction Completion Report – April 2023 (AMC Engineering). The Site (Lot 45) was remediated in accordance with the Site Management Plan (January 2017). Excavation was performed at the Site to soil/fill exceeding Restricted Residential Use SCOs and in areas where Restricted Residential Use SCOs were not achieved, an engineered composite cover system was installed. The Site will be used for restricted residential use. The remedy included the following elements:
  1. Excavation of soil/fill exceeding Restricted Residential Use SCOs to the extent practical on Lot 45;
  2. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
  3. Collection and analysis of end-point samples from Lot 45 to evaluate the performance of the remedy with respect to attainment of Restricted Residential 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. Import of ASTM 57 (3/4" stone) for us as backfill below the new building's cellar slab and around the sub-slab depressurization system piping in accordance with all Federal, State and local rules and regulations for handling and transport of material;
  6. Import of clean soil for us as off-Site backfill behind the east cellar wall in an area where sloped excavation was performed in accordance with all Federal, State and local rules and regulations for handling and transport of material;

7. Import of ASTM 57 (3/4" stone) for use as backfill behind the new building's rear cellar wall and below the rear courtyard slab in accordance with all Federal, State and local rules and regulations for handling and transport of material;
8. Installation of a sub-slab depressurization system and vapor barrier beneath the new building constructed on Lot 45;
9. Constructed a composite cover system consisting of the following:
    - Cellar: 24-inch concrete mat slab; and
    - Front and Rear Courtyards: 4-inch concrete slab in both the front courtyard and rear courtyard behind the new building.
10. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Deed Restriction which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting; and
11. Execution and recording of a Deed Restriction to ensure implementation of the SMP and that the Site is only used for allowable uses following remediation.

- Construction Completion Report – January 2023 (AMC Engineering). The Site (Lot 49) was remediated in accordance with the Site Management Plan Notification Letter (March 13, 2020). 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 Unrestricted Use SCOs to 14 ft-bgs across the Site, and to 19 ft-bgs for the elevator pits and mikvahs on Lot 49;
    2. Excavation and disposal of 3,398 cubic yard (5,097 tons) of soil/fill from Lot 49;
    3. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
    4. Collection and analysis of end-point samples from Lot 49 to evaluate the performance of the remedy with respect to attainment of Track 1 SCOs;
    5. 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;
    6. Constructed a composite cover system consisting of the following:
        - Cellar: 4-inch thick concrete slab; and

- Elevator Pits and Mikvahs: 4-inch concrete slab

7. Installation of Grace Preprufe 300R Plus vapor barrier/water proofing membrane beneath the new building constructed on Lot 49;
8. Maintain the current Deed Restriction to ensure implementation of the SMP until the NYSDEC and NYSDOH allows for the discontinuation of the Engineering Controls (EC) and Institutional Controls (IC).

Conceptual Model of Site Contamination

The contaminants of concern remaining at the Site at this time consist of chlorinated VOCs (CVOCs) mainly tetrachloroethene (PCE) and one or more of its breakdown products, including trichloroethene, cis-dichloroethene and vinyl chloride, in groundwater. The source of the CVOCs has been identified as the Pfizer - Site D located on the southeast side of Gerry Street.

Elevated levels of SVOCs and metals reported in the fill throughout the Site likely are inherent in the sub-standard fill historically placed on the property. However, elevated concentrations of mercury detected within soil samples collected from the rear courtyard areas of Lots 46, 47 and 48 is likely attributable to a prior fur manufacturer that historically operated at the Site.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in Decision Document dated February 20, 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 groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination

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.

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 a site.

2.5 Remaining Contamination

2.5.1 Soil

Lots 46, 47, 48

The laboratory results of the six endpoint soil samples collected after the removal of historic fill for construction of the three new buildings on Lots 46, 47, and 48 (EP7, EP8, EP10, EP11, EP13 and EP14) confirms that all soil remaining on the Site below the buildings meets Residential Use (Track 2) SCOs.

Three separate mercury hot-spot excavations were performed in the rear courtyards behind the new buildings on Lots 46, 47 and 48; SBB-32 Mercury Hot-Spot Excavation (Lots 47 and 48), EP9 Mercury Hot-Spot Excavation (Lot 47), Northeast Corner Excavation (very rear of Lots 46 and 47). The laboratory results of the endpoint soil samples indicated mercury is still present at elevated concentrations below the concrete capped rear courtyard behind each of the three new buildings.

Lot 49 (Formerly Lots 49 & 50)

Lot 49 was excavated to 14 feet below grade across the site, and 19 feet below grade for the new elevator pit and Mikvah. The laboratory results of the endpoint soil samples (75-EP1, 75-EP2, 75-EP3, 75-EP4,75-EP5, and 75-EP6) collected at the bottom of excavation met the NYSDEC Part 375-6.8 Unrestricted Use SCOs. Lot 49 is finished with a 4-inch concrete slab. Grace Preprufe 300R waterproofing membrane was installed below the cellar slab and behind the cellar walls up to grade elevation, since the finished slab sits below the water table. Lot 49 met Track 1 SCOs and there is no potential for soil vapor intrusion, based on the clean endpoint results and no headspace below the site for contaminated vapors to accumulate.

Lot 45

The laboratory results of the endpoint soil samples collected after the removal of historic fill for new building and endpoint soil sample collected following removal of the top 6 inches of soil from the rear courtyard area indicate SVOCs are still present at elevated concentrations below the new building slab and concrete capped rear courtyard behind the new building.

A summary of the compounds remaining above SCOs is presented as **Table 2** and **Figure 5**.

2.5.2 Groundwater

Previous investigations performed at the Site have identified Pfizer - Site D, located on the southeast side of Gerry Street, as the source of chlorinated VOCs in groundwater which appear to be migrating onto the Site in a northerly direction. The highest on-Site CVOC concentrations were reported in the northeast corner of the Site. Chlorinated VOCs previously identified in on-Site groundwater primarily includes tetrachloroethene (PCE) and one or more of its breakdown products, including trichloroethene, cis-dichloroethene and vinyl chloride.

Installation of the monitoring wells, injection of the chemical oxidant, collection and analysis of the performance groundwater samples, and all reporting has been performed by Remedial Engineering, P.C. and documented in the OUI Completion Report. The December 1, 2022, Periodic Review Report for Former Pfizer Inc. Sites B &D prepared by Roux Environmental Engineering and Geology, D.P.C notes the most recent groundwater sampling events (January 26, 2022 and April 28, 2022), represent the 4th and 5th sampling events following the November 2020 *In Situ* injection event, and the 15th and 16th groundwater sampling event following the first *In Situ* Chemical Oxidation (ISCO) injection round performed in 2016. The results demonstrate declining CVOC concentrations, and a generally improving groundwater quality since the October 2020 (pre-injection, baseline) groundwater sampling round. For the third consistent sampling event, total CVOC concentrations in all monitoring wells from within, and outside of, the Radius of Influence (ROI) are now below 1,000 µg/L. The average total CVOC concentration of wells within the ROI shows continuous decline. This suggests that the aquifer matrix has stabilized and is continuing to degrade the remaining contaminants. The results are summarized and presented in tables and figures within the December 1, 2022, Periodic Review Report for Former Pfizer Inc. Sites B &D prepared by Roux Environmental Engineering and Geology, D.P.C.

2.5.3 Soil Vapor

Chlorinated VOCs are present in on-Site groundwater, and elevated concentrations of chlorinated VOCs have been previously identified in on-Site soil gas. It is assumed that CVOC vapors are at levels requiring mitigation remain at the Site.

Since contaminated groundwater/soil vapor remains beneath the Site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the *Site Management Plan* for OU3 approved by the NYSDEC.

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Residual contamination above Restricted Residential Use SCOs remains at the Site. Institutional Controls (ICs) and Engineering Controls (ECs) therefore are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the Site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all IC/ECs on the Site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the deed restrictions;
- 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 IC/ECs; such as the implementation of the Excavation Work Plan (EWP) (as provided in **Appendix D**) 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 IC/ECs required by the site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the Site to restricted residential, commercial or industrial uses only. Adherence to these ICs on the Site is required by the deed restrictions and will be implemented under this SMP. ICs identified in the deed restrictions may not be discontinued without an amendment to or extinguishment of the deed restrictions. The IC boundaries are shown on **Figure 2**. These ICs are:

- The property may be used for restricted-residential use;
- All ECs must be operated and maintained as specified in this SMP;

- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- 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 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;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- 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 the deed restrictions;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on **Figure 2**, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the Site are prohibited;

3.3 Engineering Controls

3.3.1 Cover

Soil with elevated concentrations of SVOCs and the metal mercury are present below the concrete slab covering the rear courtyards of Lots 46, 47, and 48, and soil with elevated concentrations of SVOCs are present below the cellar slab and below the front and rear courtyard slabs of Lot 45. Exposure to remaining contamination at the Site is prevented by a cover system placed over the Site. This cover system is comprised of 2 inches of asphalt across all of Lots 49 and 50, a minimum of 6 inch thick concrete slab in the cellar of each of the three new buildings on Lots 46, 47, and 48, a 6 inch thick concrete slab covering the rear courtyards behind each of the buildings on Lots 46, 47, and 48, a 24 inch concrete mat slab in the cellar of the new building on Lot 45, and a 4 inch concrete slab cover in both the front courtyard and the rear courtyard behind the new building on Lot 45. **Figure 6** presents the location and details of each cover

system type. The Excavation Work Plan (EWP) provided in **Appendix D** outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of this SMP. Any work conducted pursuant to the EWP must be conducted in accordance also with the procedures defined in a Health and Safety Plan (HASP) (**Appendix I**) and associated Community Air Monitoring Plan (CAMP) prepared for the Site and provided in **Appendix H**.

3.3.2 Sub-Slab Depressurization (SSD) System and Vapor Barrier

Contaminated soil vapors are assumed to remain beneath the Site following the Remedial Action. ICs and ECs therefore are required to protect human health and the environment. These ECs and ICs are described in the following sections. Short-term management of these EC/ICs will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

An active sub-slab depressurization (SSD) system and vapor barrier were designed and installed beneath the cellar slab of all four buildings on Lots 45, 46, 47, and 48. The SSD system installed beneath each building consists of a single venting zone, which provides coverage of approximately 1,500 sf of slab area. This is consistent with USEPA SSD design specifications, which recommend a separate vent loop for every 4,000 sf of slab area.

The horizontal vent line is constructed with a continuous loop of perforated 4-inch high density polyethylene (HDPE) pipe. The SSDS loop was installed within a 6 inch layer of ¾ inch bluestone spread across the entire cellar footprint and below the vapor barrier. Each SSDS loop is connected to a solid 6 inch schedule 40 PVC riser pipes (Lots 46, 47, 48) or 4 inch cast iron riser pipe (Lot 45) that extend to the roof. A blower (Radonaway model No. RP265) is fitted to the top of each of the four riser/discharge pipes that extend above the roof of each building. Each system is hardwired to an electric source. The exhausts from the blowers are located a minimum of 10 feet from windows and ventilation inlets. Each SSD system utilizes a manometer (Dwyer, 0-5 inches of water manometer) and an alarm (Radonaway alarm) installed within the cellar of the buildings to ensure proper operation of the blower.

A 20-mil vapor barrier was installed over each SSD system prior to pouring the building's concrete slab. The vapor barrier for Lots 46, 47, and 48 consists of Raven Industries' VaporBlock® Plus™ 20, which is a seven-layer co-extruded 20 mil vapor barrier made from polyethylene and EVOH resins. The vapor barrier for Lot 45 consists of Stego® Wrap Vapor Barrier (20-mil), which is a multi-layer plastic extrusion manufactured with only the highest grade of prime, virgin, polyolefin resins. The vapor barrier extends throughout the entire cellar footprint of each building. Vapor barrier seams, penetrations, and repairs were sealed either by the tape method, according to the manufacturer's recommendations and instructions.

A laminated sign that provides notification information in case the alarm sounds has been posted next to each alarm. A copy of the sign is included in **Appendix F**. In addition, the building superintendent will be responsible for periodically checking SSDS alarms to determine if an alarm(s) has sounded.

Procedures for operating and maintaining the SSD system and vapor barrier are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As-built drawings, signed and sealed by a professional engineer, that depict the layout and as-built installation details of the ECs for the Site are attached as **Figures 7** and **8**.

3.3.3 Post-Remediation Groundwater Monitoring

Previous investigations performed at the Site have identified Pfizer - Site D, located on the southeast side of Gerry Street, as the source of chlorinated VOCs in groundwater which appear to be migrating onto the Site in a northerly direction. The highest on-Site CVOC concentrations were reported in the northeast corner of the Site. Chlorinated VOCs previously identified in on-Site groundwater primarily includes tetrachloroethene (PCE) and one or more of its breakdown products, including trichloroethene, cis-dichloroethene and vinyl chloride.

The RAWP required the injection of a chemical oxidant solution to address affected groundwater within a hotpot area near the property line dividing Lots 46 and 47. The chemical oxidant injections are intended to significantly reduce the CVOC contamination in groundwater, and thereby accelerate the improvements in groundwater and soil vapor quality. Following the injections, groundwater performance monitoring samples are to be collected to assess the performance of the remedy.

Installation of the monitoring wells, injection of the chemical oxidant, collection and analysis of the performance groundwater samples, and all reporting has been performed by Remedial Engineering, P.C. and documented in the OUI Completion Report. The December 1, 2022, Periodic Review Report for Former Pfizer Inc. Sites B &D prepared by Roux Environmental Engineering and Geology, D.P.C notes the most recent groundwater sampling events (January 26, 2022 and April 28, 2022), represent the 4th and 5th sampling events following the November 2020 *In Situ* injection event, and the 15th and 16th groundwater sampling event following the first *In Situ* Chemical Oxidation (ISCO) injection round performed in 2016. The results demonstrate declining CVOC concentrations, and a generally improving groundwater quality since the October 2020 (pre-injection, baseline) groundwater sampling round. For the third consistent sampling event, total CVOC concentrations in all monitoring wells from within, and outside of, the Radius of Influence (ROI) are now below 1,000 µg/L. The average total CVOC concentration of wells within the ROI shows continuous decline. This suggests that the aquifer matrix has stabilized and is continuing to degrade the remaining contaminants. The results are summarized and presented in tables and figures within the December 1, 2022, Periodic Review Report for Former Pfizer Inc. Sites B &D prepared by Roux Environmental Engineering and Geology, D.P.C.

3.3.4 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

3.3.4.1 Cover

The composite cover system is a permanent control and the quality and integrity of this system will be inspected in perpetuity at defined, regular intervals in accordance with this SMP**.**

3.3.4.2 Active Sub-Slab Depressurization System (SSDS)

The active SSD systems will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. In the event that monitoring data indicates that the SSD system

may no longer be required, a proposal to discontinue the SSD system will be submitted by the remedial party to the NYSDEC and NYSDOH. A work plan will be submitted for review/approval prior to collection of confirmatory samples.

3.3.4.3 Groundwater Monitoring

In the event monitoring data indicates groundwater monitoring may no longer be required, a proposal to discontinue groundwater monitoring, including the results of an impact study, will be submitted by the remedial party. As previously noted, installation and maintenance of the monitoring wells, injection of the chemical oxidant, collection and analysis of the performance groundwater samples, and all related groundwater monitoring/sampling reporting will be performed by Remedial Engineering, P.C. and documented in the OUI Completion Report. Conditions that may warrant discontinuing the groundwater monitoring include contaminant concentrations in groundwater that: (1) reach levels that are consistently below ambient water quality standards or the Site SCGs as appropriate, or (2) have become asymptotic to a low level over an extended period of time as accepted by the NYSDEC. Systems will remain in place and operational until permission to discontinue their use is granted in writing by the NYSDEC.

4.0 MONITORING PLAN

4.1 General

This Monitoring Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring Plan may only be revised with the approval of the NYSDEC. Details regarding inspection and evaluation of the ECs are provided in the following sections.

This Monitoring Plan describes the methods to be used for:

- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

To adequately address these issues, this Monitoring Plan provides information on:

- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site – Wide Inspection

Site-wide inspections 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-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in **Appendix E** – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that site records are up to date.

Inspections of all remedial components installed at the Site will be conducted. A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule,

regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs continue to perform as designed;
- If these controls continue 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 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, 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 to verify the effectiveness of the IC/ECs implemented at the Site 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.

4.3 Composite Cover System Monitoring

4.3.1 Composite Cover System Monitoring

Monitoring of the Composite Cover System will be performed on a routine basis, as identified in **Table 3 –** Composite Cover Remedial System Monitoring Requirements and Schedule (see below). Modification to the frequency or sampling requirements will require approval from the NYSDEC. A visual inspection of the complete system will be conducted during each monitoring event. The Composite Cover System consists of 2 inches of asphalt across all of Lots 49 and 50, a minimum of 6 inch thick concrete slab in the cellar of each of the three new buildings on Lots 46, 47, and 48, a 6 inch thick concrete slab covering the rear courtyards behind each of the buildings on Lots 46, 47, and 48, a 24 inch concrete mat slab in the cellar of the new building on Lot 45, and a 4 inch concrete slab cover in both the front courtyard and the rear courtyard behind the new building on Lot 45. The composite cover system will be monitored to document existing conditions and ensure no penetrations or damage has occurred which will affect cover system

integrity. The cover system is in place to prevent human exposure to remaining soil/fill at the Site.

Unscheduled inspections may take place when a suspected failure of the Composite Cover System has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The Composite Cover System components to be monitored include, but are not limited to, the components included in **Table 3** below.

Table 3 – Composite Cover Remedial System Monitoring Requirements and Schedule

Cover Component	Monitoring Parameter	Monitoring Schedule
Concrete Building Slab (Lot 49, formerly Lots 49 & 50) (4 inches thick)	Inspect for penetrations, holes, cracks, etc. & determine if repair/replacement is required.	Annual
Concrete Building Slab (Lots 46, 47, and 48) (6 inches thick)	Inspect for penetrations, holes, cracks, etc. & determine if repair/replacement is required	Annual
Concrete Capped Rear Yards (Lots 46, 47, and 48) (6 inches thick)	Inspect for damage, and determine if repair/replacement is required.	Annual
Concrete Building Slab (Lots 45) (24 inches thick)	Inspect for penetrations, holes, cracks, etc. & determine if repair/replacement is required	Annual
Concrete Capped Front and Rear Courtyards (Lot 45) (4 inches thick)	Inspect for damage, and determine if repair/replacement is required.	Annual

A complete list of components to be inspected is provided in the Inspection Checklist, provided in **Appendix E** - Site Management Forms. If any penetrations, holes, cracks or other disturbances are noted within the composite cover system components, maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

4.4 Remedial System Monitoring

4.4.1 SSD System

Monitoring of each sub-slab depressurization (SSD) system will be performed on a routine basis, as identified in Table 4 – SSDS Remedial System Monitoring Requirements and Schedule (see below). Modification to the frequency or sampling requirements will require approval from the NYSDEC. A visual inspection of each complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of an SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSD system components to be monitored include, but are not limited to, the components included in Table 4 below.

Table 4 – SSDS Remedial System Monitoring Requirements and Schedule

Remedial System Component	Monitoring Parameter	Operating Range	Monitoring Schedule
Vacuum Fan (RP265)	On or Off		Annually
Magnehelic Meter	Vacuum at Riser	>0.1” W.C.	Annually
Alarm	Alarm trips when fan shut off		Annually

A complete list of components to be inspected is provided in the Inspection Checklist, provided in **Appendix E** - Site Management Forms. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the Site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the Site to operate and maintain the sub-slab depressurization (SSD) systems;
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSD systems are operated and maintained.

Further detail regarding the Operation and Maintenance of the SSD system is provided in **Appendix F** - Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete SMP, is maintained at the Site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

5.2 Remedial System (or other Engineering Control) Performance Criteria

Each SSD system has been designed with an electric blower capable of producing enough negative pressure in the sub-slab as to be able to remove any potential off-gases. A minimum of 0.02" WC will be sought in the most remote sub-slab area. The vacuum achieved at the riser will be around 0.4" WC or higher. The blower, located on the roof, and installed a minimum distance of 10 ft from any vent or operable windows, is electrically fed with a dedicated circuit. A visual and audible alarm, which signals when vacuum is lost at the riser, is powered independently from the blower, such that if the blower causes the breaker to trip, the alarm will still provide an alarm status. The blower is designed for continuous duty, and will be used continuously.

5.3 Operation and Maintenance of the Sub-Slab Depressurization (SSD) System

The following sections provide a description of the operations and maintenance of the SSD system. Cut-sheets and as-built drawings for SSD system are attached as **Figures 7** and **8**.

5.3.1 System Start-Up and Testing

Each SSDS zone consists of a perforated sub-slab pipe, a gas permeable aggregate in the form of ¾-inch clean gravel, a stub out, a riser, and a blower, vacuum gauge and alarm.

Initially after the SSD system is fully installed, vacuum is measured at the riser via the Magnehelic meter. Vacuum at the foot of the riser shall be greater than 0.1"WC.

Within the SSDS loop installed below each building, two points are identified which are remote from each other and from the SSD perforated pipe. Care should be exerted before penetrating the slab and membrane to not perforate any utility pipes. Having identified the two monitoring points, a ½-inch hole is drilled through the concrete slab and vapor barrier into the gravel. With the help of a portable vacuum meter, vacuum is measured in the sub-slab. All vacuum readings should be a minimum of 0.02" WC. If vacuum is less or non-existent, then corrective measures must be taken. As an alternative, the potential for vapor intrusion can be re-evaluated to determine if the system must remain in operation. This evaluation and determination must be made in consultation with and under the approval of the NYSDEC and NYSDOH.

After sub-slab testing is conducted during the start-up, the drilled holes are filled up with non-shrink grout or any other sealant, making sure it creates a seal at the vapor barrier depth.

The system testing described above will be conducted if, in the course of the SSD system lifetime, the system goes down or significant changes are made to the system and the system must be restarted, except that the slab will not have to be drilled again to test for vacuum. Please see the manufacturer's instructions regarding additional information regarding system start-up, maintenance, and testing, provided in **Appendix F** – Operations and Maintenance Manual.

5.3.2 Routine System Operation and Maintenance

The system, as designed, is virtually maintenance free. If any of the components fail (blower, meter, alarm), they must be replaced with in kind. Please see the manufacturer's instructions regarding routine system operation and maintenance, provided in **Appendix F** – Operations and Maintenance Manual.

5.3.3 Non-Routine Operation and Maintenance

The SSD systems as designed have no non-routine operation and maintenance requirements. It is important to label the riser on every floor, even if it is concealed behind chases or walls, to prevent unwanted future taps.

Please see the manufacturer's instructions regarding non-routine operation and maintenance, provided in **Appendix F** – Operations and Maintenance Manual.

5.3.4 System Monitoring Devices and Alarms

The SSD system has an alarm, which will sound when the blower is not working properly to maintain a minimum vacuum reading. The alarm associated with each SSD system is located within a protective case installed within the basement of each building. A laminated sign is installed immediately next to each protective panel which states the building superintendent must contact AMC Engineering, PLLC if the alarm sounds. A copy of the sign is included in Appendix F.

The SSD system has warning devices to indicate that the system is not operating properly. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSD system will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 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 impact significantly 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 and/or engineering controls to severe storms/weather events and associated flooding.

The Site is located on the Rockaway Peninsula of Queens, NY. It is located at an elevation of 16 feet above the National Geodetic Vertical Datum (NGVD). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the Site is not located within a flood hazard area. 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.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires 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).

6.2.1 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

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.

6.2.2 Frequency Of System Checks, Sampling And Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to conduct system checks and or collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so 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 and system checks;
- Coordination/consolidation of activities to maximize foreman/labor time; and
- Use of mass transit for site visits, where available.

6.2.3 Metrics and Reporting

As discussed in Section 7.0 information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during site management and to identify corresponding benefits; a set of metrics has been developed.

7.0. REPORTING REQUIREMENTS

7.1 Site Management Reports

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

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of **Table 5** and summarized in the Periodic Review Report.

Table 5. Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Inspection Report	Annually
Periodic Review Report	Annually, or as otherwise determined by the Department

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

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/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);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);

- 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;
- Any modifications to the system;
- 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).

Data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link http://www.dec.ny.gov/chemical/62440.html.

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department beginning sixteen (16) months after the Certificate of Completion (COC) is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted every 1 year to the Department or at another frequency as may be required by the Department. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site described in **Appendix B** - Deed Restrictions. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site.
- Results of the required annual 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 summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS^{TM} database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific RAWP or Decision Document;

- The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
- Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
- Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan;
- Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document; and
- The overall performance and effectiveness of the remedy.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a qualified environmental professional or 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 or engineering 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 and engineering controls required by the remedial program was performed under my direction;*
- *The institutional control and/or engineering control 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;*
- *If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;*
- *Use of the site is compliant with the environmental easement;*

- *The engineering control systems are performing as designed and are effective;*
- *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.*
- *No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that these assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and*
- *The assumptions made in the qualitative exposure assessment remain valid.*

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, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative] (and if the site consists of multiple properties): *[I have been authorized and designated by all site owners/remedial parties to sign this certification] for the Site."*

Every five years the following certification will be added:

- *The assumptions made in the qualitative exposure assessment remain valid.*

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.

7.3 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 or engineering 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.

8.0 REFERENCES

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

AMC Engineering, PLLC, *Construction Completion Report, Former Pfizer Property, Site B – Operable Unit 3, April 2017.*

AMC Engineering, PLLC, *Construction Completion Report, Former Pfizer Property, Site B – Operable Unit 3 (Lot 45), April 2023.*

AMC Engineering, PLLC, *Construction Completion Report, Former Pfizer Property, Site B – Operable Unit 3 (Lot 49), January 2023.*

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

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

NYSDOH, Center for Environmental Health, October 2006, *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York.*

TABLES

Pfizer Site B - OU3
81-85 Gerry Street
Brooklyn, New York

TABLE 2
Parameters Detected Above Track 1 Soil Cleanup Objectives

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYSDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYSDEC Part 375.6 Industrial Soil Cleanup Objectives*	Range in Exceedances	Frequency of Detection	SBB-34			EP1	EP4	Duplicate (EP4)	EP6	EP7	EP8	EP10	EP12	EP13	Bldg SW - 1	Merc Exc EP9 Bot 1	Merc HS South SW
						3/29/2004			2/26/2020	7/20/2022	7/20/2022	2/18/2016	4/21/2015	9/4/2015	4/21/2015	2/18/2016	4/21/2015	6/20/2016	5/20/2016	1/8/2016
						0-2"	2-24"	60-84"	(8.5')	(1')	(1')		(7.5'-8')	(7.5'-8')	(7.5'-8')		(7.5'-8')	(4')	(8.5')	(4')
Sample Results in ug/kg																				
Acetone	50	100,000	1,000,000	55	1	-	-	-	-	-	-	-	**55**	-	-	-	-	-	-	-
4,4'-DDE	3.3	8,900	120,000	8.4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4'-DDT	3.3	7,900	94,000	7-27	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Results in ug/kg																				
Benzo(a)anthracene	1,000	1,000	11,000	1,500-11,000	5	**4,000**	**6,300**	-	**11,000**	**1,500**	-	-	-	-	-	**2,000**	-	-	-	-
Benzo(a)pyrene	1,000	1,000	1,100	1,500-7,600	5	**4,000**	**4,800**	-	**7,600**	**1,300**	-	-	-	-	-	**1,500**	-	-	-	-
Benzo(b)flouranthene	1,000	1,000	11,000	1,300-7,700	5	**3,900**	**5,200**	-	**7,700**	**1,300**	-	-	-	-	-	**1,400**	-	-	-	-
Benzo(k)flouranthene	800	3,900	110,000	1,000-4,100	5	**3,300**	**4,100**	-	**2,500**	**1,000**	-	-	-	-	-	**1,400**	-	-	-	-
Chrysene	1,000	3,900	110,000	1,500-7,000	5	**4,400**	**5,500**	-	**7,000**	**1,500**	-	-	-	-	-	**2,000**	-	-	-	-
Dibenzo(a,h)anthracene	330	330	1,100	840-1,300	3	**1,300**	**1,100**	-	**840**	-	-	-	-	-	-	**-**	-	-	-	-
Indeno(1,2,3-cd)pyrene	500	500	11,000	980-4,500	4	-	**4,500**	-	**3,700**	**980**	-	-	-	-	-	**990**	-	-	-	-
Sample Results in mg/kg																				
Arsenic	13	16	16	14.6	1	**14.6**	**-**	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	350	400	10,000	708	1	**708**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	30	180	6,800	13-53.5	2	**32.3**	**53.5**	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	63	400	3,900	86.5-2,020	6	**2,020**	**650**	**490**	-	-	**490**	**86.5**	-	-	-	**284**	-	-	-	-
Mercury	0.18	0.81	5.7	0.22 - 143	29	**2.8**	**3**	**1.3**	-	-	**1.3**	**9.27**	**0.49**	**0.31**	**0.51**	**4.74**	**0.46**	**143**	**0.46**	**46.5**
Zinc	109	10,000	10,000	398	1	-	-	-	-	-	-	-	-	-	-	**398**	-	-	-	-

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives*	NYSDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	NYSDEC Part 375.6 Industrial Soil Cleanup Objectives*	Range in Exceedances	Frequency of Detection	HSD2	HSD3		HSD4		HSD5	HSD8		HSD9			HSD10			Duplicate
						5/20/2016	5/20/2016		5/20/2016		5/20/2016	5/20/2016	5/20/2016	5/20/2016	5/20/2016	5/20/2016	5/20/2016	5/20/2016	5/20/2016	4/21/2015
						(2.5-5')	(2.5-5')	(5-7')	(2.5-5')	(7-9')	(0-2.5')	(2.5-5')	(2.5-5')	(0-2.5')	(2.5-5')	(5-7')	(0-2.5')	(2.5-5')	(5-7')	
Sample Results in ug/kg																				
Acetone	0.05	100,000	1,000,000	55	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Results in ug/kg																				
Benzo(a)anthracene	1,000	1,000	11,000	2,000-6,300	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	1,000	1,000	1,100	150-4,800	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)flouranthene	1,000	1,000	11,000	110-5,200	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)flouranthene	800	3,900	110,000	1,400-4,100	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	1,000	3,900	110,000	2,000-5,500	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	330	330	1,100	62-1,300	3															
Indeno(1,2,3-cd)pyrene	500	500	11,000	990-4,500	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Results in mg/kg																				
Arsenic	13	16	16	12.5-14.6	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	350	400	10,000	708	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	30	180	6,800	13-53.5	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	63	400	3,900	56.5-2,020	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.18	0.81	5.7	0.31 - 143	27	**7.83**	**3.04**	**0.44**	**5.14**	**0.22**	**1.68**	**0.47**	**2.88**	**7.01**	**4.86**	**0.34**	**45**	**1.95**	**1.92**	**0.43**
Zinc	109	10,000	10,000	398	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

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

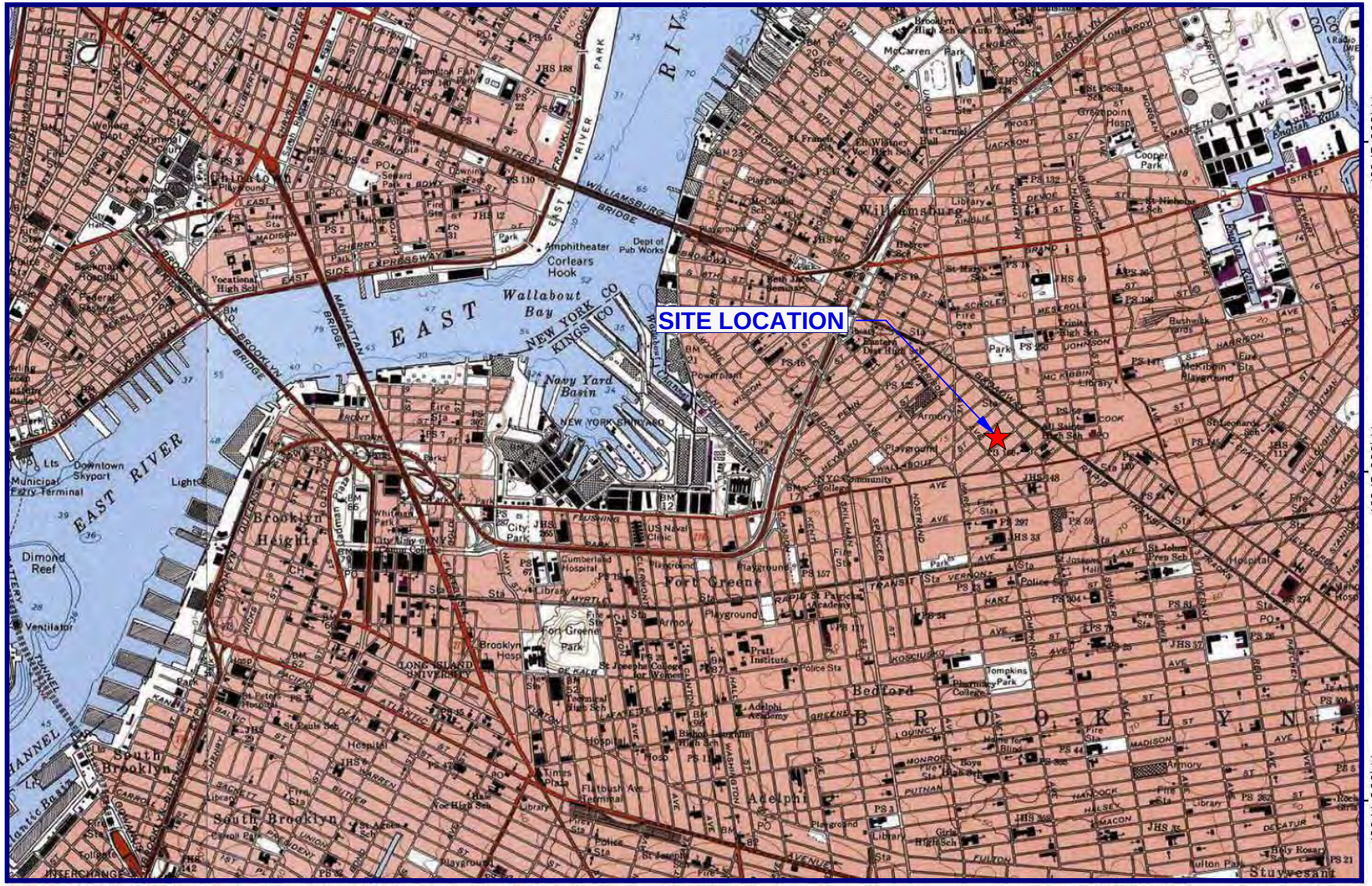
RL - Laboratory Reporting Limit

Bold/highlighted- Indicated exceedance of the NYSDEC UUSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC RRSCO Guidance Value

Bold/highlighted- Indicated exceedance of the NYSDEC Industrial SCO Guidance Value

FIGURES



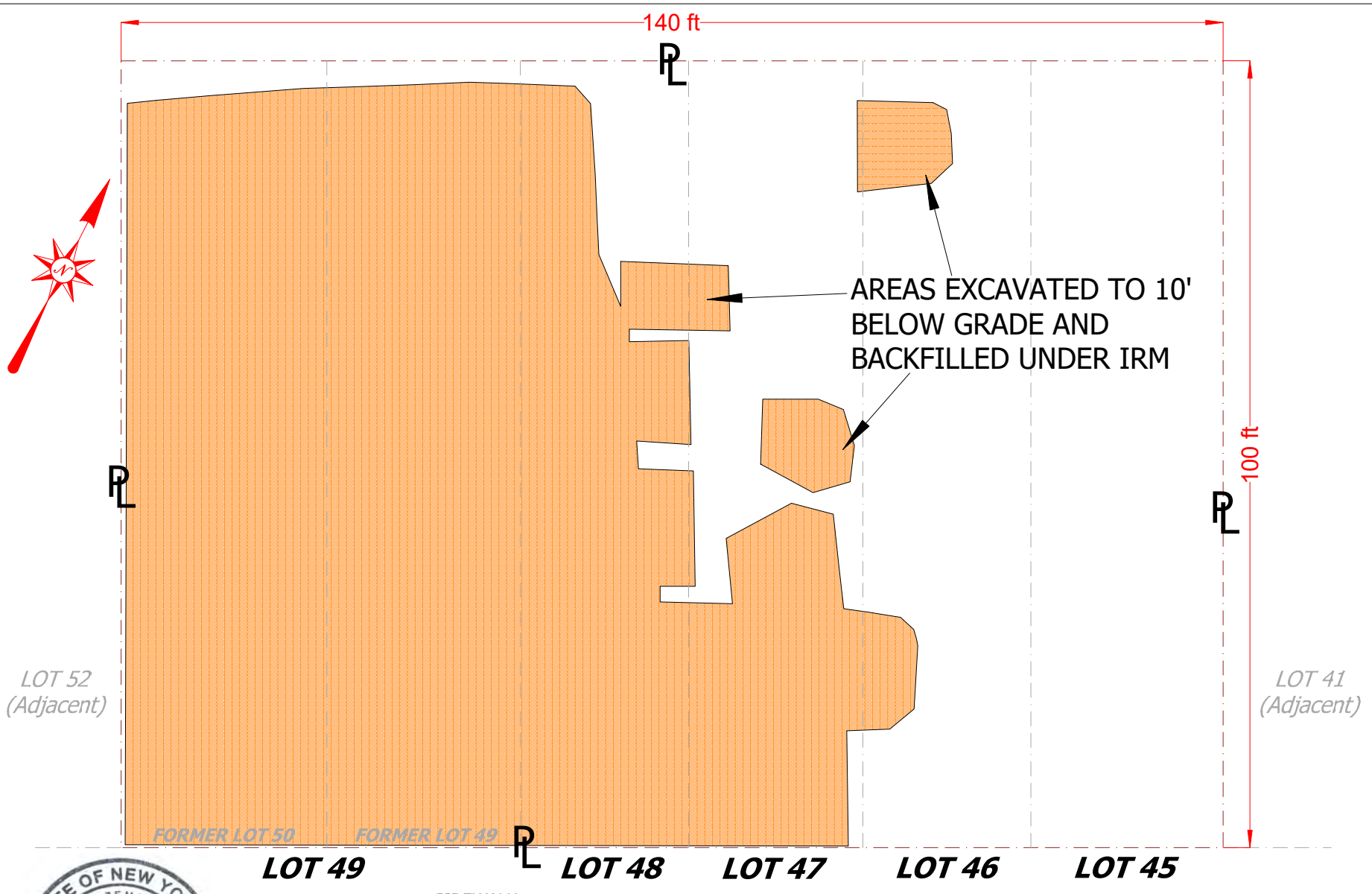
USGS Brooklyn Quadrangle 1995, Contour Interval = 10 feet

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD. RIDGE. NY 11961
Phone 631.504.6000
Fax 631.924.2780

OU3 - PFIZER SITE B

73-87 GERRY STREET, BROOKLYN, NY

FIGURE 1 SITE LOCATION MAP



STATE OF NEW YORK
ARIEL CZEMERINSKI
076508
LICENSED PROFESSIONAL ENGINEER

AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Figure No. **2**

5/20/2024

Site Name:	OU3 - PFIZER SITE B
Site Address:	73-87 GERRY STREET, BROOKLYN NY
Drawing Title:	SITE PLAN

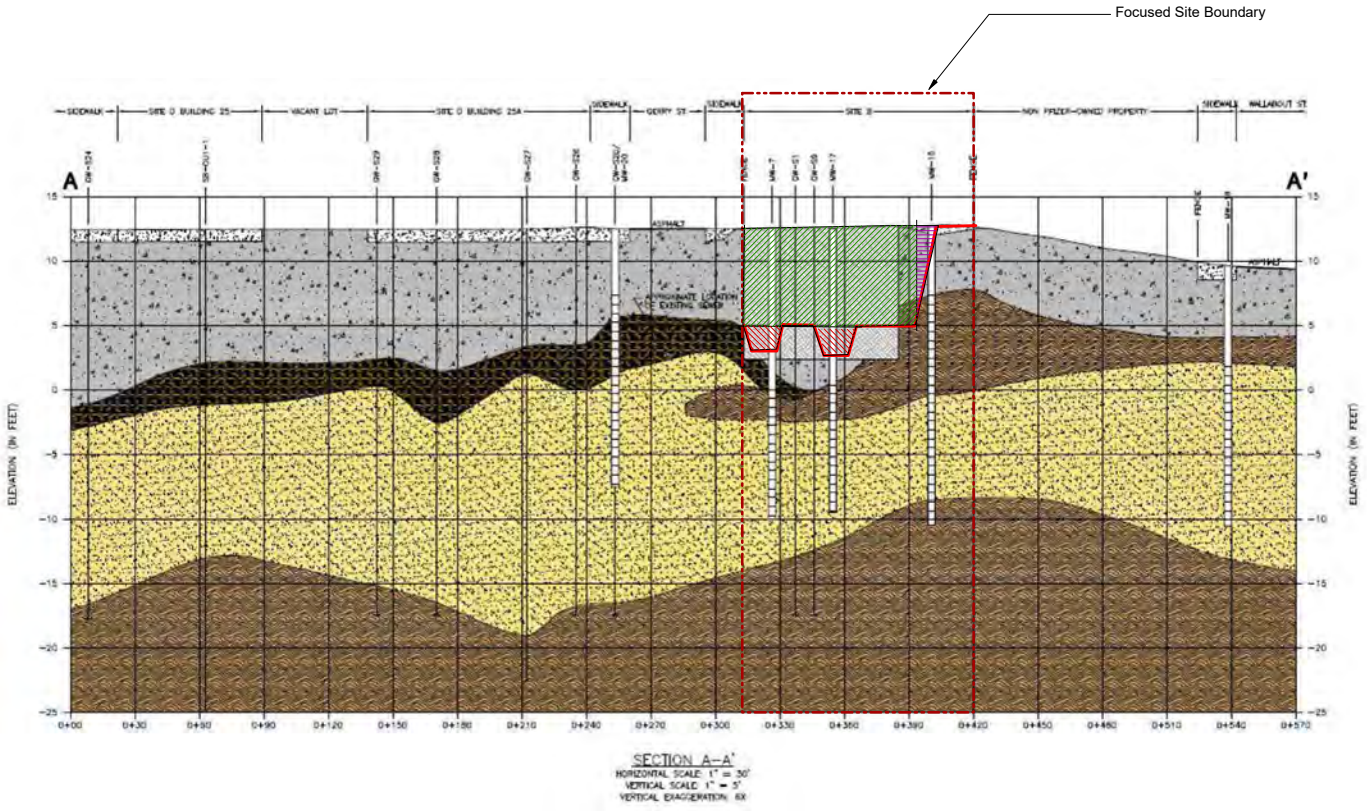
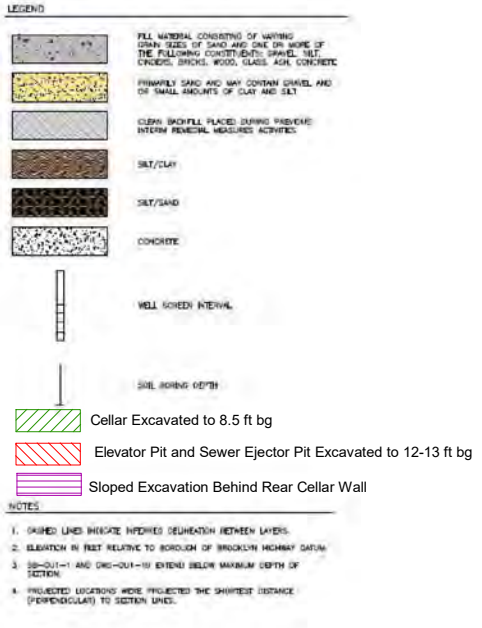


Figure originally created by Roux Associates, Inc



AMC Engineering 1836 42nd Street Astoria, NY 11105	*Figure No.* **3** 10/6/2022	Site Name:	Former Pfizer Property - Site B - Operable Unit 3
		Site Address:	87 Gerry Street, Brooklyn, NY
		Drawing Title:	Geologic Cross Section with Excavated Area Indicated

WALLABOUT STREET

HARRISON AVENUE

GERRY STREET

BARTLETT STREET

N

MW-18 3.50

MW-12 NM

MW-16 3.57

3.60

3.80

4.00

4.20

MW-11 4.07

POULTRY MARKET

APARTMENT BUILDINGS

APARTMENT BUILDING

FORMER AUTO BODY GARAGE AND YARD

MW-13

MW-8 3.74

OVERGROWN VACANT LOT

REMAINS OF LOADING DOCK

MW-15 4.91

MW-6R NM

MW-6

MW-2

MW-3 3.89

MW-17 4.19

MW-1R 4.15

MW-1

MW-5 4.16

OU-2 (WESTERN PORTION OF SITE B AND LOT 52)

MW-7 4.24

MW-4

MW-14 3.80

MW-19 4.00

OU-3 (EASTERN PORTION OF SITE B EXCLUDING LOT 52)

MW-9 4.33

MW-20 4.21

MW-10 4.18

MW-D2 4.22

MW-D2I 4.23

MW-D3 4.57

MW-D3I 4.21

FLOOR DRAIN

FLOOR DRAINO

MW-D1I 4.21

MW-D1 4.27

FLOOR DRAIN

BUILDING 25A 1-STORY

OU-1 (SITE D)

BUILDING 24 2-STORY

BUILDING 25 3-STORY

5-STORY CONDEMNED APARTMENTS (NOT PFIZER OWNED)

LEGEND

- EXISTING BUILDINGS OR STRUCTURES
- MW-1R — LOCATION AND DESIGNATION OF EXISTING MONITORING WELL
- MW-4 — LOCATION AND DESIGNATION OF DESTROYED MONITORING WELL
- SITE D (FORMER ARLINGTON PRESS)
- SITE B
- FORMER PFIZER PROPERTY LINE
- FENCE
- 4.16 — WATER-LEVEL ELEVATION IN FEET RELATIVE TO BOROUGH OF BROOKLYN HIGHWAY DATUM
- NM — NOT MEASURED
- 3.80 — LINE OF EQUAL WATER-LEVEL ELEVATION IN FEET RELATIVE TO BOROUGH OF BROOKLYN HIGHWAY DATUM
- ESTIMATED GROUNDWATER FLOW DIRECTION

NOTE

WATER-LEVEL ELEVATION AT MW-15 WAS LIKELY AN ERRONEOUS MEASUREMENT, AND MW-D3 IS LIKELY AFFECTED BY PERCHED GROUNDWATER. BOTH WERE EXCLUDED FROM DATA USED TO DETERMINE GROUNDWATER ELEVATION CONTOURS.

FIGURE 4 - GW CONTOUR MAP

30' 0 30'

Title:

GROUNDWATER FLOW DIRECTION MARCH 17, 2014

SITE B AND SITE D OU-1 AND OU-3 RAWP

Prepared For:

PFIZER INC
BROOKLYN, NEW YORK

ROUX ASSOCIATES, INC.
Environmental Consulting and Management

Compiled by: W.K.	Date: 27JUN14	PLATE 3
Prepared by: J.A.D.	Scale: AS SHOWN	
Project Mgr: W.K.	Project: 0047.0044Y040	
File: 0047.0044Y605.05.DWG		

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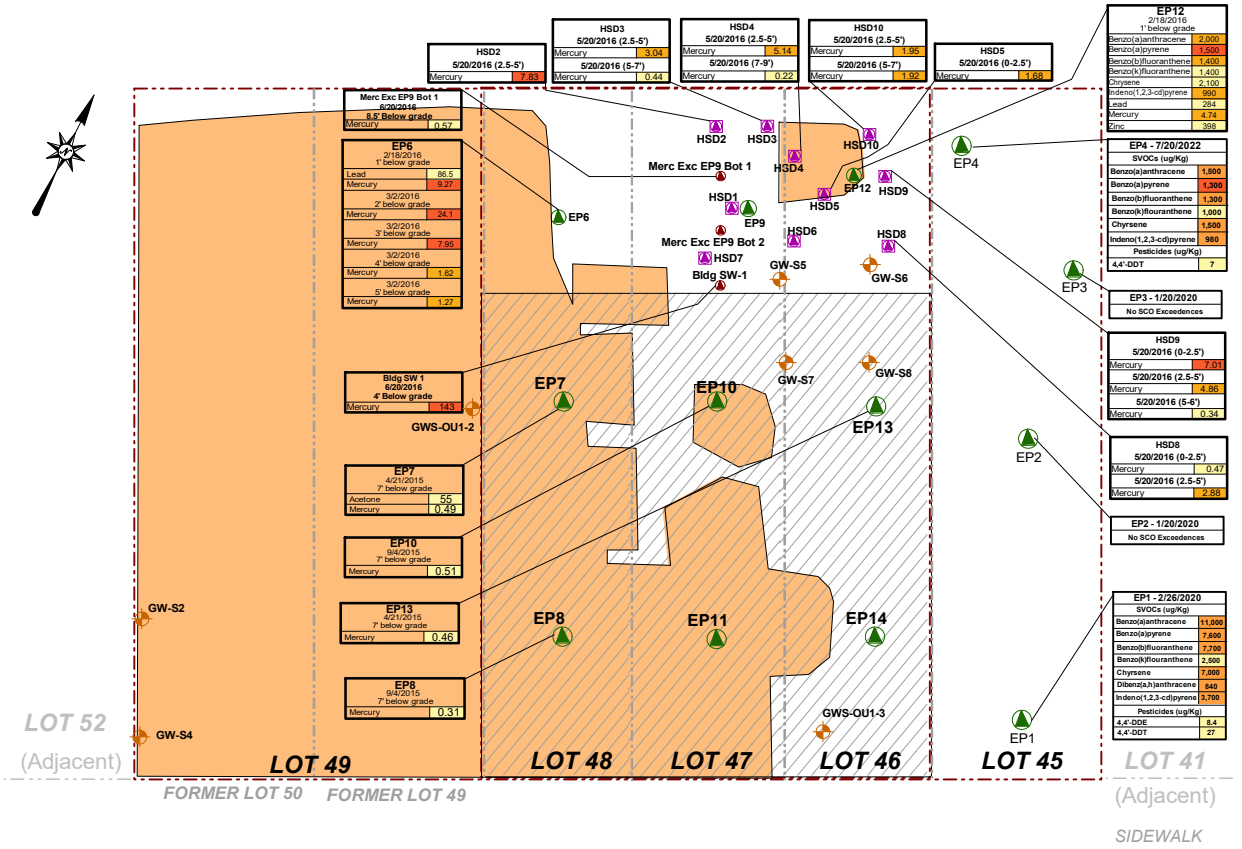
C



KEY:

- Property Line
- Areas Excavated to 10 ft below grade and Backfilled Under IRM
- Previous Investigation Sampling Locations
- Site wide endpoint sample
- Mercury Hot Spot EP9 samples
- Mercury Delineation Soil Boring samples

- Detections Above Unrestricted Use SCOs
- Detections Above Restricted Residential Use SCOs
- Detections Above Industrial Use SCOs

VOCs, SVOCs, PCBs, and Pesticides	ug/Kg
Metals	mg/Kg

SCALE:

0 15 30

1inch = 30 feet

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

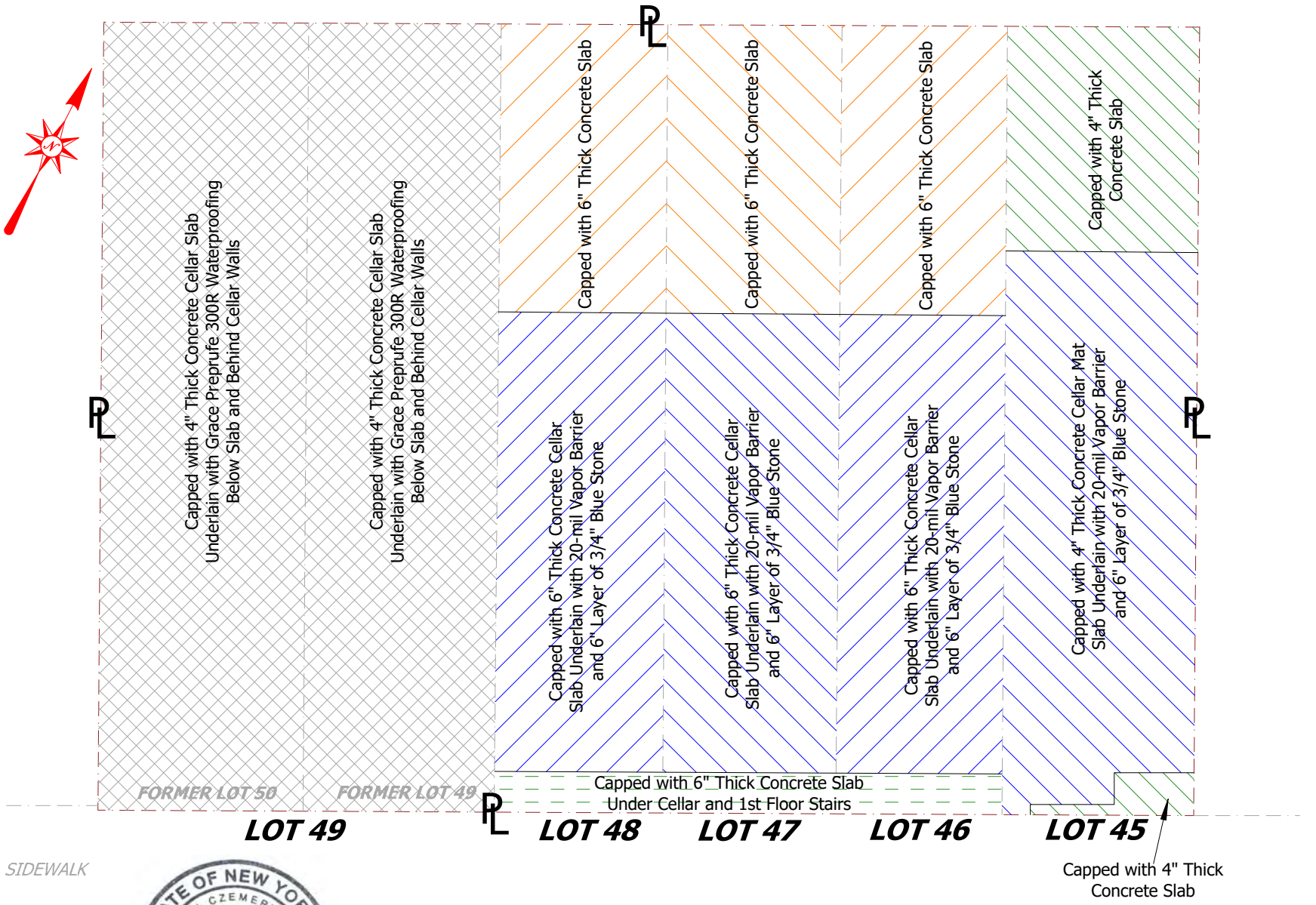
Figure No. 5

6/28/2023

Site Name: PFIZER SITE B - OU3

Site Address: 73-87 GERRY STREET, BROOKLYN, NY

Drawing Title: SOIL EXCEEDANCES REMAINING ON-SITE



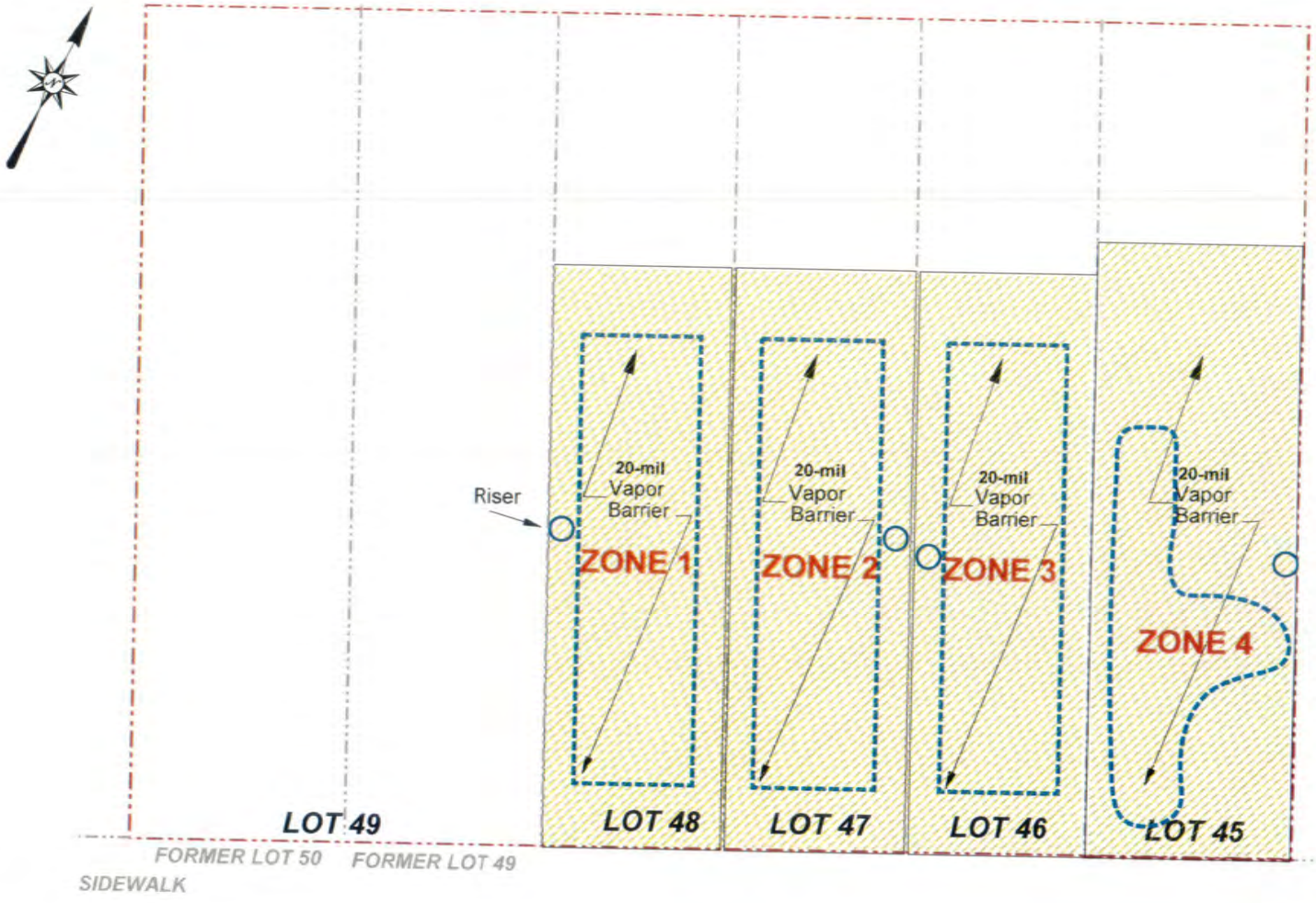
STATE OF NEW YORK
ARIEL CZEMERINSKI
076508
LICENSED PROFESSIONAL ENGINEER

SCALE: 0 10 20

AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Figure No. **6**
5/20/2024

Site Name:	OU3 - PFIZER SITE B
Site Address:	73-87 GERRY STREET, BROOKLYN NY
Drawing Title:	COMPOSITE COVER DIAGRAM



KEY:

Property Line

4" HDPE Perforated SSDS Pipe

20-Mil Vapor Barrier Installed Below Cellar Slab

SCALE:

0 10 20

1inch = 20 feet

STATE OF NEW YORK
ARIEL CZEMERINSKI
076508
LICENSED PROFESSIONAL ENGINEER

AMC Engineering
1836 42nd Street
Astoria, NY 11105

Figure No. **7**

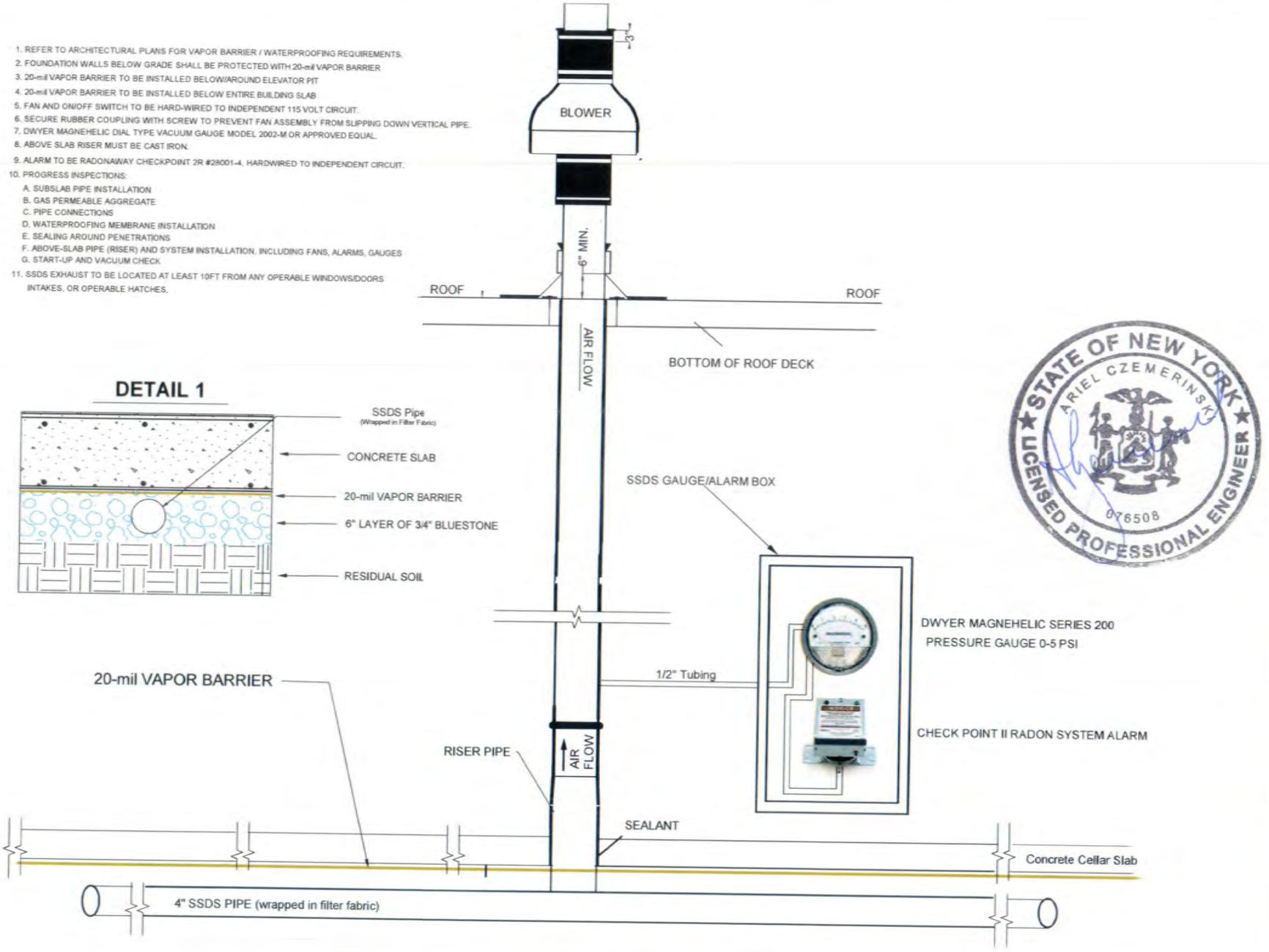
6/28/2023

Site Name: OU3 - PFIZER SITE B

Site Address: 73-87 GERRY STREET, BROOKLYN, NY

Drawing Title: SSDS LAYOUT

1. REFER TO ARCHITECTURAL PLANS FOR VAPOR BARRIER / WATERPROOFING REQUIREMENTS.
2. FOUNDATION WALLS BELOW GRADE SHALL BE PROTECTED WITH 20-mil VAPOR BARRIER
3. 20-mil VAPOR BARRIER TO BE INSTALLED BELOW/AROUND ELEVATOR PIT
4. 20-mil VAPOR BARRIER TO BE INSTALLED BELOW ENTIRE BUILDING SLAB
5. FAN AND ON/OFF SWITCH TO BE HARD-WIRED TO INDEPENDENT 115 VOLT CIRCUIT.
6. SECURE RUBBER COUPLING WITH SCREW TO PREVENT FAN ASSEMBLY FROM SLIPPING DOWN VERTICAL PIPE.
7. DWYER MAGNEHELIC DIAL TYPE VACUUM GAUGE MODEL 2002-M OR APPROVED EQUAL.
8. ABOVE SLAB RISER MUST BE CAST IRON.
9. ALARM TO BE RADONAWAY CHECKPOINT 2R #28001-4, HARDWIRED TO INDEPENDENT CIRCUIT.
10. PROGRESS INSPECTIONS:
    A. SUBSLAB PIPE INSTALLATION
    B. GAS PERMEABLE AGGREGATE
    C. PIPE CONNECTIONS
    D. WATERPROOFING MEMBRANE INSTALLATION
    E. SEALING AROUND PENETRATIONS
    F. ABOVE-SLAB PIPE (RISER) AND SYSTEM INSTALLATION, INCLUDING FANS, ALARMS, GAUGES
    G. START-UP AND VACUUM CHECK
11. SSDS EXHAUST TO BE LOCATED AT LEAST 10FT FROM ANY OPERABLE WINDOWS/DOORS INTAKES, OR OPERABLE HATCHES.



DETAIL 1

AMC Engineering 1836 42nd Street Astoria, NY 11105	*Figure No.* **8** 12/1/2022	Site Name:	OU3 - PFIZER SITE B
		Site Address:	73-87 GERRY STREET, BROOKLYN, NY
		Drawing Title:	SUB-SLAB DEPRESSURIZATION SYSTEM DETAILS

APPENDIX A

Metes and Bounds Description

SCHEDULE A

Legal Description for Section 8 Block 2266 Lot 45

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 325 feet northeasterly from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE northwesterly approximately parallel with Harrison Avenue, 100 feet;

THENCE northeasterly approximately parallel with Gerry Street, 25 feet;

THENCE southeasterly approximately parallel with Harrison Avenue, 100 feet to the northwesterly side of Gerry Street;

THENCE Southwesterly along the northwesterly side of Gerry Street, 25 feet to the point or place of BEGINNING.

Note: Address, Block & Lot shown for informational purposes only

Designated as Block 2266, New Lot 45 (formed from Old Lot 46)

SCHEDULE A

LEGAL DESCRIPTION FOR SECTION 8 BLOCK 2266 LOT 46

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 303.32 northeasterly from the corner from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE northwesterly approximately parallel with Harrison Avenue, 100 feet;

THENCE northeasterly approximately parallel with Gerry Street, 21.66 feet;

THENCE southeasterly approximately parallel with Harrison Avenue, 100 feet;

THENCE southwesterly, along the northwesterly side of Gerry Street, 21.66 feet, to the point or place of **BEGINNING**.

SCHEDULE A

LEGAL DESCRIPTION FOR SECTION 8 BLOCK 2266 LOT 47

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 281.66 northeasterly from the corner from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE northwesterly approximately parallel with Harrison Avenue, 100 feet;

THENCE northeasterly approximately parallel with Gerry Street, 21.66 feet;

THENCE southeasterly approximately parallel with Harrison Avenue, 100 feet;

THENCE southwesterly, along the northwesterly side of Gerry Street, 21.66 feet, to the point or place of **BEGINNING**.

SCHEDULE A

LEGAL DESCRIPTION FOR SECTION 8 BLOCK 2266 LOT 48

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 260 northeasterly from the corner from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE northwesterly approximately parallel with Harrison Avenue, 100 feet;

THENCE northeasterly approximately parallel with Gerry Street, 21.66 feet;

THENCE southeasterly approximately parallel with Harrison Avenue, 100 feet;

THENCE southwesterly, along the northwesterly side of Gerry Street, 21.66 feet, to the point or place of **BEGINNING.**

Riverside Abstract, LLC
as Agent for
Old Republic National Title Insurance Company

OWNER'S POLICY
SCHEDULE A DESCRIPTION

Title Number: **RANY-15528A**
Policy Number: **OX-09588578**

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 210 feet northeasterly from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE northwesterly approximately parallel with Harrison Avenue, 100 feet;

THENCE northeasterly approximately parallel with Gerry Street, 50 feet;

THENCE southeasterly approximately parallel with Harrison Avenue, 100 feet to the northwesterly side of Gerry Street;

THENCE southwesterly, along the northwesterly side of Gerry Street, 50 feet, to the point or place of BEGINNING.

Note: Address, Block & Lot shown for informational purposes only

Designated as Block 2266, New Lot 49 and 50.

APPENDIX B
Deed Restrictions

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument.The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.

2016101901069002001ED083

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 11**

Document ID: 2016101901069002 Document Date: 09-12-2016 Preparation Date: 10-19-2016
Document Type: SUNDRY AGREEMENT
Document Page Count: 9

PRESENTER:
FRONTIER RECORDINGS
69 CASCADE DRIVE
SUITE 101
ROCHESTER, NY 14614
585-955-6111
RECORDINGS@FRONTIERABSTRACT.COM

RETURN TO:
FRONTIER RECORDINGS
69 CASCADE DRIVE
SUITE 101
ROCHESTER, NY 14614
585-955-6111
RECORDINGS@FRONTIERABSTRACT.COM

PROPERTY DATA

Borough	Block	Lot	Unit	Address
BROOKLYN	2266	45	Entire Lot	N/A GERRY STREET

Property Type: NON-RESIDENTIAL VACANT LAND

Borough	Block	Lot	Unit	Address
BROOKLYN	2266	46	Entire Lot	83 GERRY STREET

Property Type: DWELLING ONLY - 2 FAMILY

☒ Additional Properties on Continuation Page

CROSS REFERENCE DATA

CRFN: 2015000140669

PARTIES

PARTY 1:
CONGREGATION DIVREI YOEL
144 SPENCER STREET, #612
BROOKLYN, NY 11205

FEES AND TAXES

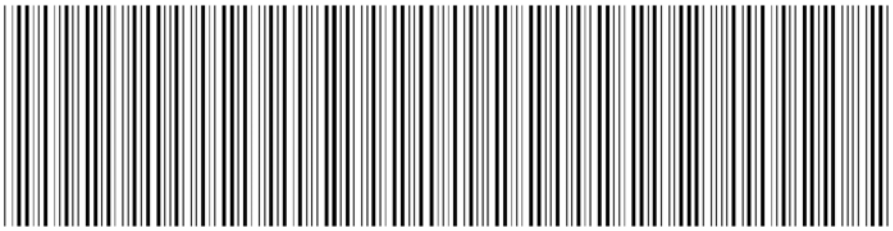
Mortgage :		
Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	97.00
Affidavit Fee:	$	0.00

Filing Fee:	$	0.00
NYC Real Property Transfer Tax:	$	0.00
NYS Real Estate Transfer Tax:	$	0.00

RECORDED OR FILED IN THE OFFICE OF THE CITY REGISTER OF THE CITY OF NEW YORK
Recorded/Filed 10-20-2016 08:48
City Register File No.(CRFN): **2016000368538**

City Register Official Signature

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER



2016101901069002001CD203

RECORDING AND ENDORSEMENT COVER PAGE (CONTINUATION) **PAGE 2 OF 11**

Document ID: 2016101901069002 Document Date: 09-12-2016 Preparation Date: 10-19-2016
Document Type: SUNDRY AGREEMENT

PROPERTY DATA

Borough	Block	Lot		Unit	Address
BROOKLYN	2266	47	Entire Lot		83 GERRY STREET

Property Type: DWELLING ONLY - 2 FAMILY

Borough	Block	Lot		Unit	Address
BROOKLYN	2266	48	Entire Lot		81 GERRY STREET

Property Type: DWELLING ONLY - 2 FAMILY

Borough	Block	Lot		Unit	Address
BROOKLYN	2266	49	Entire Lot		N/A GERRY STREET

Property Type: COMMERCIAL REAL ESTATE

Borough	Block	Lot		Unit	Address
BROOKLYN	2266	50	Entire Lot		N/A GERRY STREET

Property Type: COMMERCIAL REAL ESTATE

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the 12 day of Sept. 20 16, by Congregation Divrei Yoel, a religious corporation organized and existing under the laws of the State of New York and having an office for the transaction of business at 144 Spencer Street, #612, Brooklyn, New York 11205.

WHEREAS, Operable Unit 3 of Pfizer Sites B and D (Site #V00350) is the subject of a Voluntary Cleanup Agreement executed by Pfizer Inc. (to which Oholei Shloma and YGS, Inc. f/k/a Congregation YGS were added as Volunteers by amendment dated September 19, 2012, VCA Index #D2-0010-0703, Amendment #2) as part of the New York State Department of Environmental Conservation's (the "Department's) Voluntary Cleanup Program, namely that parcel of real property known as Brooklyn Block 2266, Lots 45, 46, 47, 48, 49 and 50 (Gerry Street) in the City of New York, County of Kings, State of New York.

WHEREAS, Oholei Shloma* conveyed to Congregation Divrei Yoel a portion of Operable Unit 3 of Pfizer Sites B and D, namely that parcel of real property located on Gerry Street, Borough of Brooklyn, City of New York, County of Kings, and State of New York and identified as Block 2266, Lots 49 and 50, by deed(s) dated March 12, 2015 and recorded on April 27, 2015 in the City Register of the City of New York in Instrument No. 2015000140669, and being more particularly described in Schedule "A," attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, Congregation Divrei Yoel, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Schedule "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils. The SMP may be obtained from the New York State Department

* c/o SYM Realty Management
517 Flushing Avenue, Brooklyn, NY 11205

of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, which are described in the SMP, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency.

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than 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)** without the express written waiver of such prohibition by the Department or Relevant Agency.

Fifth, 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.

Sixth, the owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, the owner of the Property shall continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency.

Eighth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the Voluntary Cleanup Agreement requires to be recorded, and hereby covenant not to contest the authority of the Department or Relevant Agency to seek enforcement.

Ninth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

By: _____

Print Name: CHAIM JACOBOWITZ

Title: MEMBER Date: 9-12-2016

Grantor's Acknowledgment

STATE OF NEW YORK)

) s.s.:

COUNTY OF KINGS)

On the 12 day of SEPT., in the year 2016 before me, the undersigned, personally appeared CHAIM JACOBOWITZ, ~~person~~ally 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 State of New York

JOEL LANDAU
NOTARY PUBLIC, State Of New York
No. 01LA6091405
Qualified in Kings County
Commission Expires 04/26/2019

[06/14]

SCHEDULE "A"

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 210 feet northeasterly from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE northwesterly approximately parallel with Harrison Avenue, 100 feet;

THENCE northeasterly approximately parallel with Gerry Street, 50 feet;

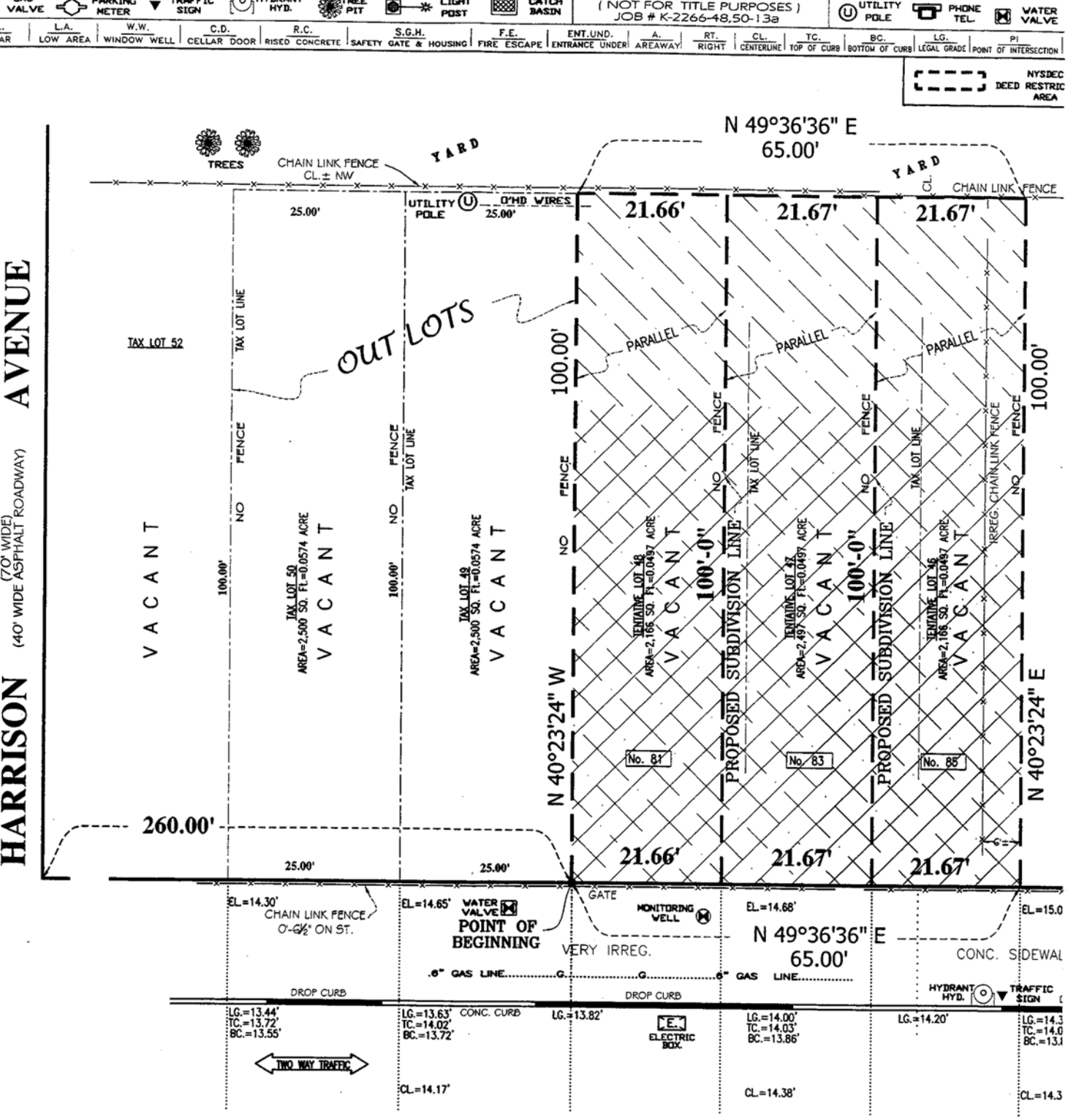
THENCE southeasterly approximately parallel with Harrison Avenue, 100 feet to the northwesterly side of Gerry Street;

THENCE southwesterly, along the northwesterly side of Gerry Street, 50 feet, to the point or place of BEGINNING.

Note: Address, Block & Lot shown for informational purposes only
Designated as Block 2266, New Lot 49 and 50.

Street Address: No # Gerry Street, Brooklyn, NY 11206

SCHEDULE "B"



VINCENT M. TEUTONICO LS., PRES.
REGISTRATION No. 050307

AAA GROUP
LAND SURVEYORS SERVICES
139 LORIMER STREET
BROOKLYN, N.Y. 11206
TEL. (718) 387-9800, FAX 384-5050

D.W.S WATER | TEL. MANHOLE | SEWER MANHOLE | ELECTRIC MANHOLE | ELECTRIC BOX.

BW. BOTTOM OF WALL | F.F FIRST FLOOR | B.F BASEMENT FLOOR | L.F LOWER FLOOR | EL. SPOT ELEVATION | EP EDGE OF PAVE

ENGINEERING CONTROL AREA (SITE COVER SYSTEM)

ENGINEERING CONTROL AREA SUB-SLAB VAPOR MITIGATION SYSTEM

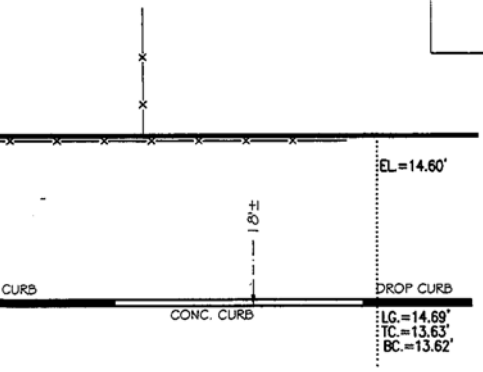
TOTAL AREA CALCULATION
(LOTS 46, 47 & 48)

AREA= 6,500 SQ. FT. =
0,149 ACRE

THE ENGINEERING/INSTITUTIONAL CONTROLS
For this Deed restriction are set forth in more detail in the Site Management Plan ("SMP"). A copy of the SMP must be obtained by any party with an interest in the property. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov.

LOT 45

VACANT



Schedule A

Legal Description for Section 8 Block 2266 Lot 46, 47 and Lot 48, NYSDEC Deed restriction area and Engineering Control Area

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 260 feet northeasterly from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE North 40 degrees 23 minutes 24 seconds west 100 feet to a point;

THENCE North 49 degrees 36 minutes 36 seconds east 65 feet to a point;

THENCE south 40 degrees 23 minutes 24 seconds east 100 feet to the northwesterly side of Gerry Street;

THENCE Southwesterly along the northwesterly side of Gerry Street, 65 feet to the point or place of BEGINNING.

Note: Address, Block & Lot shown for informational purposes only
Designated as Block 2266, New Lot 46, 47 and 48.

Certified Only To: NYSDEC

NYSDEC SITE No. V00350 (OPERABLE UNIT 3)
N/A GERRY STREET

SURVEYED: MARCH 01, 2014	
UPDATED : MARCH 14, 2016	
SCALE: 1"=20'	
BLOCK:	2266
LOT(s)	46,47 & 48
SECTION:	8
COUNTY:	KINGS
DWG BY:	AAA-Mr.L

GAS VALVE | PARKING METER | TRAFFIC SIGN | HYDRANT HYD. | TREE PIT | LIGHT POST | CATCH BASIN | POLE | TEL. | WATER VALVE

CL. CLEAR | L.A. LOW AREA | W.W. WINDOW WELL | C.D. CELLAR DOOR | R.C. RISED CONCRETE | S.G.H. SAFETY GATE & HOUSING | F.E. FIRE ESCAPE | ENT.UND. ENTRANCE UNDER | A. AREAWAY | RT. RIGHT | CL. CENTERLINE | TC. TOP OF CURB | BC. BOTTOM OF CURB | LG. LEGAL GRADE | PI POINT OF INTERSECTION

JOB # K-2266-48,50-13a

HARRISON AVENUE (70' WIDE) (40' WIDE ASPHALT ROADWAY)

PARALLEL WITH GERRY STREET

TREES

CHAIN LINK FENCE CL.± NW

50'-0" YARD

UTILITY POLE

O'HD WIRES

N 49°36'36" E 25'-0"

N 49°36'36" E 25'-0"

TOTAL AREA (

AREA= 5,00
0,114

TAX LOT 52

100'-0"

FENCE

PARALLEL

FENCE

100'-0"

NO

NO

NO

PARALLEL WITH HARRISON AVENUE

V A C A N T

TAX LOT 50 AREA=2,500 SQ. FT.=0.0574 ACRE

V A C A N T

TAX LOT 49 AREA=2,500 SQ. FT.=0.0574 ACRE

V A C A N T

TAX LOT 48

V A C A N T

PARALLEL WITH HARRISON AVENUE

N 40°23'24" W

S 40°23'24" E

S 49°36'36" W 25'-0"

S 49°36'36" W 25'-0"

210'-0"

50'-0"

GATE

MONITORING WELL

EL.=13.85'

POINT OF BEGINNING

EL.=14.30'

CHAIN LINK FENCE O'-6½" ON ST.

EL.=14.65'

WATER VALVE

10'±

VERY IRREG.

CONC. SIDEWALK

pl.--85'±--mh.

.6" GAS LINE.....G.....G.....6" GAS LINE.....

TRAFFIC SIGN

50'

DROP CURB

50'

DROP CURB

LG.=13.06'
TC.=13.27'
BC.=13.15'

CONC. CURB

LG.=13.44'
TC.=13.72'
BC.=13.55'

LG.=13.63'
TC.=14.02'
BC.=13.72'

LG.=13.82'

TWO WAY TRAFFIC

CL.=13.75'

CL.=14.17'

GERRY STREET (70' WIDE) (34' WIDE ASPHALT ROADWAY)

LOCATION SURVEY

CAUTION: BEFORE PERFORMING ANY DIGGING OR DRILLING ON THIS SITE, IT IS REQUIRED THAT SUBSURFACE SERVICES, INCLUDING THE UNDERGROUND MAINS BE MARKED AND IDENTIFIED BY THE UTILITY INVOLVED IN COMPLIANCE WITH INDUSTRIAL CODE 53 OF NEW YORK STATE.

1) ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), WHICH IS 1.10 FEET ABOVE NATIONAL GEODETIC SURVEY DATUM AT SANDY HOOK NEW JERSEY.

2) LEGAL GRADES (NAVD88) REFER TO CENTER OF RIGHT WAY IN QUEENS; FOR MANHATTAN, BRONX, BROOKLYN & RICHMOND REFER TO CURB LINE TAKEN AT PROJECTION OF PROPERTY LINE.

3) UNDERGROUND UTILITY INFORMATION SHOWN WAS OBTAINED FROM VARIOUS COMPANIES AND CITY AGENCIES AND IS NOT GUARANTEED FOR ACCURACY OR COMPLETENESS.

4) THIS IS TO CERTIFY THAT THERE ARE NO APPARENT STREAMS NATURAL WATER COURSES IN THE PROPERTY AS SHOWN ON THIS SURVEY.

0' 4' 8' 16' 24' 32' FEET

0 1 2 3 4 5 5 7 8 9 10 METERS

VINCENT M. TEUTONI
REGISTRATION No.

D.W.S WATER | TEL. MANHOLE | SEWER MANHOLE | ELECTRIC MANHOLE | E.B. ELECTRIC BOX

W. WALL | BW. BOTTOM OF WALL | F.F FIRST FLOOR | B.F BASEMENT FLOOR | L.F LOWER FLOOR | EL. SPOT ELEVATION | EP EDGE OF PAVE

NYSDEC DEED RESTRICTION AREA

ENGINEERING CONTROL AREA (SITE COVER SYSTEM)

CULATION

Q. FT. =
RE

THE ENGINEERING/INSTITUTIONAL CONTROLS
For this Deed restriction are set forth in more detail in the Site Management Plan ("SMP"). A copy of the SMP must be obtained by any party with an interest in the property. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov.

Schedule A

Legal Description for Section 8 Block 2266 Lot 50
Lot 49, NYSDEC Deed restriction area
Engineering Control Area

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 210 feet northeasterly from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE northwesterly approximately parallel with Harrison Avenue, 100 feet;

THENCE northeasterly approximately parallel with Gerry Street, 50 feet;

THENCE southeasterly approximately parallel with Harrison Avenue, 100 feet;

THENCE southwesterly, along the northwesterly side of Gerry Street, 50 feet, to the point or place of BEGINNING.

Note: Address, Block & Lot shown for informational purposes only
Designated as Block 2266, New Lot 49 and 50.

4.68'

HYD.

4.00'
4.03'
13.86'

4.38'

Certified Only To: NYSDEC

NYSDEC SITE No. V00350 (OPERABLE UNIT 3)
N/A GERRY STREET

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.

SURVEYED:	MARCH 01, 2014
UPDATED :	MARCH 14, 2016
SCALE:	1"=20'
BLOCK:	2266
LOT(s)	49 & 50
SECTION:	8
COUNTY:	KINGS
DWG BY:	AAA-Mr.L

AAA GROUP
LAND SURVEYORS SERVICES
139 LORIMER STREET
BROOKLYN, N.Y. 11206
TEL. (718) 387-9800, FAX 384-5050

L.S., PRES.
0307

NYC DEPARTMENT OF FINANCE
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2016101901069001001ED0C7

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 11**

Document ID: 2016101901069001 Document Date: 09-08-2016 Preparation Date: 10-19-2016
Document Type: SUNDRY AGREEMENT
Document Page Count: 9

PRESENTER:
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69 CASCADE DRIVE
SUITE 101
ROCHESTER, NY 14614
585-955-6111
RECORDINGS@FRONTIERABSTRACT.COM

RETURN TO:
FRONTIER RECORDINGS
69 CASCADE DRIVE
SUITE 101
ROCHESTER, NY 14614
585-955-6111
RECORDINGS@FRONTIERABSTRACT.COM

PROPERTY DATA

Borough	Block	Lot	Unit	Address
BROOKLYN	2266	45	Entire Lot	N/A GERRY STREET

Property Type: NON-RESIDENTIAL VACANT LAND

Borough	Block	Lot	Unit	Address
BROOKLYN	2266	46	Entire Lot	83 GERRY STREET

Property Type: DWELLING ONLY - 2 FAMILY

☒ Additional Properties on Continuation Page

CROSS REFERENCE DATA

CRFN: 2015000140671

PARTIES

PARTY 1:
75-83 GERRY LLC
144 SPENCER STREET, #612
BROOKLYN, NY 11205

FEES AND TAXES

Mortgage :

Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	97.00
Affidavit Fee:	$	0.00

Filing Fee: $ 0.00
NYC Real Property Transfer Tax: $ 0.00
NYS Real Estate Transfer Tax: $ 0.00

RECORDED OR FILED IN THE OFFICE OF THE CITY REGISTER OF THE CITY OF NEW YORK
Recorded/Filed 10-20-2016 08:48
City Register File No.(CRFN): **2016000368537**

City Register Official Signature

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

2016101901069001001CD247

Document ID: 2016101901069001 Document Date: 09-08-2016 Preparation Date: 10-19-2016
Document Type: SUNDRY AGREEMENT

PROPERTY DATA

Borough	Block	Lot		Unit	Address
BROOKLYN	2266	47	Entire Lot		83 GERRY STREET

Property Type: DWELLING ONLY - 2 FAMILY

Borough	Block	Lot		Unit	Address
BROOKLYN	2266	48	Entire Lot		81 GERRY STREET

Property Type: DWELLING ONLY - 2 FAMILY

Borough	Block	Lot		Unit	Address
BROOKLYN	2266	49	Entire Lot		N/A GERRY STREET

Property Type: COMMERCIAL REAL ESTATE

Borough	Block	Lot		Unit	Address
BROOKLYN	2266	50	Entire Lot		N/A GERRY STREET

Property Type: COMMERCIAL REAL ESTATE

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the 6 day of SEPTEMBER 2016, by 75-83 Gerry LLC, a limited liability company organized and existing under the laws of the State of New York and having an office for the transaction of business at 144 Spencer Street, #612, Brooklyn, New York 11205.

WHEREAS, Operable Unit #3 of Pfizer Sites B and D (Site #V00350) is the subject of a Voluntary Cleanup Agreement executed by Pfizer Inc. (to which Oholei Shloma and YGS, Inc. f/k/a Congregation YGS were added as Volunteers by amendment dated September 19, 2012, VCA Index #D2-0010-0703, Amendment #2) as part of the New York State Department of Environmental Conservation's (the "Department's) Voluntary Cleanup Program, namely that parcel of real property known as Brooklyn Block 2266, Lots 45, 46, 47, 48, 49 and 50 (Gerry Street) in the City of New York, County of Kings, State of New York.

WHEREAS, Oholei Shloma* conveyed to 75-83 Gerry LLC a portion of Operable Unit 3 of Pfizer Sites B and D, namely that parcel of real property located on Gerry Street, Borough of Brooklyn, City of New York, County of Kings, and State of New York and identified as Block 2266, Lots 46, 47, and 48, by deed(s) dated March 12, 2015 and recorded on April 27, 2015 in the City Register of the City of New York in Instrument No. 2015000140671, and being more particularly described in Schedule "A," attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, 75-83 Gerry LLC, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Schedule "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils. The SMP may be obtained from the New York State Department

of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, which are described in the SMP, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency.

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than 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)** without the express written waiver of such prohibition by the Department or Relevant Agency.

Fifth, 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.

Sixth, the owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, the owner of the Property shall continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency.

Eighth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the Voluntary Cleanup Agreement requires to be recorded, and hereby covenant not to contest the authority of the Department or Relevant Agency to seek enforcement.

Ninth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

By: _____

Print Name: JOEL BRAVER

Title: MANAGING MEMBER Date: 9/8/16

Grantor's Acknowledgment

STATE OF NEW YORK)

) s.s.:

COUNTY OF KINGS)

On the 8 day of SEP, in the year 2016, before me, the undersigned, personally appeared JOEL BRAVER, 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 State of New York

Esther Salamon
NOTARY PUBLIC, STATE OF NEW YORK
NO. 01SA6341933
Qualified in Kings County
Commission Expires 5/16/20

[06/14]

SCHEDULE "A"

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 260 feet northeasterly from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE North 40 degrees 23 minutes 24 seconds west 100 feet to a point;

THENCE North 49 degrees 36 minutes 36 seconds east 65 feet to a point;

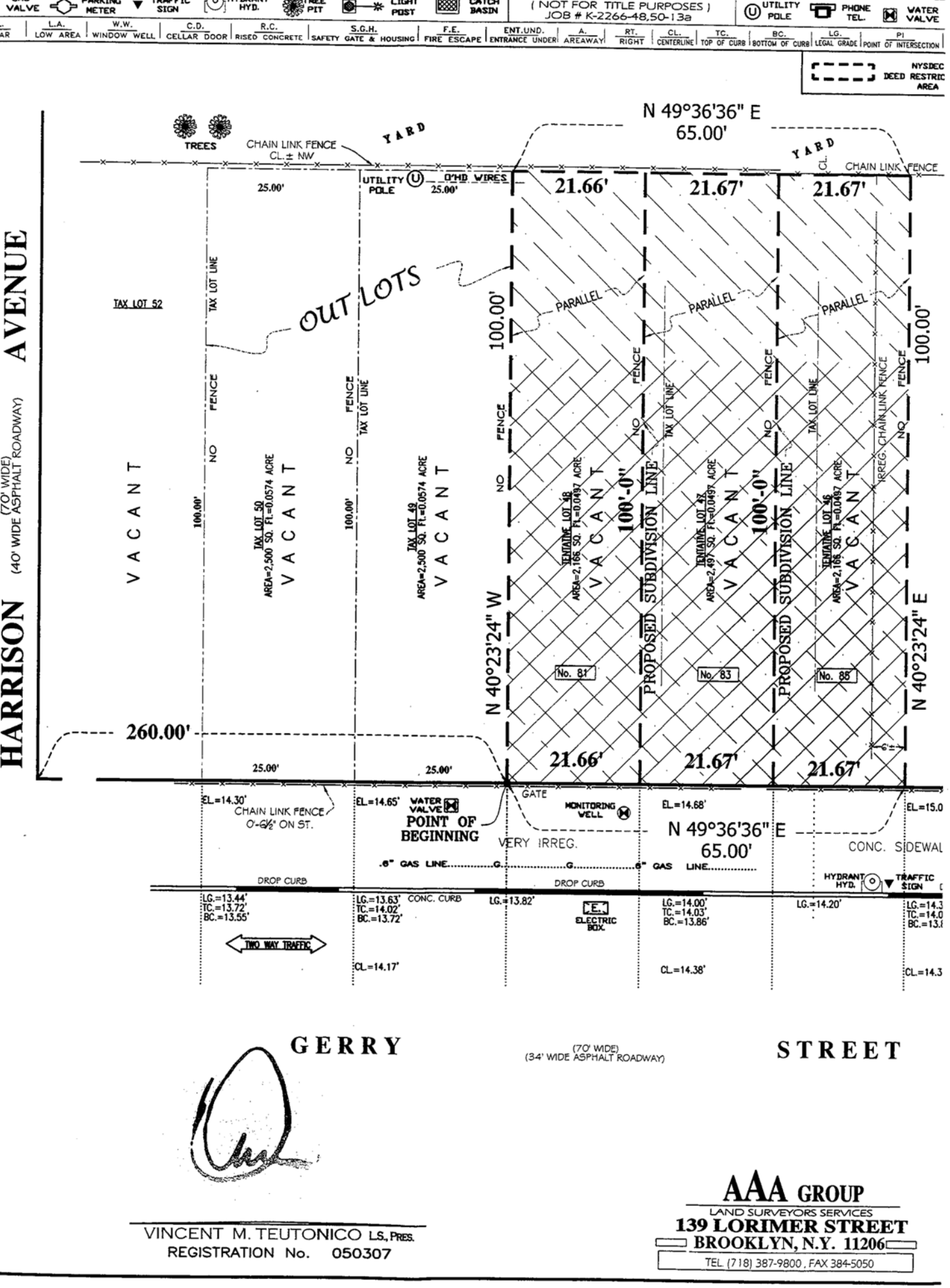
THENCE south 40 degrees 23 minutes 24 seconds east 100 feet to the northwesterly side of Gerry Street;

THENCE Southwesterly along the northwesterly side of Gerry Street, 65 feet to the point or place of BEGINNING.

Note: Address, Block & Lot shown for informational purposes only
Designated as Block 2266, New Lot 46, 47 and 48.

Street Address: 81 - 85 Gerry Street, Brooklyn, NY 11206

SCHEDULE "B"



VINCENT M. TEUTONICO LS., PRES.
REGISTRATION No. 050307

AAA GROUP
LAND SURVEYORS SERVICES
139 LORIMER STREET
BROOKLYN, N.Y. 11206
TEL. (718) 387-9800, FAX 384-5050

D.W.S WATER | TEL. MANHOLE | SEWER MANHOLE | ELECTRIC MANHOLE | ELECTRIC BOX

BW. WALL | BOTTOM OF WALL | F.F FIRST FLOOR | B.F BASEMENT FLOOR | L.F LOWER FLOOR | EL. SPOT ELEVATION | EP EDGE OF PAVE

ENGINEERING CONTROL AREA (SITE COVER SYSTEM)

ENGINEERING CONTROL AREA SUB-SLAB VAPOR MITIGATION SYSTEM

TOTAL AREA CALCULATION
(LOTS 46, 47 & 48)

AREA= 6,500 SQ. FT. =
0,149 ACRE

THE ENGINEERING/INSTITUTIONAL CONTROLS

For this Deed restriction are set forth in more detail in the Site Management Plan ("SMP"). A copy of the SMP must be obtained by any party with an interest in the property. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov.

LOT 45

VACANT

Schedule A

Legal Description for Section 8 Block 2266 Lot 46, 47 and Lot 48, NYSDEC Deed restriction area and Engineering Control Area

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 260 feet northeasterly from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

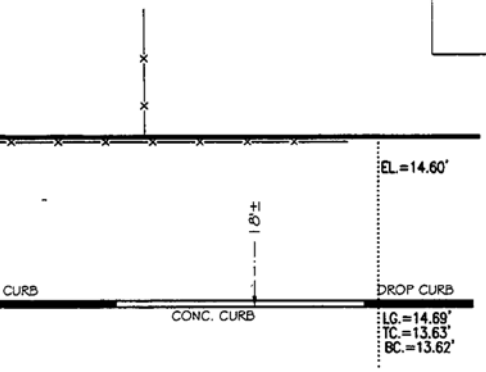
RUNNING THENCE North 40 degrees 23 minutes 24 seconds west 100 feet to a point;

THENCE North 49 degrees 36 minutes 36 seconds east 65 feet to a point;

THENCE south 40 degrees 23 minutes 24 seconds east 100 feet to the northwesterly side of Gerry Street;

THENCE Southwesterly along the northwesterly side of Gerry Street, 65 feet to the point or place of BEGINNING.

Note: Address, Block & Lot shown for informational purposes only
Designated as Block 2266, New Lot 46, 47 and 48.



Certified Only To: NYSDEC

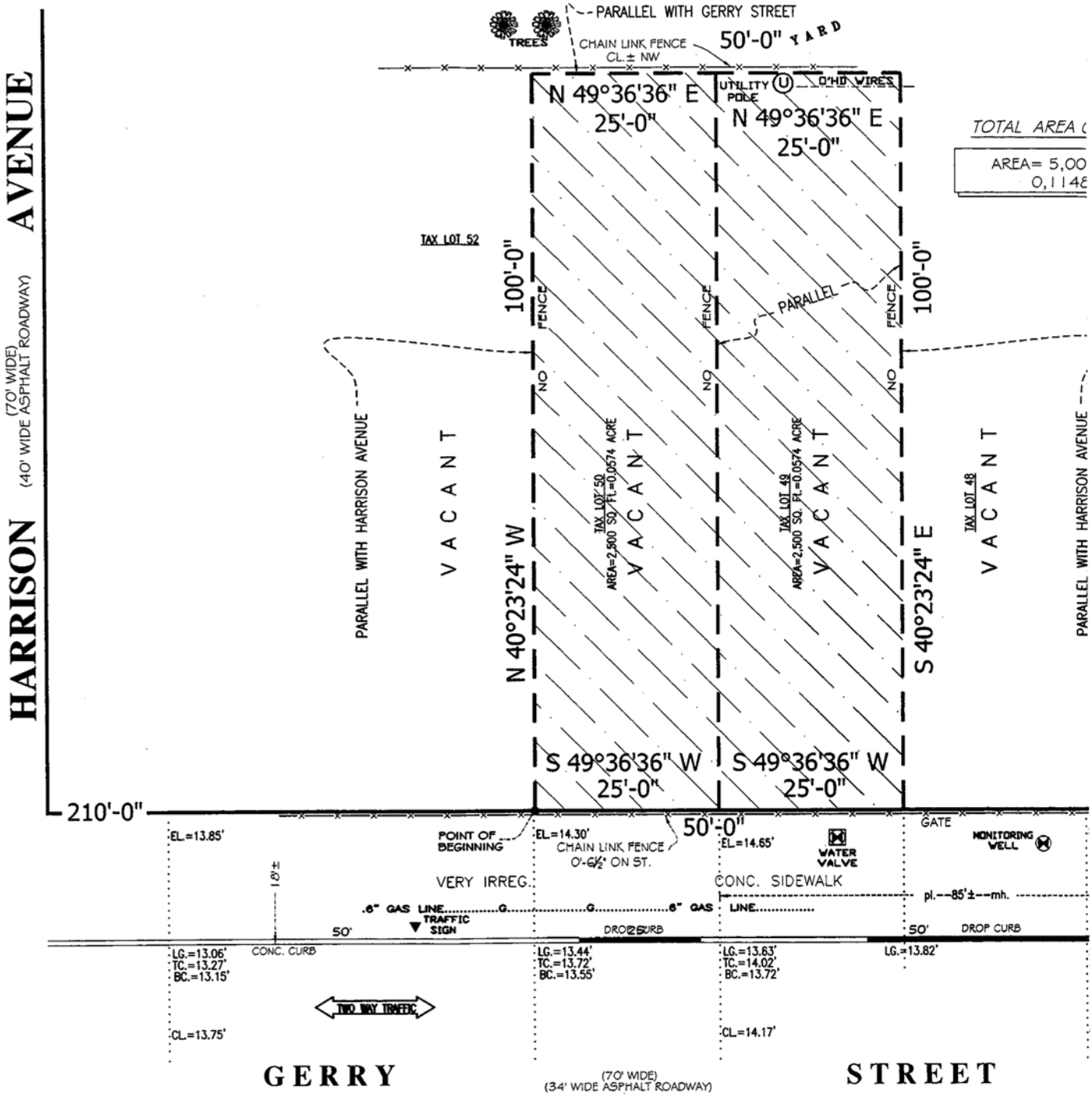
NYSDEC SITE No. V00350 (OPERABLE UNIT 3)
N/A GERRY STREET

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.

SURVEYED:	MARCH 01, 2014
UPDATED :	MARCH 14, 2016
SCALE:	1"=20'
BLOCK:	2266
LOT(s)	46,47 & 48
SECTION:	8
COUNTY:	KINGS
DWG BY:	AAA-Mr.L

VALVE | METER | SIGN | HYD. | PIT | POST | BASIN | JOB # K-2266-48,50-13a | POLE | TEL. | VALVE

CL. CLEAR | L.A. LOW AREA | W.W. WINDOW WELL | C.D. CELLAR DOOR | R.C. RISED CONCRETE | S.G.H. SAFETY GATE & HOUSING | F.E. FIRE ESCAPE | ENT.UND. ENTRANCE UNDER | A. AREAWAY | RT. RIGHT | CL. CENTERLINE | TC. TOP OF CURB | BC. BOTTOM OF CURB | LG. LEGAL GRADE | PI POINT OF INTERSECTION



LOCATION SURVEY

CAUTION: BEFORE PERFORMING ANY DIGGING OR DRILLING ON THIS SITE, IT IS REQUIRED THAT SUBSURFACE SERVICES, INCLUDING THE UNDERGROUND MAINS BE MARKED AND IDENTIFIED BY THE UTILITY INVOLVED IN COMPLIANCE WITH INDUSTRIAL CODE 53 OF NEW YORK STATE.

1) ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), WHICH IS 1.10 FEET ABOVE NATIONAL GEODETIC SURVEY DATUM AT SANDY HOOK NEW JERSEY.

2) LEGAL GRADES (NAVD88) REFER TO CENTER OF RIGHT WAY IN QUEENS; FOR MANHATTAN, BRONX, BROOKLYN & RICHMOND REFER TO CURB LINE TAKEN AT PROJECTION OF PROPERTY LINE.

3) UNDERGROUND UTILITY INFORMATION SHOWN WAS OBTAINED FROM VARIOUS COMPANIES AND CITY AGENCIES AND IS NOT GUARANTEED FOR ACCURACY OR COMPLETENESS.

4) THIS IS TO CERTIFY THAT THERE ARE NO APPARENT STREAMS NATURAL WATER COURSES IN THE PROPERTY AS SHOWN ON THIS SURVEY.

0' 4' 8' 16' 24' 32' FEET

0 1 2 3 4 5 5 7 8 9 10 METERS

VINCENT M. TEUTONI
REGISTRATION No.

D.W.S WATER | TEL. MANHOLE | SEWER MANHOLE | ELECTRIC MANHOLE | E. ELECTRIC BOX.

W. WALL | BW. BOTTOM OF WALL | F.F FIRST FLOOR | B.F BASEMENT FLOOR | L.F LOWER FLOOR | EL. SPOT ELEVATION | EP EDGE OF PAVE

NYSDEC DEED RESTRICTION AREA

ENGINEERING CONTROL AREA (SITE COVER SYSTEM)

CULATION

Q. FT. =
RE

THE ENGINEERING/INSTITUTIONAL CONTROLS

For this Deed restriction are set forth in more detail in the Site Management Plan ("SMP"). A copy of the SMP must be obtained by any party with an interest in the property. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov.

Schedule A

Legal Description for Section 8 Block 2266 Lot 50
Lot 49, NYSDEC Deed restriction area
Engineering Control Area

All that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, 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 on the northwesterly side of Gerry Street distant 210 feet northeasterly from the corner formed by the intersection of the northwesterly side of Gerry Street with the northeasterly side of Harrison Avenue;

RUNNING THENCE northwesterly approximately parallel with Harrison Avenue, 100 feet;

THENCE northeasterly approximately parallel with Gerry Street, 50 feet;

THENCE southeasterly approximately parallel with Harrison Avenue, 100 feet;

THENCE southwesterly, along the northwesterly side of Gerry Street, 50 feet, to the point or place of BEGINNING.

Note: Address, Block & Lot shown for informational purposes only
Designated as Block 2266, New Lot 49 and 50.

4.68'

HYD.

4.00'
4.03'
13.86'

4.38'

Certified Only To: NYSDEC

NYSDEC SITE No. V00350 (OPERABLE UNIT 3)
N/A GERRY STREET

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.

SURVEYED:	MARCH 01, 2014
UPDATED :	MARCH 14, 2016
SCALE:	1"=20'
BLOCK:	2266
LOT(s)	49 & 50
SECTION:	8
COUNTY:	KINGS
DWG BY:	AAA-Mr.L

AAA GROUP
LAND SURVEYORS SERVICES
139 LORIMER STREET
BROOKLYN, N.Y. 11206
TEL. (718) 387-9800 , FAX 384-5050

LS., PRES.
0307

APPENDIX C

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	Joel Braver 516-277-9300
NYSDEC Project Manager	Dana Mecomber 718-482-7541
NYSDOH Project Manager	S. Selmer 518-402-7860
EBC Project Manager	Kevin Waters 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

APPENDIX D
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
Mandy Yau	718-482-4897, man-tsz.yau@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 below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- 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 D of this document,
- 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 (I-278) take the Wythe Avenue / Kent Avenue exit (31) and head south on Kent Avenue to Flushing Avenue. Turn left, heading east on Flushing Avenue to intersection with Gerry Street. Bare left on Gerry Street to Site on the left.

- EXITING SITE – head west on Gerry Street to merge with Flushing Avenue. Bare right on flushing Avenue heading west to Kent Avenue. Turn right heading north on Kent Avenue to Williamsburg Street E. Turn right on Williamsburg Street heading northeast and take the exit ramp left onto the Brooklyn Queens Expressway (I-278)..

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 (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	Each composite sample for analysis is created from 3-5 discrete samples from representative locations in the fill.
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
1000	Add an additional 2 VOC and 1 composite for each additional 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 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the RAWP. A demarcation layer, consisting of orange snow fencing material or equivalent material will be replaced in any areas where a soil cover is replaced, to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this Site Management Plan. If the type of cover system changes from that which exists prior to the excavation (i.e., asphalt paved area is replaced with soil cover), as shown on **Figure 6** in the SMP, this will constitute a modification of the cover element of the remedy and

the upper surface of the 'Remaining Contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

E-10 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

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-11 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-12 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial 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-13 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-14 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-15 DUST CONTROL PLAN

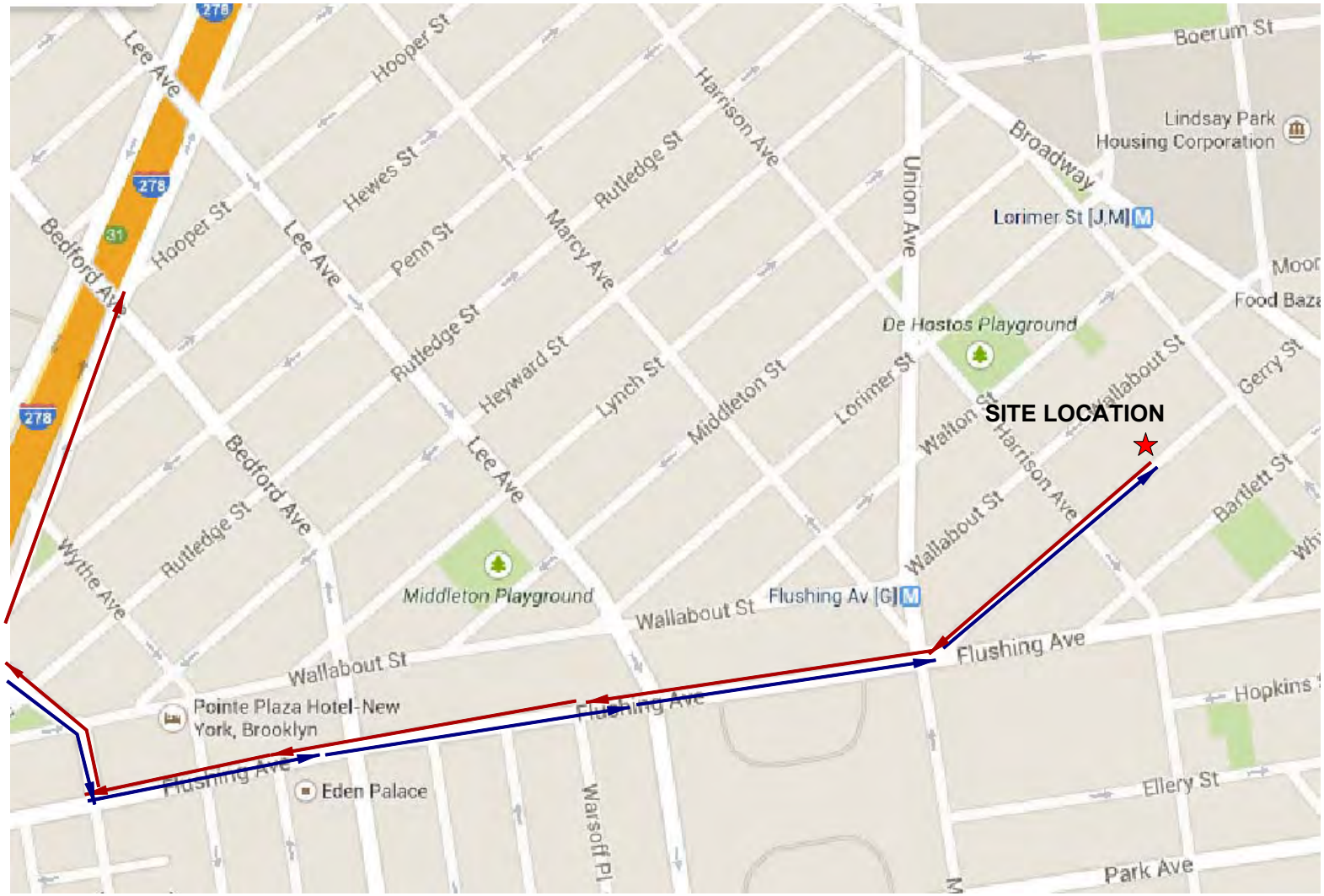
A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- 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-16 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.



Key

Truck Route to the Site

Truck Route from the Site

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
Fax 631. 924 .2870

Figure No.
E1

Site Name: FORMER PFIZER PROPERTY - OU3
Site Address: 81, 83, AND 85 GERRY STREET, BROOKLYN, NY
Drawing Title: TRUCK ROUTE MAP

APPENDIX E

Site Management Forms

SITE INSPECTION CHECKLIST

SSDS - System Inspection Checklist
81 Gerry Street
Brooklyn, NY - Lot 46

Date: _____ Time: _____

Inspector Name/Organization: _____

Physical Inspection of Fan- Check seal w/vent line, unusual noises and general condition of unit.

81 Gerry Street:	**yes**	**no**
Operational?		
Observed Leaks at Seals?		
Air Flow at Exhaust Stack?		
Vacuum Reading:	_____ "H2O	
Alarm Test:		
Alarm sound when fan off?		
Indicator lights when fan off?		

Fan Model No. Manufacturer: _____

Other Comments / Observations _____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

SITE INSPECTION CHECKLIST

SSDS - System Inspection Checklist
83 Gerry Street
Brooklyn, NY - Lot 47

Date: _____ Time: _____

Inspector Name/Organization: _____

Physical Inspection of Fan- Check seal w/vent line, unusual noises and general condition of unit.

83 Gerry Street:	**yes**	**no**
Operational?		
Observed Leaks at Seals?		
Air Flow at Exhaust Stack?		
Vacuum Reading:	_____ "H2O	
Alarm Test:		
Alarm sound when fan off?		
Indicator lights when fan off?		

Fan Model No. Manufacturer: _____

Other Comments / Observations _____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

SITE INSPECTION CHECKLIST

SSDS - System Inspection Checklist
85 Gerry Street
Brooklyn, NY - Lot 48

Date: _____ Time: _____

Inspector Name/Organization: _____

Physical Inspection of Fan- Check seal w/vent line, unusual noises and general condition of unit.

85 Gerry Street:	**yes**	**no**
Operational?		
Observed Leaks at Seals?		
Air Flow at Exhaust Stack?		
Vacuum Reading:	_____ "H2O	
Alarm Test:		
Alarm sound when fan off?		
Indicator lights when fan off?		

Fan Model No. Manufacturer: _____

Other Comments / Observations _____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

SITE INSPECTION CHECKLIST

SSDS - System Inspection Checklist
87 Gerry Street
Brooklyn, NY - Lot 45

Date: _____ Time: _____

Inspector Name/Organization: _____

Physical Inspection of Fan- Check seal w/vent line, unusual noises and general condition of unit.

87 Gerry Street:	**yes**	**no**
Operational?	_____	_____
Observed Leaks at Seals?	_____	_____
Air Flow at Exhaust Stack?	_____	_____
Vacuum Reading:	_____ "H2O	
Alarm Test:		
Alarm sound when fan off?	_____	_____
Indicator lights when fan off?	_____	_____

Fan Model No. Manufacturer: _____

Other Comments / Observations _____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

SITE INSPECTION CHECKLIST

Site Inspection Checklist - Cover System
73-79 Gerry Street
Brooklyn, NY
Lots 49 and 50

Date: _____ Time: _____

Inspector Name/Organization: _____

Visual Inspection of Asphalt Capped Site

Inspect concrete/pavement for cracks, perforations and patching

Describe General Condition of Pavement _____

_____

Describe any Cracks or New Penetrations _____

_____

Describe any Patching _____

_____

_____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

SITE INSPECTION CHECKLIST

Site Inspection Checklist - Cover System
81 Gerry Street
Brooklyn, NY
Lot 48

Date: _____ Time: _____

Inspector Name/Organization: _____

Visual Inspection of Building's Cellar Concrete Sla

Building Interior Inspect concrete slab for cracks, perforations and patching

Describe General Condition of Slab _____

_____

Describe any Cracks or New Penetrations _____

_____

Describe any Patching _____

_____

Visual Inspection of Rear Courtyard

Building Exterior Inspect concrete/pavement for cracks, perforations and patching

Describe General Condition of Pavement/Concrete _____

_____

Describe any Cracks or New Penetrations _____

_____

Describe any Patching _____

_____

_____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

SITE INSPECTION CHECKLIST

Site Inspection Checklist - Cover System
83 Gerry Street
Brooklyn, NY
Lot 47

Date: _____ Time: _____

Inspector Name/Organization: _____

Visual Inspection of Building's Cellar Concrete Sla

Building Interior Inspect concrete slab for cracks, perforations and patching

Describe General Condition of Slab _____

_____

Describe any Cracks or New Penetrations _____

_____

Describe any Patching _____

_____

Visual Inspection of Rear Courtyard

Building Exterior Inspect concrete/pavement for cracks, perforations and patching

Describe General Condition of Pavement/Concrete _____

_____

Describe any Cracks or New Penetrations _____

_____

Describe any Patching _____

_____

_____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

SITE INSPECTION CHECKLIST

Site Inspection Checklist - Cover System
85 Gerry Street
Brooklyn, NY
Lot 46

Date: _____ Time: _____

Inspector Name/Organization: _____

Visual Inspection of Building's Cellar Concrete Sla

Building Interior Inspect concrete slab for cracks, perforations and patching

Describe General Condition of Slab _____

_____

Describe any Cracks or New Penetrations _____

_____

Describe any Patching _____

_____

Visual Inspection of Rear Courtyard

Building Exterior Inspect concrete/pavement for cracks, perforations and patching

Describe General Condition of Pavement/Concrete _____

_____

Describe any Cracks or New Penetrations _____

_____

Describe any Patching _____

_____

_____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

SITE INSPECTION CHECKLIST

Site Inspection Checklist - Cover System
87 Gerry Street
Brooklyn, NY
Lot 45

Date: _____ Time: _____

Inspector Name/Organization: _____

Visual Inspection of Asphalt Capped Site

Inspect concrete/pavement for cracks, perforations and patching

Describe General Condition of Pavement _____

_____

Describe any Cracks or New Penetrations _____

_____

Describe any Patching _____

_____

_____

Repairs Needed and / or Maintenance at this time?

_____

_____

_____

_____

Signature: _____ Date: _____

APPENDIX – F

Operations and Maintenance Manual

Do Not Unplug or Disable the Alarm.

IF THIS ALARM SOUNDS

PLEASE NOTIFY THE BUILDING SUPERINTENDENT IMMEDIATELY

The alarm does not represent an immediate health threat. The alarm indicates a ventilation fan installed on the roof of this building is not functioning and requires maintenance/repair.

Further Details Regarding this Alarm and the Building's Sub-Slab Depressurization System are Provided within the Site Management Plan Located within the Superintendent's Office.

If the Building Superintendent is not available, please contact

AMC Engineering, PLLC
1836 42nd Street
Astoria, NY 11105
(516) 417-8588

RadonAway™
The world's leading radon fan manufacturer

RP Series

Radon Mitigation Fan

All RadonAway™ fans are specifically designed for radon mitigation. RP Series Fans provide superb performance, run ultra-quiet and are attractive. They are ideal for most sub-slab radon mitigation systems.

Features

- Energy efficient
- Ultra-quiet operation
- Meets all electrical code requirements
- Water-hardened motorized impeller
- Seams sealed to inhibit radon leakage (RP140 & RP145 double snap sealed)
- RP140 and RP260 Energy Star® Rated
- ETL Listed - for indoor or outdoor use
- Thermally protected motor
- Rated for commercial and residential use

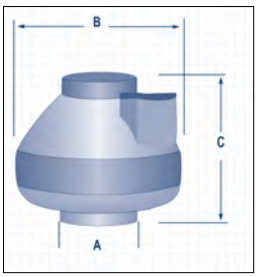
MODEL	P/N	FAN DUCT DIAMETER	WATTS	MAX. PRESSURE"WC	TYPICAL CFM vs. STATIC PRESSURE WC				
					0"	.5"	1.0"	1.5"	2.0"
RP140*	23029-1	4"	15-21	0.8	135	70	-	-	-
RP145	23030-1	4"	41-72	2.1	166	126	82	41	3
RP260*	23032-1	6"	50-75	1.6	272	176	89	13	-
RP265	23033-1	6"	91-129	2.3	334	247	176	116	52
RP380*	28208	8"	95-152	2.3	497	353	220	130	38

*Energy Star® Rated

Made in USA with US and imported parts

ETL Listed

All RadonAway inline radon fans are covered by our 5-year, hassle-free warranty



Model	A	B	C
RP140	4.5"	9.7"	8.5"
RP145	4.5"	9.7"	8.5"
RP260	6"	11.75"	8.6"
RP265	6"	11.75"	8.6"
RP380	8"	13.41"	10.53"

For Further Information Contact

RADON CONTROL

9/12
P/N 02008

OPERATION AND MAINTENANCE PLAN

1.0 INTRODUCTION

This Operation and Maintenance Plan describes the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the steps necessary to allow individuals unfamiliar with the Site to operate and maintain the SSD system installed within each building;
- Includes an operation and maintenance contingency plan; and,
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSD system is operated and maintained.

A copy of this Operation and Maintenance Plan will be kept at the Site.

1.1 SSD System Scope

The SSD system at the site will operate 24/7 with no maintenance requirements. Periodic inspections will be performed to assure that the system is continuing to operate properly..

1.2 SSD System Start-Up and Testing

The start-up test procedure will first consist of a visual inspection to make sure all of the system components are installed properly. Following this, the system will be started and checked for leaks and adequate vacuum on the intake line and adequate pressure at the discharge stack. Power to the blower will then be cut to verify that the warning alarm is functioning properly. Vacuum readings will be taken from two locations within the building from beneath the slab using a digital manometer. Each of the sub-slab vacuum sampling locations will be created by drilling a hole through the concrete slab to allow access for a 3/8 inch diameter sampling tube which is sealed to the concrete slab. The tube will then connected to a digital manometer to provide a vacuum reading and demonstrate negative pressure. Following collection of the vacuum readings, each sampling port will be permanently sealed to prevent preferential pathway for vapor intrusion. If the system defaults and is required to be re-started, the sampling ports will be re-installed in the same location, sampled and sealed in the same manner.

The system testing described above will be conducted if, in the course of the SSD system lifetime, significant changes are made to the system, and the system restarted.

1.3 SSD System Operation: Non-Routine Equipment Maintenance

The SSD systems are maintenance free. The blower should only stop operating in the event of a power outage or a severe blockage. In the event that the system trips and shuts down, the owner or owner's representative should be contacted for repairs.

2.0 SSD SYSTEM PERFORMANCE MONITORING

An SSD system has been installed to remediate / mitigate CVOC vapors present at the Site.

2.1 SSD Monitoring Schedule

The components of the SSDS system will be inspected by a qualified environmental professional or technician on a periodic basis (as per the SMP) to assure that the system is functioning properly.

Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system.

2.2 SSD General Equipment Monitoring

A visual inspection of the complete system will be conducted during the monitoring event. SSD system components to be monitored include, but are not limited to, the following:

- Vacuum fan; and,
- General system piping.
- Vacuum gauges.
- Control switches and system alarms.

A complete list of components to be checked is provided in the Inspection Checklist (attached). If any equipment readings are not within their typical range, any equipment is observed to be malfunctioning, or the system is not performing within specifications, maintenance and repair as per the Operation and Maintenance Plan are required immediately, and the SSD system restarted.

3.0 MAINTENANCE & PERFORMANCE MONITORING REPORTING REQUIREMENTS

Maintenance reports and any other information generated during regular operations at the site will be kept on-file.

3.1 Routine Maintenance Reports

Checklists or forms (attached) will be completed during each routine maintenance event. Checklists/forms will include, but not be limited to the following information:

- Date;
- Name, company, and position of person(s) conducting maintenance activities;
- Maintenance activities conducted;
- Any modifications to the system;
- 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).

3.2 Non-Routine Maintenance Reports

During each non-routine maintenance event, a form will be completed which will include, but not be limited to, the following information:

- Date;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Presence of leaks;
- Date of leak repair;
- Other repairs or adjustments made to the system;
- 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).

APPENDIX G
Remedial System Optimization TOC

REMEDIAL SYSTEM OPTIMIZATION FOR
FORMER PFIZER SITE – OPERABLE UNIT 3
81, 83, 85 GERRY STREET

APPENDIX H

Community Air Monitoring Plan

COMMUNITY AIR MONITORING PLAN

FORMER PFIZER PROPERTY
SITE B - OPERABLE UNIT 3

81, 83 and 85 GERRY STREET
BROOKLYN NEW YORK
Block 2266 Lots 46, 47, and 48

SEPTEMBER - 2016

FORMER PFIZER PROPERTY
SITE B - OPERABLE UNIT 3

COMMUNITY AIR MONITORING PLAN
TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been prepared for use during activities that disturb the building slab/foundation of any of the three new buildings constructed at 81, 83, and 85 Gerry Street, or the rear courtyard concrete slabs located behind the buildings. The CAMP provides measures for protection for the on-site works 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

Chlorinated volatile organic compounds (VOCs) and metals 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 15-minute 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 (PM_{10}) 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/m^3 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/m^3 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/m^3 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/m^3 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/m^3 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/m^3 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 PM_{10} levels are not more than 150 µg/m^3 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 $\mu g/m^3$, 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.

1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PHONE 631.504.6000
FAX 631.924.2870

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.

6.0 RECORDS AND REPORTING

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: Former Pfzier Property - OUIII Date: _____

Project Location: 81, 83, and 85 Gerry Street, Brooklyn, NY VCP No: V00350

Temperature:_____ Wind Speed:_____ Wind Direction:_____

Background Data: Upwind - PID _____ppm Dust Meter 1 - _____mg/m^3

Downwind - PID _____ppm Dust Meter 2 - _____mg/m^3

Time	Work Zone		Upwind		Downwind	
	PID - ppm	Dust - mg/m^3	PID - ppm	Dust - mg/m^3	PID - ppm	Dust - mg/m^3

Activities Performed:

APPENDIX I

Health and Safety Plan

FORMER PFIZER PROPERTY
SITE B - OPERABLE UNIT 3

81, 83 and 85 GERRY STREET
BROOKLYN NEW YORK
Block 2266 Lots 46, 46, 47, 48, 49 and 50

HEALTH AND SAFETY PLAN

OCTOBER 2016

Prepared By:

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961

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/foundation, or rear courtyard concrete slabs. 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.
- 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 Project Manager	1808 Middle Country Road Ridge, NY 11961	(631) 504-6000 (631) 338-1749
Mr. Kevin Waters	Site Safety Officer	1808 Middle Country Road Ridge, NY 11961	(631) 504-6000 (516) 287-9023

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

The Site was remediated in accordance with the remedy selected by the Remedial Action Work Plan dated November 2014 (revised February 2015), and the Decision Document dated February 20, 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:

The remedy achieved a Contingent Track 4 Cleanup and included the following elements:

1. Excavation of soil/fill exceeding Track 4 Site-Specific SCOs listed in Table 1 to the extent practical from Lots 46, 47 and 48;
2. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
3. Collection and analysis of end-point samples from Lots 46, 47 and 48 to evaluate the performance of the remedy with respect to attainment of Track 4 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. Import of materials for use as backfill and cover in compliance with: (1) chemical limits and other specifications included in **Table 1**, (2) all Federal, State and local rules and regulations for handling and transport of material;
6. Installation of a sub-slab depressurization system and vapor barrier beneath each of the three new buildings constructed at the Site;
7. Construction of a composite cover system consisting of 2 inches of asphalt across Lots 45, 49 and 50, and the following for Lots 46, 47 and 48: a minimum of 4 inch thick concrete slab in the cellar of each of the three new buildings, and a 4 inch thick concrete slab covering the rear yards behind each of the building;
8. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting; and
9. Execution and recording of a Deed Restriction to ensure implementation of the SMP and that the Site is only used for allowable uses following remediation.

Soil below the cellar slab of each of the buildings meets Restricted Residential Use SCOs. However, soil below the concrete slab for the rear courtyards contains elevated concentrations of mercury.

The majority of Lots 49 and 50 were previously excavated to 10 feet below grade and backfilled with clean soil under a prior IRM. No laboratory results are available that would indicate soil with compounds above Unrestricted Use SCOs is present.

Historic fill/soil has not been removed Lot 45 and is currently capped with a 2 inch layer of asphalt. Soil samples collected from a soil boring performed on Lot 45 in 2004 (SBB-34) indicated the historic fill layer contains SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd-pyrene) and metals (barium, mercury and lead) above Restricted Residential Use SCOs.

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 Groundwater Sampling and Soil Exposure

There is documented contamination in groundwater consisting of chlorinated VOCs 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 and Groundwater

Dust may be generated by any activities that disturbs the cellar slab or rear courtyard 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 $\mu g/m^3$ 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

Considering the past and present use of the properties, VOCs may be encountered at the site in groundwater. Therefore, the release of organic vapors to the atmosphere may occur during groundwater sampling. 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,
- 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 groundwater sampling and chemical oxidant injections will 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.

5.0 SITE CONTROL

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 or trailer.

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.

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

6.2 Emergency Telephone Numbers

General Emergencies	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;

- 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, special safety concerns, recent incidents, etc…):

_____

_____

_____

_____

2. OTHER ISSUES (HASP changes, attendee comments, etc…):

_____

_____

_____

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: _____

_____

_____

_____

_____ _____

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.

International Chemical Safety Cards

MERCURY

ICSC: 0056

Quicksilver
Liquid silver
Hg
Atomic mass: 200.6

ICSC # 0056
CAS # 7439-97-6
RTECS # OV4550000
UN # 2809
EC # 080-001-00-0
April 22, 2004 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Risk of fire and explosion.		In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Abdominal pain. Cough. Diarrhoea. Shortness of breath. Vomiting. Fever or elevated body temperature.	Local exhaust or breathing protection.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
•SKIN	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
•EYES		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		Do not eat, drink, or smoke during work. Wash hands before eating.	Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area in case of a large spill! Consult an expert! Ventilation. Collect leaking and spilled liquid in sealable non-metallic containers as far as possible. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Chemical protection suit including self-contained breathing apparatus.	Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs Well closed.	Special material. Do not transport with food and feedstuffs. T symbol N symbol R: 23-33-50/53 S: 1/2-7-45-60-61 UN Hazard Class: 8 UN Packing Group: III

SEE IMPORTANT INFORMATION ON BACK

International Chemical Safety Cards

MERCURY

ICSC: 0056

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
ODOURLESS, HEAVY AND MOBILE SILVERY LIQUID METAL.

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Upon heating, toxic fumes are formed. Reacts violently with ammonia and halogens causing fire and explosion hazard. Attacks aluminium and many other metals forming amalgams.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: 0.025 mg/m³ as TWA (skin) A4 BEI issued (ACGIH 2004).
MAK: 0.1 mg/m³ Sh
Peak limitation category: II(8) Carcinogen category: 3B (DFG 2003).
OSHA PEL†: C 0.1 mg/m^3
NIOSH REL: Hg Vapor: TWA 0.05 mg/m^3 skin
Other: C 0.1 mg/m^3 skin
NIOSH IDLH: 10 mg/m^3 (as Hg) See: 7439976

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its vapour and through the skin , also as a vapour!

INHALATION RISK:
A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance is irritating to the skin. Inhalation of the vapours may cause pneumonitis. The substance may cause effects on the central nervous systemandkidneys. The effects may be delayed. Medical observation is indicated.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
The substance may have effects on the central nervous system kidneys , resulting in irritability, emotional instability, tremor, mental and memory disturbances, speech disorders. Danger of cumulative effects. Animal tests show that this substance possibly causes toxic effects upon human reproduction.

PHYSICAL PROPERTIES

Boiling point: 357°C
Melting point: -39°C
Relative density (water = 1): 13.5
Solubility in water:
none

Vapour pressure, Pa at 20°C: 0.26
Relative vapour density (air = 1): 6.93
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.009

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. In the food chain important to humans, bioaccumulation takes place, specifically in fish.

N O T E S

Depending on the degree of exposure, periodic medical examination is indicated. No odour warning if toxic concentrations are present. Do NOT take working clothes home.

Transport Emergency Card: TEC (R)-80GC9-II+III

ADDITIONAL INFORMATION

ICSC: 0056 **MERCURY**

International Chemical Safety Cards

INDENO(1,2,3-cd)PYRENE

ICSC: 0730

o-Phenylenepyrene
2,3-Phenylenepyrene
$C_{22}H_{12}$
Molecular mass: 276.3

ICSC # 0730
CAS # 193-39-5
RTECS # NK9300000
March 25, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles 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		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0730

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.

International Chemical Safety Cards

INDENO(1,2,3-cd)PYRENE

ICSC: 0730

I **M** **P**	**PHYSICAL STATE; APPEARANCE:** YELLOW CRYSTALS **PHYSICAL DANGERS:**	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol and through the skin. **INHALATION RISK:**

O R T A N T D A T A	**CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established. MAK: Carcinogen category: 2; (DFG 2004).	Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 536°C Melting point: 164°C Solubility in water: none	Octanol/water partition coefficient as log Pow: 6.58
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality. Bioaccumulation of this chemical may occur in fish. 	

N O T E S

Indeno(1,2,3-cd)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing Indeno(1,2,3-c,d)pyrene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m^3. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0730 **INDENO(1,2,3-cd)PYRENE**

International Chemical Safety Cards

BENZO(b)FLUORANTHENE

ICSC: 0720

Benz(e)acephenanthrylene
2,3-Benzofluoroanthene
Benzo(e)fluoranthene
3,4-Benzofluoranthene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0720
CAS # 205-99-2
RTECS # CU1400000
EC # 601-034-00-4
March 25, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles 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		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0720

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.

International Chemical Safety Cards

BENZO(b)FLUORANTHENE

ICSC: 0720

I	**PHYSICAL STATE; APPEARANCE:** COLOURLESS CRYSTALS	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation

IMPORTANT DATA	**PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: A2 (suspected human carcinogen); (ACGIH 2004). MAK: Carcinogen category: 2; (DFG 2004). of its aerosol and through the skin. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans. May cause genetic damage in humans.
PHYSICAL PROPERTIES	Boiling point: 481°C Melting point: 168°C Solubility in water: none Octanol/water partition coefficient as log Pow: 6.12
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality. 

N O T E S

Benzo(b)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing benzo(b)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m^3. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0720 **BENZO(b)FLUORANTHENE**

International Chemical Safety Cards

BENZO(a)PYRENE

ICSC: 0104

Benz(a)pyrene
3,4-Benzopyrene
Benzo(d,e,f)chrysene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0104
CAS # 50-32-8
RTECS # DJ3675000
EC # 601-032-00-3
October 17, 2005 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray, foam, powder, carbon dioxide.
EXPLOSION			
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles 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		Do not eat, drink, or smoke during work.	Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area! Personal protection: complete protective clothing including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Separated from strong oxidants.	T symbol N symbol R: 45-46-60-61-43-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0104

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.

International Chemical Safety Cards

BENZO(a)PYRENE

ICSC: 0104

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
PALE-YELLOW CRYSTALS

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Reacts with strong oxidants causing fire and explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: Exposure by all routes should be carefully controlled to levels as low as possible A2 (suspected human carcinogen); (ACGIH 2005).
MAK:
Carcinogen category: 2; Germ cell mutagen group: 2; (DFG 2005).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
This substance is carcinogenic to humans. May cause heritable genetic damage to human germ cells. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES

Boiling point: 496°C
Melting point: 178.1°C
Density: 1.4
g/cm³

Solubility in water: none (<0.1 g/100 ml)
Vapour pressure :
negligible
Octanol/water partition coefficient as log Pow: 6.04

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish, in plants and in molluscs. The substance may cause long-term effects in the aquatic environment.

N O T E S

Do NOT take working clothes home. Benzo(a)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAHs) in the environment, usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.

ADDITIONAL INFORMATION

International Chemical Safety Cards

BENZ(a)ANTHRACENE

ICSC: 0385

1,2-Benzoanthracene
Benzo(a)anthracene
2,3-Benzphenanthrene
Naphthanthracene
$C_{18}H_{12}$
Molecular mass: 228.3

ICSC # 0385
CAS # 56-55-3
RTECS # CV9275000
EC # 601-033-00-9
October 23, 1995 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.		Water spray, powder. In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles 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		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Personal protection: complete protective clothing including self-contained breathing apparatus.	Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0385

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.

International Chemical Safety Cards

ICSC: 0385

BENZ(a)ANTHRACENE

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
COLOURLESS TO YELLOW BROWN FLUORESCENT FLAKES OR POWDER.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:

OCCUPATIONAL EXPOSURE LIMITS:
TLV: A2 (suspected human carcinogen); (ACGIH 2004).
MAK:
Carcinogen category: 2 (as pyrolysis product of organic materials)
(DFG 2005).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
This substance is probably carcinogenic to humans.

PHYSICAL PROPERTIES

Sublimation point: 435°C
Melting point: 162°C
Relative density (water = 1): 1.274
Solubility in water:
none

Vapour pressure, Pa at 20°C: 292
Octanol/water partition coefficient as log Pow: 5.61

ENVIRONMENTAL DATA

Bioaccumulation of this chemical may occur in seafood.

N O T E S

This substance is one of many polycyclic aromatic hydrocarbons - standards are usually established for them as mixtures, e.g., coal tar pitch volatiles. However, it may be encountered as a laboratory chemical in its pure form. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken. Do NOT take working clothes home. Tetraphene is a common name. Card has been partly updated in October 2005 and August 2006: see sections Occupational Exposure Limits, EU classification.

ADDITIONAL INFORMATION

ICSC: 0385 **BENZ(a)ANTHRACENE**

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? _____ How Much (Days/Hrs.)? _____

Was Safety Equipment in Use at the Time of the Accident (Hard Hat, Safety Glasses, Gloves, Safety Shoes, etc.)? _____

_____

(If not, it is the EMPLOYEE'S sole responsibility to process his/her claim through his/her Health and Welfare Fund.)

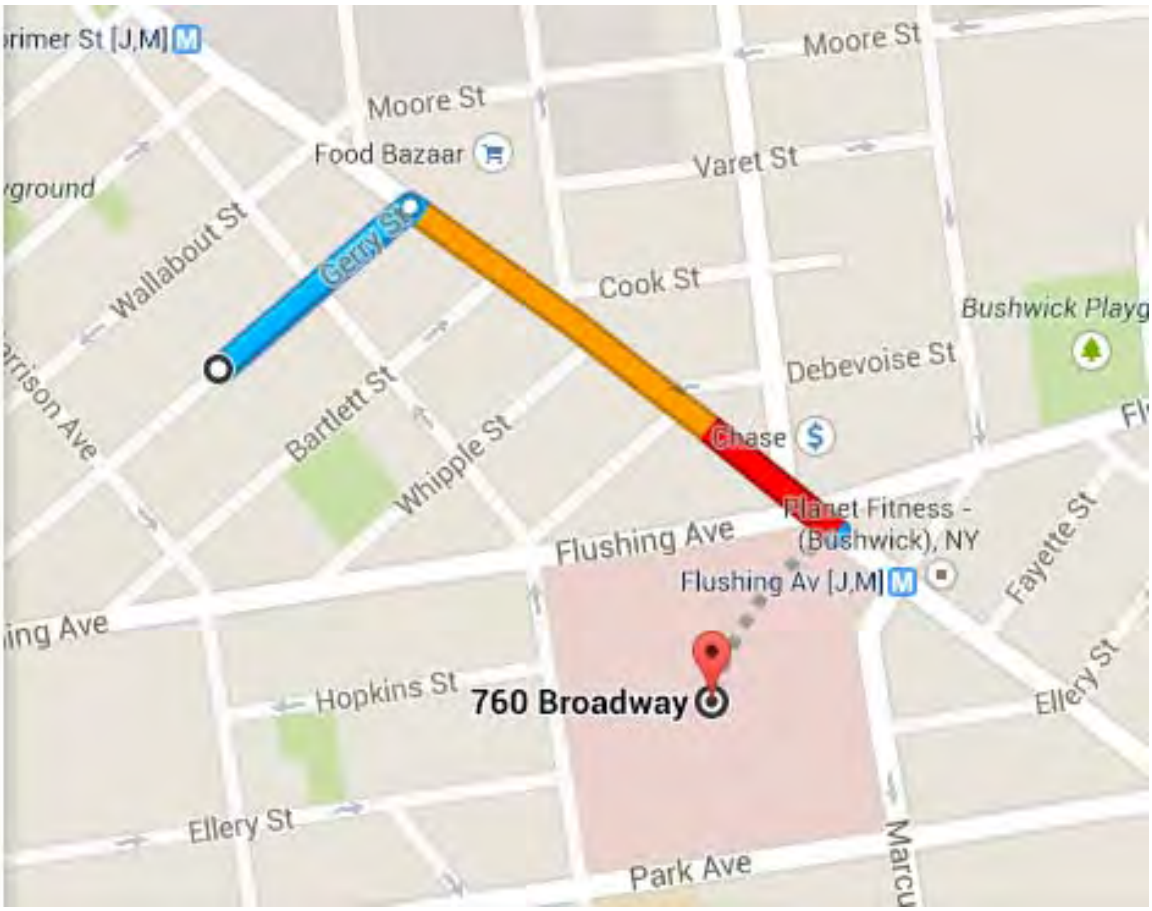
INDICATE STREET NAMES, DESCRIPTION OF VEHICLES, AND NORTH ARROW

HOSPITAL INFORMATION AND MAP

The hospital nearest the site is:

Woodhull Medical Center

760 Broadway, Brooklyn, NY 11206
718-963-8000
0.4 Mile – About 4 Minutes



START: 85 Gerry St, Brooklyn, NY 11206

1) Head northeast on Gerry St toward Throop Ave (0.1 mi)
2) Turn right onto Broadway (0.2 mi)
3) Destination will be on the right

FINISH: 760 Broadway, Brooklyn, NY 11206