

**172-180 NASSAU STREET
BROOKLYN, NEW YORK**

Remedial Action Report

NYC VCP Number: 13CVCP076K

Prepared for:

Pink Stone Capital Group
347 Fifth Avenue, Suite 1602
New York, NY 10016

Prepared by:

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

1808 Middle Country Road
Ridge, NY 11961

APRIL 2014

REMEDIAL ACTION REPORT

TABLE OF CONTENTS

LIST OF ACRONYMS

CERTIFICATION

EXECUTIVE SUMMARY i

REMEDIAL ACTION REPORT 1

1.0 SITE BACKGROUND.....1

 1.1 Site Location and Prior Usage 1

 1.2 Proposed Redevelopment Plan 2

 1.3 Description of Surrounding Property 2

 1.4 Remedial Investigation 3

2.0 DESCRIPTION OF REMEDIAL ACTIONS 6

3.0 COMPLIANCE WITH REMEDIAL ACTION WORK PLAN..... 7

 3.1 Construction Health & Safety Plan (CHASP) 8

 3.2 Community Air Monitoring Plan (CAMP)..... 8

 3.3 Soil/Materials Management Plan 8

 3.4 Storm-Water Pollution Prevention..... 8

 3.5 Deviations From the Remedial Action Work Plan 8

4.0 REMEDIAL PROGRAM 9

 4.1 Project Organization 9

 4.2 Site Controls..... 9

 4.3 Materials Excavation and Removal 11

 4.4 Materials Disposal 12

 4.5 Backfill Import..... 14

5.0 ENGINEERING CONTROLS 15

6.0 INSTITUTIONAL CONTROLS 16

7.0 SITE MANAGEMENT PLAN..... 17

FIGURES

Figure 1 - Site Location Map

Figure 2 - Site Plan

Figure 3 - Redevelopment Plan

Figure 4 - Surrounding Land Use

Figure 5 - Excavation Areas

Figure 6 - Endpoint Sample Locations

Figure 7 - Vapor Barrier Design

TABLES

Table 1 - Endpoint Sample Results - VOCs

Table 2 - Endpoint Sample Results - SVOCs

Table 3 - Endpoint Sample Results - Metals

Table 4 - List of SCOs

Table 5 - Disposal Quantities and Disposal Facilities

APPENDICES

Appendix A - Final Architectural Plans

Appendix B - Project Photographs

Appendix C - Community Air Monitoring Results

Appendix D - Daily Status Reports

Appendix E - Endpoint Laboratory Report

Appendix F - Soil Disposal Request Letters

Appendix G - Soil Disposal Acceptance Letters

Appendix H - Manifests and Scale Tickets

Appendix I - Bills of Lading for Concrete and Boulders

Appendix J - Imported Backfill Documentation

Appendix K - Sustainability Report

LIST OF ACRONYMS

Acronym	Definition
CAMP	Community Air Monitoring Plan
DER-10	NYS DEC Division of Environmental Remediation Technical Guidance Manual 10
EC	Engineering Control
HASP	Health and Safety Plan
IC	Institutional Control
NYC VCP	New York City Voluntary Cleanup Program
NYC DEP	New York City Department of Environmental Protection
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYC OER	New York City Office of Environmental Remediation
ORC	Oxygen Release Compound
PID	Photoionization Detector
QA/QC	Quality Assurance/Quality Control
QEP	Qualified Environmental Professional
RAR	Remedial Action Report
RAWP	Remedial Action Work Plan
SCG	Standards, Criteria and Guidance
SCO	Soil Cleanup Objective
SMMP	Soil/Materials Management Plan
SMP	Site Management Plan
SVOCs	Semi-Volatile Organic Compounds
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

CERTIFICATION

I, Ariel Czemerinski, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the remedial program for the Redevelopment Project located at 172-180 Nassau Street in Brooklyn, New York, Site Number 12CVCP076K .

I certify that the OER-approved Remedial Action Work Plan dated August 2012 and the associated Stipulation List dated September 5, 2012, was implemented and that all requirements in those documents have been substantively complied with. I certify that contaminated soil, fill, liquids or other material from the property were taken to facilities licensed to accept this material in full compliance with applicable laws and regulations.

Ariel Czemerinski

Name

076508

PE License Number

Signature

5/23/2014

DATE



PE Stamp

EXECUTIVE SUMMARY

Site Location and Prior Usage

The Site is located at 180 Nassau Street in the Dumbo section on Brooklyn, New York and is identified as Block 108 and Lot 12 on the New York City Tax Map. Figure 1 shows the Site location. The Site is 13,161-square feet and is bounded by Nassau Street to the north, Duffield Street to the east, Lot 5 to the west, which is developed with a 20-story apartment building with first floor commercial space. A map of the Site boundary is shown in Figure 2. Currently, the Site is vacant, but an abandoned 5-story residential building is located on the eastern portion of the Site.

Lot 12 is a slightly irregular shaped corner lot consisting of 150.5 feet of street frontage on Nassau Street and 88.33 feet of street frontage on Duffield Street. The majority of the lot consists of an exposed soil cover, but one abandoned 5-story apartment building is located at the intersection of Duffield Street and Nassau Street.

Summary of Proposed Redevelopment Plan

The proposed future use of the Site consisted of a new 12-story apartment building. Layout of the proposed Site development is presented in Figure 3. The current zoning designation is C6-2. The proposed use is consistent with existing zoning for the property.

The proposed redevelopment plans for the Site included the construction of a new 12-story apartment building with a full cellar level below grade. The apartment building has 124 dwelling units, accessory recreation areas at the cellar and first floor levels, and an outdoor accessory recreation area at the roof level. The proposed project gross area is approximately 125,000 ft², including the cellar level.

The entire Site required excavation for construction of the full cellar parking level. Due to a significant grade change along Nassau Street, the east end of the Site only required excavation to a depth of approximately 12 feet below grade, but the west end required excavation to a depth of approximately 22 feet below grade. The cellar level is utilized as accessory off-street parking, accessible from a vehicle ramp located along Duffield Street. The remainder of the cellar consists of a water service and gas meter room, fire pump room, telecommunications room,

electric service room, bicycle storage room, superintendent's office and shop, compactor and recycle room, residential storage areas, and a 1,325 ft² gym/recreation area with accessory restrooms and storage. Access to the cellar is provided by a vehicle ramp from Duffield Street, two elevators and two stairwells.

The first floor of the building is utilized for accessory off-street parking, but also consists of the residential lobby, a 1,287 ft² accessory recreation room, bicycle room, boiler room, ramps to the lower cellar level parking garage and first floor parking garage, and the two elevators and two stairwells. Each of the 124 dwelling units are located on the 2nd through 12th floors.

The total volume of soil required to be excavated from the site for construction of the proposed building was estimated at approximately 6,000 cubic yards (9,000 tons).

Summary of Past Uses of Site and Environmental Findings

The Phase I Environmental Site Assessment prepared by EBC in April of 2008 notes prior use of the Site as the following:

- 172 Nassau Street – Residential and Mayfair Ship Supplies
- 174-178 Nassau Street – Residential and a ribbon ink and carbon paper manufacturing plant
- 180 Nassau Street / 2 Duffield Street – Residential only

The AOCs identified for this Site include:

1. Historic fill layer is present at the Site from grade to depths as great as 12 ft in some areas.

Summary of Environmental Findings

1. Elevation of the property ranges from 56 feet.
2. Depth to groundwater ranges from 50 to 52 feet at the Site.
3. Groundwater flow is generally from south to north beneath the Site.
4. Depth to bedrock is at the Site is greater than 100 feet.
5. The stratigraphy of the Site, from the surface down, consists of up to 12 feet of historic fill underlain by coarse brown native sand.

6. Shallow soil samples collected during the RI showed no PCBs at detectable concentrations. No VOCs were detected above UUSCOs within any of the soil samples except for two very low concentrations of m&p-Xylenes (10 ppb) and o-Xylene (5.7 ppb) detected in one of the shallow soil samples. No chlorinated VOCs including PCE and TCE were detected in any soil sample. Four SVOCs (benzo(a)anthracene, benzo(a)-pyrene, benzo(b)fluoranthene and chrysene) were detected within one of the six shallow samples at concentrations above their RRSCOs, and one SVOC was detected at a concentration above RRSCO in a second shallow soil sample. Four metals including lead (maximum of 322 ppm), mercury (maximum of 0.51 ppm), Nickel (maximum of 339 ppm) and zinc (maximum of 324 ppm) were detected at a concentration above UUSCOs within the shallow soil samples. No metals in shallow or deeper soils were detected at a concentration exceeding their RRSCOs. One pesticide, chlordane, was detected above UUSCOs at 56 ppb within the shallow soil samples collected from the historic fill layer. The type, distribution and concentration of each of SVOCs and metals indicate that they are associated with historic fill material observed in shallow samples. Deep soil samples collected during the RI showed no pesticides, PCBs, or VOCs at detectable concentrations. Two SVOCs were detected within one of the six deep soil samples at a concentration above their RRSCO. Metals including lead, mercury, nickel and zinc were above UUSCO. Overall, the findings for soil were unremarkable and did not show a source area for contamination on the property. Soil results were consistent with observations for other historical fill sites in Brooklyn.
7. No pesticides or PCBs were detected in either groundwater sample collected at the Site. Groundwater samples collected during the RI showed one chlorinated VOC (chloroform) in both groundwater samples. Chloroform was detected above Groundwater Quality Standards (GQS) in the range from 1.0 ppb to 7.5 ppb. No TCE or PCE was detected in groundwater. No SVOCs were detected above their corresponding GQS in groundwater, but two SVOCs were reported at low concentrations below their corresponding GQS. The dissolved metals including iron, magnesium, manganese, and sodium were detected above their respective GQS and are suggestive of regional saline influence in groundwater. The RI indicates that groundwater is not impacted by Site conditions and did not reveal any sources of contaminants on the Site.

8. Soil vapor samples collected during the RI showed low trace levels of petroleum and chlorinated VOCs except for acetone (detected from 752 to 2,070 $\mu\text{g}/\text{m}^3$) and ethanol (detected from 172 to 855 $\mu\text{g}/\text{m}^3$). Both compounds are common laboratory introduced contaminants. PCE was identified in all samples at a maximum concentration of 1.91 $\mu\text{g}/\text{m}^3$. TCE was identified in five of the six soil vapor samples at a maximum concentration of 1.02 $\mu\text{g}/\text{m}^3$. These results were well below the monitoring levels for PCE and TCE in the State DOH soil vapor guidance matrix and in the range of ambient air quality. Neither PCE nor TCE were detected within any of the soil samples collected at the Site and these low levels suggest a possible off-Site origin.

Summary of the Remedy

A Pre-Application Meeting was held on July 3, 2012. A Remedial Investigation (RI) was performed between July 6, 2012 and July 12, 2012, and a RI Report dated August 2012 was prepared to evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). A Site Contact List was established and a RAWP dated August 2012 was prepared and released with a Fact Sheet on August 10, 2012, for a 30-day public comment period. The RAWP and Stipulation List dated September 5, 2012, was approved by the New York City Office of Environmental Remediation (OER) on December 13, 2012. A pre-construction meeting was held on January 15, 2013, and remedial action began in March of 2013 and completed in June of 2013.

The following remedial actions were completed in this program:

1. Prepared a Community Protection Statement and implemented a Citizen Participation Plan.
2. Performed a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Established Track 4 Soil Cleanup Objectives (SCOs). However, all soil/fill exceeding Unrestricted Use SCOs was excavated and removed from the Site and Track 1 SCOs were achieved for soil.
4. Collected and analyzed end-point samples to determine the performance of the remedy with respect to attainment of SCOs.

5. Installed a vapor barrier system beneath the building slab and behind foundation walls.
6. Imported materials to be used for backfill in compliance with this plan and in accordance with applicable laws and regulations.
7. Transported and disposed off-Site of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Collected, sampled and analyzed samples representative of excavated media as required by disposal facilities. Appropriately segregated excavated media on Site.
8. Screened excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.
9. Implemented storm-water pollution prevention measures in compliance with applicable laws and regulations.
10. Constructed an engineered composite cover across the entire Site to prevent human exposure to residual soil/fill remaining under the Site and operation of high volume air exchange required by NYC Building Code to provide ventilation for indoor parking garage.
11. Performed all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.
12. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and lists any changes from this RAWP.

REMEDIAL ACTION REPORT

1.0 SITE BACKGROUND

Pink Stone Capital Group has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at 172-180 Nassau Street in Dumbo section of Brooklyn, New York. A Remedial Investigation (RI) was performed to compile and evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). A remedial action was performed pursuant to an OER-approved RAWP in a manner that has rendered the Site protective of public health and the environment consistent with the proposed use of the property. This RAR describes the remedial action performed under the RAWP. The remedial action described in this document provides for the protection of public health and the environment, complies with applicable environmental standards, criteria and guidance and applicable laws and regulations.

1.1 Site Location and Prior Usage

The Site is located at 180 Nassau Street in the Dumbo section of Brooklyn, New York, and is identified as Block 108 and Lot 12 on the New York City Tax Map. Figure 1 shows the Site location. The Site is 13,161-square feet and is bounded by Nassau Street to the north, Duffield Street to the east, Lot 5 to the west, which is developed with a 20-story apartment building with first floor commercial space. A map of the Site boundary is shown in Figure 2. Currently, the Site is vacant, but an abandoned 5-story residential building is located on the eastern portion of the Site.

Lot 12 is a slightly irregular shaped corner lot consisting of 150.5 feet of street frontage on Nassau Street and 88.33 feet of street frontage on Duffield Street. The majority of the lot consists of an exposed soil cover, but one abandoned 5-story apartment building is located at the intersection of Duffield Street and Nassau Street.

Prior to redevelopment, the Site consisted of a vacant 4-story apartment building on the corner of Duffield Street and Nassau Street and open space created after demolition of a former commercial building and apartment building.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site consisted of a new 12-story apartment building. Layout of the proposed Site development is presented in Figure 3. The current zoning designation is C6-2. The proposed use is consistent with existing zoning for the property.

The proposed redevelopment plans for the Site included the construction of a new 12-story apartment building with a full cellar level below grade. The apartment building has 124 dwelling units, accessory recreation areas at the cellar and first floor levels, and an outdoor accessory recreation area at the roof level. The proposed project gross area is approximately 125,000 ft², including the cellar level.

The entire Site required excavation for construction of the full cellar parking level. Due to a significant grade change along Nassau Street, the east end of the Site only required excavation to a depth of approximately 12 feet below grade, but the west end required excavation to a depth of approximately 22 feet below grade. The cellar level is utilized as accessory off-street parking, accessible from a vehicle ramp located along Duffield Street. The remainder of the cellar consists of a water service and gas meter room, fire pump room, telecommunications room, electric service room, bicycle storage room, superintendent's office and shop, compactor and recycle room, residential storage areas, and a 1,325 ft² gym/recreation area with accessory restrooms and storage. Access to the cellar is provided by a vehicle ramp from Duffield Street, two elevators and two stairwells.

The first floor of the building is utilized for accessory off-street parking, but also consists of the residential lobby, a 1,287 ft² accessory recreation room, bicycle room, boiler room, ramps to the lower cellar level parking garage and first floor parking garage, and the two elevators and two stairwells. Each of the 124 dwelling units are located on the 2nd through 12th floors.

The total volume of soil required to be excavated from the site for construction of the proposed building was estimated at approximately 6,000 cubic yards (9,000 tons).

1.3 Description of Surrounding Property

The area surrounding the Site consists of a mix of residential and commercial properties as described below:

- 200 Nassau Street; 1-13 Duffield Street occupied by the D.R. White Catholic Community Center to the east.
- 170 Nassau Street, located between 168 Nassau Street and 172 Nassau Street, is currently being redeveloped as a covered entry-way to a new 18-story apartment complex located at 189 Bridge Street.
- 12 Duffield Street and 193 Bridge Street are located to the south, and both are used as parking for the 18-story apartment complex located at 189 Bridge Street.
- Trinity Park (Public Park and Playground) to the north.

Figure 4 shows the surrounding land usage.

1.4 Remedial Investigation

A remedial investigation was performed and the results are documented in a document called “*Remedial Investigation Report, 180 Nassau Street*”, dated August 2012 (RIR).

Summary of Past Uses of Site and Areas of Concern

The Phase I Environmental Site Assessment prepared by EBC in April of 2008 notes prior use of the Site as the following:

- 172 Nassau Street – Residential and Mayfair Ship Supplies
- 174-178 Nassau Street – Residential and a ribbon ink and carbon paper manufacturing plant
- 180 Nassau Street / 2 Duffield Street – Residential only

The AOCs identified for this Site include:

1. Historic fill layer is present at the Site from grade to depths as great as 12 ft in some areas.

Summary of the Work Performed under the Remedial Investigation

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed 6 soil borings across the entire project Site, and collected 12 soil samples (plus one duplicate sample) for chemical analysis from the soil borings to evaluate soil quality;

3. Installed two groundwater monitoring wells throughout the Site and collected two groundwater samples (plus one duplicate sample) for chemical analysis to evaluate groundwater quality; and
4. Installed five soil vapor probes around Site perimeter and collected five samples for chemical analysis.

Summary of Environmental Findings

1. Elevation of the property ranges from 56 feet.
2. Depth to groundwater ranges from 50 to 52 feet at the Site.
3. Groundwater flow is generally from south to north beneath the Site.
4. Depth to bedrock is at the Site is greater than 100 feet.
5. The stratigraphy of the Site, from the surface down, consists of up to 12 feet of historic fill underlain by coarse brown native sand.
6. Shallow soil samples collected during the RI showed no PCBs at detectable concentrations. No VOCs were detected above UUSCOs within any of the soil samples except for two very low concentrations of m&p-Xylenes (10 ppb) and o-Xylene (5.7 ppb) detected in one of the shallow soil samples. No chlorinated VOCs including PCE and TCE were detected in any soil sample. Four SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene and chrysene were detected within the one of the six shallow samples at concentrations above their RRSCOs, and one SVOC was detected at a concentration above RRSCO in a second shallow soil sample. Four metals including lead (maximum of 322 ppm), mercury (maximum of 0.51 ppm), Nickel (maximum of 339 ppm) and zinc (maximum of 324 ppm) were detected at a concentration above UUSCOs within the shallow soil samples. No metals in shallow or deeper soils were detected at a concentration exceeding their RRSCOs. One pesticide, chlordane was detected above UUSCOs at 56 ppb within the shallow soil samples collected from the historic fill layer. The type, distribution and concentration of each of SVOCs and metals indicate that they are associated with historic fill material observed in shallow samples. Deep soil samples collected during the RI showed no pesticides, PCBs, or VOCs at detectable concentrations. Two SVOCs were detected within one of the six deep soil samples at a concentration above their RRSCO. Metals including lead, mercury nickel and zinc were

above UUSCO. Overall, the findings for soil were unremarkable and did not show a source area for contamination on the property. Soil results were consistent with observations for other historical fill sites in Brooklyn.

7. No pesticides or PCBs were detected in either groundwater sample collected at the Site. Groundwater samples collected during the RI showed one chlorinated VOC (chloroform) in both groundwater samples. Chloroform was detected above Groundwater Quality Standards (GQS) in the range from 1.0 ppb to 7.5 ppb. No TCE or PCE was detected in groundwater. No SVOCs were detected above their corresponding GQSs in groundwater, but two SVOCs were reported at low concentrations below their corresponding GQS. The dissolved metals including iron, magnesium, manganese, and sodium were detected above their respective GQS and are suggestive of regional saline influence in groundwater. The RI indicates that groundwater is not impacted by Site conditions and did not reveal any sources of contaminants on the Site.
8. Soil vapor samples collected during the RI showed low trace levels of petroleum and chlorinated VOCs except for acetone (detected from 752 to 2,070 $\mu\text{g}/\text{m}^3$) and ethanol (detected from 172 to 855 $\mu\text{g}/\text{m}^3$). Both compounds are common laboratory introduced contaminants. PCE was identified in all samples at a maximum concentration of 1.91 $\mu\text{g}/\text{m}^3$. TCE was identified in five of the six soil vapor samples at a maximum concentration of 1.02 $\mu\text{g}/\text{m}^3$. These results were well below the monitoring levels for PCE and TCE in the State DOH soil vapor guidance matrix and in the range of ambient air quality. Neither PCE nor TCE were detected within any of the soil samples collected at the Site and these low levels suggest a possible off-Site origin.

For more detailed results, consult the RIR. Based on an evaluation of the data and information from the RIR and this RAWP, disposal of significant amounts of hazardous waste is not suspected at this Site.

2.0 DESCRIPTION OF REMEDIAL ACTIONS

The factors considered during the selection of the remedial action included protection of human health, protection of the environment, compliance with standards, criteria, and guidelines (SCGs), short-term effectiveness and impacts, long-term effectiveness and permanence, reduction of toxicity, mobility, or volume of contaminated material, implementability, cost effectiveness, community acceptance, land use, and sustainability of the remedial action.

A Pre-Application Meeting was held on July 3, 2012. A Remedial Investigation (RI) was performed between July 6, 2012 and July 12, 2012, and a RI Report dated August 2012 was prepared to evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). A Site Contact List was established and a RAWP dated August 2012 was prepared and released with a Fact Sheet on August 10, 2012, for a 30-day public comment period. The RAWP and Stipulation List dated September 5, 2012, was approved by the New York City Office of Environmental Remediation (OER) on December 13, 2012. A pre-construction meeting was held on January 15, 2013, and remedial action began in March of 2013 and completed in June of 2013.

The following remedial actions were completed in this program:

1. Prepared a Community Protection Statement and implemented a Citizen Participation Plan.
2. Performed a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Established Track 4 Soil Cleanup Objectives (SCOs). However, all soil/fill exceeding Unrestricted Use SCOs was excavated and removed from the Site and Track 1 Unrestricted Use SCOs were achieved for soil.
4. Collected and analyzed end-point samples to determine the performance of the remedy with respect to attainment of SCOs.
5. Installed a vapor barrier system beneath the building slab and behind foundation walls.
6. Imported materials to be used for backfill in compliance with this plan and in accordance with applicable laws and regulations.
7. Transported and disposed off-Site of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and

- this plan. Collected, sampled and analyzed samples representative of excavated media as required by disposal facilities. Appropriately segregated excavated media on Site.
8. Screened excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.
 9. Implemented storm-water pollution prevention measures in compliance with applicable laws and regulations.
 10. Constructed an engineered composite cover across the entire Site to prevent human exposure to residual soil/fill remaining under the Site and operation of high volume air exchange required by NYC Building Code to provide ventilation for indoor parking garage.
 11. Performed all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.
 12. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and lists any changes from this RAWP.

3.0 COMPLIANCE WITH REMEDIAL ACTION WORK PLAN

3.1 Construction Health & Safety Plan (CHASP)

The remedial construction activities performed under this program were in compliance with the Construction Health and Safety Plan and applicable laws and regulations. The Site Safety Coordinator was Kevin Waters - EBC.

3.2 Community Air Monitoring Plan (CAMP)

The Community Air Monitoring Plan provided for the collection and analysis of air samples during remedial construction activities to ensure proper protections were employed to protect workers and the neighboring community. Monitoring was performed in compliance with the Community Air Monitoring Plan in the approved RAWP. The results of Community Air monitoring are shown in Appendix C.

3.3 Soil/Materials Management Plan

The Soil/Materials Management Plan in the RAWP provided detailed plans for managing all soils/materials that were disturbed at the Site, including excavation, handling, storage, transport and disposal. It also included a series of controls to assure effective, nuisance free remedial activity in compliance with applicable laws and regulations. Remedial construction activities performed under this program were in full compliance with the SMMP in the approved RAWP.

3.4 Storm-Water Pollution Prevention

Storm water pollution prevention included physical methods and processes to control and/or divert surface water flows and to limit the potential for erosion and migration of Site soils, via wind or water. Remedial construction activities performed under this program were in full compliance with methods and processes defined in the RAWP for storm water prevention and applicable laws and regulations.

3.5 Deviations From the Remedial Action Work Plan

No significant deviations from the Remedial Action Work Plan occurred during implementation of the Remedial Action Work Plan.

4.0 REMEDIAL PROGRAM

4.1 Project Organization

The PE responsible for implementation of the remedial action for this project was Ariel Czmerinski P.E., AMC Engineering. On-Site air monitoring in accordance with the CHASP and CAMP, soil screening and soil sampling was performed by either Dominick Mosca, Sunny Chen, Kristen Discenza, Chawinie Miller or Kevin Waters of EBC or Sara Babyatsky of AMC Engineering. The Qualified Environmental Professional which implemented the remedial action was Kevin Brussee, Project Manager-EBC.

The excavation and foundation contractor was Greener Concepts, LLC, and the developer was Pink Stone Capital Group.

4.2 Site Controls

Site Preparation

The amended plans for the new 10-story building (NYC DOB Job number NB-301914739) were approved on May 22, 2013. Related NYC DOB Job numbers include 320717499, 320584453, 320552460, 320582909, 320761822, and 320761813. Initial waste characterization soil sampling was performed on August 8, 2012, and again on September 3, 2012, prior to mobilization to obtain soil disposal approval and to minimize the need for on-Site soil stockpiles. On March 11, 2013, equipment was mobilized to the Site to begin excavation of on-Site soil.

Soil Screening

All intrusive soil excavation activities were overseen by an EBC qualified environmental professional (QEP). In addition to extensive sampling and chemical testing of soils on the Site, excavated soil was screened continuously using hand-held instruments, by sight, and by smell to ensure proper material handling and management, and community protection. Excavation at the Site commenced with the removal of historic fill which varied in depth across the Site. EBC visually determined the boundary of historic fill and clean native soil. Historic fill at the Site was a darker brown soil with brick and concrete fragments, and clean native soil was a coarse brown sand. No physical or olfactory evidence of a spill was observed during Site excavation.

Stockpile Management

For the majority of the project, soil was excavated from the ground and live loaded into trucks to eliminate the need for stockpiling. However, any soil stockpiles that were generated and kept overnight were covered with 6-mil poly-sheeting to prevent dust. Stockpile covers were inspected by the EBC QEP.

Truck Inspection

A stabilized construction entrance was constructed at the front of the Site, which exited and entered from Nassau Street. The stabilized entrance was constructed of a bed of crushed concrete which was sloped back toward the interior of the Site. The stabilized entrance was inspected on a daily basis during soil loading activities and reinforced as needed with additional concrete material to prevent the accumulation of ruts, mud or soil and to minimize the potential for impacted soil to be dispersed beyond the Site boundary. Before exiting the Site, trucks were examined for evidence of contaminated soil on the undercarriage, body, and wheels. If soil/debris was observed, it was removed utilizing brooms or shovels.

Site Security

An 8-ft high construction fence was constructed around the perimeter of the property. The fence was locked with a chain and padlock during non-working hours/days.

Nuisance Controls

No petroleum or other odors were detected during soil screening and no complaints were reported. Dust was minimized by excavating and live-loading directly into trucks, and covering stockpiles with 6-mil poly sheeting overnight during off-work hours.

Reporting

Daily status reports were prepared and forwarded to the OER project manager for construction days in which soil disturbance activities were performed (soil excavation/loading). A copy of each of the daily status reports is included in Appendix D.

Digital photographs of the remedial action are included in Appendix B.

4.3 Materials Excavation and Removal

Historic Fill with large amounts brick and concrete was encountered across the Site from grade to a depth of approximately 9 feet. A native fine brown sand with some large stones was encountered below the historic fill layer.

A total of 9,675.74 tons of soil was removed and transported to Fenimore Landfill, and a total of approximately 4,781.43 tons of soil was removed and transported to Prospect Park, LLC. A map showing the location where excavations were performed is shown in Figure 5. No material was reused on-Site.

End Point Sample Results

Following excavation for the new buildings, EBC collected eight endpoint soil samples and one duplicate endpoint soil sample. The location of each of the endpoint soil samples is shown on Figure 6. Dedicated disposable sampling equipment was utilized to collect each endpoint sample, eliminating the need for field equipment (rinsate) blanks.

The endpoint soil samples were appropriately packaged, placed in a cooler and picked up by laboratory courier for transport to the analytical laboratory. The samples were containerized in laboratory provided glassware and shipped in plastic coolers preserved utilizing ice or “cold-paks” to maintain a temperature of 4°C.

Endpoint samples EP1 through EP8 and the duplicate were submitted to Phoenix Environmental Laboratories, Inc. located at 587 East Middle Turnpike, in Manchester, CT 06040 (NYS ELAP Certification No. 11301).

Each of the endpoint samples were submitted for laboratory analysis utilizing the following methodology:

- Volatile organic compounds by EPA Method 8260;
- Semi-volatile organic compounds by EPA Method 8270; and
- Target Analyte List metals.

A copy of each of the laboratory reports for the endpoint soil samples is attached in Appendix E. A tabular and map summary of end-point sampling results is included in Tables 1 through 3 and

Figure 6, respectively. As shown in Tables 1 through Table 3, no VOCs, SVOCs, or metals were detected above Unrestricted Use or Groundwater Protection SCOs, with the exception of the following metals detected at a concentration slightly above SCOs:

- Lead at 134 ppm in EP7;
- Nickel at 32.5 ppm in EP2;
- Nickel at 30.5 ppm in EP3;
- Nickel at 70.9 ppm in EP6;
- Nickel at 41.8 ppm in EP7.

Due to the elevated lead concentration in EP7, an area of approximately 10ft by 10ft by 1 foot deep was excavated in the approximate collection location of EP7 on June 24, 2014. The soil was loaded into trucks for transport to Prospect Park, LLC on June 24, 2014. A confirmatory endpoint soil sample (EP7A) was collected and submitted to Phoenix for laboratory analysis of lead and nickel only. The laboratory results reported the lead concentration (23 ppm) below Unrestricted Use and Groundwater Protection SCOs, and the nickel concentration (75.2 ppm) was again detected at a concentration slightly higher than the Unrestricted Use SCO of 30 ppm. The Unrestricted Use SCO exceedences of nickel across the Site are likely indicative of the composition of native soil in the area, and are not believed to be indicative on-Site contamination.

4.4 Materials Disposal

Waste characterization soil sampling of the historic fill layer was performed on September 3, 2012. Historic fill (brown silty sand with large amounts brick) was encountered from grade to a depth of approximately 9 feet below grade. From 10 test pits excavated to approximately 10 feet below grade, EBC collected two 5-pt composite soil samples representing the interval 0-3ft, two 5-pt composite soil samples representing the interval 3-6ft, and two 5-pt composite soil samples representing the interval 6-9ft.

The laboratory results, profile form and a formal letter describing the sampling process and material type, was forwarded to Birdsall Services Group (BSG) to obtain soil disposal approval of the historic fill material at the Fenimore Landfill Closure Project (Fenimore) located at 77

Mountain Road in Roxbury Township, NJ. BSG is the Third Party Review Engineer for Fenimore. A copy of the soil disposal request letter with the sampling plan and laboratory results is attached in Appendix F. At the request of BSG, additional delineation soil sampling was performed in the area of TP6-10 (6-9') zone due to an elevated concentration of the SVOC benzo(a)anthracene. Upon receipt of the laboratory results of the delineation soil samples, BSG issued a formal soil disposal acceptance letter approving approximately 6,000 cubic yards of historic fill material. A copy of the acceptance letter is attached in Appendix G.

From March 14, 2013 to April 18, 2013, a total 9,675.74 tons of historic fill was excavated and loaded into 10-wheel dump trucks for transport to Fenimore. Copies of each of the non-hazardous manifests and associated scale tickets are included in Appendix H.

Additional waste characterization soil samples were collected from the clean soil located below the historic fill as the historic fill was removed. The additional waste characterization soil samples were collected at a rate of one composite soil sample per 400 cubic yards by dividing the Site into four grid Sections (A, B, C and D) and performing four test pits within each Grid Section to the anticipated excavation depth necessary for construction of the new building. The laboratory results for each of the Grid Sections, profile form and a formal letter describing the sampling process and material type, was forwarded to Prospect Park, LLC to obtain soil disposal approval of the clean soil at the Prospect Park facility located at 100 Planten Avenue in Prospect Park, New Jersey. A copy of the soil disposal request letter with the sampling plan and laboratory results is attached in Appendix F. Copies of each of the formal soil disposal acceptance letters issued by Prospect Park, LLC are attached in Appendix G.

From April 30, 2013 to June 25, 2013, a total of approximately 4,781.43 tons of native clean soil was excavated and loaded into 10-wheel dump trucks for transport to Prospect Park. Copies of each of the non-hazardous manifests and associated scale tickets are included in Appendix H.

Large pieces of concrete and large boulders were segregated from the soil as encountered, and loaded into roll-off containers and dump trailers for transport to Evergreen Recycling of Corona.

The volume/tonnage and destination of material removed and disposed off-Site is presented below:

Table 5 - Disposal Quantities and Disposal Facilities

Destination	Type of Material	Quantity
Fenimore Landfill Closure Project	Historic Fill	9,675.74 tons
Prospect Park LLC	Clean Soil	4,781.43 tons

4.5 Backfill Import

A total of 20 truck loads (approximately 500 tons) of recycled concrete aggregate was imported to the Site from Allocco Recycling, Ltd. located at 540 Kingsland Avenue, Brooklyn, New York 11222. The recycled concrete aggregate was imported to backfill the vehicle ramp that provides access to the cellar level parking garage from Duffield Street. Allocco Recycling, Ltd. is a NYSDEC Active Registered C&D Debris Processing Facility.

An additional 15 truck loads (approximately 477 cubic yards) of 3/4 inch crushed stone was imported to the Site from Allocco Recycling, Ltd. and was spread across the entire basement area to a depth of approximately 2 to 6 inches.

No other backfill was imported to the Site. A copy of each of the import trucking tickets for the recycled concrete aggregate and 3/4 inch crushed concrete is attached in Appendix J.

5.0 ENGINEERING CONTROLS

A Track 1 Remedial Action was achieved and Engineering Controls are not required. However, as part of construction, several protective systems were installed. These are:

Composite Cover System

The Composite Cover System is comprised of 6 inches of composite concrete slab with wire mesh underlain by 2 to 6 inches of clean sub-base material. Photographs of construction of the Composite Cover System are included in Appendix B. The composite cover system was installed by Greener Concepts, LLC.

Vapor Barrier

Migration of soil vapor is mitigated with a combination of building slab and vapor barrier. The vapor barrier consists of W.R. Grace Preprufe 300R below the elevator pits and basement floor slab, W.R. Grace Bituthene 4000 and Hydroduct 200 at two face walls, W.R. Grace Preprufe 160R at blindside walls and Raven Industries Vaporblock® Plus™ 20 vapor below the vehicle ramps. The vapor barrier extends throughout the footprint of the building and extends upward behind each of the foundation walls to grade.

All vapor barrier seams, penetrations, and repairs were sealed utilizing the tape method, in accordance with to the manufacturer's installation instructions. Photos of the vapor barrier being installed are included in Appendix B and the approximate layout is shown on Figure 7. The vapor barrier was installed by Marsat Contracting.

6.0 INSTITUTIONAL CONTROLS

A Track 1 Remedial Action was achieved, therefore Institutional Controls are not required for this project.

7.0 SITE MANAGEMENT PLAN

A Track 1 Remedial Action was achieved and Site Management is not required.

FIGURES

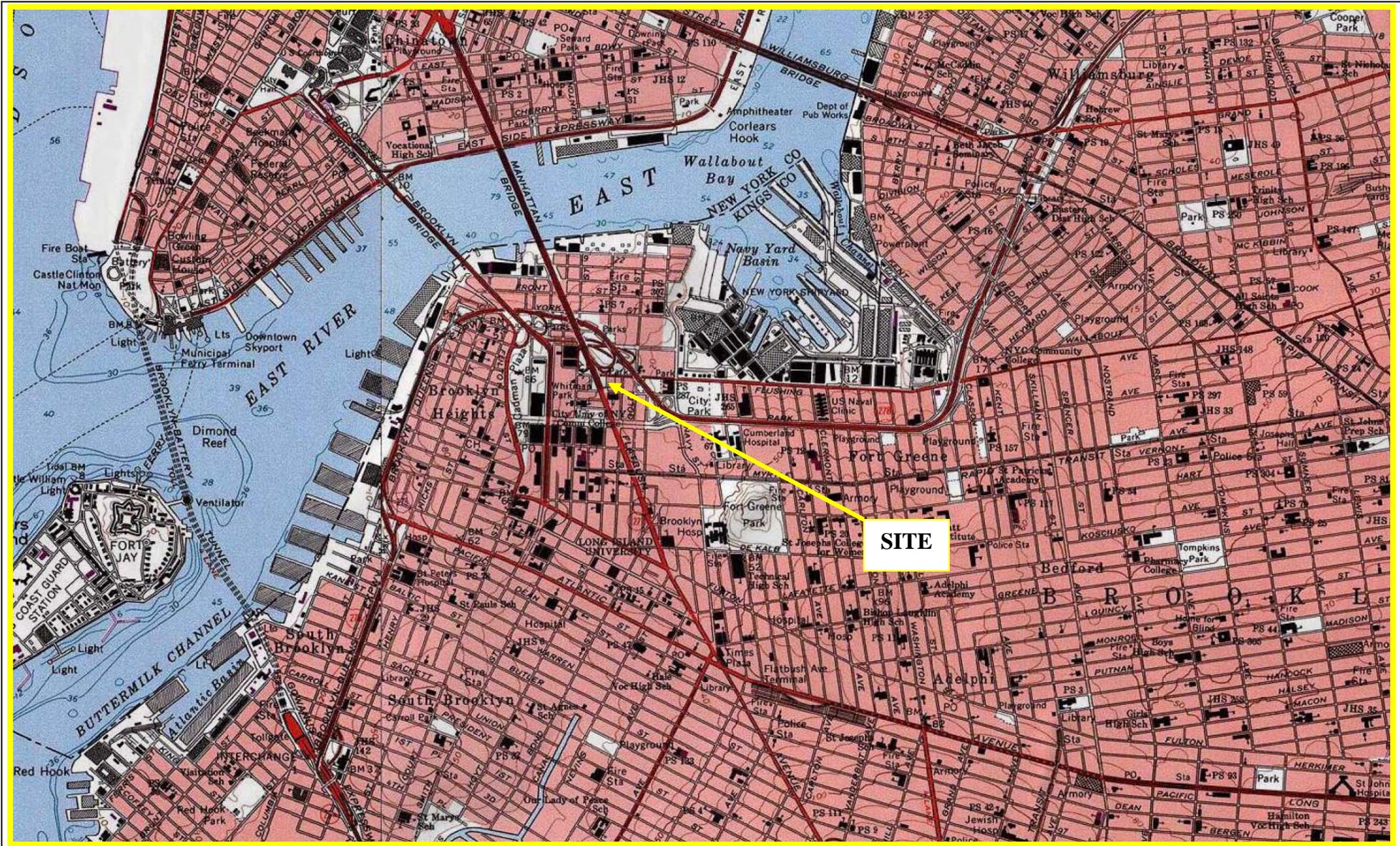


FIGURE 1 – SITE LOCATION

172-180 NASSAU STREET, BROOKLYN, NY

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD, RIDGE, NEW YORK 11961
PHONE: (631) 504-6000 FAX: (631) 924-2870

NASSAU STREET

SIDEWALK

150.5'

LOT 5



87'

LOT 12

88.33'

DUFFIELD STREET

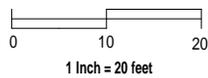
SIDEWALK

LOT 5

KEY

 Site Boundary

SCALE



EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
Fax 631.924.2870

Figure No.
2

Site Name: REDEVELOPMENT PROJECT

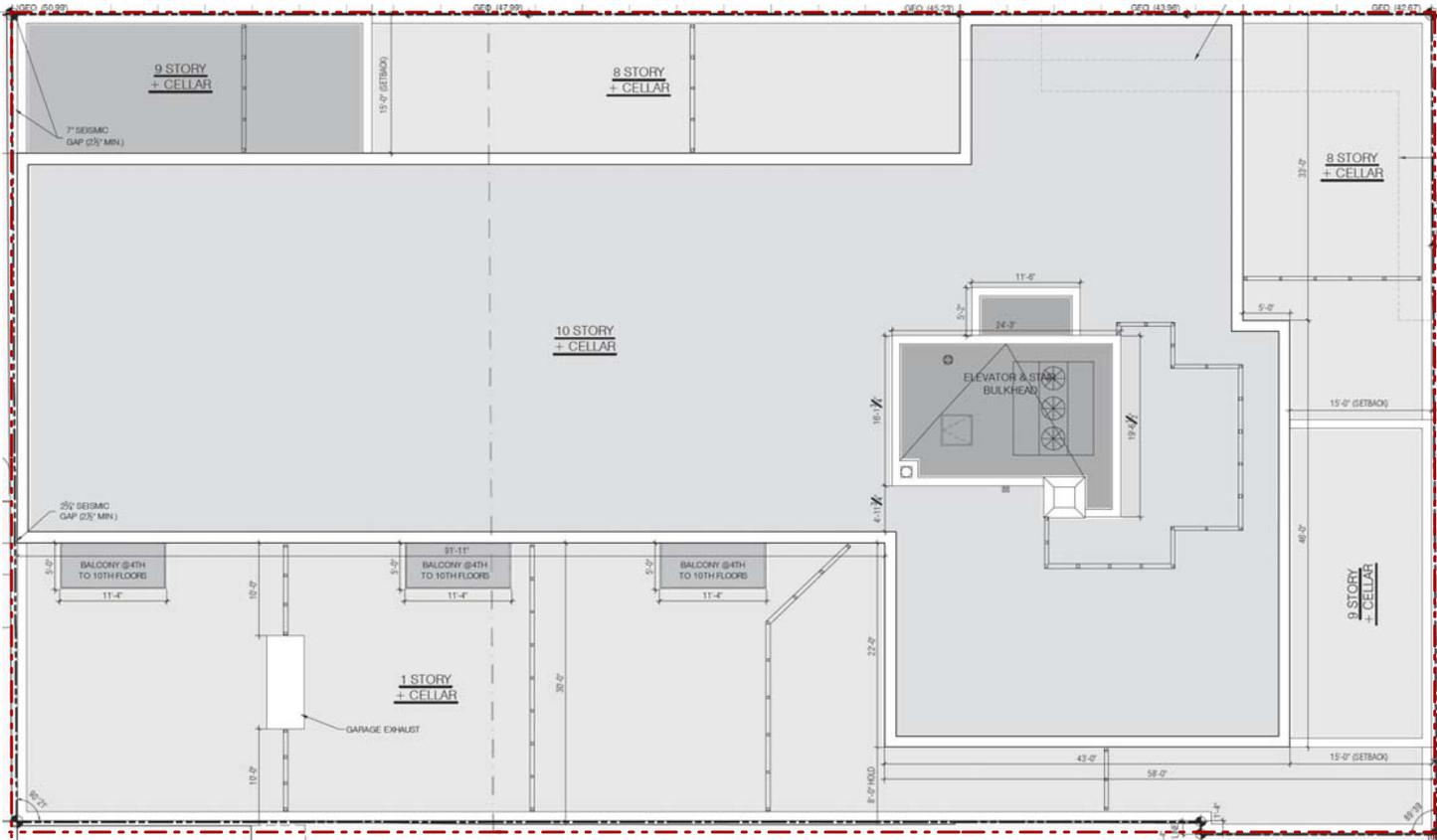
Site Address: 172-180 NASSAU STREET, BROOKLYN, NY

Drawing Title: SITE BOUNDARY MAP

NASSAU STREET

SIDEWALK

LOT 5



SIDEWALK

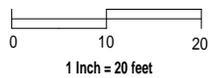
DUFFIELD STREET

LOT 5

KEY

Site Boundary

SCALE



 ENVIRONMENTAL BUSINESS CONSULTANTS	Phone 631.504.6000 Fax 631.924.2870	Figure No. 3	Site Name: REDEVELOPMENT PROJECT
			Site Address: 172-180 NASSAU STREET, BROOKLYN, NY

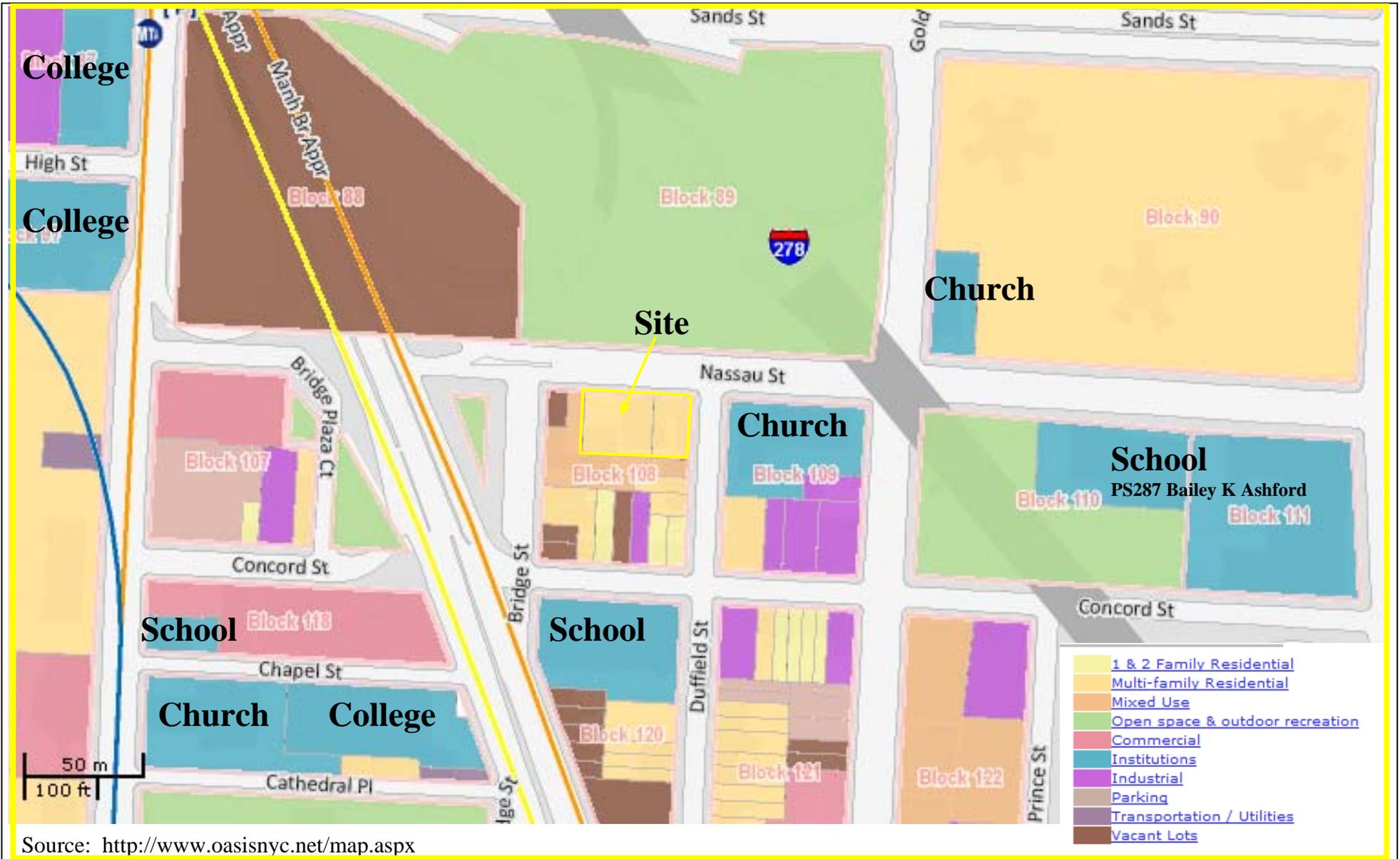


FIGURE 4
SURROUNDING LAND USE MAP

172-180 NASSAU STREET, BROOKLYN, NY



ENVIRONMENTAL BUSINESS CONSULTANTS
 1808 MIDDLE COUNTRY ROAD, RIDGE, NEW YORK 11961
 PHONE: (631) 504-6000 FAX: (631) 924-2870

NASSAU STREET

SIDEWALK

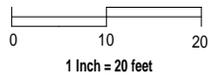
LOT 5



KEY

 Site Boundary

SCALE



LOT 5

SIDEWALK

DUFFIELD STREET

BBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631.924.2870

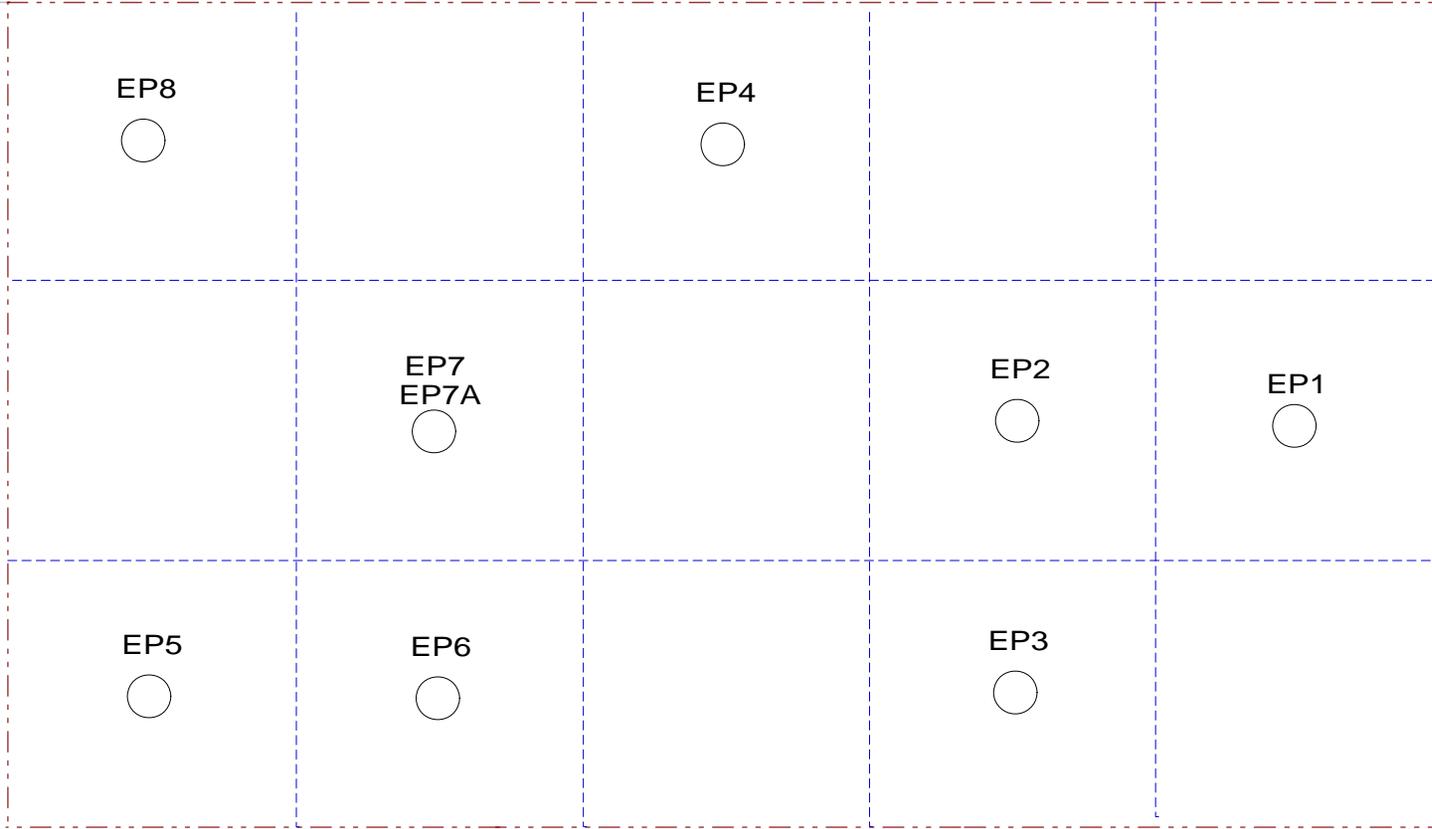
Figure No.
5

Site Name: REDEVELOPMENT PROJECT
Site Address: 172-180 NASSAU STREET, BROOKLYN, NY
Drawing Title: EXCAVATION DIAGRAM

NASSAU STREET

SIDEWALK

LOT 5



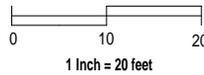
SIDEWALK

KEY

 Site Boundary

 Endpoint Soil Sample Location

SCALE



ABC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631.924.2870

Figure No.
6

Site Name: REDEVELOPMENT PROJECT
Site Address: 172-180 NASSAU STREET, BROOKLYN, NY
Drawing Title: ENDPOINT SAMPLING PLAN

TABLES

TABLE 1
172-180 Nassau St, Brooklyn, New York
Soil Analytical Results
Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Remedial Investigation Soil Boring Results						Endpoint Soil Sample Results														
			B1	B2	B3	B4	B5	B6	EP-1	EP-2	EP-3	EP-4	EP-5	EP-6	EP-7	EP-8							
			(12-14) µg/Kg	(12-14) µg/Kg	(12-14) µg/Kg	(12-14) µg/Kg	(12-14) µg/Kg	(12-14) µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg						
1,1,1,2-Tetrachloroethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,1,1-Trichloroethane	680	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,1,2,2-Tetrachloroethane			ND	ND	ND	ND	ND	ND	3.2	ND	3.2	ND	2.8	ND	2.6	ND	2.9	ND	2.3	ND	4.6	ND	3.5
1,1,2-Trichloroethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,1-Dichloroethane	270	26,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,1-Dichloropropene	330	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,1-Dichloropropane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,2,3-Trichlorobenzene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,2,3-Trichloropropane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,2,4-Trichlorobenzene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,2,4-Trimethylbenzene	3,600	52,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,2-Dibromo-3-chloropropane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,2-Dichlorobenzene	1,100	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,2-Dichloroethane	20	3,100	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,2-Dichloropropane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,3,5-Trimethylbenzene	8,400	52,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,3-Dichlorobenzene	2,400	4,900	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,3-Dichloropropane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
1,4-Dichlorobenzene	1,800	13,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
2-Dichloropropane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
2-Chlorotoluene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
2-Hexanone (Methyl Butyl Ketone)			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
2-Isopropyltoluene			ND	ND	ND	ND	ND	ND	27	ND	26	ND	23	ND	21	ND	24	ND	19	ND	38	ND	29
4-Chlorotoluene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
4-Methyl-2-Pentanone			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Acetone	50	100,000	ND	ND	ND	ND	ND	ND	27	ND	26	ND	23	ND	21	ND	24	ND	19	ND	38	ND	29
Acrylonitrile			ND	ND	ND	ND	ND	ND	27	ND	26	ND	23	ND	21	ND	24	ND	19	ND	38	ND	29
Benzene	60	4,800	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Bromobenzene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Bromochloromethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Bromodichloromethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Bromoform			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Bromomethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Carbon Disulfide			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Carbon tetrachloride	760	2,400	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Chlorobenzene	1,100	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Chloroethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Chloroform	370	46,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Chloromethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
cis-1,2-Dichloroethane	250	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
cis-1,3-Dichloropropene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Dibromochloromethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Dibromomethane			ND	ND	ND	ND	ND	ND	3.2	ND	3.2	ND	2.8	ND	2.6	ND	2.9	ND	2.3	ND	4.6	ND	3.5
Dibromofluoromethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Dichlorodifluoromethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Ethylbenzene	1,000	41,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Hexachlorobutadiene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Isopropylbenzene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
m&p-Xylenes	260	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Methyl Ethyl Ketone (2-Butanone)	120	100,000	ND	ND	ND	ND	ND	ND	32	ND	32	ND	28	ND	26	ND	29	ND	23	ND	46	ND	35
Methyl t-butyl ether (MTBE)	930	100,000	ND	ND	ND	ND	ND	ND	11	ND	11	ND	9.2	ND	8.6	ND	9.7	ND	7.6	ND	15	ND	12
Methylene chloride	50	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Naphthalene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
n-Butylbenzene	12,000	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
n-Propylbenzene	3,900	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
o-Xylene	260	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
p-Isopropyltoluene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
sec-Butylbenzene	11,000	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Styrene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
tert-Butylbenzene	5,900	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Tetrachloroethane	1,300	19,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Tetrahydrofuran (THF)			ND	ND	ND	ND	ND	ND	11	ND	11	ND	9.2	ND	8.6	ND	9.7	ND	7.6	ND	15	ND	12
Toluene	700	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Total Xylenes	260	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
trans-1,2-Dichloroethane	190	100,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
trans-1,3-Dichloropropene			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
trans-1,4-dichloro-2-butene			ND	ND	ND	ND	ND	ND	11	ND	11	ND	9.2	ND	8.6	ND	9.7	ND	7.6	ND	15	ND	12
Trichloroethane	470	21,000	ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8	ND	7.6	ND	5.9
Trichlorofluoromethane			ND	ND	ND	ND	ND	ND	5.4	ND	5.3	ND	4.6	ND	4.3	ND	4.8	ND	3.8				

TABLE 2
172-180 Nassau St. Brooklyn, New York
Soil Analytical Results
Semi-Volatile Organic Compounds

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives	Remedial Investigation Soil Boring Results						Endpoint Soil Sample Results								
			B1	B2	B3	B4	B5	B6	EP-1	EP-2	EP-3	EP-4	EP-5	EP-6	EP-7	EP-8	
			(12-14) µg/Kg	(12-14) µg/Kg	(12-14) µg/Kg	(12-14) µg/Kg	(12-14) µg/Kg	(12-14) µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,2,4,5-Tetrachlorobenzene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
1,2,4-Trichlorobenzene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
1,2-Dichlorobenzene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
1,3-Dichlorobenzene			ND	ND	ND	ND	ND	ND	360	360	350	350	370	350	360	360	360
1,4-Dichlorobenzene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2,4,5-Trichlorophenol			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2,4,6-Trichlorophenol			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2,4-Dichlorophenol			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2,4-Dimethylphenol			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2,4-Dinitrophenol			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2,4-Dinitrotoluene			ND	ND	ND	ND	ND	ND	580	570	570	580	570	570	580	580	580
2,6-Dinitrotoluene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2-Chloronaphthalene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2-Chlorophenol			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2-Methylnaphthalene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2-Methylphenol (o-cresol)	330	100,000	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2-Nitroaniline			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
2-Nitrophenol			ND	ND	ND	ND	ND	ND	580	570	570	580	570	570	580	580	580
3&4-Methylphenol (m&p-cresol)	330	100,000	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
3,3'-Dichlorobenzidine			ND	ND	ND	ND	ND	ND	360	350	350	370	350	360	360	360	360
3-Nitroaniline			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
4,6-Dinitro-2-methylphenol			ND	ND	ND	ND	ND	ND	580	570	570	580	570	570	580	580	580
4-Bromophenyl phenyl ether			ND	ND	ND	ND	ND	ND	1,000	1,000	1,000	1,100	1,000	1,000	1,000	1,000	1,000
4-Chloro-3-methylphenol			ND	ND	ND	ND	ND	ND	360	350	350	370	350	360	360	360	360
4-Chloroaniline			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
4-Chlorophenyl phenyl ether			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
4-Nitroaniline			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
4-Nitrophenol			ND	ND	ND	ND	ND	ND	580	570	570	580	570	570	580	580	580
Acenaphthene	20,000	100,000	ND	ND	ND	ND	ND	ND	1,000	1,000	1,000	1,100	1,000	1,000	1,000	1,000	1,000
Acenaphthylene	100,000	100,000	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Acetophenone			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Aniline			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Anthracene	100,000	100,000	ND	ND	ND	ND	ND	ND	1,000	1,000	1,000	1,100	1,000	1,000	1,000	1,000	1,000
Azobenzene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Benzo(a)anthracene	1,000	1,000	ND	1,200	ND	ND	ND	ND	250	290	250	250	250	250	250	250	250
Benzo(b)anthracene			ND	ND	ND	ND	ND	ND	430	430	430	440	430	430	430	430	430
Benzo(g,h)anthracene	1,000	1,000	ND	960	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Benzo(k)fluoranthene	1,000	1,000	ND	1,200	ND	ND	ND	ND	250	270	250	250	250	250	250	250	250
Benzo(a,h)perylene	100,000	100,000	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Benzo(i)fluoranthene	800	3,900	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Benzoic Acid			ND	ND	ND	ND	ND	ND	1,000	1,000	1,000	1,100	1,000	1,000	1,000	1,000	1,000
Butyl benzyl phthalate			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Bis(2-chloroethoxy)methane			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Bis(2-chloroethyl)ether			ND	ND	ND	ND	ND	ND	360	350	350	370	350	360	360	360	360
Bis(2-chloroisopropyl)ether			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Bis(2-ethylhexyl)phthalate			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Carbazole			ND	ND	ND	ND	ND	ND	540	530	530	550	530	530	540	540	540
Chrysene	1,000	3,900	ND	1,200	ND	ND	ND	ND	250	290	250	250	250	250	250	250	250
Dibenz(a,h)anthracene	330	330	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Dibenzofuran			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Diethyl phthalate			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Dimethyl phthalate			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Di-n-butylphthalate			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Di-n-octylphthalate			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Fluoranthene	100,000	100,000	ND	1,300	ND	ND	ND	ND	250	510	250	250	250	250	250	460	250
Fluorene	30,000	100,000	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Hexachlorobenzene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Hexachlorobutadiene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Hexachlorocyclopentadiene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Hexachloroethane			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Indeno(1,2,3-cd)pyrene	500	500	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Isophorone			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Naphthalene	12,000	100,000	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Nitrobenzene			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
N-Nitrosodimethylamine			ND	ND	ND	ND	ND	ND	360	350	350	370	350	360	360	360	360
N-Nitrosodi-n-propylamine			ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
N-Nitrosodiphenylamine			ND	ND	ND	ND	ND	ND	360	350	350	370	350	360	360	360	360
Pentachloronitrobenzene			ND	ND	ND	ND	ND	ND	360	350	350	370	350	360	360	360	360
Pentachlorophenol	800	6,700	ND	ND	ND	ND	ND	ND	360	350	350	370	350	360	360	360	360
Phenanthrene	100,000	100,000	ND	1,700	ND	ND	ND	ND	250	410	250	250	250	250	350	250	250
Phenol	330	100,000	ND	ND	ND	ND	ND	ND	250	250	250	250	250	250	250	250	250
Pyrene	100,000	100,000	ND	1,100	ND	ND	ND	ND	250	470	250	250	250	250	400	250	250
Pyridine			ND	ND	ND	ND	ND	ND	360	350	350	370	350	360	360	360	360

Notes:
 - 6 NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives
 ND - Not detected
 NA - Guidance value not available
Bold/highlighted - Indicated exceedance of the NYSDEC Unrestricted Use Soil Cleanup Objective
Bold/highlighted - Indicated exceedance of the NYSDEC Restricted Residential Soil Cleanup Objective

TABLE 3
172-180 Nassau St, Brooklyn, New York
Soil Analytical Results
Metals

Remedial Investigation Soil Boring Results															
COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	B1			B2		B3		B4		B5		B6	
			(0-2) mg/Kg	(12-14') mg/Kg	Duplicate (12-14') mg/Kg	(0-2) mg/Kg	(12-14') mg/Kg								
Aluminum			6,680	3,880	4,220	6,750	7,070	8,660	5,620	6,410	6,010	6,730	6,080	7,590	7,660
Antimony			BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Arsenic	13	16	6	1.7	2	7.5	5.3	8.1	1.8	5.2	1.8	5.9	1.8	6.2	2.4
Barium	350	400	340	26.5	28.2	109	130	147	36.1	101	41.7	124	47.7	170	52.2
Beryllium	7.2	72	0.36	BDL	BDL	BDL	0.29	0.43	0.31	0.28	BRL	BRL	0.46	0.34	0.4
Cadmium	2.5 c	4.3	2.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Calcium			61,800	796	864	21,400	26,400	16,700	1,150	31,100	1,380	42,600	580	63,700	876
Chromium	30 c	180 - trivalent	22.7	7.79	8.85	11.2	14.3	21.9	23.6	11	21.1	10.6	16.8	13.7	17.8
Cobalt			5.93	4.99	4.63	3.78	4.9	7.35	7.95	3.31	5.81	3.39	5.8	4.74	9.45
Copper	50	270	35	8.59	9.14	47.1	19.6	29.9	13.8	11.1	14.2	12.8	14.6	17.5	14.8
Iron			14,400	8,110	9,000	9,100	9,820	15,600	14,400	9,350	14,800	9,360	14,000	11,500	12,800
Lead	63 c	400	347	3.68	3.68	166	232	322	7.44	135	4.55	151	4.71	219	10.2
Magnesium			11,700	1,900	2,030	3,600	4,130	4,490	2,550	6,160	2,610	4,290	1,860	8,360	2,530
Manganese	1600 c	2,000	231	281	285	182	237	312	343	192	109	286	332	408	442
Mercury	0.18 c	0.81	0.5	BDL	BDL	0.51	0.34	0.19	BDL	0.23	BDL	0.27	BDL	0.21	BRL
Nickel	30	310	25.4	27.3	29.4	13.8	17.7	33.9	47.4	10.6	48.2	11.4	27.1	15	43.1
Potassium			1,420	669	699	881	964	1,230	1,180	831	1,400	938	907	1,600	1,160
Selenium	3.9c	180	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BRL	BRL	BRL	BRL
Silver	2	180	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BRL	BRL	BRL	BRL
Sodium			315	80.8	88.3	687	457	200	122	789	137	741	59.1	460	87.8
Thallium			BDL	BDL	BDL	BDL	BDL	BDL	BDL	BRL	BRL	BRL	BRL	BRL	BRL
Vanadium			56.7	12.1	10.4	16.2	17.7	30.2	28.9	18.2	20.2	16.9	23.6	15.8	22
Zinc	109 c	10,000	324	23.3	24.2	120	137	162	29.5	95.3	36.4	193	26.6	132	46.1

Endpoint Soil Sample Results											
COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	EP-1	EP-2	EP-3	EP-4	EP-5	EP-6	EP-7	EP-7A	EP-8
			µg/Kg	µg/Kg	µg/Kg						
Aluminum			5,810	7,880	6,710	7,250	6,550	6,950	7,980	-	4,950
Antimony			BRL	-	BRL						
Arsenic	13	16	2.4	3.3	2.9	2.5	3.3	2.3	3.3	-	2.2
Barium	350	400	74.6	59.6	39.3	52.3	43.6	53	115	-	55.6
Beryllium	7.2	72	0.41	0.47	0.5	0.42	0.44	0.45	0.49	-	0.33
Cadmium	2.5 c	4.3	BRL	BRL	BRL	BRL	BRL	0.34	0.43	-	0.36
Calcium			1,810	4,160	1,310	1,570	1,790	2,950	4,910	-	3,110
Chromium	30 c	180 - trivalent	12.2	18	17.6	15.6	13	18.1	18.3	-	14
Cobalt			5.37	6.08	5.75	5.17	5.07	8.69	7.71	-	6.92
Copper	50	270	15.2	22.1	16.1	14	16.3	23.3	24.9	-	17.9
Iron			13,100	15,800	14,100	15,300	15,900	17,400	18,000	-	13,700
Lead	63 c	400	13.5	29.2	10.5	5.36	9.96	16.8	134	23	33.6
Magnesium			3,140	3,900	2,830	4,500	2,710	7,530	4,360	-	3,710
Manganese	1600 c	2,000	288	292	269	264	290	368	325	-	276
Mercury	0.18 c	0.81	BRL	-	BRL						
Nickel	30	310	26.1	32.5	30.5	16.3	17.5	70.9	41.8	-	38.2
Potassium			1,120	1,870	1,260	2,090	1,360	1,430	1,750	-	1,160
Selenium	3.9c	180	BRL	-	BRL						
Silver	2	180	BRL	-	BRL						
Sodium			139	180	101	252	124	224	185	-	166
Thallium			BRL	-	BRL						
Vanadium			21.1	26.4	22.7	24.3	21.6	29.8	30	-	21.9
Zinc	109 c	10,000	50.8	46.9	44.7	27.8	29.4	53.4	99.7	-	43.4

Notes:

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

BDL - Below Detection Limit

Bold/highlighted- Indicated exceedance of the NYSDEC Unrestricted Use Soil Cleanup Objective

Bold/highlighted- Indicated exceedance of the NYSDEC Restricted Residential Soil Cleanup Objective

TABLE 4
Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water	Unrestricted Use
		Residential	Restricted-Residential	Commercial	Industrial			
METALS								
Arsenic	7440-38 -2	16f	16f	16f	16f	13f	16f	13 ^c
Barium	7440-39 -3	350f	400	400	10,000 d	433	820	350 ^c
Beryllium	7440-41 -7	14	72	590	2,700	10	47	7.2
Cadmium	7440-43 -9	2.5f	4.3	9.3	60	4	7.5	2.5 ^c
Chromium, hexavalent ^h	18540-29-9	22	110	400	800	1e	19	1 ^b
Chromium, trivalent ^h	16065-83-1	36	180	1,500	6,800	41	NS	30 ^c
Copper	7440-50 -8	270	270	270	10,000 d	50	1,720	50
Total Cyanide ^h		27	27	27	10,000 d	NS	40	27
Lead	7439-92 -1	400	400	1,000	3,900	63f	450	63 ^c
Manganese	7439-96 -5	2,000f	2,000f	10,000 d	10,000 d	1600f	2,000f	1600 ^c
Total Mercury		0.81j	0.81j	2.8j	5.7j	0.18f	0.73	0.18 ^c
Nickel	7440-02 -0	140	310	310	10,000 d	30	130	30
Selenium	7782-49 -2	36	180	1,500	6,800	3.9f	4f	3.9 ^c
Silver	7440-22 -4	36	180	1,500	6,800	2	8.3	2
Zinc	7440-66 -6	2200	10,000 d	10,000 d	10,000 d	109f	2,480	109 ^c
PESTICIDES / PCBs								
2,4,5-TP Acid (Silvex)	93-72-1	58	100a	500b	1,000c	NS	3.8	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 e	17	0.0033 ^b
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 e	136	0.0033 ^b
4,4'-DDD	72-54-8	2.6	13	92	180	0.0033 e	14	0.0033 ^b
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19	0.005 ^c
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04g	0.02	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09	0.036
Chlordane (alpha)	5103-71 -9	0.91	4.2	24	47	1.3	2.9	0.094
delta-BHC	319-86-8	100a	100a	500b	1,000c	0.04g	0.25	0.04
Dibenzofuran	132-64-9	14	59	350	1,000c	NS	210	7
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1	0.005 ^c
Endosulfan I	959-98-8	4.8i	24i	200i	920i	NS	102	2.4
Endosulfan II	33213-65-9	4.8i	24i	200i	920i	NS	102	2.4
Endosulfan sulfate	1031-07 -8	4.8i	24i	200i	920i	NS	1,000c	2.4
Endrin	72-20-8	2.2	11	89	410	0.014	0.06	0.014
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38	0.042
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1	0.1
Polychlorinated biphenyls	1336-36 -3	1	1	1	25	1	3.2	0.1
SEMI-VOLATILES								
Acenaphthene	83-32-9	100a	100a	500b	1,000c	20	98	20
Acenaphthylene	208-96-8	100a	100a	500b	1,000c	NS	107	100 ^a
Anthracene	120-12-7	100a	100a	500b	1,000c	NS	1,000c	100 ^a
Benzo(a)anthracene	56-55-3	1f	1f	5.6	11	NS	1f	1 ^c
Benzo(a)pyrene	50-32-8	1f	1f	1f	1.1	2.6	22	1 ^c
Benzo(b) fluoranthene	205-99-2	1f	1f	5.6	11	NS	1.7	1 ^c
Benzo(g,h,i) perylene	191-24-2	100a	100a	500b	1,000c	NS	1,000c	100
Benzo(k) fluoranthene	207-08-9	1	3.9	56	110	NS	1.7	0.8 ^c
Chrysene	218-01-9	1f	3.9	56	110	NS	1f	1 ^c
Dibenz(a,h) anthracene	53-70-3	0.33e	0.33e	0.56	1.1	NS	1,000c	0.33 ^b
Fluoranthene	206-44-0	100a	100a	500b	1,000c	NS	1,000c	100 ^a
Fluorene	86-73-7	100a	100a	500b	1,000c	30	386	30
Indeno(1,2,3-cd) pyrene	193-39-5	0.5f	0.5f	5.6	11	NS	8.2	0.5 ^c
m-Cresol	108-39-4	100a	100a	500b	1,000c	NS	0.33e	0.33 ^b
Naphthalene	91-20-3	100a	100a	500b	1,000c	NS	12	12
o-Cresol	95-48-7	100a	100a	500b	1,000c	NS	0.33e	0.33 ^b
p-Cresol	106-44-5	34	100a	500b	1,000c	NS	0.33e	0.33 ^b
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8e	0.8e	0.8 ^b
Phenanthrene	85-01-8	100a	100a	500b	1,000c	NS	1,000c	100
Phenol	108-95-2	100a	100a	500b	1,000c	30	0.33e	0.33 ^b
Pyrene	129-00-0	100a	100a	500b	1,000c	NS	1,000c	100

TABLE 4
Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water	Unrestricted Use
		Residential	Restricted-Residential	Commercial	Industrial			
VOLATILES								
1,1,1-Trichloroethane	71-55-6	100a	100a	500b	1,000c	NS	0.68	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27	0.27
1,1-Dichloroethene	75-35-4	100a	100a	500b	1,000c	NS	0.33	0.33
1,2-Dichlorobenzene	95-50-1	100a	100a	500b	1,000c	NS	1.1	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02f	0.02 ^c
cis-1,2-Dichloroethene	156-59-2	59	100a	500b	1,000c	NS	0.25	0.25
trans-1,2-Dichloroethene	156-60-5	100a	100a	500b	1,000c	NS	0.19	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1e	0.1e	0.1 ^b
Acetone	67-64-1	100a	100b	500b	1,000c	2.2	0.05	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06	0.06
Butylbenzene	104-51-8	100a	100a	500b	1,000c	NS	12	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76	0.76
Chlorobenzene	108-90-7	100a	100a	500b	1,000c	40	1.1	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1	1
Hexachlorobenzene	118-74-1	0.33e	1.2	6	12	NS	3.2	0.33 ^b
Methyl ethyl ketone	78-93-3	100a	100a	500b	1,000c	100a	0.12	0.12
Methyl tert-butyl ether	1634-04 -4	62	100a	500b	1,000c	NS	0.93	0.93
Methylene chloride	75-09-2	51	100a	500b	1,000c	12	0.05	0.05
n-Propylbenzene	103-65-1	100a	100a	500b	1,000c	NS	3.9	3.9
sec-Butylbenzene	135-98-8	100a	100a	500b	1,000c	NS	11	11
tert-Butylbenzene	98-06-6	100a	100a	500b	1,000c	NS	5.9	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3	1.3
Toluene	108-88-3	100a	100a	500b	1,000c	36	0.7	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47	0.47
1,2,4-Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6	3.6
1,3,5-Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02	0.02
Xylene (mixed)	1330-20 -7	100a	100a	500b	1,000c	0.26	1.6	0.26

All soil cleanup objectives (SCOs) are in parts per million (ppm). NS=Not specified. See Technical Support Document (TSD). Footnotes

a The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

b The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

c The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

d The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

e For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.