

376-382 WALLABOUT STREET
BROOKLYN, NEW YORK

Remedial Action Report

NYC VCP Project Number: 13CVCP150K

OER Project Number: 13EHAN469K

Prepared for:

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REMEDIAL ACTION REPORT

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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 performed professional engineering services and had primary direct responsibility for implementation of the remedial program for the redevelopment project located at 376-382 Wallabout Street, Brooklyn, NY, site number 13CVCP150K. I certify to the following:

- I have reviewed this document, to which my signature and seal are affixed.
- Engineering Controls implemented during this remedial action were designed by me or a person under my direct supervision and achieve the goals established in the Remedial Action Work Plan for this site.
- The Engineering Controls constructed during this remedial action were professionally observed by me or by a person under my direct supervision and (1) are consistent with the Engineering Control design established in the Remedial action Work Plan; (2) are accurately reflected in the text and drawings for as-built design reported in this Remedial Action Report; and (3) will achieve the goal of the Remedial Action Work Plan to prevent soil vapor intrusion and provide protection of public health for the occupants of the building.
- The OER-approved Remedial Action Work Plan dated June 2013 and Stipulations in a letter dated September 16, 2013, were 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.

Name

PE License Number

Signature

Date

PE Stamp

I, Kevin Brussee, am a Qualified Environmental Professional. I had primary direct responsibility for implementation of the remedial program for the redevelopment project located at 376-382 Wallabout Street, Brooklyn, NY, site number 13CVCP150K. I certify to the following:

- The OER-approved Remedial Action Work Plan dated June 2013 and Stipulations in a letter dated September 16, 2013, were 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.

QEP Name

QEP Signature

Date



EXECUTIVE SUMMARY

Throop Wallabout Realty, LLC has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at 376-382 Wallabout Street in Williamsburg 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.

Site Location and Background

The Site is located at 376-382 Wallabout Street in the Williamsburg section of Brooklyn, New York, and is identified as Block 2266 and Lots 14, 15, 16 and 17 on the New York City Tax Map. Figure 1 shows the Site location. The Site is 10,000-square feet and is bounded by Wallabout Street and Block 2250 Lots 41 and 46 (single story industrial buildings) to the north, Block 2266 Lot 46 (vacant lot) to the south, Block 2266 Lot 18 (vacant lot) to the east, and Block 2266 Lot 13 (multi-story residential building) to the west. A map of the site boundary is shown in Figure 2.

Prior to redevelopment, the Site was comprised of four undeveloped vacant lots surrounded by an 8 foot high chain link fence. The Site was uncapped, and overgrown with weeds.

Summary of Proposed Redevelopment Plan

The proposed future use of the Site consisted of the redevelopment of the Site with four new six-story residential apartment buildings. Layout of the site redevelopment is presented in Figure 3. The current zoning designation for the Site is R7A. R7A is a contextual district that allows residential and community facility buildings. The proposed use is consistent with existing zoning for the property.

Each of the four 25 ft wide tax lots is being redeveloped with a new six-story residential building with a full cellar level. Each of the four buildings extend approximately 65 feet, meeting both side lot lines. The gross building square footage for each building is 8,625 ft². A rear cellar level walk-out court yard is constructed behind each building that extends from the rear of the building to the rear property line. The concrete slab of the majority of the cellar is approximately 4.5 feet below sidewalk level, but the cellar slab depth of the gas meter room and water meter room located in the front of the buildings is approximately 8ft below grade. The street front portion of the cellar consists of a boiler room, gas meter room, electric meter room. The remaining portions of the cellar will be used as accessory residential space for the first floor apartment.

Excavation for each new building extended to a depth of approximately 7 feet below grade for construction of the buildings' cellar levels and foundations. In addition, each rear cellar level court yard was excavated to a depth of approximately 6 feet below grade. Additional excavation to a depth of approximately 9 feet was performed for construction of the lower level meter rooms in the front of each building and to a depth of approximately 13 feet for installation of each buildings' elevator pit. Assuming an excavation volume of approximately 25 feet (wide) by 100 feet long (length) and 5 feet (deep), a total of approximately 460 cubic yards (700 tons) of soil was proposed for each building. The additional excavation for the elevator and meter rooms in the front of the building's was to generate an additional 300 cubic yards (450 tons) per building. The rear cellar level court yard of each building has been capped with concrete.

Summary of Surrounding Properties

The area surrounding the Site consists of a mix of residential and industrial properties. Figure 4 shows the surrounding land usage of the adjacent properties listed below as well as additional properties located up to 500 feet away from the Site. No hospitals, daycare facilities or schools are located within a 250 ft radius of the Site.

Surrounding Property Usage

Direction	Property Description
North – Opposite side of Wallabout Street	<u>Block 2250, Lot 41 and 46</u> (291 and 295 Wallabout Street) – Developed with 1-story industrial buildings.
South – Adjacent property	<u>Block 2266, Lot 46</u> (75 Gerry Street) – A 200ft by 100ft undeveloped, vacant lot.

East – Adjacent property	<u>Block 2266, Lot 18</u> (384 Wallabout Street) – A 25ft by 100ft undeveloped vacant lot.
West – Adjacent property	<u>Block 2266, Lot 13</u> (374 Wallabout Street) – Developed with a multi-story residential building.

Summary of Past Uses of Site and Environmental Findings

EBC was able to establish the following site history based upon Sanborn maps dating back to 1887:

- From 1887 through 1965 Lots 14, 16 and 17 consisted of residential dwellings.
- In 1887 Lot 15 was developed with a bowling alley which was converted into a knitting mill at some point prior to 1904 and remained as such through 1918 at which time the property is listed as a slipper factory.
- At some point between 1918 and 1935 Lot 15 was converted into a residential dwelling which remained through 1965.
- Between 1965 and 1977 all residences were removed and the lots are listed as vacant through present day.

The AOCs identified for this Site include:

1. Historic fill layer is present at the Site from grade to depths as great as 5 feet below grade.

Summary of the Work Performed under the Remedial Investigation

Throop Wallabout Realty, LLC performed the following scope of work:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed six soil borings across the entire project Site, and collected twelve soil samples and one duplicate soil sample for chemical analysis from the soil borings to evaluate soil quality;
3. Installed three groundwater monitoring wells throughout the Site to establish groundwater flow and collected three groundwater samples and one duplicate groundwater sample for chemical analysis to evaluate groundwater quality; and
4. Installed four soil vapor probes across the Site and collected four samples for chemical analysis.

Summary of Environmental Findings

1. Elevation of the property ranges from 19 to 20 feet.
2. Depth to groundwater ranges from 5.95 to 7.48 feet at the Site.
3. Groundwater flow is generally from southwest to northeast beneath the Site.
4. Depth to bedrock at the Site is greater than 100 feet.
5. The stratigraphy of the Site, from the surface down, consists of 5 feet of historic fill underlain by native brown silty sand and clay.
6. Soil/fill samples collected during the RI showed no detectable concentrations of VOCs. Seven SVOCs including benzo(a)anthracene (max. of 16,000 µg/Kg), benzo(a)pyrene (max. of 9,700 µg/Kg), benzo(b)fluoranthene (max. of 17,000 µg/Kg), benzo(k)fluoranthene (max. of 4,000 µg/Kg), chrysene (max. of 12,000 µg/Kg), dibenzo(a,h)anthracene (max. of 2,200 µg/Kg), and indeno(1,2,3-cd)pyrene (max. of 6,100 µg/Kg) were detected above their respective Restricted Residential Use SCOs within shallow soil samples. The SVOCs detected above Restricted Residential SCOs are all PAH compounds and their concentrations and distribution indicate that they are associated with historic fill material observed during the sampling. Three pesticides 4,4'-DDE (max. of 160 µg/Kg); 4,4'-DDT (max. of 780 µg/Kg); and dieldrin (max. of 34 µg/Kg) were detected above Unrestricted Use SCOs, mostly in shallow soil samples and one deep soil sample. One PCB, PCB-1254 was detected above Unrestricted Use SCOs at a maximum concentration of 200 µg/Kg. Six metals including barium (max. of 849 µg/Kg), cadmium (max. of 3.62 µg/Kg), copper (max. of 358 µg/Kg), lead (max. of 1,850 µg/Kg), mercury (max. of 4.9 µg/Kg) and zinc (max. of 1,080 µg/Kg) exceeded Unrestricted Use SCOs in all six shallow soil samples. Of these metals, barium, cadmium, copper, lead, and mercury also exceeded Restricted Residential SCOs. Other than one pesticide, VOCs, SVOCs, metals or PCBs were not detected above Unrestricted Use SCOs within any of the six deep soil samples. Overall, the findings were consistent with observations for historical fill sites in areas throughout NYC.
7. Groundwater samples collected during the RI showed no VOCs, PCBs or pesticides detected above NYSDEC Groundwater Quality Standards (GQS). Five SVOCs were detected in groundwater at a concentration above GQS. The metals iron, manganese and

sodium were detected above their respective GQS in all three dissolved groundwater samples.

8. Soil vapor samples collected during the RI showed petroleum and chlorinated VOCs at low concentrations. Tetrachloroethylene (PCE) was identified in all soil vapor samples at a maximum concentration of $25.8 \mu\text{g}/\text{m}^3$, carbon tetrachloride was detected at a maximum concentration of $4.02 \mu\text{g}/\text{m}^3$, trichloroethylene (TCE) was detected in one soil vapor sample, at a concentration of $0.48 \mu\text{g}/\text{m}^3$, and 1,1,1- TCA was detected in one soil vapor sample, at a concentration of $2.62 \mu\text{g}/\text{m}^3$. The PCE, TCE, 1,1,1-TCA and carbon tetrachloride concentrations are all below the monitoring level ranges established within the State DOH soil vapor guidance matrix. Concentrations of petroleum-related VOCs (BTEX) ranged from $152 \mu\text{g}/\text{m}^3$ to $203 \mu\text{g}/\text{m}^3$. Overall the highest reported concentrations were for propylene (maximum of $213 \mu\text{g}/\text{m}^3$) and acetone (maximum of $202 \mu\text{g}/\text{m}^3$).

Summary of the Remedial Action

The remedial action achieved protection of public health and the environment for the intended use of the property. The remedial action achieved all of the remedial action objectives established for the project and addressed applicable standards, criterion, and guidance; was effective in both the short-term and long-term and reduced mobility, toxicity and volume of contaminants; was cost effective and implementable; and used standards methods that are well established in the industry.

A summary of the milestones achieved in the Remedial Action is as follows: A Pre-Application Meeting was held on May 23, 2013. A Remedial Investigation (RI) was performed in May of 2013 and a RI Report dated June 2013 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 June 2013 was prepared and released with a Fact Sheet on June 14, 2013, for a 30-day public comment period. The RAWP with a Stipulation List dated September 16, 2013, was approved by the New York City Office of Environmental Remediation (OER) on September 23, 2013. A pre-construction meeting was held on October 29, 2013, and remedial action began in November of 2013 and completed in April of 2015.

The remedial action consisted of the following tasks:

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 1 Soil Cleanup Objectives (SCOs). Excavation and removal of soil/fill exceeding Unrestricted Use SCOs and achieved Track 1 SCOs for soil.
4. Excavated 1,274.77 tons of D008 hazardous lead soil and transported to Clean Earth of North Jersey; excavated 987.72 of non-hazardous lead contaminated soil and transported to Clean Earth of North Jersey; excavated 767.61 tons of clean soil and transported to Clean Earth of Carteret
5. Collected and analyzed end-point samples to determine the performance of the remedy with respect to attainment of SCOs.
6. As part of development, installed a passive sub-slab depressurization system.
7. As part of development, installed a vapor barrier system beneath the building slab and behind foundation walls.
8. Imported of materials to be used for backfill in compliance with this plan and in accordance with applicable laws and regulations.
9. 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.
10. Screened excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.
11. Implemented storm-water pollution prevention measures in compliance with applicable laws and regulations.
12. Performed all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.

13. Submitted a RAR that: certifies that the remedial requirements have been achieved; defines the Site boundaries; and describes the remedial activities including any changes from the RAWP.

REMEDIAL ACTION REPORT

1.0 SITE BACKGROUND

Throop Wallabout Realty LLC has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at 376-382 Wallabout Street in the Williamsburg section of Brooklyn, New York. The boundary of the property subject to this Remedial Action is shown in Figure 2 and includes, in its entirety, Brooklyn Block 2266 and Lots 15, 16, and 17. The Remedial Action was performed pursuant to the OER-approved RAWP in a manner that has rendered the property protective of public health and the environment consistent with its intended use. 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 376-382 Wallabout Street in the Williamsburg section of Brooklyn, New York, and is identified as Block 2266 and Lots 14, 15, 16 and 17 on the New York City Tax Map. Figure 1 shows the Site location. The Site is 10,000-square feet and is bounded by Wallabout Street and Block 2250 Lots 41 and 46 (single story industrial buildings) to the north, Block 2266 Lot 46 (vacant lot) to the south, Block 2266 Lot 18 (vacant lot) to the east, and Block 2266 Lot 13 (multi-story residential building) to the west. A map of the site boundary is shown in Figure 2.

Prior to redevelopment, the Site was comprised of four undeveloped vacant lots surrounded by an 8 foot high chain link fence. The Site was uncapped, and overgrown with weeds.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site consisted of the redevelopment of the Site with four new six-story residential apartment buildings. Layout of the site redevelopment is presented in Figure 3. The current zoning designation for the Site is R7A. R7A is a contextual district that allows residential and community facility buildings. The proposed use is consistent with existing zoning for the property.

Each of the four 25 ft wide tax lots is being redeveloped with a new six-story residential building with a full cellar level. Each of the four buildings extend approximately 65 feet, meeting both side lot lines. The gross building square footage for each building is 8,625 ft². A rear cellar level walk-out court yard is constructed behind each building that extends from the rear of the building to the rear property line. The concrete slab of the majority of the cellar is approximately 4.5 feet below sidewalk level, but the cellar slab depth of the gas meter room and water meter room located in the front of the buildings is approximately 8ft below grade. The street front portion of the cellar consists of a boiler room, gas meter room, electric meter room. The remaining portions of the cellar will be used as accessory residential space for the first floor apartment.

Excavation for each new building extended to a depth of approximately 7 feet below grade for construction of the buildings' cellar levels and foundations. In addition, each rear cellar level court yard was excavated to a depth of approximately 6 feet below grade. Additional excavation to a depth of approximately 9 feet was performed for construction of the lower level meter rooms in the front of each building and to a depth of approximately 13 feet for installation of each buildings' elevator pit. Assuming an excavation volume of approximately 25 feet (wide) by 100 feet long (length) and 5 feet (deep), a total of approximately 460 cubic yards (700 tons) of soil was proposed for each building. The additional excavation for the elevator and meter rooms in the front of the building's was to generate an additional 300 cubic yards (450 tons) per building. The rear cellar level court yard of each building has been capped with concrete.

1.3 Description of Surrounding Property

The area surrounding the Site consists of a mix of residential and industrial properties. Figure 4 shows the surrounding land usage of the adjacent properties listed below as well as additional properties located up to 500 feet away from the Site. No hospitals, daycare facilities or schools are located within a 250 ft radius of the Site.

Surrounding Property Usage

Direction	Property Description
North – Opposite side of Wallabout Street	<u>Block 2250, Lot 41 and 46</u> (291 and 295 Wallabout Street) – Developed with 1-story industrial buildings.
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West – Adjacent property	<u>Block 2266, Lot 13</u> (374 Wallabout Street) – Developed with a multi-story residential building.

1.4 Summary of Past Uses of Site and Environmental Findings

EBC was able to establish the following site history based upon Sanborn maps dating back to 1887:

- From 1887 through 1965 Lots 14, 16 and 17 consisted of residential dwellings.
- In 1887 Lot 15 was developed with a bowling alley which was converted into a knitting mill at some point prior to 1904 and remained as such through 1918 at which time the property is listed as a slipper factory.
- At some point between 1918 and 1935 Lot 15 was converted into a residential dwelling which remained through 1965.
- Between 1965 and 1977 all residences were removed and the lots are listed as vacant through present day.

The AOCs identified for this Site include:

- Historic fill layer is present at the Site from grade to depths as great as 5 feet below grade.

1.5 Remedial Investigation

A remedial investigation was performed and the results are documented in a document called “*Remedial Investigation Report, 376-382 Wallabout Street*”, dated June 2013 (Appendix A).

1.5.1 Summary of the Work Performed under the Remedial Investigation

Throop Wallabout Realty, LLC performed the following scope of work:

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

3. Installed three groundwater monitoring wells throughout the Site to establish groundwater flow and collected three groundwater samples and one duplicate groundwater sample for chemical analysis to evaluate groundwater quality; and
4. Installed four soil vapor probes across the Site and collected four samples for chemical analysis.

1.5.2 Summary of Environmental Findings

1. Elevation of the property ranges from 19 to 20 feet.
2. Depth to groundwater ranges from 5.95 to 7.48 feet at the Site.
3. Groundwater flow is generally from southwest to northeast 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 5 feet of historic fill underlain by native brown silty sand and clay.
6. Soil/fill samples collected during the RI showed no detectable concentrations of VOCs. Seven SVOCs including benzo(a)anthracene (max. of 16,000 µg/Kg), benzo(a)pyrene (max. of 9,700 µg/Kg), benzo(b)fluoranthene (max. of 17,000 µg/Kg), benzo(k)fluoranthene (max. of 4,000 µg/Kg), chrysene (max. of 12,000 µg/Kg), dibenzo(a,h)anthracene (max. of 2,200 µg/Kg), and indeno(1,2,3-cd)pyrene (max. of 6,100 µg/Kg) were detected above their respective Restricted Residential Use SCOs within shallow soil samples. The SVOCs detected above Restricted Residential SCOs are all PAH compounds and their concentrations and distribution indicate that they are associated with historic fill material observed during the sampling. Three pesticides 4,4'-DDE (max. of 160 µg/Kg); 4,4'-DDT (max. of 780 µg/Kg); and dieldrin (max. of 34 µg/Kg) were detected above Unrestricted Use SCOs, mostly in shallow soil samples and one deep soil sample. One PCB, PCB-1254 was detected above Unrestricted Use SCOs at a maximum concentration of 200 µg/Kg. Six metals including barium (max. of 849 µg/Kg), cadmium (max. of 3.62 µg/Kg), copper (max. of 358 µg/Kg), lead (max. of 1,850 µg/Kg), mercury (max. of 4.9 µg/Kg) and zinc (max. of 1,080 µg/Kg) exceeded Unrestricted Use SCOs in all six shallow soil samples. Of these metals, barium, cadmium, copper, lead, and mercury also exceeded Restricted Residential SCOs. Other than one pesticide, VOCs, SVOCs, metals or PCBs were not detected above Unrestricted

Use SCOs within any of the six deep soil samples. Overall, the findings were consistent with observations for historical fill sites in areas throughout NYC.

7. Groundwater samples collected during the RI showed no VOCs, PCBs or pesticides detected above NYSDEC Groundwater Quality Standards (GQS). Five SVOCs were detected in groundwater at a concentration above GQS. The metals iron, manganese and sodium were detected above their respective GQS in all three dissolved groundwater samples.
8. Soil vapor samples collected during the RI showed petroleum and chlorinated VOCs at low concentrations. Tetrachloroethylene (PCE) was identified in all soil vapor samples at a maximum concentration of $25.8 \mu\text{g}/\text{m}^3$, carbon tetrachloride was detected at a maximum concentration of $4.02 \mu\text{g}/\text{m}^3$, trichloroethylene (TCE) was detected in one soil vapor sample, at a concentration of $0.48 \mu\text{g}/\text{m}^3$, and 1,1,1- TCA was detected in one soil vapor sample, at a concentration of $2.62 \mu\text{g}/\text{m}^3$. The PCE, TCE, 1,1,1-TCA and carbon tetrachloride concentrations are all below the monitoring level ranges established within the State DOH soil vapor guidance matrix. Concentrations of petroleum-related VOCs (BTEX) ranged from $152 \mu\text{g}/\text{m}^3$ to $203 \mu\text{g}/\text{m}^3$. Overall the highest reported concentrations were for propylene (maximum of $213 \mu\text{g}/\text{m}^3$) and acetone (maximum of $202 \mu\text{g}/\text{m}^3$).

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

2.0 DESCRIPTION OF REMEDIAL ACTIONS

The remedial action was performed in accordance with an OER approved Remedial Action Work Plan (Appendix B) and achieved the remedial action objectives established for the project. The remedial action was evaluated in an alternatives analysis and was determined to be protective of human health and the environment, compliant with standards, criteria, and guidelines (SCGs), effective in the short-term, effective in the long-term, capable of attaining appropriate levels of reduction of toxicity, mobility, or volume of contaminated material, implementable, cost effective, acceptable to the community, consistent with land uses, and sustainable.

A summary of the milestones achieved in the Remedial Action is as follows: A Pre-Application Meeting was held on May 23, 2013. A Remedial Investigation (RI) was performed in May of 2013 and a RI Report dated June 2013 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 June 2013 was prepared and released with a Fact Sheet on June 14, 2013, for a 30-day public comment period. The RAWP with a Stipulation List dated September 16, 2013, was approved by the New York City Office of Environmental Remediation (OER) on September 23, 2013. A pre-construction meeting was held on October 29, 2013, and remedial action began in November of 2013 and completed in April of 2015.

The remedial action consisted of the following tasks:

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 1 Soil Cleanup Objectives (SCOs). Excavation and removal of soil/fill exceeding Unrestricted Use SCOs and achieved Track 1 SCOs for soil;
Implemented storm-water pollution prevention measures in compliance with applicable laws and regulations;
4. Excavated 1,274.77 tons of D008 hazardous lead soil and transported to Clean Earth of North Jersey; excavated 987.72 of non-hazardous lead contaminated soil and transported

- to Clean Earth of North Jersey; excavated 767.61 tons of clean soil and transported to Clean Earth of Carteret;
5. Screened excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID;
 6. Appropriately segregated excavated media on Site;
 7. Collected and analyzed end-point samples to determine the performance of the remedy with respect to attainment of SCOs;
 8. As part of development, installed a passive sub-slab depressurization system;
 9. As part of development, installed a vapor barrier system beneath the building slab and behind foundation walls;
 10. Imported of materials to be used for backfill in compliance with this plan and in accordance with applicable laws and regulations;
 11. Performed all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations;
 12. Submitted a Sustainability Report; and
 13. Submitted a RAR that: certifies that the remedial requirements have been achieved; defines the Site boundaries; and describes the remedial activities including any changes from the 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 E.

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

Deviations from the Remedial Action Work Plan are summarized below:

- The RAP did not anticipate disposal of significant amounts of hazardous waste. However, a composite waste characterization soil sample collected from the interval 0 to 3 feet

below grade reported a TCLP lead concentration greater than 5.0 mg/L. Therefore, all soil at the Site to a depth of 3 feet below grade required disposal as D008 Hazardous lead. No other 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, Kevin Brussee or Kevin Waters of EBC. The Qualified Environmental Professional which implemented the remedial action was Kevin Brussee, Project Manager-EBC.

The excavation and foundation contractor was All Island Masonry and Concrete, and the developer was HSD Construction, LLC.

4.2 Site Controls

Site Preparation

Plans for each of the four new buildings (NYC DOB Job number NB-320779109, MB-320779074, NB-320779181, and NB-320779172) were approved on October 24, 2013. Waste characterization soil sampling was performed on June 21, 2013, prior to mobilization to obtain soil disposal approval and to minimize the need for on-Site soil stockpiles. On November 6, 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 soil classified as hazardous for lead (D008) based on waste characterization soil sampling (top 0-3ft). Non-hazardous soil with an elevated lead concentration was then removed from the interval 3 to 6ft. Endpoint soil samples were collected in accordance with the frequency specified by the disposal facility to determine if all soil hazardous for lead and/or an elevated lead concentration had been removed. Following removal of soil hazardous for lead (D008) and non-hazardous soil with an elevated lead concentration, clean native soil from approximately 6 feet and below was excavated as necessary for the new

buildings.

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 and minimize odors. 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 Throop Avenue. 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 removal of the historic fill layer. Petroleum contaminated soil was encountered at the groundwater interface, but because the soil was excessively wet, odors were minimal. On-site soil screening did not detect any excessive PID readings and no complaints were reported. Dust and odor 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 F.

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

4.3 Materials Excavation and Removal

Excavation of soil classified as hazardous for lead (D008) based on waste characterization soil sampling began in November of 2013. A total of 1,274.77 tons of D008 hazardous lead soil was removed and transported to Clean Earth of North Jersey.

Following removal of the top 3ft of D008 hazardous soil across the entire Site, non-hazardous soil from the depth interval 3 to 6 feet was excavated from across the entire Site and transported to Clean Earth of North Jersey on Uniform Hazardous Waste Manifests as a non-hazardous, non-regulated material. A concrete slab was encountered across the majority of the Site at a depth of 6 feet below grade. Soil below the slab consisted of a clean native silty sand. A total of 987.72 tons of non-hazardous lead contaminated soil was removed and transported to Clean Earth of North Jersey.

Following removal of all soil to a depth of 6 feet below grade, and the concrete slab encountered at a depth of 6 feet below grade, endpoint soil samples were collected in accordance with the frequency specified by the disposal facility to determine if all soil with an elevated lead concentration had been removed.

Clean native soil located below the concrete slab was transported to Clean Earth of Carteret.

Excavation and removal of all remaining soil to a depth of approximately 8 feet across the entire Site was performed in December of 2013. A total of 767.61 tons of soil was removed and transported to Clean Earth of Carteret. A map showing the location where excavations were performed is shown in Figure 5. No material was reused on-Site.

4.3.1 Tank Removal

On November 11, 2013, one former 275-gallon No. 2 fuel oil aboveground storage tank was encountered buried in soil in the front portion of Lot 15. The tank was empty and was standing on a former basement concrete slab within a former basement that had been filled in. The tank

was completely empty and dry and was removed from the Site. The soil/fill above the slab was scraped back to inspect the concrete. No physical or olfactory of a spill was observed. Following removal of the concrete slab, EBC field screened the soil for evidence of a spill/leak associated with the tank. No physical or olfactory evidence of a spill/leak was observed.

4.3.3 End Point Sample Results

Following excavation for the new buildings, EBC collected five endpoint soil samples and one duplicate endpoint soil sample. The location of each of the endpoint soil samples is shown on Figure 5. 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, EP2, EP3, EP4 and EP5 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) for laboratory analysis utilizing the following methodology:

- Volatile organic compounds by EPA Method 8260;
- Semi-volatile organic compounds by EPA Method 8270;
- Target Analyte List metals; and
- Pesticides/PCBs by EPA Method 8081/8082.

A copy of each of the laboratory reports for the endpoint soil samples is attached in Appendix G. A tabular and map summary of end-point sampling results is included in Tables 1 through 4 and Figure 6, respectively. As shown in Tables 1 through 4, no VOCs, SVOCs, pesticides, PCBs or metals were detected above Unrestricted Use or Groundwater Protection SCOs.

4.4 Materials Disposal

Waste characterization soil sampling was performed on June 21, 2013. Historic fill (brown silty sand with brick, concrete, and wood) was encountered from grade to a depth of approximately 6

feet below grade. EBC performed 5 test pits from grade to a depth of approximately 9 feet. From each of the five test pits, EBC formed 5-pt composite soil samples representing the intervals 0 to 3 feet, 3 to 6 feet, and 6 to 9 feet. In addition, EBC collected grab samples from each interval for analysis of TPH. The composite soil samples were submitted to a laboratory for analysis of VOCs, SVOCs, metals, TCLP metals, PCBs and RCRA characteristics and paint filter. Based on a TCLP lead concentration greater than 5.0 mg/L, the top 3 feet of soil across the Site was classified as D008 Hazardous Lead. The laboratory results, profile form and a formal letter describing the sampling process and material type, was forwarded to Clean Earth to obtain soil disposal approval for the D008 Hazardous Lead soil at Clean Earth of North Jersey. A copy of the soil disposal request letter with the sampling plan and laboratory results is attached in Appendix H. A copy of the soil disposal acceptance letter issued by Clean Earth is attached in Appendix I.

The TCLP lead concentration for soil from the interval 3 to 6 feet below grade was 4.72 mg/L, which is below the hazardous threshold of 5.0 mg/L. Therefore the soil was classified as non-hazardous, but approved into Clean Earth of North Jersey for transport as non-hazardous soil on a hazardous manifest.

The laboratory results, profile form and a formal letter describing the sampling process and material type, was forwarded to Clean Earth to obtain soil disposal approval at Clean Earth of Carteret for all other soil at the Site that required excavation for the new buildings. A copy of the soil disposal request letter with the sampling plan and laboratory results is attached in Appendix H. A copy of the soil disposal acceptance letter issued by Clean Earth is attached in Appendix I.

In early November 2013, 1,274.77 tons of D008 Hazardous Lead soil was removed from across the entire Site to a depth of approximately 3 feet below grade and loaded into 10-wheel dump trucks for transported to Clean Earth of North Jersey. Copies of each of the hazardous manifests and associated scale tickets for Clean Earth of North Jersey are included in Appendix J.

In November and December of 2013, 987.72 tons of non-hazardous soil was excavated across the Site from the 3 to 6 feet below grade, and transported on a hazardous manifest to Clean Earth of North Jersey. Copies of each of the hazardous manifests and associated scale tickets utilized

for the non-hazardous soil excavated from the interval 3 to 6 feet below grade and transported to Clean Earth of North Jersey are included in Appendix K.

An additional 767.61 tons of non-hazardous soil was excavated across the Site from approximately 6 to 8 feet below grade and loaded into 10-wheel dump trucks for transport to Clean Earth of Carteret. Copies of each of the non-hazardous manifests and associated scale tickets for Clean Earth of Carteret are included in Appendix L.

The concrete slab encountered at a depth of approximately 6 feet below grade was broken into pieces and loaded into roll-off containers for transport to Alloco Recycling Inc., a NYSDEC active/registered construction and demolition debris processing facility. A total of 2 roll-off containers of concrete were removed and transported to Alloco Recycling, Inc. Invoices and copies of each of the truck tickets for the pieces of concrete are included in Appendix M.

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

Table 6 - Disposal Quantities and Disposal Facilities

Destination	Type of Material	Quantity
Clean Earth of North Jersey 105 Jacobus Avenue, Kearny, NJ 07032	D008 Hazardous - Lead	1,274.77 tons
Clean Earth of North Jersey 105 Jacobus Avenue, Kearny, NJ 07032	Non-Hazardous Fill Material	987.72 tons
Clean Earth of Carteret 24 Middlesex Avenue, Carteret, NJ 07008	Non-Hazardous Fill Material	767.61 tons
Alloco Recycling Inc. 540 Kingsland Avenue, Brooklyn, NY	Pieces of Concrete from former cellar slab	~40 cubic yards

4.5 Backfill Import

On February 18th and 19th of 2013, and March 19, 2014, a total of 4 truck loads (approximately 140 tons) of 3/4 inch crushed concrete (RCA) was imported for use beneath the cellar slab from Evergreen Recycling of Corona, Inc. located at 127-50 Northern Boulevard, Flushing, New York 11368. Evergreen Recycling of Corona, Inc. is a NYSDEC Active Registered C&D Debris

Processing Facility. The crushed concrete was spread across the entire Site to a depth of approximately 4 to 6 inches. No other backfill was imported to the Site. A copy of the import trucking tickets and source invoice for the RCA is attached in Appendix N.

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 consists of an 18-inch thick concrete mat slab underlain by 4 to 6 inches of RCA subgrade across the entire footprint of the buildings, and a 4-inch thick concrete slab underlain by 2-4 inches of RCA subgrade within the rear yard. Photographs of construction of the Composite Cover System are included in Appendix B. The composite cover system was installed by All Island Masonry and Concrete.

Vapor Barrier

As part of development, migration of soil vapor from potential offsite sources is mitigated with a combination of building slab and vapor barrier. A high density polyethylene vapor barrier liner (HPDE) was installed over the SSD systems prior to pouring mat concrete slab. The vapor barrier 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 extends throughout the area occupied by the footprint of the new buildings and extends upward behind the side and front walls of the buildings. 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 6. The vapor barrier was installed by the foundation contractor, All Island Masonry and Concrete.

Passive Sub-Slab Depressurization System

Migration of any potential future soil vapors from off site will also be mitigated with a passive sub-slab depressurization system. The SSDS installed beneath the basement slab of the buildings (total of 6,500 sf) consists of three venting zones (loops) in accordance with USEPA sub-slab depressurization design specifications which recommend a separate vent loop for every 4,000 sf of slab area. Each venting zone is constructed of a continuous loop of perforated 4-inch HDPE smooth interior pipe fitted with a filter sock and installed within the 4-6" layer of crushed concrete installed below the concrete building slab. A horizontal pipe connected to each of the

SSDS loops extends to the rear of the building where they connect to a 6-inch schedule 40 pvc riser pipes that extend to the roof to discharge. Each riser pipe discharge vent is located a minimum of 10 feet from windows and ventilation inlets.

The approximate layout of the SSDS piping is shown on Figure 7 and photos of the SSDS piping being installed are included in Appendix B. The passive SSD systems were installed by HSD Construction, LLC.

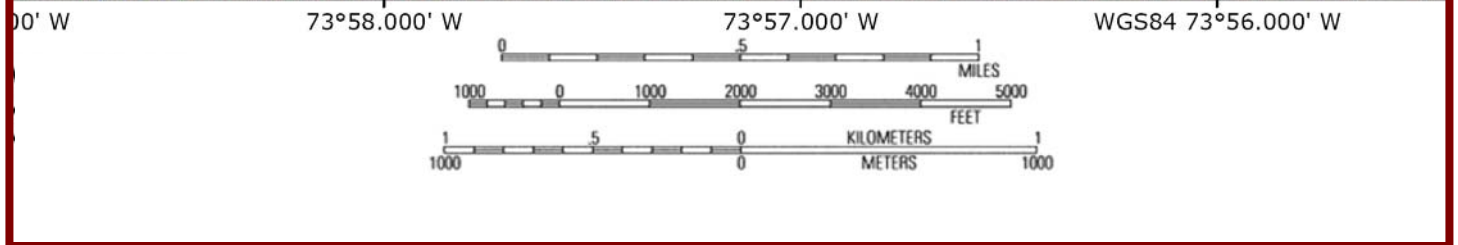
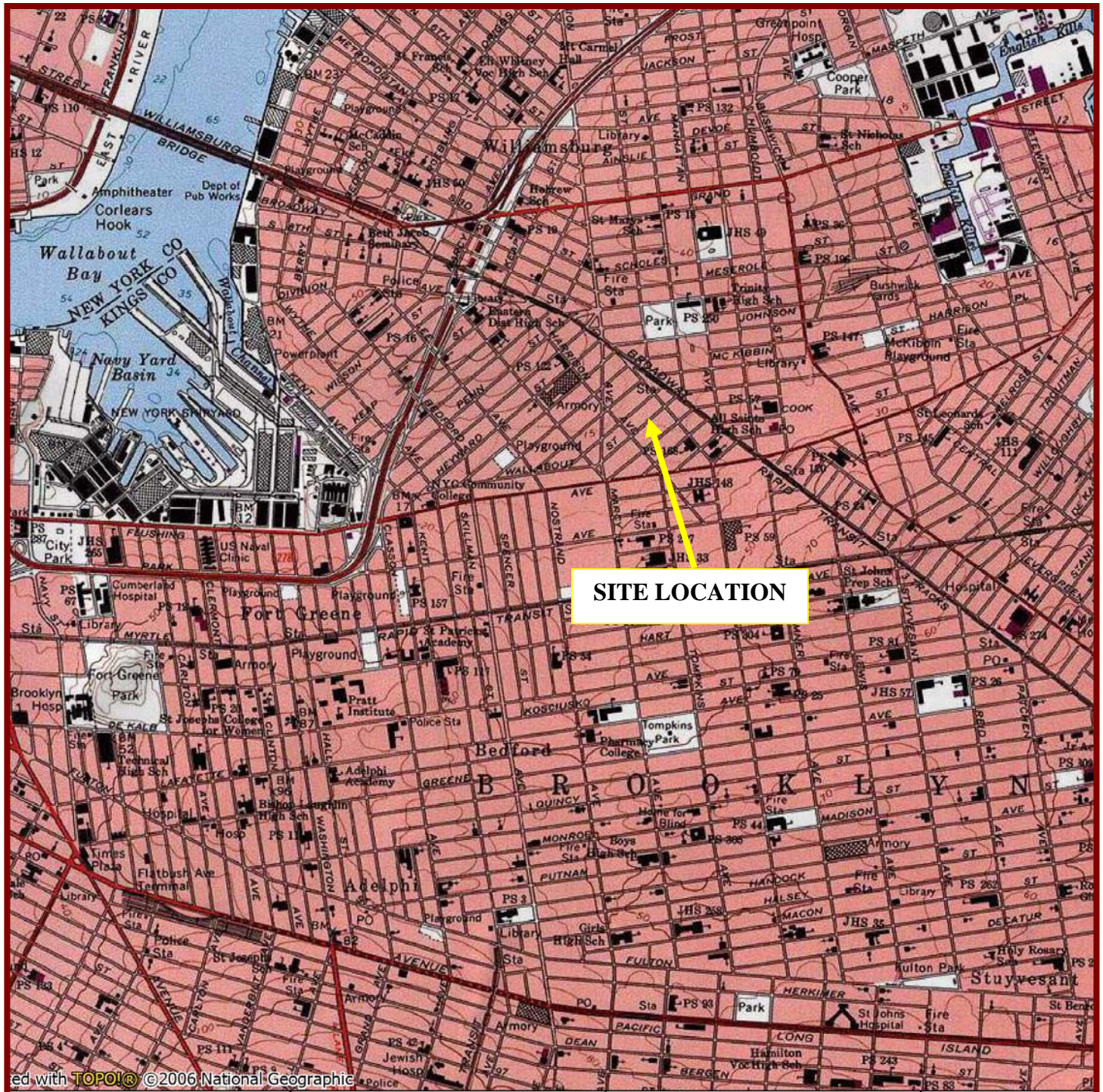
6.0 INSTITUTIONAL CONTROLS

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



ENVIRONMENTAL BUSINESS CONSULTANTS

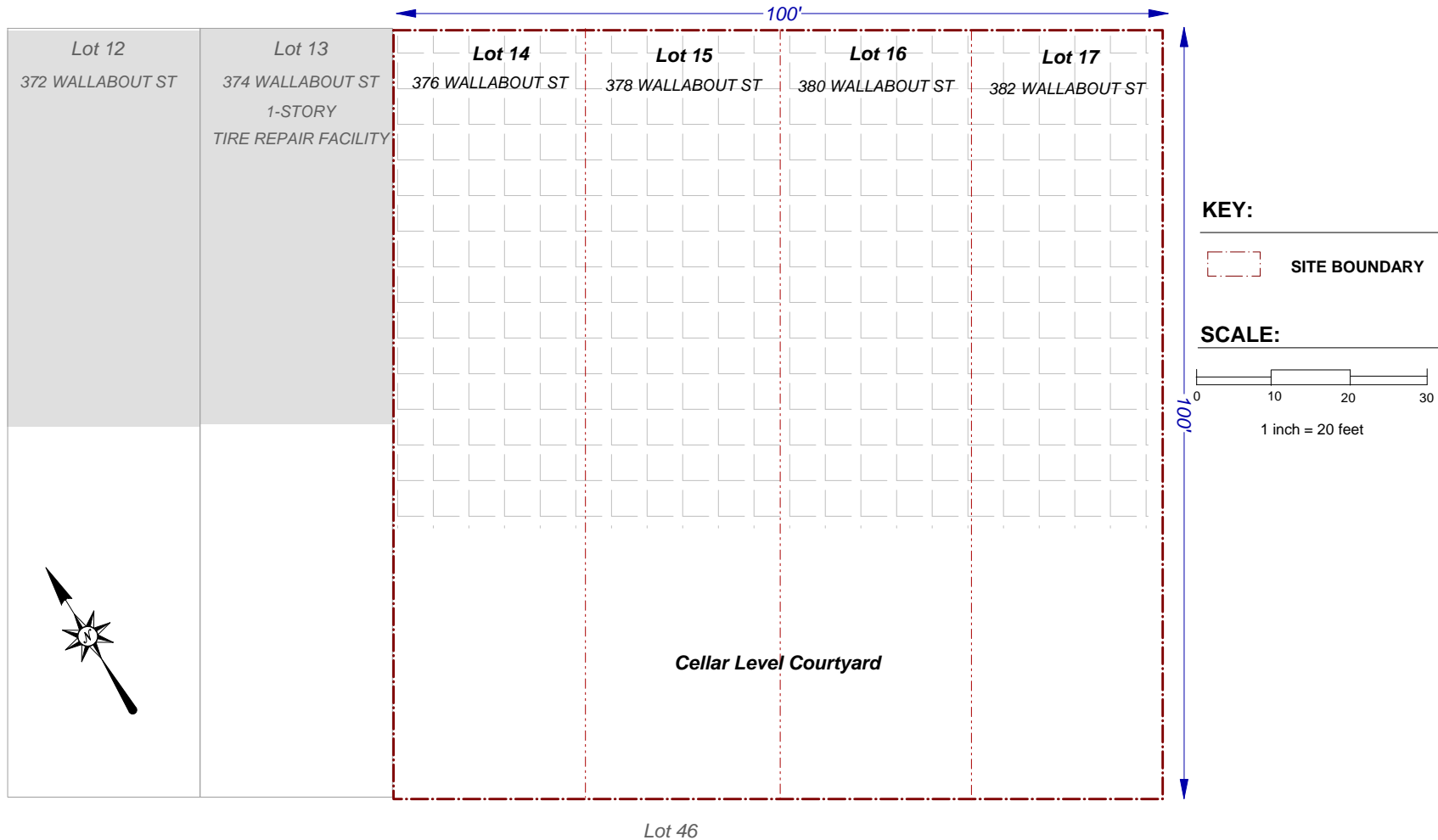
Phone 631.504.6000
Fax 631.924.2870

376-382 WALLABOUT STREET
BROOKLYN, NEW YORK 11206

FIGURE 1 – SITE LOCATION MAP

Wallabout Street

SIDEWALK



IBC

ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD, RIDGE, NY 11961

Phone 631.504.6000
Fax 631.924.2780

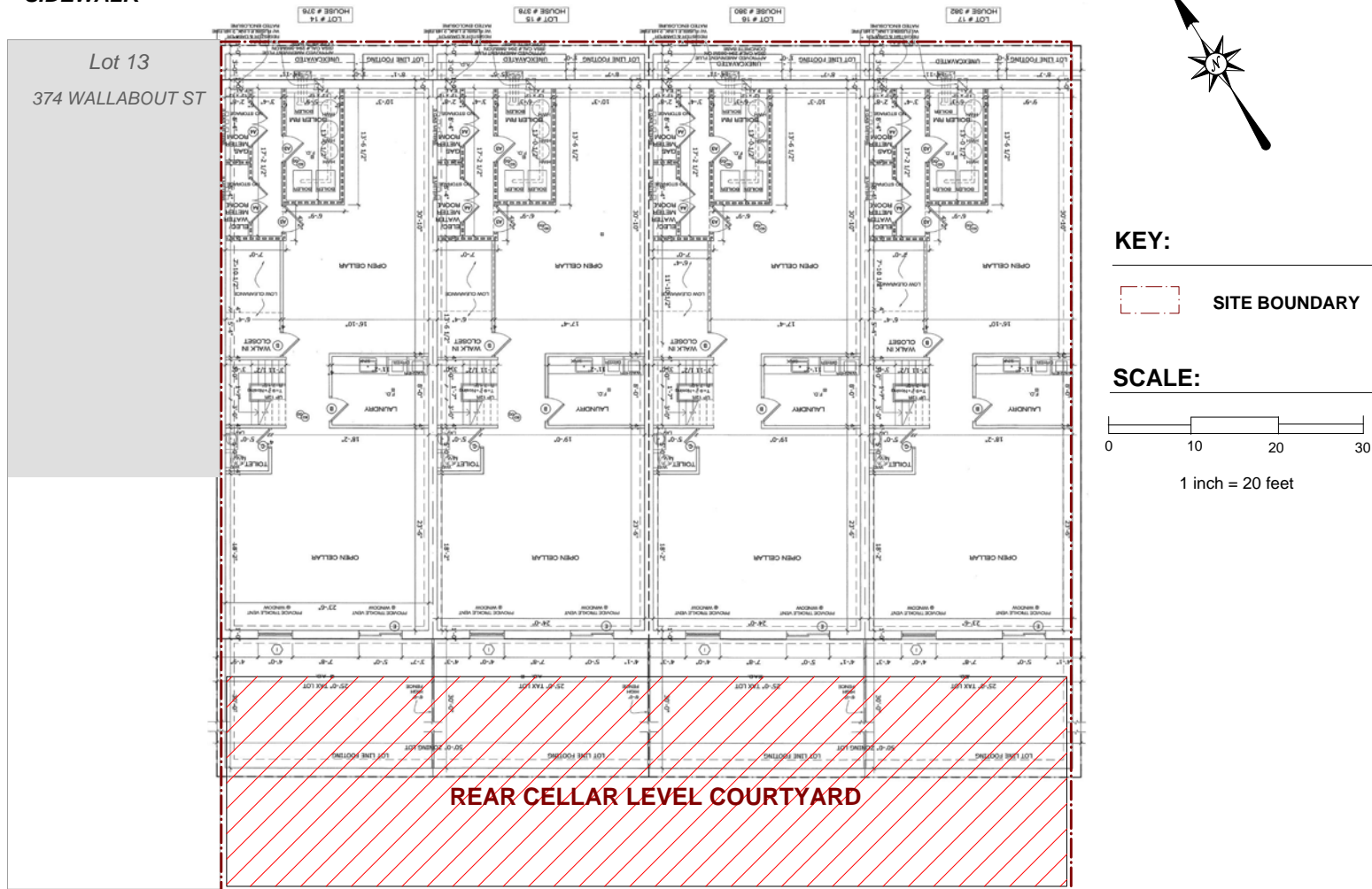
**376-382 WALLABOUT STREET
BROOKLYN, NY 11206**

FIGURE 2 **SITE BOUNDARY**

Wallabout Street

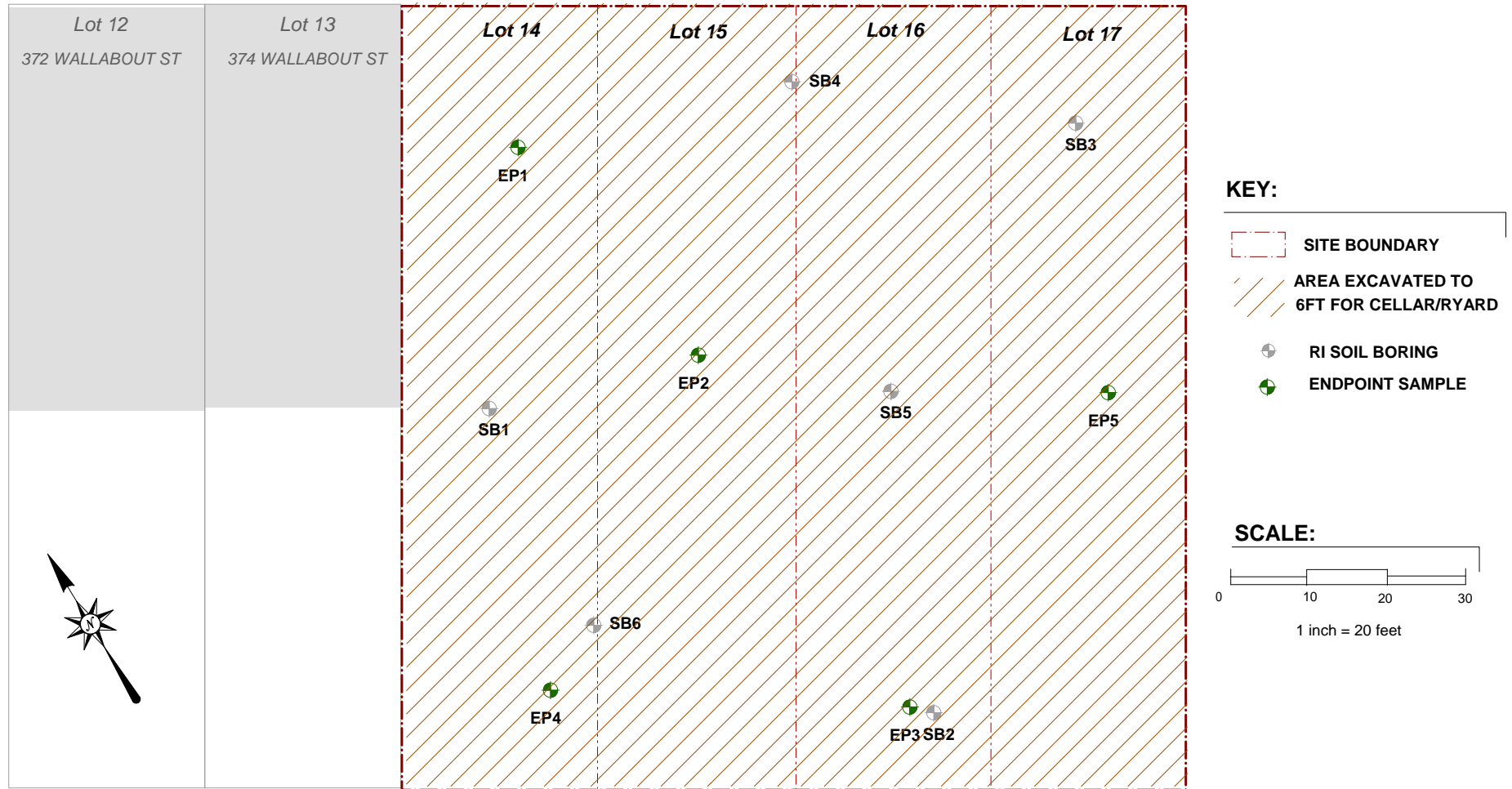
CELLAR FLOOR PLAN

SIDEWALK



WALLABOUT STREET

SIDEWALK



WALLABOUT STREET

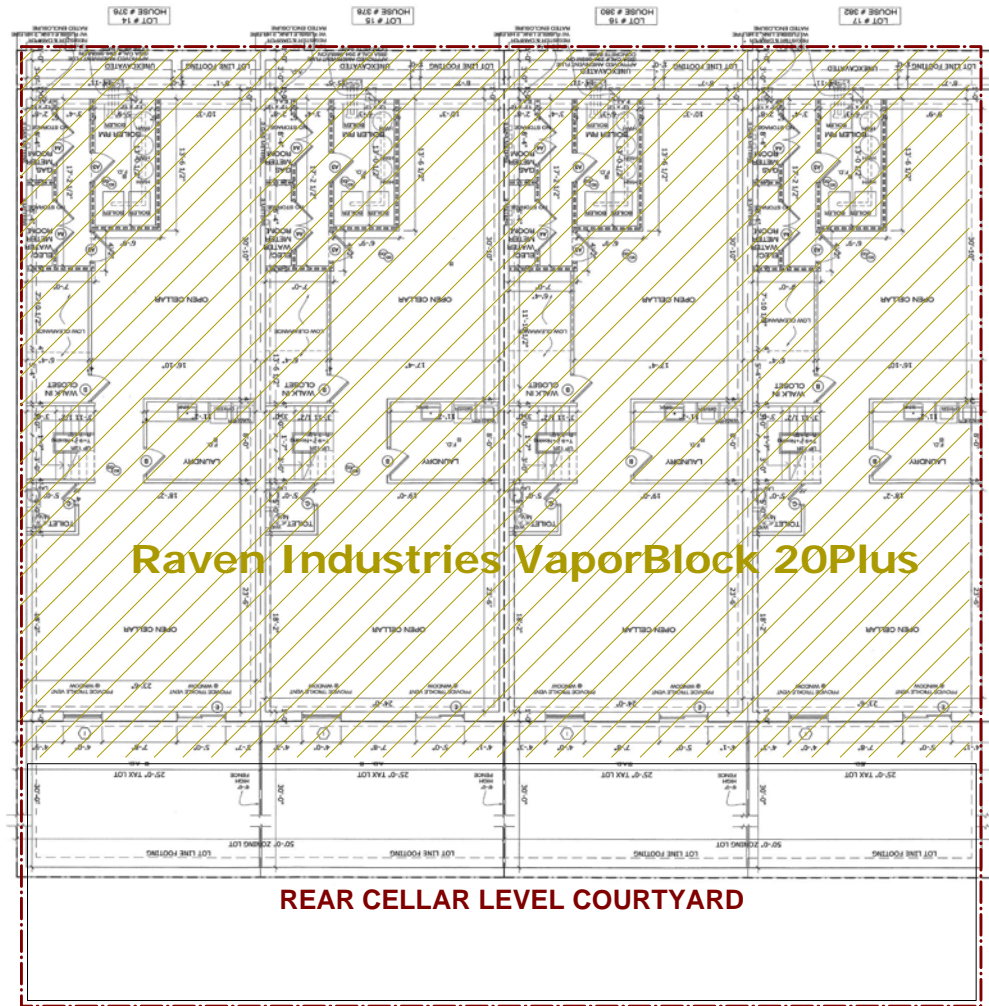
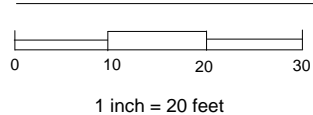
SIDEWALK



KEY:

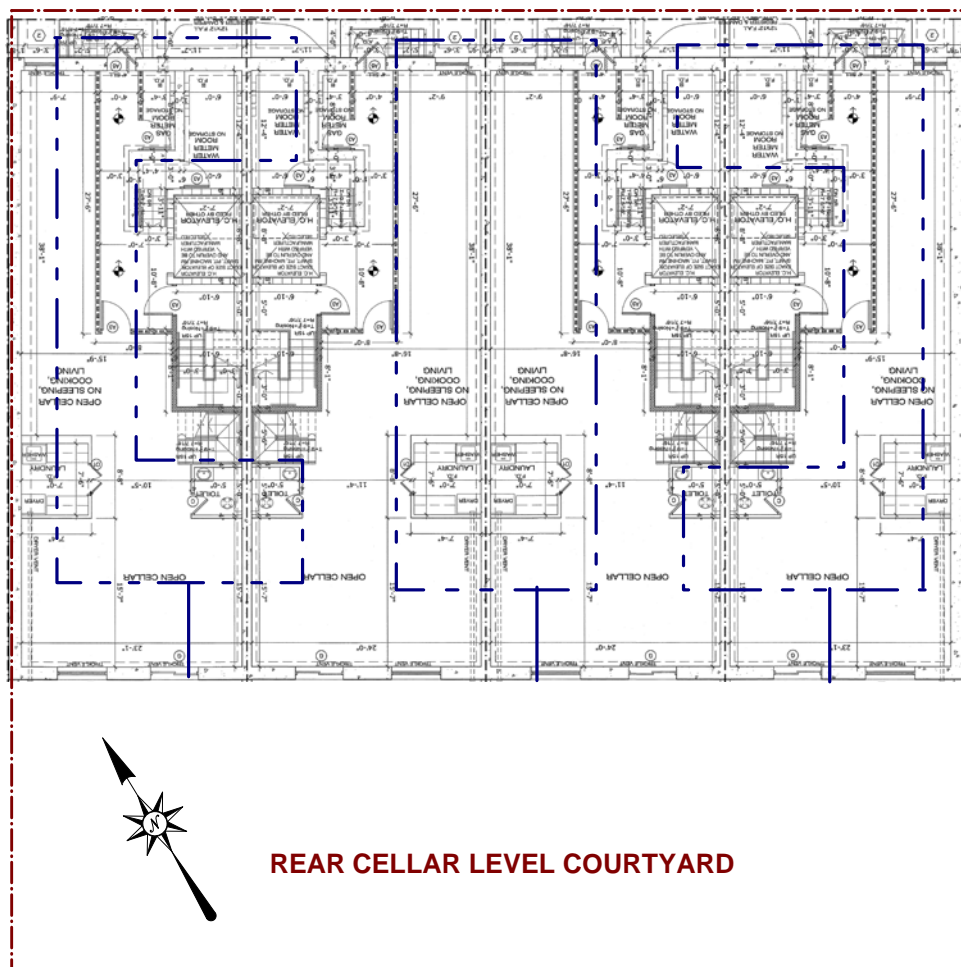


SCALE:



WALLABOUT STREET

SIDEWALK



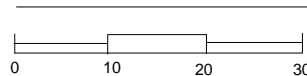
KEY:



SITE BOUNDARY

— — — — — 4" SSDS Pipe Installed Below Cellar Slab

SCALE:



1 inch = 20 feet

TABLES

TABLE 1
376-382 Wallabout Street,
Brooklyn, New York
Endpoint Sample Results
Volatile Organic Compounds

			Remedial Investigation Results										Endpoint Sample Results									
COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	SB1	SB3		SB4		SB5		SB6		EP1		EP2		EP3		EP4		EP5		
			(7-9)		(7-9)		(7-9)		(7-9)		(7-9)		12/6/2013		12/6/2013		12/6/2013		12/6/2013		12/6/2013	
			µg/Kg	RL	µg/Kg	RL	µg/Kg	RL	µg/Kg	RL	µg/Kg	RL	µg/Kg	RL	µg/Kg	RL	µg/Kg	RL	µg/Kg	RL	µg/Kg	RL
1,1,1,2-Tetrachloroethane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,1,1-Trichloroethane	680	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,1,1,2,2-Tetrachloroethane			ND	2.4	ND	3.1	ND	3.2	ND	2.8	ND	2.5	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,1,2-Trichloroethane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,1-Dichloroethane	270	26,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,1-Dichloropropene	330	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,2,3-Trichlorobenzene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,2,3-Trichloropropane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,2,4-Trichlorobenzene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,2,4-Trimethylbenzene	3,600	52,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,2-Dibromo-3-chloropropane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,2-Dichlorobenzene	1,100	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,2-Dichloroethane	20	3,100	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,2-Dichloropropane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,3,5-Trimethylbenzene	8,400	52,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,3-Dichlorobenzene	2,400	4,900	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,3-Dichloropropane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
1,4-Dichlorobenzene	1,800	13,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
2,2-Dichloropropane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
2-Chlorotoluene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
2-Hexanone (Methyl Butyl Ketone)			ND	20	ND	26	ND	26	ND	24	ND	21	<31	31	<30	30	<48	48	<30	30	<29	29
2-Isopropyltoluene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
4-Chlorotoluene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
4-Methyl-2-Pentanone			ND	20	ND	26	ND	26	ND	24	ND	21	<31	31	<30	30	<48	48	<30	30	<29	29
Acetone	50	100,000	ND	81	ND	100	ND	110	ND	150	ND	75	20	50	15	50	<50	50	18	50	23	50
Acrylonitrile			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<12	12	<12	12	<19	19	<12	12	<12	12
Benzene	60	4,800	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Bromobenzene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Bromochloromethane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Bromodichloromethane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Bromoform			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Bromomethane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Carbon Disulfide			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Carbon tetrachloride	760	2,400	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Chlorobenzene	1,100	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Chloroethane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Chloroform	370	49,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Chloromethane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
cis-1,2-Dichloroethene	250	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
cis-1,3-Dichloropropene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Dibromochloromethane			ND	2.4	ND	3.1	ND	3.2	ND	2.8	ND	2.5	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Dichlorodifluoromethane			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Ethylbenzene	1,000	41,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Hexachlorobutadiene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Isopropylbenzene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
m&p-Xylenes	260	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Methyl Ethyl Ketone (2-Butanone)	120	100,000	ND	24	ND	31	ND	32	ND	28	ND	25	<37	37	<36	36	<58	58	<36	36	<35	35
Methyl t-butyl ether (MTBE)	930	100,000	ND	8.1	ND	10	ND	11	ND	9.4	ND	8.5	<12	12	<12	12	<19	19	<12	12	<12	12
Methylene chloride	50	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
Naphthalene	12,000	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
n-Butylbenzene	12,000	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
n-Propylbenzene	3,900	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
o-Xylene	260	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
p-Isopropyltoluene			ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<6.1	6.1	<6.0	6	<9.6	9.6	<6.0	6	<5.9	5.9
sec-Butylbenzene	11,000	100,000	ND	4.1	ND	5.1	ND	5.3	ND	4.7	ND	4.2	<									

TABLE 2
376-382 Wallabout Street,
Brooklyn, New York
Endpoint Sample 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 Results												Endpoint Sample Results											
			SB1		SB3		SB4		SB5		SB6		EP1		EP2		EP3		EP4		EP5					
			(7-9)		(7-9)		(7-9)		(7-9)		(7-9)		12/6/2013		12/6/2013		12/6/2013		12/6/2013		12/6/2013					
			µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg		µg/Kg					
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL				
1,2,4,5-Tetrachlorobenzene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
1,2,4-Trichlorobenzene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
1,2-Dichlorobenzene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
1,2-Diphenylhydrazine			ND	390	ND	410	ND	370	ND	380	ND	390	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
1,3-Dichlorobenzene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
1,4-Dichlorobenzene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2,4,5-Trichlorophenol			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2,4,6-Trichlorophenol			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2,4-Dichlorophenol			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2,4-Dimethylphenol			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2,4-Dinitrophenol			ND	620	ND	660	ND	590	ND	610	ND	620	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
2,4-Dinitrotoluene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2,6-Dinitrotoluene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2-Chloronaphthalene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2-Chlorophenol			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2-Methylnaphthalene			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2-Methylphenol (o-cresol)	330	100,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
2-Nitroaniline			ND	620	ND	660	ND	590	ND	610	ND	620	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
2-Nitrophenol			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
3&4-Methylphenol (m&p-cresol)			ND	390	ND	410	ND	370	ND	380	ND	390	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
3,3'-Dichlorobenzidine			ND	270	ND	290	ND	260	ND	270	ND	270	< 850	850	< 790	790	< 780	780	< 780	780	< 780	780				
3-Nitroaniline			ND	620	ND	660	ND	590	ND	610	ND	620	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
4,6-Dinitro-2-methylphenol			ND	1,100	ND	1,200	ND	1,100	ND	1,100	ND	1,100	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
4-Bromophenyl phenyl ether			ND	390	ND	410	ND	370	ND	380	ND	390	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
4-Chloro-3-methylphenol			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
4-Chloroaniline			ND	270	ND	290	ND	260	ND	270	ND	270	< 850	850	< 790	780	< 780	780	< 780	780	< 780	780				
4-Chlorophenyl phenyl ether			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
4-Nitroaniline			ND	620	ND	660	ND	590	ND	610	ND	620	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
4-Nitrophenol			ND	1,100	ND	1,200	ND	1,100	ND	1,100	ND	1,100	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
Acenaphthene	20,000	100,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Acenaphthylene	100,000	100,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Acetophenone			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Aniline			ND	1,100	ND	1,200	ND	1,100	ND	1,100	ND	1,100	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
Anthracene	100,000	100,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Benz(a)anthracene	1,000	1,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Benztidine			ND	460	ND	490	ND	440	ND	460	ND	460	< 950	950	< 790	790	< 780	780	< 780	780	< 780	780				
Benzo(a)pyrene	1,000	1,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Benzo(b)fluoranthene	1,000	1,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Benzo(g)hifluoranthene	100,000	100,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Benzo(k)fluoranthene	800	1,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Benzoic acid			ND	1,100	ND	1,200	ND	1,100	ND	1,100	ND	1,100	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
Benzyl butyl phthalate			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Bis(2-chloroethoxy)methane			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Bis(2-chloroethyl)ether			ND	390	ND	410	ND	370	ND	380	ND	390	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Bis(2-chloroisopropyl)ether			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Bis(2-ethylhexyl)phthalate			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Carbazole			ND	580	ND	620	ND	550	ND	570	ND	580	< 2100	2,100	< 2000	2,000	< 2000	2,000	< 1900	1,900	< 1900	1,900				
Chrysene	1,000	1,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Dibenz(a,h)anthracene	330	330	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Dibenzofuran	7,000	59,000	ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Diethyl phthalate			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Dimethyl phthalate			ND	270	ND	290	ND	260	ND	270	ND	270	< 300	300	< 280	280	< 270	270	< 270	270	< 270	270				
Di-n-butylphthalate			ND	270	ND	290	ND																			

TABLE 3
376-382 Wallabout Street,
Brooklyn, New York
Endpoint Sample Results
Pesticides PCBs

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Remedial Investigation Results										Endpoint Sample Results														
			SB1		SB3		SB4		SB5		SB6		EP1		EP2		EP3		EP4		EP5						
			(7-9') µg/Kg		(7-9') µg/Kg		(7-9') µg/Kg		(7-9') µg/Kg		(7-9') µg/Kg		12/6/2013 µg/Kg		12/6/2013 µg/Kg		12/6/2013 µg/Kg		12/6/2013 µg/Kg		12/6/2013 µg/Kg						
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result
4,4' -DDD	3.3	2,600	ND	7.4	ND	7.8	ND	7.1	ND	7.4	ND	7.6	< 3.0	3	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8
4,4' -DDE	3.3	1,800	ND	7.4	ND	7.8	ND	7.1	ND	7.4	ND	7.6	< 3.0	3	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8
4,4' -DDT	3.3	1,700	ND	7.4	ND	7.8	ND	7.1	ND	7.4	ND	7.6	< 3.0	3	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8	2.8	< 2.8
a-BHC	20	97	ND	3.7	ND	3.9	ND	3.5	ND	3.7	ND	3.8	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
Alachlor			ND	3.7	ND	3.9	ND	3.5	ND	3.7	ND	3.8	< 4.2	4.2	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.8	3.8	< 3.8	3.8	< 3.8
Aldrin	5	19	ND	1.2	ND	1.2	ND	1.1	ND	1.2	ND	1.2	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
b-BHC	36	72	ND	3.7	ND	3.9	ND	3.5	ND	3.7	ND	3.8	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
Chlordane			ND	12	ND	12	ND	11	ND	12	ND	12	< 25	25	< 24	24	< 24	24	< 24	24	< 24	24	< 23	23	< 23	23	< 23
d-BHC	40	100,000	ND	3.7	ND	3.9	ND	3.5	ND	3.7	ND	3.8	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
Dieldrin	5	39	ND	1.2	ND	1.2	ND	1.1	ND	1.2	ND	1.2	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
Endosulfan I	2,400	4,800	ND	3.7	ND	3.9	ND	3.5	ND	3.7	ND	3.8	< 4.2	4.2	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.8	3.8	< 3.8	3.8	< 3.8
Endosulfan II	2,400	4,800	ND	7.4	ND	7.8	ND	7.1	ND	7.4	ND	7.6	< 4.2	4.2	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.8	3.8	< 3.8	3.8	< 3.8
Endosulfan sulfate	2,400	4,800	ND	7.4	ND	7.8	ND	7.1	ND	7.4	ND	7.6	< 4.2	4.2	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.8	3.8	< 3.8	3.8	< 3.8
Endrin	14	2,200	ND	7.4	ND	7.8	ND	7.1	ND	7.4	ND	7.6	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
Endrin aldehyde			ND	7.4	ND	7.8	ND	7.1	ND	7.4	ND	7.6	< 4.2	4.2	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.9	3.9	< 3.8	3.8	< 3.8	3.8	< 3.8
Endrin ketone			ND	7.4	ND	7.8	ND	7.1	ND	7.4	ND	7.6	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
g-BHC	100	280	ND	1.2	ND	1.2	ND	1.1	ND	1.2	ND	1.2	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
Heptachlor	42	420	ND	2.3	ND	2.4	ND	2.2	ND	2.3	ND	2.4	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
Heptachlor epoxide			ND	3.7	ND	3.9	ND	3.5	ND	3.7	ND	3.8	< 2.1	2.1	< 2.0	2	< 2.0	2	< 2.0	2	< 2.0	2	< 1.9	1.9	< 1.9	1.9	< 1.9
Methoxychlor			ND	37	ND	39	ND	35	ND	37	ND	38	< 8.4	8.4	< 7.9	7.9	< 7.8	7.8	< 7.9	7.9	< 7.7	7.7	< 7.7	7.7	< 7.7	7.7	< 7.7
Toxaphene			ND	37	ND	39	ND	35	ND	37	ND	38	< 40	40	< 38	38	< 38	38	< 38	38	< 38	38	< 37	37	< 37	37	< 37
PCB-1016	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38
PCB-1221	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38
PCB-1232	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38
PCB-1242	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38
PCB-1248	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38
PCB-1254	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38
PCB-1260	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38
PCB-1262	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38
PCB-1268	100	1,000	ND	77	ND	81	ND	74	ND	77	ND	79	< 42	42	< 39	39	< 39	39	< 39	39	< 39	39	< 38	38	< 38	38	< 38

Notes:

* Due to matrix interference from non target compounds in the sample an elevated RL was reported.

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

ND - Non-Detect

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

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

TABLE 4
376-382 Wallabout Street,
Brooklyn, New York
Endpoint Sample Results
Metals

COMPOUND	NYSDEC Part 375.6 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375.6 Restricted Residential Soil Cleanup Objectives*	Remedial Investigation Results										Endpoint Sample Results									
			SB1		SB3		SB4		SB5		SB6		EP1		EP2		EP3		EP4		EP5	
			(7-9') mg/Kg		(7-9') mg/Kg		(7-9') mg/Kg		(7-9') mg/Kg		(7-9') mg/Kg		12/6/2013 mg/Kg		12/6/2013 mg/Kg		12/6/2013 mg/Kg		12/6/2013 mg/Kg		12/6/2013 mg/Kg	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Aluminum			7,690	60	4,440	60	7,130	55	6,450	53	7,580	56	14,400	41	9,010	35	9,460	41	12,600	42	8,060	37
Antimony			BRL	4	BRL	4	BRL	3.6	BRL	3.5	BRL	3.7	< 2.1	2.1	0.8	1.8	< 2.0	2	< 2.1	2.1	< 1.8	1.8
Arsenic	13	16	1.9	0.8	BRL	0.8	1.7	0.7	BRL	0.7	2.2	0.7	2.4	0.8	1.9	0.7	1.8	0.8	1.5	0.8	1.7	0.7
Barium	350	350	20.5	0.4	18.4	0.4	26.5	0.36	29	0.35	43.3	0.37	66.5	0.8	36.5	0.7	24.5	0.8	27.2	0.8	30.6	0.7
Beryllium	7.2	14	BRL	0.32	BRL	0.32	0.39	0.29	BRL	0.28	0.38	0.3	0.44	0.33	0.37	0.28	0.39	0.33	0.41	0.34	0.32	0.29
Cadmium	2.5	2.5	BRL	0.4	BRL	0.4	BRL	0.36	BRL	0.35	BRL	0.37	< 0.41	0.41	< 0.35	0.35	< 0.41	0.41	< 0.42	0.42	< 0.37	0.37
Calcium			609	6	332	6	626	5.5	687	5.3	1,500	5.6	2,120	4.1	1,220	3.5	810	4.1	1,120	4.2	1,120	3.7
Chromium	30		12.4	0.4	13.7	0.4	14.1	0.36	16.4	0.35	23.7	0.37	23.6	0.41	15.7	0.35	19.1	0.41	20.8	0.42	16	0.37
Cobalt			3.94	0.4	1.22	0.4	4.12	0.36	3.37	0.35	4.14	0.37	5.05	0.41	3.93	0.35	4.64	0.41	3.8	0.42	2.93	0.37
Copper	50	270	9.99	0.4	6.58	0.4	11.5	0.36	10.8	0.35	11.3	0.37	18.3	0.41	8.2	0.35	12.3	0.41	9.68	0.42	129	0.37
Iron			11,200	60	5,790	6	13,100	55	8,670	5.3	10,100	56	14,400	41	9,290	35	13,500	41	10,300	42	11,100	37
Lead	63	400	4.41	0.4	5.82	0.4	3.89	0.36	4.07	0.35	7.18	0.37	77.7	0.8	19.6	0.7	8	0.8	8.5	0.8	29.7	0.7
Magnesium			1,170	6	787	6	1,680	5.5	1,530	5.3	2,080	5.6	1,990	4.1	1,420	3.5	2,230	4.1	1,760	4.2	1,540	3.7
Manganese	1,600	2,000	66.8	0.4	21.5	0.4	113	0.36	59.6	0.35	82.5	0.37	116	0.41	58.3	0.35	116	0.41	67.5	0.42	63.5	0.37
Mercury	0.18	0.81	BRL	0.08	BRL	0.07	BRL	0.08	BRL	0.07	BRL	0.08	0.38	0.08	< 0.07	0.07	< 0.08	0.08	< 0.09	0.09	0.06	0.08
Nickel	30	140	10.8	0.4	5.12	0.4	12.6	0.36	12.5	0.35	11.9	0.37	13.5	0.41	10.1	0.35	10.8	0.41	11.1	0.42	9.7	0.37
Potassium			484	6	389	6	567	5.5	540	5.3	841	5.6	937	8	549	7	728	8	651	8	615	7
Selenium	3.9	36	BRL	1.6	BRL	1.6	BRL	1.5	BRL	1.4	BRL	1.5	< 1.6	1.6	< 1.4	1.4	< 1.6	1.6	< 1.7	1.7	< 1.5	1.5
Silver	2	36	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	< 0.41	0.41	< 0.35	0.35	< 0.41	0.41	< 0.42	0.42	< 0.37	0.37
Sodium			37.4	6	37.1	6	37.9	5.5	56.4	5.3	46.8	5.6	88	8	61	7	52	8	54	8	42	7
Thallium			BRL	0.6	BRL	0.6	BRL	0.6	BRL	0.6	BRL	0.6	< 1.6	1.6	< 1.4	1.4	< 1.6	1.6	< 1.7	1.7	< 1.5	1.5
Vanadium			18.9	0.4	13.8	0.4	22.1	0.36	21.6	0.35	29.4	0.37	37.7	0.4	22.2	0.4	27.3	0.4	36.9	0.4	20.4	0.4
Zinc	109	2,200	46.6	0.4	13.8	0.4	77.6	0.36	26.3	0.35	34.3	0.37	63.4	0.8	26.7	0.7	31.9	0.8	24.5	0.8	64.3	0.7

Notes:

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

BRL - Below Reporting Limit

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

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

TABLE 5
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 5
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.