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November 6, 2013

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Re: **Decision Document**
NYC VCP Remedial Action Work Plan Approval
186 Greenpoint Avenue
Block 2575, Lot 5
VCP Project #13CVCP113K

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated January 2013 and Stipulation List dated April 19, 2013 for 186 Greenpoint Avenue, VCP Project #13CVCP113K. The Plan was submitted to OER under the NYC Voluntary Cleanup Program (VCP). The RAWP was released for public comment for 30 days as required by program rule. That comment period ended on March 29, 2013. There were no public comments.

Statement of Purpose and Basis

This document presents the remedy for a Voluntary Cleanup Program site known as "186 Greenpoint Avenue" site. This document is a summary of the information that can be found in the site-related reports and documents in the document repository at OER's website www.nyc.gov/oer.

The New York City Office of Environmental Remediation (the Office or OER) has established a remedy for the above referenced site. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous substances.

The decision is based on the Administrative Record of the New York City Office of Environmental Remediation (the Office or OER) for the "186 Greenpoint Avenue" site and the public's input to the proposed remedy presented by OER.

Description of Selected Remedy

The remedy selected for this "186 Greenpoint Avenue" site includes soil excavation, an engineered composite cover system, and installation of a vapor barrier.

The elements of the selected remedy are as follows:

1. Preparation of a Community Protection Statement and implementation of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Perform a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Establishment of Track 4 Site-Specific Soil Cleanup Objectives (SCOs).
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
5. Excavation and removal of soil/fill exceeding SCOs. Excavation for development purposes to a depth of approximately 10 feet bgs in the proposed building footprint and approximately 2 feet bgs in the proposed rear yard area.
6. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.
7. Collection and analysis of end-point samples to determine the performance of the remedy with respect to attainment of SCOs.
8. Removal of underground storage tanks and closure of petroleum spills, if encountered, in compliance with applicable local, State and Federal laws and regulations.
9. Transportation and off-Site disposal of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities. Appropriate segregation of excavated media onsite.
10. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
11. Installation of a vapor barrier system beneath the building slab.
12. Demarcation of residual soil/fill.
13. Construction and maintenance of an engineered composite cover over the entire Site consisting of a 4" concrete building slab across the building footprint and 2 feet of clean fill in the proposed rear yard area to prevent human exposure to residual soil/fill remaining under the Site.
14. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
15. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.
16. Submission of a RAR that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and describes all

Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP.

17. Submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency.
18. Continued registration as an "E" Designated property and listing of Engineering Controls and a requirement that management of these controls must be in compliance with an approved SMP; and Institutional Controls including prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

Remedial activities will be performed at the Site in accordance with this OER-approved RAWP. All deviations from the RAWP will be promptly reported to OER. Changes will be documented in the RAR.

This remedy conforms to the promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration OER guidance, as appropriate. The remedy is protective of public health and the environment.

November 6, 2013
Date

Shaminder Chawla
Assistant Director

SITE BACKGROUND

Location:

The 186 Greenpoint Avenue Site (hereafter referred to as the "Site") is located at 186 Greenpoint Avenue in the Greenpoint section in Brooklyn, New York and is identified as Block 2575 and Lot 5 on the New York City Tax Map. Figure 1 shows the Site location.

Site Features:

The Site is 3,725-square feet and is bounded by Greenpoint Avenue to the north, 3-story residential building to the south, 3-story residential building to the east, and 3-story residential and commercial mixed use building to the west. Currently, the Site is used for residential and contains one 2-story building with a cellar and a 2 car garage. A site map is attached as Figure 1. A Site location map is attached as Figure 2.

Current Zoning/uses:

The current zoning designation is R6B. The proposed use is consistent with existing zoning for the property.

Historical Use:

Based on the Phase I ESA Report and government databases, the site was developed prior to early 1900s with the existing 2-story residential building.

Summary of Environmental Findings:

1. Elevation of the property is 28 feet.
2. Depth to groundwater is approximately 21 feet below grade at the Site.
3. Bedrock was not encountered during the investigation.
4. The stratigraphy of the site, from the surface down, consists of 4 to 12 feet of silt, sand, and bricks (uncontrolled fill) underlain by fine to medium grained sand.

PROPOSED DEVELOPMENT PLAN

The proposed future use of the Site will consist of a 5-story residential building with a cellar and a rear yard. The plans for this project have been filed with the Department of Buildings as Job #320376437. The area of the building (approximately 25 feet by 67.5 feet) will be excavated to approximately 10 feet below grade surface (bgs), and the rear yard will require 2 feet of excavation for a clean fill cap. The elevator pit will require an additional 5 feet of excavation below cellar level. The total amount of soil removed from the site will be approximately 820 cubic yards, and there will be a backfill of approximately 200 cubic yard required. The cellar will be used for mechanical rooms, elevator, storage rooms and egress stairs. The first through fifth floors will be used for residential apartments

SUMMARY OF REMEDIAL INVESTIGATION

The Remedial Investigation was conducted in January, July, and September 2012. A full Remedial Investigation Report is available online in the document repository and the results are summarized below.

Soil:

Soil/fill samples collected during the RI showed no detectable concentrations of PCBs. No VOCs were detected in soil, except acetone and methylene chloride at concentrations below both their laboratory reporting limits and Track 1 Unrestricted Use SCOs. No chlorinated VOCs were detected in any sample above method detection limits (MDLs). One pesticide, chlordane, was detected above its Unrestricted Use SCO in two deep soil samples (10-12 feet bgs) at a maximum concentration of 389 ppb, which is below its Restricted Residential Use SCO. Select SVOCs, all polycyclic aromatic hydrocarbons (PAHs) were identified in two of four shallow soil samples, and concentrations of 4 PAHs, benzo(a)anthracene (3560 ppb), benzo(a)pyrene (3650 ppb), benzo(b)fluroanthene (3780 ppb), and indeno(1,2,3-cd)pyrene (1590 ppb), were found above their Track 1 Unrestricted Use and Track 2 Restricted Residential Use SCOs in one sample. The maximum SVOC concentration identified in soil was 50 ppm. Five (5) metals were identified in two shallow and four deep soil samples above their respective Track 1 SCOs. Of these metals, lead (maximum of 865 ppm) and manganese (maximum of 3860 ppm) also exceeded their respective Track 2 Restricted Residential Use SCOs. Overall, these results are consistent with levels of pesticides, SVOCs, and metals found at sites throughout NYC with historic fill material.

Groundwater:

Groundwater samples collected during the RI showed no detectable PCBs or SVOCs. One pesticide, chlordane, was detected above NYSDEC TOGS 1.1.1 Groundwater Quality Standards (GQS) in one sample at 0.151 ug/L. The VOCs chloroform and cis-1,2-dichloroethylene were detected in 3 and 1 groundwater samples, respectively, with chloroform (17 ppb) exceeding its GQS of 7 ppb in one sample, while cis-1,2-dichloroethylene was detected below its GQS. TCE and PCE were not detected in groundwater. Two metals, manganese and sodium, were detected above GQSs in dissolved groundwater samples.

Soil vapor:

Soil vapor samples collected during the RI showed petroleum-related VOCs at generally low levels. Acetone and methylene chloride were detected in all soil vapor samples at maximum concentrations of 1500 ug/m^3 and 21 ug/m^3, respectively. The chlorinated VOCs PCE, TCE, carbon tetrachloride, and 1,1,1-trichloroethane were not detected in any of the soil vapor samples. PCE was detected in outdoor air at a concentration of 0.83 ug/m^3. Overall, soil vapor samples do not suggest a significant onsite source of VOCs.

Figure 1 – Site Map

Figure 2 – Site Location Map