



OFFICE OF ENVIRONMENTAL REMEDIATION

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DECISION DOCUMENT

April 01, 2014

Nicholas Notias
501 Leonard Realty, LLC
29-30 120th Street
Flushing, New York 11354

Scott Yanuck
Laurel Environmental Associates, Ltd.
53 West Hills Road, Suite #1
Huntington Station, New York

Re: **NYC VCP Remedial Action Work Plan Approval**
501 Leonard Street (493 – 501 Leonard Street/ 544 Manhattan Avenue)
Block 2697, Lot 7
VCP Project # 13CVCP128K/ OER Project # 13EHAZ318K

Dear Mr. Notias:

The New York City Office of Environmental Remediation (OER), in consultation with the New York City Department of Health and Mental Hygiene (DOHMH), has completed its review of the Remedial Action Work Plan (RAWP) and Stipulation List for the 501 Leonard Street Site, VCP Project # 13CVCP128K, dated November 1, 2013 and March 06, 2013. 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 November 30, 2013. No comments were received.

The following remedial action elements will be implemented at the project site:

Statement of Purpose and Basis

This document presents the remedy for a Voluntary Cleanup site known as “501 Leonard Street” 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: <http://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 501 Leonard Street Site and the public's input to the proposed remedy presented by the Office.

Description of Selected Remedy

The remedy selected for this 501 Leonard Street Site is Track 1 remedy and includes soil excavation, cover system, vapor barrier, and a passive sub-slab depressurization system.

The elements of the selected remedy are as follows:

1. Preparation of a Community Protection Statement and Performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Establishment of Unrestricted Use Track 1 Soil Cleanup Objectives (SCOs) within the footprint of the proposed building, and site specific Track 4 SCOs in the remainder of the property.
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 Track 1 SCOs within the footprint of the proposed building, and site specific Track 4 SCOs in the remainder of the property. Footprint of new building will be excavated to the depths of more than 11 feet and remainder of site will be excavated to the depths of two feet.
6. Implementation of dewatering methods during excavation due to penetration into groundwater.
7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.
8. Removal of underground storage tanks (if encountered) and closure of petroleum spills (if evidence of a spill/leak is encountered during Site excavation) 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. Collection and analysis of six (6) end-point samples to determine the performance of the remedy with respect to attainment of SCOs. Samples will be analyzed for contaminants of concern (VOCs, SVOCs, and Metals). These end point samples are in addition to endpoint sample requirements by NYSDEC Spills program.
11. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
12. Installation of a vapor barrier and waterproofing beneath the building slab and behind the foundation walls of the proposed building. A 46-millimeter vapor barrier will be installed beneath the structure's slab and along foundation sidewalls. The barrier chosen for this project is manufactured by Grace Construction Products, the Preprufe 300R vapor barrier.
13. Installation of a passive sub-slab depressurization system beneath the building slab.
14. Demarcation of residual soil/fill.

15. Construction and maintenance of an engineered composite cover consisting of 5-inch thick structural concrete slab beneath the building and 2 feet of imported backfill material in the eastern portion of the site to prevent human exposure to residual soil/fill remaining under the Site.
16. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
17. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.
18. 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 describes all Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP.
19. 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.
20. Continued registration of the property with an E-Designation; establishment of Engineering Controls and Institutional Controls in this RAWP; 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 is relevant and appropriate and takes into consideration OER guidance, as appropriate. The remedy is protective of public health and the environment.

April 1, 2014



Date

Shaminder Chawla
Deputy Director

SITE BACKGROUND

Location:

The Site is located at 501 Leonard Street in the Greenpoint section of Brooklyn, New York and is identified as Block 2697 and Lot 7 on the New York City Tax Map. Figure 1 shows the Site location.

Site Features:

The Site is 8,800-square feet and is bounded by Leonard Street to the east, Manhattan Avenue to the west, an eight-story residential building to the north, and a six-story residential building to the south. Currently, the Site is used for Auto Repair and Auto Body purposes and contains a single story brick building, with a partial basement in the northeast corner.

Current Zoning/uses:

The current zoning designation is M1-2/R6, for mixed high performance light manufacturing and residential. Therefore, the proposed use is consistent with the new zoning for the property.

Historical Use:

The Subject Property has been used for commercial purposes since construction circa 1931. Former occupants have included a 'Furniture Assembling and Finishing' facility, a 'service station', and an outdoor drive-in movie theatre. The southern section of the building had most recently been occupied by a motorcycle fabrication company. The northern portion of the building is currently occupied by an auto repair and auto body shop.

Summary of Environmental Findings:

1. Elevation of the property is fifteen feet.
2. Depth to groundwater ranges from 8.4' to 9.5' feet at the Site.
3. Groundwater flow is generally from south-southwest to north-northeast beneath the Site.
4. Depth to bedrock is approximately 100 feet at the Site.
5. The known stratigraphy in the area of the site is considered to be ~6 feet of urban fill, followed by fine silty sand up to 12 feet and fine to medium grained sands to 32 feet and up to 100 feet of the Upper Glacial Aquifer, which is likely underlain directly by bedrock.

A site location map is attached as Figure 1.

PROPOSED DEVELOPMENT PLAN

The Site will be developed with a 3,753 square-foot, mixed-use, residential building, with two commercial units and parking garage on the first floor, and a basement for storage and mechanical housing. The footprint of the proposed building will have a basement. Excavation will extend to an approximate depth of 11' 6" below the current grade within the footprint of the building, 16' in the location of the elevator pit. Other areas of the property outside of the building footprint will be excavated 2' below the current grade and will be paved with concrete. Front paved area will have planters. There are no landscaped areas.

The remedial action contemplated under this RAWP may be implemented independently of the proposed redevelopment plan.

SUMMARY OF REMEDIAL INVESTIGATION

The Remedial Investigation was conducted on between December 2012 and March 2013. A full Remedial Investigation Report is available online in the document repository and the results are summarized below.

Nature and Extent of Contamination:

Soil:

Soil/fill samples collected during the RI showed volatile organic compounds (VOCs) including 1,2-dichloroethane (max. of 0.028 ppm), 1,4-dioxane (max. of 0.15 ppm), acetone (max. of 0.085 ppm), and vinyl chloride (max. of 0.028 ppm) were detected at concentrations slightly exceeding the NYSDEC Part 375 Unrestricted Use (Track 1) Soil Cleanup Objectives (SCO). Trace levels of chlorinated solvents (PCE, TCE, TCA or Carbon Tetrachloride) were also detected in the samples collected from the Site. Several Semi-Volatile Organic Compounds (SVOCs) including 1,2-dichlorobenzene (max. of 3.16 ppm), 1,4-dichlorobenzene (max. of 2.97 ppm), 2-methylphenol (max. of 1.83 ppm), benzo(a)anthracene (max of 13.9 ppm), benzo(b)fluoranthene (max of 12 ppm), benzo(k)fluoranthene (max of 11.8 ppm), dibenzo(a,h)anthracene (max of 4.13 ppm), hexachlorobenzene (max of 2.85 ppm), and indeno(1,2,3-cd)pyrene (max 9.96 ppm), chrysene (max of 14.3 ppm), pentachlorophenol (max of 3.64 ppm), and phenol (max of 2.09 ppm) exceeded their respective NYSDEC Track 1 Soil Cleanup Objectives, and of these benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, hexachlorobenzene, and indeno(1,2,3-cd)pyrene also exceeded their respective Track 2 Restricted Residential SCOs. Metals including arsenic (max. of 24.5 ppm), cadmium (5.59 ppm), copper (max. of 887 ppm), lead (maximum of 5,790 ppm), selenium (maximum of 11.3 ppm) and silver exceeded Track 1 SCOs and, of these arsenic, cadmium, copper and lead also exceeded Track 2 Restricted Residential SCOs.

Groundwater:

Groundwater samples collected during the RI showed that pesticides and PCBs were not detected in any groundwater sample. Groundwater samples collected during the RI showed several VOCs at concentrations exceeding the New York State 6NYCRR Part 703.5 Class GA groundwater standards (GQS). These included; 1,1,2-trichloroethane, 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane, cis-1,3-dichloropropylene, hexachlorobutadiene, and trans-1,3-dichloropropylene. Several SVOCs and metals including arsenic (32 ppb), magnesium, manganese, and selenium were detected at levels exceeding their respective GQS.

Soil vapor:

Soil vapor samples collected during the RI showed a wide variety of VOCs at low concentrations, consisting mainly of benzene, toluene, ethyl-benzene, xylenes (BTEX) and associated compounds at concentrations generally below 49 µg/m³. Chlorinated VOCs were detected at trace levels. PCE was detected at a maximum concentration of 7 µg/m³ in one of five samples. TCA, TCE and vinyl chloride were not detected in any sample.

Figure 1: Site Location Map

