



**OFFICE OF ENVIRONMENTAL REMEDIATION**

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October 17, 2012

Ira Lichtiger  
Bluestone Jamaica I, LLC  
193-04 Horace Harding Expressway  
Fresh Meadows, NY 11365

Ernie Rossano  
ERM Consulting & Engineering, Inc.  
40 Marcus Drive, Suite 200  
Melville, NY 11747

Re: **NYC VCP Remedial Action Work Plan Approval**  
**161st Street Development Bluestone**  
**Block 9757, Lot 18**  
**VCP Project # 13CVCP085Q**

Dear Mr. Lichtiger and Mr. Rossano:

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 161st Street Bluestone Development, VCP Project # 13CVCP085Q, dated October 8, 2012. 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 October 4, 2012. There were no public comments.

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 “161st Street Bluestone Development” 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](http://www.nyc.gov/oer).

The New York City Office of Environmental Remediation (the Office or OER), in consultation with the

New York City Department of Health and Mental Hygiene (DOHMH), 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 161st Street Bluestone Development site and the public's input to the proposed remedy presented by the Office.

### **Description of Selected Remedy**

The remedy selected for this 161st Street Bluestone Development Site is Track 1 remedy and includes soil excavation, as well as installation of a cover system, vapor barrier, and sub-grade ventilated parking garage.

The elements of the selected remedy are as follows:

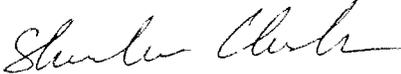
1. Preparation of a Community Protection Statement and performance of all required NYC VCP citizen participation activities according to an approved Citizen Participation Plan;
2. Performance of a Community Air Monitoring Program for particulates and volatile organic compounds;
3. Establishment of Track 1 Soil Cleanup Objectives (SCOs);
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking and staking excavation areas;
5. Excavation and removal of soil/fill exceeding SCOs.
6. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of excavated media onsite;
7. 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;
8. 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;
9. Collection and analysis of end-point samples to determine the performance of the remedy with respect to attainment of SCOs;
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 and along accessible foundation walls (anticipated to the 160th and 161st Street sides of the building), as part of new construction;
12. Installation of a sub-grade ventilation system, as part of building construction;
13. Capping of entire Site with a 6-inch concrete building slab (except for two small landscaped areas totaling approximately 140 square feet);
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 pre-treatment 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. If Track 1 is not achieved, 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; and
18. If Track 1 is not achieved, recording of a Declaration of Covenants and Restrictions that includes a 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 is relevant and appropriate and takes into consideration OER guidance, as appropriate. The remedy is protective of public health and the environment.

10/17/12  
Date

  
Shaminder Chawla  
Assistant Director

## **SITE BACKGROUND**

### **Location:**

The Site is located at 90-14 161<sup>st</sup> Street in Queens, New York and is identified as Block 9757, Lot 18 on the New York City Tax Map. Figure 1 shows the Site location.

### **Site Features:**

The Site is 18,386-square feet and is bounded by 90-04 160 Street, an eight-story commercial building to the north, 90-18 161 Street, a two-story commercial building to the south, 161st Street to the east, and 160th Street to the west. Currently, the Site is vacant undeveloped land and contains no permanent structures or other pertinent Site features.

### **Current Zoning/uses:**

The current zoning designation is C4-5X, mixed residential and commercial buildings. The proposed use is consistent with existing zoning for the property.

### **Historical Use:**

Currently, the Site is vacant undeveloped land and contains no permanent structures or other pertinent Site features.

Historic uses include:

- Prior to early 1920s: residential dwellings and the Chub Club
- Circa 1925 until the 1960s: stores and residential dwellings.
- Mid-1960s until the present: stores, offices, and parking areas.

### **Summary of Environmental Findings:**

1. Elevation of the property is approximately 61 feet.
2. Depth to groundwater ranges from 42 to 46 feet at the Site.
3. Groundwater flow is generally southwest 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 12 to 15 feet of historic fill material underlain by a native brown silty sand.

A site location map is attached as Figure 1.

## **PROPOSED DEVELOPMENT PLAN**

The proposed redevelopment plan and end use of the property is a combination of affordable rental housing, commercial, and retail space. Under current redevelopment plans, two nine-story towers will be constructed with 101 rental residential dwelling units, approximately 5,773 square feet of commercial space, approximately 4,063 square feet of retail space on the ground floor, and a sub-grade garage with 39 parking spaces. The sub-grade parking area is expected to be 12 feet in height. A total of 51 parking spaces, including 12 located at grade, will be available on the site post construction. Bluestone Jamaica I, LLC plans to excavate approximately 13 feet across the entire site, and down to approximately 16 feet for footings and elevator pits at required locations. Excavations and footings will not be located beneath the groundwater table at the Site. In addition, no proposed demolition activities are planned during the proposed redevelopment at the Site.

## **SUMMARY OF REMEDIAL INVESTIGATION**

The Remedial Investigation was conducted in June 2008 and June 2012. 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 no PCBs at detectable concentrations and no pesticides above Track 1 Unrestricted Use SCOs. No VOCs were detected above Track 1 Unrestricted Use SCOs, as only trace levels (less than 20 ppb) of acetone, naphthalene, and trimethylbenzene were detected. Six SVOCs, all Polycyclic Aromatic Hydrocarbons (PAHs) compounds, were detected at concentrations above their Track 2 Restricted Residential SCOs in one shallow sample (total SVOC concentration of approximately 269 ppm). Four metals (copper, mercury, lead and zinc) exceeded UUSCOs in shallow soil samples, and of these, lead (max 460 mg/kg) and mercury (max 0.84 mg/kg), also exceeded their Track 2 Restricted Residential SCOs. No VOCs, SVOCs, pesticides, PCBs, or metals were detected above Unrestricted Use SCOs within any of the deep soil samples collected at the Site. Overall the findings were consistent with observations of historical fill.

Groundwater: No PCBs were detected in any of the groundwater samples collected at the Site, and no pesticides or VOCs were detected above their respective Groundwater Quality Standards (GQSs). The only VOCs detected were PCE (max of 3.5 ug/L) in 2 samples and naphthalene (1.1 ug/L) in 1 sample. No chlorinated VOCs were identified in any of the soil samples collected on Site. PAH SVOCs (chrysene and pyrene) were found above their respective GQSs in one groundwater sample collected in 2008, but both samples collected in 2012 showed no detections of SVOCs in groundwater suggesting that the earlier findings are linked with a turbid sample rather than on-Site conditions. The dissolved metals manganese and sodium were detected above their GQSs. The RI indicates that groundwater is not impacted by site conditions and did not reveal any sources of contaminants on-site.

Soil vapor: Soil vapor samples collected during the RI detected trace to low concentrations of chlorinated and petroleum-related VOCs. Tetrachloroethene (PCE) was identified in all four samples at a maximum concentration of 111 µg/m<sup>3</sup>, which falls within the monitoring level range of the State DOH soil vapor guidance matrix. Trichloroethene (TCE) was not detected in soil vapor. Neither PCE nor TCE were detected within any of the soil samples collected at the Site, and these low levels and the Site's history suggest a possible off-site origin.

Figure 1: Site Map

