



HydroTech Environmental

ENGINEERING AND GEOLOGY, DPC

NYC Office
15 Ocean Avenue, Suite 2B
Brooklyn, New York 11225
T (718) 636-0800 ; F (718) 636-0900

Long Island Office
77 Arkay Drive, Suite K
Hauppauge, New York 11788
T (631) 462-5866 ; F (631) 462-5877

WWW.HYDROTECHENVIRONMENTAL.COM

Project Name: 856 East 213th Street, Bronx, NY

Project Number: 12EHA311X

Site Management Reporting Period: July 2018 to July 2019

Inspection Date: October 16, 2019

Inspector: Anusha Agnoor

Certifier: Mark Robbins, PG

Report Submittal Date: October 30, 2019

Report Preparer: HydroTech Environmental Engineering and Geology, DPC on behalf of 856 East 213th Associates, LLC

Site Inspection and Certification Letter Report

HydroTech Environmental Engineering and Geology, DPC (HydroTech) hereby submits a Site Management Inspection and Certification Report for the property located at 856 East 213th Street in Williamsbridge/Baychester section of Bronx, New York for the reporting period, July 2018 to July 2019, pursuant to the Site Management Plan (SMP) that is included in the OER-approved Remedial Action Report (RAR) that was prepared by DT Consulting Services, Inc. and dated February 2016. The Site is identified as Block 4671 and Lot 64 on the New York City Tax Map.

1.0 ENGINEERING CONTROLS

Engineering Controls were employed in the Remedial Action to assure permanent protection of public health by eliminating human exposure to residual materials remaining at the site. The Site has three (3) Engineering Control Systems. Engineering Controls for this property are:

- (i) Composite Cover System
- (ii) Soil Vapor Barrier System
- (iii) Active Sub-Slab Depressurization System

Composite Cover System

Exposure to residual soil/fill is prevented by an engineered Composite Cover System that has been built on the Site. This Composite Cover System is comprised of 4 inches of concrete slab and 4-inch asphalt cap for the parking and recreation area. The contractor for construction of the Composite Cover System was BE Bronx Builders.

Vapor Barrier System

As per the RAR, exposure to soil vapor is prevented by a Vapor Barrier System that has been built on the Site. According to the contractor for construction, the Vapor Barrier System was installed utilizing a Polyguard 650 Membrane consisting of a 4-mil cross-laminated, high density polyethylene (HDPE) backing, bonded to 56 mils of rubberized asphalt waterproofing compound. The liner was protected by a geo-textile non-woven fabric (8 oz. /sq. yd.) on both sides to prevent tears and the entire assembly. Utility penetrations were sealed by installing 20 mil vapor barrier material over the penetration. The base was then taped to the membrane using the vapor bond tape, approved and supplied by the manufacturer, to secure the vapor barrier material to the penetration. All Polyguard products were installed as per the manufacturer installation specifications. No unforeseen problems occurred during the vapor barrier installation. The contractor for construction of the Vapor Barrier System was BE Bronx Builders.

Active Sub-Slab Depressurization System

As per the RAR, exposure to soil vapor is further prevented by an active Sub-Slab Depressurization System (SSDS) that has been built on the Site. This active SSDS consists of two closed loops utilizing fabric wrapped schedule 40 perforated PVC pipes aligned horizontally beneath the building slab in a 6-inch bed of ¾-inch bluestone and attached to a common lateral and then vertical pipes that traverse the building slab, with vapors conveyed via a chase and vented above the roof of the building. A Radon Away RP Series 380 vacuum blower was installed inline on the roof level and a manometer was installed in an accessible area in the basement to enable measurement of the vacuum pressure established by the system. The active SSDS was designed by Mohammad R. Badaly. The contractor for construction of the active SSDS was BE Bronx Builders.

2.0 INSTITUTIONAL CONTROLS

A series of Institutional Controls are required under the Remedial Action to assure permanent protection of public health by eliminating human exposure to residual materials remaining at the site. The Institutional Controls for the Remedial Action are:

- (1) The property will continue to be registered with an E-Designation by the NYC Department of Buildings. Property owner and property owner's successors and assigns are required to comply with the approved SMP;
- (2) Compliance with an OER-approved Site Management Plan including procedures for appropriate operation, maintenance, inspection, and certification of performance of EC's and IC's. The property owner and property owner's successors and assigns will inspect EC's and IC's and submit to OER a written certification that evaluates their performance in a manner and at a frequency to be determined by OER;
- (3) Engineering Controls will not be discontinued without prior OER approval;
- (4) OER has the right to enter the Site upon notice for the purpose of evaluating the performance of EC's and IC's;
- (5) Vegetable gardens and farming in residual soil/fill on the Site are prohibited;
- (6) Use of groundwater underlying the Site without treatment rendering it safe for its intended use is prohibited;
- (7) All future activities on the Site that will disturb residual soil/fill must be conducted pursuant to the Soil/Materials Management provisions of the SMP, or otherwise approved by OER;
- (8) The Site is intended to be used for restricted residential use and will not be used for a higher level of use without prior approval by OER.

3.0 INSPECTION NARRATIVE

The annual site inspection for reporting period July 2018 to July 2019 was performed by Ms. Anusha Agnoor of HydroTech Environmental Engineering and Geology, DPC on October 16, 2019.

All accessible portions of the composite cover system were visually inspected during the site inspection. The composite cover system appears to be in sound condition. No cracks were observed in the concrete slab.

Visual inspection of the active SSDS indicates the blower on the roof level is working properly. The alarm was noted to be plugged in and operational upon arrival appeared to be in working condition. The magnehelic gauge was reading pressure of 1-inch H₂O. The results of the initial inspection were communicated to the client and their building management team.

Based upon the site inspection, the ECs present appear to be in sound condition and functioning properly. The Site is protective to human health and the environmental. Based upon the site inspection, the ECs present appear to be in sound condition and functioning properly. The Site is protective to human health and the environmental. **Attachment #1** provides photographs of inspected building slabs and active SSDS system. **Attachment #2** provides the annual inspection checklist.

4.0 STATUS OF ENGINEERING AND INSTITUTIONAL CONTROLS

- Are the Engineering Controls and Institutional Controls employed at the Site continuing to perform as designed and continuing to be protective of human health and the environment?

Response: Yes

- Has anything occurred that impairs the ability of the Engineering Controls or Institutional Controls to protect public health and the environment?

Response: No

- Are any changes needed to the remedial systems or controls?

Response: No

- Has compliance with this SMP been maintained during this reporting period?

Response: No, monthly inspections were not completed, and client has been informed about the monthly inspections to be in compliance with the SMP.

- Are site records complete and up to date?

Response: No, monthly reports are not available. A monthly checklist along with instructions for preparation has been provided to the client.

5.0 DEVIATIONS IN PERFORMANCE OF ENGINEERING AND INSTITUTIONAL CONTROLS

No deviations in the performance of Engineering and Institutional Controls as described in the SMP were noted or anticipated during the current inspections of Site remedies in association with the vapor barrier or composite cover.

6.0 NEXT INSPECTION


As per the SMP, the next Site Management Inspection will be performed in July 2022, and the Site Inspection and Certification Letter Report will be submitted by July 31, 2022.

7.0 CERTIFICATION

I, Mark E. Robbins, certify the following:

- I am a Qualified Environmental Professional;
- The annual inspection at 856 East 213th Street, site number 12CVCP061X was performed on October 16, 2019 under my direct supervision;
- I prepared this Site Inspection and Certification Letter Report;
- Engineering Controls or Institutional Controls employed at the Site continue to be in place and perform as designed and continue to be protective of human health and the environment;
- There was no disturbance of residual soil/fill;
- Site records are complete and up to date;
- No changes are needed to the remedial systems or engineering controls;
- Compliance with the Site Management Plan has been maintained;
- Vegetable gardening and farming in residual soils has been prevented;
- Groundwater underlying the Site is not being utilized without treatment rendering it safe for the intended purpose has been prevented;
- The Site has not been used for a higher level of use other than the restricted residential use addressed by the Remedial Action;
- The Site continues to be registered as an E-Designated property by the NYC Department of Buildings;

QEP Name: Mark E. Robbins

X 

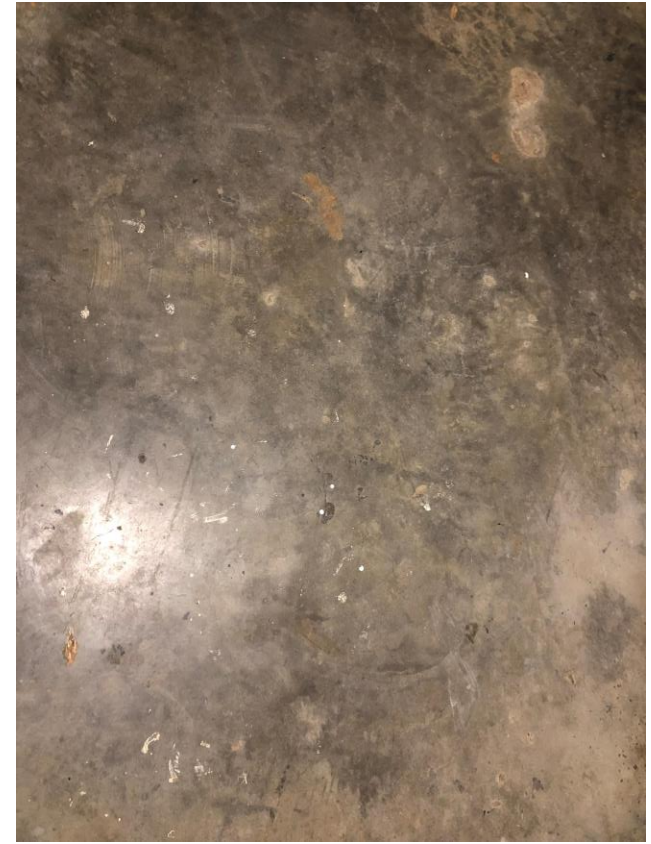
QEP Signature

Date 10/30/2019

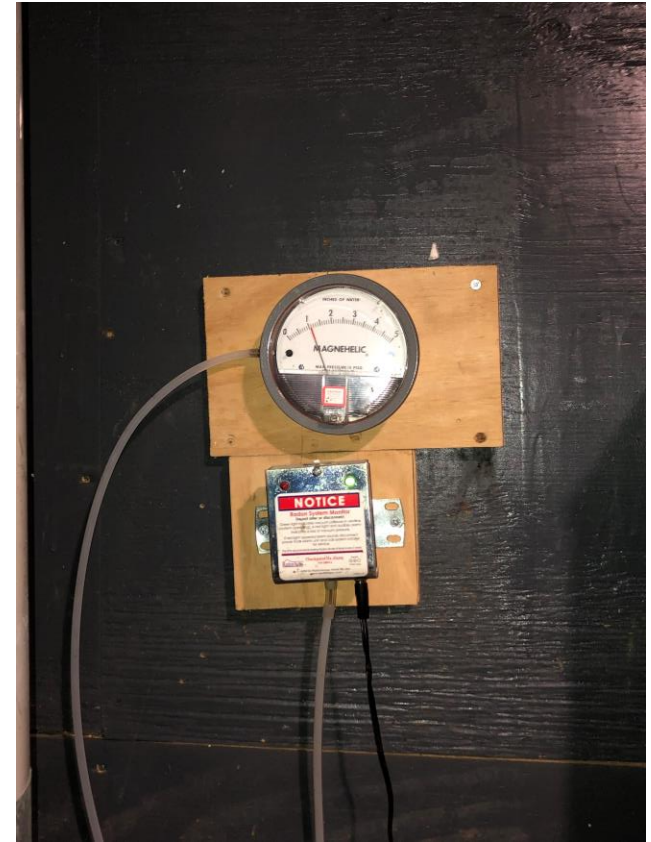
Attachment 1:
Photos



Subject Property



Composite Cover



Active SSDS System



Vacuum Blower in Roof

Attachment 2:
Annual Inspection Checklist

Annual Insepection Form for 856 East 213th Street, Bronx, New York

1. Review of the current remedy

Identify the current remedy:

Vapor Barrier

Cover Slab

SSDS

How many SSDS Systems are used (if applicable)? 1 active SPS

2. Review of the current remedy goals

What schedule has been established for monitoring each system in O&M?

Monthly - Building staff, yearly - Engineering

B. Remedy Performance Assessment

1. Evaluate remedy effectiveness:

Based on information collected since the last O&M review, do monitoring data indicate that the system is failing or could eventually fail to meet remedy goals?

Yes

No

Since the last O&M review, have monitoring data exhibited trends indicative of a new or renewed release?

Yes

No

Since the last O&M review, have changes in land and/or ground water use been suggested and or implemented that have the potential to reduce the protectiveness of the SSDS remedy?

Yes

No

Since the last O&M review, have contaminants been identified in new locations or at higher concentrations where they pose or have the potential to pose unacceptable risks to receptors?

Yes

No

If you answered yes to any of the above questions, did the information suggest the need for immediate action or is the condition being monitored to evaluate the need for future action? Use this space to comment. What actions, if any, have been taken and/or are planned in response to the new information?

Immediate Action

Monitor for future

N/A

Based on your answers to the above questions, is there reason to evaluate the need for a contingent remedy at this time? If yes, use this space to comment.

Yes

No

Blowers and Piping

Since the last O&M review for this system, has evidence of excessive corrosion of system components been observed?

Yes

No

If yes, what actions have been taken and/or are planned in response?

Since the last O&M review, have blower operational characteristics, such as flow rate, pressure, and discharge temperatures, been consistently within equipment design parameters?

Yes

No

If no, what actions have been taken and/or are planned in response?

Since the last O&M review, if water is manually removed from the extraction blower water separator, has water accumulation been observed that could adversely impact blower operation?

Yes

No

N/A

If yes, what actions have been taken and/or are planned in response?

Since the last O&M review, have all blowers, water separators, valves, and piping components been consistently operational?

Yes

No

SSDS	
PID Level efficient	0.0 PPM
Vacuum Reading	1 Inch H2O
Alarm Condition	<input checked="" type="checkbox"/> Function <input type="checkbox"/> Damage
<p>Was the Subslab Depressurization System (SSDS) operating upon arrival?</p> <p>If "No," explain below why the system was not running, efforts taken to restart the SSDS and if the system was operational when leaving. If successful in making the SSDS operational, complete the remainder of the checklist.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>If measured, were all subslab probe vacuum readings greater than 0.004 inches of water?</p> <p>If "Yes," the SSDS is deemed still effective and the vacuum readings taken during this inspection are now the new baseline readings.</p> <p>If "No," system must be adjusted/amended and the SSDS re-commissioned Discuss adjustments and amendments below:</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>List below all pertinent observations and actions taken during this Inspection: i.e., sagging/damaged pipes, construction changes to building that may affect the system, pipe leaks that may need smoke test, is building still vacant, has occupancy zoning changed (i.e. commercial to residential), are non-SSDS engineered systems still functioning as designed etc. Add additional pages as needed.</p>	
Vapor Barrier	
Did you observe breaking of slab cover, what portion? Any of evidence of Vapor Barrier needs to be alter?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If yes, does the Vapor Barrier appear to be puncture?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, describe action needed to repair the alter cover system.	
Cover System	
Did you observe breaking of slab cover or top soil?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes describe the level of alteration needed for repairs and remedies?	

PERIODIC COMPLIANCE INSPECTION FORM

PERIODIC COMPLIANCE INSPECTION FORM
I. GENERAL INFORMATION

Name of Inspector:	Anusha Agasthi	Inspection Date:	10/16/2019
Construction Completion Date:		Date of Last Periodic Compliance Inspection:	N/A
Site Name:	856 East 213th St, Bronx NY	Site ID	12CRCP061x
Site Address: (attach map)		County:	Bronx
Name and Address Current Property Owner(s):			
Name of Site Contact:	Javier Moron / Julio	Telephone Number:	203-609-5527
Address:	Step Group - PO Box 9, Purchase, NY - 10577		
Operators Name: (if applicable)	N/A	Telephone Number:	N/A
Persons Present During Inspection include Affiliations:			