

Project Name: 33-01 38th Avenue, Long Island City, NY 11101

Project Number: 12EHAZ013Q

Site Management Reporting Period: July 2018 – September 2020

Inspection Date: November 27, 2019; September 14, 2020

Inspector and Certifier: Evan Greenberg, EIT and Spiro Dongaris, PE

Report Submittal Date: November 4, 2020

Report Preparer: Athenica Environmental Services, on behalf of 38th Avenue Partners LLC.

Site Inspection and Certification Letter Report

38th Avenue Partners LLC hereby submits a Site Management Inspection and Certification Report for the property located at 33-01 38th Avenue in the Long Island City section of Queens, New York for the reporting period, 2018 to 2020, pursuant to the Site Management Plan (SMP) that is included in the OER approved Hazardous Materials Remedial Closure Report (RCR), dated July 2018. The Site is identified as Block 375 and Lot 33 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 Engineering Control Systems. The Engineering Controls employed at the Site are:

- (1) Composite Cover System;
- (2) Active Sub-Slab Depressurization, and;
- (3) Vapor Barrier System.

Composite Cover System

Exposure to residual soil/fill is prevented by an engineered, Composite Cover system comprised of:

- Asphalt covered parking lot;
- Existing concrete building slabs (ranging in thickness from 5" to 14");
- New concrete building slab in all areas where renovations required removing the existing slab (minimum 5" thickness).

In addition, all foundation cracks/voids, utility inlets, drains, etc. were sealed with an industry-standard commercial grade 50-year rated caulking/sealant as a standard construction practice. The Composite Cover system is a permanent engineering control for the Site.

Active Sub-Slab Depressurization System.

An active SSDS was installed beneath the slab on the southern portion of the building. The sub-slab vapor is extracted through two depressurization pits connected together by a 4-inch cast iron pipe lateral. The lateral runs eastward and connects to the riser. The SSDS fan is connected to the riser and penetrates the roof. A pressure gauge and vacuum alarm are installed and mounted on the wall by the fan. The alarm

will signal when there is inadequate sub-slab vacuum ($< 0.25''$ water column [wc]) with a visual and audible alarm.

Vapor Barrier System

The vapor barrier membrane was installed in the northeast portion of the building. The barrier consisted of VaporBlock® Plus™ and had a thickness of 20-mil. It was installed on top of the existing slab and beneath the new finishing slab to mitigate potential vapor exposure pathways.

Fleming Lee Shue (FLS) designed the engineering controls and provided oversight during the installation of the engineering controls.

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) A deed restriction was placed on the property to document the installation, and continued operation, of an active SSDS. The deed restriction can be removed if OER determines that the active SSDS has achieved its goals and is no longer warranted.
- (2) 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;
- (3) Compliance with an OER-approved Site Management Plan including procedures for appropriate operation, maintenance, inspection, and certification of performance of ECs and ICs. The property owner and property owner's successors and assigns will inspect ECs and ICs and submit to OER a written certification that evaluates their performance in a manner and at a frequency to be determined by OER;
- (4) Engineering Controls will not be discontinued without prior OER approval;
- (5) OER has the right to enter the Site upon notice for the purpose of evaluating the performance of ECs and ICs;
- (6) Use of groundwater underlying the Site without treatment rendering it safe for its intended use is prohibited.

3.0 INSPECTION NARRATIVE

The site inspection was performed by Evan Greenberg, E.I.T., and Spiro Dongaris, P.E. of Athenica Environmental Services. The date of the initial inspection was November 27, 2019.

During the inspection, Athenica performed visual inspection of the protective construction elements. There appeared to be no cracks or chipping in the composite cover or concrete sidewalls. Vapor barrier was not visible due to the presence of the concrete slab and sidewalls.

Athenica inspected the SSDS piping to verify operation. There appeared to be no cracks in any accessible portions of the riser. The blower unit, located in a mechanical room on the penthouse floor, was observed to be offline. On September 10, 2020, Athenica repaired the SSDS by replacing the blower fan and magnehelic gauge. The blower fan selected was an equivalent Radonaway HS5000, as specified in the OER-approved design.

A final inspection was performed on September 14, 2020, after a period of several days to allow vacuum to develop across the Site footprint. During this inspection, the SSDS appeared to be operating correctly, with no observable leaks. The magnehelic gauge, connected to the riser beneath the blower fan, showed a vacuum of -17 inches water column. Additionally, the blower discharge was confirmed to be located at least 10 feet from any air intake or frequently occupied space. The alarm system was briefly tested to ensure the alarm emitted a red light and audible alarm when the vacuum pressure dropped. Vacuum release was simulated by removing the inlet tubing from the alarm. The system remained active during this testing.

During the inspections, Athenica was not able to locate any of the three permanent monitoring points that had been reportedly installed.

Athenica confirmed that the site use has not changed, and the Site is still registered with an “E” designation. Additionally, a deed restriction has been filed, requiring the continued operation of the SSDS.

4.0 STATUS OF ENGINEERING AND INSTITUTIONAL CONTROLS

- The Engineering Controls employed at the Site currently perform as designed and are protective of human health and the environment.
- The active SSDS was initially found to be offline, and now functions correctly following repairs.
- No changes are needed to the remedial systems or controls.
- The Site superintendent has been trained to perform monthly inspections and maintain records moving forward.
- Vegetable gardening and farming in residual soils has been prevented.
- Groundwater underlying the Site is not being utilized.
- No activities on-Site have disturbed soil/fill material in accordance with the SMMP.
- The Site has not been used for a higher level of use other than the restricted use addressed by the Remedial Action.
- The Site continues to be registered as an E-Designated property by the NYC Department of Buildings.

5.0 DEVIATIONS IN PERFORMANCE OF ENGINEERING AND INSTITUTIONAL CONTROLS

The SSDS did not function for an unspecified period of time. The system has been repaired in accordance with the OER-approved design, and is now operational.

6.0 NEXT INSPECTION

The next Site Management Inspection will be performed in 2021, and the Site Inspection and Certification Letter Report will be submitted by July 30, 2021.

7.0 CERTIFICATION

I, Spiro Dongaris, P.E. certify the following:

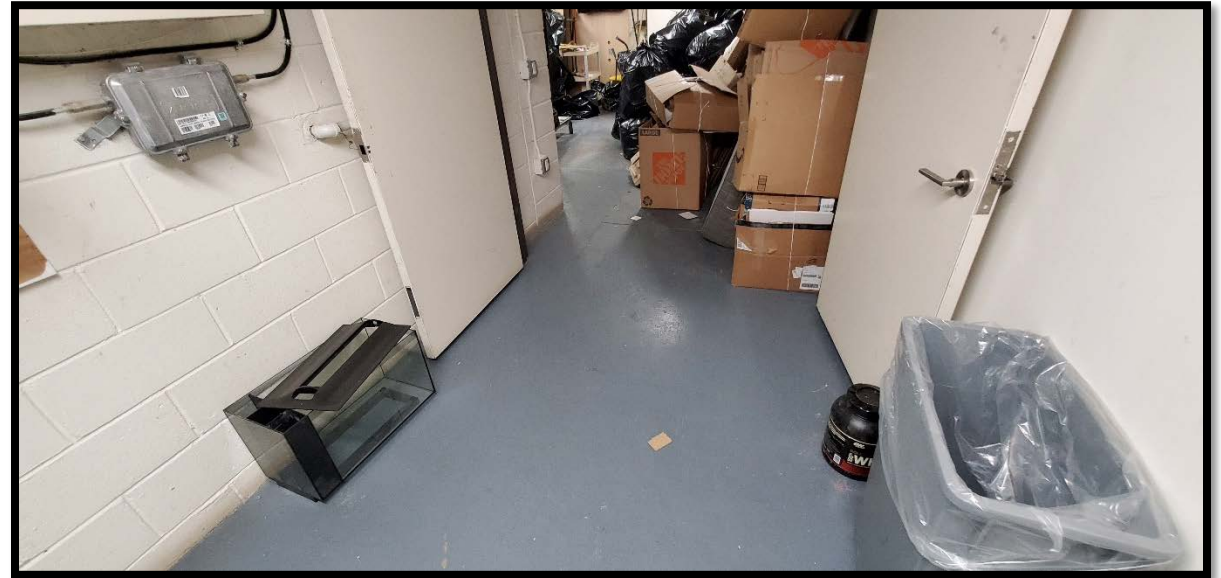
- I am a Professional Engineer;
- I inspected 33-01 38th Avenue, Long Island City, site, site number 12EHAZ013Q on November 27, 2019 and September 14, 2020;
- I prepared this Site Inspection and Certification Letter Report;
- Engineering Controls or Institutional Controls employed at the Site are in place and perform as designed and are protective of human health and the environment;
- Activities on the Site that have disturbed residual soil/fill material have been in accordance with the Soil/Materials Management Plan in the SMP;
- No changes are needed to the remedial systems or engineering controls;
- The Site is now in compliance with the Site Management Plan;
- The building owner and superintendent have been trained and informed of their duty to perform monthly inspections;
- The Site continues to be registered as an E-Designated property by the NYC Department of Buildings;
- A Deed Restriction has been placed on the property to document the continued operation of an active SSDS. The deed restriction can be removed if OER determines that the active SSDS has achieved its goals and is no longer warranted;
- Engineering Controls have not been discontinued without prior OER approval;
- OER has the right to enter the Site upon notice for the purpose of evaluating the performance of EC's and IC's.

Spiro I. Dongaris
PE Name

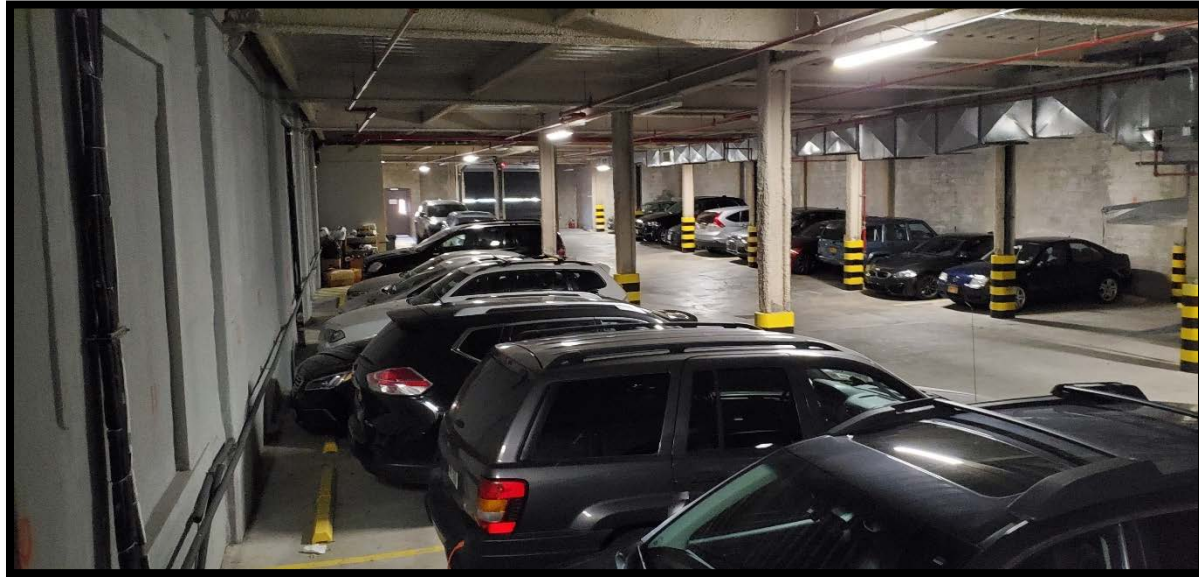
PE Signature
Date



View of the SSDS
discharge on the roof.



View of the cellar slab.



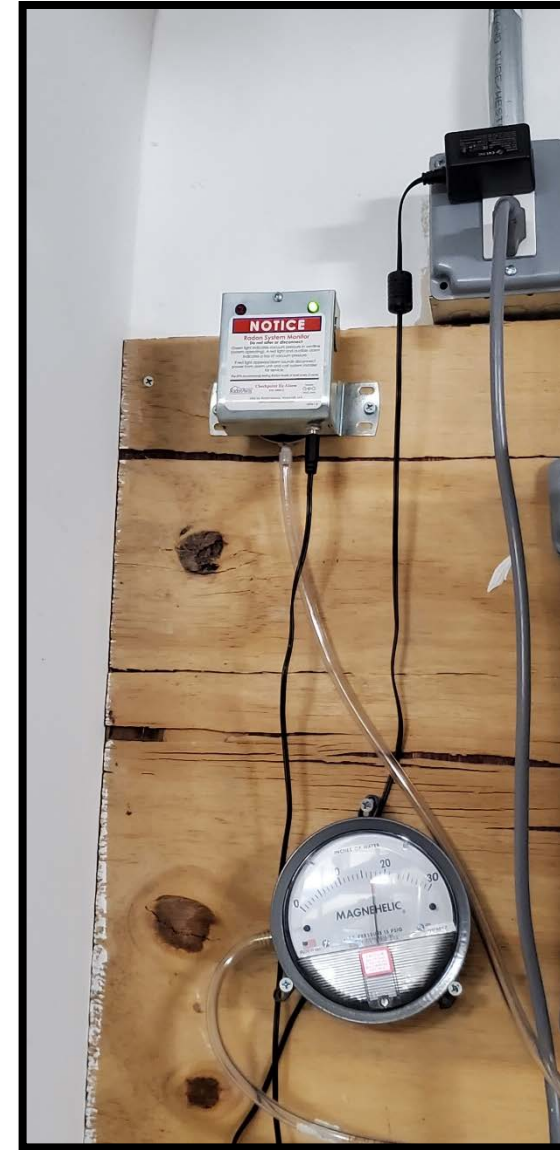
View of the parking garage.



View of the SSDS riser pipe.



View of the SSDS blower fan.



View of the SSDS
magnehelic gauge and
alarm system.