

Project Name: 235-237 Kent Avenue, Brooklyn, NY
Project Number: 14TMP0314K, 14EHAZ314K
Site Management Reporting Period: 2022-2023
Inspection Date: July 14 and August 15, 2023
Inspector and Certifier: Patrick Recio
Report Submittal Date: August 30, 2023
Report Preparer: Brussee Environmental Corp on behalf of DAX Real Estate

Site Inspection and Certification Letter Report

DAX Real Estate hereby submits a Site Management Inspection and Certification Report for the property located at 235-237 Kent Avenue in the Williamsburg of Brooklyn, New York for the reporting period, 2022-2023, pursuant to the Site Management Plan (SMP) that is included in the OER approved Remedial Action Report (RAR), dated September 2015. The Site is identified as Block 2378 and Lots 1 & 2 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. Engineering Controls for this property are:

- Soil Vapor Barrier System;
- Composite Cover System; and
- 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. The Composite Cover System consists of the following:

- 6-inch thick concrete cellar slab underlain by the 20 mil vapor barrier and SSDS piping within a 4 inch layer of virgin-mined 1" stone subgrade; and
- 4-inch thick concrete slab and 1" stone subgrade within the rear yard.

Vapor Barrier System

Migration of soil vapor is mitigated with a combination of building slab and vapor barrier. A vapor barrier was installed over the SSDS prior to pouring each building's concrete slab. The vapor barrier consists of Raven Industries' VaporBlock Plus 20, which is a seven-layer co-extruded 20 mil vapor barrier made from polyethylene and EVOH resins. The vapor barrier extends throughout the area occupied by the footprint of the cellar. All vapor barrier seams, penetrations, and repairs were sealed utilizing the tape method, in accordance with to the manufacturer's installation instructions. The vapor barrier was installed by the foundation contractor, A&L Construction.

Active/Passive Sub-Slab Depressurization System

Migration of soil vapor is mitigated with an active sub-slab depressurization system. The SSDS installed beneath the basement slab of each building (total of 1,625 sf) consists of a single venting zone (loop) in accordance with USEPA sub-slab depressurization design specifications which recommend a separate vent loop for every 4,000 sf of slab area. The venting zone is constructed of a continuous loop of perforated 4-inch HDPE smooth interior pipe fitted with a filter sock and installed within the 4" layer of virgin mined stone installed below the concrete building slab. Each loop connect to a 6-inch schedule 40 pvc riser pipe that extends to the roof to discharge. A blower (Radonaway model No. RP265) is fitted to the top of each 6-inch PVC discharge pipe at the roof level. The system is hardwired to an electric source. The exhaust from the blowers is located a minimum of 10 feet from windows and ventilation inlets.

A Dwyer 0-5 inches of water manometer and a Radonaway alarm is installed immediately below the SSDS blower within the roof access stairwell. Following initial start up of the active SSDS, an initial vacuum gauge reading using a Portable Digital Manometer was recorded. The system is designed to establish a vacuum of 0.4 inches of water or higher.

The active SSD system is connected to a Dwyer Magnehelic Manometer (Range of 0-2 inches of water) and a Radonaway Checkpoint IIa Radon System Alarm. The alarm and manometer are connected to the cast iron riser pipe and are located within a tamperproof plastic cabinet located against the cellar wall. Exposed riser pipe is labeled as SSDS piping. The active SSDS was installed by A&L Construction.

The P.E. evaluated the effectiveness of the sub-slab depressurization system on October 15, 2015, by collecting to sub-slab vacuum readings. The sub-slab vacuum readings were collected from ½" diameter holes drilled through the concrete slab and vapor barrier. Rigid tubing was inserted into each hole and connected to a Dwyer Series 476A Single Pressure Digital Manometer that reads from -20.0 to +20.0 inches H₂O. One sub-slab vacuum reading was obtained from the front and rear of cellar of both buildings. A minimum vacuum reading of -0.05 inches H₂O was recorded. The vacuum readings obtained below the slab indicate the sub-slab depressurization system operates as designed.

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 with 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) The Site will be used for restricted residential use and will not be used for a higher level of use without prior approval by OER.
- (6) Vegetable gardens and farming in residual soil/fill on the Site are prohibited;
- (7) Use of groundwater underlying the Site without treatment rendering it safe for its intended use is prohibited;
- (8) 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;
- (9) 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 site inspection was performed by Patrick Recio of Brussee Environmental Corp. on July 14, and August 15, 2023.

Composite Cover System

Interior Cellar: The interior cellar consists of the slab covered with tile that extends within the hallways, commercial spaces, and some of the accessory rooms. Exposed slab was within some of the utility rooms.

No significant cracks that required patching/filling were observed. No evidence of recent repairs/replacement was observed.

Rear Courtyard: The rear courtyard consists of concrete pavers. No missing pavers or other damage was observed that required action.

Vapor Barrier System

The vapor barrier installed below the building slab does not appear to have been disturbed as no evidence of slab disturbance was observed during the Site inspection. The building slab was able to be directly observed because there were no floor coverings in the observed spaces.

Active/Passive Sub-Slab Depressurization System

The blowers for the active SSD systems were inspected on July 14, 2023 and found to be operating. The vacuum gauges installed within the building were inspected on August 15, 2023 due to scheduling issues with the commercial spaces at the property. The recorded vacuum readings for the 235 Kent Avenue site was approximately 0.80" of water and the vacuum readings for the 237 Kent Avenue site was approximately 0.90" of water. The alarms were not sounding and the alarm lights were green. Photos showing the vacuum gauge and alarm are attached.

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: Yes, the SSD system appears to have operated continuously during the year. However, the monthly inspection sheets were not completed.
- Are site records complete and up to date?
Response: No, periodic maintenance inspection forms have not been completed..
- Have monthly SSDS inspections been performed, certified on inspection checklists, and maintained on file on site?
Response: No, periodic maintenance inspection forms have not been completed.

5.0 DEVIATIONS in PERFORMANCE of ECs/ICs

Monthly inspection sheets were not provided by the Site's superintendent. Patrick Recio of Brussee Environmental Corp. met with the building superintendent on July 14, 2023, to re-iterate the monthly inspection requirement and to show how the monthly inspection sheets should be completed.

6.0 NEXT INSPECTION

The next Site Management Inspection will be performed in June 2024, and the Site Inspection and Certification Letter Report will be submitted by July 31, 2024.

7.0 CERTIFICATION

I, Patrick Recio, certify the following:

- I am a Qualified Environmental Professional;

- I inspected the 235-237 Kent Avenue, site number 14EHAZ314K on July 14, and August 15, 2023;
- I reviewed 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 (except as noted);
- Site records are complete and up to date (with the exception that periodic inspections of the composite cover were not performed by the building superintendent);
- Nothing has occurred on the Site that impairs the ability of Engineering Controls or
- Institutional Controls to protect public health and the environment;
- No changes are needed to the remedial systems or engineering controls;
- Compliance with the Site Management Plan has been maintained (except as noted);
- 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 – Patrick Recio

A handwritten signature in cursive script, appearing to read "Patrick Recio".

Date – August 30, 2023

PHOTOS

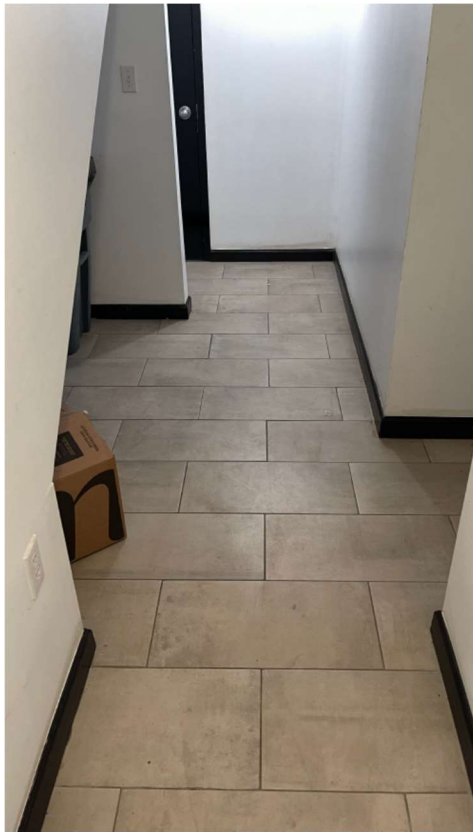


Photo 1 – View of hallway in cellar of 235 Kent Avenue covered with tile.



Photo 2 – Additional view of tile covered slab within the cellar of 235 Kent Avenue.

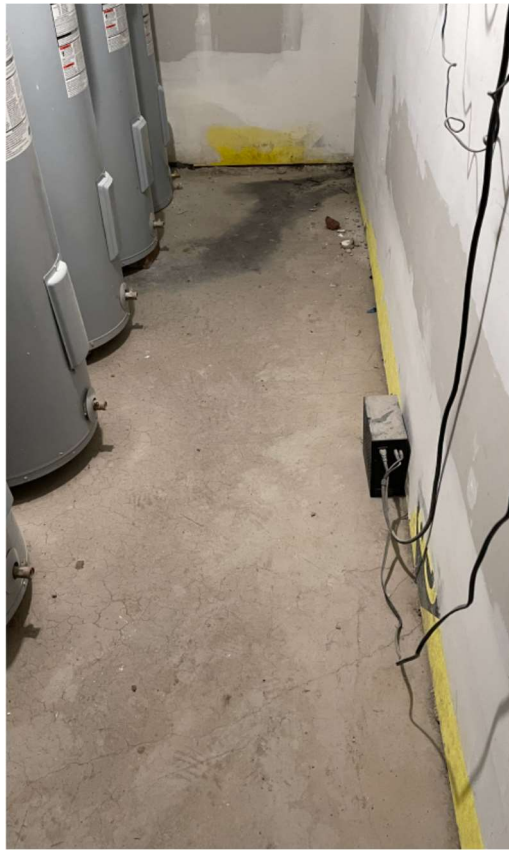


Photo 3 – View of exposed slab within a utility room in the cellar of 235 Kent Avenue.

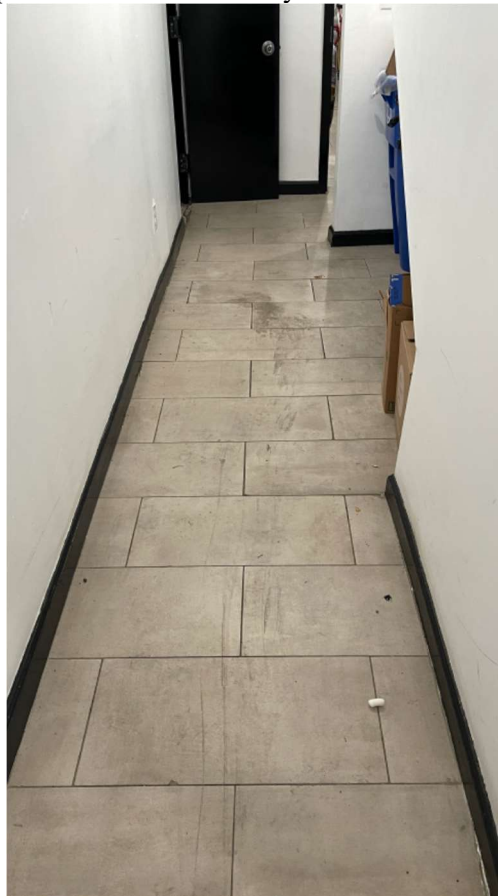


Photo 4 – View of tile covered slab in the hallways of 237 Kent Avenue.

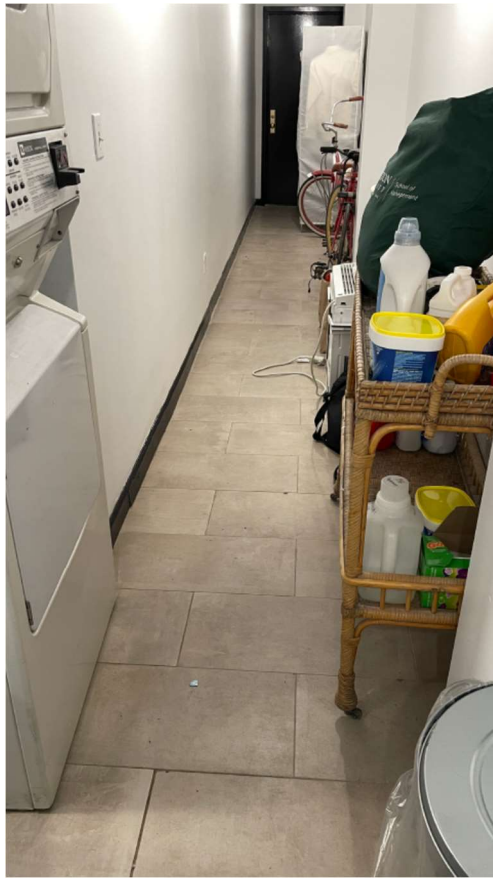


Photo 5 – Additional view of tile covered slab in the hallways of 237 Kent Avenue.

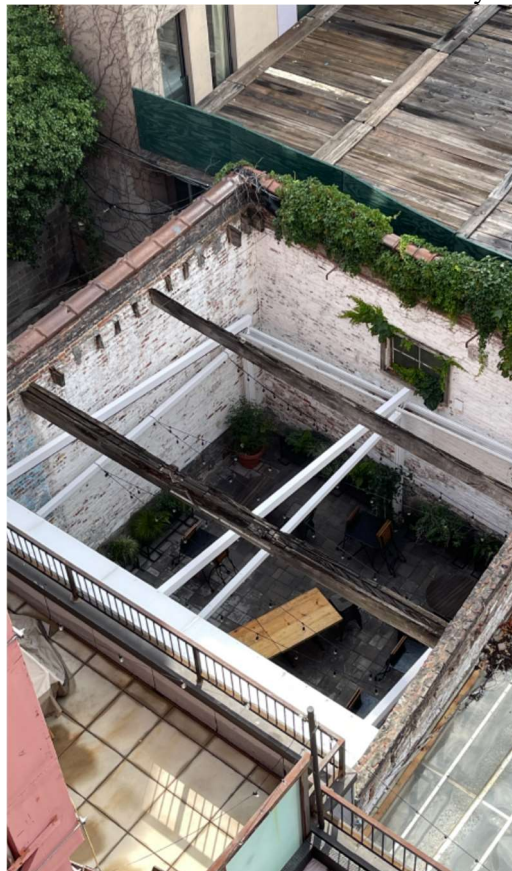


Photo 6 – View of concrete paver capped rear yard.



Photo 7 – View of blowers and risers on the roof of the 235-237 Kent Avenue



Photo 8 – View of manometer and alarm for the 235 Kent Avenue SSDS Loop.



Photo 9 – View of the manometer and the alarm for the 237 Kent Avenue SSDS Loop.

INSPECTION FORMS

SITE INSPECTION CHECKLIST

Site Inspection Checklist
235 Kent Avenue
Brooklyn, NY

Date: 7/14/2023 Time: 11:00AM

Inspector Name/Organization: Patrick Recio / Brussee Environmental Corp

Physical Inspection of Fan

Fan 1 :

yes

no

Fan Model No. Manufacturer:

Operational?

X

Observed Leaks at Seals?

X

Air Flow at Exhaust Stack?

X

Other Comments / Observations

Vacuum Reading: 0.80" - 8/15/2023

Repairs Needed and / or Maintenance at this time?

All components operational and no maintenance or repairs needed at this time

Signature:

Patrice A. Brown

Date:

8/15/2023

SITE INSPECTION CHECKLIST

Site Inspection Checklist
237 Kent Avenue
Brooklyn, NY

Date: 7/14/2023 Time: 1100AM

Inspector Name/Organization: Patrick Recio / Brussee Environmental Corp.

Physical Inspection of Fan

Fan 1 :	yes	no	Fan Model No. Manufacturer:
Operational?	X		
Observed Leaks at Seals?		X	
Air Flow at Exhaust Stack?	X		Other Comments / Observations
Vacuum Reading:	0.90" - 8/15/2023		

Repairs Needed and / or Maintenance at this time?

All components operational and no maintenance or repairs needed at this time

Signature: *[Handwritten Signature]* Date: 8/15/2023

Site Inspection Checklist - Cover System
235 Kent Avenue
Brooklyn, NY

Date: 7/14/2023 Time: 1130AM

Inspector Name/Organization: Patrick Recio / Brussee Environmental Corp.

Visual Inspection of Concrete Slabs

235 Kent Avenue Building

Inspect concrete slab for cracks, perforations and patching

Describe General Condition of Slab

Good

Describe any Cracks or New Penetrations

None

Describe any Patching

None

Exterior Impervious Cap Areas (Rear Courtyard)

Inspect for cracks, perforations and patching

Describe General Condition of Impervious Cap

Good

Describe any Cracks or New Penetrations

None

Describe any Patching

None

Repairs Needed and / or Maintenance at this time?

Signature: Patrick Recio Date: 7/14/2023

Site Inspection Checklist - Cover System
237 Kent Avenue
Brooklyn, NY

Date: 7/14/2023 Time: 1130AM

Inspector Name/Organization: Patrick Recio / Brussee Environmental Corp.

Visual Inspection of Concrete Slabs

237 Kent Avenue Building

Inspect concrete slab for cracks, perforations and patching

Describe General Condition of Slab

Good

Describe any Cracks or New Penetrations

None

Describe any Patching

None

Exterior Impervious Cap Areas (Rear Courtyard)

Inspect for cracks, perforations and patching

Describe General Condition of Impervious Cap

Good

Describe any Cracks or New Penetrations

None

Describe any Patching

None

Repairs Needed and / or Maintenance at this time?

Signature: Patrick Recio Date: 7/14/2023