

Project Name:105-04 – 105-24 Flatlands Avenue, Brooklyn

Project Number: 13CVCP092K

Site Management Reporting Period: 2019- 2020

Inspection Date: 7/30/20

Inspector and Certifier: Karen G. Tyll, PE

Report Submittal Date: 7/31/20

Report Preparer: Karen G. Tyll, PE on behalf of 128 Merrick Realty LLC

Site Inspection and Certification Letter Report

128 Merrick Realty, LLC hereby submits a Site Management Inspection and Certification Report for the property located at 105-04 – 105-24 Flatlands Avenue in the Canarsie section of Brooklyn, New York for the reporting period, 2019 to 2020, pursuant to the Site Management Plan (SMP) that is included in the OER approved Remedial Action Report (RAR), dated March 2014. The Site is identified as Block 8213 and Lot 37 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:

- (1) Composite Cover System,
- (2) Vapor Barrier System; and,
- (3) 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 the buildings concrete footprint constructed of 6 inches of concrete for its slab with one-foot thick concrete walls in the partial cellar. The exterior Composite Cover System consists of concrete 4 inches thick in the parking lot areas and rear egress area. The contractor for construction of the Composite Cover System was Long Lasting.

Vapor Barrier System

Exposure to soil vapor is prevented by both a Vapor Barrier System and an active SSDS that have been built on the Site. This Vapor Barrier System consists of VaporBlock Plus VBP 20-mil vapor barrier, manufactured by Raven Industries that was installed beneath all grade-level slab areas. The vapor barrier was also installed beneath the partial cellar slab and outside sub-grade side walls. Penetrations through the building foundation, footings, slab, and sidewalls were appropriately sealed. A VaporBoot was placed around each protrusion and over the vapor barrier to create an air tight seal. Where overlapping of vapor barrier sheets occurred, the layer being laid down overlapped the other layer by six inches. The supplied vapor barrier tape was then used to make a good seal between the two sheets. The contractor for construction of the Vapor Barrier System was Long Lasting.

Active Sub-Slab Depressurization System

The SSDS was designed to create a negative pressure beneath the slab and prevent the migration of fugitive soil vapors into the overlying building. The SSDS consists of new 4-inch schedule 40 HDPE slotted pipe placed horizontally on a bed of one-inch stone with one-inch stone placed on top of the pipe. The slotted pipe is located beneath the building slab, between the rear foundation wall and rear of the partial cellar walls running the length of the building east to west. Two 3-inch ductile iron vertical risers are connected to bring the piping up to roof level. The first vertical riser is located in a partition wall separating the two eastern most units. The other vertical riser is located within the western most unit. The two risers are approximately twenty feet apart when they reach the roof. The two blowers for the system are Fantech HP-220 soil mitigation fan on the rooftop. The design engineer for the active SSDS was J.R. Holzmacher P.E. LLC. The contractor for construction of the active SSDS was Long Lasting, Inc.

The active SSDS is a permanent engineering control for the Site. The system will be inspected and reported at specified intervals as required by this RAWP and the Site Management Plan (SMP).

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) 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;
- (2) Engineering Controls will not be discontinued without prior OER approval;
- (3) OER has the right to enter the Site upon notice for the purpose of evaluating the performance of ECs and ICs;
- (4) Vegetable gardens and farming in residual soil/fill on the Site are prohibited;
- (5) Use of groundwater underlying the Site without treatment rendering it safe for its intended use is prohibited;
- (6) 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;
- (7) The Site is intended to be used for restricted commercial, 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 Karen G. Tyll, PE. The date of the inspection was July 30, 2020. Access to the Site, roof and basement was provided by the Owner and tenants.

The roof was inspected first, accessing it by ladder at the rear, western corner of the building. The SSDS fans and piping were inspected. The two SSDS fans were operational, both expelling air during the inspection.

The SSDS panel was located in the basement of the medical office located in Unit 105-10 Flatlands Avenue. The SSDS panel had two green lights indicating that the system was operational. The two fans were operational on the roof. Photos of the inspection can be found in Appendix A.

The Composite Cover system consisting of concrete and asphalt surrounding the building was in good condition and had no evidence of construction or alterations.

The vapor barrier was not visible within the units or the basement.

The approved intended use of the site has not been changed.

We did not find any deficiencies during the inspection. The building manager provided a monthly list indicating the dates that he was at the Site to check the SSDS system's operation which can be found in Appendix B.

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, the system is operational as designed however, a piece of tubing from the riser pipe to the pressure switch has disintegrated and needs to be replaced.**

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

Response: **Nothing to our knowledge**

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

Response: **None needed**

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

Response: **Yes**

- Are site records complete and up to date?

Response: **Yes**

- Have monthly SSDS inspections by building superintendents been performed, certified on inspection checklists, and maintained on file on site?

Response: **The Monthly inspection list can be found in Appendix B that lists when the Site Manager visited the Site to verify the SSDS system's operation.**

5.0 DEVIATIONS IN PERFORMANCE OF ENGINEERING AND INSTITUTIONAL CONTROLS

No deviations have occurred during this time period.

6.0 NEXT INSPECTION

The next Site Management Inspection will be performed in August 2020 and will continue to July 2021, and the Site Inspection and Certification Letter Report will be submitted by July 31, 2021.

7.0 CERTIFICATION

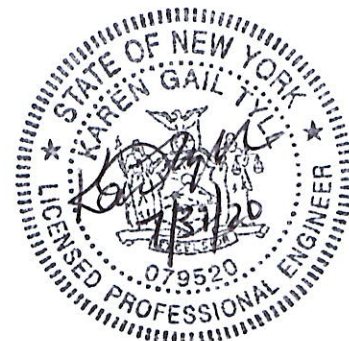
I, Karen G. Tyll, PE, certify the following:

- I am a Professional Engineer in the State of New York;
- I inspected 105-04 to 105-24 Flatlands Avenue site, site number 13CVCP092K on July 30, 2020;
- 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;
- Activities on the Site that have disturbed residual soil/fill material have been in accordance with the Soil/Materials Management Plan in the SMP;
- Site records are complete and up to date;
- 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 and Engineering Controls will not be discontinued without prior OER approval;
- 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 commercial use addressed by the Remedial Action;
- OER has the right to enter the Site upon notice for the purpose of evaluating the performance of ECs and ICs;
- The Site continues to be registered as an E-Designated property by the NYC Department of Buildings;

PE Name Karen G. Tyll, PE

PE Signature Karen Tyll

Date 7/31/20



Appendix A

Inspection Photographs





Appendix B

Monthly Site Inspection form

2020 Monthly Inspection Form

105-04 - 105-24 Flatlands Avenue, Brooklyn, NY

Date of Inspection	Inspector	Findings Y/N	If YES to findings, describe here
07/24/19	Karen Tyll	Y	System is operational. Tubing from riser pipe to pressure switch needs to be replaced. <i>Replaced DEC. 23, 2019</i>
8/21/19	ALIK	N	
9/25/19	ALIK	N	
10/23/19	ALIK	N	
11/18/19	ALIK	N	
12/19/19	ALIK	N	
1/15/20	ALIK	N	
2/19/20	ALIK	N	
3/11/20	ALIK	N	
4/16/20	ALIK	N	
5/19/20	ALIK	N	
6/22/20	ALIK	N	
7/30/2020	Karen Tyll	N	