

October 17, 2024

Manfred Magloire
New York State Department of Environmental Conservation
Division of Environmental Remediation
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Long Island City, NY 11101
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**Re: Supplemental Remedial Investigation Work Plan No. 1
691 Lenox Avenue – Phase 1
New York, NY
Langan Project No.: 170635401
NYSDEC BCP Site No.: C231145**

Dear Mr. Magloire:

Langan Engineering, Environmental, Survey, Landscape Architecture and Geology, D.P.C. (Langan) presents this Supplemental Remedial Investigation (SRI) Work Plan on behalf of One45 Lenox LLC for the property known as 691 Lenox Avenue – Phase 1 in New York, New York (the site). The site is located at 691 Lenox Avenue in New York, New York and is identified as Manhattan Tax Block 2013, Lot 29. The site comprises about 34,400 square feet ($\pm$ 0.80 acres) and is part of a larger, two-part development property known as “One45”.

The purpose of the SRI is to further evaluate the potential for soil vapor intrusion (SVI) as an exposure pathway at the site. Co-located soil vapor and indoor air samples will be collected from ten locations within occupied tenant spaces. The data collected during the SRI will be incorporated into the draft Remedial Investigation Report (RIR) and may be used to inform potential Interim Remedial Measures (IRM) and/or the Remedial Action (RA) for the site.

Background

The Remedial Investigation (RI) was completed between February 2023 and March 2024. Soil vapor and indoor air sampling completed in March 2024 identified certain chlorinated volatile organic compounds (VOC) at levels indicative of a potential SVI exposure concern. Tetrachloroethene (PCE) was detected in one indoor air sample at a concentration (79 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]), above the Air Guideline Value (AGV) set forth in the New York State Department of Health (NYSDOH) October 2006 Guidance for Evaluating Soil Vapor Intrusion (with subsequent updates [February 2024]). PCE was also detected as high as 4,400 $\mu\text{g}/\text{m}^3$ in soil vapor, but at a different sampling location [approximately 110 feet away from] and not co-located with the above-referenced indoor air sample. Langan presented the RI data to the NYSDEC on a September 10, 2024, conference call. On September 17, 2024, NYSDEC subsequently issued a request for a work plan to conduct SVI sampling at occupied site structures during the upcoming 2024-2025 heating season.

Current Conditions

The site encompasses an area of about 34,400 square feet and is currently improved with three one-story commercial buildings with storage mezzanines (former Lots 29 and 38) and an asphalt-paved parking lot (former Lot 33). The two buildings on former Lot 29 contain seven tenant spaces including a deli/grocery store (occupied), an urgent care center (occupied), an Islamic religious center (Timbuktu-Islamic Center) (occupied), a non-profit organization (occupied), a community center (National Action Network) (occupied), a vacant retail store, and a vacant restaurant. The building on former Lot 38 contains four unoccupied tenant spaces including a vacant laundromat, two vacant restaurants, and a vacant retail store, as well as one occupied quick-serve restaurant (Dunkin Donuts). All three buildings contain partial cellars used for storage.

Field Investigation

The SRI will be completed in accordance with the protocols set forth in Langan's July 19, 2022 Remedial Investigation Work Plan (RIWP). The SRI will include collection of ten soil vapor samples with ten co-located indoor air samples and one ambient air sample. The proposed sampling locations are illustrated on Figure 1. A sample summary matrix is provided as Table 1.

Soil Vapor Point Installation

The SRI will include installation of ten permanent sub-slab soil vapor points (PH1_SV27, PH1_SV28, PH1_SV29, PH1_SV30, PH1_SV31, PH1_SV32, PH1_SV33, PH1_SV34, PH1_SV35, and PH1_SV36) in six occupied tenant spaces (Dunkin Donuts, Nation Action Network, Timbuktu-Islamic Center, the non-profit building, urgent care center, and deli/grocery store). Two of the ten sub-slab vapor points will be installed within partial cellars – one within the National Action Network's partial cellar and the other within the deli/grocery store's partial cellar. Proposed sub-slab soil vapor points are shown on Figure 1.

The sub-slab vapor points will be constructed by installing Vapor Pins® within the concrete building foundation slab and finished with 2-inch-diameter stainless steel integrated flush-mount covers. A hammer drill will be used to drill a 1.5-inch-diameter hole at least 1.75 inches into the slab, then a 5/8-inch-diameter hole will be drilled from the base of the first hole through the concrete slab and approximately 1 inch into underlying soil to form a void. Loose debris and concrete dust will be cleared from the hole using a bottle brush and shop vacuum. Each Vapor Pin® will be fitted with a silicone sleeve and installed within the inner 5/8-inch diameter hole using a dead-blow hammer until bulging of the silicone sleeve is observed, indicating an air-tight seal.

Product Inventory and NYSOH Questionnaire

Prior to sample collection, a product inventory will be completed in the area of indoor sample locations to document petroleum-based products, solvents, chemicals, and other materials/products containing VOCs or other ingredients that may influence the indoor air sample results. An NYSDOH Indoor Air Quality Questionnaire and Building Inventory form will be completed for each of the occupied tenant spaces where sampling is proposed.

Soil Vapor and Indoor Air Sampling and Analysis

Soil vapor samples will be collected from each of the ten newly installed soil vapor points. Before collecting vapor samples, a maximum of three soil vapor point volumes (i.e., the volume of the soil vapor pin, void space, and tubing) will be purged from each sample location at a rate of less than 0.2 liters per minute using a RAE Systems MultiRAE® meter set at a low flow setting. The purged soil vapor will be monitored for VOCs with the MultiRAE® during purging. A helium tracer gas will be used in accordance with the NYSDOH Guidance to serve as a quality assurance/quality control (QA/QC) technique to document the integrity of each soil vapor point seal before sampling. The tracer gas will be introduced into a container, which will shroud the soil vapor point and seal. Helium will be measured from the sampling tube and inside the container. If the sample tubing contains more than 10% of the tracer gas concentration that was introduced into the container, then the seal will be considered compromised and will be enhanced or reconstructed to reduce outdoor air infiltration. A log sheet for each soil vapor sample will be completed to record sample identification; date and time of sample collection; sampling depth; name of the field engineer, geologist or scientist responsible for sampling; sampling methods and equipment; vapor purge volumes; volume of vapor extracted; flow rate; and vacuum of canisters before and after sample collection.

Soil vapor, indoor air, and ambient air samples will be collected concurrently for a period of 8 hours using laboratory-supplied, individually certified-clean Summa® canisters (2.7- or 6-liter capacity) with 8-hour calibrated flow controllers. Co-located indoor air samples will be collected from a height above the ground representative of a typical breathing zone (about 3 to 5 feet). The ambient air sample will be collected from a representative upwind outdoor location away from wind obstructions and obvious sources of volatile chemicals.

A total of twenty one samples will be submitted to an NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory for analysis of VOCs via United States Environmental Protection Agency (USEPA) method TO-15. A sample summary matrix is provided as Table 1.

Reporting

Langan will revise the October 3, 2024 draft RIR to incorporate observations, sampling logs, product inventory sheets, NYSDOH questionnaires, analytical results, and conclusions from the SRI. Validated and tabulated sampling data will be included in the draft RIR and submitted to NYSDEC electronically as electronic data deliverables (EDDs). If an SVI condition is identified based on the SVI sampling data, Langan will notify NYSDEC/NYSDOH and provide unvalidated data in advance of submitting the RIR.

Schedule

After this SRIWP is approved by the NYSDEC, mobilization for the SRI will commence during the 2024-2025 heating season, pending coordination of site access with tenants. While we do not expect any unoccupied spaces to become occupied before the commencement of SRI field work, there is a possibility that one or more occupied spaces will become vacant before the start of field work. The NYSDEC will be notified of the start date at least 7 days in advance and if the status of any occupied tenant space changed after NYSDEC approval of this SRIWP but prior to commencement of field work.

Once the SRI is complete and the analytical data is validated, the draft RIR will be revised and submitted to the NYSDEC and NYSDOH. We expect the updated RIR will also address other agency comments/edits received in the interim.

Certification

I, Jason J. Hayes, certify that I am currently a Qualified Environmental Professional [as defined in 6 NYCRR Part 375] and that this Report [SRI Work Plan] was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Sincerely,
**Langan Engineering, Environmental, Surveying,
Landscape Architecture and Geology, D.P.C.**

Jason J. Hayes, P.E., LEED AP
Principal/Vice President

Enclosure(s):

Table 1 – Proposed Sample Summary

Figure 1 – Proposed Sample Location Plan

cc: C. Maycock, G. Nam - NYSDEC
A. Ghosh – NYSDOH
M. Raygorodetsky, G. Wyka, N. Palumbo - Langan

Table 1
Supplemental Remedial Investigation Work Plan No. 1
Proposed Sample Summary

One 45 - Phase 1
NYSDEC BCP Site No. C231145
New York, New York
Langan Project No. 170635401

SOIL VAPOR							
No.	Sample Location	Sample Type	Sample ID	Date	Time	Location	Analysis
1	PH1_SV27	Soil Vapor	PH1_SV27_000000	XX/XX/XXXX	XX:XX	Immediately beneath ground floor slab of quick-serve restaurant (Dunkin Donuts)	VOCs via USEPA Method TO-15
2	PH1_SV28		PH1_SV28_000000	XX/XX/XXXX	XX:XX	Immediately beneath partial cellar slab of community center (National Action Network)	
3	PH1_SV29		PH1_SV29_000000	XX/XX/XXXX	XX:XX	Immediately beneath ground floor slab of community center (National Action Network)	
4	PH1_SV30		PH1_SV30_000000	XX/XX/XXXX	XX:XX	Immediately beneath ground floor slab of community center (National Action Network)	
5	PH1_SV31		PH1_SV31_000000	XX/XX/XXXX	XX:XX	Immediately beneath ground floor slab of religious center (Timbuktu-Islamic Center)	
6	PH1_SV32		PH1_SV32_000000	XX/XX/XXXX	XX:XX	Immediately beneath ground floor slab of religious center (Timbuktu-Islamic Center)	
7	PH1_SV33		PH1_SV33_000000	XX/XX/XXXX	XX:XX	Immediately beneath ground floor slab of non-profit organization	
8	PH1_SV34		PH1_SV34_000000	XX/XX/XXXX	XX:XX	Immediately beneath ground floor slab of urgent care center	
9	PH1_SV35		PH1_SV35_000000	XX/XX/XXXX	XX:XX	Immediately beneath ground floor slab of deli/grocery store	
10	PH1_SV36		PH1_SV36_000000	XX/XX/XXXX	XX:XX	Immediately beneath partial cellar slab of deli/grocery store	
INDOOR AIR/AMBIENT AIR							
11	PH1_IA27	Indoor Air	PH1_IA27_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above ground floor slab in quick-serve restaurant (Dunkin Donuts)	VOCs via USEPA Method TO-15
12	PH1_IA28		PH1_IA28_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above partial cellar slab of community center (National Action Network)	
13	PH1_IA29		PH1_IA29_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above ground floor slab of community center (National Action Network)	
14	PH1_IA30		PH1_IA30_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above ground floor slab of community center (National Action Network)	
15	PH1_IA31		PH1_IA31_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above ground floor slab of religious center (Timbuktu-Islamic Center)	
16	PH1_IA32		PH1_IA32_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above ground floor slab of religious center (Timbuktu-Islamic Center)	
17	PH1_IA33		PH1_IA33_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above ground floor slab of non-profit organization	
18	PH1_IA34		PH1_IA34_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above ground floor slab of urgent care center	
19	PH1_IA35		PH1_IA35_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above ground floor slab of deli/grocery store	
20	PH1_IA36		PH1_IA36_000000	XX/XX/XXXX	XX:XX	Co-located with soil vapor sample, three to five feet above partial cellar slab of deli/grocery store	
21	PH1_AA02	Ambient Air	PH1_AA02_000000	XX/XX/XXXX	XX:XX	Outside within the paved parking lot in the northeast corner of the site	

Notes:

1. TBD = To Be Determined
2. VOC = Volatile Organic Compound
3. USEPA = United States Environmental Protection Agency

