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August 23, 2024
GZA File No.: 41.0163097.00

Wendi Zheng
Project Manager
Division of Environmental Remediation - Region 2
New York State Department of Environmental Conservation
1 Hunter's Point Plaza,
47-40 21st Street,
Long Island City, NY 11101--5401

Re: Proposed Interim Site Stabilization Measures for
Part-time Community Air Monitoring Plan
101 East 150th Street, Bronx, NY 10451
Block 2354 Lot 1
BCP Site No. C203154

Dear Ms. Zheng:

On behalf of the 586 River Ave., LLC (BCP Participant/Owner), Goldberg-Zoino Associates of New York P.C. d/b/a GZA GeoEnvironmental of New York (GZA) is proposing to implement interim Site measures to temporarily downgrade the implementation of the full-time Community Air Monitoring Plan (CAMP) at the above-referenced property (Site).

In accordance with the New York State Department of Environmental Conservation (NYSDEC) *Final DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, updated April 2019*, and the New York State Department of Health (NYSDOH) requirements under *Appendix 1A, Generic Community Air Monitoring Plan*, GZA has been performing full-time CAMP at the Site since July 2023 as part of the Owner's responsibility as a Participant in the Brownfield Cleanup Program (BCP Site No. C203154). The Owner understands that the CAMP must be implemented to ensure that the public living and working near the Site are protected from exposure to Site contaminants during intrusive activities, remedial actions, or on-site treatment actions undertaken during the investigation and/or remediation construction of the Site. According to DER-10, the CAMP should be in effect whenever:

- i. *the site cap or soil cover is breached, penetrated or has been temporarily removed from areas of the site;*
- ii. *any potential for exposure to the public or Site workers from the remaining contamination may result from activities; and/or*
- iii. *intrusive activities undertaken at a Site associated with the implementation of the remedial program which are related to the investigation or delineation of Site conditions.*

To address this concern, the Owner proposes to implement measures to temporarily stabilize the Site. The Site is currently in active construction with the implementation of the Interim Remedial Measure (IRM) nearing completion. A year of redevelopment construction and CAMP has provided sufficient information about the project, which we used to propose a temporary engineering measure to stabilize the Site. However, there is no active excavation anticipated for the next 4 months of construction (until November 2024).



INTERIM REMEDIAL MEASURE PROGRESS

Development of the approximately 2.3-acre Site began in July 2023. Construction under the BCP was performed under the NYSDEC-approved IRM dated June 2023 and the Supplemental IRM – Southern Extension (SIRM) dated January 2024. A drawing depicting construction progress of the site cover system is included as **Drawing 1**.

Remedial Excavation and Documentation Endpoint Sample Results

Under the IRM and SIRM, the remedial excavation to at least 2 feet below existing grade was completed across the Site. Then remedial excavations removed volatile organic compound (VOC) source area contamination identified during the Remedial Investigation. As of July 16, 2024, a total 74 confirmatory endpoint samples have been collected (EP-01 to EP-69, EP-17A, EP-17B, EP-18A, EP-21A, and EP-22A) completing the proposed end point sampling program. The laboratory analytical results from the confirmatory endpoint samples show that all remedial excavation areas have been completed and the residual material meets the Track 4 Site-Specific Restricted Residential Use Soil Cleanup Objectives (see **Drawing 2**).

CAMP Results and Site Materials Management Plan Implementation

Throughout the implementation of the IRM activities, GZA has been performing full-time continuous monitoring for VOCs and dust/particulates. There have been no documented continued exceedances of either the VOCs or dust/particulate threshold that warranted stoppage of work during the IRM excavations. The five documented CAMP action level exceedances during the IRM/SIRM activities were reported to the NYSDEC and are discussed below.

One construction-related elevated dust level was recorded on April 22, 2024 - during concrete sidewalk cutting. A 15-minute dust concentration of 134.4 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) was recorded at the downwind CAMP station. Dust suppression measures were implemented, and the dust levels fell below and did not exceed the 150 $\mu\text{g}/\text{m}^3$ action threshold.

Non-construction related exceedances of the VOC and dust thresholds were encountered on three occurrences through the project and are summarized below:

- July 27, 2023 – Dust exceedance at the upwind CAMP station as a prestart condition, prior to construction activities beginning for the day. Dust exceedance occurred during system warmup.
- July 31, 2023 – VOC exceedances occurred at both the upwind and downwind CAMP stations due to calibration of the equipment at the time of the exceedance.
- February 5, 2024 – VOC exceedance at the upwind CAMP station due to calibration of the equipment at the time of the exceedance.
- April 22, 2024 – Dust during concrete sidewalk cutting when a 15-minute dust concentration of 134.42 $\mu\text{g}/\text{m}^3$ was recorded at the downwind CAMP station.

The results can be attributed to the successful implementation of the Soil Materials Management Plan (SMMP), which set guidelines for the management of excess excavated soil/ fill and other materials generated by construction activities.



Since the IRM and SIRM are nearing completion, the project is not anticipated to generate excess soil / and other materials for disposal. The BCP redevelopment project has reached the steel erection of the building superstructure, and this phase of the project is going to take several months to complete. GZA proposes to stabilize the Site to continue work on the superstructure and demobilize the full time CAMP personnel and equipment. However, the contractor will continue to follow the approved SMMP during all construction activities to reduce accumulation of dust at the Site during importation of materials or other potentially dust generating construction activities.

PROPOSED SITE STABILIZATION MEASURES

Construction of Permanent Site Cover

Construction of the sitewide cover system, including the vapor barrier and sub-slab depressurization is on-going. A majority of the building footprint has minimum 12-inch gas permeable aggregate layer placed by August 2, 2024, and several areas of the building foundation are completely placed. In addition, the electrical vault structures are completed on the northeastern portion of the Site. At least 24-inches of clean fill also has been placed around the exterior of the building foundation in most areas. A section of the building footprint in the southeastern portion of the Site will be delayed in placement of the gas permeable aggregate due to the ramp and active crane operation in this area. These areas are shown on **Drawing 1**.

Temporary Soil Encapsulation Methods

The project imported material that was used as across the entire footprint and the Site access ramp in the southeast corner of the proposed building. The access ramp will remain in-place throughout the construction of the majority of the superstructure slab, walls, and floors. The Site access ramp will be excavated, and material disposed off-Site once all other areas are complete. It is anticipated this will occur in approximately 4 months (November 2024). When the ramp is being excavated, GZA proposes to remobilize to the Site and to continue daily, full-time CAMP for the duration of the soil removal.

Sections of the area outside of the construction footprint have not been backfilled with 2-feet of clean fill due to its slope and positioning outside of the SOE. As a temporary stabilization method, it is proposed to apply a 3- to 4-inch layer of concrete in this area to achieve a temporary stabilization through soil encapsulation. The location of the proposed concrete mud mat application is shown on the attached **Drawing 1**. Following construction of the superstructure, these areas of soil encapsulation will be backfilled with clean fill to 4 inches below the sidewalk grade and be finished with a permanent 4-inch concrete cover adjacent to the sidewalk as approved the IRM/SIRM.

PROPOSED PERIODIC MONITORING AND REPORTING

GZA proposes to continue to be on-Site and perform CAMP with hand-held equipment during clean fill and aggregate importing, soil disposal, and periodically during installation of the sub-slab depressurization system (SSDS) and soil vapor extraction (SVE) system. GZA proposes to downgrade CAMP implementation by conducting a site visit at least weekly, or more often as required, throughout the duration of the construction to observe and document the progress of the installed engineering controls. GZA will also perform CAMP with hand-held equipment during other intrusive site work (condition iii, above) such as groundwater monitoring or drilling soil borings. GZA will prepare weekly and monthly field reports for submittal to the NYSDEC.



On behalf of the BCP Participant, we respectfully request that the NYSDEC/NYSDOH approve the proposed CAMP downgrade from full-time CAMP monitoring to part-time CAMP monitoring once the proposed temporary soil encapsulation areas are completed.

Should you have any questions or comments, please contact Stephen Kline at 212-594-8140, or stephen.kline@gza.com.

Very truly yours,

GZA GEOENVIRONMENTAL OF NEW YORK

A blue ink signature of Reinbill P. Maniquez, consisting of a large, stylized 'R' followed by 'P. Maniquez'.

Reinbill P. Maniquez, CHMM
Senior Project Manager

A blue ink signature of Stephen M. Kline, consisting of a stylized 'S' followed by 'M. Kline'.

Stephen M. Kline, P.E
Principal

ATTACHMENTS

Drawing 1: Site Cover and Soil Encapsulation Locations

Drawing 2: Endpoint Soil Sample Locations



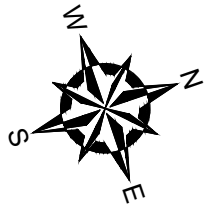
DRAWINGS

OUTSIDE BUILDING
FOOTPRINT -
BACKFILLED WITH
AT LEAST 2'
CLEAN FILL

FULL SITE COVER IN PLACE
SSDS, VAPOR BARRIER, CONCRETE SLAB

SOIL VAPOR EXTRACTION - COVERAGE AREA
BACKFILLED WITH AT LEAST 2' CLEAN FILL

SITE COVER WORK
IN PROGRESS



AREA BACKFILLED
WITH 12" GPA

OUTSIDE BUILDING
FOOTPRINT -
BACKFILLED WITH AT
LEAST 2'
CLEAN FILL

SITE ACCESS RAMP -
BACKFILLED WITH AT
LEAST 2' CLEAN FILL

CRANE OPERATION
LOCATION - BACKFILLED WITH
AT LEAST 2' CLEAN FILL

SEE MEMO

CONCRETE SLAB

FULL SITE COVER IN PLACE -
SSDS, VAPOR BARRIER, CONCRETE SLAB

GENERAL NOTES

1. BASE MAP DEVELOPED FROM DRAWING "FO-100.00" TITLED "FLOOR PLAN FOUNDATION", PREPARED BY LERA CONSULTING STRUCTURAL ENGINEERS, R.L.L.P., ORIGINAL SCALE $\frac{1}{16}''=1'$, DATED MAY 26, 2023
2. LOCATIONS OF SHOWN COVER LOCATIONS ARE APPROXIMATE AND MAY CHANGE DAILY AS CONSTRUCTION PROGRESSES.
3. THIS PLAN SHALL NOT BE USED FOR STRUCTURAL, ARCHITECTURAL OR OTHER REFERENCES OTHER THAN FOR THE PURPOSES OF THE CAMP DEMOBILIZATION PROPOSAL LETTER.

LEGEND

	SOIL ENCAPSULATION
	HORIZONTAL EXTENT OF SSDS, VAPOR BARRIER CONSISTING OF 46-MIL GCP VAPOR BARRIER AND 12" GAS PERMEABLE AGGREGATE LAYER
	BACKFILLED WITH 12" GPA
	OUTSIDE BUILDING FOOTPRINT - BACKFILLED WITH AT LEAST 2' CLEAN FILL
	CRANE OPERATION LOCATION - BACKFILLED WITH AT LEAST 2' CLEAN FILL
	SITE ACCESS RAMP - BACKFILLED WITH AT LEAST 2' CLEAN FILL
	SOIL VAPOR EXTRACTION - BACKFILLED WITH AT LEAST 2' CLEAN FILL
	CONCRETE COVER



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101 EAST 150TH STREET BRONX, NEW YORK, 10451				
SITE COVER PROGRESS AND SOIL ENCAPSULATION LOCATION				
PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: 586 RIVER AVE., LLC		
PROJ MGR: RPM	DESIGNED BY: JHB	REVIEWED BY: RPM	CHECKED BY: SMK	DRAWING
DATE: JULY 2024	PROJECT NO. 41.0163097.00	DRAWN BY: JHB	SCALE: 1"=40'	1 SHEET NO.
			REVISION NO. -	

OUTSIDE BUILDING
FOOTPRINT -
BACKFILLED WITH
AT LEAST 2'
CLEAN FILL

FULL SITE COVER IN PLACE
SSDS, VAPOR BARRIER, CONCRETE SLAB

SOIL VAPOR EXTRACTION -
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SITE ACCESS RAMP -
BACKFILLED WITH AT
LEAST 2' CLEAN FILL

SEE MEMO

CONCRETE SLAB

FULL SITE COVER IN PLACE -
SSDS, VAPOR BARRIER, CONCRETE SLAB


GENERAL NOTES

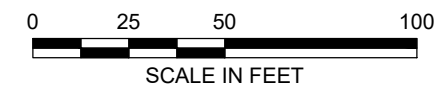
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<p style="text-align: center;">101 EAST 150TH STREET BRONX, NEW YORK, 10451</p>								
<p style="text-align: center;">INTERIM REMEDIAL MEASURE SOUTHERN EXTENT ENDPOINT SAMPLE LOCATION PLAN</p>								
PREPARED BY:  GZA GeoEnvironmental of NY Engineers and Scientists www.gza.com			PREPARED FOR: 586 RIVER AVE., LLC					
PROJ MGR:	RPM	REVIEWED BY:	RPM	CHECKED BY:	SMK			
DESIGNED BY:	RPM	DRAWN BY:	JHB	SCALE:	1"=50'			
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