SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

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October 21, 2022 ***via email:*** christopher.allan@dec.ny.gov

Christopher H. Allan, Environmental Engineer
Superfund and Brownfield Cleanup Section, Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

RE: **Proposed Documentation Sampling Work Plan (Revised)**
90-02 168th Street Site
90-02 168th Street
Jamaica, Queens County, New York
NYSDEC Site No. C241243
SESI Project No. Project#10831

Dear Mr. Allan

In accordance with our conference call on September 30, 2022 pertaining to the 90-02 168th Street Brownfields Cleanup Program project and subsequent email and verbal communications, we are presenting this workplan for documentation sampling for your approval. As discussed during the conference call, documentation sampling was proposed in the NYSDEC-approved Remedial Action Workplan and has been conducted for the Track 1 portion of the Site but was not proposed or conducted for the Track 4 area of the Site. SESI now understands that documentation sampling is required for the Track 4 portion of the Site. The following paragraphs detail the proposed sample locations and depths, collection methods, and laboratory analysis.

The proposed work will be conducted under the governing documents of the approved Remedial Investigation Work Plan (RIWP) and Remedial Action Workplan (RAWP), including the Health and Safety Plan (HASP), Community Air Monitoring Plan (CAMP) and Quality Assurance Project Plan (QAPP). Two CAMP monitoring stations will be installed during the proposed soil sampling activities up-and down-wind of the sampling area.

Sample Location
The Track 4 area for the Site is 31,232 SF. In accordance with the DER-10 requirement for Documentation Samples, one sample is to be collected and analyzed for every 900 square feet, or one sample from each approximately 30 foot x 30 foot grid. This results in 35 samples. SESI will layout a 30 foot x 30 foot grid for the Track 4 area and collect one sample for analysis from each grid as shown in the attached proposed sampling grid map (Figure 1). These proposed sample locations will be adhered to as practical, however, given site logistics due to construction activities, it is possible that some grids will not be sampled, or locations may be adjusted.

Sample Depths

Redevelopment construction resulted in excavation and disposal of impacted soil from the Track 4 area. Impacted soil was excavated to a minimum of two (2) feet below the existing grade pre-development and followed a slope to facilitate construction of the new building's basement. Upon completion of the excavation, the Track 4 area was backfilled with clean soil to create a clean cap that is a minimum two (2) feet thick, but ranges in thickness depending on the depth of the initial excavation. SESI proposes to sample the remaining soil just below the clean fill cap to provide a sample for analysis that represents the remaining material in the Track 4 area. Figure 2 presents the survey elevations from the Track 4 excavation. Sampling equipment will be advanced to the appropriate depths in each grid to facilitate sample collection. In grids where a survey point is not available, SESI will extrapolate the sample depths based on available elevations. To the extent possible, the sample depth and top of cap will then be surveyed at each sampling point.

Sample Collection Methods

Documentation sampling depths will be made accessible using direct push sampling techniques, hand shovel or a hand auger. When the remaining material is exposed, samples will be collected using disposable field tools and transferred to laboratory provided bottle ware / containers (samples for VOC analysis will be collected using Encores). Upon collection, the samples will be transferred to a cooler and prepared for shipment to the laboratory. Finally, the sampling location and depth will be surveyed, and the hole will be backfilled with the clean soil. All the resulting soil cuttings will be treated as Investigative Derived Waste (IDW) and disposed of accordingly.

Collection of QA/QC samples to evaluate potential cross-contamination from sampling equipment and during shipment of samples and repeatability of laboratory analytical practices will be in accordance with the QAPP included as Appendix C of the RIWP and Appendix C of the RAWP. Field blanks, trip blanks and duplicate samples associated with daily sampling activities will be collected as a part of the QA/QC practices.

Laboratory Analysis

All samples will be analyzed for Target Compound List (TCL)/Target Analyte List (TAL) TCL/TAL+30 (volatile organic compounds (VOCs) by Environmental Protection Agency (EPA) Method 8260C, semi-VOCs (SVOCs) by EPA Method 8270D, pesticides by EPA Method 8081B, polychlorinated biphenyls (PCBs) by EPA Method 8082A, TAL metals by EPA Methods 6010C, 7470A/7471B, and 9012), polyfluoroalkyl chemicals (PFAS) compounds (by USEPA 537) and 1,4-dioxane (by USEPA 8270D SIM). Analysis will be expedited and DUSRs EDDs completed as soon as final lab results are available.

Laboratory Results

To ensure that the field sampling and laboratory analytical practices are acceptable, the data associated with the samples will be validated by a third party (in accordance with requirements of DER-10). The validation approach and results will be presented in a Data Usability Study Report (DUSR) to be included in the Final Engineering Report FER.

Schedule

SESI proposes to collect the Track 4 documentation samples on October 20 and 21, 2022. Return of the laboratory data and DUSRs for TCL/TAL and I,4-dioxane is anticipated during the week of November 7, 2022. Return of the laboratory data and DUSRs for PFAS is anticipated during the week of November 14, 2022. Completion and submission of all EDDs is anticipated during the week of November 21, 2022.

Reporting

Upon completion of the sampling, laboratory analysis and data validation, SESI will prepare a letter report presenting the findings of the Track 4 documentation sampling. This letter report will be submitted to the NYSDEC Case Manager and included as an addendum to the Final Engineering Report (FER).

Certification

I, Fuad Dahan, certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Documentation Sampling 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)

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Fuad Dahan	10/21/2022	
NYS Professional Engineer	*Date*	*Signature (# 090531)*

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education.

Sincerely,

SESI CONSULTING ENGINEERS

Fuad Dahan, PE
Principal

NOTES:
1. THIS PLAN IS FOR LOCATING BORINGS ONLY. OTHER SITE WORK SHOWN HERE IS NOT INTENDED FOR CONSTRUCTION PURPOSES
2. SOIL SAMPLES REPRESENT VOC CONCENTRATIONS
3. ALL SAMPLES ARE MEASURED IN MG/KG

REFERENCE
1. IMAGE TAKEN FROM BING MAPS ON 9/10/19.

LEGEND:
- SITE BOUNDARY
- APPROX. 900 SF SAMPLE GRID
- PROPOSED DOCUMENTATION SAMPLE LOCATION
- TRACK 1 AREA

Scale 1"=80'
0 80 160

SESI CONSULTING ENGINEERS
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
959 ROUTE 46E, 3RD FLOOR, PARSIPPANY, N.J. 07054 PH: 973-808-9050

dwg by: JLB
chk by: EK
scale: AS NOTED
date: 10/14/2022

project: 90-02 168TH STREET QUEENS, NY

title: PROPOSED DOCUMENTATION SAMPLING GRID

job no: 10831
drawing no:

FIG-1

LEGEND:

- SITE BOUNDARY
- APPROX. 900 SF SAMPLE GRID
- PROPOSED DOCUMENTATION SAMPLE LOCATION
- TRACK 1 AREA
- 54.99 - TRACK 4 REMAINING ELEVATIONS
- 60* - INTERPOLATED TRACK 4 DOCUMENTATION SAMPLE ELEVATIONS

NOTES:
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3. ALL SAMPLES ARE MEASURED IN MG/KG

REFERENCE
1. IMAGE TAKEN FROM BING MAPS ON 9/10/19.

SCALE: 1"=60'
0 60 120

SESI CONSULTING ENGINEERS
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
959 ROUTE 46E, 3RD FLOOR, PARSIPPANY, N.J. 07054 PH: 973-808-9050

dwg by: JLB
chk by: EK
scale: AS NOTED
date: 10/20/2022

project: 90-02 168TH STREET QUEENS, NY

title: TRACK 4 REMAINING ELEVATIONS AND PROPOSED DOCUMENTATION SAMPLE ELEVATIONS

job no: 10831
drawing no:

FIG-2

N:\ACAD\10831\CAD\RIWP\FIGURE SET – MARCH 2021\10831 – FIG-5.1A TO 5.1E –BORING RESULTS PLAN.DWG 10/21/22 10:09:18AM, alan.ward, LAYOUT:FIG-2