**LANGAN** **SITE OBSERVATION REPORT – Supplemental Remedial Investigation – Day 06**

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| **PROJECT No.:** | 170390001 | **CLIENT:** | | **DATE:** | Friday, 10 February 2023 |
| **PROJECT:** | 141 3rd Street | Third Street Owner LLC and 155 Third St., LLC | | **WEATHER:** | Sunny, 54-57 $^0$F<br>Wind: SW @ 0-10 mph |
| **LOCATION:** | Brooklyn, New | | | **TIME:** | 6:30 a.m. – 17:30 p.m. |
| **BCP SITE ID:** | C224336 | | | **MONITOR:** | Ali Reach |

**EQUIPMENT:**
Geoprobe® 7822 DT Drill Rig
Geoprobe® 8150 LS Sonic Drill Rig
Mini RAE 3000 x3
TSI Dust Trak x2
Hand tools
Interface Probe

**PRESENT AT SITE:**
**Langan**: Ali Reach
**AARCO Environmental Services Inc. (AARCO):** Daybi Pacheco and two assistants, Jose Sr. and one assistant
**Monadnock Construction, Inc. (Monadnock):** James Castore and Matt Albert

**OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:**
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) was present to implement the Supplemental Remedial Investigation (SRI) in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Supplemental Remedial Investigation Work Plan (SRIWP), dated 7 February 2023. The purpose of this investigation was to further delineate coal tar impacts.

## Site Activities

- AARCO used a submersible pump to develop one deep monitoring well (MW15-SW1).
- AARCO used a Geoprobe® 8150LS sonic drill rig to advance two soil borings (SB15-S2 and SB15-SW3) in the eastern part of the site. SB15-S2 was advanced about 20 feet southwest of SRI boring SB15-S1, and SB15-SW3 was advance about 20 feet south of SRI soil boring SB15-SW2. Langan documented the work and screened the recovered soil continuously for evidence of environmental impacts (e.g., grossly contaminated material [GCM]/non-aqueous phase liquids [NAPL]) using visual and olfactory methods and with a calibrated photoionization detector (PID).
    - **SB15-S2** was advanced to 60 feet below grade surface (bgs). Coal tar impacts (strong naphthalene-like odor, and saturated soil) were identified between 28 and 30 feet bgs. The presence of NAPL was confirmed negative between 31 and 32 feet bgs using shake tests equipped with hydrophobic red SUDAN IV dye. A maximum PID reading of 72.9 parts per million (ppm) was recorded at 28 feet bgs.
    - **SB15-SW3** was advanced to a depth of about 60 feet bgs. Coal tar impacts were not observed. Petroleum-like impacts (moderate petroleum-like odor) were identified between 6 and 8 feet bgs, and a maximum PID reading of 36.9 ppm was recorded at 7.5 feet bgs.
- AARCO used a Geoprobe® 7822DT direct-push drill rig to advance two soil borings (SB13-NW1 and SB13-W2) about 15 feet to the north and about 20 feet to the west of SRI boring SB13-W1, respectively. Langan documented the work and screened the recovered soil continuously for evidence of environmental impacts (e.g., GCM/NAPL) using visual and olfactory methods and with a calibrated PID.
    - **SB13-NW1** was advanced to a depth of about 60 feet bgs. Coal tar impacts were not observed. The presence of NAPL was confirmed negative between 28 and 30 feet bgs, and 46 and 47 feet bgs using shake tests equipped with hydrophobic red SUDAN IV dye. A maximum PID reading of 0.0 ppm was recorded throughout the boring.
    - **SB13-W2** was advanced to a depth of about 15 feet bgs. Coal tar impacts were not observed, and a maximum PID reading of 0.0 ppm was recorded throughout the boring.
        - This boring will be completed on Tuesday, 2/14.

**Material Tracking:**

- Seventeen 55-gallon drums containing soil cuttings and/or soil-grout mixture from soil borings SB15-N1, SB15-W1, SB15-S1, SB15-SW1, SB15-SW2, SB13-N1, SB13-S1, SB13-W1, SB15-SW2, SB13-S2, SB15-NW1, SB15-W3, and SB13-S3 are staged in the eastern part of the site.
- Four 55-gallon drums containing purged groundwater from MW15-S1, MW15-N1, MW13-S1, and MW15-SW1.

## Sampling

- Langan collected the following remedial investigation soil samples for laboratory analysis. The samples were submitted to Alpha Analytical Laboratories, a New York State Department of Health (NYSDOH) Environmental Laboratory Accredited Program (ELAP)-certified laboratory under standard chain-of-custody protocols. The following soil samples were submitted for Part 375/Target Compound List (TCL) volatile organic compounds (VOC) and semivolatile organic compounds:

    - SB15-S2_29-30 and duplicate sample SODUP02_021023
    - SB15-S2_31-32*
    - SOFB02_021023

  *Additional material collected for MS/MSD analysis.

Soil samples were placed on a 48-hour turnaround time. Five soil samples (SB15-SW3_6-7, SB15-SW3_29-30, SB15-SW3_39-40, SB13-NW1_28-30, and SB13-NW1_46-47) from soil borings SB15-SW3 and SB13-NW1 respectively, were collected and placed on hold.

## Community Air Monitoring Plan (CAMP) Activities

- Langan implemented the CAMP at upwind and downwind locations to monitor VOCs and particulate matter (PM10). 15-minute-average concentrations of VOCs and PM10 were not recorded above the action levels. No fugitive dust and odors associated with intrusive activities were observed migrating off site.

| **Particulate Monitoring ($mg/m^3$)** | | | **Organic Vapor Monitoring (ppm)** | | |
|---|---|---|---|---|---|
| Averaging Period | Upwind | Downwind | Averaging Period | Upwind | Downwind |
| Maximum 15-min Average | 0.019 | 0.033 | Maximum 15-min Average | 0.0 | 0.2 |
| Minimum 15-min Average | 0.000 | 0.014 | Minimum 15-min Average | 0.0 | 0.0 |
| Minimum 1-min Instant Reading | 0.000 | 0.012 | Minimum 1-min Instant Reading | 0.0 | 0.0 |
| Maximum 1-min Instant Reading | 0.028 | 0.056 | Maximum 1-min Instant Reading | 0.0 | 0.2 |

$mg/m^3$= milligrams per cubic meter ppm= parts per million

## Anticipated Activities

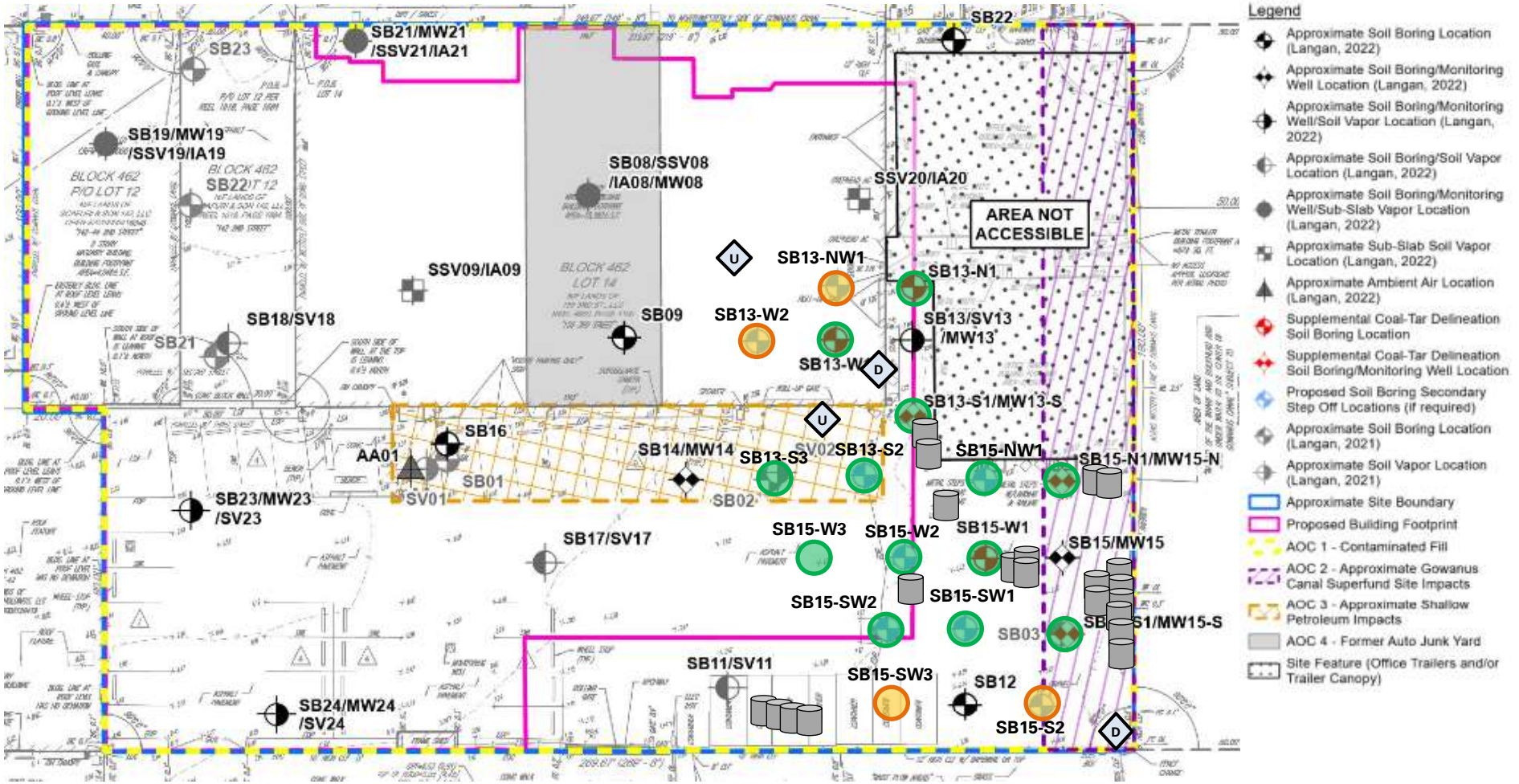
- AARCO will continue to advance soil borings and install monitoring wells in the eastern part of the site on Tuesday, 2/14.

**SITE PHOTOGRAPHS:**

**Photo 1:** AARCO advancing soil boring SB15-S2 (facing southeast).

**Photo 2:** Representative recovered soil from soil boring SB13-NW1.

**SITE MAP:**




**INVESTIGATION KEY**

- Completed Soil Boring
- Completed Soil Boring/Monitoring Well Installation Location
- Previously Completed Soil Boring and/or Monitoring Well Installation Location
- Upwind CAMP Station Location
- Downwind CAMP Station Location
- Drum Location