SITE OBSERVATION REPORT

PROJECT No.: 170381202		**DATE:**	Tuesday, August 25, 2020
PROJECT: 250 Water Street	**CLIENT:** 250 Seaport District, LLC	**WEATHER:**	Sunny, 75-88 ^{0}F Wind: 0 mph to W @ 9.2 mph (1:05 pm)
LOCATION: New York, NY		**TIME:**	5:45 am – 15:45 pm
BCP SITE ID: C231127			
CONTRACTOR: AARCO Environmental Services Corp. (AARCO)		**LANGAN REP. :**	Tyler Zorn Lexi Haley

EQUIPMENT:	**PRESENT AT SITE:** **RI Day 17**
AMS Power Probe 9580-VTR Niton XL3t XRF Jerome J505 and J405 MiniRAE 3000 Dusttrak DRX	Tyler Zorn, Lexi Haley – Langan Rohn Dixon, Alex Pothemont – AARCO Environmental Services Corp.

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan continued implementing Phase 4 of the May 13, 2020 Remedial Investigation Work Plan (RIWP) for New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C231127 located at 250 Water Street (Manhattan Block 98, Lot 1).

Site Activities

- AARCO used an AMS Power Probe 9580-VTR drill rig with 4-foot-long Macro-Core® samplers to advance two soil borings. Langan documented the work, screened the soil samples for environmental impacts, and collected soil samples for laboratory analysis.
    - Boring SB34: Boring was advanced to 20 feet below grade surface (bgs). A void space was encountered from 0 to 4 feet bgs. Petroleum-like odors, staining, and PID readings up to 4.2 parts per million (ppm) were observed from about 11 to 16 feet bgs. Visual evidence of elemental mercury was not identified. Total mercury concentrations evaluated with the Niton XL3t XRF (XRF) were less than the limit of detection (LOD).
    - Boring SB35: Boring was advanced to refusal at 28 feet bgs. Petroleum-like and creosote-like odors, staining, and PID readings up to 21.0 ppm were observed from about 9 to 24 feet bgs. Visual evidence of elemental mercury was not identified. Total mercury concentrations evaluated with the XRF were less than the LOD.
- AARCO installed monitoring well MW34.
    - MW34 consists of a 2-inch-diameter polyvinyl chloride (PVC) monitoring well with 20-slot well screen from about 9 to 19 feet bgs. MW34 will be developed at a future date.
- All soil borings were backfilled with clean drill cuttings from the borehole, clean sand, and/or bentonite and then patched with cold patch asphalt or concrete after sampling was completed.

Material Tracking

- No material was imported to the site.
- No material was exported from the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley **LANGAN**

SITE OBSERVATION REPORT

- Impacted soil cuttings from soil borings SB34 were containerized in sealed 55-gallon drums. The drums were stored on-site for future off-site disposal.

Sampling

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, herbicides, metals including mercury and hexavalent and trivalent chromium, total cyanide, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS):
    - SB34: 4-6, 10-12, and 12-14 feet bgs
    - SB35: 0-2, 8-10, and 26-28 feet bgs
- The following sample depths were submitted for analysis of VOCs, SVOCs, and Part 375/TAL metals:
    - SB34: 18-20 feet bgs
- One quality assurance/quality control soil samples (an equipment blank) was collected and submitted for analysis.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of particulate matter smaller than 10 microns in diameter (PM10), mercury vapor, and VOCs did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m^3) for PM10, 0.5 ppm for VOCs, and 0.0 $\mu g/m^3$ for mercury vapor.

Daily Average Concentrations			
Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu g/m^3$)
PM-1	0.026	0.0	0.0
PM-2	0.035	0.0	0.0
PM-3	0.032	0.0	0.0
PM-4	0.018	0.0	0.0
PM-5	0.022	0.6	0.0
PM-6	0.024	0.0	0.0
WZ-1	0.023	0.0	0.0

mg/m^3 = milligrams per cubic meter
ppm = parts per million
$\mu g/m^3$ = micrograms per cubic meter

Maximum 15-Minute-Average Concentration			
Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu g/m^3$)
PM-1	0.035	0.0	0.0
PM-2	0.050	0.0	0.0
PM-3	0.039	0.0	0.0
PM-4	0.025	0.0	0.1
PM-5	0.029	1.4	0.0
PM-6	0.030	0.0	0.0
WZ-1	0.062	0.0	0.0

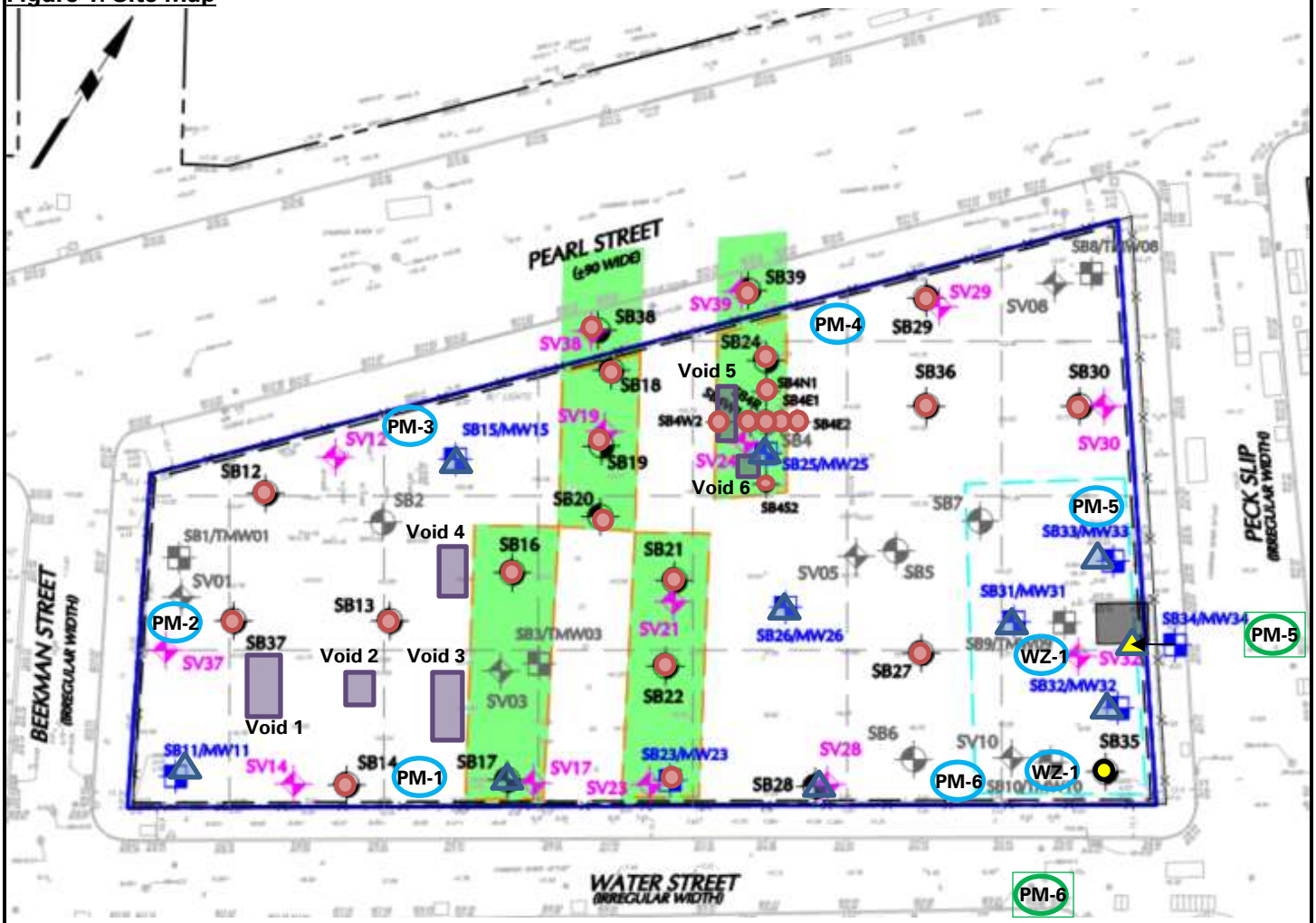
Anticipated Activities

- AARCO and Langan will continue to advance and sample soil borings and develop monitoring wells at the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

Figure 1: Site Map



Legend:

- Site Boundary
- Approximate area of suspected void space
- Approximate location of soil borings sampled
- Approximate location of previously sampled soil borings
- Approximate location of completed soil borings and monitoring well
- Approximate location of previously completed soil borings and monitoring well
- PM-1 — Approximate location of air monitoring station (on-site)
- PM-1 — Approximate location of air monitoring station (off-site)
- WZ-1 — Approximate locations of work zone air monitoring station

Notes:

1) Air monitoring station were relocated based on work area and wind direction. Locations shown above identify the predominant area of the air monitoring station.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:

Photo 1: View of soil from boring SB35

Photo 2: Perimeter CAMP station WZ-1 and off-site CAMP station PM-6 along Water Street during the drilling of boring SB35 (facing southeast)

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

Photo 3: AARCO drilling boring SB34 (facing east)

Photo 4: AARCO troubleshooting drill rig track (facing north)

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN