SITE OBSERVATION REPORT

PROJECT No.: 170381202	**CLIENT:** 250 Seaport District, LLC c/o The Howard Hughes Corporation	**DATE:**	Wednesday, May 25, 2022
PROJECT: 250 Water Street		**WEATHER:**	Clear, 60.4 – 69.6 ˚F Wind: SW @ 0.8 – 6.7 mph
LOCATION: New York, NY		**TIME:**	6:00 AM – 7:00 PM
BCP SITE ID: C231127		**MONITOR:**	Lauren Roper, Brian Kenneally

EQUIPMENT:
MiniRAE 3000 PID
DustTrak II
Jerome J405®
Jerome J505®
Hand tools
CAT 374F
Komatsu 969
APE Model 150

PRESENT AT SITE: **Day 22**
Langan (Environmental/Geotechnical) – Lauren Roper, Brian Kenneally
LendLease (Construction Manager) – Marty Cohen
Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn
Department of Environmental Conservation (DEC) – Aaron Fischer
AKRF Inc. (Archaeologist)

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was present to document remediation and construction activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127).

Site Activities

- CCJV pumped groundwater from the previously installed dewatering well to facilitate installation of a pile cap in the southwestern portion of the site. Groundwater was pumped directly to the dewatering treatment system, consisting of a settling tank and filtration system, before being discharged to the catch basin located at the northeastern corner of Beekman Street and Water Street in accordance with a New York City Department of Environmental Protection (NYCDEP) temporary discharge permit (Permit No. C001446396).
- CCJV excavated an approximately 6-foot-long by 6-foot-wide area to a maximum depth of about 20 feet below grade surface (bgs) within the previously installed steel sheet pile wall for installation of a pile cap.
    - Excavated material consisted of hazardous lead-impacted soil/fill and was screened for visual, olfactory and instrumental evidence of impacts using a photoionization detector (PID) and Jerome® J505 mercury analyzer. No evidence of impacts were observed. Excavated soil/fill was temporarily graded into the adjacent area in preparation for off-site disposal at a later date.
- CCJV torch-cut the previously installed foundation piles to the final cut-off elevation using acetylene gas and installed steel reinforcement bars for the future pile cap.
- CCJV placed about 10 cubic yards (CY) of concrete within the previously installed steel sheet pile wall for installation of a pile cap in the southwestern portion of the site.
- CCJV covered exposed soil/fill, stockpiled virgin stone, roll-off containers and the dewatering tank with polyethylene sheeting during periods of inactivity and at the conclusion of site activities.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper, Gabriella DeGennaro **LANGAN**

SITE OBSERVATION REPORT

Material Tracking

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

Material Import Summary				
Facility Name Location Type of Material	**Stone Industries, Inc. Haledon, NJ 2.5-inch Virgin Stone**		**Stone Industries, Inc. Haledon, NJ 0.75-inch Virgin Stone**	
Quantities	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)
Today	0	0	0	0
Total	5	115.55	0	0
NYSDEC Approved:	1,000 cubic yards (CY)			

Material Export Summary				
Facility Name Location Type of Material	**Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris**		**Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill**	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0
Total	1	5	9	180

Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper, Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site at six locations for particulate matter less than 10 microns in diameter (PM10), volatile organic compounds (VOCs), and mercury vapor, during ground-intrusive activities. Fifteen-minute average concentrations of PM10, VOCs, and mercury vapor did not exceed the action levels established in the site community air monitoring plan (CAMP) for the duration of work activities. Prior to implementation of ground-intrusive work, background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 µg/m^3 to 0.02 µg/m^3.
- Background concentration of VOCs at each CAMP station were recorded at 0.0 parts per million (ppm).

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor (µg/m^3)
PM-1	0.005	0.0	0.1
PM-2	0.009	0.0	0.0
PM-3	0.005	0.1	0.0
PM-4	0.008	0.0	0.1
PM-5	0.018	0.0	0.0
PM-6	0.011	0.0	0.0
WZ-1	0.018	0.0	0.0

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor (µg/m^3)
PM-1	0.016	0.0	0.1
PM-2	0.016	0.0	0.0
PM-3	0.014	0.6	0.1
PM-4	0.016	0.0	0.3
PM-5	0.034	0.0	0.1
PM-6	0.092	0.0	0.0
WZ-1	0.044	0.1	0.0

●mg/m^3 = milligrams per cubic meter ●ppm = parts per million ●µg/m^3 = micrograms per cubic meter

- Langan used two handheld Jerome® J505 mercury analyzers to monitor ambient air conditions at various heights throughout the site and within the work zone.
  - Instantaneous mercury vapor concentrations throughout the site ranged from 0.00 µg/m^3 to 0.06 µg/m^3.
  - Instantaneous mercury vapor concentrations within the work zone ranged from 0.00 µg/m^3 to 0.04 µg/m^3.
- Langan used a handheld PID to monitor VOC concentrations within the work zone and throughout the site. VOC concentrations were not detected above background concentrations throughout the work day.
- The Jerome® J405 mercury vapor analyzer at perimeter CAMP station PM-4 was replaced at 1:40pm, after verification with the handheld Jerome® J505 unit that erroneous high readings were being recorded. Instantaneous mercury vapor concentrations were recorded using the Jerome® J505 unit during equipment replacement and concentrations were recorded at 0.0 µg/m^3 between 1:40pm and 1:43pm.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper, Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

- Perimeter air monitoring station PM-2 was relocated to the southern sidewalk of Water Street from 7:09am to 5:11pm.
- Prior to discontinuing the CAMP at the conclusion of ground-intrusive activities, VOC and mercury vapor concentrations were confirmed to return to background conditions at each perimeter station using the handheld PID and handheld Jerome® J505 mercury vapor analyzer. CAMP stations were discontinued at 5:11pm at the conclusion of ground-intrusive activities.
    - Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m^3 to 0.05 µg/m^3.
    - VOC concentrations at each CAMP station were recorded at 0.0 ppm.

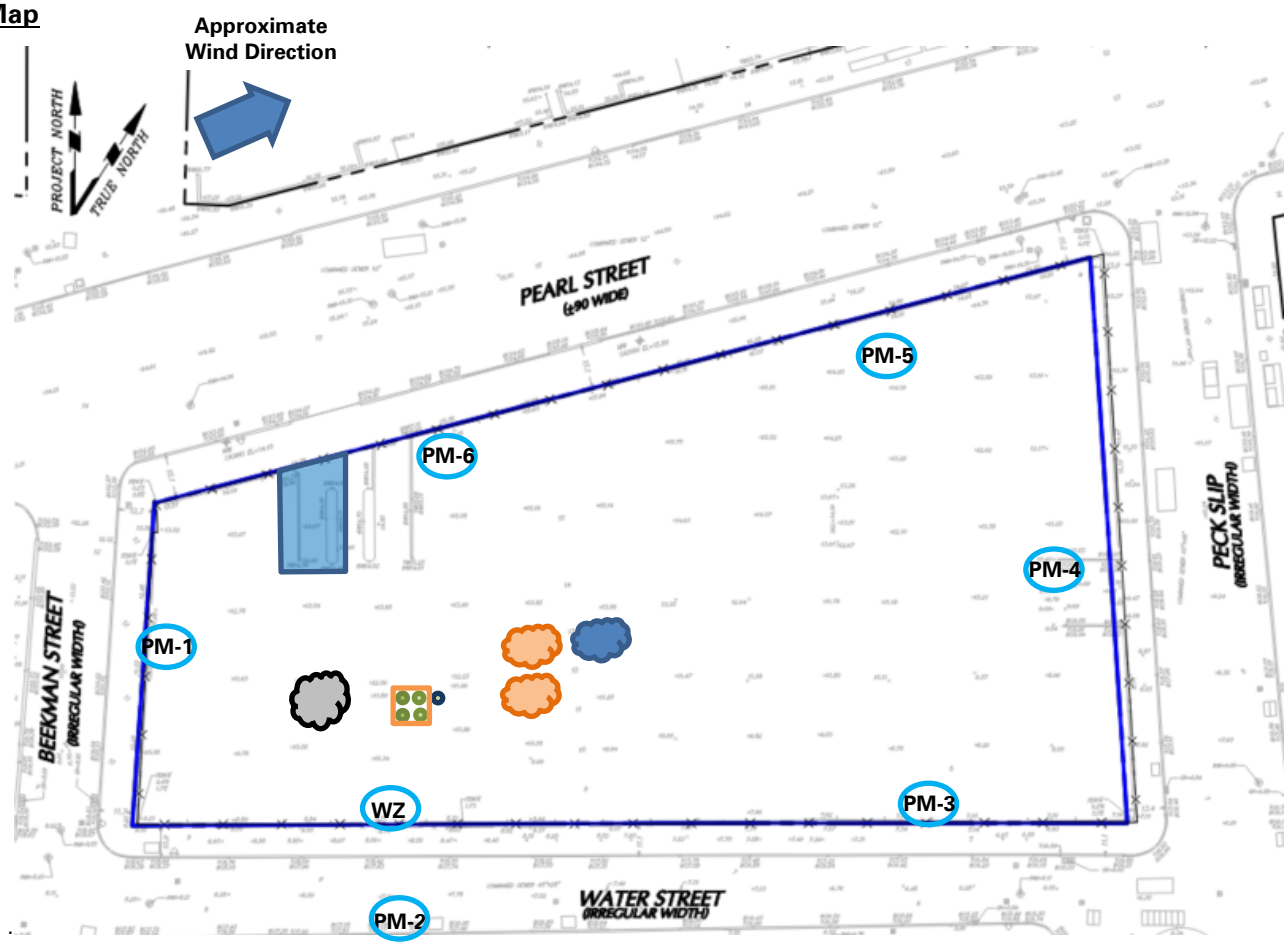
Anticipated Activities

- CCJV will continue concrete placement within the previously installed steel sheet pile wall for installation of the future pile cap.
- CCJV will export 4 truckloads of hazardous lead-impacted soil/fill to the Clean Earth of North Jersey (CENJ) facility, located in Kearny, NJ.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper, Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

Site Map



Legend:

- PM-1 — Approximate Location of Air Monitoring Station
- Approximate Work Area
- Approximate Location of Future Pile Cap
- Approximate Location of Foundation Piles Completed
- Approximate Location of Settling Tanks
- Approximate Location of Truck Tracking Pad
- Approximate Location of Dewatering Well
- Approximate Location of C&D Container
- Approximate Location of Soil Container
- Approximate Location of Stockpiled Virgin Stone

Notes:
1) Locations of air monitoring stations are approximate.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper, Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:

Photo 1: View CCJV excavating soil/fill between previously installed foundation piles in the southwestern portion of the site (facing north)

Photo 2: View of pile cap construction progress in the southwestern portion of the site (facing east).

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper, Brian Kenneally
			LANGAN