SITE OBSERVATION REPORT

PROJECT No.: 170381202	**CLIENT:** 250 Seaport District, LLC c/o The Howard Hughes Corporation	**DATE:**	Saturday, July 23, 2022
PROJECT: 250 Water Street		**WEATHER:**	Sunny, 90.5 – 97.8 ˚F Wind: N @ 1.2 – 6.2 mph
LOCATION: New York, NY		**TIME:**	8:00 AM – 6:45 PM
BCP SITE ID: C231127		**MONITOR:**	Elsah Boak, Yaskira Mota Diaz

EQUIPMENT:
MiniRAE 3000 PID
DustTrak II
Jerome J405®
Jerome J505®
Hand tools
CAT 374F
Komatsu 969
Komatsu 228
Takeuchi TB290

PRESENT AT SITE: **Day 46**
Langan (Environmental/Geotechnical) – Elsah Boak, Yaskira Mota Diaz, Kevin Leong
LendLease (Construction Manager) – Marty Cohen
Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra, George Washburn
New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was present to document remediation 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 installed support-of-excavation (SOE) soldier piles SP43 through SP49 along the eastern boundary of the site.
- CCJV excavated an about 50-foot-long by 8-foot-wide area to a maximum depth of about 8 feet below grade surface (bgs) in the north-central part of the site to facilitate SOE lagging installation between soldier piles SP01 through SP10.
    - CCJV continued demolition of the previously identified concrete foundation wall and demolished concrete was temporarily stockpiled adjacent to the excavation area in preparation for off-site disposal.
    - Excavated soil/fill was temporarily stockpiled adjacent to the excavation area on polyethylene sheeting and was screened for odors, staining, organic vapors, and mercury vapor using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer, respectively.
        - Maximum instantaneous mercury vapor concentrations ranged from 1.07 µg/m^3 (at 10:58am) to 10.03 µg/m^3 (at 11:22am) during screening of excavated soil/fill. There were no fifteen-minute time-weighted average (TWA) concentrations for mercury vapor that exceeded the action level established by the community air monitoring plan (CAMP) during the excavation activities.
    - Mercon-X® and Atmos® AC-645 dust/vapor suppressing foam was actively applied to exposed soil/fill and stockpiles during excavation activities.
    - After excavation was complete, Mercon-X® and Atmos® AC-645 dust/vapor suppressing foam were applied to exposed soil/fill and stockpiles were covered with polyethylene sheeting.

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SITE OBSERVATION REPORT

- CCJV excavated an about 10-foot-long by 3-foot-wide area to a maximum depth of about 1.5 feet bgs in the west-central part of the site to create a temporary sump for the trucking pad at the entrance to the site. The excavated area was lined with polyethylene sheeting and was backfilled to surface grade using previously imported 1.5-inch clean stone.
    - Excavated soil/fill was temporarily stockpiled on and covered with polyethylene sheeting adjacent to the excavation area and was screened for odors, staining, organic vapors, and mercury vapor using a handheld PID and handheld Jerome® J505 mercury vapor analyzer, respectively. No odors, staining, or instrumental evidence (PID or Jerome® J505) of contamination was recorded.
- CCJV installed T-brackets along the edges of soldier piles SP01 through SP07 to accommodate timber lagging installation.
- CCJV installed timber lagging between soldier piles SP01 through SP07 to a depth of about 5 feet bgs for SOE system installation along the northern site boundary.
- CCJV covered all exposed soil/fill and C&D debris with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover at the end of the work day.

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SITE OBSERVATION REPORT

Material Tracking

- No material was imported to the site.
- CCJV exported three truckloads (about 60 cubic yards [CY]) of construction and demolition (C&D) debris, consisting of demolished concrete, to the Allocco Recycling facility, located in Brooklyn, NY.

Material Import Summary

Facility Name Location Type of Material	**Stone Industries, Inc. Haledon, NJ 1.5/2.5-inch Virgin Stone**		**Stone Industries, Inc. Haledon, NJ 0.75-inch Virgin Stone**		**Impact Reuse & Recovery or Impact Materials Jersey City, Lyndhurst/Jersey City, NJ 1.5 inch Clean Bluestone**	
Quantities	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)
Today	0	0	0	0	0	0
Total	7	161.51	0	0	2	41.23
NYSDEC Approved:	1,000 CY				400 CY	

Material Export Summary

Facility Name Location Type of Material	**Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris**		**IRRC Lyndhurst, NJ 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)	No. of Loads	Approx. Volume (CY)
Today	3	60	0	0	0	0
Total	5	85	6	120	14	280

Sampling Activities

- No samples were collected.

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at the work zone at eight total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor or VOCs that exceeded the action level established by the CAMP (1.00 µg/m^3 and 5.0 ppm, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work, instantaneous 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 were recorded at 0.00 µg/m^3.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor (µg/m^3)
PM-1	0.014	0.0	0.01
PM-2	0.009	0.0	0.01
PM-3	0.031	1.3	0.00
PM-4	0.031	0.4	0.02
PM-5	0.042	0.0	0.02
PM-6	0.037	0.0	0.05
WZ-1	0.038	0.0	0.01
WZ-2	0.027	0.3	0.01
WZ-3	N/A	N/A	N/A

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor (µg/m^3)
Action Level	**0.100 mg/m^3**	**5.0 ppm**	**1.00 µg/m^3**
PM-1	0.045	0.0	0.03
PM-2	0.036	0.2	0.03
PM-3	0.053	3.4	0.01
PM-4	0.042	3.9	0.03
PM-5	0.061	0.0	0.09
PM-6	*0.185 @ 11:01am	0.0	0.48
WZ-1	0.052	0.0	0.02
WZ-2	0.042	0.6	0.11
WZ-3	N/A	N/A	N/A

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

- * PM10 concentrations at perimeter CAMP station PM-6 exceeded the action level established in the CAMP (0.100 mg/m3) from 10:55am to 11:08am (14 minutes), 11:24am to 11:35am (12 minutes), and 12:56pm to 1:08pm (13 minutes). The exceedances were caused by welding activities in proximity to perimeter CAMP station PM-6 and were not a result of ground-intrusive activities at the site. In each instance, work was

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temporarily halted and dust suppression was implemented by spraying the work area with water. Fugitive dust was not observed migrating from the site during each of these times.

Ambient Air (Handheld Jerome® J505 and Handheld PID)

- The dedicated mobile monitor (Langan) used a handheld Jerome® J505 mercury vapor analyzer to monitor ambient air conditions at various heights throughout the site. Instantaneous mercury vapor concentrations throughout the site ranged from 0.00 µg/m^3 to 0.79 µg/m^3 (mercury vapor concentrations above background concentrations are associated with ambient air screening in the north-central part of the site during excavation activities in the mercury-impacted area).
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

Off-Site CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 9:19am to 5:27pm during excavation and demolition activities along the northern boundary of the site.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 9:51am to 5:11pm during installation of SOE soldier piles along the eastern boundary of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 5:07pm and 5:29pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station were recorded at 0.00 µg/m^3.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

Anticipated Activities

- UBS will begin relocation of the perimeter construction fence along the northern sidewalk of Water Street.
- CCJV will continue excavating test pits to identify potential subsurface utilities and/or obstructions prior to SOE soldier pile installation along the southern boundary of the site.
- CCJV will continue installation of SOE soldier piles along the eastern boundary of the site.
- CCJV will continue installation of T-brackets along the edges of soldier piles to accommodate timber lagging installation.
- CCJV will continue installation of timber lagging between soldier piles.
- CCJV will excavate soil/fill in the mercury-impacted area for off-site disposal to the Clean Earth of North Jersey (CENJ) facility, located in Kearny, NJ.

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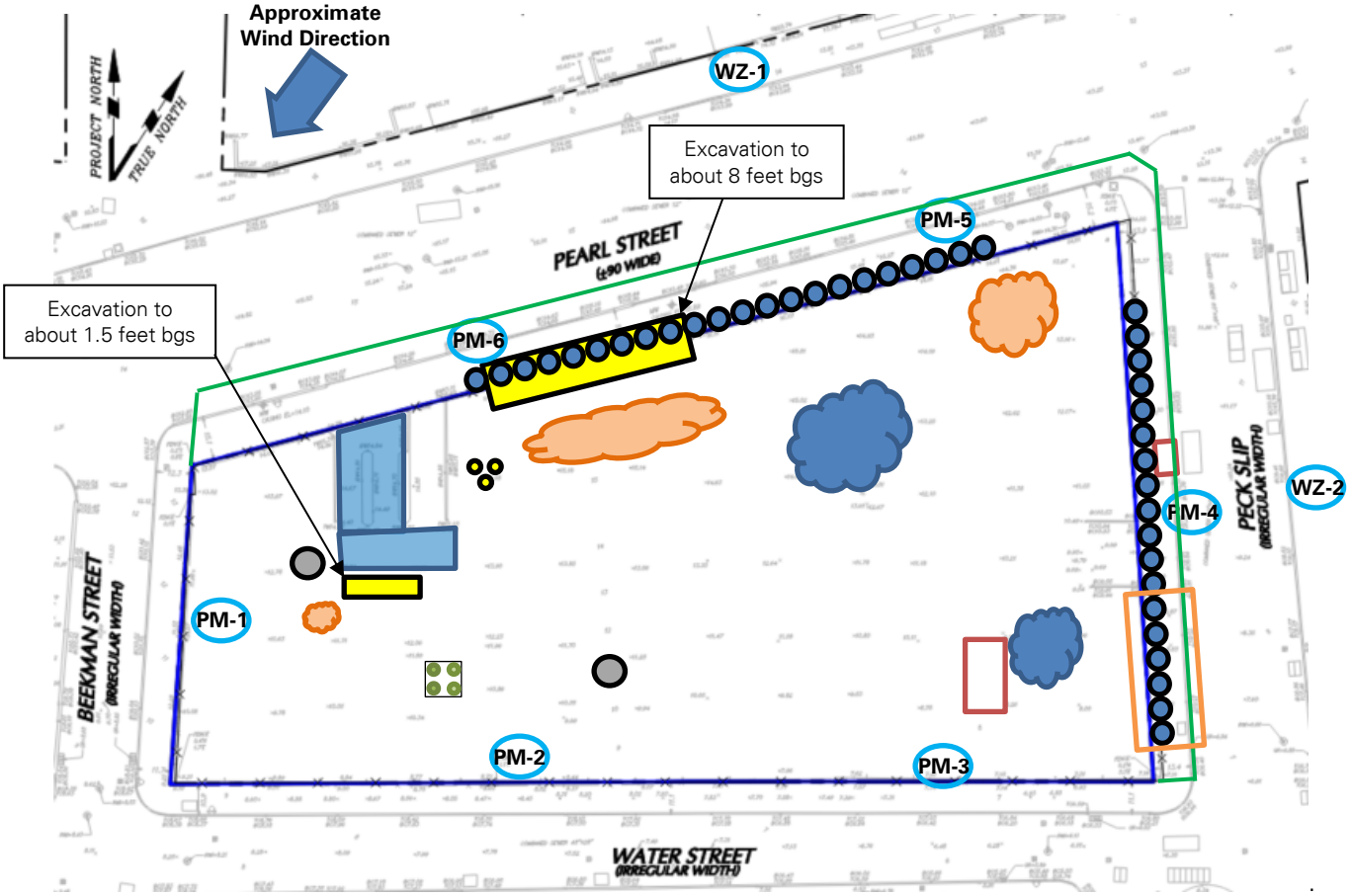
Site Map



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

Legend:

- PM-1 — Approximate Location of Air Monitoring Station
- Approximate Work Area
- Approximate Location of Installed Pile Cap
- Approximate Location of Foundation Piles Completed
- Approximate Location of Truck Tracking Pad
- Approximate Location of C&D Stockpile
- Approximate Location of Soil/Fill Container
- Approximate Location of Soil/Fill Stockpile
- Approximate location of USTs
- Approximate Location of Stockpiled Virgin Stone
- Approximate Location of 55-gallon drum
- Approximate Location of Test Pile
- Approximate Location of Soldier Pile
- Approximate Perimeter Construction Fence Location
- Approximate Fence Relocation Area
- Approximate Excavation Area

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Select Site Photographs:

Photo 1: CCJV excavating soil/fill along the northern boundary of the site and actively applying Mercon-X® to the excavation area (facing southeast)

Photo 2: Installed timber lagging sprayed with Atmos® AC-645 dust/vapor suppressing foam and stockpiled soil/fill covered with polyethylene sheeting along the northern boundary of the site (facing east).

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