SITE OBSERVATION REPORT

PROJECT No.: 170381202	**CLIENT:** 250 Seaport District, LLC c/o The Howard Hughes Corporation	**DATE:**	Friday, July 22, 2022
PROJECT: 250 Water Street		**WEATHER:**	Sunny, 82.2 – 97.8 ˚F Wind: N @ 0.6 – 7.2 mph
LOCATION: New York, NY		**TIME:**	6:00 AM – 6:30 PM
BCP SITE ID: C231127		**MONITOR:**	Elsah Boak, Brian Kenneally

EQUIPMENT:	**PRESENT AT SITE:** **Day 45**
MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290	**Langan** (Environmental/Geotechnical) – Elsah Boak, Brian Kenneally, Lisa Cristiano, Ava Sann, 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 **UBS** (Fence Contractor)

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 pile SP22 along the northern (Pearl Street) boundary of the site and SOE soldier piles SP32 through SP42 along the eastern (Peck Slip) boundary of the site.
- UBS installed additional plywood panels atop the perimeter construction fence along Pearl Street to extend the fence to a height of about 10 feet above grade surface.
- CCJV excavated nine test pits along the eastern boundary of the site for installation of SOE soldier piles SP42 through SP50. Each test pit consisted of an about 4-foot-long by 3-foot-wide area and was excavated to a maximum depth of about 4 feet below grade surface (bgs).
    - Excavated soil/fill was temporarily stockpiled adjacent to each respective work 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. No odors, staining, or instrumental evidence (PID and Jerome® J505) of contamination was recorded.
    - One additional underground storage tank (UST) was identified off-site beneath the Peck Slip sidewalk, immediately east of the site, during excavation of test pits along the eastern boundary of the site. The support-of-excavation system will be reconfigured in this area and decommissioning of the UST is anticipated to occur at a later date.
    - Excavated soil/fill from each test pit was covered with polyethylene sheeting and will be temporarily backfilled into each respective test pit at a later date.
- CCJV excavated four about 20-foot-long by 6-foot-wide areas to a maximum depth of about 8 feet bgs in the north-central part of the site to facilitate demolition of a previously identified concrete foundation wall prior to SOE lagging installation between soldier piles SP01 through SP15.

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- 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 PID and handheld Jerome® J505 mercury vapor analyzer, respectively. A maximum instantaneous mercury vapor reading of 1.41 µg/m^3 was recorded during screening of the excavated soil/fill.
- Mercon-X® and Atmos® AC-645 dust/vapor suppressing foam was actively applied to exposed soil/fill and stockpiles during excavation and/or demolition activities. There were no fifteen-minute time-weighted average (TWA) concentrations for mercury vapor that approached or exceeded the action level established by the CAMP (1.00 µg/m^3).
- CCJV demolished the previously identified concrete foundation wall and demolished concrete was temporarily stockpiled adjacent to the excavation area in preparation for off-site disposal.
- Following demolition and removal of the previously identified concrete foundation wall, the excavation areas were temporarily backfilled with the excavated soil/fill originating from the same location. Following application of Mercon-X® and Atmos® AC-645 dust/vapor suppressing foam, exposed soil/fill and stockpiles were covered with polyethylene sheeting in preparation for re-excavation and SOE lagging installation at a later date.

- 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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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 Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.

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	0	0	3	60	0	0
Total	1	25	6	120	14	280

Sampling Activities

- No samples were collected.

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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 approached or exceeded the action level established by the CAMP (1.0 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 ranged from 0.00 to 0.01 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	0.030	0.0	0.01
PM-2	0.042	0.0	0.01
PM-3	0.036	0.0	0.00
PM-4	0.045	0.7	0.01
PM-5	0.039	0.2	0.01
PM-6	0.041	0.0	0.02
WZ-1	0.042	0.0	0.01
WZ-2	0.031	0.0	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	0.053	0.0	0.03
PM-2	0.072	0.1	0.02
PM-3	0.052	0.1	0.01
PM-4	**0.173 @ 11:09am	4.1	0.09
PM-5	0.071	0.6	0.02
PM-6	*0.160 @ 9:49am	0.3	0.08
WZ-1	0.068	0.0	0.02
WZ-2	0.040	0.2	0.03
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/m^3) for a duration of about 15 minutes (9:36am to 9:50am). The maximum 15-minute TWA concentration of PM10 was recorded at 0.160 mg/m^3 and was caused by instantaneous PM10 concentrations ranging from 0.798 mg/m^3 to 1.208 mg/m^3. No ground-intrusive activities were ongoing at the site and fugitive

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dust was not observed migrating from the site during this time. The DustTrak unit at perimeter CAMP station PM-6 was recalibrated and instantaneous PM10 concentrations returned to background conditions at 9:37am.

- ** PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m^3) for a duration of about 5 minutes (11:05am to 11:09am). The maximum 15-minute TWA concentration of PM10 was recorded at 0.173 mg/m^3 and was caused by instantaneous PM10 concentrations ranging from 0.118 mg/m^3 to 0.691 mg/m^3. The exceedances were caused by exhaust from a nearby generator, which resulted in PM10 and VOC concentrations above background conditions. Perimeter CAMP station PM-4 was relocated further downwind of the work area at 11:10am to avoid potential interference from the generator. During this time, off-site CAMP station WZ-2 was located on the eastern sidewalk of Peck Slip and no instantaneous PM10 concentrations above background conditions were recorded.
- PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m^3) for a duration of about 26 minutes (1:59pm to 2:24pm). The maximum 15-minute TWA concentration of PM10 was recorded at 0.158 mg/m^3 and was caused by instantaneous PM10 concentrations ranging from 0.134 mg/m^3 to 0.500 mg/m^3. The exceedances were caused by concrete demolition activities in proximity to the perimeter CAMP station. Dust suppression was implemented by spraying the work area with water and PM10 concentrations returned to background conditions. During this time, off-site CAMP station WZ-2 was located on the eastern sidewalk of Peck Slip and no instantaneous PM10 concentrations above background conditions were recorded.

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 0.28 µg/m^3.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous 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 6:58am to 5:23pm during excavation/backfilling activities along the northern boundary of the site.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:58am to 5:23pm during installation of SOE soldier piles along the eastern boundary of the site.

Equipment Troubleshooting

- PM10 concentrations were not recorded at perimeter CAMP station PM-4 between 11:10am and 11:20am during relocation of the CAMP station further downwind of the work area to avoid interference from a nearby generator. Fugitive dust was not observed migrating from the site during this time and data logging resumed at 11:21am. During this time, off-site CAMP station WZ-2 was located on the eastern sidewalk of Peck Slip and no instantaneous PM10 concentrations above background conditions were recorded.

Prior to CAMP Shutdown

Prior to discontinuing the 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 5:22pm and 5:24pm at the conclusion of ground-intrusive activities.

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

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- 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 eastern boundary of the site.
- CCJV will continue installation of SOE soldier piles along the eastern boundary of the site.
- CCJV will install T-brackets along the edges of soldier piles to accommodate timber lagging installation.
- CCJV will install timber lagging between soldier piles.

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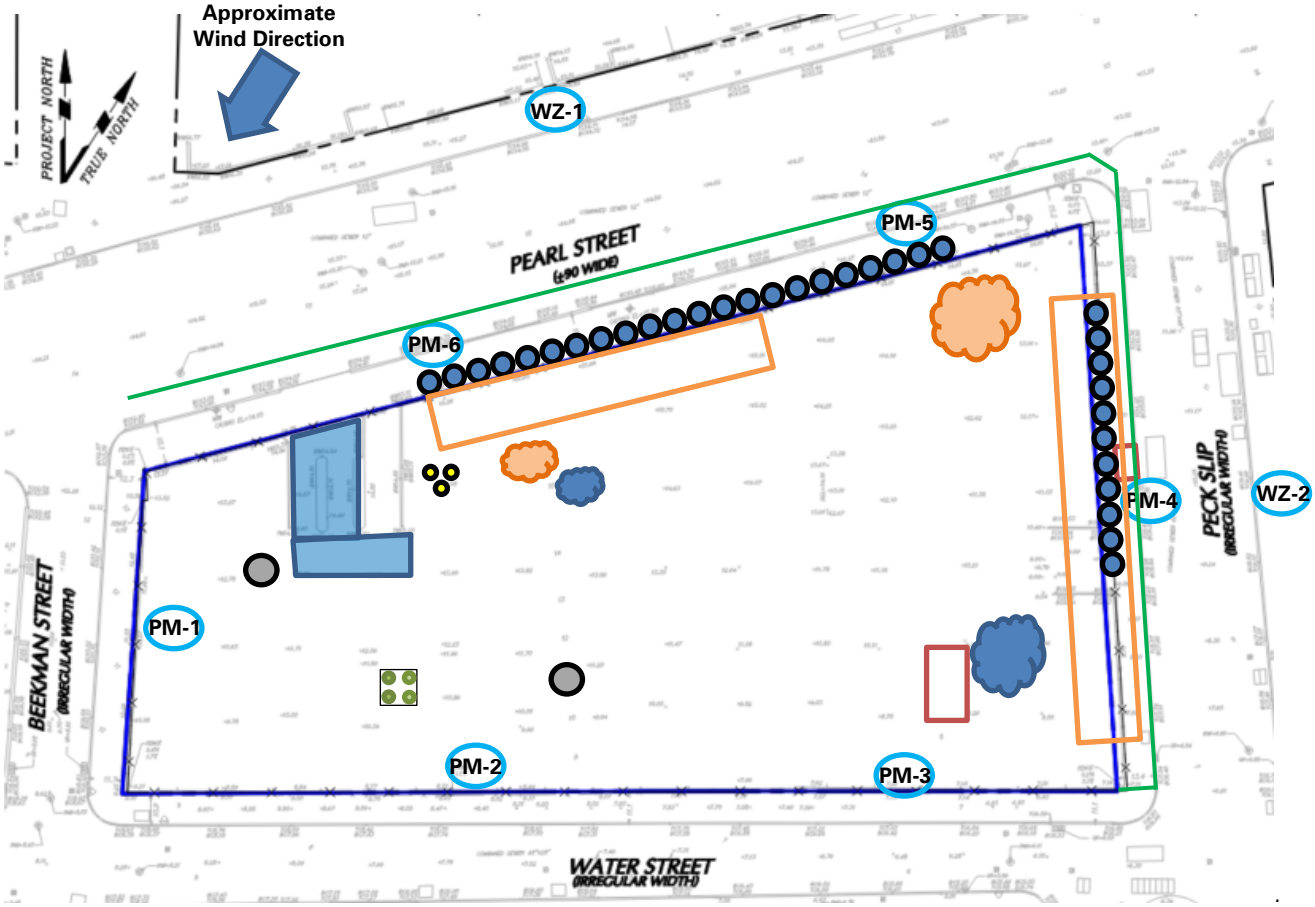
Site Map



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 Location of Soil Boring Completed Today

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Select Site Photographs:

Photo 1: Exposed soil/fill and stockpiles covered with Atmos-AC-645 dust/vapor suppressing foam and/or polyethylene sheeting (facing northwest)

Photo 2: CCJV installing SOE soldier piles along the eastern boundary of the site (facing southeast)

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