SITE OBSERVATION REPORT

PROJECT No.: 170381202	**CLIENT:** 250 Seaport District, LLC c/o The Howard Hughes Corporation	**DATE:**	Friday, October 7, 2022
PROJECT: 250 Water Street		**WEATHER:**	Clear, 60.9 – 78.6 ˚F Wind: NNE @ 0.3 – 5.3 mph
LOCATION: New York, NY		**TIME:**	6:00 AM – 4:00 PM
BCP SITE ID: C231127		**MONITOR:**	Maitland Robinson, Eddie Cai

EQUIPMENT:
MiniRAE 3000 PID
DustTrak II
Jerome J405®
Jerome J505®
Hand tools
CAT 374F
Komatsu 969
Komatsu 228
Takeuchi TB290
JCB 110W Hydradig
Wacker Neuson RTSC3
Wacker Neuson OPU6555

PRESENT AT SITE: **Day 122**
Langan (Environmental/Geotechnical) – Maitland Robinson, Eddie Cai
Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra
Lendlease (General Contractor) – Marty Cohen
Tristate Groundwater (Dewatering Contractor) – John Ratcliff
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 removed previously installed steel sheet piles in the southeastern part of the site.
- CCJV and Tristate Groundwater began demobilization of the dewatering system from the eastern and southeastern parts of the site.
- CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Eddie Cai **LANGAN**

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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 1.5/2.5-inch Virgin Stone		Stone Industries, Inc. Haledon, NJ 0.75-inch Virgin Stone		Impact Reuse & Recovery Center or Impact Materials Jersey City, Lyndhurst/Jersey City, NJ 1.5-inch Clean Bluestone		Impact Reuse & Recovery Center, Lyndhurst, NJ General Fill	
Quantities	No. of Loads	Approx. Volume (Tons)	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	0	0
Project Total	8	184.42	0	0	12	264.01	233	5,719.75
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

*0.75-inch, 1.5-inch, and 2.5-inch virgin stone from the Stone Industries, Inc. facility and 1.5-inch clean bluestone from the Impact Reuse & Recovery Center (IRRC) facility were approved for import of 1,000 cubic yards (CY) and 400 CY, respectively. Assuming a conversion factor of 1.8, each quantity was converted to tons in order to accurately compare with import weight tickets. General fill from the IRRC facility was approved for import of 5,000 CY and a conversion factor of 1.5 is applied.

Material Export Summary (1 of 2)

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		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	37	740	81	1,620	216	4,320

Material Export Summary (2 of 2)

Facility Name Location Type of Material	Middlesex County Landfill East Brunswick, NJ Non-hazardous Soil/Fill		Bayshore Soil Management Keasbey, NJ Petroleum-Impacted Soil/Fill		Clean Earth of Carteret, NJ Carteret, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0
Project Total	261	5,220	267	5,340	42	840

Sampling Activities

- No samples were collected.

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CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, 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, VOCs, or PM10 that approached or exceeded the action levels established by the CAMP (1.00 µg/m^3, 5.0 ppm and 0.100 mg/m^3 respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, 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 ranged from 0.0 ppm to 0.2 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	0.037	0.0	0.01
PM-2	0.042	0.0	0.00
PM-3	0.031	0.0	0.00
PM-4	0.030	0.1	0.00
PM-5	0.008	0.1	0.01
PM-6	0.032	0.0	0.01
WZ-1	0.044	0.0	0.01
WZ-2	0.000	0.1	0.01
WZ-3	0.024	0.1	0.01

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	0.059	0.0	0.03
PM-2	0.061	0.0	0.02
PM-3	0.051	0.0	0.01
PM-4	0.057	0.4	0.01
PM-5	0.019	0.2	0.03
PM-6	0.056	0.0	0.02
WZ-1	0.069	0.0	0.03
WZ-2	0.001	1.1	0.04
WZ-3	0.054	0.2	0.02

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

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Equipment Troubleshooting

- The Jerome® J505 at off-site CAMP station WZ-2 did not transmit data through the remote telemetry system throughout the work day. The mercury vapor data from the Jerome® J505 was manually downloaded at the end of the work day and is reflected in the Daily Air Monitoring Report. A Jerome® J405 was connected to telemetry to provide real-time mercury vapor data to field personnel while continuing to monitor the area with a Jerome® J505 unit.

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 0.09 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.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:10am to 3:00pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:57am to 3:00pm during removal of steel sheet piles in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:57am to 3:00pm during removal of steel sheet piles in the southeastern part 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 at 3:00pm 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 excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV and Tristate Groundwater will continue demobilization of the dewatering system.
- Langan will continue collection of confirmation endpoint soil samples across the site.

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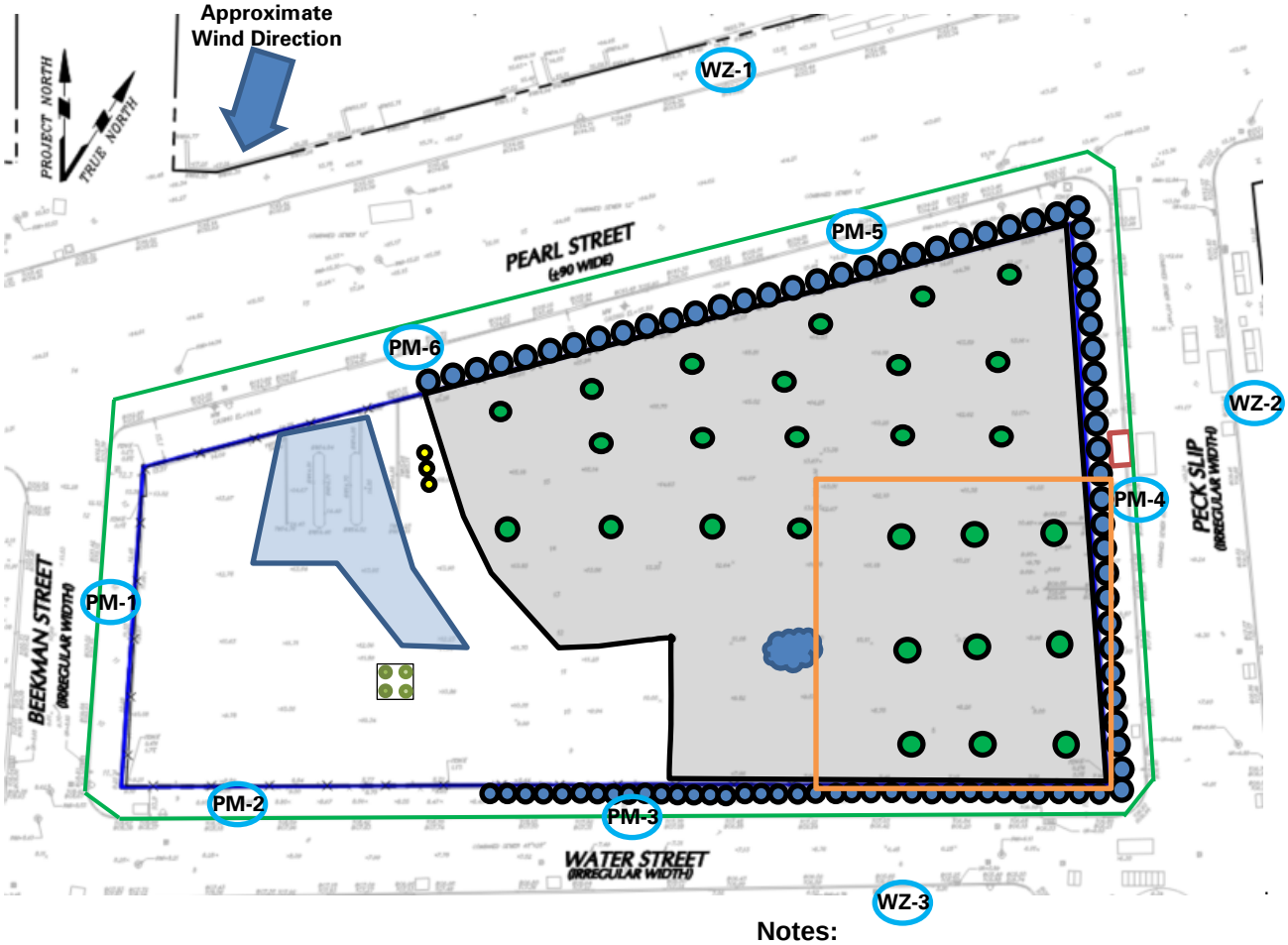
Site Map



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 General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile
- Approximate Location of 55-gallon drum
- Approximate Location of Soldier Pile
- Approximate Perimeter Construction Fence Location
- Previous Excavation Area
- Approximate Excavation Area
- Approximate Backfill Area
- Approximate Location of Endpoint Sample
- Approximate Location of Previously Collected Endpoint Sample

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Select Site Photographs:

Photo 1: CCJV removing previously installed steel sheet piles in the southeastern part of the site (facing east)

Photo 2: Exposed soil/fill covered in Atmos® AC-645 dust/vapor suppressing foam for the temporary overnight cover (facing northeast)

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