SITE OBSERVATION REPORT

PROJECT No.:	170381202	**CLIENT:** 250 Seaport District, LLC c/o The Howard Hughes Corporation	**DATE:**	Friday, September 8, 2023
PROJECT:	250 Water Street		**WEATHER:**	Sunny, 78 – 88° F Wind: ESE @ 0.1 – 1.9 mph
LOCATION:	New York, NY		**TIME:**	5:45am – 4:0-0pm
BCP SITE ID:	C231127		**MONITOR**	Jack Millman

EQUIPMENT:
CAT 335 Excavator
CAT 328 Excavator
Komatsu PC138 Excavator
Delmag Drill Rig
Bauer RTG RG 27S
Bauer BG45 Drill Rig
Jerome J505 Mercury Vapor Analyzer
RKI GX-6000 Photoionization Detector (PID)
Aeroqual ASQ1 Air Monitoring Station

PRESENT AT SITE: **Day 199**
Langan (Environmental/Geotechnical) Jack Millman, Michael Cole, Pradeep Pandey
Suffolk Construction (Suffolk) (General Contractor) Anthony Galu, Wyatt Favia
East Coast Drilling, Inc. (ECD) (Foundation Contractor) Danny Rodgers
New York State Department of Environmental Conservation (NYSDEC) Meghan Medwig

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

- ECD excavated an about 15-foot-long by 1-foot-wide area to a maximum depth of about 7 feet below grade surface (bgs) in the western part of the site (waste characterization cells WC02 and WC03) to install timber lagging for the support-of-excavation (SOE) system.
    - Excavated soil/fill 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 evidence of impacts was observed and the excavated soil/fill was temporarily graded into the adjacent area in preparation for off-site disposal.
- ECD excavated an about 20-foot-long by 30-foot-wide area to a maximum depth of about 5 feet bgs in the northwest part of the site (waste characterization cell WC01) to install timber lagging for the SOE system.
    - Excavated soil/fill 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 evidence of impacts was observed and the excavated soil/fill was temporarily graded into the adjacent area in preparation for off-site disposal.
    - Construction and demolition (C&D) debris was separated from the soil/fill and was live-loaded into securely covered tri-axle dump trucks for off-site disposal.
- ECD continued installation of the concrete guide wall in the northern and eastern parts of the site (along Pearl Street and Peck Slip, respectively). The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.

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Material Tracking

- ECD exported eight truckloads (about 160 cubic yards [CY]) of C&D debris for off-site disposal at the Earth Efficient MSM facility, located in East Stroudsburg, PA.
- No material was imported to 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	12	283.91	0	0	15	339.65	374	9,157.85
NYSDEC Approved:	1,800 tons*				720 tons*		19,500 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 13,000 CY and a conversion factor of 1.5 is applied.

Material Export Summary (1 of 3)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ C&D Debris		Earth Efficient MSM East Stroudsburg, PA 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)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	8	160	0	0
Project Total	5	85	42	840	38	760	95	1,900

Material Export Summary (2 of 3)

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	273	5,460	267	5,340	66	1,320

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Material Export Summary (3 of 3)				
Facility Name Location Type of Material	**Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill**		**Cycle Chem, Inc. Elizabeth, NJ Hazardous Lead - Impacted Soil/Fill**	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0
Project Total	201	4,020	10	200

Sampling

- No samples were collected.

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site, at the northern sidewalk of Pearl Street, at the western sidewalk of Beekman Street, at the eastern sidewalk of Peck Slip, and at the southern sidewalk of Water Street at eight total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:57am to 2:58pm. 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, or 0.100 mg/m^3, respectively).

Background Concentrations

Prior to implementation of CAMP, 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	0.019	0.00	0.01
PM-2	0.020	0.00	0.01
PM-3	0.022	0.00	0.02
PM-4	0.020	0.00	0.02
WZ-1	0.020	0.00	0.00
WZ-2	0.019	0.00	0.00
WZ-3	0.019	0.00	0.00
WZ-4	0.019	0.00	0.03

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor (µg/m^3)
PM-1	0.029	0.02	0.09
PM-2	0.025	0.04	0.05
PM-3	0.038	0.03	0.12
PM-4	0.028	0.07	0.05
WZ-1	0.024	0.00	0.01
WZ-2	0.027	0.01	0.01
WZ-3	0.026	0.00	0.01
WZ-4	0.035	0.02	***** 0.56

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

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Equipment Troubleshooting

***** Two consecutive mercury vapor readings were detected at 4.73 µg/m^3 and 3.43 µg/m^3 at off-site CAMP station WZ-4 at 9:00am and 9:01am, respectively. The 15-minute time-weighted-average (TWA) concentrations of mercury vapor did not exceed the action level established by the CAMP (1.00 µg/m^3) as a result of the detections. Mercury vapor readings at perimeter CAMP station PM-4 were recorded at 0.00 and 0.02 µg/m^3, respectively, during this time, and mercury vapor readings returned to background conditions at 9:02am. The filter within the Jerome® J505 unit at off-site CAMP station WZ-4 was replaced and the equipment rental vendor was contacted to replace the 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 0.15 µg/m^3.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were not detected above background concentrations throughout the workday.

Off-site CAMP Stations

- CAMP station WZ-1 was placed on the western sidewalk of Beekman Street from about 6:42am to 3:11pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from about 6:45am to 3:15pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from about 6:46am to 3:23pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from about 6:49am to 3:30pm.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, mercury vapor and VOC concentrations were confirmed to return to background conditions at each perimeter station using the handheld Jerome® J505 mercury vapor analyzer and handheld PID, respectively. Perimeter CAMP stations were discontinued sequentially between 3:11pm and 3:30pm.

- 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.

Anticipated Activities

- ECD will continue exporting C&D and soil/fill from the western part of the site for off-site disposal.
- ECD will continue installing soil mix columns and/or soldier piles for SOE installation along Pearl Street and Peck Slip.
- ECD will continue installation of timber lagging for the SOE system in the western part of the site.

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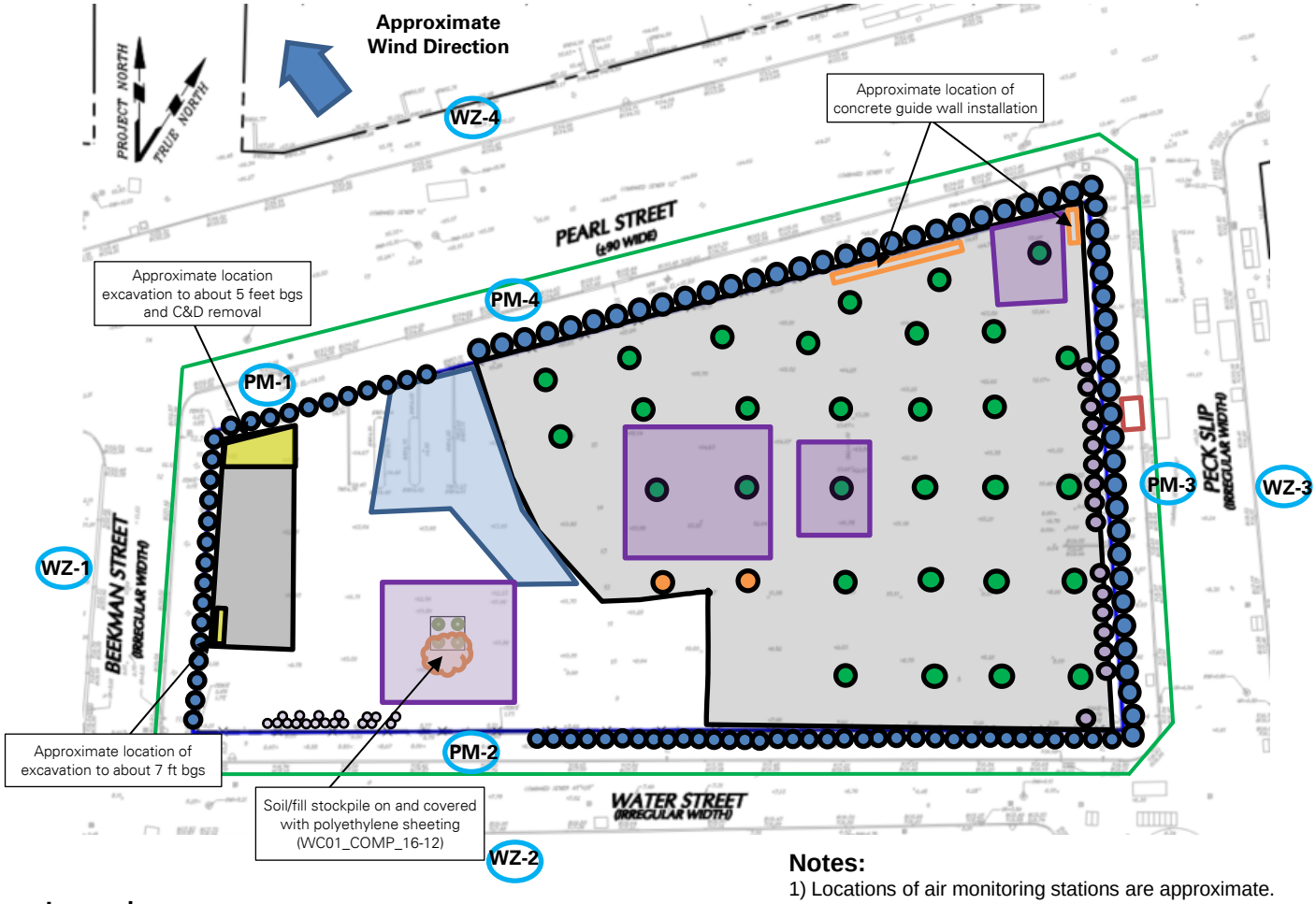
Site Map



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 Underground Storage Tank
- Approximate Location of C&D Stockpile
- Approximate Location of Soil/Fill Stockpile
- Approximate Location of Soldier Pile
- Approximate Location of Soil Mix Column Installed Today
- Approximate Location of Soil Mix Column Installed Previously
- Approximate Perimeter Construction Fence Location
- Previous Excavation Area
- Approximate Excavation Area
- Approximate Location of Documentation Sample
- Approximate Location of Previously Collected Endpoint Sample
- Approximate Location of Imported Fill/Stone

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

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Select Site Photographs:

Photo 1: General view of site (facing south)

Photo 2: ECD excavating soil/fill in the western part of the site (facing west)

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