

SITE OBSERVATION REPORT

PROJECT No.: 170381202	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Friday, March 31, 2023
PROJECT: 250 Water Street		WEATHER: Overcast, 41– 52 °F Wind: ESE @ 0 – 4.5 mph
LOCATION: New York, NY		TIME: 6:00 am – 3:00 pm
BCP SITE ID: C231127		MONITOR Caroline Devin

EQUIPMENT: CME75 Truck-Mounted Drill Rig CME75 Track-Mounted Drill Rig Jerome J505 RKI GX-6000 Photoionization Detector Aeroqual ASQ1 Particulate and VOC Monitors	PRESENT AT SITE: Langan (Environmental) Caroline Devin Suffolk Construction (General Contractor) Anthony Galu East Coast Drilling (Foundation Contractor) Craig Geotechnical Drilling Co., Inc. (Geotechnical Drilling Contractor) Sean Cleary, Keith Parent, Matthew Michelotti, Bryan Gregor New York State Department of Environmental Conservation (NYSDEC) Rafi Alam	Day 140
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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

- Craig Geotechnical Drilling Co., Inc. (Craig) used a CME75 truck-mounted drill rig to advance one geotechnical soil boring along the northern boundary of the site (Pearl Street). The geotechnical boring was advanced to about 138 feet below grade surface (bgs), which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques.
 - Drilling spoils were containerized in a sealed and labeled United Nations/Department of Transportation (UN/DOT)-approved drums, which was staged in the northern part of the site for future sampling and off-site disposal at a later date.
- Craig used a CME75 track-mounted drill rig to advance one geotechnical soil boring along the southern boundary of the site (Water Street). The geotechnical boring was advanced to about 114 feet bgs, which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques.
 - Drilling spoils were containerized in a sealed and labeled UN/DOT-approved drum, which was staged in the northern part of the site for future sampling and off-site disposal at a later date.

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Material Tracking

- No material was exported from the site.
- 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	8	184.42	0	0	15	339.65	336	8,216.79
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 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	42	840	95	1,900	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	66	1,320

Sampling

- No samples were collected.

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CAMP Activities

Langan performed air monitoring at the perimeter of the site and across Pearl and Water Streets 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, VOCs, or PM10 that approached or exceeded the action levels established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$, 5.0 parts per million [ppm], and 0.100 mg/m^3 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 $\mu\text{g}/\text{m}^3$.
- 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 ($\mu\text{g}/\text{m}^3$)
PM-1	0.007	0.0	0.00
PM-2	0.008	0.0	0.01
PM-3	0.008	0.0	0.01
PM-4	0.007	0.0	0.00
PM-5	0.007	0.0	0.00
PM-6	0.008	0.0	0.00
WZ-1	0.007	0.0	0.01
WZ-2	0.007	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.017	0.0	0.01
PM-2	0.012	0.0	0.02
PM-3	0.013	0.0	0.03
PM-4	0.008	0.0	0.01
PM-5	0.008	0.0	0.02
PM-6	0.016	0.0	0.02
WZ-1	0.011	0.0	0.03
WZ-2	0.009	0.0	0.05

• mg/m^3 = milligrams per cubic meter • ppm = parts per million • $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

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 $\mu\text{g}/\text{m}^3$ to 0.10 $\mu\text{g}/\text{m}^3$.

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- 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.

Equipment Troubleshooting

- PM10 concentrations were not recorded at perimeter CAMP station PM-6 between 10:40am and 10:41am and at off-site CAMP station WZ-2 between 8:12am and 8:13am, and at 8:50am due to an automatic zero-calibration function being run within each respective station. Data logging resumed following completion of the automatic calibration. Fugitive dust was not observed migrating from the site during this time.
- VOC concentrations were not recorded at off-site CAMP station WZ-2 between 8:12am and 8:14am, and 8:50am and 8:51am due to an automatic zero-calibration function being run within the station. Data logging resumed following completion of the automatic calibration. Odors were not observed migrating from the site during this time.

Off-Site CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 8:57am to 1:08pm during advancement of geotechnical soil borings in the northern part of the site.
- CAMP station WZ-2 was relocated to the southern sidewalk of Water Street from 7:13am to 1:17pm during advancement of geotechnical soil borings in the southern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing 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 sequentially between 12:47pm and 1:17pm at the conclusion of ground-intrusive activities.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 to 0.01 $\mu\text{g}/\text{m}^3$.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

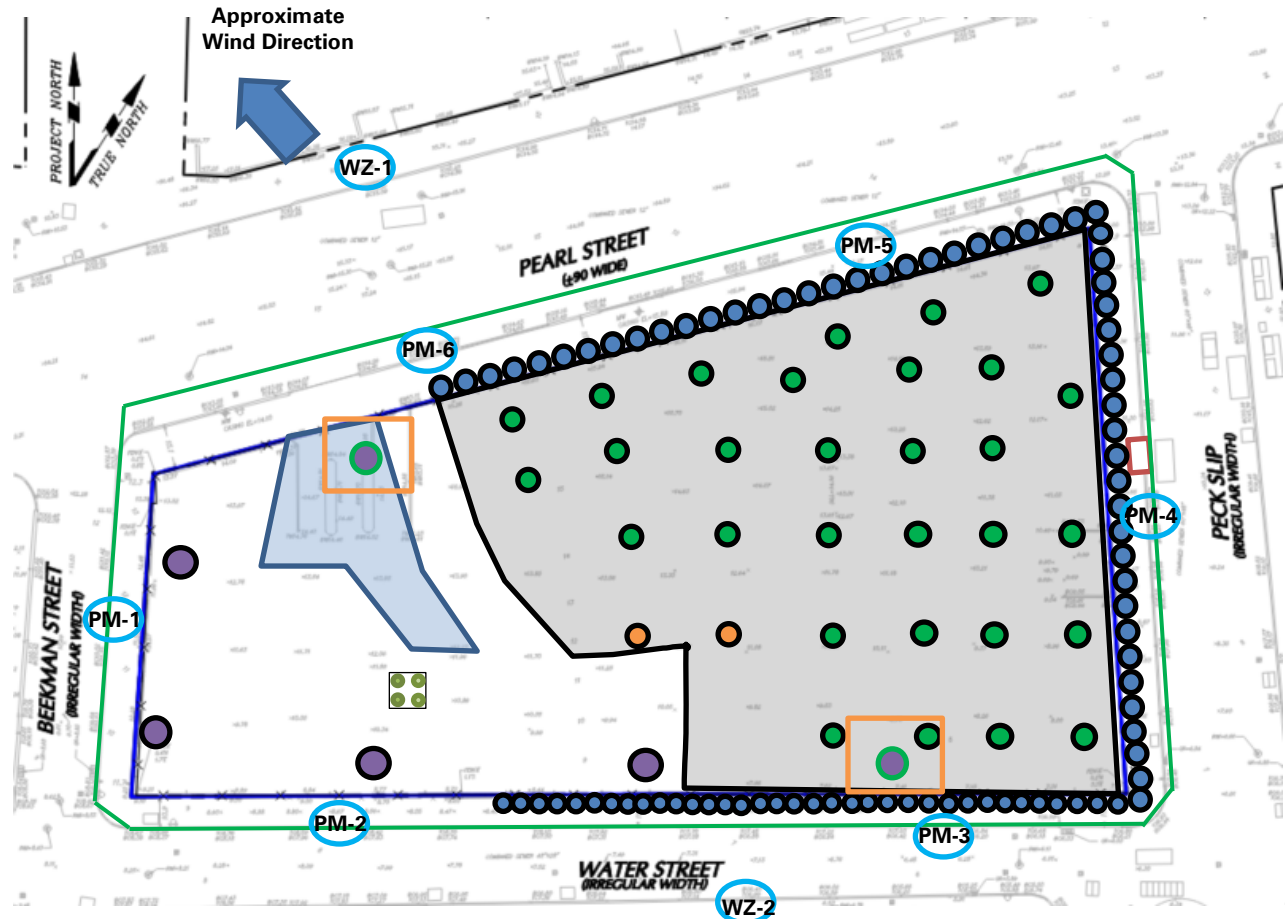
Anticipated Activities

- Craig will continue advancing geotechnical borings along the perimeter 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 Geotechnical Boring Completed Today
- Approximate Location of Geotechnical Boring Completed Previously

Notes:

1) Locations of air monitoring stations are approximate.

- Approximate Location of 55-gallon drum
- Approximate Location of Soldier Pile
- Approximate Perimeter Construction Fence Location
- Previous Excavation Area
- Approximate Location of Documentation Sample
- Approximate Location of Previously Collected Endpoint Sample

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Select Site Photographs:



Photo 1: Craig advancing a geotechnical boring in the southeastern part of the site (facing east)



Photo 2: CAMP station PM-5 in the northern part of the site (facing northwest)

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