SITE OBSERVATION REPORT

PROJECT No.: 170381202 **PROJECT:** 250 Water Street **LOCATION:** New York, NY **BCP SITE ID:** C231127	**CLIENT:** 250 Seaport District, LLC c/o The Howard Hughes Corporation	**DATE:** Thursday, December 7, 2023 **WEATHER:** Cloudy/Snow: 25 – 35 °F Wind: NE @ 0.2 – 1.9 mph **TIME:** 6:00am – 5:15pm **MONITOR** Gabriella DeGennaro	

EQUIPMENT:
CAT 335 Excavator
CAT 328 Excavator
Komatsu PC210 Excavator
Delmag Drill Rig
Bauer BG 36H Drill Rig
Bauer BG45 Drill Rig
Casagrande M6A-1 Tieback Drill Rig
Jerome J505 Mercury Vapor Analyzer
RKI GX-6000 Photoionization Detector (PID)
Aeroqual ASQ1 Air Monitoring Station

PRESENT AT SITE: **Day 265**
Langan (Environmental/Geotechnical) Gabriella DeGennaro, Michael Cole, Pradeep Pandey
Suffolk Construction (Suffolk) (General Contractor) Anthony Galu, Wyatt Favia
East Coast Drilling, Inc. (ECD) (Foundation Contractor) Mike Brosnan
New York State Department of Environmental Conservation (NYSDEC) Megan Medwid
Earth Efficient (Soil Broker) Yinette Batista
Lakewood Environmental Services (Lakewood): Michael Kolasinski

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

- Lakewood used a Geoprobe® 6610DT direct-push drill rig to advance two boreholes to a maximum of about 14 feet below the existing grade using 2-inch-diameter by 4-foot-long steel macrocores with dedicated acetate liners in the southeast part of the site.
    - Lakewood expanded each borehole, TMW35 and TMW36, using a 3.5-inch-diameter drill rod to about 14 and 10 feet bgs, respectively. 1-inch-diameter, 0.01-inch slotted polyvinyl chloride (PVC) well screen was installed into the boreholes followed by a riser to surface grade for installation of temporary monitoring wells TMW35 and TMW36. The annulus of each well was backfilled with clean No. 1 sand.
    - Langan collected one groundwater sample from each temporary monitoring well using a peristaltic pump fitted with dedicated low-density polyethylene (LDPE) tubing. Water quality parameters were recorded until stabilization criteria were achieved using a Horiba U-52 water quality meter during low-flow purging prior to sample collection.
    - The temporary monitoring wells were removed following sample collection, and each borehole was backfilled with hydrated bentonite chips from the boring termination depth to surface grade.
- ECD graded soil/fill in an about 50-foot-long by 20-foot-wide area in the central part of the site to create a level grade for future placement of imported stone.

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- Graded soil/fill was screened for odors, staining, organic vapors, and mercury vapor using a handheld PID and handheld Jerome® J505 mercury vapor analyzer, respectively. Evidence of impacts was not observed and the soil/fill generated from grading activities was added to the stockpile in the north-central part of the site for future off-site disposal.

- ECD continued dewatering in the southern part of the site. Groundwater was pumped directly to the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C002547552).
- ECD continued demobilizing equipment from the site.

Material Tracking

- ECD exported 31 truckloads (about 620 cubic yards [CY]) of soil/fill for off-site disposal at the Middlesex County Landfill (MCUA) facility, located in East Brunswick, NJ.
- No material was imported to 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**		**XRDS Recycling LLC Wayne, NJ Clean Screened 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)	No. of Loads	Approx Volume (CY)
Today	0	0	0	0	0	0	0	0	0	0
Project Total	16	382.13	0	0	15	339.65	374	9,157.85	103	2,060
NYSDEC Approved:	1,800 tons*				720 tons*		19,500 tons*		4,500 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 and XRDS facilities were approved for import of 13,000 CY and 3,000 CY, respectively, and a conversion factor of 1.5 is applied.

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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	0	0	0	0
Project Total	5	85	42	840	303	6,060	142	2,840

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	31	620	0	0	0	0
Project Total	524	10,500	267	5,340	66	1,320

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**		**Harmony Foul Rift (HFR) Belvidere, NJ Non-hazardous Soil/Fill**		**XRDS Recycling LLC Wayne, 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	201	4,020	17	340	137	2,740	28	560

Sampling

- Langan collected two groundwater samples (TMW35_120723 and TMW36_120723) plus quality assurance/quality control (QA/QC) samples from the southeast part of the site for laboratory analysis of target compound list (TCL) and NYSDEC Part 375 volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).
- Samples were relinquished to Alpha Analytical, an Environmental Laboratory Accredited Program (ELAP)-certified laboratory, under standard chain-of-custody protocols.

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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 6:31am to 4:32pm. 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	0.007	0.01	0.02
PM-2	0.006	0.00	0.02
PM-3	0.006	0.00	0.00
PM-4	0.007	0.00	0.02
WZ-1	0.006	0.00	0.00
WZ-2	0.006	0.00	0.00
WZ-3	0.006	0.01	0.01
WZ-4	0.007	0.02	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor (µg/m^3)
PM-1	0.013	0.04	0.05
PM-2	0.011	0.01	0.03
PM-3	0.012	0.01	0.01
PM-4	0.018	0.01	0.04
WZ-1	0.011	0.00	0.02
WZ-2	0.011	0.00	0.01
WZ-3	0.013	0.01	0.03
WZ-4	0.011	0.06	0.02

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

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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 0.06 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 6:17am to 4:21pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from about 6:52am to 4:34pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from about 6:57am to 4:19pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from about 6:22am to 4:30pm.

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 4:32pm and 4:40pm.

- 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 soil/fill across the site for off-site disposal.
- ECD will start to import virgin stone for backfill across the site.
- ECD will continue to demobilize equipment from the site.

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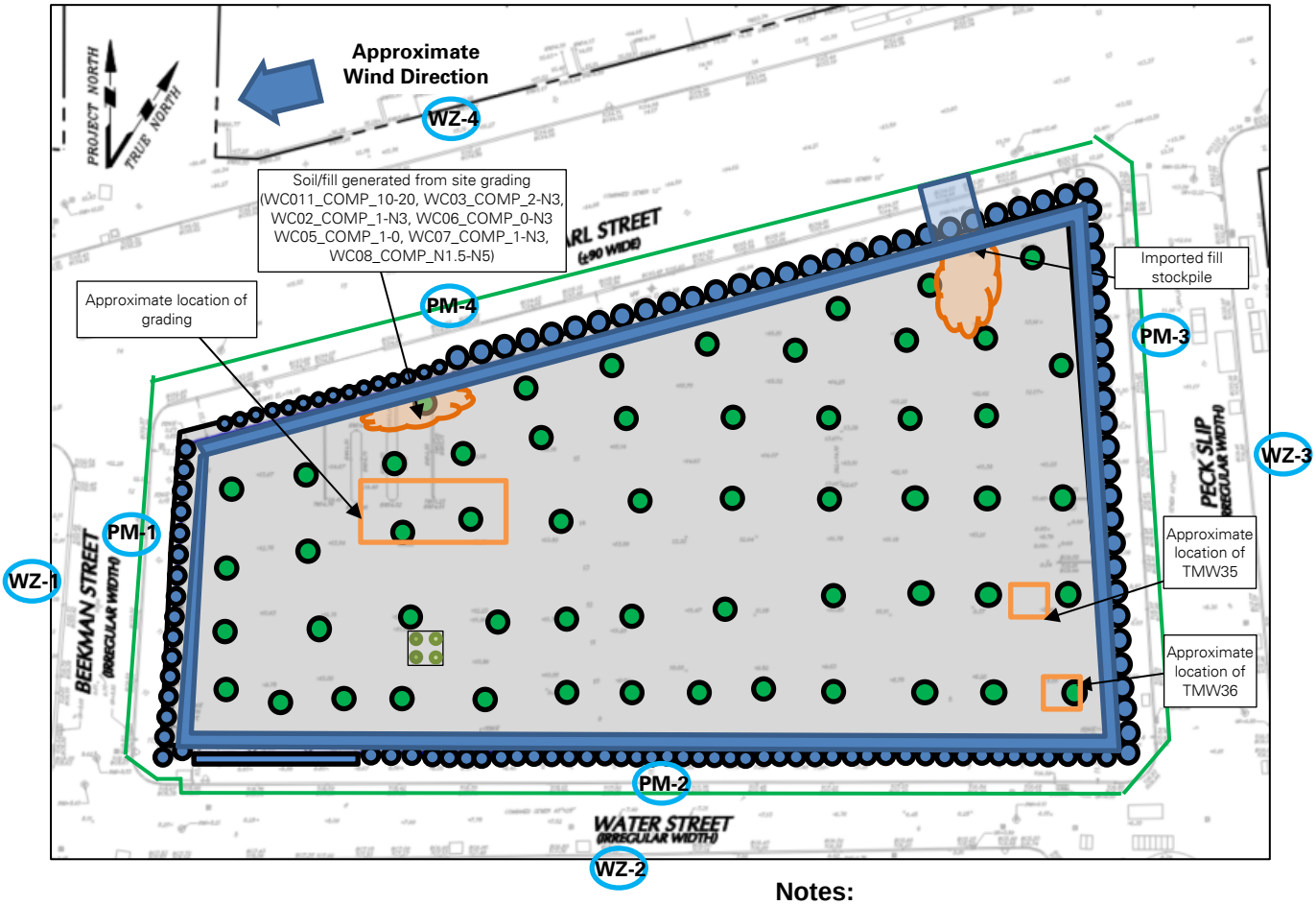
Site Map



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 Perimeter Construction Fence Location
- Approximate Location of Soldier Pile
- Approximate Location of Soil Mix Column Installed Today
- Approximate Location of Soil Mix Column Installed Previously
- Approximate Previous Excavation Area
- Approximate Excavation Area
- Approximate Location of Documentation Sample
- Approximate Location of Confirmation 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: ECD loading a truck with soil/fill for off-site disposal (facing west)

Photo 2: Lakewood installing temporary monitoring well TMW36 in the southeast part of the site (facing west)

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