

## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, March 28, 2023  <b>WEATHER:</b> Overcast/Sunny, 43 – 52 °F Wind: ENE @ 0 – 4.5 mph  <b>TIME:</b> 6:15 am – 3:15 pm  <b>MONITOR</b> Caroline Devin
<b>EQUIPMENT:</b> CME75 Truck-Mounted Drill Rig Jerome J505 RKI GX-6000 Photoionization Detector Aeroqual ASQ1 Particulate and VOC Monitors	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 137</b></span> <b>Langan</b> (Environmental) Caroline Devin, Ali Reach, Paul McMahon <b>Suffolk Construction</b> (General Contractor) Anthony Galu <b>East Coast Drilling</b> (Foundation Contractor) <b>Craig Geotechnical Drilling Co., Inc.</b> (Geotechnical Drilling Contractor) Sean Cleary, Keith Parent <b>New York State Department of Environmental Conservation</b> <b>(NYSDEC)</b> Rafi Alam <b>Hylan Datacom &amp; Electrical, LLC</b> (New York City Department of Transportation [NYCDOT] Contractor) Andrew Ross, Luis Rivera Jr.	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>           Craig Geotechnical Drilling Co., Inc. (Craig) used a CME75 truck-mounted drill rig to advance one geotechnical soil boring along the western (Beekman Street) boundary of the site. The geotechnical boring was advanced to about 150 feet below grade surface (bgs), which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques.           <ul style="list-style-type: none"> <li>Drilling spoils generated from drilling activities were containerized in a sealed and labeled United Nations/Department of Transportation (UN/DOT)-approved drum, which was staged in the western part of the site for future sampling and off-site disposal at a later date.</li> </ul> </li> <li>           Hylan Datacom &amp; Electrical, LLC (Hylan), on behalf of the NYCDOT, used hand tools to excavate an about 4-foot-wide trench to the northwest of the site (off-site, within the perimeter construction fencing at the corner of Beekman Street and Pearl Street) for upgrade of city-wide telecommunications infrastructure. Excavated soil/fill was temporarily stockpiled adjacent to the work area prior to backfill into the initial location at the end of the work day.         </li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au	<b>By:</b> Caroline Devin  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			LANGAN

## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site and across Beekman Street at seven 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  $\text{mg}/\text{m}^3$  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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.004	0.0	0.01
PM-2	0.004	0.0	0.01
PM-3	0.003	0.0	0.01
PM-4	0.003	0.0	0.01
PM-5	0.003	0.0	0.01
PM-6	0.005	0.0	0.01
WZ-1	0.004	0.0	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.011	0.0	0.06
PM-2	0.012	0.0	0.07
PM-3	0.012	0.0	0.02
PM-4	0.012	0.0	0.02
PM-5	0.011	0.0	0.07
PM-6	0.013	0.0	0.02
WZ-1	0.008	0.0	0.03

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

### Equipment Troubleshooting

- Mercury vapor was not recorded at perimeter CAMP station PM-4 from 11:58am to 2:15pm due to a data logging issue with the Jerome® J505 unit. The Jerome® J505 remained operational and screening results were monitored for the remainder of the work day. Mercury vapor was not identified at concentrations above background conditions during this time.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.09 µg/m<sup>3</sup>.
- 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 work day.

### Off-Site CAMP Station Relocation

- CAMP station WZ-1 was relocated to the western sidewalk of Beekman Street from 7:49am to 2:14pm during advancement of a geotechnical boring in the southwestern 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 2:05pm and 2:15pm at the conclusion of ground-intrusive activities.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### Anticipated Activities

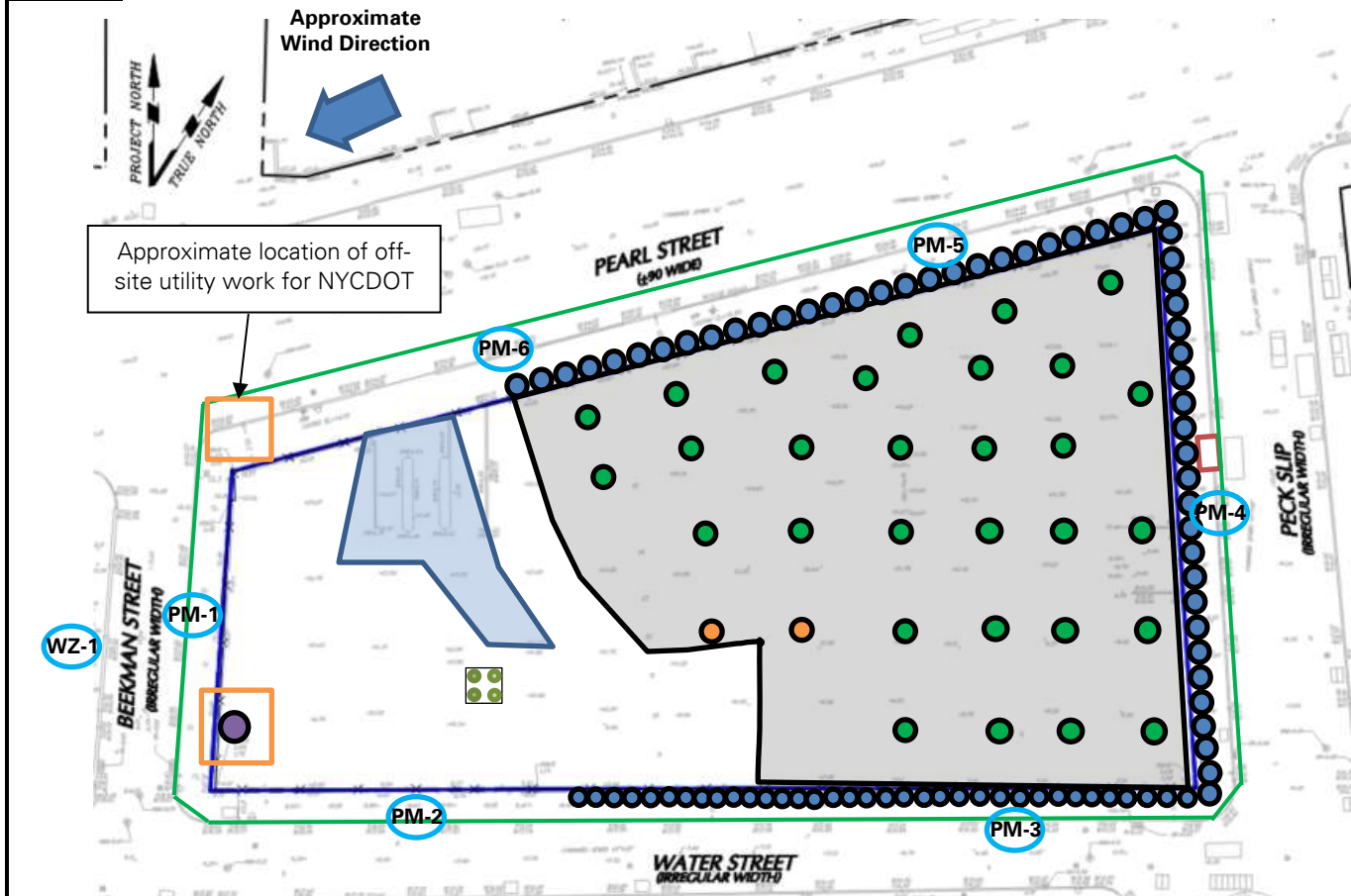
- Craig will continue advancing geotechnical borings along the perimeter of the site.
- Langan will begin advancement of soil borings in the southwestern part of the site for waste characterization soil sampling to facilitate future off-site disposal of excavated soil/fill.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>



## SITE OBSERVATION REPORT

### 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

### 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

Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Caroline Devin

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## SITE OBSERVATION REPORT

### Select Site Photographs:



Photo 1: Craig preparing to advance a geotechnical boring in the southwestern part of the site (facing east)



Photo 2: ECD washing a vehicle on the tracking pad prior to exiting the site (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Wednesday, March 29, 2023  <b>WEATHER:</b> Overcast/Sunny, 39 – 54 °F Wind: E @ 0 – 4.5 mph  <b>TIME:</b> 6:00 am – 5:30 pm  <b>MONITOR</b> Caroline Devin
<b>EQUIPMENT:</b> CME75 Truck-Mounted Drill Rig Geoprobe Direct-Push Drill Rig Jerome J505 RKI GX-6000 Photoionization Detector Aeroqual ASQ1 Particulate and VOC Monitors	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 138</b></span> <b>Langan</b> (Environmental) Caroline Devin, Ali Reach <b>Suffolk Construction</b> (General Contractor) Anthony Galu <b>East Coast Drilling</b> (Foundation Contractor) <b>Craig Geotechnical Drilling Co., Inc.</b> (Geotechnical Drilling Contractor) Sean Cleary, Keith Parent <b>New York State Department of Environmental Conservation</b> <b>(NYSDEC)</b> Rafi Alam <b>Lakewood Environmental Services Corp. (Lakewood)</b> (Environmental Drilling Contractor) Michael Kolasinski	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Craig Geotechnical Drilling Co., Inc. (Craig) used a CME75 truck-mounted drill rig to advance one geotechnical soil boring along the western boundary of the site (Beekman Street). The geotechnical boring was advanced to about 154 feet below grade surface (bgs), which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques.             <ul style="list-style-type: none"> <li>Drilling spoils generated from drilling activities were containerized in a sealed and labeled United Nations/Department of Transportation (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.</li> </ul> </li> <li>Lakewood used a Geoprobe® direct-push drill rig with 4-foot-long Macro-Core® samplers to advance nine soil borings to determine the extents of previously identified hazardous lead-impacted soil/fill and to facilitate off-site disposal of soil/fill in the western part of the site (towards Beekman Street). Langan observed and documented the work, screened the soil samples for environmental impacts, and collected soil samples:             <ul style="list-style-type: none"> <li>Soil borings <b>WC03AR</b>, <b>WC03A_S1</b>, <b>WC03A_N1</b>, and <b>WC03A_NE2A</b> were advanced to depths between 12 and 16 feet bgs. Material was screened for odors, staining, organic vapors using a photoionization detector (PID), and mercury vapor using the handheld Jerome® J505 unit. No evidence odors, staining, or instrumental evidence of contamination was recorded.</li> <li>Soil borings <b>WC03C_NW1</b> and <b>WC03C_SW1</b> were advanced to a depth of about 12 feet bgs. Material was screened for odors, staining, organic vapors using a PID and mercury vapor using the handheld Jerome® J505 unit. No evidence of odors, staining, or instrumental evidence of contamination was recorded.</li> <li>Soil borings <b>WC11N</b>, <b>WC11SW</b>, and <b>WC11SW2</b> were advanced to a depth of about 16 feet bgs. Material was screened for odors, staining, organic vapors using a PID and mercury vapor using the handheld</li> </ul> </li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au	<b>By:</b> Caroline Devin  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

Jerome® J505 unit. No evidence of odors, staining, or instrumental evidence of contamination was recorded.

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			LANGAN

## SITE OBSERVATION REPORT

### Sampling

- Langan collected three grab soil samples and one composite soil sample for laboratory analysis of total and toxicity characteristic leaching procedure (TCLP) lead:
  - WC03A\_NE2A\_4-2
  - WC11N\_10-12
  - WC11SW\_10-12
  - WC11SW2\_COMP\_0-10
- An additional 20 grab soil samples were collected and placed on hold with the laboratory for potential analysis of total and TCLP lead, pending receipt of the initial laboratory report.
- Samples were relinquished to Alpha Analytical Inc., an Environmental Laboratory Accredited Program (ELAP)-certified laboratory under standard chain-of-custody protocols.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site and across Beekman Street at seven 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  $\text{mg}/\text{m}^3$  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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.005	0.0	0.00
PM-2	0.003	0.0	0.00
PM-3	0.003	0.0	0.01
PM-4	0.003	0.0	0.01
PM-5	0.003	0.0	0.00
PM-6	0.003	0.0	0.00
WZ-1	0.004	0.0	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.010	0.0	0.05
PM-2	0.005	0.0	0.02
PM-3	0.005	0.0	0.03
PM-4	0.004	0.0	0.02
PM-5	0.004	0.0	0.02
PM-6	0.005	0.0	0.02
WZ-1	0.009	0.0	0.02

•  $\text{mg}/\text{m}^3$  = 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 0.07  $\mu\text{g}/\text{m}^3$ .

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			<b>LANGAN</b>

## SITE OBSERVATION REPORT

- 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 work day.

### Off-Site CAMP Station Relocation

- CAMP station WZ-1 was relocated to the western sidewalk of Beekman Street from 7:40am to 2:55pm during advancement of geotechnical and environmental soil borings in the western 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 2:42pm and 2:55pm at the conclusion of ground-intrusive activities.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 to 0.03  $\mu\text{g}/\text{m}^3$ .
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### Anticipated Activities

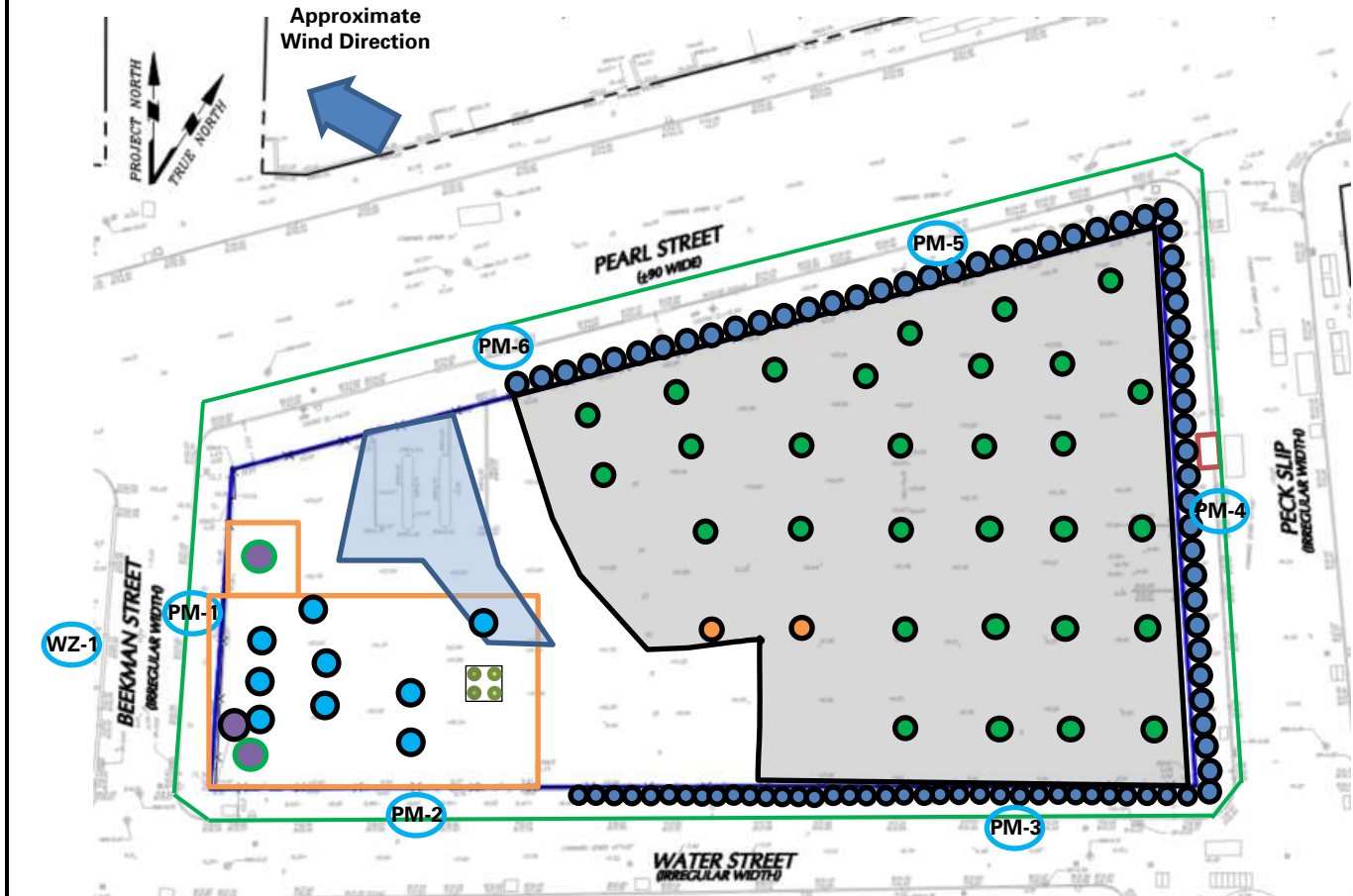
- Craig will continue advancing geotechnical borings along the perimeter of the site.
- Langan will continue advancement of soil borings in the southwestern part of the site for waste characterization soil sampling to facilitate future off-site disposal of excavated soil/fill.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>



## SITE OBSERVATION REPORT

### 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
- Approximate Location of Soil Boring Completed Today

Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Caroline Devin

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** Craig advancing a geotechnical boring in the western part of the site (facing west)



**Photo 2:** Lakewood advancing a soil boring in the southwestern part of the site (facing east)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Thursday, March 30, 2023  <b>WEATHER:</b> Overcast/Sunny, 39 – 54 °F Wind: E @ 0 – 4.5 mph  <b>TIME:</b> 6:00 am – 3:00 pm  <b>MONITOR</b> Caroline Devin
<b>EQUIPMENT:</b> CME75 Truck-Mounted Drill Rig CME75 Track-Mounted Drill Rig Geoprobe Direct-Push Drill Rig Jerome J505 RKI GX-6000 Photoionization Detector Aeroqual ASQ1 Particulate and VOC Monitors	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 139</b></span> <b>Langan</b> (Environmental) Caroline Devin, Maitland Robinson <b>Suffolk Construction</b> (General Contractor) Anthony Galu <b>East Coast Drilling</b> (Foundation Contractor) <b>Craig Geotechnical Drilling Co., Inc.</b> (Geotechnical Drilling Contractor) Sean Cleary, Keith Parent, Matthew Michelotti, Bryan Gregor <b>New York State Department of Environmental Conservation</b> <b>(NYSDEC)</b> Rafi Alam <b>Lakewood Environmental Services Corp. (Lakewood)</b> (Environmental Drilling Contractor) Michael Kolasinski	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Craig Geotechnical Drilling Co., Inc. (Craig) used a CME75 truck-mounted drill rig to continue advancement of one geotechnical boring along the western boundary of the site (Beekman Street) and to begin advancement of one geotechnical boring along the southern boundary of the site (Water Street). The geotechnical borings were advanced using mud-rotary drilling techniques to about 160 feet and 140 feet below grade surface (bgs), respectively, which was the apparent bedrock depth based on observations from Craig.             <ul style="list-style-type: none"> <li>Drilling spoils were containerized in sealed and labeled United Nations/Department of Transportation (UN/DOT)-approved drums, which were staged in the northern part of the site for future sampling and off-site disposal at a later date.</li> </ul> </li> <li>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 124 feet bgs, which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques.             <ul style="list-style-type: none"> <li>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.</li> </ul> </li> <li>Lakewood used a Geoprobe® direct-push drill rig with 4-foot-long Macro-Core® samplers to advance seven soil borings to determine the extents of previously identified hazardous lead-impacted soil/fill and to facilitate off-site disposal of soil/fill in the western part of the site (towards Beekman Street). Langan observed and documented the work, screened the soil samples for environmental impacts, and collected soil samples:             <ul style="list-style-type: none"> <li>Soil borings <b>WC03A_N2</b> and <b>WC03A_N3</b> were advanced to a depth of about 8 feet bgs. Material was screened for odors, staining, organic vapors using a photoionization detector (PID) and mercury vapor using the handheld Jerome® J505 unit. No evidence of odors, staining, or instrumental evidence of contamination was recorded.</li> </ul> </li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au	<b>By:</b> Caroline Devin  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

- Soil borings **WC03A\_N4**, **WC03A\_N5**, **WC03A\_NE2B**, **WC03A\_NE3**, and **WC03A\_NE3A** were advanced to a depth of about 16 feet bgs. Material was screened for odors, staining, organic vapors using a PID and mercury vapor using the handheld Jerome® J505 unit. No evidence of odors, staining, or instrumental evidence of contamination was recorded.

### 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	

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Sampling

- Langan collected two grab soil samples for laboratory analysis of total and toxicity characteristic leaching procedure (TCLP) lead:
  - WC03A\_N4\_4-2
  - WC03A\_NE3\_4-2
- An additional 32 grab soil samples were collected and placed on hold with the laboratory for potential analysis of total and TCLP lead, pending receipt of the initial laboratory report.
- Samples were relinquished to Alpha Analytical Inc., an Environmental Laboratory Accredited Program (ELAP)-certified laboratory under standard chain-of-custody protocols.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site and across Beekman 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  $\text{mg}/\text{m}^3$  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 ranged from 0.00 to 0.03  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.005	0.0	0.01
PM-2	0.003	0.0	0.01
PM-3	0.003	0.0	0.01
PM-4	0.002	0.0	0.00
PM-5	0.002	0.0	0.00
PM-6	0.003	0.0	0.00
WZ-1	0.002	0.0	0.01
WZ-2	0.004	0.0	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.012	0.0	0.02
PM-2	0.005	0.0	0.03
PM-3	0.003	0.0	0.03
PM-4	0.003	0.0	0.02
PM-5	0.002	0.0	0.05
PM-6	0.003	0.0	0.05
WZ-1	0.002	0.0	0.02
WZ-2	0.006	0.0	0.02

•  $\text{mg}/\text{m}^3$  = 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 0.07  $\mu\text{g}/\text{m}^3$ .

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

- 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 work day.

### Off-Site CAMP Station Relocation

- CAMP station WZ-1 was relocated to the southern sidewalk of Water Street from 7:36am to 1:33pm during advancement of geotechnical soil borings in the southern part of the site.
- CAMP station WZ-2 was relocated to the western sidewalk of Beekman Street from 7:14am to 1:24pm during advancement of geotechnical and environmental soil borings in the western 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 1:24pm and 1:47pm at the conclusion of ground-intrusive activities.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 to 0.02  $\mu\text{g}/\text{m}^3$ .
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

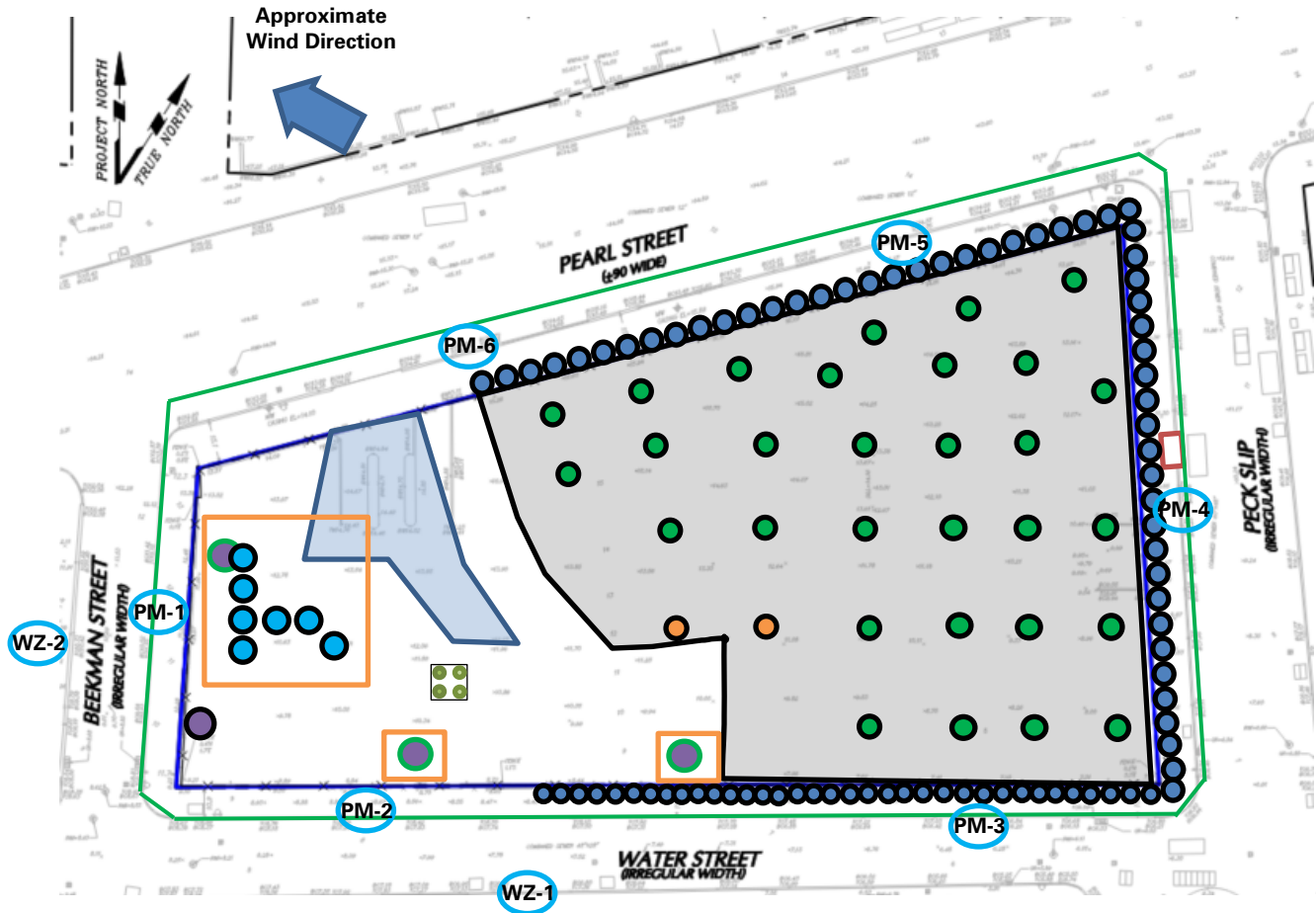
### Anticipated Activities

- Craig will continue advancing geotechnical borings along the perimeter of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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
- Approximate Location of Soil Boring Completed Today

Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Caroline Devin

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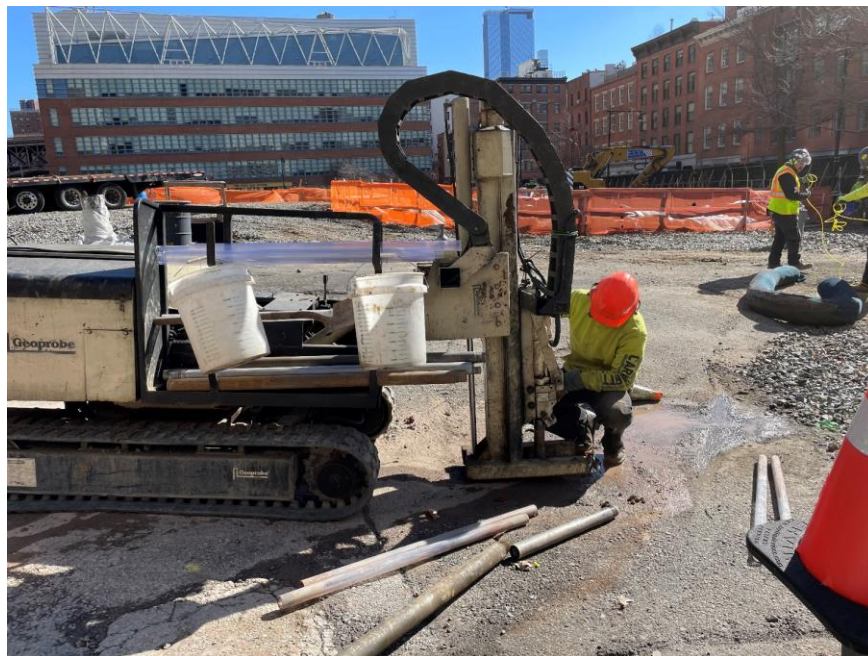


## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** Craig advancing a geotechnical boring in the northwestern part of the site (facing northeast)



**Photo 2:** Lakewood advancing a soil boring in the western part of the site (facing east)

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			<b>LANGAN</b>



## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Friday, March 31, 2023  <b>WEATHER:</b> Overcast, 41– 52 °F Wind: ESE @ 0 – 4.5 mph  <b>TIME:</b> 6:00 am – 3:00 pm  <b>MONITOR</b> Caroline Devin
<b>EQUIPMENT:</b> CME75 Truck-Mounted Drill Rig CME75 Track-Mounted Drill Rig Jerome J505 RKI GX-6000 Photoionization Detector Aeroqual ASQ1 Particulate and VOC Monitors	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 140</b></span> <b>Langan</b> (Environmental) Caroline Devin <b>Suffolk Construction</b> (General Contractor) Anthony Galu <b>East Coast Drilling</b> (Foundation Contractor) <b>Craig Geotechnical Drilling Co., Inc.</b> (Geotechnical Drilling Contractor) Sean Cleary, Keith Parent, Matthew Michelotti, Bryan Gregor <b>New York State Department of Environmental Conservation</b> <b>(NYSDEC)</b> Rafi Alam	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>           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.           <ul style="list-style-type: none"> <li>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.</li> </ul> </li> <li>           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.           <ul style="list-style-type: none"> <li>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.</li> </ul> </li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au	<b>By:</b> Caroline Devin  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			LANGAN

## SITE OBSERVATION REPORT

### 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  $\text{mg}/\text{m}^3$  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 ( $\text{mg}/\text{m}^3$ )	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 ( $\text{mg}/\text{m}^3$ )	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

●  $\text{mg}/\text{m}^3$  = 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  $\mu\text{g}/\text{m}^3$ .

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

- 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.

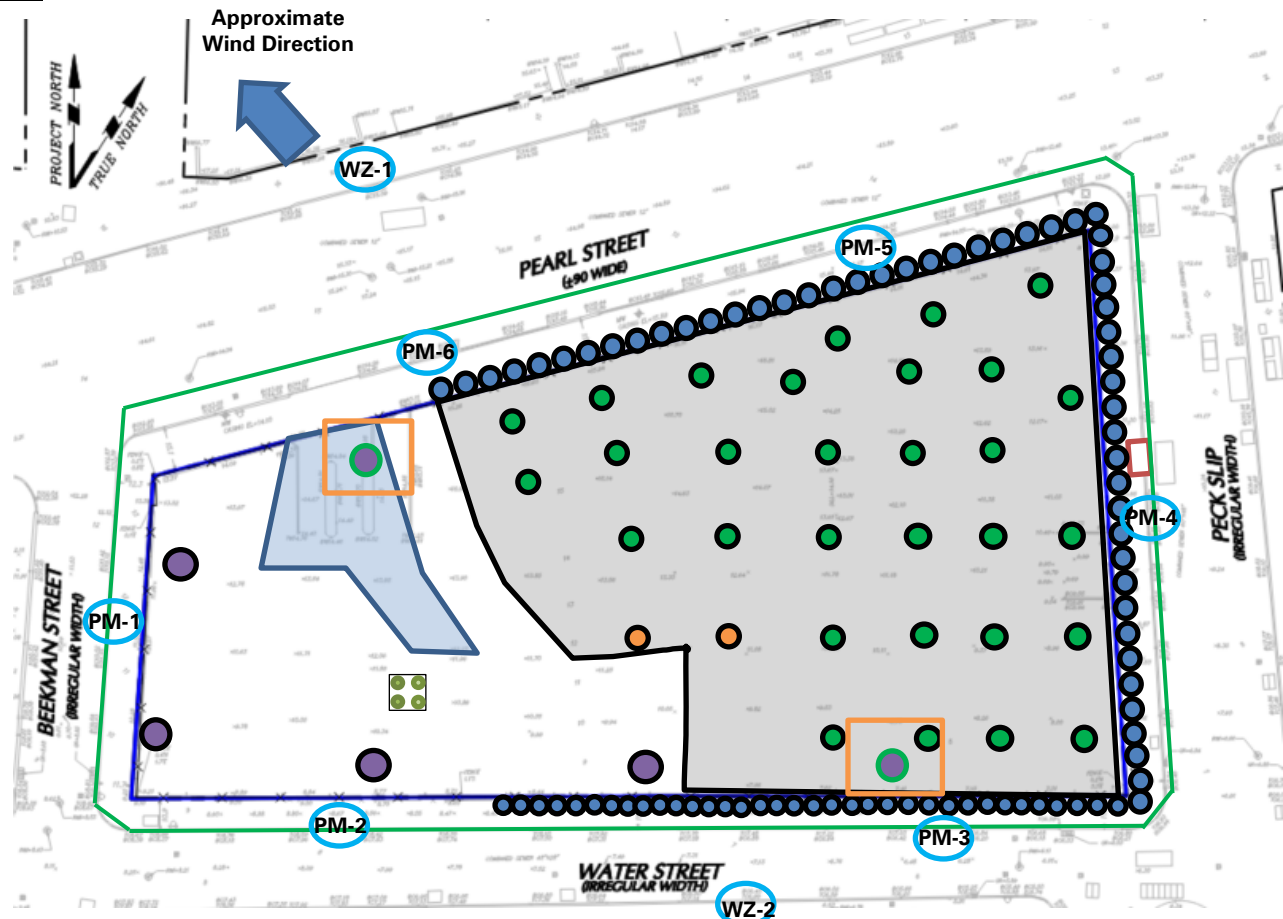
### Anticipated Activities

- Craig will continue advancing geotechnical borings along the perimeter of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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

Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Caroline Devin

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## SITE OBSERVATION REPORT

### 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)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Monday, April 3, 2023  <b>WEATHER:</b> Sunny, 39– 57 °F Wind: ESE @ 0 – 4.5 mph  <b>TIME:</b> 6:10 am – 3:30 pm  <b>MONITOR</b> Caroline Devin
<b>EQUIPMENT:</b> CME75 Truck-Mounted Drill Rig CME75 Track-Mounted Drill Rig Jerome J505 RKI GX-6000 Photoionization Detector Aeroqual ASQ1 Particulate and VOC Monitors	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 141</b></span> <b>Langan</b> (Environmental) Caroline Devin <b>Suffolk Construction</b> (General Contractor) Anthony Galu <b>East Coast Drilling</b> (Foundation Contractor) <b>Craig Geotechnical Drilling Co., Inc.</b> (Geotechnical Drilling Contractor) Sean Cleary, Keith Parent, Matthew Michelotti, Bryan Gregor <b>New York State Department of Environmental Conservation</b> <b>(NYSDEC)</b> Rafi Alam	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>           Craig Geotechnical Drilling Co., Inc. (Craig) used a CME75 truck-mounted drill rig to advance one geotechnical soil boring along the western boundary of the site (Beekman Street). The geotechnical boring was advanced to about 150 feet below grade surface (bgs), which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques.           <ul style="list-style-type: none"> <li>Drilling spoils were containerized in a sealed and labeled United Nations/Department of Transportation (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.</li> </ul> </li> <li>           Craig used a CME75 track-mounted drill rig to advance a geotechnical soil boring along the eastern boundary of the site (Peck Slip). The geotechnical boring was advanced to about 102 feet bgs, which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques. Craig also began advancement of a geotechnical soil boring along the northern boundary of the site (Pearl Street). The geotechnical boring was advanced to about 35 feet bgs and is anticipated to be completed tomorrow, March 4, 2023.           <ul style="list-style-type: none"> <li>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.</li> </ul> </li> </ul>		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Caroline Devin  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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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			LANGAN



## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site and across Beekman Street and Peck Slip 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  $\text{mg}/\text{m}^3$  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 ranged from 0.00 to 0.04  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.004	0.0	0.03
PM-2	0.004	0.0	0.01
PM-3	0.004	0.0	0.01
PM-4	0.003	0.0	0.00
PM-5	0.003	0.0	0.01
PM-6	0.004	0.0	0.00
WZ-1	0.003	0.0	0.01
WZ-2	0.003	0.0	0.00

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.011	0.0	0.25*
PM-2	0.011	0.0	0.04
PM-3	0.006	0.0	0.03
PM-4	0.006	0.0	0.02
PM-5	0.006	0.0	0.02
PM-6	0.007	0.0	0.01
WZ-1	0.006	0.0	0.02
WZ-2	0.005	0.0	0.02

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

\* One instantaneous mercury vapor detection was recorded at a concentration of 3.66  $\mu\text{g}/\text{m}^3$  at perimeter CAMP station PM-1 at 8:23am. The 15-minute time-weighted average concentration of mercury vapor (1.0  $\mu\text{g}/\text{m}^3$ ) was not exceeded as a result of the instantaneous detection. During this time, Craig was in the process of drilling a geotechnical boring in the southwestern part of the site. Work was temporarily halted to investigate for a potential source of mercury vapor. Drilling spoils and nearby vehicle exhaust were screened for mercury

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## SITE OBSERVATION REPORT

vapor using the handheld Jerome® J505 unit and concentrations ranged from 0.0 µg/m<sup>3</sup> to 0.05 µg/m<sup>3</sup>. Additionally, mercury vapor was not detected at off-site CAMP station WZ-2 during this time and mercury vapor at perimeter CAMP station PM-1 was recorded at 0.0 µg/m<sup>3</sup> for the 15-minute-period following the detection. No source of mercury vapor was identified and the detection was indicative of the internal filter within the Jerome® J505 unit requiring replacement. The internal filter within the Jerome® J505 unit at perimeter CAMP station PM-1 was replaced following completion of work for the day.

### 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<sup>3</sup> to 0.08 µg/m<sup>3</sup>.
- 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 work day.

### Equipment Troubleshooting

- PM10 concentrations were not recorded at perimeter CAMP station PM-6 between 10:50am and 10:51am due to an automatic zero-calibration function being run within the station. Data logging resumed following completion of the automatic calibration. Fugitive dust was not observed migrating from the site during this time.

### Off-Site CAMP Station Relocation

- CAMP station WZ-1 was relocated to the eastern sidewalk of Peck Slip from 7:23am to 11:18am during advancement of a geotechnical soil boring in the eastern part of the site.
- CAMP station WZ-2 was relocated to the western sidewalk of Beekman Street from 7:43am to 11:30am during advancement of a geotechnical soil boring in the western 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 2:20pm and 2:30pm at the conclusion of ground-intrusive activities.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.01 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

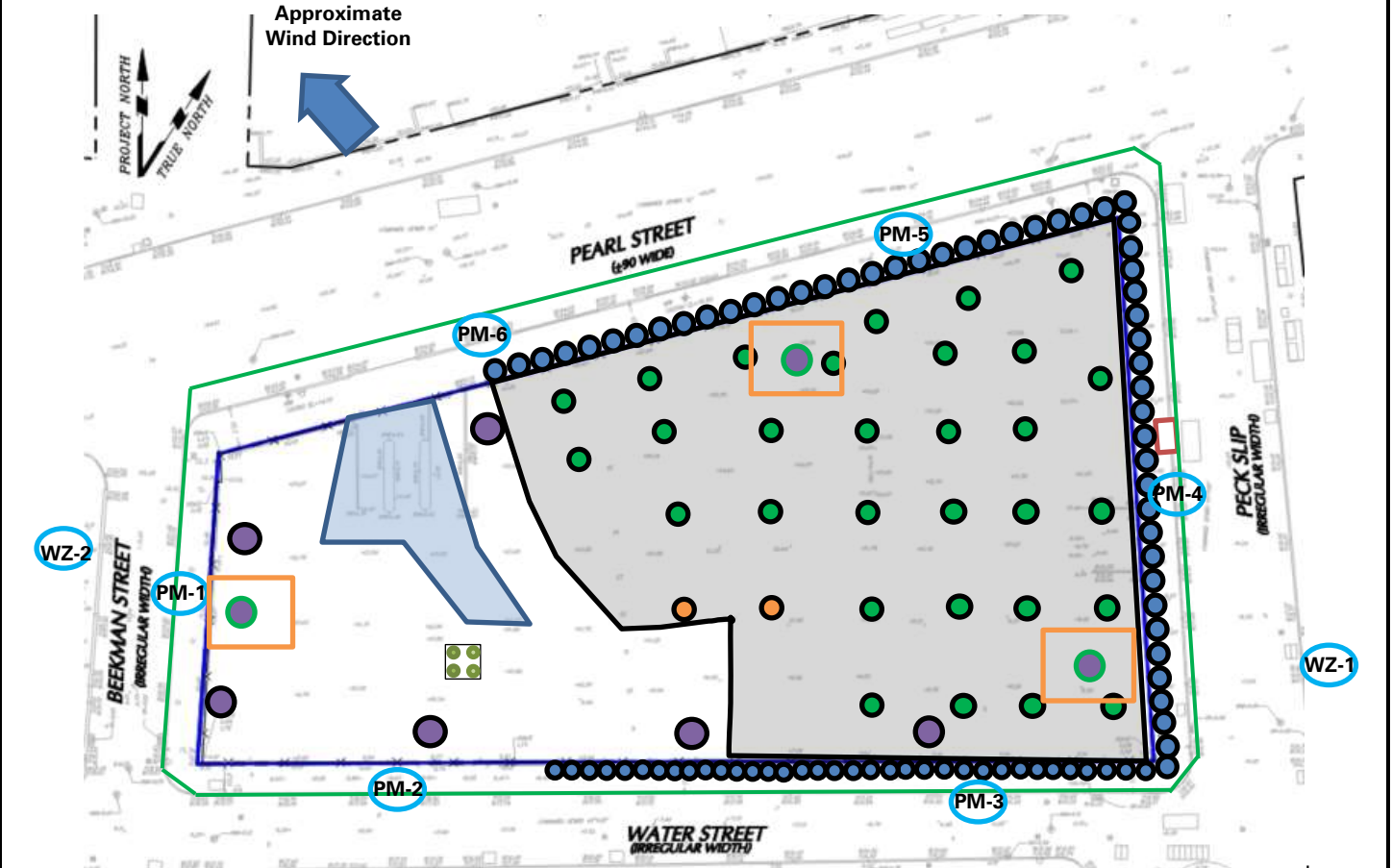
### Anticipated Activities

- Craig will continue advancing geotechnical borings along the perimeter of the site.

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## SITE OBSERVATION REPORT

### 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

Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Caroline Devin

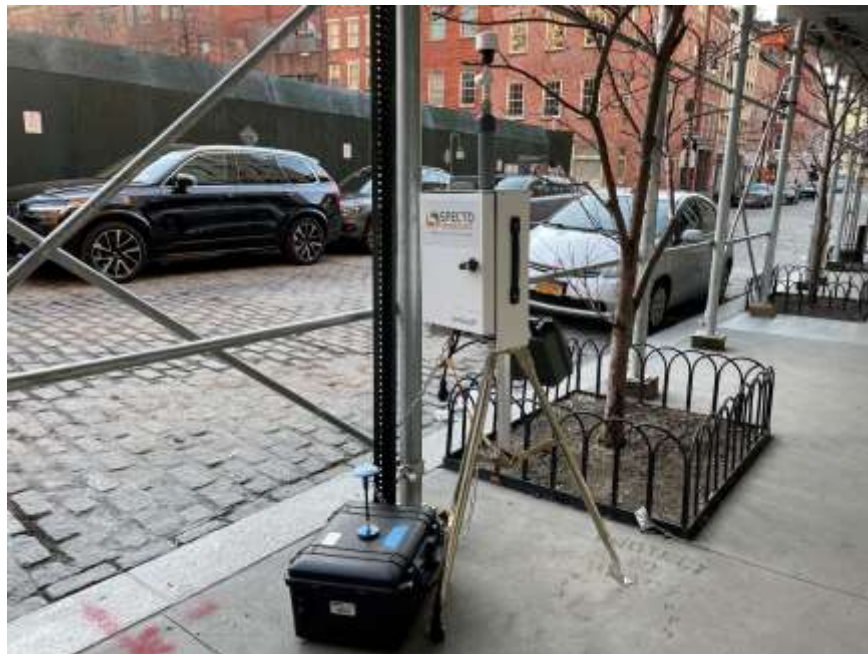
**LANGAN**

## SITE OBSERVATION REPORT

### Select Site Photographs:



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



**Photo 2:** Off-site CAMP station WZ-2 placed on the western sidewalk of Beekman Street (facing southeast)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, April 4, 2023  <b>WEATHER:</b> Sunny, 48 – 72 °F Wind: ESE @ 0 – 5 mph  <b>TIME:</b> 6:10 am – 3:30 pm  <b>MONITOR</b> Caroline Devin
<b>EQUIPMENT:</b> CME75 Track-Mounted Drill Rig Jerome J505 RKI GX-6000 Photoionization Detector Aeroqual ASQ1 Particulate and VOC Monitors	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 142</b></span> <b>Langan</b> (Environmental) Caroline Devin <b>Suffolk Construction</b> (General Contractor) Anthony Galu <b>East Coast Drilling</b> (Foundation Contractor) <b>Craig Geotechnical Drilling Co., Inc.</b> (Geotechnical Drilling Contractor) Matthew Michelotti, Bryan Gregor <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>           Craig used a CME75 track-mounted drill rig to continue advancement of a geotechnical soil boring along the northern boundary of the site (Pearl Street). The geotechnical boring was advanced to about 104 feet below grade surface (bgs), which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques. Craig began advancement of an additional geotechnical soil boring in the northeastern part of the site. The geotechnical boring was advanced to about 30 feet bgs and is anticipated to be completed tomorrow, March 5, 2023.           <ul style="list-style-type: none"> <li>Drilling spoils were containerized in a sealed and labeled United Nations/Department of Transportation (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.</li> <li>A petroleum-like odor and a maximum photoionization detector (PID) reading of 26 parts per million (ppm) was observed during screening of drilling spoils generated from the geotechnical soil boring in the northeastern part of the site. The odorous soil was containerized in a UN/DOT-approved drum. PID readings were not detected at perimeter CAMP stations and odors were not observed migrating off-site.</li> </ul> </li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au	<b>By:</b> Caroline Devin  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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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## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site at six 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 ppm, and 0.100  $\text{mg}/\text{m}^3$ , 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 ranged from 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.

### Perimeter and Work Zone Concentrations

#### **Daily Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.012	0.0	0.01
PM-2	0.013	0.0	0.01
PM-3	0.013	0.0	0.00
PM-4	0.013	0.0	0.01
PM-5	0.012	0.0	0.01
PM-6	0.007	0.0	0.01
WZ-1	-	-	-
WZ-2	-	-	-

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.022	0.0	0.02
PM-2	0.025	0.0	0.02
PM-3	0.024	0.0	0.02
PM-4	0.024	0.0	0.04
PM-5	0.023	0.0	0.02
PM-6	0.011	0.0	0.02
WZ-1	-	-	-
WZ-2	-	-	-

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

### Equipment Troubleshooting

- PM10 and VOC concentrations were not recorded at perimeter CAMP station PM-6 from 6:35am and 11:20am due outdated software resulting in issues with the internal computer (which is responsible for data logging). Following identification of the issue, dust and odors were monitored by the dedicated CAMP monitor using visual and olfactory methods. The spare CAMP station was set up at the location of perimeter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
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## SITE OBSERVATION REPORT

CAMP station PM-6 to monitor for PM10 and VOCs. The equipment rental company was notified and the station was replaced at the end of the workday. Fugitive dust or odors were not observed migrating off-site.

### 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 0.08  $\mu\text{g}/\text{m}^3$ .
- 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 work day.

### 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 1:42pm and 1:55pm at the conclusion of ground-intrusive activities.

- Background concentrations of mercury vapor at each CAMP station ranged from 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

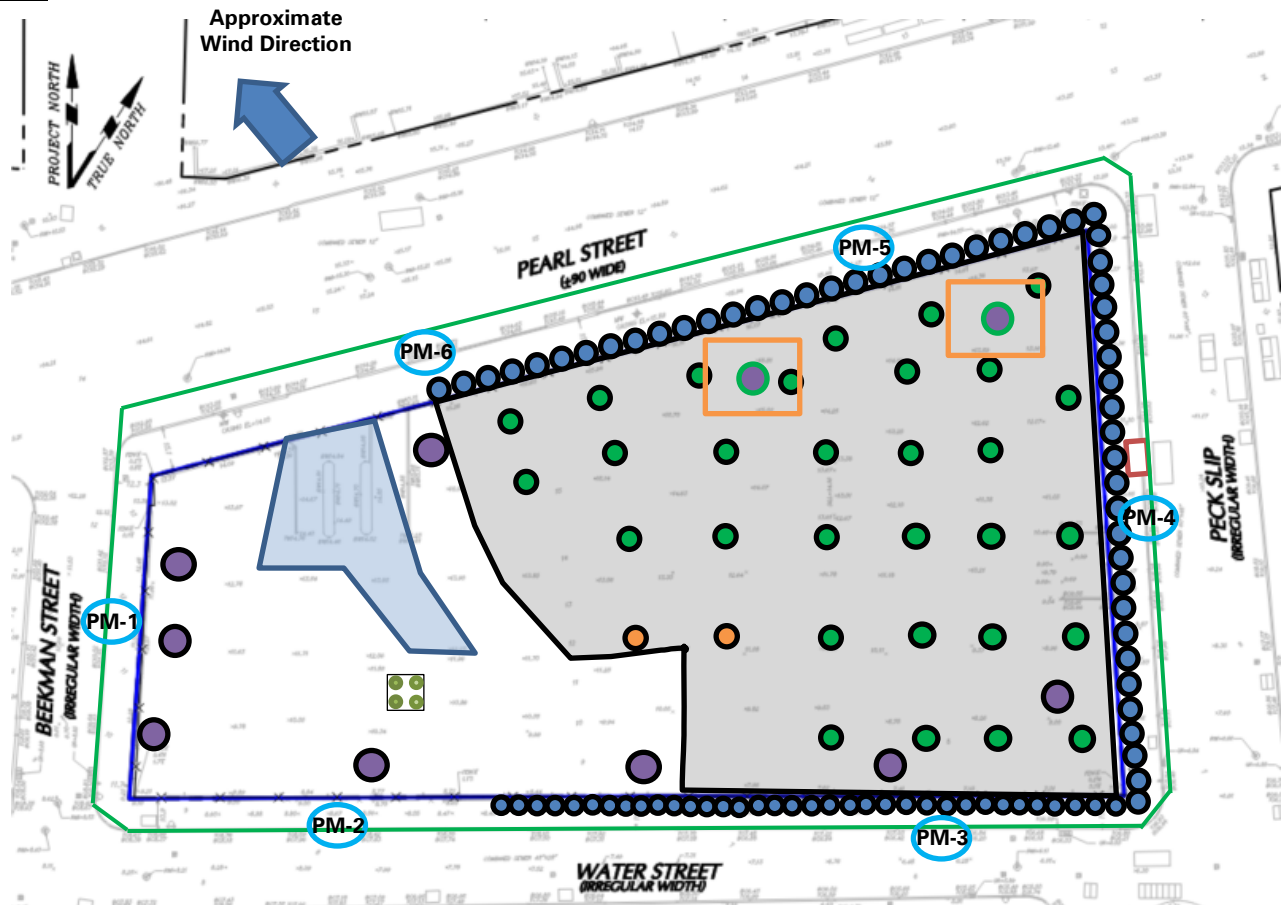
- Craig will continue advancing geotechnical borings along the perimeter of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin
			<b>LANGAN</b>



## SITE OBSERVATION REPORT

### 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

Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Caroline Devin

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** Craig advancing a geotechnical boring in the northern part of the site (facing northwest)



**Photo 2:** ECD spraying water across the site to mitigate dust generation (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Wednesday, April 5, 2023  <b>WEATHER:</b> Overcast, 48– 52 °F Wind: NNW @ 0 – 5 mph  <b>TIME:</b> 6:00 am – 4:30 pm  <b>MONITOR</b> Ali Reach
<b>EQUIPMENT:</b> CME75 Track-Mounted Drill Rig Jerome J505 RKI GX-6000 Photoionization Detector Aeroqual ASQ1 Particulate and VOC Monitors	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 143</b></span> <b>Langan</b> (Environmental) Ali Reach <b>Suffolk Construction</b> (General Contractor) Anthony Galu <b>East Coast Drilling</b> (Foundation Contractor) <b>Craig Geotechnical Drilling Co., Inc.</b> (Geotechnical Drilling Contractor) Matthew Michelotti, Bryan Gregor <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam <b>Earth Efficient</b> (Soil Broker): Ethan Szerlip and Ryan Casserly <b>EnvoCare Environmental (EnvoCare):</b> Matt Gandy	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>           Craig Geotechnical Drilling Co., Inc. (Craig) used a CME75 track-mounted drill rig to continue advancement of a geotechnical soil boring in the northeastern part of the site (Pearl Street and Peck Slip). The geotechnical boring was advanced to about 90 feet below grade surface (bgs), which was the apparent bedrock depth based on observations from Craig, using mud-rotary drilling techniques.           <ul style="list-style-type: none"> <li>Drilling spoils were containerized in a sealed and labeled United Nations/Department of Transportation (UN/DOT)-approved drum, which was staged in the northeastern part of the site for sampling and future off-site disposal at a later date.</li> </ul> </li> <li>EnvoCare and EarthEfficient collected five waste characterization soil samples (each consisting of a composite and grab sample) from containerized drilling spoils to facilitate off-site disposal of soil generated during future support of excavation installation.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au	<b>By:</b> Ali Reach  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Ali Reach

LANGAN

## SITE OBSERVATION REPORT

### Sampling

- EnviroCare collected five waste characterization soil samples (each consisting of a grab and composite sample) for laboratory analysis of target compound list (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), target analyte list (TAL) metals, hexavalent chromium, total cyanide, toxicity characteristic leaching procedure (TCLP) metals, New Jersey Department of Environmental Protection (NJDEP) extractable petroleum hydrocarbons (EPH), Resource Conservation and Recovery Act (RCRA) characteristics, and/or paint filter:
  - WC-1\_COMP                      • WC-1\_GRAB
  - WC-2\_COMP                      • WC-2\_GRAB
  - WC-3\_COMP                      • WC-3\_GRAB
  - WC-4\_COMP                      • WC-4\_GRAB
  - WC-5\_COMP                      • WC-5\_GRAB
- Samples were transported to Alpha Analytical Inc., an Environmental Laboratory Accredited Program (ELAP)-certified laboratory by EnviroCare under standard chain-of-custody protocols.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Ali Reach
			LANGAN

## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site at six 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  $\mu\text{g}/\text{m}^3$ , 5.0 parts per million [ppm], and 0.100  $\text{mg}/\text{m}^3$  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 ranged from 0.00 to 0.03  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	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	0.00
PM-4	0.007	0.0	0.01
PM-5	0.007	0.0	0.00
PM-6	0.007	0.0	0.00
WZ-1	-	-	-
WZ-2	-	-	-

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.010	0.0	0.01
PM-2	0.010	0.0	0.02
PM-3	0.013	0.0	0.01
PM-4	0.010	0.0	0.03
PM-5	0.009	0.0	0.04
PM-6	0.011	0.0	0.01
WZ-1	-	-	-
WZ-2	-	-	-

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

Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Ali Reach

**LANGAN**

## SITE OBSERVATION REPORT

### 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/m³ to 0.10 µg/m³.
- 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 work day.

### Prior to CAMP Shutdown

Prior to discontinuing CAMP at the conclusion of ground-intrusive activities, 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. CAMP stations were discontinued sequentially between 2:35pm and 2:55pm at the conclusion of ground-intrusive activities.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.03 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

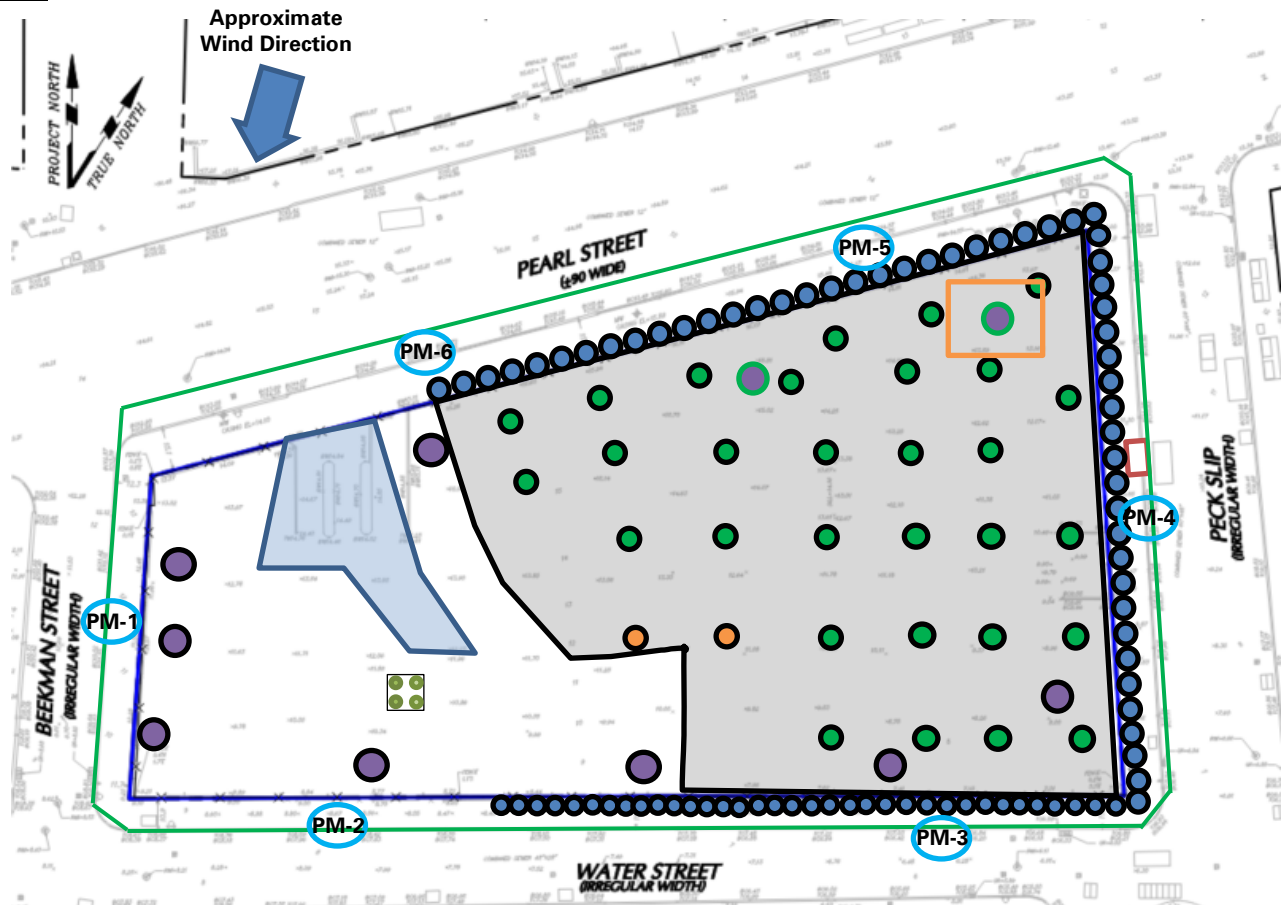
### Anticipated Activities

- None.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Ali Reach <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### 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

Cc: M. Raygorodetsky, P. McMahon, M. Au

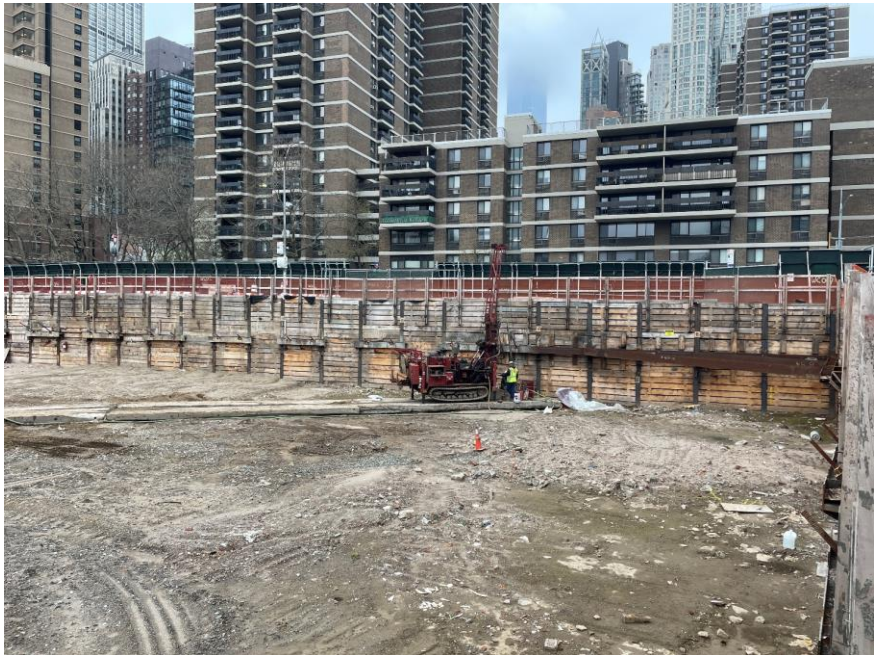
By: Ali Reach

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SITE OBSERVATION REPORT

Select Site Photographs:



**Photo 1:** Craig advancing a geotechnical soil boring in the northeastern part of the site (facing north)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Ali Reach
			LANGAN

## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Monday, June 19, 2023  <b>WEATHER:</b> Partly Sunny, 65 – 80 °F Wind: NE @ 0.25 – 2.24 mph  <b>TIME:</b> 6:00 am – 2:30 pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 144</b></span> <b>Langan</b> (Environmental) Jack Millman, Roswell Lo, Paul McMahon <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam <b>New York City Department of Buildings (NYCDOB)</b>	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk began mobilizing equipment to the site in preparation for the next phase of remediation. An on-site meeting was attended by Suffolk, Langan and the NYSDEC to discuss project expectations during implementation of the RAWP.</li> <li>Ground-intrusive activities were not conducted throughout the workday; however, Langan implemented the community air monitoring plan (CAMP) to troubleshoot equipment and collect background air quality data prior to the commencement of remedial activities.</li> <li>NYCDOB was on-site to conduct a routine inspection of general site conditions. No adverse conditions were identified, and no further action was required as a result of the site visit.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

Langan performed air monitoring at the perimeter of the site at four locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10). 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  $\text{mg}/\text{m}^3$  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 ranged from 0.00 to 0.02  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.004	0.0	0.00
PM-2	0.004	0.0	0.00
PM-3	0.004	0.0	0.00
PM-4	0.004	0.0	0.00
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.008	0.0	0.01
PM-2	0.008	0.0	0.02
PM-3	0.006	0.0	0.02
PM-4	0.007	0.0	0.03
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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/m³ to 0.08 µg/m³.
- 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.

### 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. CAMP stations were discontinued sequentially between 1:54 pm and 2:06 pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.04 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

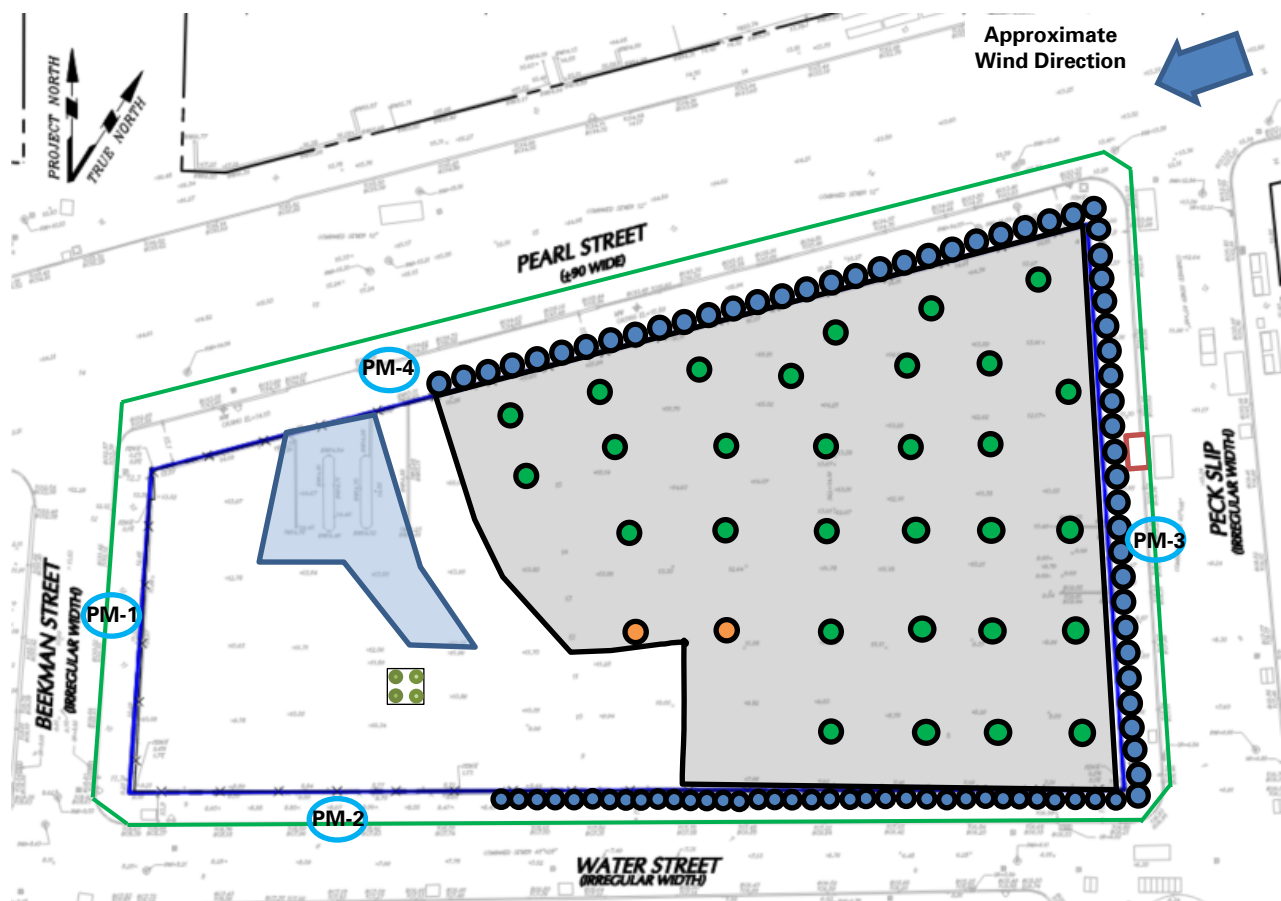
### Anticipated Activities

- Suffolk and East Coast Drilling, Inc. (ECD) will continue mobilization in preparation for the next phase of remediation.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### 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

### 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

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey

By: Jack Millman

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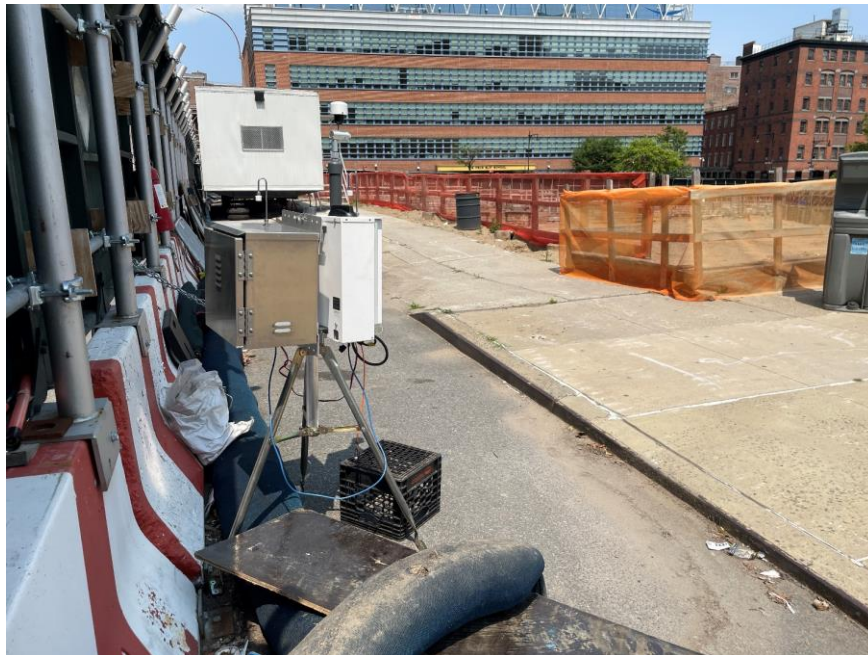


## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** General view of the site (facing west)



**Photo 2:** View of CAMP station PM-4 in the northwestern part of the site (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
		LANGAN	

## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, June 20, 2023  <b>WEATHER:</b> Sunny, 64– 77 °F Wind: NE @ 4 – 7 mph  <b>TIME:</b> 7:45 am – 9:00 am  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 145</b></span> <b>Langan</b> (Environmental) Jack Millman, Michael Au <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu, Jay Kwon <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Gary Smith, Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk continued mobilizing equipment in preparation for the next phase of remediation. An on-site meeting was attended by Suffolk, Langan, ECD, and the NYSDEC to discuss project expectations during implementation of the RAWP.</li> </ul>		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Jack Millman <b>LANGAN</b>	



## SITE OBSERVATION REPORT

### 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

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey By: Jack Millman  
LANGAN

## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

- The community air monitoring plan (CAMP) was not implemented due to a lack of ground-intrusive activities.

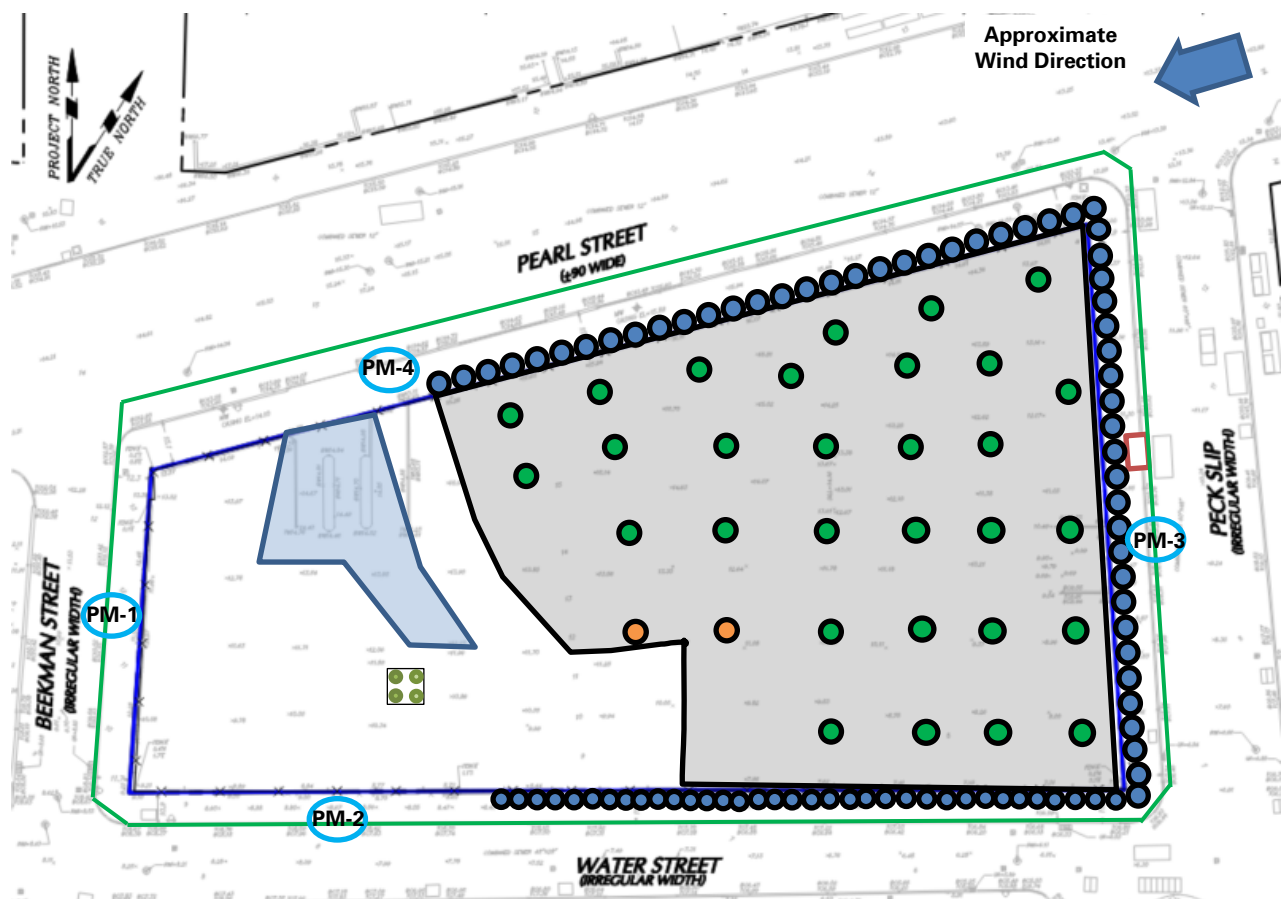
### Anticipated Activities

- Suffolk and ECD will continue mobilization in preparation for the next phase of remediation.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### 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

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			<b>LANGAN</b>

SITE OBSERVATION REPORT

Select Site Photographs:

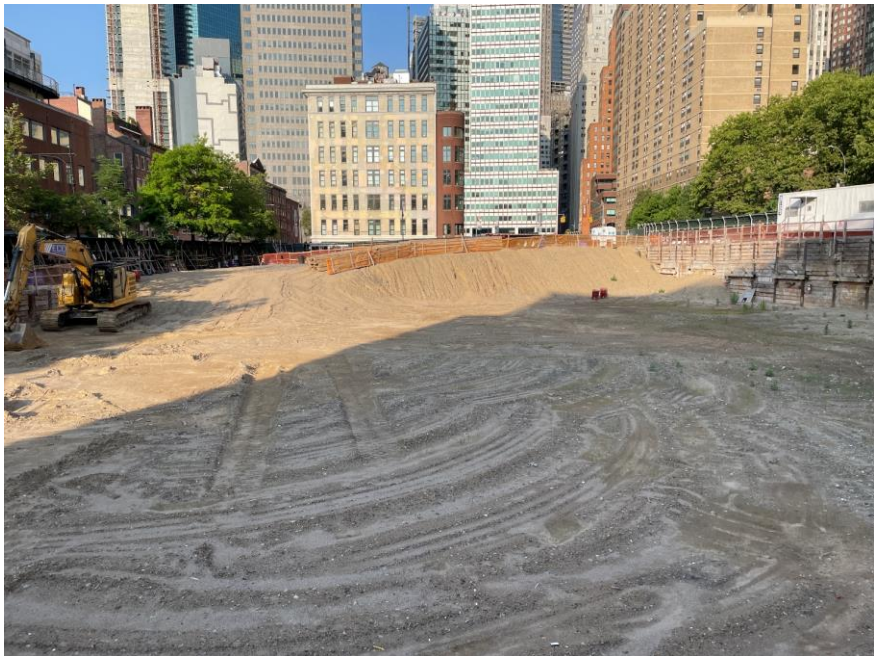


Photo 1: General view of the site (facing west)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Thursday, June 22, 2023  <b>WEATHER:</b> Overcast, 60 – 65 °F Wind: NE @ 8 – 16 mph  <b>TIME:</b> 6:50 am – 12:15 pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 146</b></span> <b>Langan</b> (Environmental) Jack Millman <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam and Meghan Medwid	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk and ECD continued mobilizing equipment in preparation for the next phase of remediation.</li> </ul>		
Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By: Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

- The community air monitoring plan (CAMP) was not implemented because no ground-intrusive activities were performed.

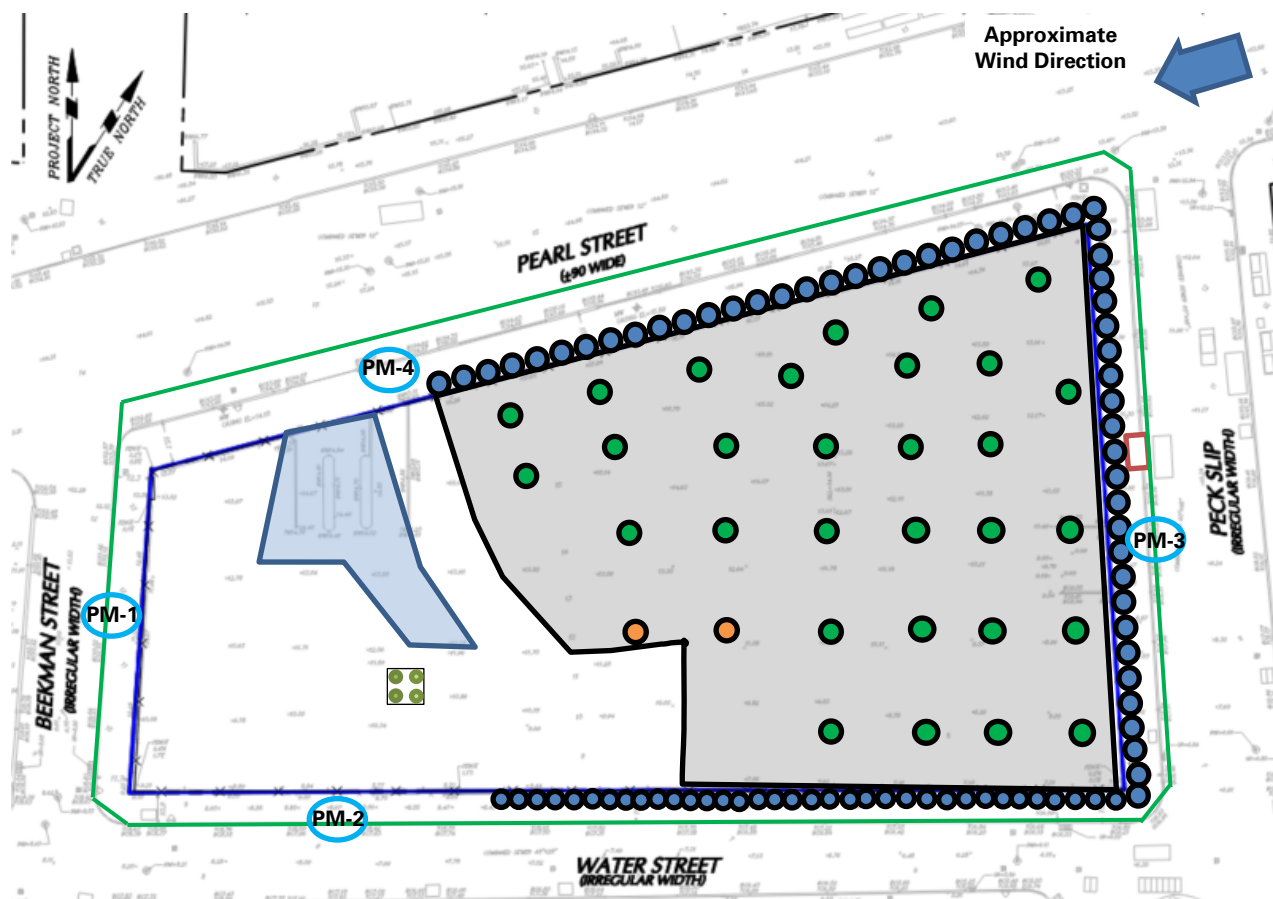
### Anticipated Activities

- Suffolk and ECD will continue mobilization in preparation for the next phase of remediation.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |   |  |
|--|--|---|--|
| <span style="border: 1px solid blue; border-radius: 50%; padding: 2px;">PM-1</span>                                  | Approximate Location of Air Monitoring Station     | <span style="background-color: blue; border-radius: 50%; width: 10px; height: 10px; display: inline-block;"></span>   | Approximate Location of Soldier Pile                         |
| <span style="border: 1px solid orange; width: 20px; height: 10px; display: inline-block;"></span>                    | Approximate Work Area                              | <span style="border-bottom: 2px solid green; width: 20px; display: inline-block;"></span>                             | Approximate Perimeter Construction Fence Location            |
| <span style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></span>                     | Approximate Location of Installed Pile Cap         | <span style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></span>                      | Previous Excavation Area                                     |
| <span style="background-color: green; border-radius: 50%; width: 10px; height: 10px; display: inline-block;"></span> | Approximate Location of Foundation Piles Completed | <span style="background-color: orange; border-radius: 50%; width: 10px; height: 10px; display: inline-block;"></span> | Approximate Location of Documentation Sample                 |
| <span style="background-color: blue; border-radius: 5px; width: 20px; height: 10px; display: inline-block;"></span>  | Approximate Location of Truck Tracking Pad         | <span style="background-color: green; border-radius: 50%; width: 10px; height: 10px; display: inline-block;"></span>  | Approximate Location of Previously Collected Endpoint Sample |
| <span style="border: 1px solid red; width: 20px; height: 10px; display: inline-block;"></span>                       | Approximate Location of Underground Storage Tank   |   |  |

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey

By: Jack Millman

**LANGAN**



SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: General view of the site (facing east)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Friday, June 23, 2023  <b>WEATHER:</b> Overcast/Light Rain, 65 – 70 °F Wind: NE @ 3 – 7 mph  <b>TIME:</b> 6:45 am – 12:30 pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 147</b></span> <b>Langan</b> (Environmental) Jack Millman and Isabella Legovich <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam and Jared Donaldson	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk and ECD continued mobilizing equipment in preparation for the next phase of remediation.</li> </ul>		
Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By: Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

- The community air monitoring plan (CAMP) was not implemented because no ground-intrusive activities were performed.

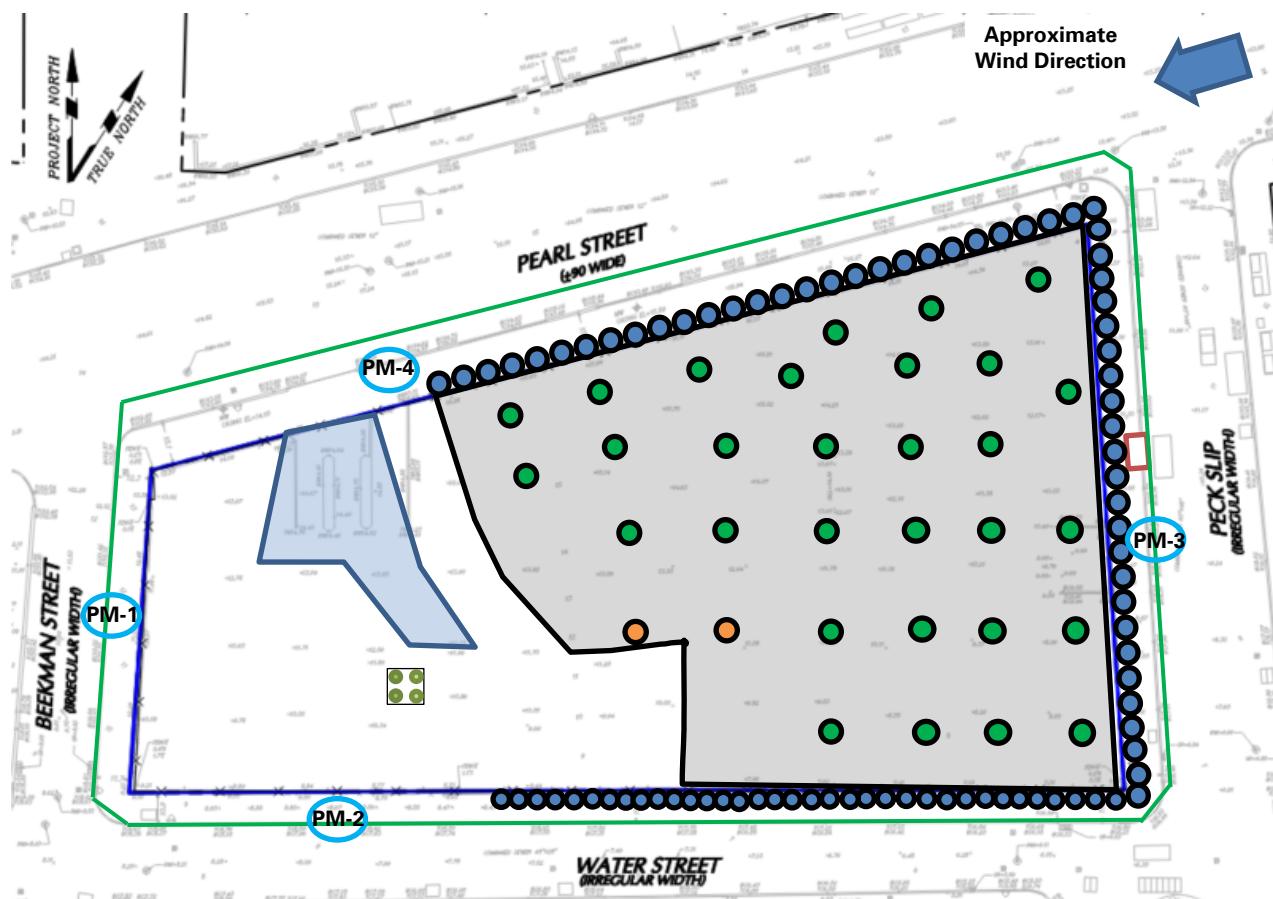
### Anticipated Activities

- Suffolk and ECD will continue mobilization in preparation for the next phase of remediation.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |   |  |
|--|--|---|--|
| <span style="border: 1px solid blue; border-radius: 50%; padding: 2px;">PM-1</span>                                  | Approximate Location of Air Monitoring Station     | <span style="background-color: blue; border-radius: 50%; width: 15px; height: 15px; display: inline-block;"></span>   | Approximate Location of Soldier Pile                         |
| <span style="border: 2px solid orange; width: 20px; height: 10px; display: inline-block;"></span>                    | Approximate Work Area                              | <span style="border-bottom: 2px solid green; width: 20px; display: inline-block;"></span>                             | Approximate Perimeter Construction Fence Location            |
| <span style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></span>                     | Approximate Location of Installed Pile Cap         | <span style="border: 2px solid black; width: 20px; height: 10px; display: inline-block;"></span>                      | Previous Excavation Area                                     |
| <span style="background-color: green; border-radius: 50%; width: 15px; height: 15px; display: inline-block;"></span> | Approximate Location of Foundation Piles Completed | <span style="background-color: orange; border-radius: 50%; width: 15px; height: 15px; display: inline-block;"></span> | Approximate Location of Documentation Sample                 |
| <span style="background-color: blue; border-radius: 5px; width: 20px; height: 10px; display: inline-block;"></span>  | Approximate Location of Truck Tracking Pad         | <span style="background-color: green; border-radius: 50%; width: 15px; height: 15px; display: inline-block;"></span>  | Approximate Location of Previously Collected Endpoint Sample |
| <span style="border: 2px solid red; width: 20px; height: 10px; display: inline-block;"></span>                       | Approximate Location of Underground Storage Tank   |   |  |

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** General view of the site (facing northeast)



**Photo 2:** ECD mobilizing equipment to the site (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By:	Jack Millman
			<b>LANGAN</b>



## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Monday, June 26, 2023  <b>WEATHER:</b> Overcast/Rain, 70 – 75 °F Wind: WNW @ 0.1 – 1.6 mph  <b>TIME:</b> 5:45 am – 4:15 pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 148</b></span> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro, Mike Au, Seyena Simpson, Paul McMahon, Jack Frey <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers, Gary Smith <b>New York State Department of Environmental Conservation</b> <b>(NYSDEC)</b> Mike Sollecito	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk and ECD continued mobilizing equipment in preparation for the next phase of remediation.</li> <li>ECD received four, 55-gallon drums containing Atmos® AC-645 odor/vapor suppressing foam. The drums were staged in the central part of the site for use during future remedial activities. ECD applied Atmos® odor/vapor suppressing foam to the northwestern part of the site to verify the equipment was operational prior to the commencement of remedial activities.</li> <li>Ground-intrusive activities were not conducted throughout the workday; however, Langan implemented the community air monitoring plan (CAMP).</li> </ul>		
Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey	By: Jack Millman <b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>



## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

Langan performed air monitoring at the perimeter of the site and at the northern sidewalk of Pearl Street at five total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10). 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  $\text{mg}/\text{m}^3$  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 photoionization detector (PID), respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.02  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.010	0.00	0.00
PM-2	0.010	0.00	0.00
PM-3	0.010	0.00	0.01
PM-4	0.011	0.00	0.00
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	0.010	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.019	0.01	0.08
PM-2	0.018	0.01	0.01
PM-3	0.021	0.10	0.04
PM-4	0.027	0.07	0.17
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	0.018	0.01	0.00

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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 0.12  $\mu\text{g}/\text{m}^3$ .
- 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.

### 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. CAMP stations were discontinued sequentially between 3:33 pm and 3:52 pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.01  $\mu\text{g}/\text{m}^3$ .
- Background concentrations of VOCs at each CAMP station ranged from 0.0 to 0.1 ppm.

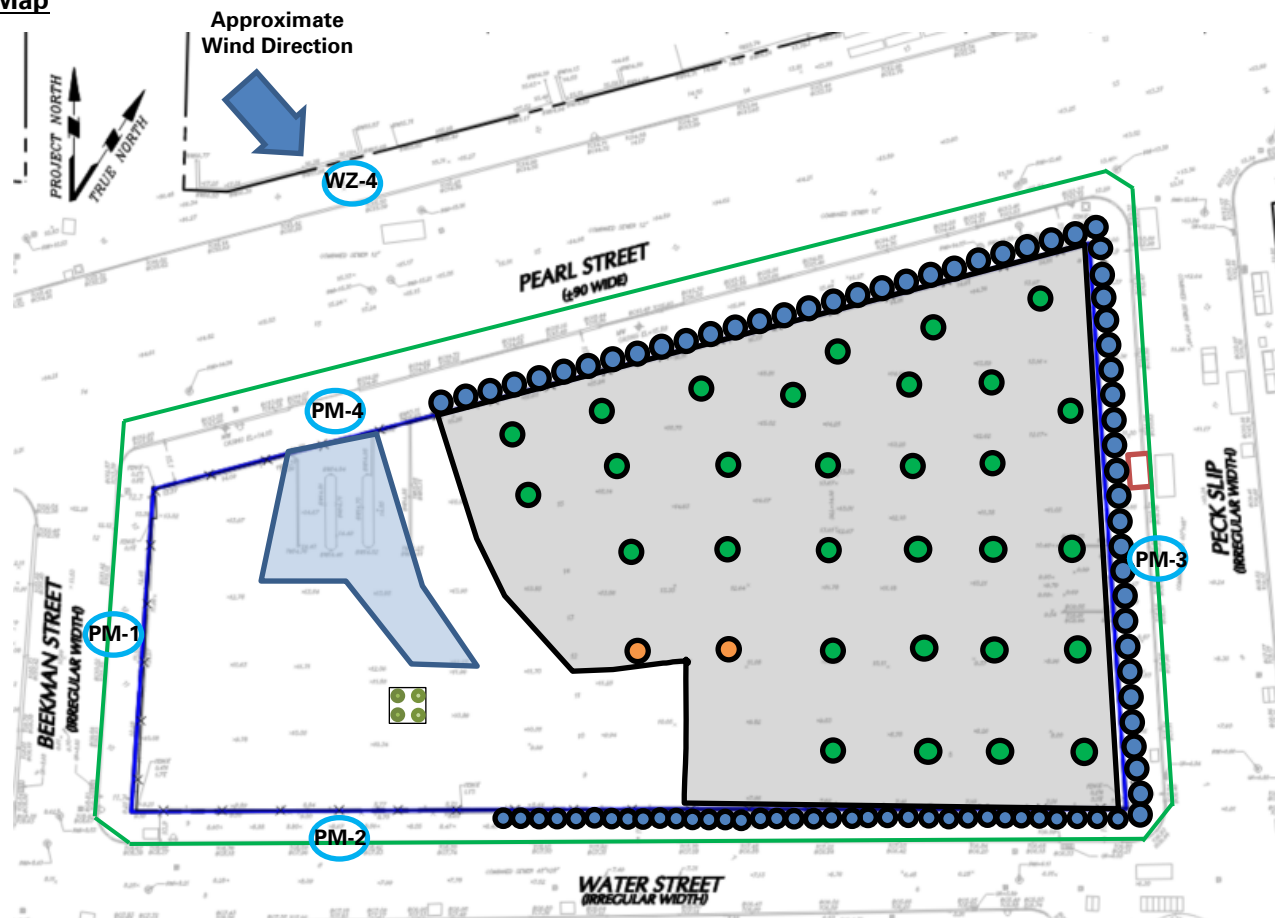
### Anticipated Activities

- Suffolk and ECD will continue mobilization in preparation for the next phase of remediation.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT












### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |
|--|--|
|  Approximate Location of Air Monitoring Station     |  Approximate Location of Soldier Pile                         |
|  Approximate Work Area                              |  Approximate Perimeter Construction Fence Location            |
|  Approximate Location of Installed Pile Cap         |  Previous Excavation Area                                     |
|  Approximate Location of Foundation Piles Completed |  Approximate Location of Documentation Sample                 |
|  Approximate Location of Truck Tracking Pad         |  Approximate Location of Previously Collected Endpoint Sample |
|  Approximate Location of Underground Storage Tank   |  |

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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SITE OBSERVATION REPORT

Select Site Photographs:



**Photo 1:** ECD applying Atmos® AC-645 odor/vapor suppressing foam in the northwestern part of the site to verify the equipment was operational prior to the commencement of remedial activities (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, June 27, 2023  <b>WEATHER:</b> Overcast/Light Rain, 68 – 75 °F Wind: E @ 0.1 – 1.7 mph  <b>TIME:</b> 5:45 am – 1:00 pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 149</b></span> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Mike Sollecito <b>Earth Efficient LLC (Earth Efficient)</b> (Soil Broker) Michael DiGaetano	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk and ECD continued mobilizing equipment in preparation for the next phase of remediation.</li> <li>Earth Efficient marked out waste characterization cells along the perimeter construction fence in preparation for excavation and off-site disposal of soil/fill during the next phase of remediation.</li> <li>Ground-intrusive activities were not conducted throughout the workday; however, Langan implemented the community air monitoring plan (CAMP) from about 6:53am to 11:55am.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

Langan performed air monitoring at the perimeter of the site at four locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:53am to 11:55am. 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  $\text{mg}/\text{m}^3$  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 photoionization detector (PID), respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 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.

### Perimeter and Work Zone Concentrations

#### Daily Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.012	0.00	0.01
PM-2	0.013	0.00	0.01
PM-3	0.013	0.00	0.01
PM-4	0.013	0.01	0.06
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.016	0.04	0.19
PM-2	0.017	0.01	0.02
PM-3	0.017	0.00	0.02
PM-4	0.018	0.09	0.38
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.07 µg/m<sup>3</sup>.
- 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.

### 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. CAMP stations were discontinued sequentially between 11:55 am and 12:03 pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### Anticipated Activities

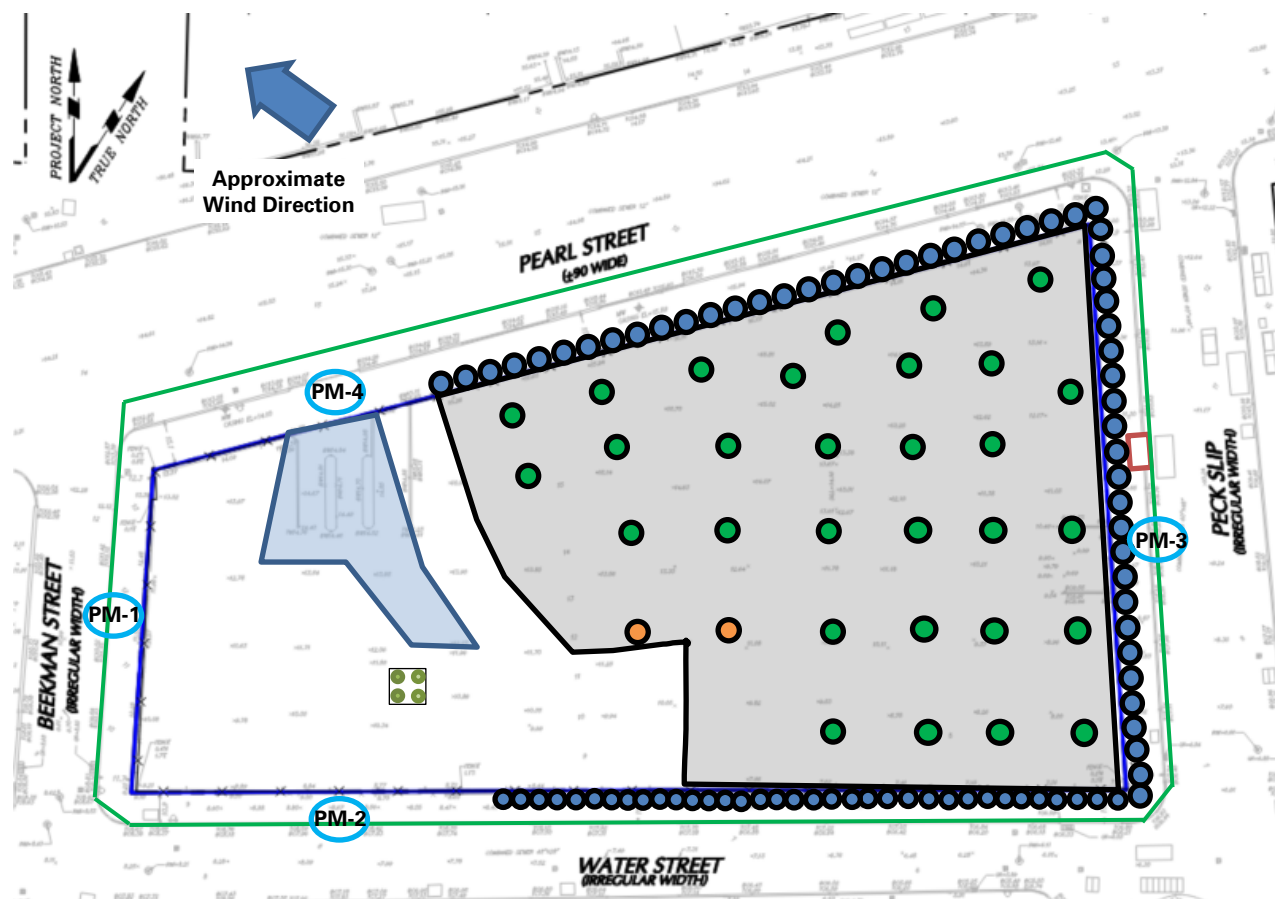
- Suffolk and ECD will continue mobilization in preparation for the next phase of remediation.
- ECD will reinforce the existing support-of-excavation in the southeastern part of the site by placing flowable fill behind the timber lagging.

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			<b>LANGAN</b>



## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |
|------|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: General view of the site (facing east)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Wednesday, June 28, 2023  <b>WEATHER:</b> Cloudy/Light Rain, 70 – 80 °F Wind: E @ 0.2 – 1.9 mph  <b>TIME:</b> 5:45 am – 4:00 pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 150</b> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Mike Sollecito	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk and ECD continued mobilizing equipment in preparation for the next phase of remediation.</li> <li>ECD poured flowable fill behind existing support-of-excavation in the southern and eastern parts of the site.</li> <li>Ground-intrusive activities were not conducted throughout the workday; however, Langan implemented the community air monitoring plan (CAMP) from about 6:46am to 3:23pm.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

Langan performed air monitoring at the perimeter of the site at four total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:46am to 3:23pm. 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  $\text{mg}/\text{m}^3$  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 photoionization detector (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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.011	0.00	0.01
PM-2	0.012	0.00	0.01
PM-3	0.011	0.00	0.02
PM-4	0.011	0.00	0.02
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.042	0.00	0.09
PM-2	0.046	0.01	0.02
PM-3	0.047	0.02	0.04
PM-4	0.033	0.08	0.20
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.09 µg/m<sup>3</sup>.
- 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.

### 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. CAMP stations were discontinued sequentially between 3:23 pm and 3:31 pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

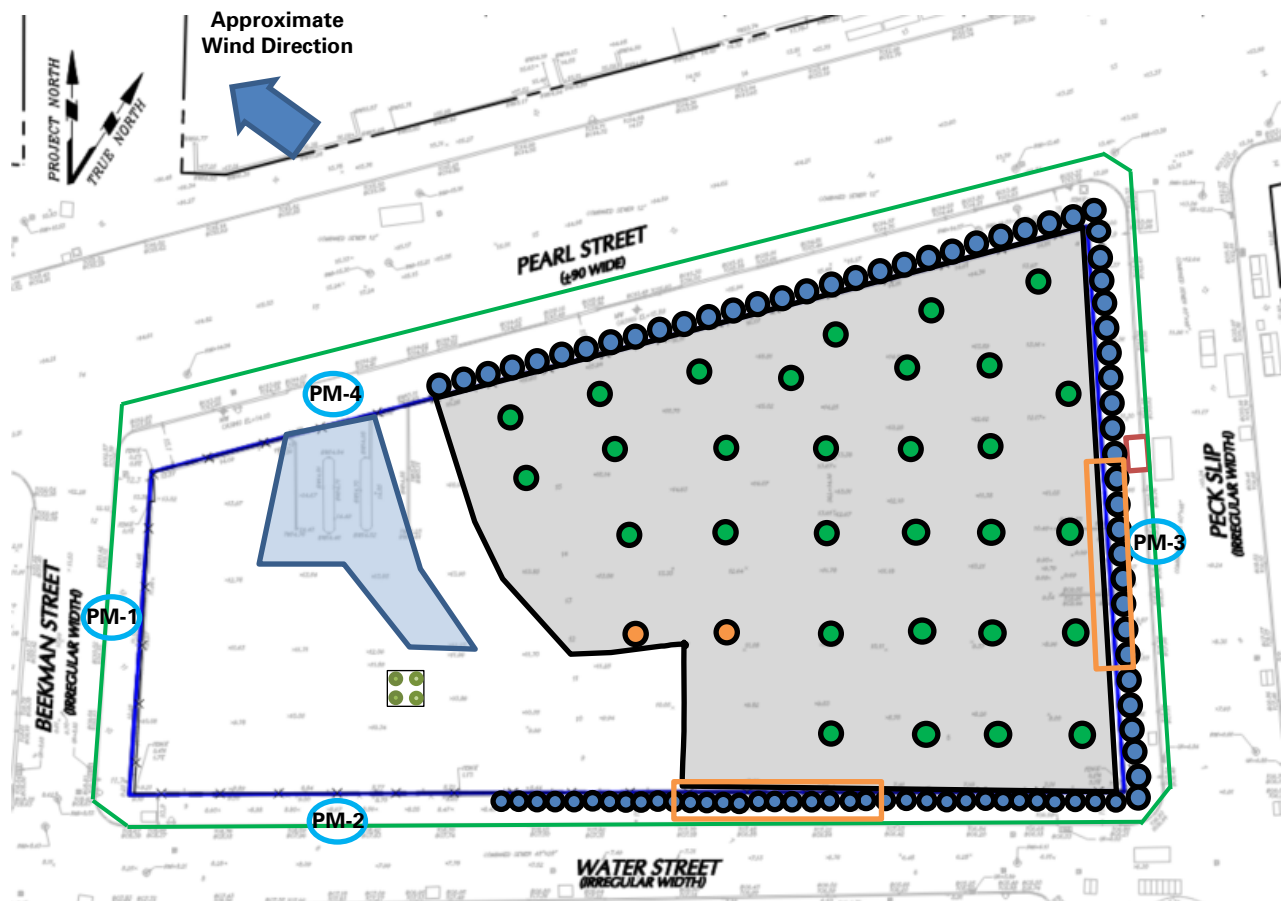
### Anticipated Activities

- Suffolk and ECD will continue mobilization in preparation for the next phase of remediation.
- ECD will continue reinforcing the existing support-of-excavation in the eastern and northern parts of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |
|--|--|
| Approximate Location of Air Monitoring Station     | Approximate Location of Soldier Pile                         |
| Approximate Work Area                              | Approximate Perimeter Construction Fence Location            |
| Approximate Location of Installed Pile Cap         | Previous Excavation Area                                     |
| Approximate Location of Foundation Piles Completed | Approximate Location of Documentation Sample                 |
| Approximate Location of Truck Tracking Pad         | Approximate Location of Previously Collected Endpoint Sample |
| Approximate Location of Underground Storage Tank   |  |

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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SITE OBSERVATION REPORT

Select Site Photographs:

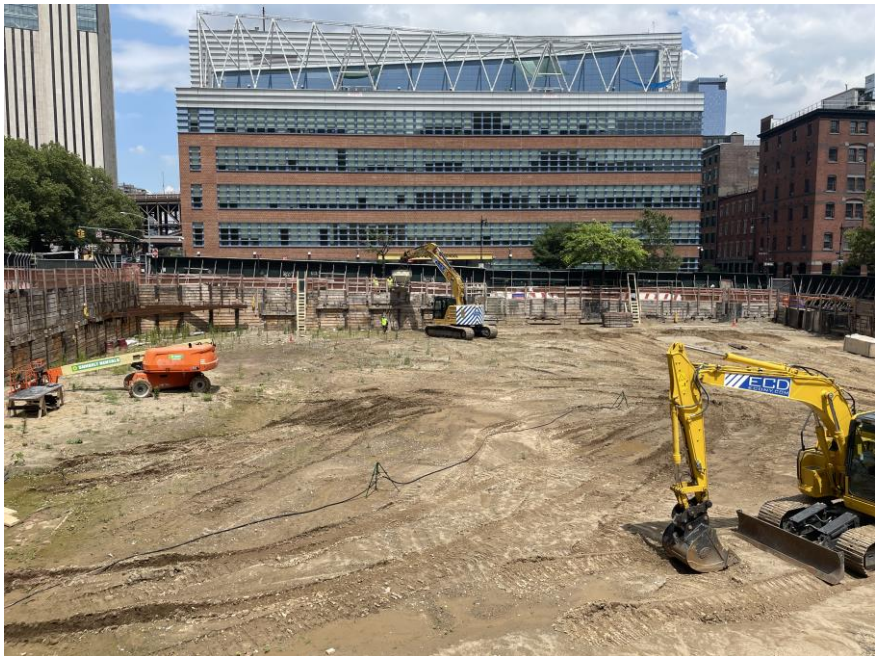


Photo 1: General view of the site (facing east).

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
		LANGAN	



## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Thursday, June 29, 2023  <b>WEATHER:</b> Partly Sunny, 65 – 80 °F Wind: E @ 0.24 – 2.09 mph  <b>TIME:</b> 5:45 am – 3:45 pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 151</b> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro, Brayden Klein <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Mike Sollecito	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk and ECD continued mobilizing equipment in preparation for the next phase of remediation.</li> <li>ECD poured flowable fill behind existing support-of-excavation in the northern and eastern parts of the site.</li> <li>Ground-intrusive activities were not conducted throughout the workday; however, Langan implemented the community air monitoring plan (CAMP) from about 6:40 am to 3:00 pm.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

Langan performed air monitoring at the perimeter of the site and at the northern sidewalk of Pearl Street at five total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:40am to 3:00pm. 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  $\text{mg}/\text{m}^3$  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 photoionization detector (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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.029	0.00	0.01
PM-2	0.031	0.00	0.01
PM-3	0.030	0.00	0.01
PM-4	0.034	0.00	0.01
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	0.031	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.053	0.00	0.02
PM-2	0.055	0.00	0.02
PM-3	0.053	0.00	0.04
PM-4	0.056	0.01	0.03
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	0.060	0.00	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Equipment Troubleshooting

- Mercury vapor, VOCs, and PM10 concentrations were not recorded at perimeter CAMP station PM-1 between 2:25pm and 2:32pm due to depleted battery. Datalogging resumed at about 2:33pm following replacement of the battery. No ground-intrusive work occurred throughout the day. Fugitive dust and odors were not observed migrating off-site during this time.

### 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/m³ to 0.09 µg/m³.
- 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.

### 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. CAMP stations were discontinued sequentially between 3:02 pm and 3:17 pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.04 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

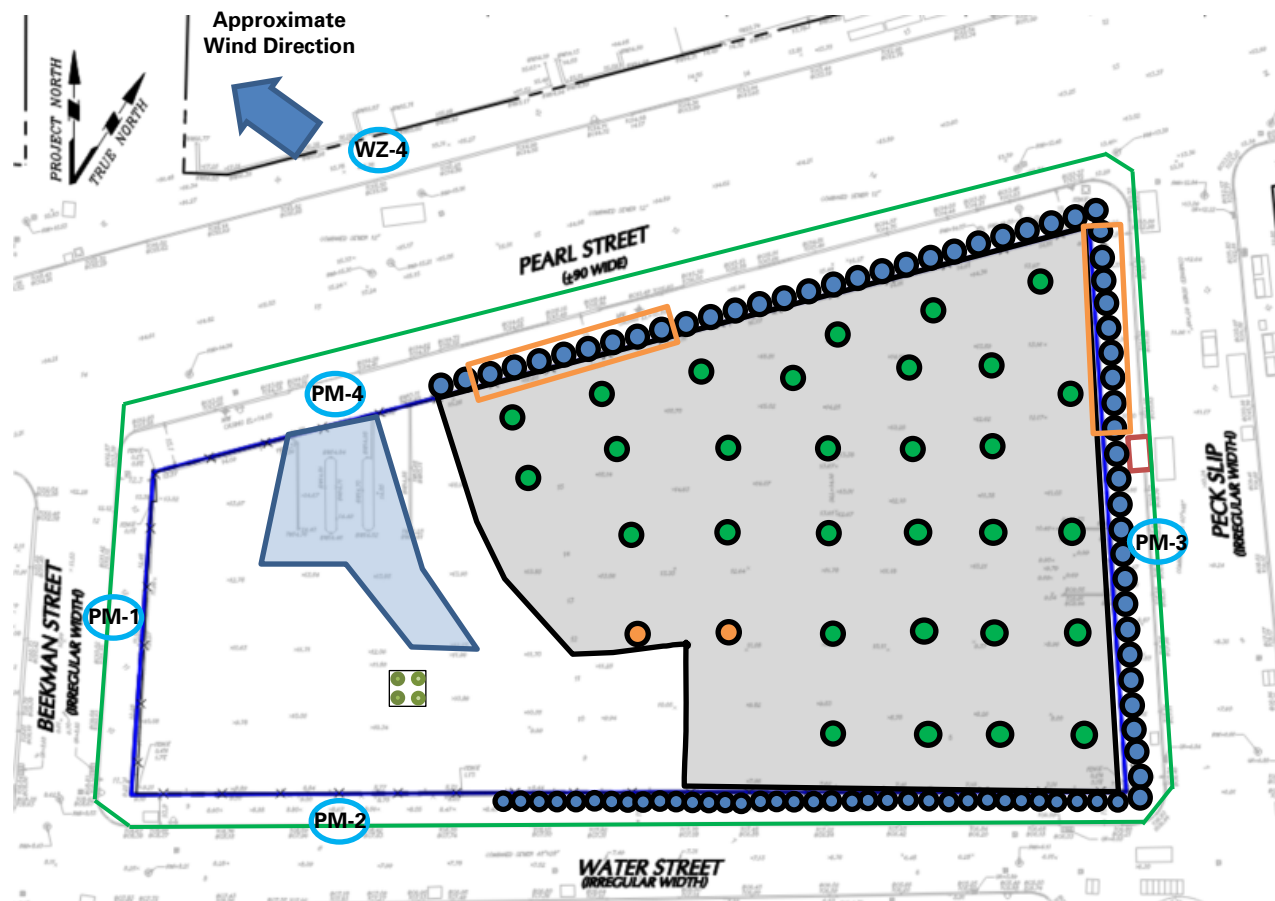
### Anticipated Activities

- Suffolk and ECD will continue mobilization in preparation for the next phase of remediation.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT












### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |
|--|--|
|  Approximate Location of Air Monitoring Station     |  Approximate Location of Soldier Pile                         |
|  Approximate Work Area                              |  Approximate Perimeter Construction Fence Location            |
|  Approximate Location of Installed Pile Cap         |  Previous Excavation Area                                     |
|  Approximate Location of Foundation Piles Completed |  Approximate Location of Documentation Sample                 |
|  Approximate Location of Truck Tracking Pad         |  Approximate Location of Previously Collected Endpoint Sample |
|  Approximate Location of Underground Storage Tank   |  |

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson

By: Jack Millman  
LANGAN

## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** Dust suppression in the northwestern part of the site (facing south)



**Photo 2:** CAMP station PM-3 in the eastern part of the site (facing north)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Friday, June 30, 2023  <b>WEATHER:</b> Partly Sunny, 68 – 82°F Wind: SE @ 0.2 – 2.4 mph  <b>TIME:</b> 5:45am – 2:00pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 152</b></span> <b>Langan</b> (Environmental) Jack Millman <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Mike Sollecito	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>Suffolk and ECD continued mobilizing equipment in preparation for the next phase of remediation.</li> <li>Ground-intrusive activities were not conducted throughout the workday; however, Langan implemented the community air monitoring plan (CAMP) from about 7:00 am to 1:20 pm.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN



## SITE OBSERVATION REPORT

### Sampling

- No samples were collected.

### CAMP Activities

Langan performed air monitoring at the perimeter of the site at four locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:59 am to 1:23 pm. There were no fifteen-minute average concentrations for mercury vapor or VOCs that approached or exceeded the action levels established by the CAMP (1.00  $\mu\text{g}/\text{m}^3$  and 5.0 parts per million [ppm], 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 photoionization detector (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.

\*A NYSDEC Air Quality Health Advisory was issued for New York State on Friday, June 30th. Background concentrations of PM10 were observed at a daily average concentration above the 15-minute time-weighted-average (TWA) action level of 0.100  $\text{mg}/\text{m}^3$  due to regionally poor air quality. The PM10 exceedances are not attributed to remediation activities at the site.

### Perimeter and Work Zone Concentrations

#### Daily Average Concentrations

Station ID	*Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.115	0.00	0.01
PM-2	0.119	0.00	0.01
PM-3	0.114	0.00	0.02
PM-4	0.119	0.00	0.01
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

\*See note above regarding background particulate concentrations

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Maximum 15-Minute-Average Concentrations

Station ID	*Particulate (mg/m <sup>3</sup> )	Organic Vapor (ppm)	Mercury Vapor (µg/m <sup>3</sup> )
PM-1	0.129	0.01	0.02
PM-2	0.136	0.02	0.01
PM-3	0.124	0.03	0.04
PM-4	0.143	0.02	0.03
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

•mg/m<sup>3</sup> = milligrams per cubic meter •ppm = parts per million •µg/m<sup>3</sup> = micrograms per cubic meter

\*See note above regarding background particulate concentrations

### 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<sup>3</sup> to 0.10 µg/m<sup>3</sup>.
- 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.

### 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. CAMP stations were discontinued sequentially between 1:23 pm and 1:42 pm.

- Background concentrations of mercury vapor at each CAMP station ranged at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

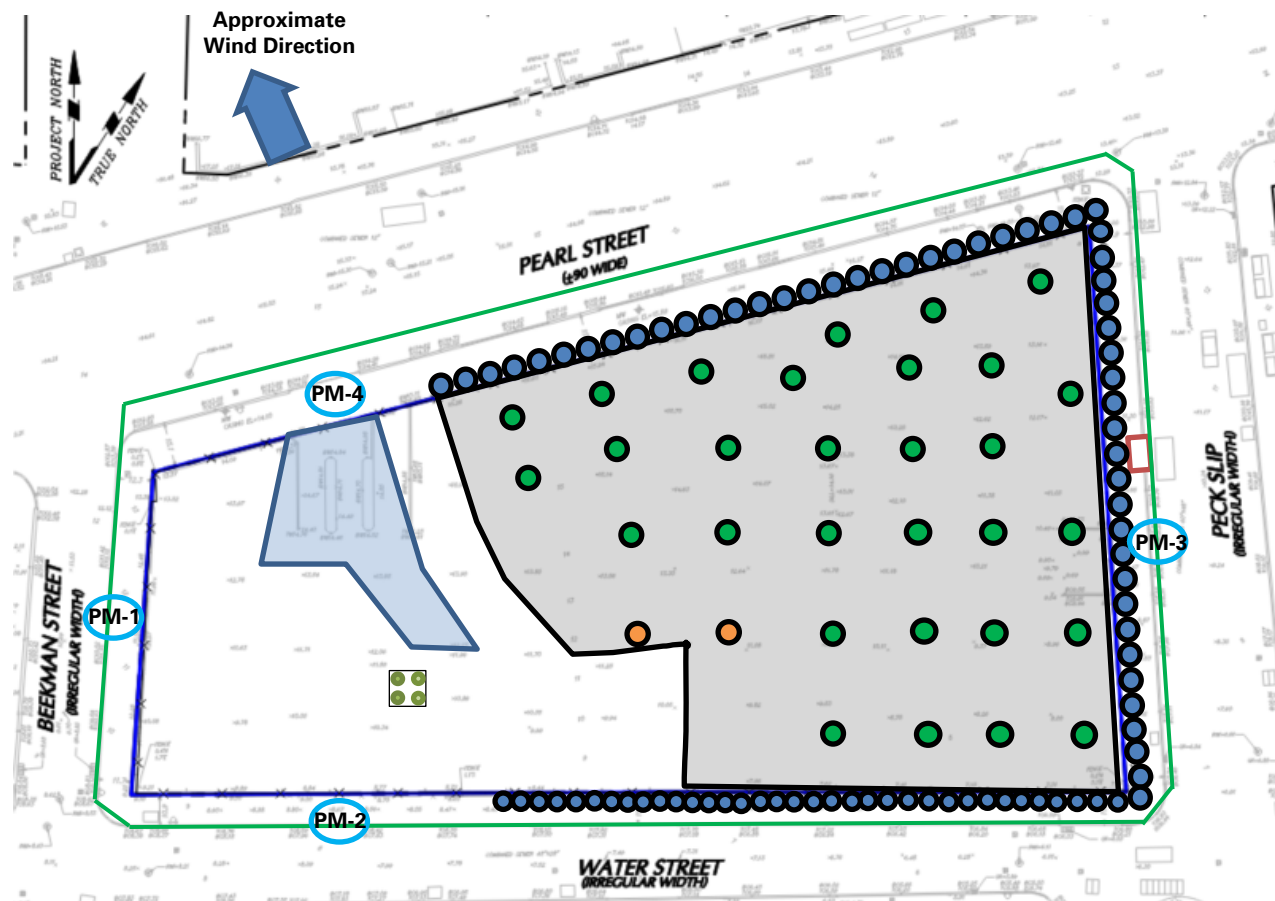
### Anticipated Activities

- ECD will begin excavation in the northern part of the site for installation of a stabilized construction entrance.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |  |
|------|--|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |  |

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson

By: Jack Millman  
**LANGAN**

## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** General view of the site (facing west)



**Photo 2:** CAMP station PM-2 in the southwestern part of the site (facing west)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Wednesday, July 5, 2023  <b>WEATHER:</b> Partly Sunny, 75 – 90°F Wind: E @ 0.1 – 2.2 mph  <b>TIME:</b> 5:45am – 4:45pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 153</b></span> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Gabriella DeGennaro, Pradeep Pandey <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD applied Mercon-X® to the northwestern part of the site to verify the equipment was operational prior to the commencement of remedial activities.</li> <li>ECD demolished existing asphalt and concrete in the northwestern part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting adjacent to the work area pending future off-site disposal.</li> <li>ECD removed previously imported 1.5-inch virgin stone from the existing tracking pad and excavated an about 30-foot-long by 25-foot-wide area to a maximum depth of about 1 foot below grade surface (bgs) for the installation of a stabilized construction entrance in the northwestern part of the site.             <ul style="list-style-type: none"> <li>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. Evidence of impacts was not observed and the soil/fill was temporarily stockpiled on and covered with polyethylene sheeting adjacent to the work area for future off-site disposal.</li> <li>ECD backfilled the area to grade using the previously imported 1.5-inch virgin stone. A layer of filter fabric was placed atop the stone, followed by polyethylene sheeting and reusable, plastic tracking pads for installation of the stabilized construction entrance.</li> </ul> </li> <li>ECD excavated an about 4-foot-long by 4-foot-wide area to a maximum depth of about 4 feet bgs to create a temporary sump pit for the collection of excess fluids generated during truck washing operations in the northwestern part of the site. Excavated soil/fill was temporarily stockpiled on and covered with polyethylene sheeting adjacent to the work area for future off-site disposal.             <ul style="list-style-type: none"> <li>Excavated soil/fill was screened for odors, staining, organic vapors, and mercury vapor using a handheld PID and handheld Jerome® J505 mercury vapor analyzer, respectively. Mercon-X® was applied to exposed soil/fill and stockpiles as a proactive measure.</li> </ul> </li> </ul>		
Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By: Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site and at the northern sidewalk of Pearl Street at five total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 7:00 am to 4:00 pm. There were no fifteen-minute average concentrations for mercury vapor or VOCs that approached or exceeded the action levels established by the CAMP (1.00  $\mu\text{g}/\text{m}^3$  and 5.0 parts per million [ppm], 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 photoionization detector (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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.018	0.00	0.01
PM-2	0.019	0.00	0.01
PM-3	0.018	0.00	0.02
PM-4	0.023	0.00	0.01
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	0.020	0.00	0.00

\*See note above regarding background particulate concentrations

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.045	0.01	0.03
PM-2	0.051	0.01	0.02
PM-3	0.058	0.02	0.08
PM-4	*0.175	0.08	0.03
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	0.049	0.05	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

\*PM10 was detected at concentrations exceeding the 15-minute time-weighted-average (TWA) action level at perimeter CAMP station PM-4 between 9:36am and 9:49am. Perimeter CAMP station PM-4 was located adjacent to the work area in the northwestern part of the site and ECD was in the process of demolishing the existing asphalt and concrete cover for the installation of a stabilized construction entrance. Work was halted and the work area was saturated using hydrant water prior to resuming work. Concentrations of PM10 were not detected above background conditions at off-site CAMP station WZ-4 during this time.

### 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/m³ to 0.28 µg/m³.
- 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

- Mercury vapor, VOC and PM10 data were not recorded at perimeter CAMP station PM-4 from 2:09 pm to 2:19 pm due to a network issue with the equipment rental vendor. No ground-intrusive activities were ongoing during this time; however, Langan continuously monitored the surrounding area using a handheld Jerome® J505 mercury vapor analyzer and handheld PID. Mercury vapor and VOC concentrations were not detected at concentrations above background conditions during this time. The equipment rental vendor was notified of the issue and a spare CAMP station was placed at the location of perimeter CAMP station PM-4.

### Off-site CAMP Stations

- CAMP station WZ-4 was relocated to the northern sidewalk of Pearl Street from 6:24am to 4:28pm due to ground-intrusive activities along the northern boundary of the site.

### 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. CAMP stations were discontinued sequentially between 3:59pm and 4:28pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.0 to 0.01 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

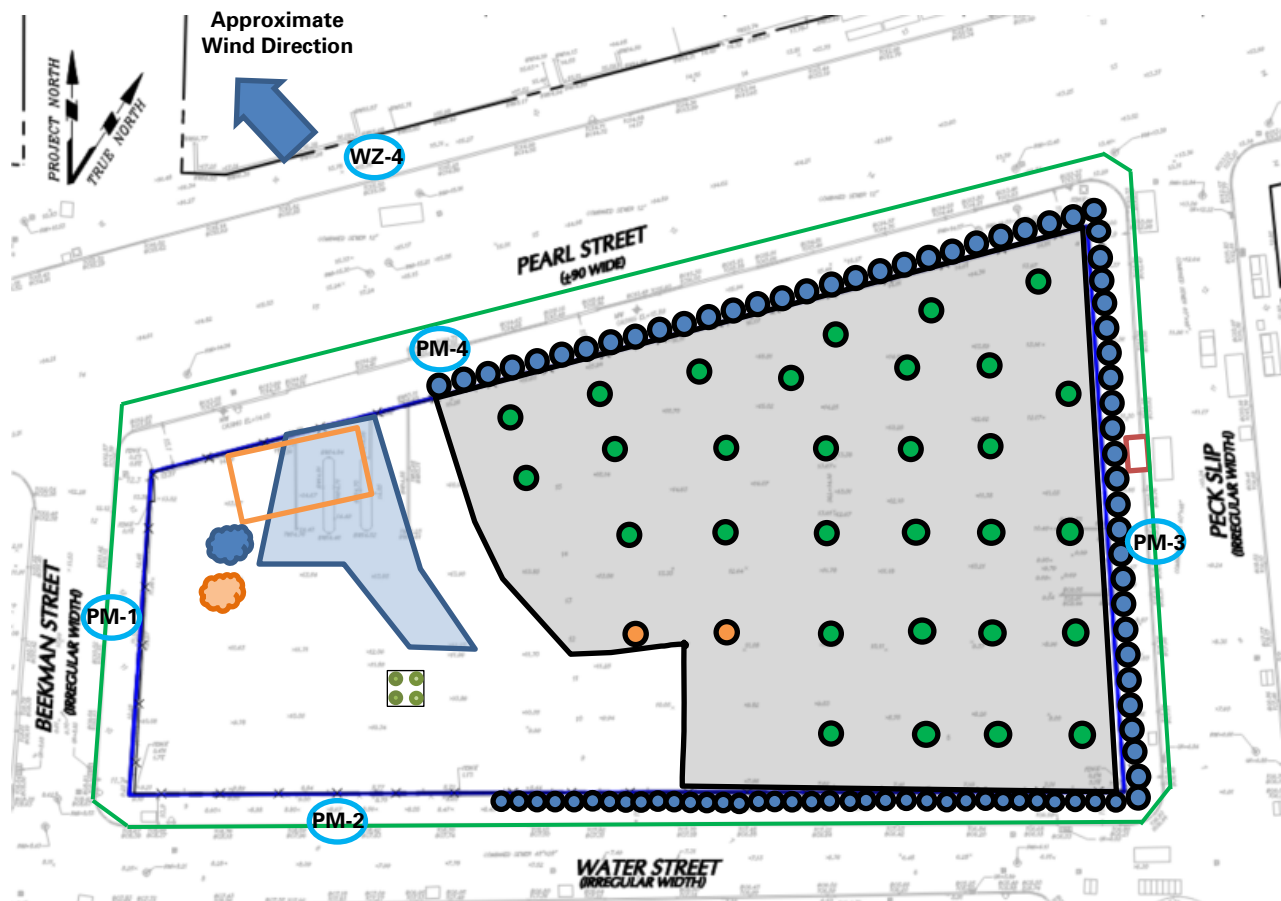
### Anticipated Activities

- ECD will excavate soil/fill along Pearl and Beekman Streets to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## Site Map



**Notes:**

-  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 Perimeter Construction Fence Location
-  Previous Excavation Area
-  Approximate Location of Documentation Sample
-  Approximate Location of Previously Collected Endpoint Sample

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** Stabilized construction entrance in the northwestern part of the site (facing west)



**Photo 2:** Soil/fill stockpile on and covered with polyethylene sheeting in the northwestern part of the site (facing northeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Thursday, July 6, 2023  <b>WEATHER:</b> Partly Sunny, 80 – 90°F Wind: SE @ 0.3 – 1.9 mph  <b>TIME:</b> 5:30am – 5:00pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 154</b> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Gabriella DeGennaro, Angelina Schott, William Bohrer, Pradeep Pandey <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam, Heidi Dudek, Marnie Chancey	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the western part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting adjacent to the work area pending future off-site disposal.</li> <li>ECD excavated an about 85-foot-long by 5-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation along Beekman Street.             <ul style="list-style-type: none"> <li>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. Evidence of impacts was not observed and the soil/fill was temporarily stockpiled on and covered with polyethylene sheeting adjacent to the work area for future backfill into the original location.</li> </ul> </li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:45am to 3:30pm. 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], or 0.100  $\text{mg}/\text{m}^3$ , 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 photoionization detector (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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.012	0.00	0.01
PM-2	0.012	0.00	0.01
PM-3	0.010	0.00	0.01
PM-4	0.011	0.00	0.01
WZ-1	0.011	0.00	0.00
WZ-2	0.008	0.00	0.00
WZ-3	-	-	-
WZ-4	0.012	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	*Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.019	0.00	0.03
PM-2	0.026	0.00	0.01
PM-3	0.019	0.00	0.05
PM-4	0.023	0.00	0.03
WZ-1	0.018	0.00	0.01
WZ-2	0.019	0.00	0.01
WZ-3	-	-	-
WZ-4	0.019	0.00	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Off-site CAMP Stations

- CAMP station WZ-1 was relocated to the western sidewalk of Beekman Street from 7:19am to 3:35pm due to ground-intrusive activities along the western boundary of the site.
- CAMP station WZ-2 was relocated to the southern sidewalk of Water Street from 10:53am to 4:01pm due to ground-intrusive activities along the southern boundary of the site.
- CAMP station WZ-4 was relocated to the northern sidewalk of Pearl Street from 6:47am to 3:16pm due to ground-intrusive activities along the northern boundary of the site.

### 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 0.13  $\mu\text{g}/\text{m}^3$ .
- 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.

### 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. CAMP stations were discontinued sequentially between 3:16pm and 4:00pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.0 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

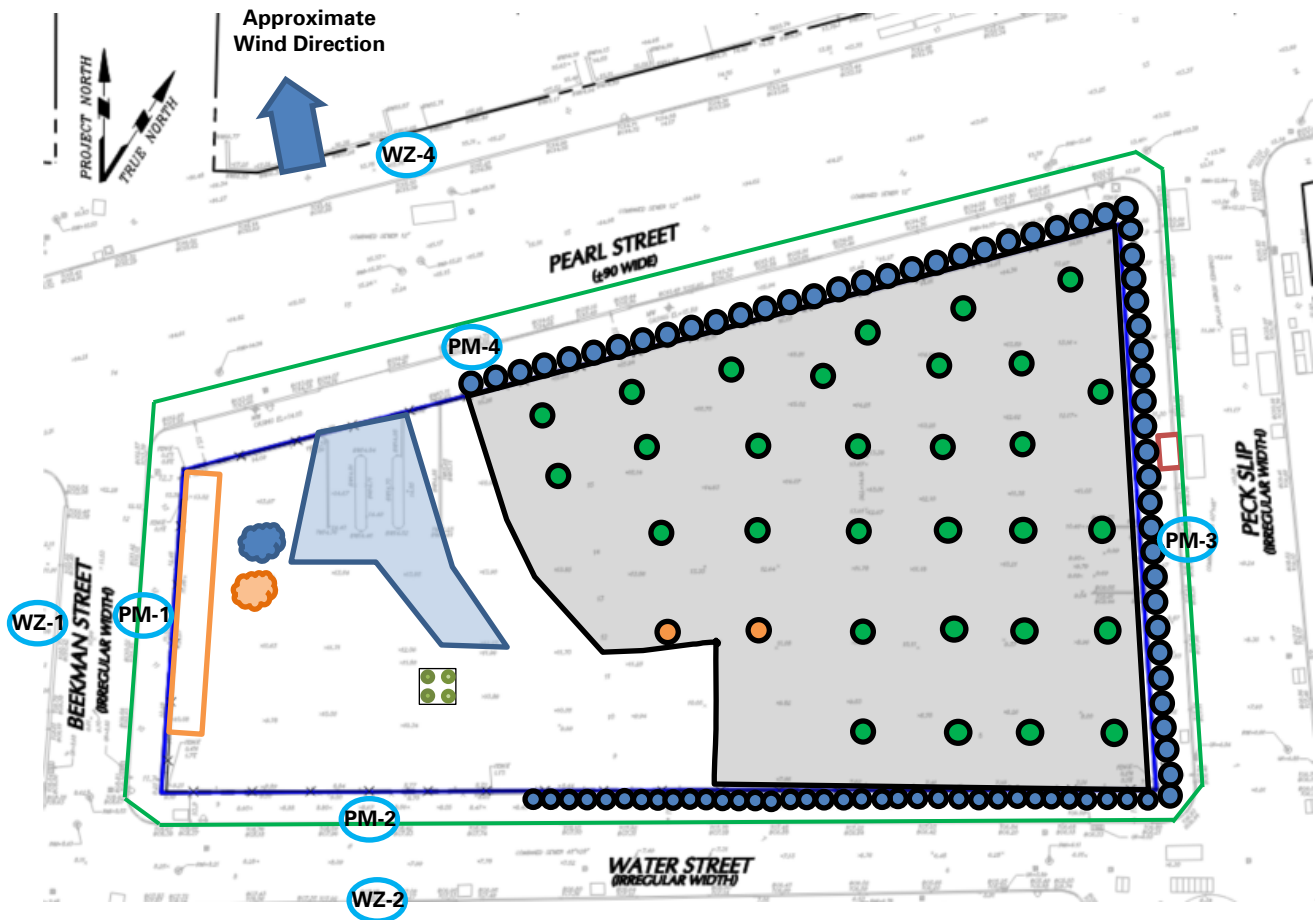
- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation

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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |
|--|--|
| Approximate Location of Air Monitoring Station     | Approximate Location of Soldier Pile                         |
| Approximate Work Area                              | Approximate Perimeter Construction Fence Location            |
| Approximate Location of Installed Pile Cap         | Previous Excavation Area                                     |
| Approximate Location of Foundation Piles Completed | Approximate Location of Documentation Sample                 |
| Approximate Location of Truck Tracking Pad         | Approximate Location of Previously Collected Endpoint Sample |
| Approximate Location of Underground Storage Tank   |  |
| Approximate Location of C&D Stockpile              |  |
| Approximate Location of Soil/Fill Stockpile        |  |

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD excavating soil/fill along Beekman Street (facing northwest)



**Photo 2:** CAMP station WZ-1 on the western sidewalk of Beekman Street (facing southeast)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Friday, July 7, 2023  <b>WEATHER:</b> Partly Sunny, 75 – 85°F Wind: SSE @ 0.2 – 2.4 mph  <b>TIME:</b> 5:45am – 4:15pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 155</b> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro, Angelina Schott <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the southwestern part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting adjacent to the work area pending future off-site disposal.</li> <li>ECD excavated an about 25-foot-long by 5-foot-wide area and an about 15-foot-long by 5-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the southwestern part of the site (along Beekman and Water Streets).             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of obstructions and/or confirmation that subsurface utilities were not present.</li> </ul> </li> <li>ECD constructed wooden formwork in preparation for concrete guide wall installation in the southeastern part of the site. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site, at the western sidewalk of Beekman Street, and at the southern sidewalk of Water Street at six total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:35am to 3:05pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.011	0.00	0.01
PM-2	0.011	0.00	0.00
PM-3	0.010	0.00	0.01
PM-4	0.010	0.00	0.01
WZ-1	0.011	0.00	0.00
WZ-2	0.010	0.00	0.00
WZ-3	-	-	-
WZ-4	-	-	-

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.021	0.00	0.06
PM-2	0.024	0.03	0.00
PM-3	0.017	0.01	0.04
PM-4	0.016	0.03	0.03
WZ-1	0.020	0.00	0.01
WZ-2	0.017	0.01	0.01
WZ-3	-	-	-
WZ-4	-	-	-

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.16 µg/m<sup>3</sup>.
- 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 6:27am to 3:38pm during ground-intrusive activities along the western boundary of the site.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:35am to 3:43pm during ground-intrusive activities along the southern boundary of the site.

### 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. CAMP stations were discontinued sequentially between 3:05pm and 3:43pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.0 to 0.03 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

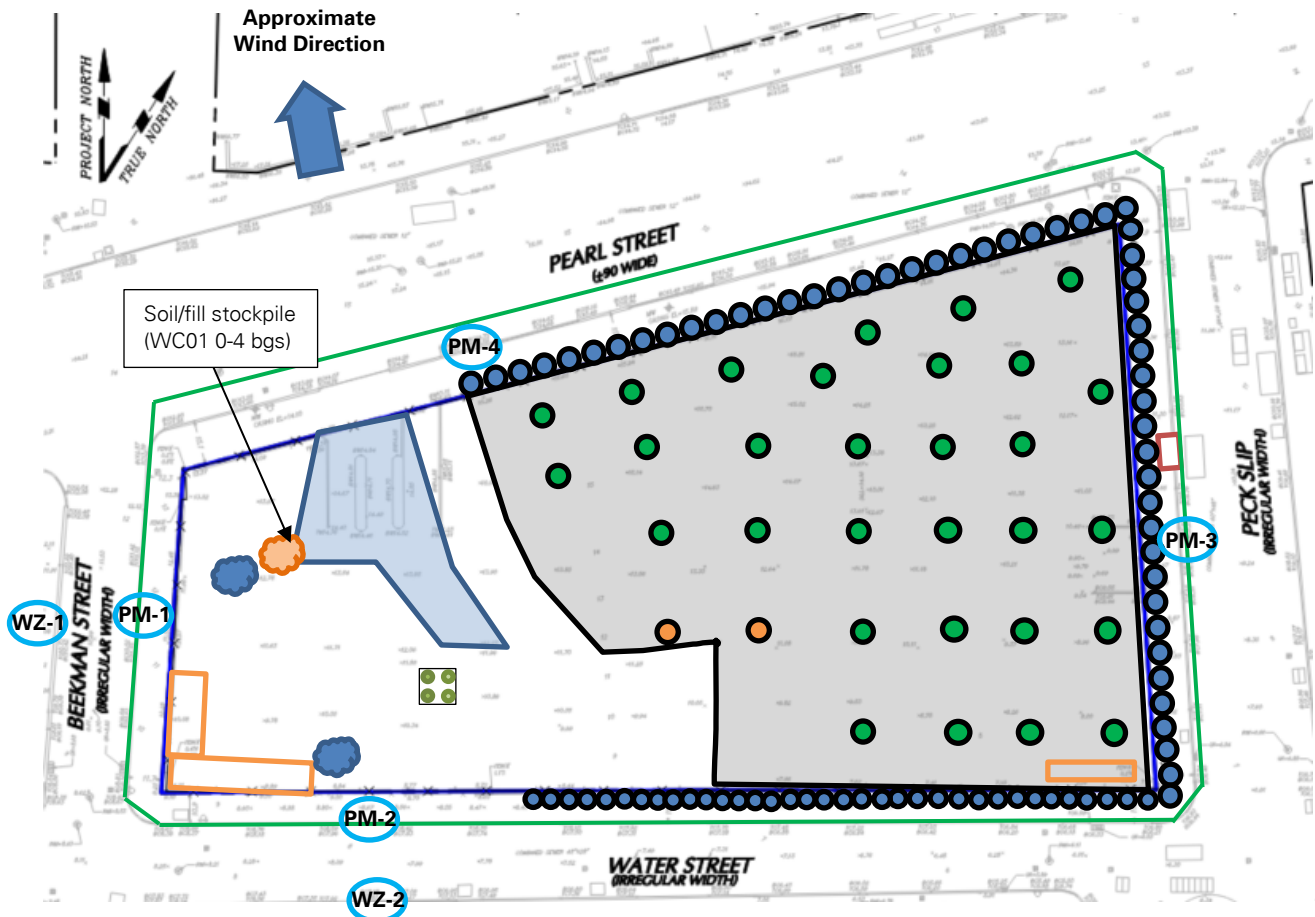
### Anticipated Activities

- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will begin exporting C&D debris and soil/fill from the western part of the site for off-site disposal.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |                          |  |                                      |  |
|--------------------------|--|--------------------------------------|--|
| PM-1                     | Approximate Location of Air Monitoring Station     | Soldier Pile                         | Approximate Location of Soldier Pile                         |
| Work Area                | Approximate Work Area                              | Perimeter Fence                      | Approximate Perimeter Construction Fence Location            |
| Installed Pile Cap       | Approximate Location of Installed Pile Cap         | Previous Excavation Area             | Previous Excavation Area                                     |
| Foundation Piles         | Approximate Location of Foundation Piles Completed | Documentation Sample                 | Approximate Location of Documentation Sample                 |
| Truck Tracking Pad       | Approximate Location of Truck Tracking Pad         | Previously Collected Endpoint Sample | Approximate Location of Previously Collected Endpoint Sample |
| Underground Storage Tank | Approximate Location of Underground Storage Tank   |                                      |  |
| C&D Stockpile            | Approximate Location of C&D Stockpile              |                                      |  |
| Soil/Fill Stockpile      | Approximate Location of Soil/Fill Stockpile        |                                      |  |

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson

By: Jack Millman  
LANGAN

## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD excavating soil/fill in the southwestern part of the site (facing southwest)



**Photo 2:** Soil/fill stockpile on and covered with polyethylene sheeting in the northwestern part of the site (facing south)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Monday, July 10, 2023  <b>WEATHER:</b> Partly Sunny, 70 – 80°F Wind: SSE @ 0.2 – 2.6 mph  <b>TIME:</b> 5:45am – 4:45pm  <b>MONITOR</b> Jack Millman	
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 156</b></span> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rob Strang, Mike Sollecito <b>TRC Companies Inc.</b> (NYSDEC Consultant) <b>Earth Efficient</b> (Soil Broker) Yinette Batista, Mike DiGaetano		
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the southwestern part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting in the northwestern part of the site pending future off-site disposal.</li> <li>ECD excavated an about 8-foot-long by 4-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the southwestern part of the site (along Water Street). A fiber optic cable was identified during excavation activities.             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> </ul> </li> <li>ECD poured concrete into the previously installed wooden formwork in the southeastern part of the site for concrete guide wall installation. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>			
Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### Material Tracking

- ECD exported three truckloads (about 60 cubic yards [CY]) of C&D (previously demolished concrete and asphalt) for off-site disposal at the Earth Efficient MSM facility located in East Stroudsburg, PA.
- ECD exported two truckloads (about 40 CY) of non-hazardous soil/fill from waste characterization cell WC01 for off-site disposal at the Middlesex County Landfill located in East Brunswick, NJ.
- 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 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 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	3	60	0	0
Project Total	5	85	42	840	3	60	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	2	40	0	0	0	0	
Project Total	263	5,260	267	5,340	66	1,320	

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN



## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 7:00am to 3:45pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.004	0.00	0.01
PM-2	0.003	0.00	0.01
PM-3	0.002	0.00	0.01
PM-4	0.002	0.00	0.01
WZ-1	0.003	0.00	0.00
WZ-2	0.002	0.00	0.00
WZ-3	-	-	-
WZ-4	0.03	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.015	0.01	0.04
PM-2	0.018	0.03	0.02
PM-3	0.003	0.01	0.08
PM-4	0.004	0.06	0.05
WZ-1	0.013	0.02	0.01
WZ-2	0.003	0.01	0.01
WZ-3	-	-	-
WZ-4	0.008	0.01	0.00

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.17 µg/m<sup>3</sup>.
- 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 6:23am to 4:03pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:26am to 4:17pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:29am to 4:08pm.

### 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. CAMP stations were discontinued sequentially between 3:46pm and 4:17pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.0 to 0.01 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

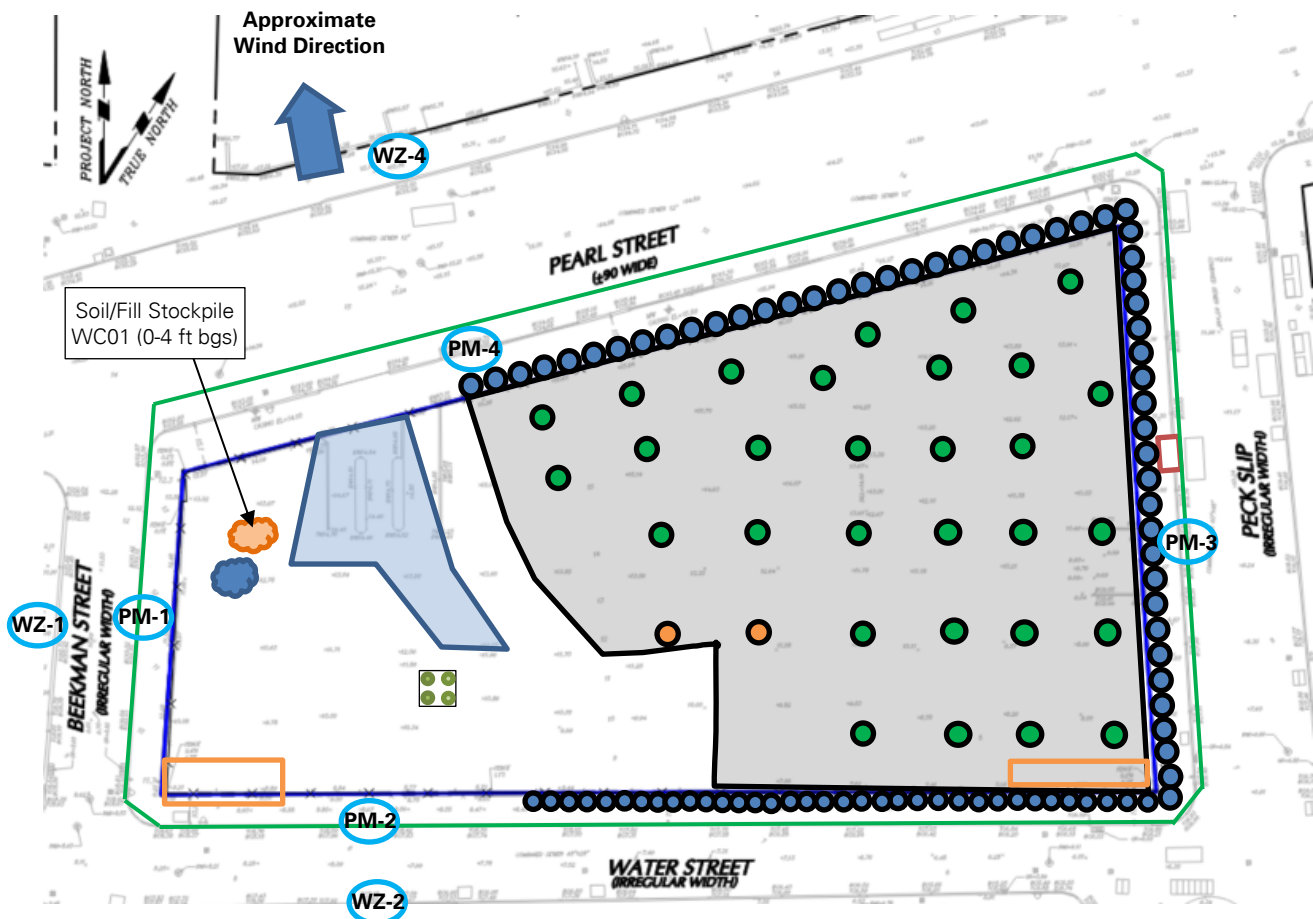
### Anticipated Activities

- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |  |  |
|--|--|--|--|
|  | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|  | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|  | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|  | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|  | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|  | Approximate Location of Underground Storage Tank   |  |  |
|  | Approximate Location of C&D Stockpile              |  |  |
|  | Approximate Location of Soil/Fill Stockpile        |  |  |

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD washing a tri-axle truck prior to existing the site (facing north)



**Photo 2:** ECD excavating soil/fill in the southwestern part of the site (facing southwest)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, July 11, 2023  <b>WEATHER:</b> Partly Sunny, 70 – 85°F Wind: SE @ 0.2 – 1.8 mph  <b>TIME:</b> 5:45am – 4:30pm  <b>MONITOR</b> Jack Millman	
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 157</b> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro, Jack Frey <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rob Strang, Mike Sollecito <b>TRC Companies Inc. (TRC)</b> (NYSDEC Consultant) <b>Earth Efficient</b> (Soil Broker) Mike DiGaetano		
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the northwestern part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting in the northwestern part of the site pending future off-site disposal.</li> <li>ECD excavated an about 10-foot-long by 5-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the northwestern part of the site (along Pearl Street).             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> </ul> </li> <li>ECD excavated an about 25-foot-long by 5-foot-wide area and an about 40-foot-long by 30-foot-wide area to a maximum depth of about 1 foot bgs to grade soil/fill beneath the stabilized construction entrance in the northwestern part of the site.             <ul style="list-style-type: none"> <li>Excavated 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 was temporarily stockpiled on and covered with polyethylene sheeting in the southwestern part of the site.</li> </ul> </li> <li>ECD relocated a stockpile consisting of previously excavated soil/fill from the northwestern part of the site to the southwestern part of the site. The excavated soil/fill was temporarily placed on and covered with</li> </ul>			
<b>Cc:</b>	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b>	Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

polyethylene sheeting in the former foundation pile installation area to provide a level surface for drill rig access in preparation for SOE installation along the southern boundary of the site (Water Street).

- ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the southern part of the site. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.
- TRC mobilized equipment and personnel to the site for implementation of the off-site investigation administered by the NYSDEC.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Material Tracking

- ECD exported four truckloads (about 80 cubic yards [CY]) of C&D (previously demolished concrete and asphalt) 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	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 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 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	4	80	0	0
Project Total	5	85	42	840	7	140	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN



## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:51am to 3:30pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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 ranged from 0.00 to 0.02  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.008	0.00	0.01
PM-2	0.007	0.00	0.00
PM-3	0.006	0.00	0.01
PM-4	0.007	0.00	0.01
WZ-1	0.007	0.00	0.00
WZ-2	0.007	0.00	0.00
WZ-3	-	-	-
WZ-4	0.07	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.016	0.05	0.03
PM-2	0.010	0.01	0.05
PM-3	0.008	0.00	0.03
PM-4	0.009	0.01	0.06
WZ-1	0.011	0.00	0.01
WZ-2	0.010	0.01	0.01
WZ-3	-	-	-
WZ-4	0.010	0.00	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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/m³ to 0.15 µg/m³.
- 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 6:29am to 3:50pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:31am to 3:58pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:36am to 3:41pm.

### 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. CAMP stations were discontinued sequentially between 3:30pm and 3:58pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

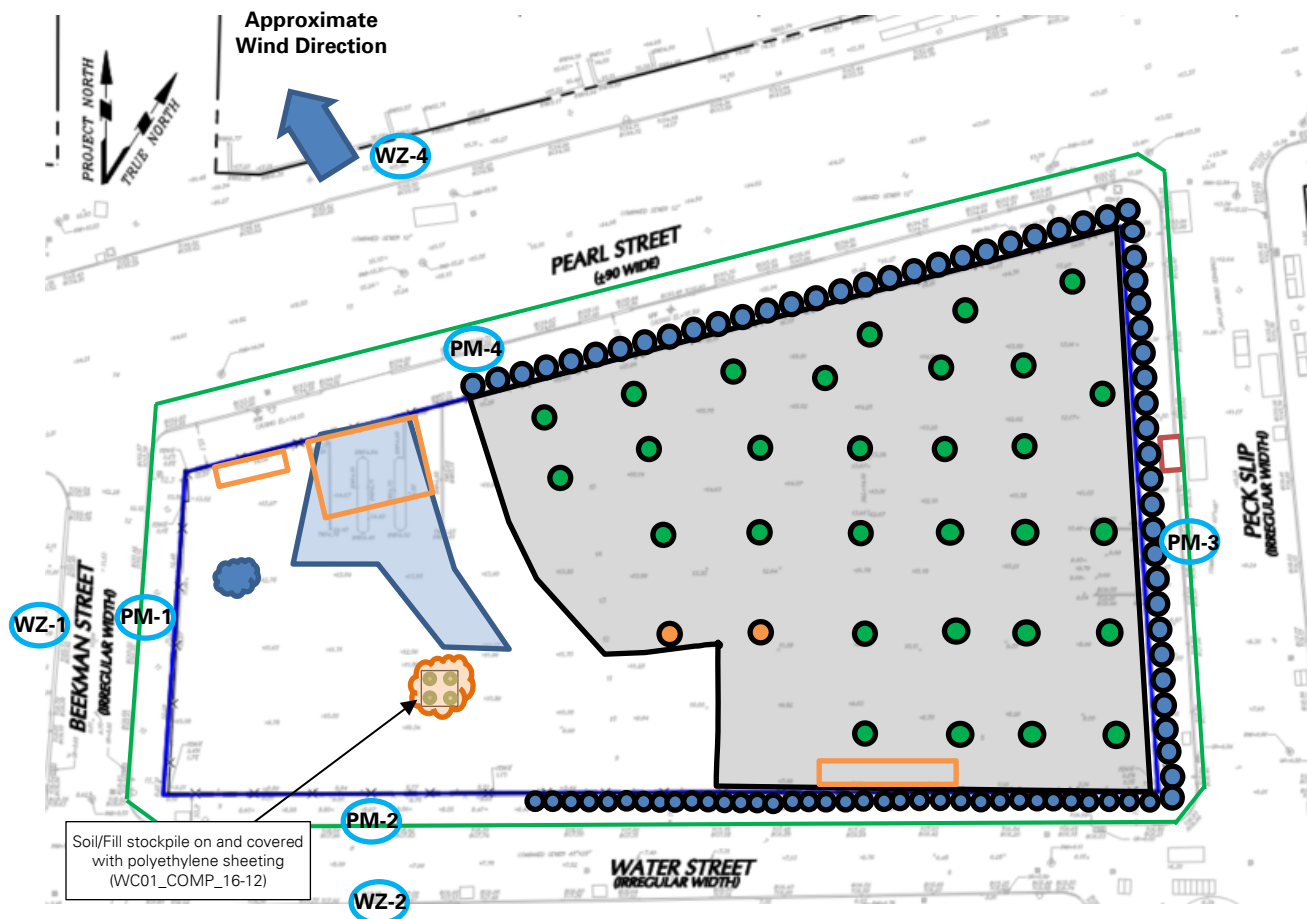
### Anticipated Activities

- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the southern part of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

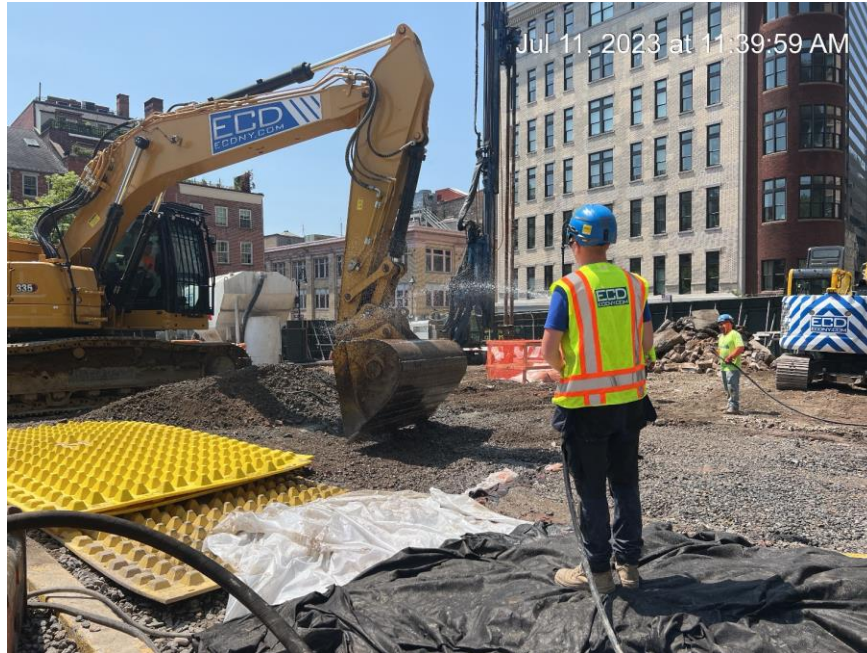
### Legend:

- |      |  |  |
|------|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |
|      | Approximate Location of C&D Stockpile              |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |

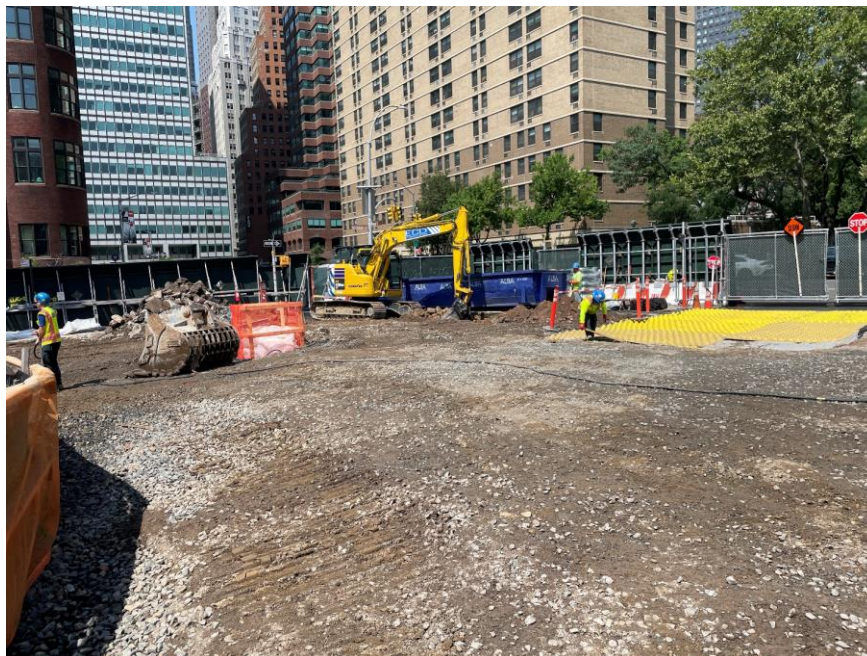
Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD excavating soil/fill in the northwestern part of the site (facing southwest)



**Photo 2:** ECD excavating soil/fill in the northwestern part of the site (facing northwest)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Wednesday, July 12, 2023  <b>WEATHER:</b> Partly Sunny, 75 – 90°F Wind: SE @ 0.1 – 2.0 mph  <b>TIME:</b> 5:45am – 4:15pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 158</b></span> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Gabriella DeGennaro, Pradeep Pandey <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rob Strang, Mike Sollecito <b>TRC Companies Inc. (TRC)</b> (NYSDEC Consultant) <b>Earth Efficient</b> (Soil Broker) Mike DiGaetano <b>AKRF Inc.</b> (Archaeologist)	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the western part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting in the northwestern part of the site pending future off-site disposal.</li> <li>ECD excavated an about 110-foot-long by 5-foot-wide area and an about 50-foot-long by 5-foot-wide area to a maximum depth of about 7 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the western part of the site (along Beekman and Water Streets, respectively).             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> </ul> </li> <li>ECD poured concrete into the previously installed wooden formwork in the southern part of the site for concrete guide wall installation. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> <li>TRC continued implementation the off-site investigation administered by the NYSDEC.</li> </ul>		
<b>Cc:</b>	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### Material Tracking

- ECD exported two truckloads (about 40 cubic yards [CY]) of C&D (previously demolished concrete and asphalt) 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	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 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 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	2	40	0	0
Project Total	5	85	42	840	9	180	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>



## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 7:18am to 3:08pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.010	0.00	0.01
PM-2	0.011	0.00	0.00
PM-3	0.009	0.00	0.01
PM-4	0.010	0.00	0.01
WZ-1	0.010	0.00	0.00
WZ-2	0.010	0.00	0.00
WZ-3	-	-	-
WZ-4	0.011	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.015	0.00	0.02
PM-2	0.014	0.06	0.02
PM-3	0.012	0.01	0.03
PM-4	0.013	0.07	0.03
WZ-1	0.013	0.02	0.00
WZ-2	0.014	0.02	0.01
WZ-3	-	-	-
WZ-4	0.026	0.02	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.16 µg/m<sup>3</sup>.
- 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 6:26am to 3:36pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:30am to 3:40pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:23am to 3:32pm.

### 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. CAMP stations were discontinued sequentially between 3:08pm and 3:40pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.01 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

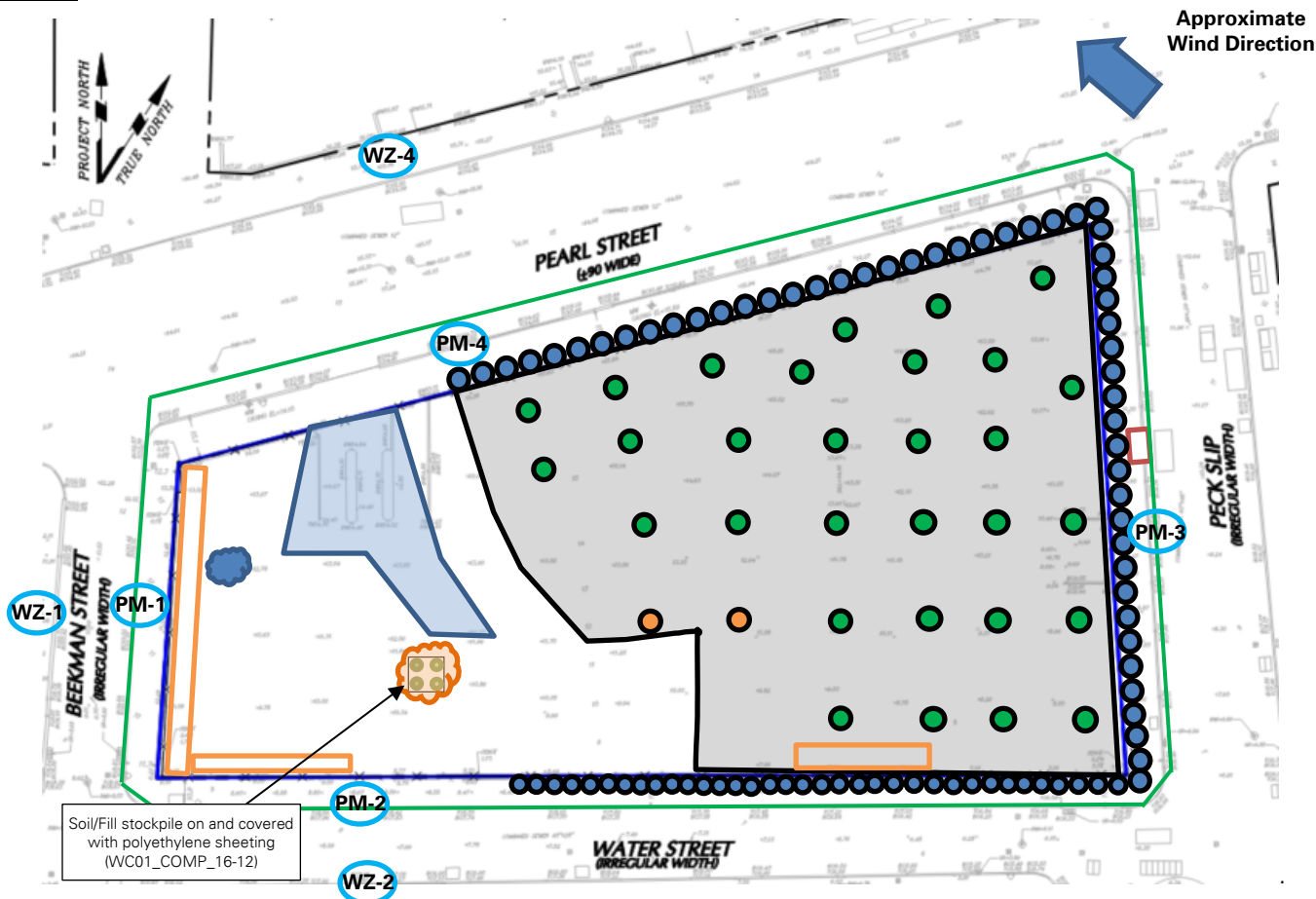
### Anticipated Activities

- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the southern part of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |
|------|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |
|      | Approximate Location of C&D Stockpile              |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson

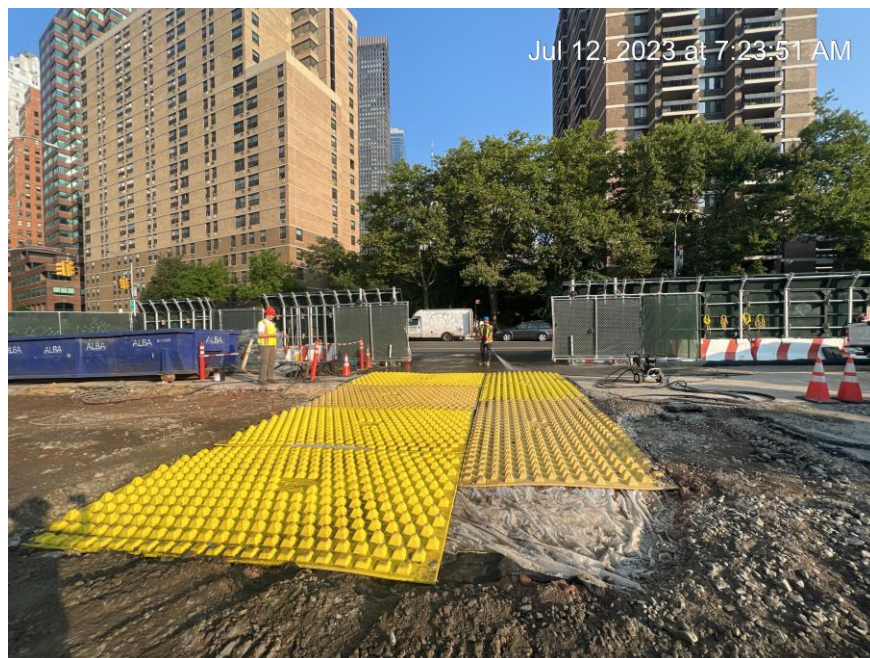
By: Jack Millman  
LANGAN

## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** C&D stockpile on and covered with polyethylene sheeting in the northwestern part of the site (facing northeast)



**Photo 2:** General view of construction entrance (facing northwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Thursday, July 13, 2023  <b>WEATHER:</b> Partly Sunny, 80 – 90°F Wind: SW @ 0.2 – 2.6 mph  <b>TIME:</b> 5:45am – 4:00pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 159</b> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Gabriella DeGennaro, Pradeep Pandey <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rob Strang, Mike Sollecito <b>TRC Companies Inc. (TRC)</b> (NYSDEC Consultant) <b>Earth Efficient</b> (Soil Broker) Mike DiGaetano	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the northern part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting in the northwestern part of the site pending future off-site disposal.</li> <li>ECD excavated an about 10-foot-long by 5-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the northern part of the site (along Pearl Street).             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> </ul> </li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> <li>ECD advanced a borehole to about 6 feet bgs in the northwestern part of the site to verify that the drill rig was operational prior to installation of SOE along the perimeter of the site. No drilling spoils were generated during advancement of the borehole.</li> <li>TRC continued implementation of the off-site investigation administered by the NYSDEC.</li> </ul>		
<b>Cc:</b>	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### Material Tracking

- ECD exported one truckload (about 20 cubic yards [CY]) of C&D (previously demolished concrete and asphalt) 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	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 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 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	1	20	0	0
Project Total	5	85	42	840	10	200	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>



## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:46am to 3:26pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.011	0.00	0.01
PM-2	0.010	0.00	0.01
PM-3	0.009	0.00	0.01
PM-4	0.010	0.00	0.01
WZ-1	0.010	0.00	0.00
WZ-2	0.010	0.00	0.00
WZ-3	-	-	-
WZ-4	0.011	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.018	0.03	0.02
PM-2	0.015	0.04	0.03
PM-3	0.015	0.02	0.02
PM-4	0.013	0.02	0.02
WZ-1	0.014	0.00	0.01
WZ-2	0.016	0.00	0.01
WZ-3	-	-	-
WZ-4	0.015	0.00	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>



## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.16 µg/m<sup>3</sup>.
- 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 6:28am to 3:45pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:30am to 3:50pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:33am to 3:40pm.

### 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. CAMP stations were discontinued sequentially between 3:26pm and 3:50pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.01 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### Anticipated Activities














- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the southern part of the site.
- ECD will begin installing shallow soil mixing columns for SOE installation along the perimeter of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## Site Map



**Legend:**

-  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 Perimeter Construction Fence Location
  -  Previous Excavation Area
  -  Approximate Location of Documentation Sample
  -  Approximate Location of Previously Collected Endpoint Sample

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD advancing a borehole in the northwestern part of the site (facing southwest)



**Photo 2:** ECD implementing dust suppression in the central part of the site (facing south)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Friday, July 14, 2023  <b>WEATHER:</b> Overcast/Rain, 70 – 80°F Wind: SW @ 0.2 – 2.3 mph  <b>TIME:</b> 5:45am – 3:15pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 160</b> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Gabriella DeGennaro, Pradeep Pandey <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rob Strang, Mike Sollecito <b>TRC Companies Inc. (TRC)</b> (NYSDEC Consultant) <b>Earth Efficient</b> (Soil Broker) Mike DiGaetano	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the northern and southern parts of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting in the northwestern part of the site pending future off-site disposal.</li> <li>ECD excavated an about 10-foot-long by 5-foot-wide area and an about 2-foot-long by 2-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the southern and northern parts of the site (along Water and Pearl Streets, respectively).             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> </ul> </li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> <li>ECD advanced two boreholes to a maximum depth of about 12 feet bgs in the western and southwestern parts of the site to verify that the drill rig was operational prior to installation of SOE along the perimeter of the site. No drilling spoils were generated during advancement of the borehole.</li> <li>TRC continued implementation of the off-site investigation administered by the NYSDEC.</li> </ul>		
<b>Cc:</b>	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### Material Tracking

- ECD exported one truckload (about 20 cubic yards [CY]) of C&D (previously demolished concrete and asphalt) 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	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 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 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	1	20	0	0
Project Total	5	85	42	840	11	220	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:45am to 2:25pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.007	0.00	0.00
PM-2	0.008	0.00	0.00
PM-3	0.007	0.00	0.00
PM-4	0.007	0.00	0.01
WZ-1	0.007	0.00	0.01
WZ-2	0.008	0.00	0.00
WZ-3	-	-	-
WZ-4	0.008	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.013	0.00	0.02
PM-2	0.014	0.00	0.01
PM-3	0.012	0.00	0.01
PM-4	0.013	0.00	0.02
WZ-1	0.013	0.00	0.23
WZ-2	0.014	0.00	0.01
WZ-3	-	-	-
WZ-4	0.014	0.03	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>



## SITE OBSERVATION REPORT

- Two instantaneous mercury vapor concentrations of  $2.25 \mu\text{g}/\text{m}^3$  and  $1.12 \mu\text{g}/\text{m}^3$  were detected at off-site CAMP station WZ-1, located west of perimeter CAMP station PM-1, between 7:25am and 7:26am, respectively. The 15-minute time-weighted-average action level established in the CAMP ( $1.00 \mu\text{g}/\text{m}^3$ ) was not exceeded as a result of the instantaneous detections. Perimeter CAMP station PM-1 was located between the work zone and CAMP station WZ-1 during this time, and mercury vapor was not detected at concentrations above  $0.00 \mu\text{g}/\text{m}^3$ . Additionally, the dedicated CAMP monitor used a handheld Jerome® J505 mercury vapor analyzer to monitor ambient air conditions surrounding CAMP station WZ-1 following the instantaneous detections, and mercury vapor readings were recorded at  $0.00 \mu\text{g}/\text{m}^3$ . As such, the instantaneous mercury vapor detections were attributed to an off-site source or external interference. As a precautionary measure, the dedicated CAMP monitor replaced the internal filter in the Jerome® J505 unit within off-site CAMP station WZ-1.

### 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  $0.16 \mu\text{g}/\text{m}^3$ .
- 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 6:23am to 2:43pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:25am to 2:46pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:21am to 2:38pm.

### 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. CAMP stations were discontinued sequentially between 2:25pm and 2:46pm.

- Background concentrations of mercury vapor at each CAMP station ranged from  $0.00$  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

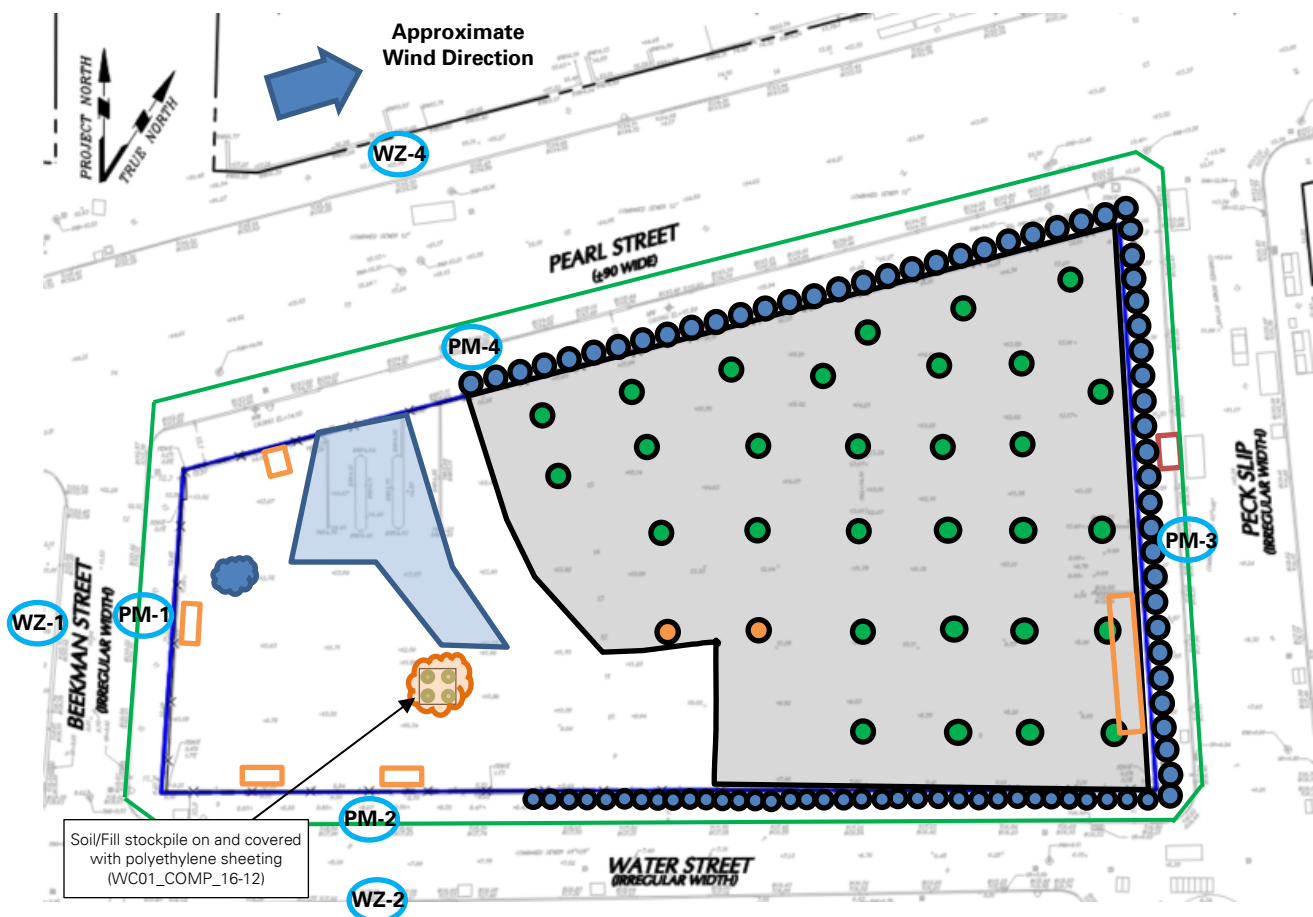
- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site.
- ECD will begin installing shallow soil mixing columns for SOE installation along the perimeter of the site.

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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |  |
|------|--|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |  |
|      | Approximate Location of C&D Stockpile              |  |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |  |

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD advancing a borehole in the western part of the site (facing north)



**Photo 2:** View of CAMP station WZ-2 on the southern sidewalk of Water Street (facing east)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Monday, July 17, 2023  <b>WEATHER:</b> Partly Sunny, 75 – 85°F Wind: SW @ 0.2 – 1.7 mph  <b>TIME:</b> 5:45am – 4:15pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 161</b> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Meghan Medwig, Mike Sollecito <b>TRC Companies Inc. (TRC)</b> (NYSDEC Consultant)	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the northern and southern parts of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting in the northwestern part of the site pending future off-site disposal.</li> <li>ECD excavated an about 45-foot-long by 10-foot-wide area and an about 10-foot-long by 5-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the southern and northern parts of the site (along Water and Pearl Streets, respectively).           <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> <li>Atmos® AC-645 dust/vapor suppressing foam was actively applied to the soil/fill during excavation as a proactive measure.</li> </ul> </li> <li>ECD poured concrete into the previously installed wooden formwork in the eastern part of the site for concrete guide wall installation. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> <li>TRC continued implementation of the off-site investigation administered by the NYSDEC.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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 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 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	11	220	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 7:10am to 3:23pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.016	0.00	0.01
PM-2	0.016	0.00	0.00
PM-3	0.015	0.00	0.01
PM-4	0.015	0.00	0.01
WZ-1	0.016	0.00	0.00
WZ-2	0.016	0.00	0.00
WZ-3	-	-	-
WZ-4	0.016	0.00	0.00

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.034	0.01	0.19
PM-2	0.036	0.02	0.02
PM-3	0.034	0.00	0.10
PM-4	0.037	0.07	0.12
WZ-1	0.041	0.07	0.01
WZ-2	0.039	0.01	0.02
WZ-3	-	-	-
WZ-4	0.044	0.00	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.18 µg/m<sup>3</sup>.
- 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 6:24am to 3:40pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:35am to 3:43pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:20am to 3:34pm.

### 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. CAMP stations were discontinued sequentially between 3:23pm and 3:40pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### Anticipated Activities

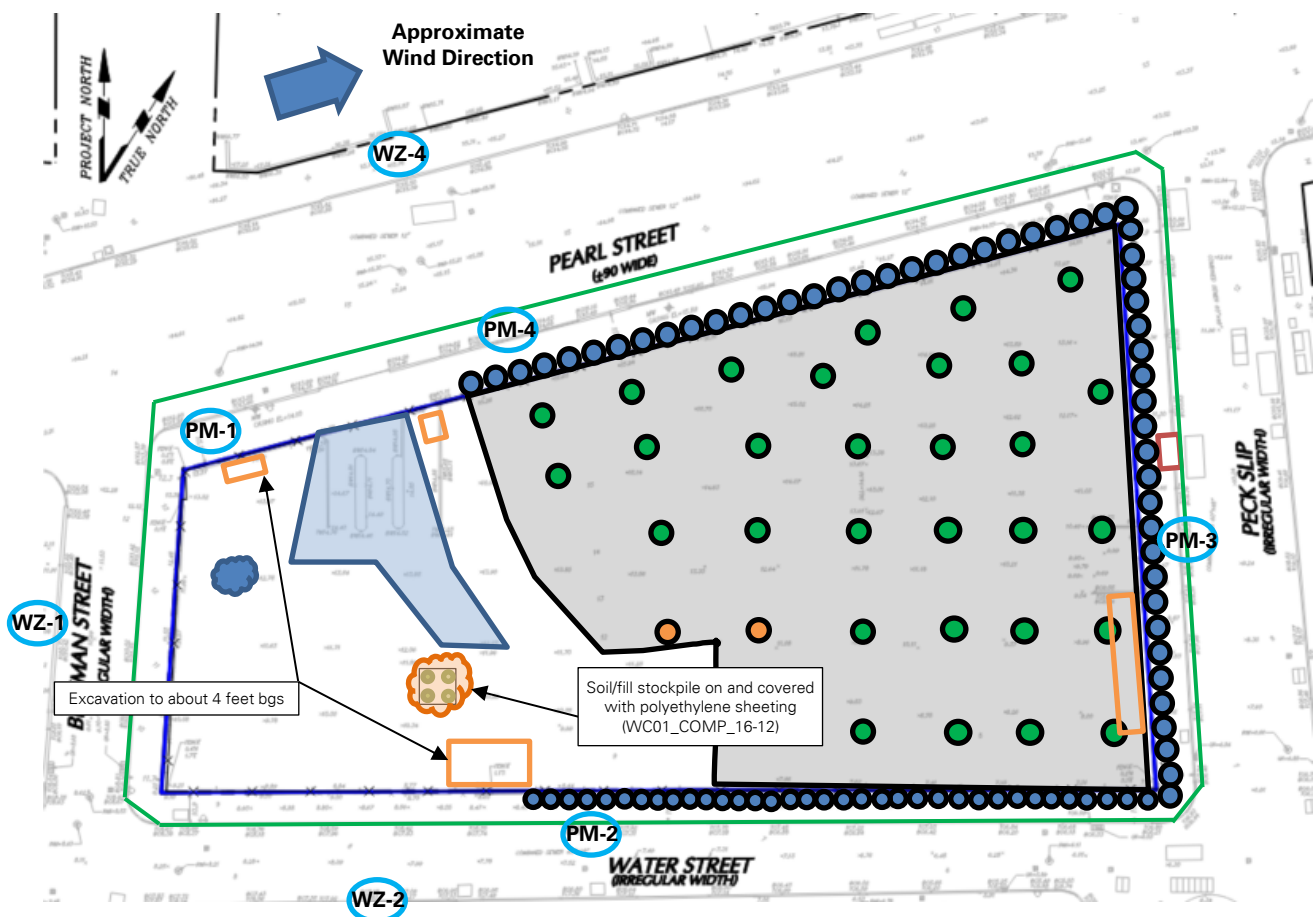
- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site.

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## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |  |
|------|--|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |  |
|      | Approximate Location of C&D Stockpile              |  |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |  |

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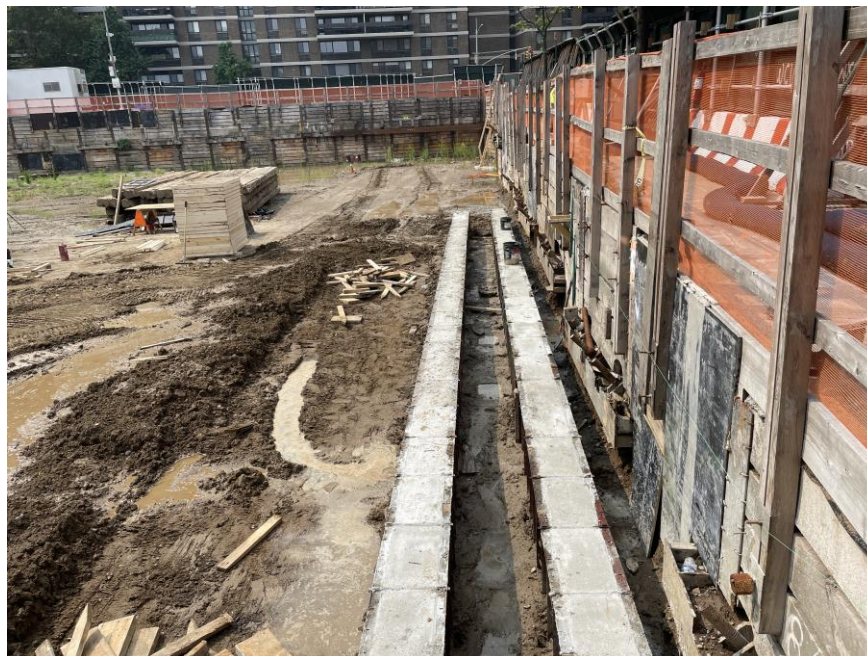


## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD actively applying Atmos® AC-645 dust/vapor suppressing foam to soil/fill during excavation in the southern part of the site (facing northeast)



**Photo 2:** Concrete guide wall in the eastern part of the site (facing north)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, July 18, 2023  <b>WEATHER:</b> Overcast, 75 – 82°F Wind: SW @ 0.1 – 1.5 mph  <b>TIME:</b> 5:45am – 4:15pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 162</b> <b>Langan</b> (Environmental) Jack Millman, Gabriella DeGennaro <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Meghan Medwig, Mike Sollecito <b>TRC Companies Inc. (TRC)</b> (NYSDEC Consultant)	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the northern part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting in the northwestern part of the site pending future off-site disposal.</li> <li>ECD excavated an about 10-foot-long by 5-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the northern part of the site (along Pearl Street).             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> </ul> </li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> <li>TRC completed the scope of work included in their initial mobilization for the off-site investigation administered by the NYSDEC. NYSDEC and TRC will continue the off-site investigation at a later date.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### Material Tracking

- ECD exported two truckloads (about 40 cubic yards [CY]) of C&D (previously demolished concrete and asphalt) 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	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 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 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	2	40	0	0
Project Total	5	85	42	840	13	260	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:48am to 3:23pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.022	0.00	0.01
PM-2	0.022	0.00	0.01
PM-3	0.021	0.00	0.00
PM-4	0.021	0.00	0.01
WZ-1	0.022	0.00	0.00
WZ-2	0.022	0.00	0.00
WZ-3	-	-	-
WZ-4	0.023	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.036	0.01	0.05
PM-2	0.035	0.00	0.02
PM-3	0.034	0.02	0.02
PM-4	0.037	0.00	0.02
WZ-1	0.035	0.00	0.00
WZ-2	0.041	0.00	0.01
WZ-3	-	-	-
WZ-4	0.037	0.01	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.08 µg/m<sup>3</sup>.
- 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 6:33am to 2:24pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:28am to 2:27pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:36am to 2:17pm.

### 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 3:23pm and 3:29pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

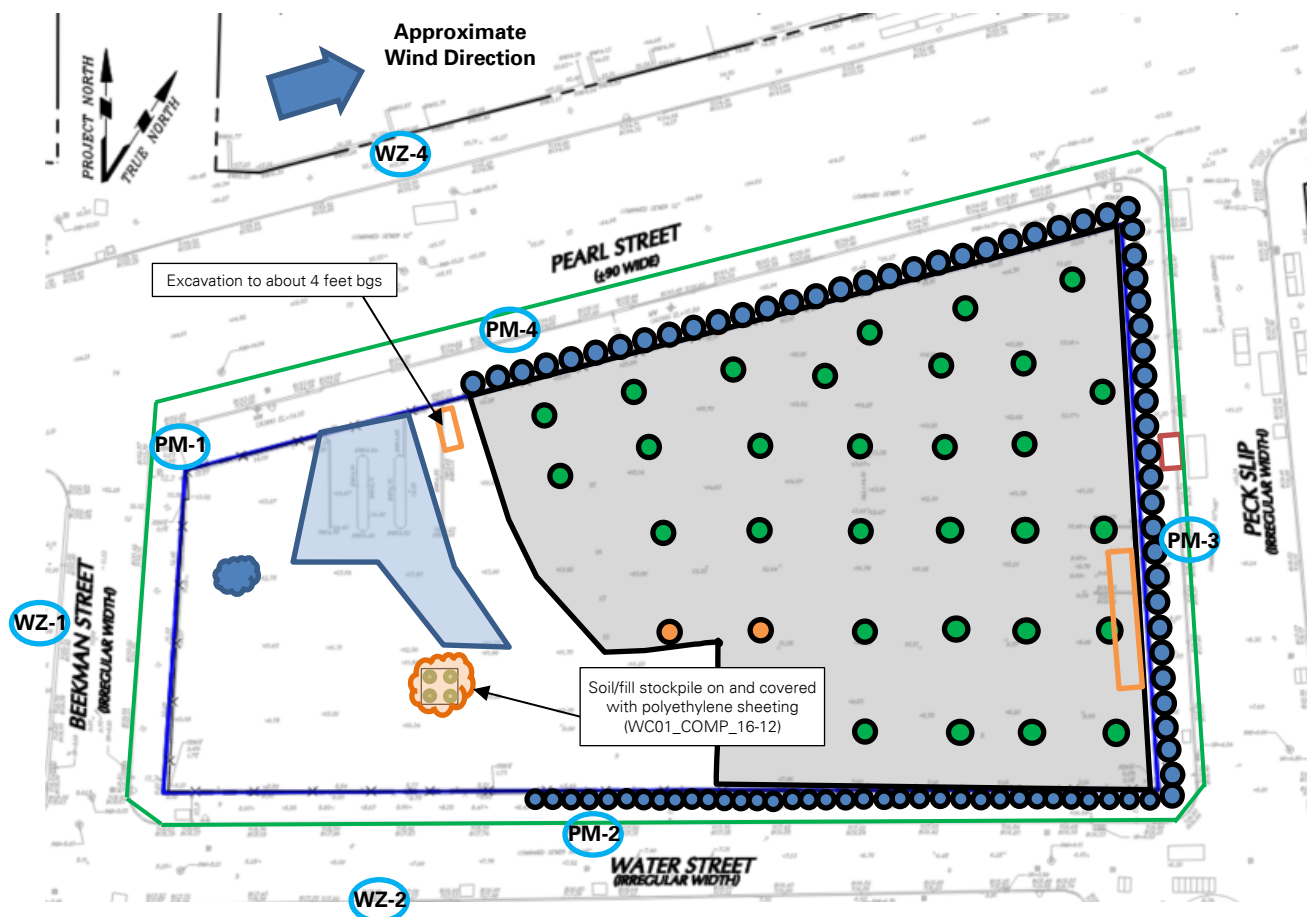
### Anticipated Activities

- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |  |
|------|--|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |  |
|      | Approximate Location of C&D Stockpile              |  |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |  |

Cc:

M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson

By:

Jack Millman

**LANGAN**



## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** General view of the site (facing west)



**Photo 2:** View of CAMP station PM-3 in the eastern part of the site (facing north)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Wednesday, July 19, 2023  <b>WEATHER:</b> Overcast/Rain, 70 – 80° F Wind: WSW @ 0.1 – 1.4 mph  <b>TIME:</b> 5:45am – 5:15pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 163</b> <b>Langan</b> (Environmental) Jack Millman, Aron Farber, TJ Malgieri, Seyena Simpson <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Meghan Medwig	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD excavated an about 20-foot-long by 10-foot-wide area to a maximum depth of about 4 feet below grade surface (bgs) to identify potential subsurface utilities and/or obstructions prior to support-of-excavation (SOE) installation in the southwestern part of the site (along Water Street).             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> </ul> </li> <li>ECD poured concrete into the previously installed wooden formwork in the eastern part of the site for concrete guide wall installation. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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 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 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	13	260	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 7:00am to 4:51pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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 ranged from 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.

### Perimeter and Work Zone Concentrations

#### **Daily Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.037	0.00	0.01
PM-2	0.037	0.00	0.01
PM-3	0.035	0.01	0.00
PM-4	0.037	0.00	0.01
WZ-1	0.037	0.00	0.00
WZ-2	0.037	0.00	0.00
WZ-3	-	-	-
WZ-4	0.038	0.00	0.00

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.071	0.00	0.02
PM-2	0.051	0.01	0.02
PM-3	0.050	0.20	0.02
PM-4	0.055	0.00	0.03
WZ-1	0.045	0.00	0.01
WZ-2	0.045	0.01	0.01
WZ-3	-	-	-
WZ-4	0.047	0.03	0.01

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.16 µg/m<sup>3</sup>.
- 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 6:36am to 4:27pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:39am to 4:30pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:34am to 4:17pm.

### 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 4:51pm and 4:58pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.02 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

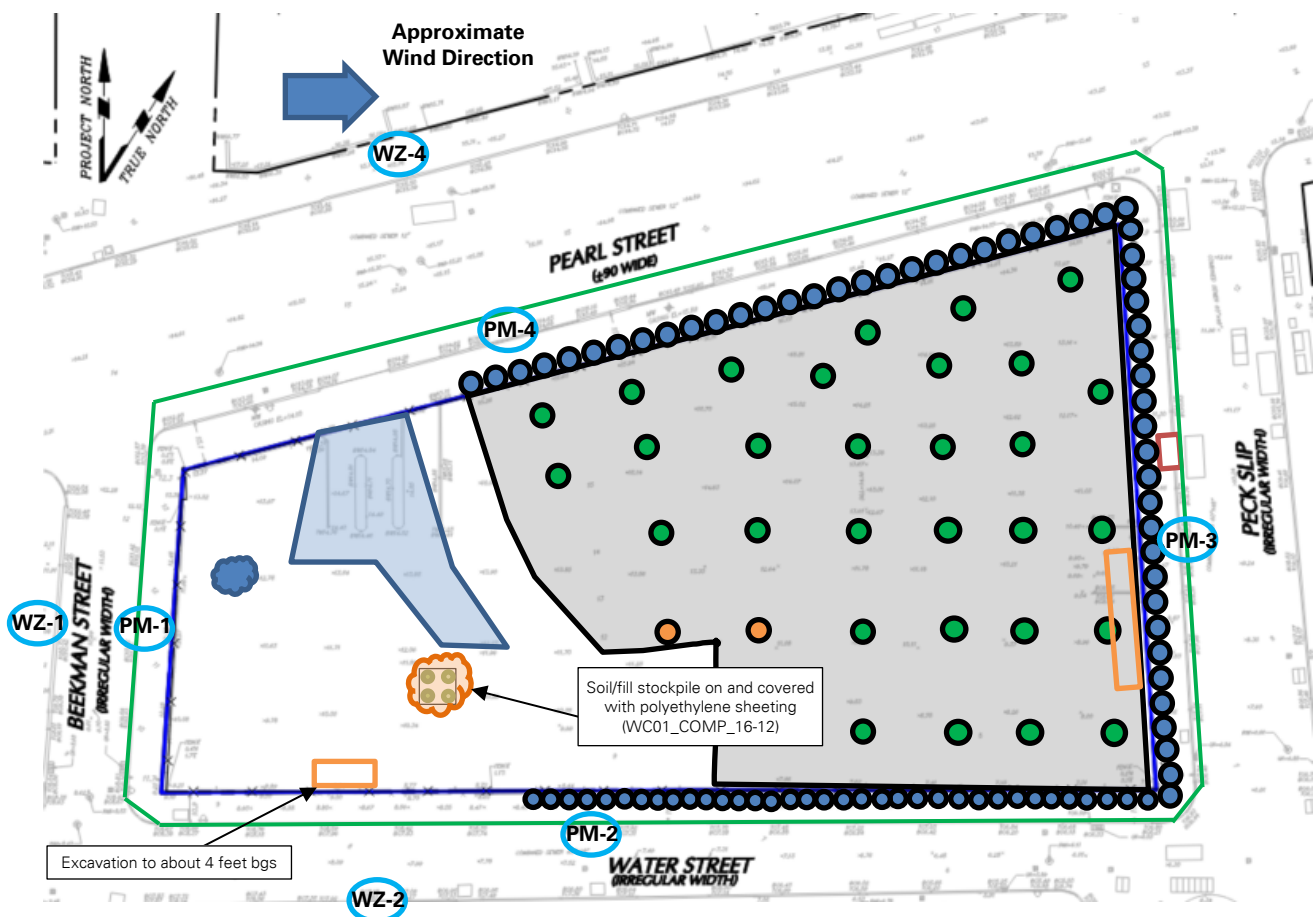
### Anticipated Activities

- ECD will continue excavating soil/fill along the perimeter of the site to identify potential subsurface utilities and/or obstructions prior to SOE installation.
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |                              |  |  |  |
|------------------------------|--|--|--|
| <b>PM-1</b> (in blue circle) | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|                              | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|                              | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|                              | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|                              | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|                              | Approximate Location of Underground Storage Tank   |  |  |
|                              | Approximate Location of C&D Stockpile              |  |  |
|                              | Approximate Location of Soil/Fill Stockpile        |  |  |

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson

By: Jack Millman  
**LANGAN**

SITE OBSERVATION REPORT

Select Site Photographs:

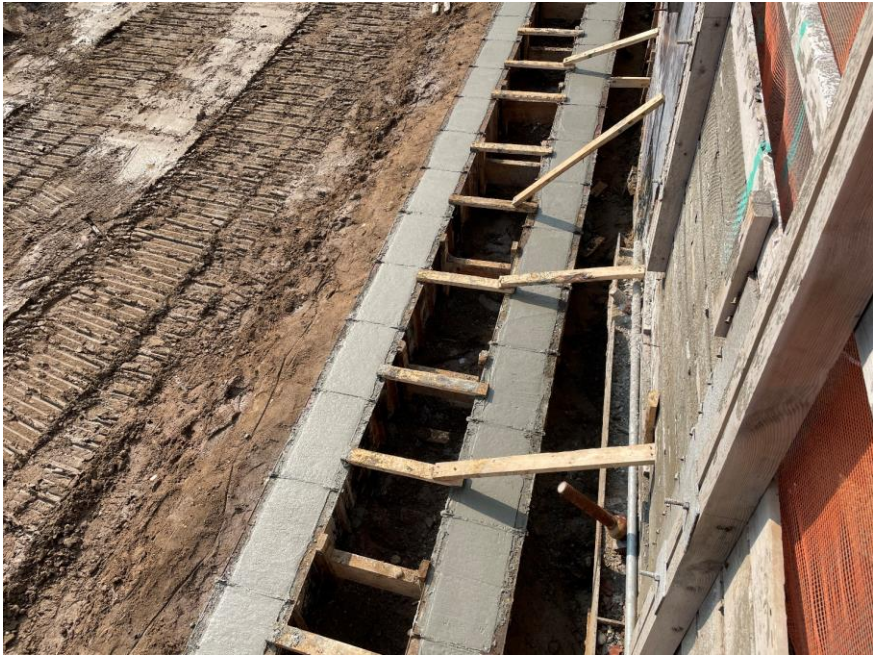


Photo 1: Concrete guide wall in the eastern part of the site (facing north)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN



## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Thursday, July 20, 2023  <b>WEATHER:</b> Partly Cloudy, 72 – 86° F Wind: W @ 0.2 – 2.6 mph  <b>TIME:</b> 5:45am – 3:45pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 164</b></span> <b>Langan</b> (Environmental) Jack Millman, Aron Farber <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Meghan Medwig	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD graded an about 20-foot-long by 50-foot-wide area to facilitate support-of-excavation (SOE) installation in the northern part of the site (along Pearl Street).             <ul style="list-style-type: none"> <li>Graded 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.</li> </ul> </li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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 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 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	13	260	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:39am to 3:07pm. 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<sup>3</sup>, 5.0 ppm, or 0.100 mg/m<sup>3</sup>, 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<sup>3</sup>.
- 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 <sup>3</sup> )	Organic Vapor (ppm)	Mercury Vapor (µg/m <sup>3</sup> )
PM-1	0.023	0.00	0.01
PM-2	0.024	0.00	0.01
PM-3	0.022	0.00	0.01
PM-4	0.023	0.00	0.01
WZ-1	0.026	0.00	0.00
WZ-2	0.023	* 0.19	0.01
WZ-3	-	-	-
WZ-4	0.024	0.00	0.00

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate (mg/m <sup>3</sup> )	Organic Vapor (ppm)	Mercury Vapor (µg/m <sup>3</sup> )
PM-1	0.078	0.00	0.04
PM-2	0.085	0.02	0.02
PM-3	0.084	0.00	0.02
PM-4	0.094	0.00	0.03
WZ-1	0.071	0.03	0.01
WZ-2	0.070	* 3.00	0.02
WZ-3	-	-	-
WZ-4	0.069	0.00	0.01

●mg/m<sup>3</sup> = milligrams per cubic meter ●ppm = parts per million ●µg/m<sup>3</sup> = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Equipment Calibration

\* Routine maintenance was conducted for off-site CAMP station WZ-2 between 12:27pm and 1:05pm for monthly calibration of the VOC module within the station. Isobutylene gas with a concentration of 5 ppm was used to complete the calibration. No ground-intrusive activities were completed during this time and the VOC detections were the result of calibration activities that were not reflective of the work completed during this time.

### 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<sup>3</sup> to 0.17 µg/m<sup>3</sup>.
- 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 6:22am to 3:03pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:26am to 3:25pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:19am to 3:19pm.

### 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 3:07pm and 3:14pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

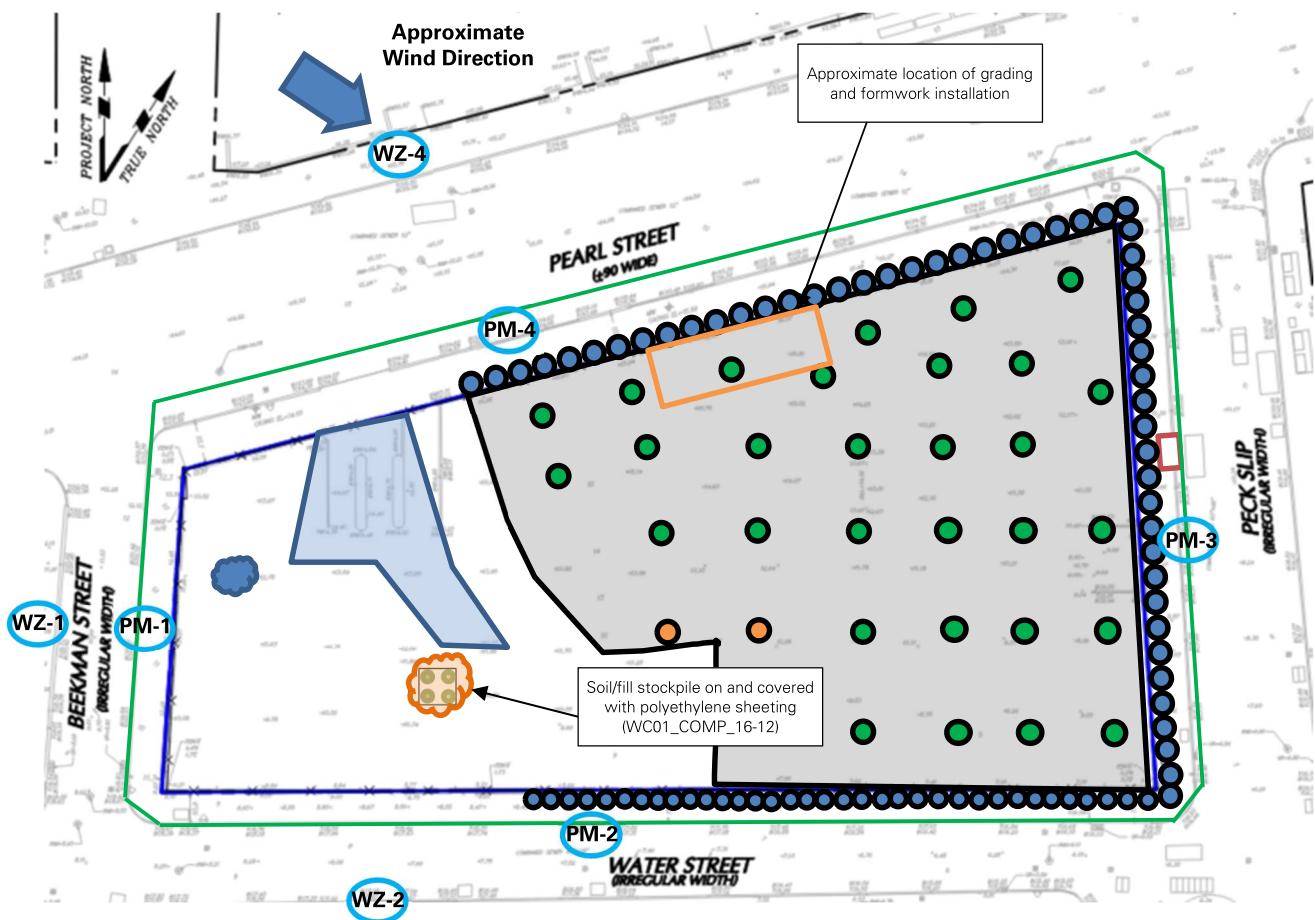
### Anticipated Activities

- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |  |
|------|--|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |  |
|      | Approximate Location of C&D Stockpile              |  |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |  |

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD grading soil/fill in the northern part of the site (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Friday, July 21, 2023  <b>WEATHER:</b> Partly Cloudy/Rain, 70 – 85° F Wind: SW @ 0.2 – 1.6 mph  <b>TIME:</b> 5:45am – 3:15pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 165</b></span> <b>Langan</b> (Environmental) Jack Millman, Aron Farber <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Meghan Medwig	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site (Pearl Street). The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> <li>Ground-intrusive activities were not conducted throughout the workday; however, Langan implemented the community air monitoring plan (CAMP).</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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 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	13	260	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	263	5,260	267	5,340	66	1,320

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			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### CAMP Activities

Langan performed air monitoring at the perimeter of the site at four locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:25am to 2:37pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.010	0.00	0.01
PM-2	0.010	0.00	0.01
PM-3	0.009	0.00	0.00
PM-4	0.010	0.00	0.01
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.027	0.00	0.05
PM-2	0.030	0.01	0.02
PM-3	0.031	0.00	0.01
PM-4	0.037	0.00	0.04
WZ-1	-	-	-
WZ-2	-	-	-
WZ-3	-	-	-
WZ-4	-	-	-

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

### Equipment Calibration

- Routine maintenance was conducted for off-site CAMP stations WZ-1, WZ-2, and WZ-4 for monthly calibration of the VOC modules within the stations using 5 ppm isobutylene gas. Off-site CAMP stations WZ-1, WZ-2,

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## SITE OBSERVATION REPORT

and WZ-4 were not included in the CAMP implementation due to a lack of ground-intrusive activities during the workday.

### 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/m³ to 0.17 µg/m³.
- 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.

### 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 2:37pm and 2:44pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

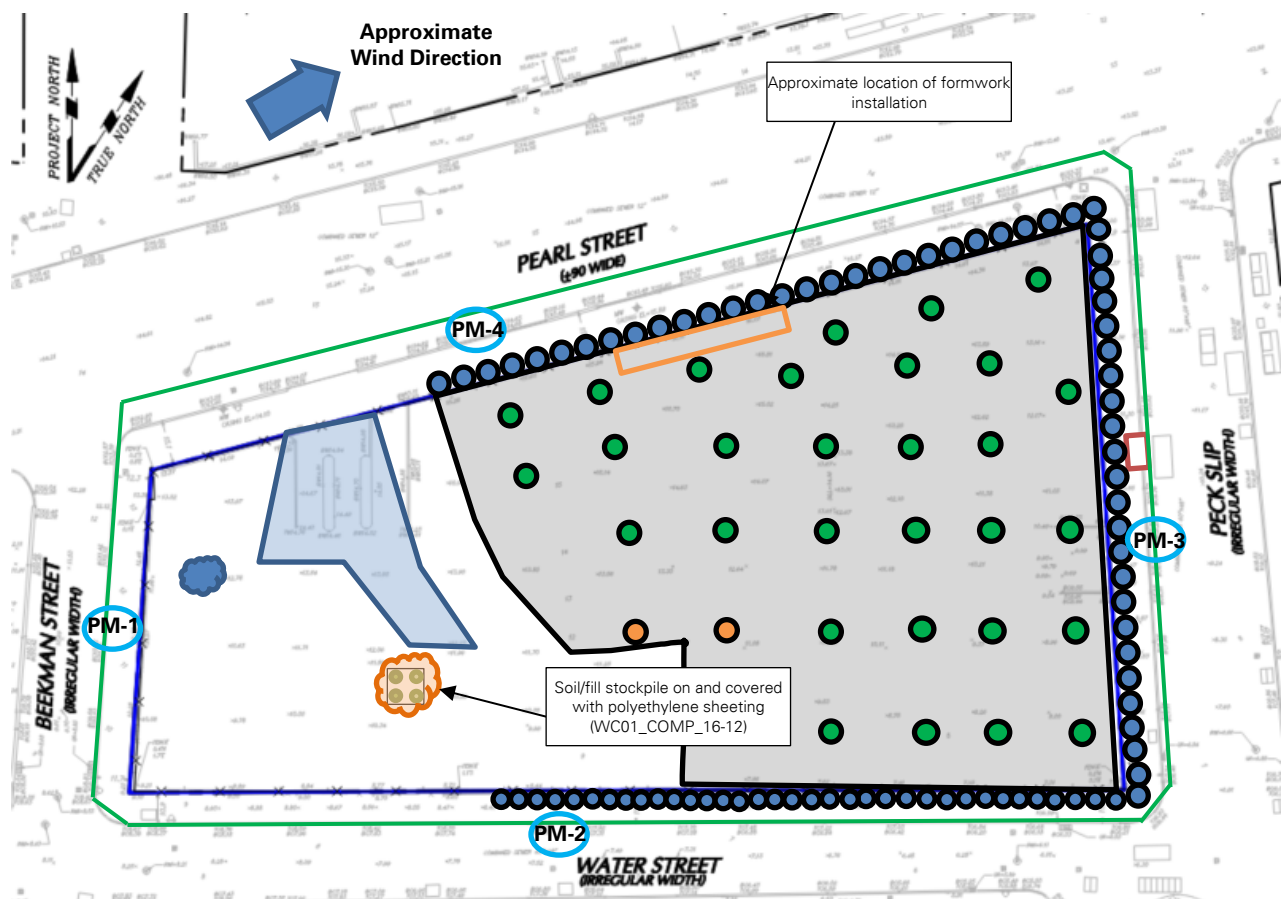
### Anticipated Activities

- ECD will continue exporting concrete and demolition (C&D) debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site.
- ECD will import general fill from the Import Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ to create a temporary equipment ramp in the northeastern corner of the site.

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## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

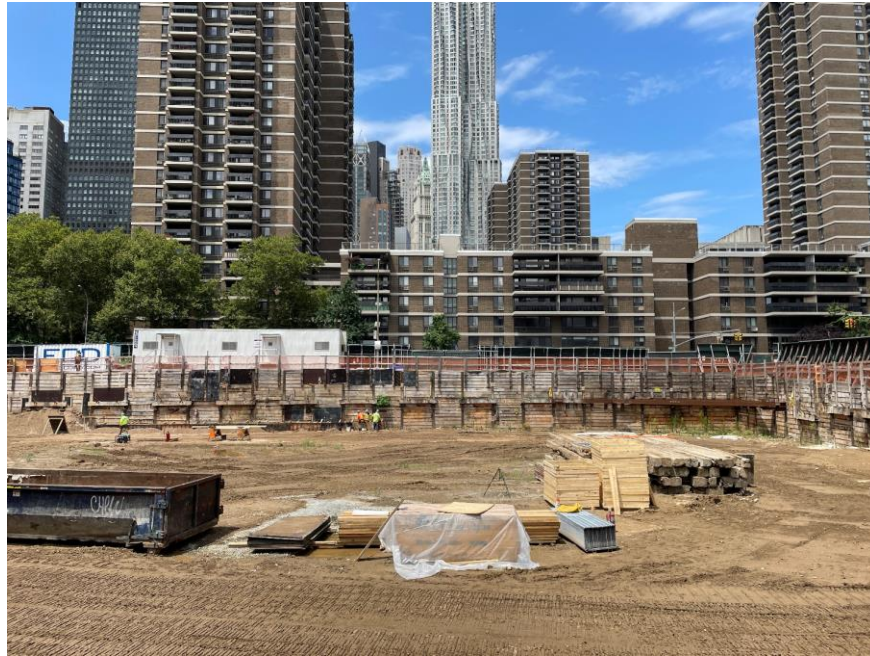
### Legend:

- |      |  |  |
|------|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  |
|      | Approximate Location of C&D Stockpile              |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |

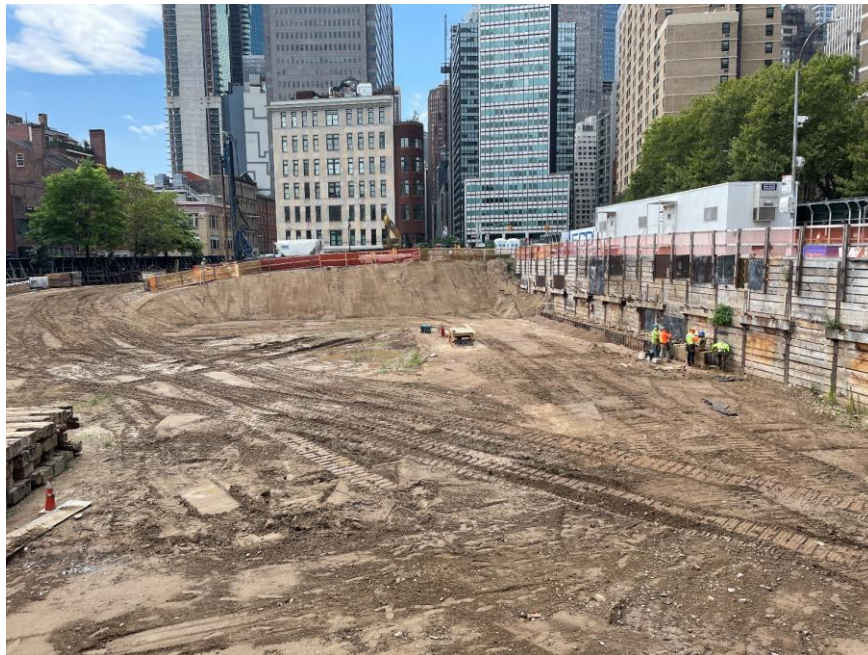
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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** General view of the site (facing north)



**Photo 2:** ECD constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site (facing west)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Monday, July 24, 2023  <b>WEATHER:</b> Partly Sunny, 75 – 84° F Wind: NW @ 0.3 – 3.1 mph  <b>TIME:</b> 5:45am – 4:00pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 166</b></span> <b>Langan</b> (Environmental) Jack Millman, Aron Farber <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD placed imported general fill in an about 35-foot-long by 40-foot-wide area in the northeastern corner of the site (Pearl Street and Peck Slip) to create a temporary ramp for equipment access. The imported general fill was placed atop a layer of geotextile fabric and polyethylene sheeting.</li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site (Pearl Street). The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b>	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>



## SITE OBSERVATION REPORT

### Material Tracking

- ECD exported one truckload (about 20 cubic yards [CY]) of construction and demolition (C&D) debris (previously demolished concrete and asphalt) for off-site disposal at the Earth Efficient MSM facility located in East Stroudsburg, PA.
- ECD imported 10 truckloads (234.75 tons) of general fill from the Impact Reuse & 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 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	10	234.75
Project Total	8	184.42	0	0	15	339.65	346	8,451.54
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	1	20	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 7:18am to 3:12pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.009	0.00	0.01
PM-2	0.009	0.00	0.00
PM-3	0.009	0.00	0.01
PM-4	0.010	0.00	0.01
WZ-1	0.010	0.00	0.00
WZ-2	0.009	0.00	0.00
WZ-3	0.009	0.00	0.00
WZ-4	0.010	0.00	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.012	0.00	0.02
PM-2	0.013	0.00	0.02
PM-3	0.012	0.00	0.02
PM-4	0.013	0.01	0.03
WZ-1	0.013	0.01	0.00
WZ-2	0.021	0.03	0.01
WZ-3	0.012	0.01	0.02
WZ-4	0.014	0.09	0.02

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.14 µg/m<sup>3</sup>.
- 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 7:10am to 3:23pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 7:11am to 3:27pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 7:14am to 3:32pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 7:18am to 3:34pm.

### 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 3:12pm and 3:34pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

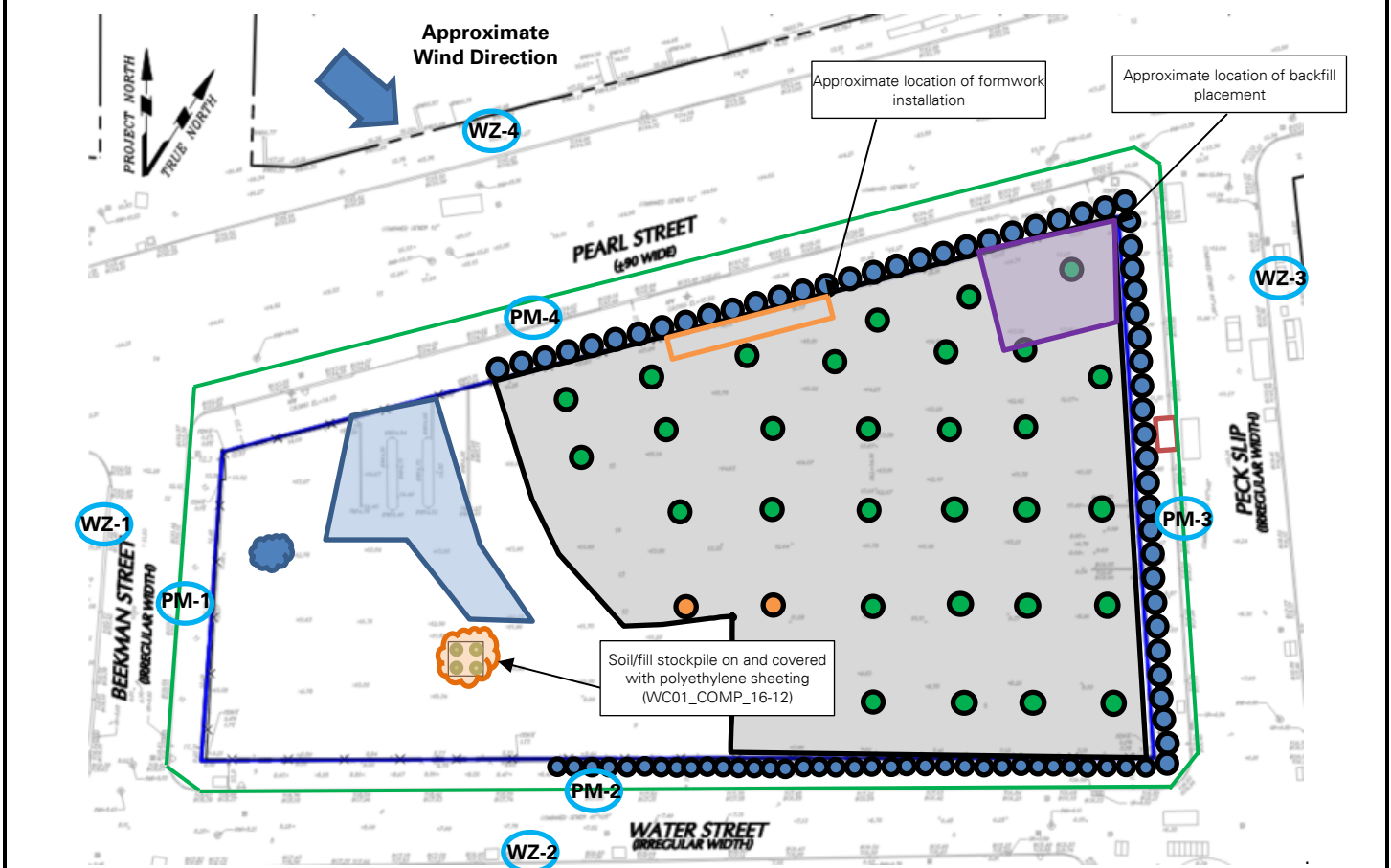
### Anticipated Activities

- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site.
- ECD will import general fill from the IRRRC facility, located in Lyndhurst, NJ to create temporary ramps for equipment access in the northeastern corner and western parts of the site.

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## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |  |
|------|--|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   |  | Approximate Location of Backfill                             |
|      | Approximate Location of C&D Stockpile              |  |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |  |

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD importing general fill atop polyethylene sheeting in the northeastern corner of the site (facing northwest)



**Photo 2:** ECD exporting C&D debris from the western part of the site for off-site disposal (facing northeast)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, July 25, 2023  <b>WEATHER:</b> Sunny, 75 – 85° F Wind: NW @ 0.2 – 2.9 mph  <b>TIME:</b> 5:30am – 3:45pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 167</b> <b>Langan</b> (Environmental) Jack Millman, Aron Farber <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam <b>Earth Efficient</b> (Soil Broker) Yinette Bautista	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD placed imported general fill on polyethylene sheeting in the former foundation pile installation area to create a level grade for equipment access.</li> <li>ECD excavated an about 5-foot-long by 15-foot-wide area to a maximum depth of about 2 feet below grade surface (bgs) to facilitate installation of a concrete guide wall in the southern part of the site (along Water Street).             <ul style="list-style-type: none"> <li>Excavated soil/fill was temporarily stockpiled on polyethylene sheeting adjacent to the work area 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 evidence of impacts was observed.</li> </ul> </li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site (Pearl Street). The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### Material Tracking

- No material was exported from the site.
- ECD imported 10 truckloads (252.44 tons) of general fill from the Impact Reuse & 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 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	10	252.44
Project Total	8	184.42	0	0	15	339.65	356	8,703.98
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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN



## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 6:34am to 3:05pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\mu\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.007	0.00	0.01
PM-2	0.007	0.00	0.00
PM-3	0.006	0.00	0.01
PM-4	0.007	0.00	0.01
WZ-1	0.008	0.00	0.01
WZ-2	0.007	0.00	0.00
WZ-3	0.007	0.16	0.01
WZ-4	0.007	0.00	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.011	0.02	0.02
PM-2	0.012	0.00	0.01
PM-3	0.008	0.04	0.01
PM-4	0.008	0.00	0.03
WZ-1	0.010	0.00	0.23
WZ-2	0.011	0.00	0.01
WZ-3	0.008	0.27	0.02
WZ-4	0.009	0.00	0.02

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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/m³ to 0.13 µg/m³.
- 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 6:19am to 2:43pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:21am to 2:48pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:24am to 2:54pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:26am to 3:00pm.

### 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 3:05pm and 3:13pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

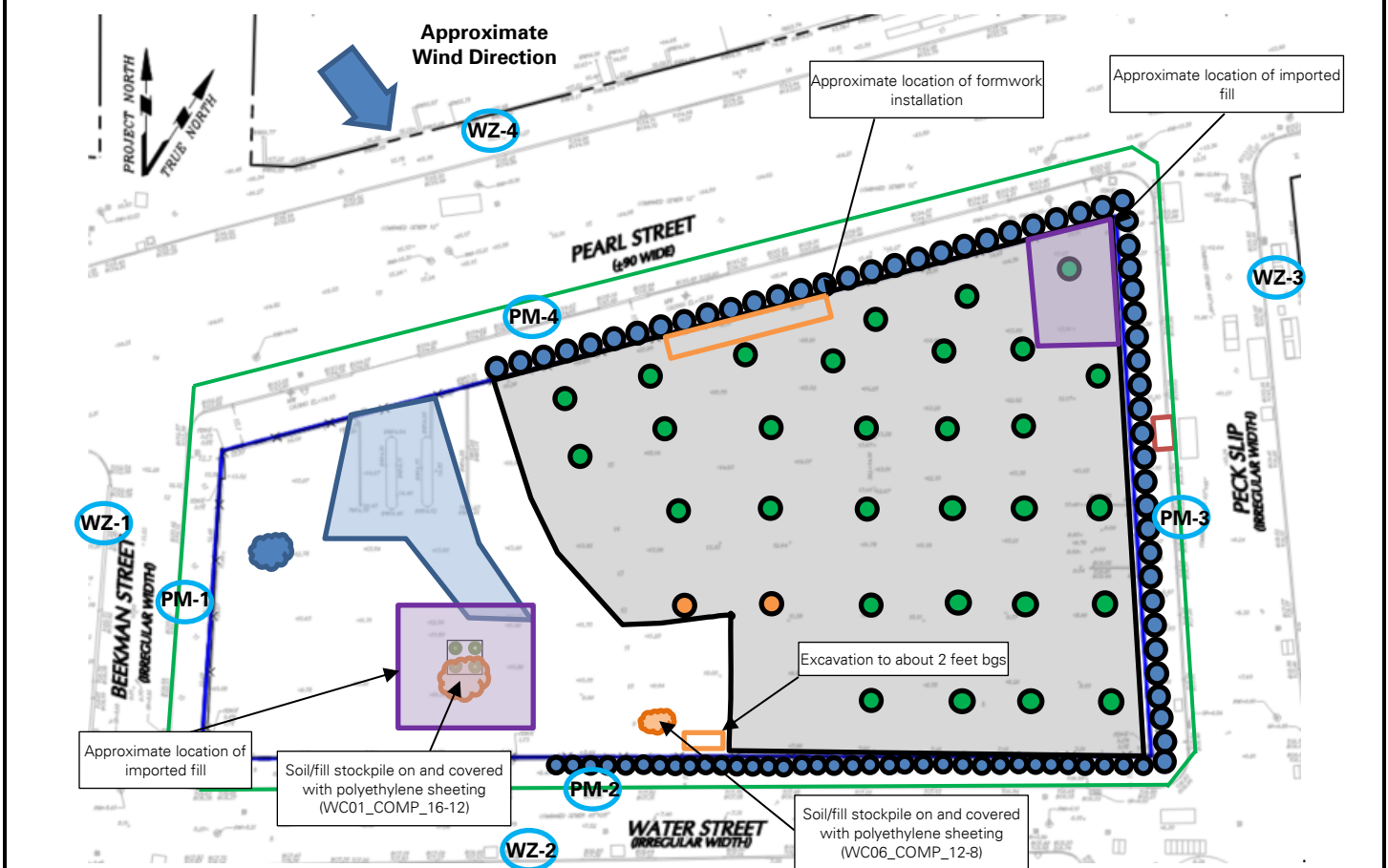
### Anticipated Activities

- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site.
- ECD will import general fill from the IRRRC facility, located in Lyndhurst, NJ to create temporary ramps for equipment access in the northeastern corner and western parts of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |                            |  |                                      |  |
|----------------------------|--|--------------------------------------|--|
| PM-1                       | Approximate Location of Air Monitoring Station     | Soldier Pile                         | Approximate Location of Soldier Pile                         |
| Work Area                  | Approximate Work Area                              | Perimeter Fence                      | Approximate Perimeter Construction Fence Location            |
| Installed Pile Cap         | Approximate Location of Installed Pile Cap         | Previous Excavation Area             | Previous Excavation Area                                     |
| Foundation Piles Completed | Approximate Location of Foundation Piles Completed | Documentation Sample                 | Approximate Location of Documentation Sample                 |
| Truck Tracking Pad         | Approximate Location of Truck Tracking Pad         | Previously Collected Endpoint Sample | Approximate Location of Previously Collected Endpoint Sample |
| Underground Storage Tank   | Approximate Location of Underground Storage Tank   | Imported Fill                        | Approximate Location of Imported Fill                        |
| C&D Stockpile              | Approximate Location of C&D Stockpile              |                                      |  |
| Soil/Fill Stockpile        | Approximate Location of Soil/Fill Stockpile        |                                      |  |

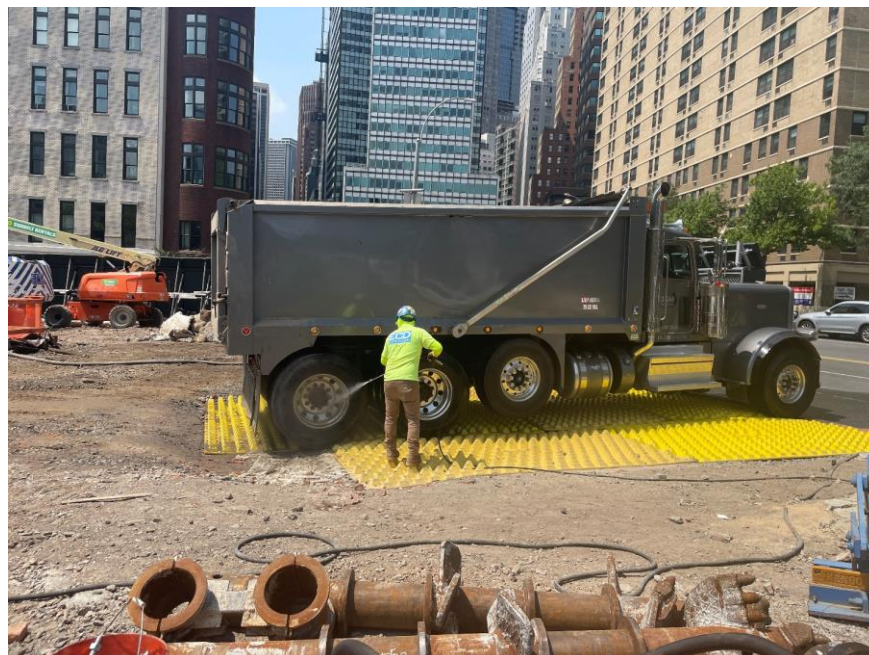
Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD importing general fill in the western part of the site (facing northwest)



**Photo 2:** ECD washing a tri-axle truck prior to exiting the site (facing west)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Wednesday, July 26, 2023  <b>WEATHER:</b> Sunny, 75 – 86° F Wind: NW @ 0.1 – 2.4 mph  <b>TIME:</b> 5:30am – 4:00pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 168</b></span> <b>Langan</b> (Environmental) Jack Millman, Savannah Walters <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam <b>Earth Efficient</b> (Soil Broker) Yinette Bautista	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD placed imported general fill in an about 85-foot-long by 35-foot-wide area in the northeastern part of the site (Pearl Street and Peck Slip) to create a temporary ramp for equipment access.</li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the southern part of the site (Water Street). The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### Material Tracking

- No material was exported from the site.
- ECD imported eight truckloads (205.12 tons) of general fill from the Impact Reuse & 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 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	8	205.12
Project Total	8	184.42	0	0	15	339.65	364	8,909.1
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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>



## 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 6:56am to 3:29pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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 ranged from 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.

### Perimeter and Work Zone Concentrations

#### Daily Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.020	0.00	0.01
PM-2	0.020	0.00	0.01
PM-3	0.020	0.00	0.01
PM-4	0.020	0.01	0.02
WZ-1	0.020	0.00	0.00
WZ-2	0.019	0.00	0.00
WZ-3	0.020	0.17	0.01
WZ-4	0.023	0.01	0.01

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.027	0.00	0.03
PM-2	0.023	0.00	0.02
PM-3	0.023	0.00	0.02
PM-4	0.023	0.18	0.06
WZ-1	0.024	0.00	0.01
WZ-2	0.022	0.00	0.01
WZ-3	0.023	0.28	0.02
WZ-4	0.037	0.10	0.02

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.16 µg/m<sup>3</sup>.
- 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 6:39am to 2:50pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:37am to 2:55pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:32am to 3:05pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:28am to 3:02pm.

### 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 3:31pm and 3:42pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

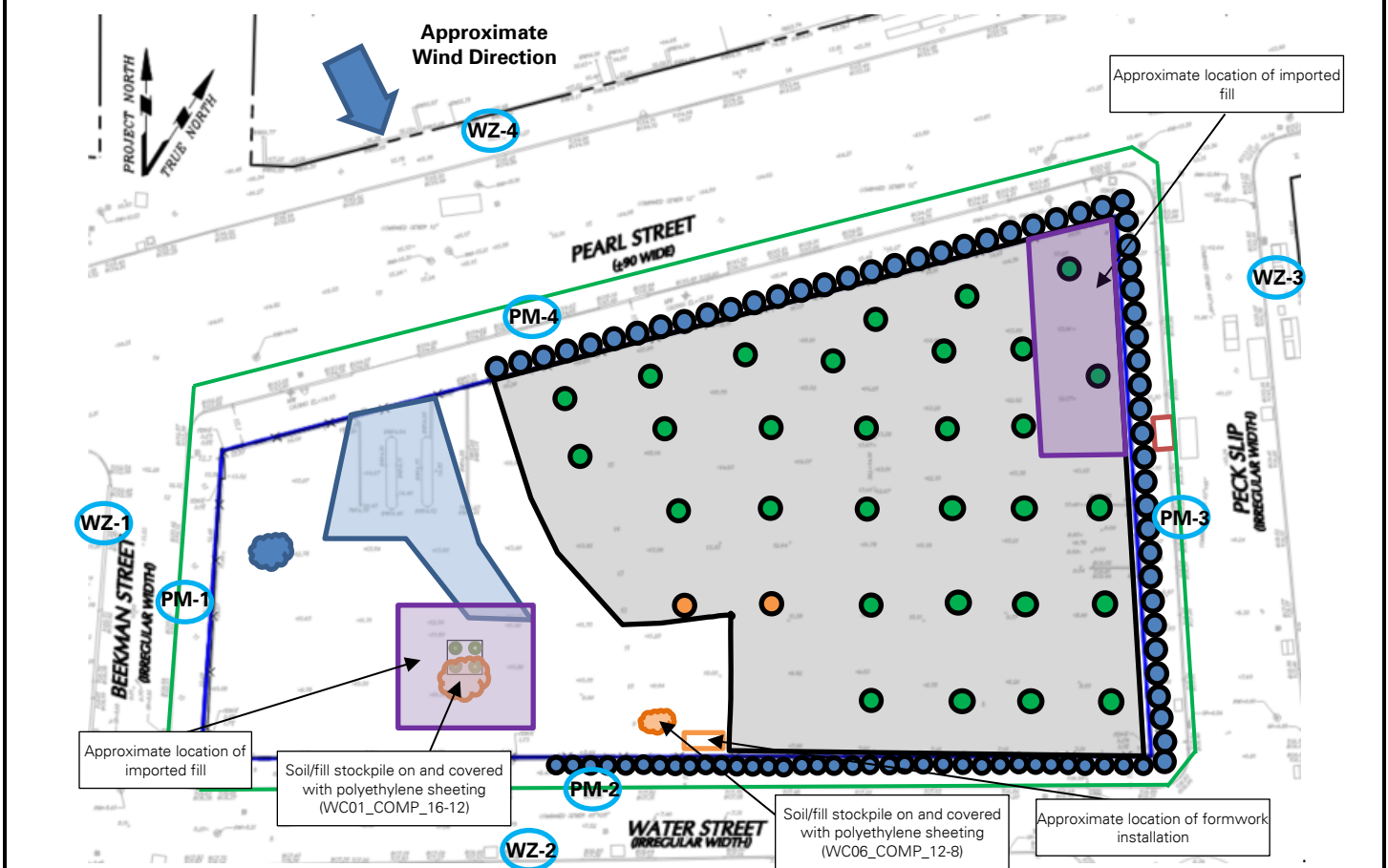
### Anticipated Activities

- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the northern part of the site.
- ECD will import general fill from the IRRRC facility, located in Lyndhurst, NJ to create temporary ramps for equipment access in the northeastern corner and western parts of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

1) Locations of air monitoring stations are approximate.

### Legend:

- |                              |  |  |  |
|------------------------------|--|--|--|
| <b>PM-1</b> (in blue circle) | Approximate Location of Air Monitoring Station     |  | Approximate Location of Soldier Pile                         |
|                              | Approximate Work Area                              |  | Approximate Perimeter Construction Fence Location            |
|                              | Approximate Location of Installed Pile Cap         |  | Previous Excavation Area                                     |
|                              | Approximate Location of Foundation Piles Completed |  | Approximate Location of Documentation Sample                 |
|                              | Approximate Location of Truck Tracking Pad         |  | Approximate Location of Previously Collected Endpoint Sample |
|                              | Approximate Location of Underground Storage Tank   |  | Approximate Location of Imported Fill                        |
|                              | Approximate Location of C&D Stockpile              |  |  |
|                              | Approximate Location of Soil/Fill Stockpile        |  |  |

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD using imported general fill to create a temporary ramp in the northeastern corner of the site (facing east)



**Photo 2:** Soil/fill stockpile on and covered with polyethylene sheeting in the southern part of the site (facing east)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
		LANGAN	

## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Thursday, July 27, 2023  <b>WEATHER:</b> Sunny, 75 – 91° F Wind: NW @ 0.2 – 2.8 mph  <b>TIME:</b> 5:30am – 4:15pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 169</b></span> <b>Langan</b> (Environmental) Jack Millman, Aron Farber <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam <b>Earth Efficient</b> (Soil Broker) Yinette Bautista	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD placed imported general fill in an about 90-foot-long by 35-foot-wide area in the northeastern part of the site (Pearl Street and Peck Slip) to create a temporary ramp for equipment access.</li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the southern part of the site (Water Street). The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### Material Tracking

- No material was exported from the site.
- ECD imported ten truckloads (248.75 tons) of general fill from the Impact Reuse & 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 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	10	248.75
Project Total	8	184.42	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 7:00am to 3:21pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.015	0.00	0.01
PM-2	0.016	0.00	0.01
PM-3	0.014	0.00	0.01
PM-4	0.015	0.00	0.02
WZ-1	0.015	0.00	0.00
WZ-2	0.015	0.00	0.00
WZ-3	0.015	0.20	0.01
WZ-4	0.017	0.00	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.019	0.06	0.11
PM-2	0.022	0.00	0.02
PM-3	0.017	0.01	0.03
PM-4	0.019	0.00	0.16
WZ-1	0.018	0.00	0.01
WZ-2	0.018	0.00	0.01
WZ-3	0.020	0.32	0.02
WZ-4	0.025	0.04	0.02

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>



## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.19 µg/m<sup>3</sup>.
- 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 6:36am to 2:16pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:39am to 2:21pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:44am to 3:50pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:47am to 3:39pm.

### 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 3:21pm and 3:30pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

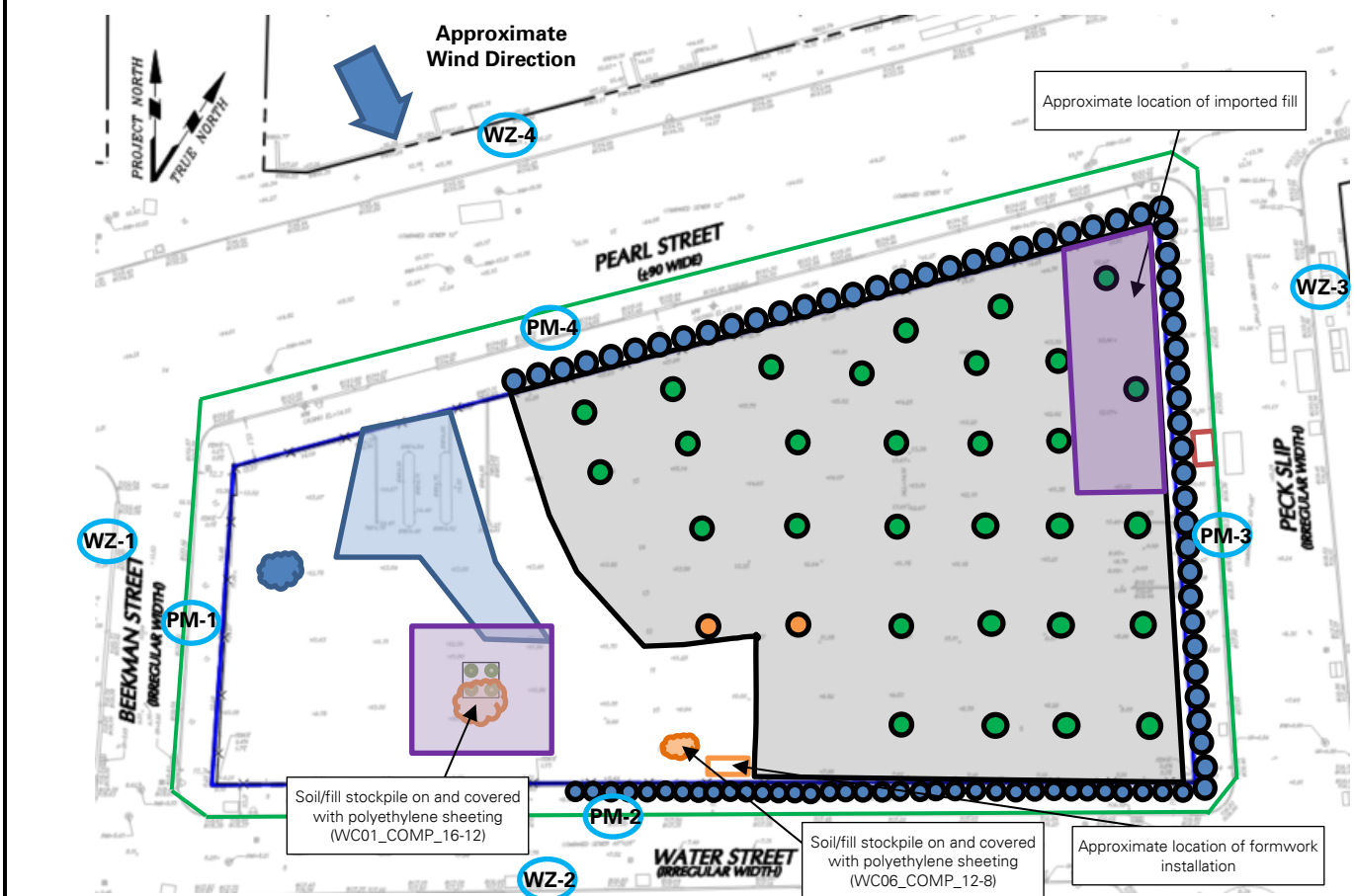
### Anticipated Activities

- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the southern part of the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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 Underground Storage Tank
- Approximate Location of C&D Stockpile
- Approximate Location of Soil/Fill Stockpile
- 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
- Approximate Location of Imported Fill

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD using imported general fill to create a temporary ramp in the northeastern corner of the site (facing east)



**Photo 2:** CAMP station WZ-3 on the eastern sidewalk of Peck Slip (facing northwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Friday, July 28, 2023  <b>WEATHER:</b> Sunny, 75 – 91° F Wind: NW @ 0.2 – 2.1 mph  <b>TIME:</b> 5:30am – 4:15pm  <b>MONITOR</b> Jack Millman	
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 170</b></span> <b>Langan</b> (Environmental) Jack Millman, Aron Farber <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Rafi Alam		
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD demolished existing asphalt and concrete in the southwestern part of the site. The construction and demolition (C&amp;D) debris was temporarily stockpiled on and covered with polyethylene sheeting in the northwestern part of the site pending future off-site disposal.</li> <li>ECD graded previously imported fill in an about 35-foot-long by 5-foot-wide area facilitate installation of a concrete guide wall in the eastern part of the site (along Peck Slip).             <ul style="list-style-type: none"> <li>Graded 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.</li> </ul> </li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site (Peck Slip). The concrete guide wall will be used to facilitate installation of support-of-excavation (SOE) along the perimeter of the site.</li> </ul>			
<b>Cc:</b>	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b>	Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 6:53am to 3:01pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.007	* 0.10	0.01
PM-2	0.007	0.00	0.01
PM-3	0.007	0.00	0.01
PM-4	0.007	0.00	0.02
WZ-1	0.008	0.00	0.00
WZ-2	0.008	0.01	0.00
WZ-3	0.007	* 0.34	0.00
WZ-4	0.008	0.01	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.011	* 5.03	0.02
PM-2	0.009	0.00	0.02
PM-3	0.010	0.00	0.02
PM-4	0.010	0.00	0.04
WZ-1	0.010	0.00	0.01
WZ-2	0.012	0.14	0.00
WZ-3	0.009	* 3.77	0.02
WZ-4	0.010	0.00	0.03

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Equipment Calibration

\* Routine maintenance was conducted on perimeter CAMP station PM-1 between 3:39pm and 4:03pm, and on off-site CAMP station WZ-3 between 1:21pm and 1:41pm for monthly calibration of the VOC module within each station. Isobutylene gas with a concentration of 5 ppm was used to complete the calibration. No ground-intrusive activities were completed during this time and the VOC detections were the result of calibration activities that were not reflective of the work completed during this time.

### 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<sup>3</sup> to 0.17 µg/m<sup>3</sup>.
- 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 6:36am to 3:23pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:38am to 3:29pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:41am to 3:37pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:44am to 3:45pm.

### 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 3:01pm and 3:10pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### Anticipated Activities

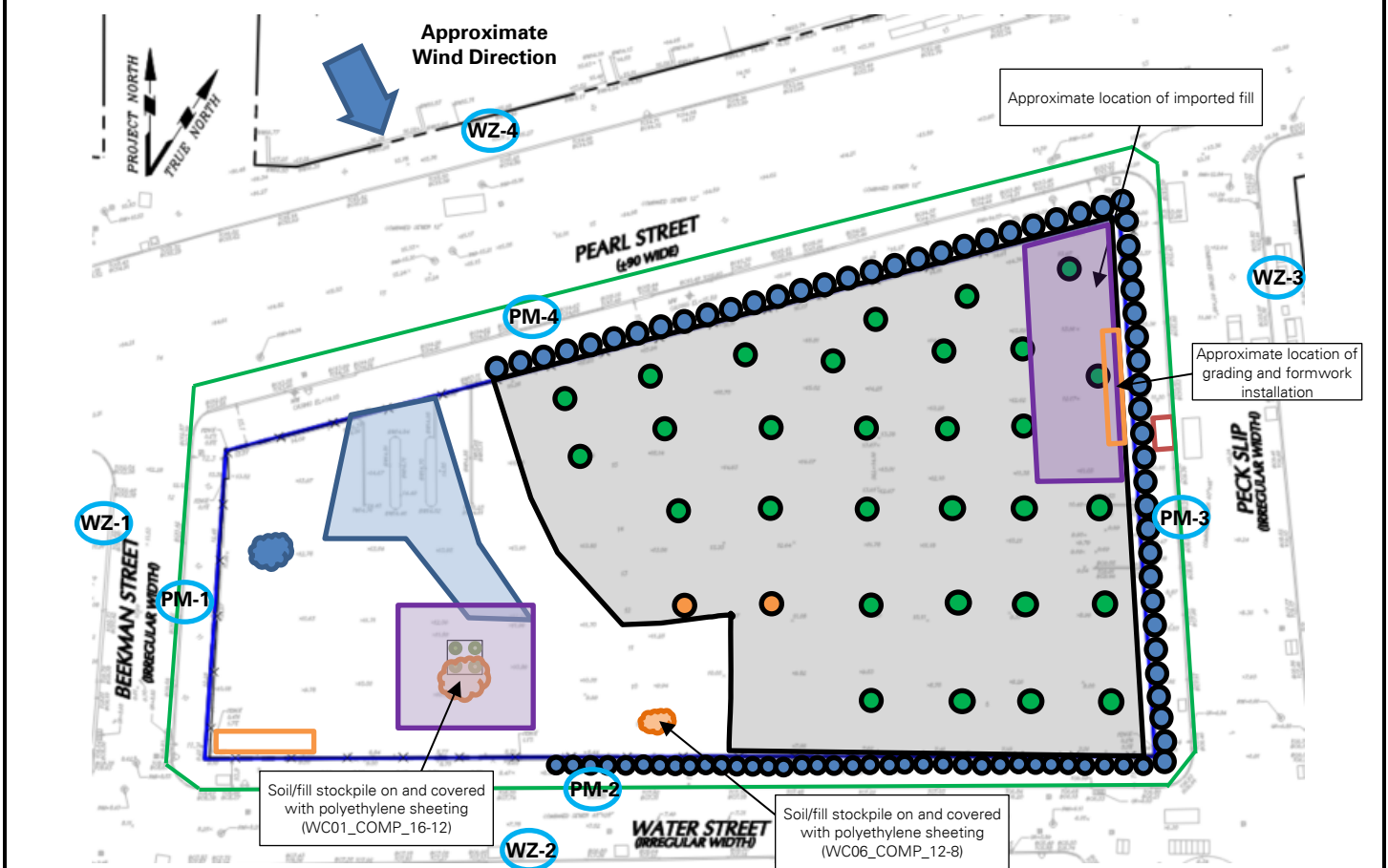
- ECD will continue exporting C&D debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site.
- ECD will begin installing soil mixing columns for SOE installation along Water Street.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |      |  |  |
|------|--|--|
| PM-1 | Approximate Location of Air Monitoring Station     | Approximate Location of Soldier Pile                         |
|      | Approximate Work Area                              | Approximate Perimeter Construction Fence Location            |
|      | Approximate Location of Installed Pile Cap         | Previous Excavation Area                                     |
|      | Approximate Location of Foundation Piles Completed | Approximate Location of Documentation Sample                 |
|      | Approximate Location of Truck Tracking Pad         | Approximate Location of Previously Collected Endpoint Sample |
|      | Approximate Location of Underground Storage Tank   | Approximate Location of Imported Fill                        |
|      | Approximate Location of C&D Stockpile              |  |
|      | Approximate Location of Soil/Fill Stockpile        |  |

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD grading imported general fill in the northeastern part of the site (facing east)



**Photo 2:** Dust suppression in the central part of the site (facing south)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Monday, July 31, 2023  <b>WEATHER:</b> Sunny, 76 – 84° F Wind: W @ 0.2 – 2.8 mph  <b>TIME:</b> 5:30am – 3:45pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 171</b> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Aron Farber, Tom Keane <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Jared Donaldson	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD excavated an about 5-foot-long by 30-foot-wide area to a maximum depth of about 2 feet below grade surface (bgs) to facilitate installation of support-of-excavation (SOE) in the southwestern part of the site (along Water Street).             <ul style="list-style-type: none"> <li>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. Evidence of impacts was not observed and the excavated soil/fill was temporarily graded into the adjacent area.</li> </ul> </li> <li>ECD poured concrete into the previously installed wooden formwork in the eastern part of the site (Peck Slip) for concrete guide wall installation. The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 6:53am to 3:21pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.004	0.00	0.01
PM-2	0.004	0.00	0.00
PM-3	0.004	0.00	0.00
PM-4	0.004	0.00	0.01
WZ-1	0.004	0.00	0.00
WZ-2	0.004	0.00	0.00
WZ-3	0.003	0.31	0.01
WZ-4	0.004	0.00	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.005	0.00	0.04
PM-2	0.006	0.00	0.01
PM-3	0.005	0.00	0.01
PM-4	0.005	0.00	0.02
WZ-1	0.005	0.00	0.01
WZ-2	0.006	0.00	0.00
WZ-3	0.004	0.41	0.02
WZ-4	0.004	0.01	0.02

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.15 µg/m<sup>3</sup>.
- 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 6:29am to 1:54pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:32am to 1:57pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:39am to 2:05pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:42am to 2:16pm.

### 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 3:21pm and 3:30pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### Anticipated Activities

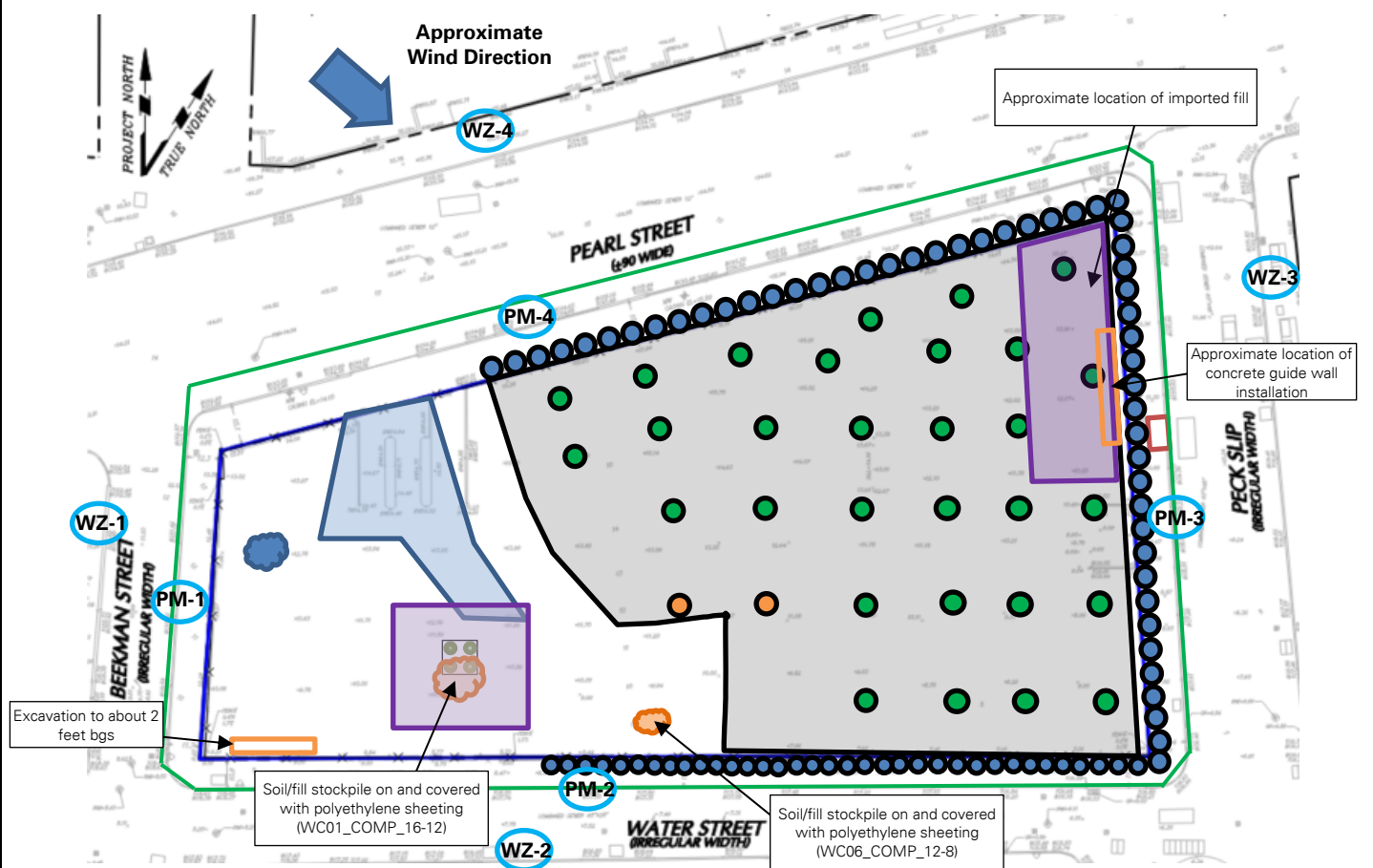
- ECD will continue exporting construction and demolition (C&D) debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site.
- ECD will begin installing soil mixing columns for SOE installation along Water Street.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |
|--|--|
| Approximate Location of Air Monitoring Station     | Approximate Location of Soldier Pile                         |
| Approximate Work Area                              | Approximate Perimeter Construction Fence Location            |
| Approximate Location of Installed Pile Cap         | Previous Excavation Area                                     |
| Approximate Location of Foundation Piles Completed | Approximate Location of Documentation Sample                 |
| Approximate Location of Truck Tracking Pad         | Approximate Location of Previously Collected Endpoint Sample |
| Approximate Location of Underground Storage Tank   | Approximate Location of Imported Fill                        |
| Approximate Location of C&D Stockpile              |  |
| Approximate Location of Soil/Fill Stockpile        |  |

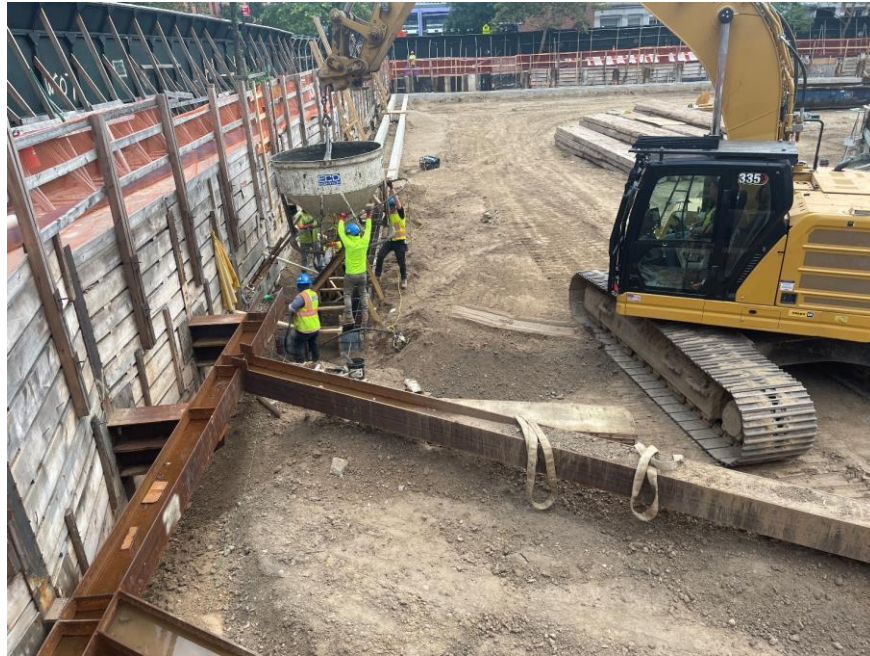
Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson

By: Jack Millman  
LANGAN



## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD pouring concrete into the previously installed wooden formwork in the eastern part of the site (facing south)



**Photo 2:** Perimeter CAMP station PM-4 in the northern part of the site (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, August 1, 2023  <b>WEATHER:</b> Sunny, 77 – 81° F Wind: W @ 0.2 – 3.0 mph  <b>TIME:</b> 5:30am – 4:00pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 172</b> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Gabriella DeGennaro, Tom Keane <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Jared Donaldson	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD excavated an about 2-foot-long by 30-foot-wide area to a maximum depth of about 2 feet below grade surface (bgs) to facilitate installation of support-of-excavation (SOE) in the southwestern part of the site (along Water Street).             <ul style="list-style-type: none"> <li>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.</li> </ul> </li> <li>ECD used an ABI Mobilram drill rig to install one soil mix column to about 35 feet bgs for SOE installation in the southwestern part of the site (Water Street). ECD's drill rig advanced steel rods with a soil mixing paddle at the bottom of the rods, while concurrently injecting grout through the top of the paddle and spinning and advancing the paddle downward.             <ul style="list-style-type: none"> <li>No drilling spoils were generated during installation of the soil mix column.</li> <li>Excess grout was contained within a temporary trench adjacent to the drilling area and will be managed as construction and demolition (C&amp;D) debris at a later date.</li> </ul> </li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site (Peck Slip). The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 6:59am to 2:56pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.004	0.00	0.01
PM-2	0.003	0.00	0.01
PM-3	0.003	0.00	0.00
PM-4	0.003	0.02	0.01
WZ-1	0.003	0.00	0.00
WZ-2	0.003	0.00	0.00
WZ-3	0.003	* 0.47	0.00
WZ-4	0.003	0.00	0.00

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.005	0.00	0.02
PM-2	0.004	0.00	0.02
PM-3	0.006	0.00	0.02
PM-4	0.005	0.02	0.02
WZ-1	0.005	0.00	0.01
WZ-2	0.004	0.00	0.01
WZ-3	0.004	* 1.08	0.02
WZ-4	0.007	0.00	0.02

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Equipment Calibration

\* Routine maintenance was conducted on off-site CAMP station WZ-3 between 12:43pm and 1:03pm for monthly calibration of the VOC module. Isobutylene gas with a concentration of 5 ppm was used to complete the calibration. No ground-intrusive activities were completed within 20 feet of the eastern boundary of the site (Peck Slip) during this time and the VOC detections were the result of calibration activities that were not reflective of the work completed during this time. The VOC module was not able to be calibrated and the spare CAMP station will be used in place of off-site CAMP station WZ-3 beginning tomorrow, August 2, 2023, and until the WZ-3 unit is repaired or replaced.

### 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/m³ to 0.16 µg/m³.
- 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 6:38am to 3:14pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:41am to 3:05pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:45am to 12:43pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:51am to 3:10pm.

### 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 2:56pm and 3:15pm.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.01 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

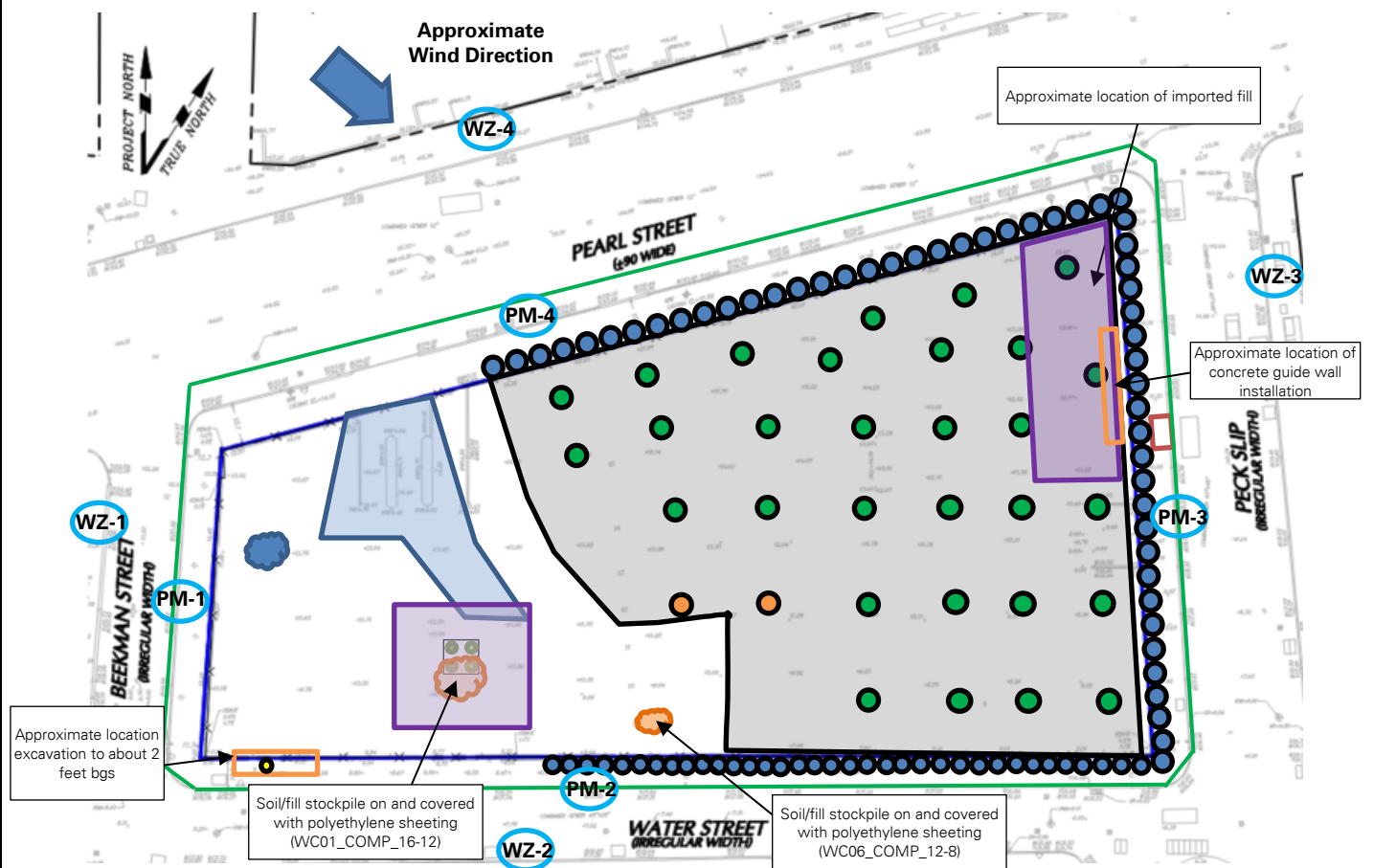
### Anticipated Activities

- ECD will continue exporting construction and demolition (C&D) debris and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site.
- ECD will continue installing soil-mix columns for SOE installation along Water Street.

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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |                           |  |                         |  |
|---------------------------|--|-------------------------|--|
| <b>PM-1</b> (blue circle) | Approximate Location of Air Monitoring Station     | <b>Blue Dot</b>         | Approximate Location of Soldier Pile                         |
| <b>Orange Rectangle</b>   | Approximate Work Area                              | <b>Yellow Circle</b>    | Approximate Location of Soil Mixing Column                   |
| <b>White Square</b>       | Approximate Location of Installed Pile Cap         | <b>Green Line</b>       | Approximate Perimeter Construction Fence Location            |
| <b>Green Dot</b>          | Approximate Location of Foundation Piles Completed | <b>Grey Rectangle</b>   | Previous Excavation Area                                     |
| <b>Blue Rectangle</b>     | Approximate Location of Truck Tracking Pad         | <b>Orange Circle</b>    | Approximate Location of Documentation Sample                 |
| <b>Red Rectangle</b>      | Approximate Location of Underground Storage Tank   | <b>Green Circle</b>     | Approximate Location of Previously Collected Endpoint Sample |
| <b>Blue Cloud</b>         | Approximate Location of C&D Stockpile              | <b>Purple Rectangle</b> | Approximate Location of Imported Fill                        |
| <b>Orange Cloud</b>       | Approximate Location of Soil/Fill Stockpile        |                         |  |

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD excavating soil/fill in the southwestern part of the site in preparation for SOE installation (facing east)



**Photo 2:** ECD advancing a soil mix column in the southwestern part of the site (facing west)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Wednesday, August 2, 2023  <b>WEATHER:</b> Sunny, 77 – 81° F Wind: SW @ 0.2 – 2.3 mph  <b>TIME:</b> 5:45am – 4:00pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 173</b> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Aron Farber, Tom Keane <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Danny Rodgers <b>New York State Department of Environmental Conservation (NYSDEC)</b> Jared Donaldson	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD used an ABI Mobilram drill rig to install four soil mix columns to about 35 feet below grade surface (bgs) for support of excavation (SOE) installation in the southwestern part of the site (Water Street). ECD's drill rig advanced steel rods with a soil mixing paddle at the bottom of the rods, while concurrently injecting grout through the top of the paddle and spinning and advancing the paddle downward.             <ul style="list-style-type: none"> <li>No drilling spoils were generated during installation of the soil mix columns.</li> <li>Excess grout was contained within a temporary trench adjacent to the drilling area and will be managed as construction and demolition (C&amp;D) debris at a later date.</li> </ul> </li> <li>ECD continued constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site (Peck Slip). The concrete guide wall will be used to facilitate installation of SOE along the perimeter of the site.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 6:46am to 3:27pm. 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<sup>3</sup>, 5.0 ppm, or 0.100 mg/m<sup>3</sup>, 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 g/m<sup>3</sup>.
- 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 <sup>3</sup> )	Organic Vapor (ppm)	Mercury Vapor (µg/m <sup>3</sup> )
PM-1	0.003	0.00	0.01
PM-2	0.003	0.00	0.01
PM-3	0.002	0.00	0.00
PM-4	0.003	0.00	0.01
WZ-1	0.003	0.00	0.00
WZ-2	0.002	0.00	0.00
WZ-3	-	-	-
WZ-4	0.003	0.00	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate (mg/m <sup>3</sup> )	Organic Vapor (ppm)	Mercury Vapor (µg/m <sup>3</sup> )
PM-1	0.009	0.01	0.02
PM-2	0.004	0.00	0.02
PM-3	0.004	0.04	0.02
PM-4	0.004	0.00	0.03
WZ-1	0.003	0.00	0.03
WZ-2	0.003	0.00	0.01
WZ-3	-	-	-
WZ-4	0.003	0.01	0.02

•mg/m<sup>3</sup> = milligrams per cubic meter •ppm = parts per million •µg/m<sup>3</sup> = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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/m³ to 0.14 µg/m³.
- 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 6:30am to 2:55pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:23am to 3:00pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:28am to 3:07pm.

### 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 3:27pm and 3:38pm.

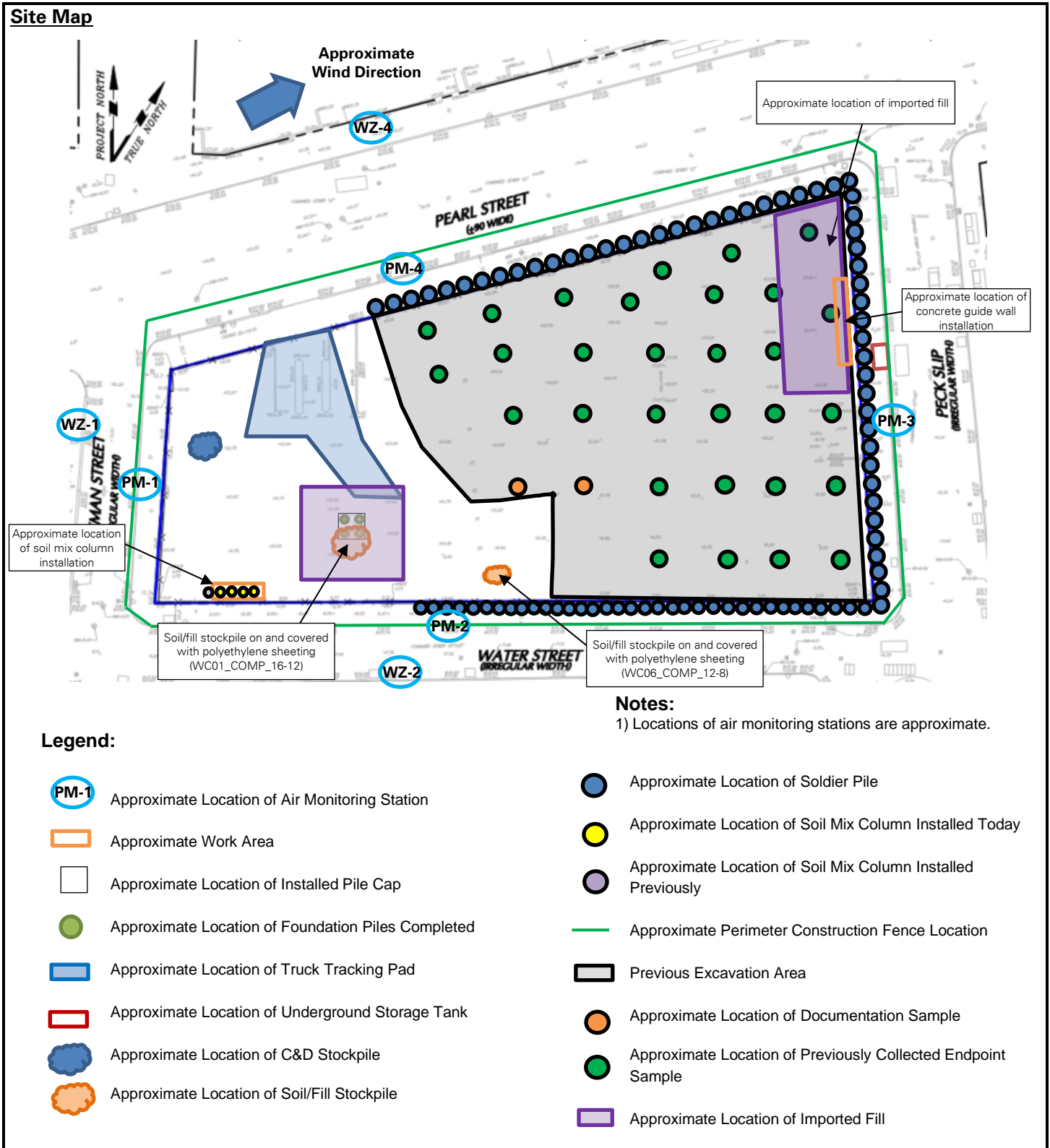
- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### 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 constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site.
- ECD will continue installing soil mixing columns for SOE installation along Water Street.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT



Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: ECD advancing a soil mix column in the southwestern part of the site (facing southeast)



Photo 2: Dust suppression in the central part of the site (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN



## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Thursday, August 3, 2023  <b>WEATHER:</b> Sunny, 71 – 81° F Wind: NW @ 0.3 – 2.8 mph  <b>TIME:</b> 5:45am – 5:00pm  <b>MONITOR</b> Jack Millman
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 174</b> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Aron Farber, Tom Keane <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Ryan Nugent <b>New York State Department of Environmental Conservation (NYSDEC)</b> Jared Donaldson <b>TRC Companies Inc. (TRC)</b> (NYSDEC Consultant)	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD graded an about 15-foot-long by 50-foot-wide area to facilitate support of excavation (SOE) installation in the southwestern part of the site (along Water Street).             <ul style="list-style-type: none"> <li>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. No evidence of impacts was observed.</li> </ul> </li> <li>ECD used an ABI Mobilram drill rig to install four soil mix columns to about 35 feet below grade surface (bgs) for SOE installation in the southwestern part of the site (Water Street). ECD's drill rig advanced steel rods with a soil mixing paddle at the bottom of the rods, while concurrently injecting grout through the top of the paddle and spinning and advancing the paddle downward.             <ul style="list-style-type: none"> <li>No drilling spoils were generated during installation of the soil mix columns.</li> <li>Excess grout was contained within a temporary trench adjacent to the drilling area and will be managed as construction and demolition (C&amp;D) debris at a later date.</li> </ul> </li> <li>TRC continued implementation of the off-site investigation administered by the NYSDEC.</li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Jack Millman  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 6:45am to 3:40pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.004	0.00	0.01
PM-2	0.003	0.00	0.00
PM-3	0.003	0.00	0.00
PM-4	0.003	0.00	0.01
WZ-1	0.003	0.00	0.00
WZ-2	0.003	0.00	0.00
WZ-3	0.002	0.00	0.01
WZ-4	0.003	0.00	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.010	0.00	0.02
PM-2	0.005	0.06	0.02
PM-3	0.003	0.00	0.00
PM-4	0.006	0.00	0.03
WZ-1	0.006	0.00	0.00
WZ-2	0.009	0.01	0.01
WZ-3	0.003	0.00	0.02
WZ-4	0.004	0.00	0.04

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Equipment Troubleshooting

- PM10, VOC, and mercury vapor concentrations were not recorded at perimeter CAMP stations PM-2 and PM-3 from 10:32am to 10:42am and from 11:40am to 11:50am, respectively, due to depleted batteries requiring replacement. Data logging for perimeter CAMP stations PM-2 and PM-3 resumed at 10:43am and 11:51am, respectively, after replacement of the batteries. Off-site CAMP stations WZ-2 and WZ-3, located on the Water Street and Peck Slip sidewalks, respectively, did not detect PM10, VOCs, or mercury vapor above daily background concentrations during these periods.

### 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/m³ to 0.15 µg/m³.
- 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 6:19am to 3:54pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:22am to 4:00pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:27am to 4:17pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:32am to 4:28pm.

### 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 3:40pm and 3:49pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

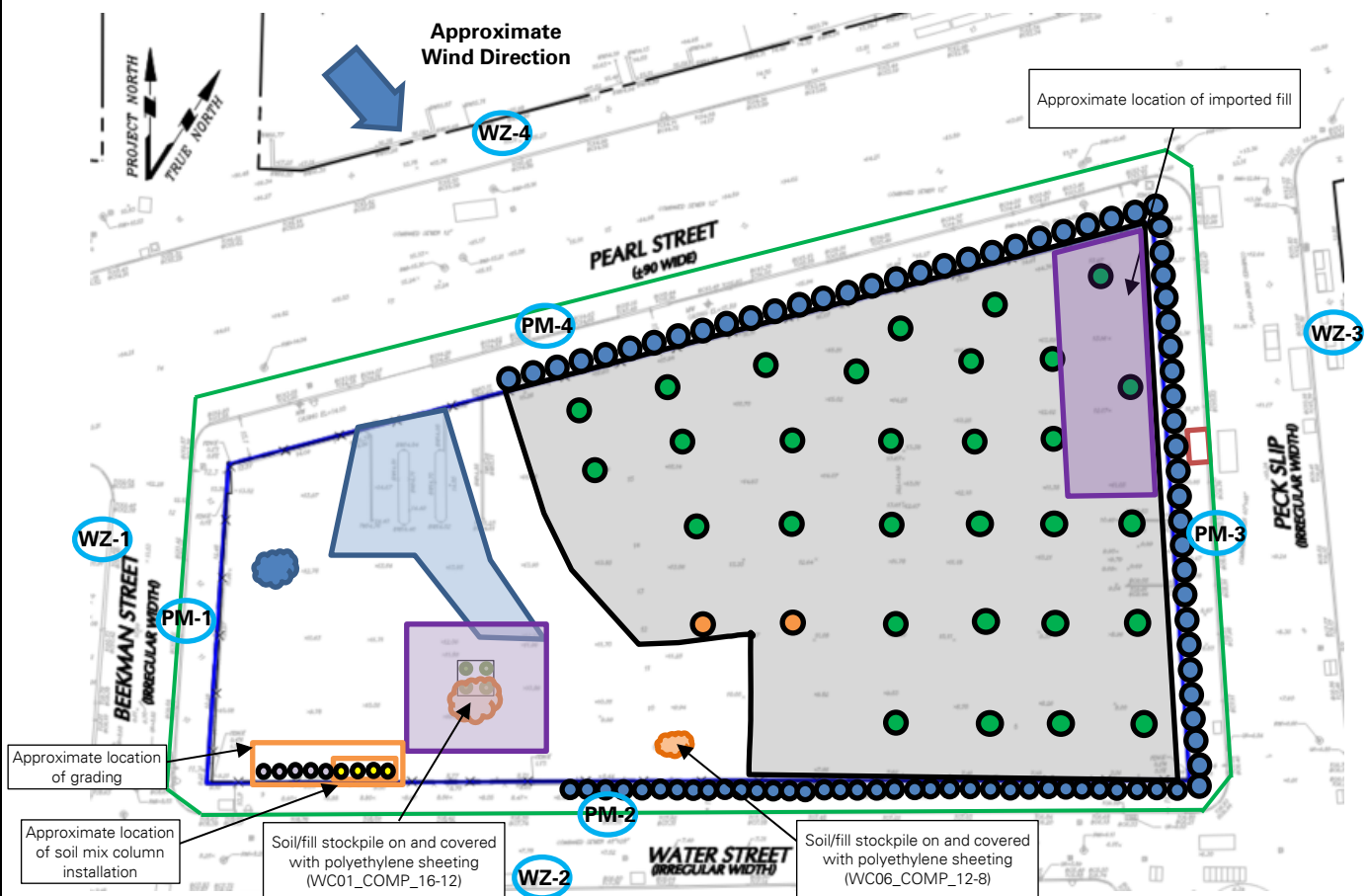
### Anticipated Activities

- ECD will continue exporting C&D and soil/fill from the western part of the site for off-site disposal.
- ECD will continue constructing wooden formwork in preparation for concrete guide wall installation in the eastern part of the site.
- ECD will continue installing soil mixing columns for SOE installation along Water Street.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |  |  |   |
|--|--|---|
| <b>PM-1</b> (blue circle)  | Approximate Location of Air Monitoring Station | <b>Approximate Location of Soldier Pile</b> (blue circle)                           |
| <b>Approximate Work Area</b> (orange rectangle)                          |  | <b>Approximate Location of Soil Mix Column Installed Today</b> (yellow circle)      |
| <b>Approximate Location of Installed Pile Cap</b> (white square)         |  | <b>Approximate Location of Soil Mix Column Installed Previously</b> (purple circle) |
| <b>Approximate Location of Foundation Piles Completed</b> (green circle) |  | <b>Approximate Perimeter Construction Fence Location</b> (green line)               |
| <b>Approximate Location of Truck Tracking Pad</b> (blue rectangle)       |  | <b>Previous Excavation Area</b> (black rectangle)                                   |
| <b>Approximate Location of Underground Storage Tank</b> (red rectangle)  |  | <b>Approximate Location of Documentation Sample</b> (orange circle)                 |
| <b>Approximate Location of C&amp;D Stockpile</b> (blue cloud shape)      |  | <b>Approximate Location of Previously Collected Endpoint Sample</b> (green circle)  |
| <b>Approximate Location of Soil/Fill Stockpile</b> (orange cloud shape)  |  | <b>Approximate Location of Imported Fill</b> (purple rectangle)                     |

Cc: M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson

By: Jack Millman  
**LANGAN**

## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD advancing a soil mix column in the southwestern part of the site (facing southwest)



**Photo 2:** ECD grading soil/fill in the southwestern part of the site (facing southeast)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Friday, August 4, 2023  <b>WEATHER:</b> Partly Sunny, 74 – 82° F Wind: W @ 0.3 – 2.3 mph  <b>TIME:</b> 5:45am – 4:45pm  <b>MONITOR</b> Jack Millman	
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 175</b></span> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Aron Farber, Tom Keane <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Ryan Nugent <b>New York State Department of Environmental Conservation (NYSDEC)</b> Jared Donaldson		
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>• ECD used an ABI Mobilram drill rig to install three soil mix columns to about 35 feet below grade surface (bgs) for support-of-excavation (SOE) installation in the southwestern part of the site (Water Street). ECD's drill rig advanced steel rods with a soil mixing paddle at the bottom of the rods, while concurrently injecting grout through the top of the paddle and spinning and advancing the paddle downward.             <ul style="list-style-type: none"> <li>○ No drilling spoils were generated during installation of the soil mix columns.</li> <li>○ Excess grout was contained within a temporary trench adjacent to the drilling area and will be managed as construction and demolition (C&amp;D) debris at a later date.</li> </ul> </li> <li>• ECD excavated an about 10-foot-long by 10-foot-wide area to a maximum depth of about 8 feet bgs to identify to identify potential subsurface utilities and/or obstructions prior to SOE installation in the southwestern part of the site (along Water Street).             <ul style="list-style-type: none"> <li>○ Excavated soil/fill was temporarily stockpiled adjacent to the work area 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 evidence of impacts was observed. The excavated soil/fill was temporarily backfilled into the original location following removal of concrete obstructions.</li> </ul> </li> </ul>			
<b>Cc:</b>	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b>	Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 7:09am to 3:42pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.021	0.00	0.01
PM-2	0.017	* 0.09	0.01
PM-3	0.016	0.00	0.00
PM-4	0.017	0.00	0.01
WZ-1	0.017	0.00	0.01
WZ-2	0.017	0.00	0.00
WZ-3	0.017	0.00	0.00
WZ-4	0.018	0.00	0.01

#### **Maximum 15-Minute-Average Concentrations**

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.080	0.01	0.02
PM-2	0.022	* 5.04	0.02
PM-3	0.021	0.00	0.01
PM-4	0.023	0.00	0.06
WZ-1	0.020	0.00	0.03
WZ-2	0.026	0.01	0.01
WZ-3	0.021	0.00	0.00
WZ-4	0.032	0.00	0.02

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Equipment Calibration

\* Routine maintenance was conducted for perimeter CAMP station PM-2 for monthly calibration of the VOC module within the station using 5 ppm isobutylene gas. No ground-intrusive activities were completed during this time and the VOC detections were the result of calibration activities that were not reflective of the work completed during this time.

### 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<sup>3</sup> to 0.15 µg/m<sup>3</sup>.
- 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 6:38am to 4:05pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:40am to 4:01pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:43am to 2:13pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:48am to 2:24pm.

### 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 3:42pm and 3:54pm.

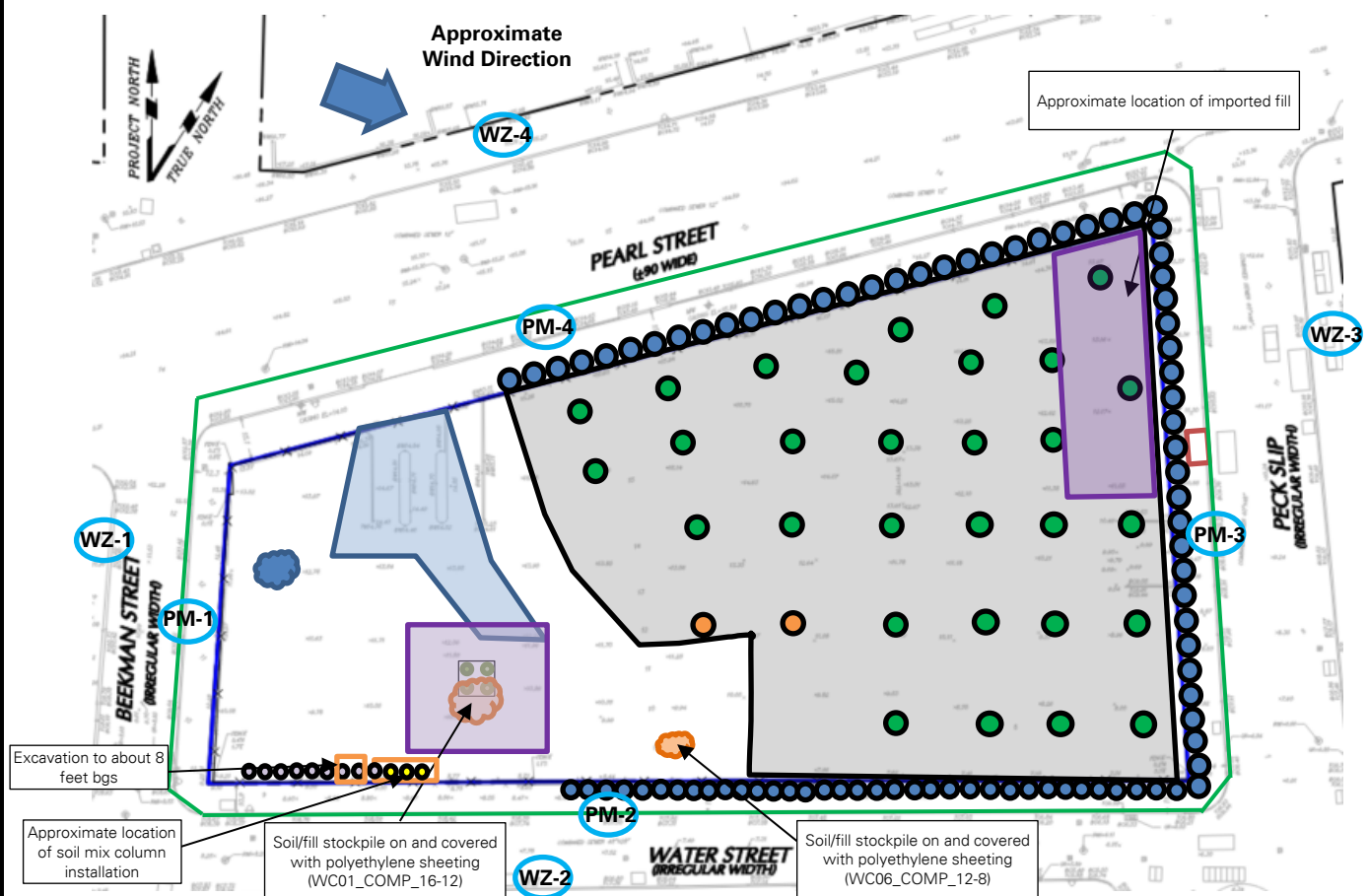
- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

### 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 mixing columns for SOE installation along Water Street.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## Site Map



**Notes:**

-  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 Location of Documentation Sample
-  Approximate Location of Previously Collected Endpoint Sample
-  Approximate Location of Imported Fill

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD advancing a soil mix column in the southwestern part of the site (facing southeast)



**Photo 2:** ECD excavating soil/fill in the southwestern part of the site (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman <b>LANGAN</b>
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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Monday, August 7, 2023  <b>WEATHER:</b> Rain/Overcast, 74 – 82° F Wind: W @ 0.2 – 2.2 mph  <b>TIME:</b> 5:45am – 4:30pm  <b>MONITOR</b> Gabriella DeGennaro
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <b>Day 176</b> <b>Langan</b> (Environmental/Geotechnical) Gabriella DeGennaro, Aron Farber, Tom Keane <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Ryan Nugent <b>New York State Department of Environmental Conservation</b> <b>(NYSDEC)</b> Meghan Medwid	
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD used an ABI Mobilram drill rig to install two soil mix columns to depths between about 30 and 36 feet below grade surface (bgs) for support-of-excavation (SOE) installation in the southwestern part of the site (Water Street). ECD's drill rig advanced a steel rod with a soil mixing paddle at the bottom of the rod, while concurrently injecting grout through the top of the paddle and spinning and advancing the paddle downward.             <ul style="list-style-type: none"> <li>No drilling spoils were generated during installation of the soil mix columns.</li> <li>Excess grout was contained within a temporary trench adjacent to the drilling area and will be managed as construction and demolition (C&amp;D) debris at a later date.</li> </ul> </li> <li>ECD graded an about 45-foot-long by 15-foot-wide area to create a level surface for equipment staging in the southwestern part of the site (along Water Street).             <ul style="list-style-type: none"> <li>Graded 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.</li> </ul> </li> </ul>		
<b>Cc:</b> M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	<b>By:</b> Gabriella DeGennaro  <b>LANGAN</b>	

## SITE OBSERVATION REPORT

### 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	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

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			<b>LANGAN</b>

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### 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, and at the southern sidewalk of Water Street at seven total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10) from about 7:35am to 3:45pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.013	0.00	0.01
PM-2	0.012	0.00	0.01
PM-3	0.012	0.00	0.01
PM-4	0.012	0.00	0.02
WZ-1	0.013	0.00	0.02
WZ-2	0.012	0.00	0.00
WZ-3	-	-	-
WZ-4	0.012	0.00	0.01

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.021	0.01	0.16
PM-2	0.016	0.00	0.02
PM-3	0.023	0.00	0.18
PM-4	0.021	0.02	0.13
WZ-1	0.020	0.02	0.09
WZ-2	0.017	0.01	0.00
WZ-3	-	-	-
WZ-4	0.019	0.03	0.02

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

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## SITE OBSERVATION REPORT

### 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<sup>3</sup> to 0.18 µg/m<sup>3</sup>.
- 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 6:56am to 4:05pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 7:00am to 4:11pm.
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 7:14am to 3:59pm.

### 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 3:45pm and 3:51pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

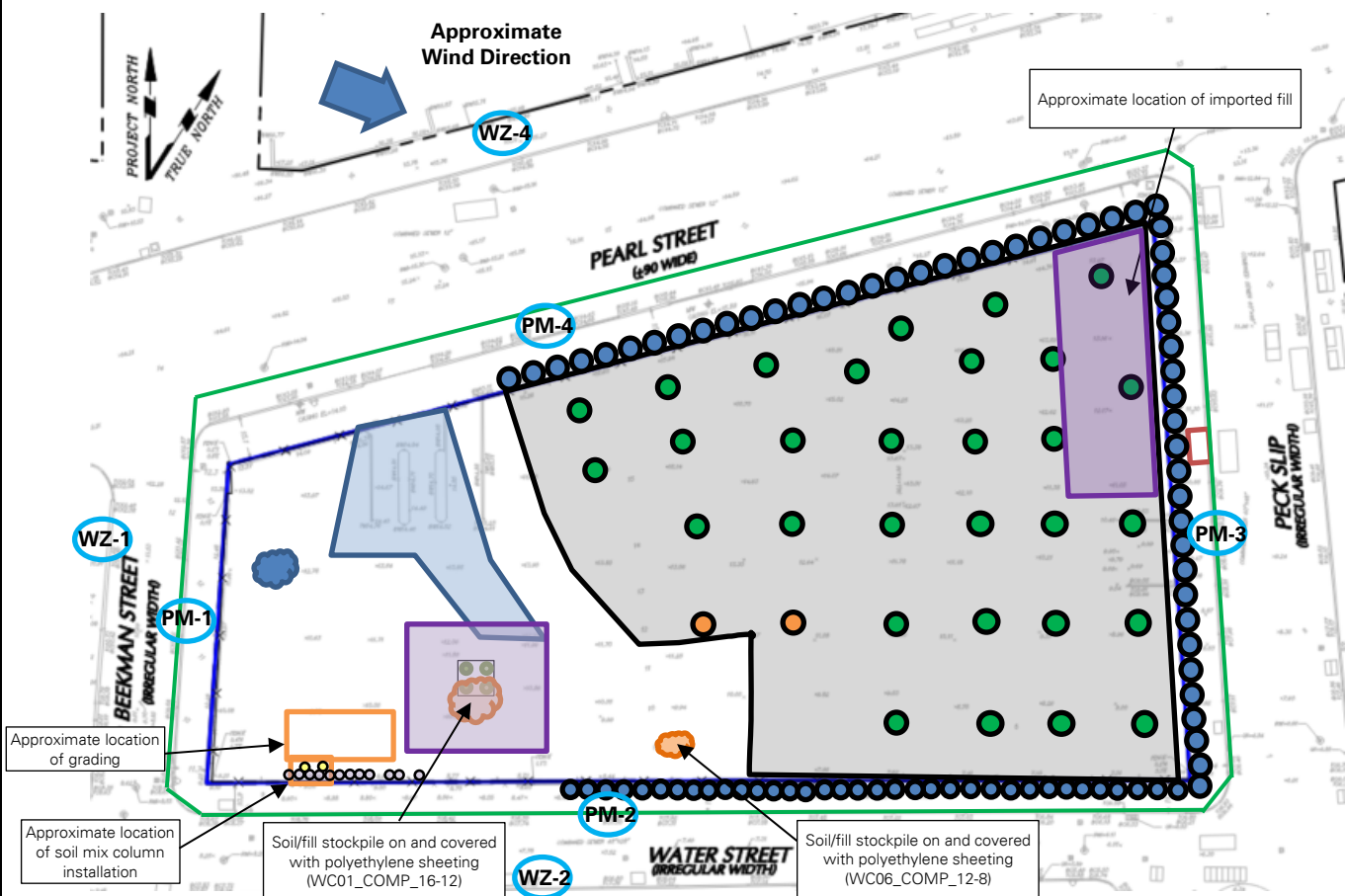
### Anticipated Activities

- 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 for SOE installation along Water Street.

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## SITE OBSERVATION REPORT

### 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 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 Location of Documentation Sample
- Approximate Location of Previously Collected Endpoint Sample
- Approximate Location of Imported Fill

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD advancing a soil mix column in the southwest part of the site (facing southwest)



**Photo 2:** ECD grading soil/fill in the southwest part of the site (facing southeast)

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## SITE OBSERVATION REPORT

<b>PROJECT No.:</b> 170381202  <b>PROJECT:</b> 250 Water Street  <b>LOCATION:</b> New York, NY  <b>BCP SITE ID:</b> C231127	<b>CLIENT:</b> 250 Seaport District, LLC c/o The Howard Hughes Corporation	<b>DATE:</b> Tuesday, August 8, 2023  <b>WEATHER:</b> Partly Sunny, 70 – 78° F Wind: SW @ 0.2 – 1.5 mph  <b>TIME:</b> 5:45am – 4:45pm  <b>MONITOR</b> Jack Millman	
<b>EQUIPMENT:</b> CAT 335 Excavator Komatsu PC138 Excavator ABI Mobilram Drill Rig Jerome J505 Mercury Vapor Analyzer RKI GX-6000 Photoionization Detector (PID) Aeroqual ASQ1 Air Monitoring Station	<b>PRESENT AT SITE:</b> <span style="float: right;"><b>Day 177</b></span> <b>Langan</b> (Environmental/Geotechnical) Jack Millman, Aron Farber, Tom Keane <b>Suffolk Construction (Suffolk)</b> (General Contractor) Anthony Galu <b>East Coast Drilling, Inc. (ECD)</b> (Foundation Contractor) Ryan Nugent <b>New York State Department of Environmental Conservation (NYSDEC)</b> Meghan Medwid		
<b>OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:</b>  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).  <b>Site Activities</b> <ul style="list-style-type: none"> <li>ECD used an ABI Mobilram drill rig to install four soil mix columns to about 35 feet below grade surface (bgs) for support-of-excavation (SOE) installation in the southwestern part of the site (Water Street). ECD's drill rig advanced a steel rod with a soil mixing paddle at the bottom of the rod, while concurrently injecting grout through the top of the paddle and spinning and advancing the paddle downward.             <ul style="list-style-type: none"> <li>No drilling spoils were generated during installation of the soil mix columns.</li> <li>Excess grout was contained within a temporary trench adjacent to the drilling area and will be managed as construction and demolition (C&amp;D) debris at a later date.</li> </ul> </li> <li>ECD graded an about 50-foot-long by 50-foot-wide area to create a level surface for equipment staging in the central part of the site.             <ul style="list-style-type: none"> <li>Graded 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.</li> </ul> </li> </ul>			
Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman  <b>LANGAN</b>

## SITE OBSERVATION REPORT

### 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	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	0	0	0	0
Project Total	5	85	42	840	14	280	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	263	5,260	267	5,340	66	1,320

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			LANGAN

## SITE OBSERVATION REPORT

Material Export Summary (3 of 3)		
Facility Name Location Type of Material	Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)
Today	0	0
Project Total	216	4,320

### Sampling

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au, J. Frey, S. Simpson	By:	Jack Millman
			<b>LANGAN</b>

## 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 6:59am to 3:54pm. 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 ppm, or 0.100  $\text{mg}/\text{m}^3$ , 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  $\text{g}/\text{m}^3$ .
- 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 ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.004	0.00	0.01
PM-2	0.004	0.00	0.01
PM-3	0.003	* 0.08	0.01
PM-4	0.004	0.00	0.02
WZ-1	0.005	0.00	0.00
WZ-2	0.004	0.00	0.00
WZ-3	0.004	0.00	0.00
WZ-4	0.004	0.00	0.01

#### Maximum 15-Minute-Average Concentrations

Station ID	Particulate ( $\text{mg}/\text{m}^3$ )	Organic Vapor (ppm)	Mercury Vapor ( $\mu\text{g}/\text{m}^3$ )
PM-1	0.008	0.00	0.09
PM-2	0.006	0.00	0.02
PM-3	0.007	* 3.34	0.04
PM-4	0.007	0.00	0.07
WZ-1	0.008	0.00	0.01
WZ-2	0.007	0.00	0.00
WZ-3	0.007	0.01	0.01
WZ-4	0.008	0.03	0.03

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

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## SITE OBSERVATION REPORT

### Equipment Calibration

\* Routine maintenance was conducted on perimeter CAMP station PM-3 between 4:06pm and 4:27pm for monthly calibration of the VOC module. Isobutylene gas with a concentration of 5 ppm was used to complete the calibration. No ground-intrusive activities were completed during this time and the VOC detections were the result of calibration activities that were not reflective of the work completed during this time.

### 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<sup>3</sup> to 0.16 µg/m<sup>3</sup>.
- 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 6:33am to 3:43pm.
- CAMP station WZ-2 was placed on the southern sidewalk of Water Street from 6:35am to 4:08pm.
- CAMP station WZ-3 was placed on the eastern sidewalk of Peck Slip from 6:40am to 3:29pm
- CAMP station WZ-4 was placed on the northern sidewalk of Pearl Street from 6:43am to 3:38pm.

### 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 3:54pm and 3:59pm.

- Background concentrations of mercury vapor at each CAMP station were recorded at 0.00 µg/m<sup>3</sup>.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

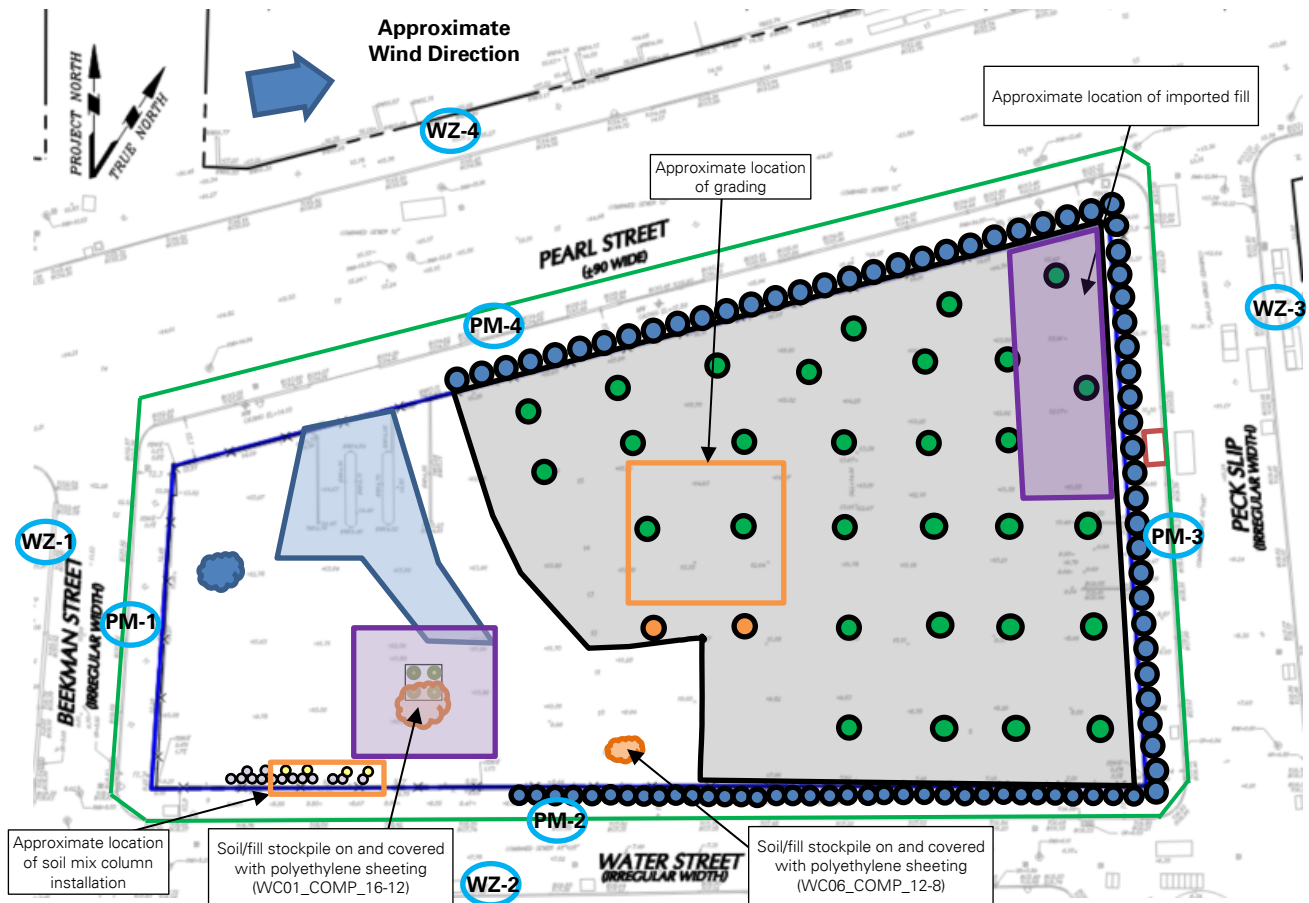
### Anticipated Activities

- 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 mixing columns for SOE installation along Water Street.

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## SITE OBSERVATION REPORT

### Site Map



### Notes:

- 1) Locations of air monitoring stations are approximate.

### Legend:

- |                           |  |                    |  |
|---------------------------|--|--------------------|--|
| <b>PM-1</b> (blue circle) | Approximate Location of Air Monitoring Station     | (blue circle)      | Approximate Location of Soldier Pile                         |
| (orange square)           | Approximate Work Area                              | (yellow circle)    | Approximate Location of Soil Mix Column Installed Today      |
| (white square)            | Approximate Location of Installed Pile Cap         | (purple circle)    | Approximate Location of Soil Mix Column Installed Previously |
| (green circle)            | Approximate Location of Foundation Piles Completed | (green line)       | Approximate Perimeter Construction Fence Location            |
| (blue rectangle)          | Approximate Location of Truck Tracking Pad         | (black rectangle)  | Previous Excavation Area                                     |
| (red rectangle)           | Approximate Location of Underground Storage Tank   | (orange circle)    | Approximate Location of Documentation Sample                 |
| (blue cloud)              | Approximate Location of C&D Stockpile              | (green circle)     | Approximate Location of Previously Collected Endpoint Sample |
| (orange cloud)            | Approximate Location of Soil/Fill Stockpile        | (purple rectangle) | Approximate Location of Imported Fill                        |

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## SITE OBSERVATION REPORT

### Select Site Photographs:



**Photo 1:** ECD advancing a soil mix column in the southwest part of the site (facing southeast)



**Photo 2:** ECD grading soil/fill in the central part of the site (facing south)

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