

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Thursday, September 1, 2022 WEATHER: Clear, 66.0 – 85.0 °F Wind: WNW @ 1.3 – 6.2 mph TIME: 6:00 AM – 6:00 PM MONITOR: Elsay Boak, Maitland Robinson, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 86 Langan (Environmental/Geotechnical) – Elsay Boak, Maitland Robinson, Eddie Cai, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn, Jack Dettra Lendlease (General Contractor) – Marty Cohen Akela Contracting, LLC (Excavation Contractor) – Akille McCallister New York State Department of Environmental Conservation (NYSDEC) – Marnie Chancey Brookside Environmental (UST Cleaning/Removal Contractor) – Dan Cinnighy	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 36-foot-long by 40-foot-wide area to about 2 feet below the existing grade for removal and off-site disposal of non-hazardous soil/fill in the north-central and northeastern parts of site (waste characterization cells WC05, WC07 and WC08). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Middlesex County Landfill facility in East Brunswick, NJ. The trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. A maximum PID reading of 17.6 part per million (ppm) was recorded. CCJV actively applied Mercon-X® to exposed soil/fill during excavation and loading for off-site disposal. CCJV excavated an about 80-foot-long by 25-foot-wide area to a maximum depth of about 15 feet below grade surface (bgs) for removal and off-site disposal of non-hazardous soil/fill in the north-central part of the site (waste characterization cells WC04 and WC05). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Middlesex County Landfill facility in East Brunswick, NJ. The trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. No odors, staining, or instrumental evidence of contamination was recorded. CCJV actively applied Mercon-X® to exposed soil/fill during excavation and loading for off-site disposal. CCJV excavated an about 20-foot-long by 25-foot-wide area to a maximum depth of about 9 feet bgs for removal and off-site disposal of hazardous lead-impacted soil/fill in the south-central part of site. Excavated 		
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soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Clean Earth of North Jersey (CENJ) facility in Kearny, NJ. The trucks were lined with polyethylene sheeting, covered with tight-fitting covers and were inspected and washed before leaving the site.

- 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. No odors, staining, or instrumental evidence of contamination was recorded. CCJV actively applied Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill during excavation and loading for off-site disposal.
- Brookside Environmental used a vacuum truck to remove approximately 1,909 gallons of petroleum product/water mixture from four previously identified underground storage tanks (USTs) located in the northeastern part of the site.
- Akela Contracting installed piping within the off-site excavation area (along Peck Slip between previously installed support-of-excavation [SOE] lagging and the perimeter construction fencing) for connection to the New York City Department of Environmental Protection (NYCDEP) sewer for future dewatering activities at the site. Following installation, Akela backfilled the excavation area using clean sand to match the surrounding grade. The backfilled area was covered with polyethylene sheeting in preparation for restoration at a later date.
- CCJV continued installation of steel sheet piles in the southeastern part of the site for SOE system installation.
- CCJV covered all exposed soil/fill and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

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Material Tracking

- CCJV exported 14 truckloads (approximately 280 CY) of hazardous lead-impacted soil/fill from the south-central part of the site for off-site disposal at the Clean Earth facility of North Jersey (CENJ) facility, located in Kearney New Jersey.
- CCJV exported 40 truckloads (approximately 800 CY) of non-hazardous soil/fill from waste characterization cells WC05, WC07 and WC08 for off-site disposal at the Middlesex County Landfill, located in East Brunswick New Jersey.
- Brookside Environmental exported approximately 1,909 gallons of non-hazardous petroleum product/water mixture to the Advanced Waste and Water Technology facility, located in Farmingdale, New York.
- 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	5	108.52	17	482.65
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	14	280	0	0
Project Total	5	85	31	620	29	580	201	4,020

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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	40	800	0	0	0	0
Project Total	251	5,020	99	1,980	42	840

Sampling Activities

- Langan collected five confirmation endpoint soil samples and associated quality assurance/quality control (QA/QC) samples for laboratory analysis of NYSDEC Part 375/target compound list (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, target analyte list (TAL) metals (including hexavalent/trivalent chromium and total cyanide), per- and polyfluoroalkyl substances (PFAS), and/or 1,4-dioxane:
 - EP18_EL_0.0
 - EP24_EL_0.0
 - EP29_EL_0.0
 - EP35_EL_-2.0
 - EP41_EL_-1.5
- Samples were relinquished to Alpha Analytical, Inc., an Environmental Laboratory Accredited Program (ELAP)-certified laboratory under standard chain-of-custody protocols.
- Sample locations and elevations were surveyed by a professional surveyor.

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CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs, and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor, VOCs, and PM10 that approached or exceeded the action level established by the CAMP (1.00 µg/m³, 5.0 ppm, and 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 µg/m³ to 0.06 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.035	0.0	0.01
PM-2	0.036	0.0	0.01
PM-3	0.018	0.0	0.00
PM-4	0.000	0.1	0.01
PM-5	0.026	0.1	0.01
PM-6	0.018	0.0	0.01
WZ-1	0.028	0.1	0.01
WZ-2	0.013	0.1	0.01
WZ-3	0.015	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.049	0.0	0.03
PM-2	0.077	0.0	0.03
PM-3	0.035	0.0	0.01
PM-4	0.000	0.3	0.04
PM-5	0.044	2.4	0.03
PM-6	0.032	0.0	0.03
WZ-1	0.059	1.8	0.04
WZ-2	0.018	0.2	0.03
WZ-3	0.024	0.0	0.03

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

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Ambient Air (Handheld Jerome® J505 and Handheld PID)

- The dedicated mobile monitor (Langan) used a handheld Jerome® J505 mercury vapor analyzer to monitor ambient air conditions at various heights throughout the site. Instantaneous mercury vapor concentrations throughout the site ranged from 0.00 µg/m³ to 0.37 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:44am to 5:14pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:44am to 5:14pm during backfilling activities along Peck Slip and installation of steel sheet piles in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:44am to 5:14pm during excavation activities in the southern part of the site and installation of steel sheet piles in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 5:08pm and 5:14pm at the conclusion of ground-intrusive activities.

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

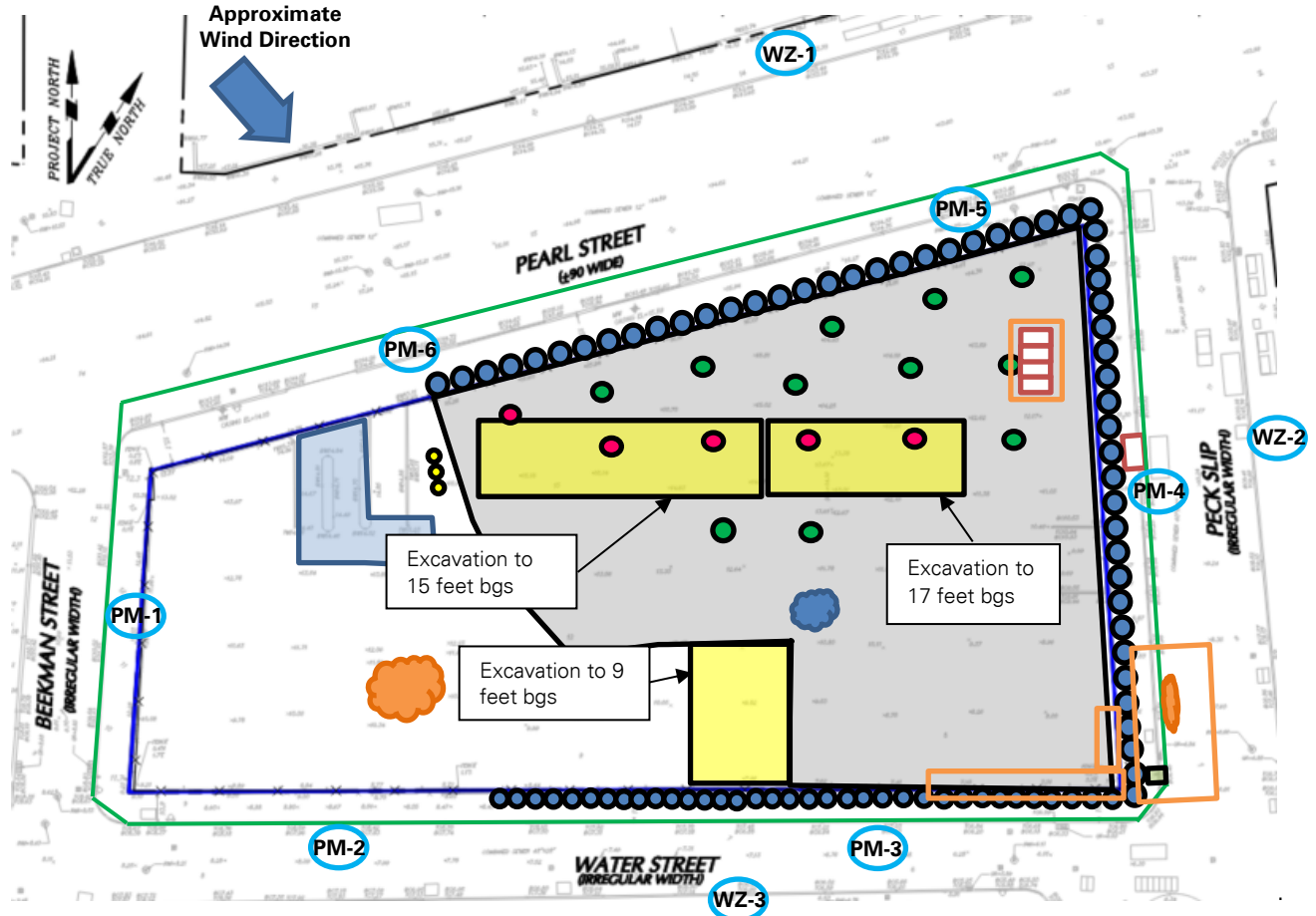
Anticipated Activities

- CCJV will continue installation of sheet piles.
- CCJV will continue excavation and off-site disposal of soil/fill in the southern part of the site.
- CCJV will remove previously identified underground storage tanks (USTs) from the northeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across 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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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Select Site Photographs:

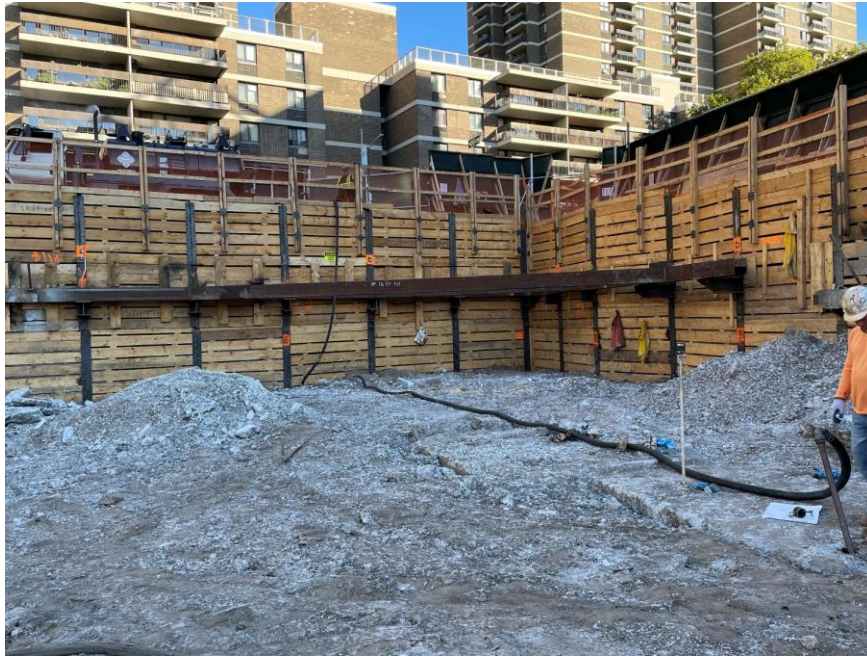


Photo 1: Brookside Environmental removing petroleum product/water mixture from a previously identified UST in the northeastern part of the site (facing northeast)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill during excavation in the south-central part of the site (facing southwest).

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PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Friday, September 2, 2022 WEATHER: Clear, 74.1 – 77.5 °F Wind: N @ 0.1 mph TIME: 6:00 AM – 6:15 PM MONITOR: Elsay Boak, Maitland Robinson, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 87 Langan (Environmental/Geotechnical) – Elsay Boak, Maitland Robinson, Eddie Cai, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn, Jack Dettra Lendlease (General Contractor) – Marty Cohen Akela Contracting, LLC (Excavation Contractor) – Akille McCallister New York State Department of Environmental Conservation (NYSDEC) – Marnie Chancey AKRF – Elizabeth Meade	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 20-foot-long by 30-foot-wide area to a maximum depth of about 9 feet below grade surface (bgs) for removal and off-site disposal of non-hazardous soil/fill in the south-central part of the site (waste characterization cell WC06). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Middlesex County Landfill facility in East Brunswick, NJ. The trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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 odors, staining, or instrumental evidence of contamination was recorded. CCJV actively applied Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill during excavation and loading for off-site disposal. CCJV excavated an about 20-foot-long by 50-foot-wide area to a maximum depth of about 9 feet bgs for removal and off-site disposal of hazardous lead-impacted soil/fill in the south-central part of site. Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Clean Earth of North Jersey (CENJ) facility in Kearny, NJ. The trucks were lined with polyethylene sheeting, covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. No odors, staining, or instrumental evidence of contamination was recorded. CCJV actively applied Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill during excavation and loading for off-site disposal. 		
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- Akela Contracting continued backfilling and compacting the previously excavated area off-site (along Peck Slip between previously installed support-of-excavation [SOE] lagging and the perimeter construction fencing) using clean sand to match the surrounding grade. Akela Contracting placed concrete atop the backfilled area for restoration of the Peck Slip sidewalk.
- Akela Contracting relocated a roll-off container containing previously excavated soil/fill from the off-site excavation area into the site in preparation for off-site disposal at a later date. The roll-off container was covered with polyethylene sheeting at the end of the work day.
- CCJV continued installation of steel sheet piles in the southeastern part of the site for SOE system installation.
- CCJV covered all exposed soil/fill and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

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Material Tracking

- CCJV exported 18 truckloads (approximately 360 cubic yards [CY]) of hazardous lead-impacted soil/fill from the south-central part of the site for off-site disposal at the CENJ facility, located in Kearney, NJ.
- CCJV exported 10 truckloads (approximately 200 CY) of non-hazardous soil/fill from waste characterization cell WC06 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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)								
Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	18	360	0	0
Project Total	5	85	31	620	47	940	201	4,020

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	10	200	0	0	0	0
Project Total	261	5,220	99	1,980	42	840

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Sampling Activities

- Langan collected two confirmation endpoint soil samples (EP25_EL_0.0 and EP30_EL_-0.5) and associated quality assurance/quality control (QA/QC) samples for laboratory analysis of NYSDEC Part 375/target compound list (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, target analyte list (TAL) metals (including hexavalent/trivalent chromium and total cyanide), per- and polyfluoroalkyl substances (PFAS), and/or 1,4-dioxane.
- Samples were relinquished to Alpha Analytical, Inc., an Environmental Laboratory Accredited Program (ELAP)-certified laboratory under standard chain-of-custody protocols.
- Sample elevations were surveyed by a professional surveyor.

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs, and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor, VOCs, and PM10 that approached or exceeded the action level established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$, 5.0 ppm, and 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ 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 (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.017	0.0	0.01
PM-2	0.019	0.0	0.01
PM-3	0.014	0.0	0.00
PM-4	0.000	0.0	0.01
PM-5	0.017	0.5	0.01
PM-6	0.005	0.0	0.02
WZ-1	0.013	0.0	0.01
WZ-2	0.010	0.0	0.01
WZ-3	0.006	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.030	0.0	0.03
PM-2	0.046	0.3	0.03
PM-3	0.058	0.1	0.01
PM-4	0.000	0.2	0.03
PM-5	0.031	1.6	0.02
PM-6	0.011	0.0	0.04
WZ-1	0.018	0.0	0.03
WZ-2	0.063	0.1	0.03
WZ-3	0.018	0.0	0.02

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

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By: Elsayh Boak

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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/m³ to 0.26 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:53am to 4:59pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:53am to 4:59pm during backfilling activities along Peck Slip and installation of steel sheet piles in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:53am to 4:59pm during excavation activities in the southern part of the site and installation of steel sheet piles in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued at 4:59pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.06 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

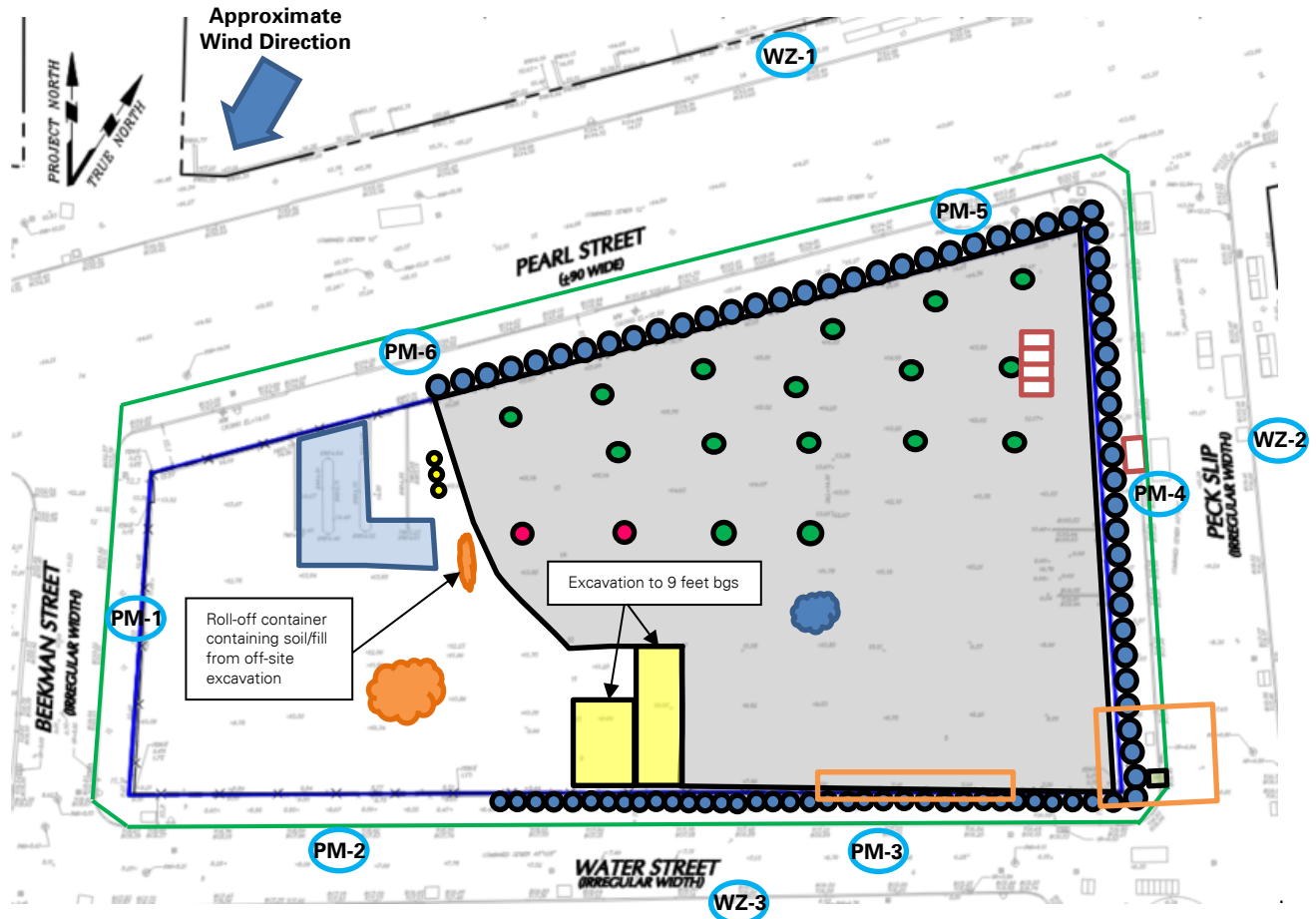
Anticipated Activities

- CCJV will continue installation of sheet piles for SOE system installation in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will remove previously identified underground storage tanks (USTs) from the northeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Elsayh Boak

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:

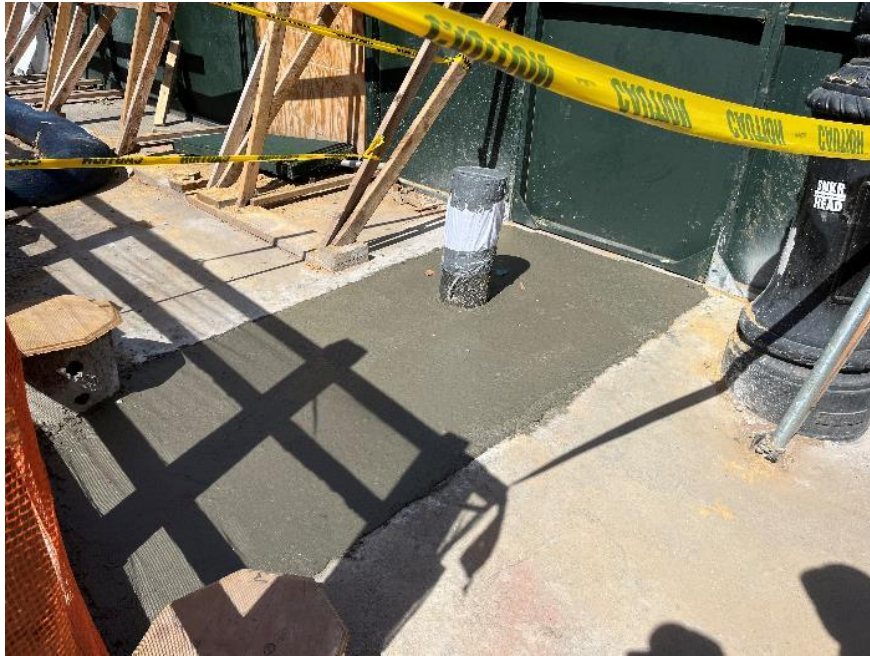


Photo 1: Concrete placed off-site for restoration of the Peck Slip sidewalk (facing northeast)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill during excavation in the south-central part of the site (facing north).

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Saturday, September 3, 2022 WEATHER: Clear, 74.3 – 80.9 °F Wind: N @ 0.1 mph TIME: 6:30 AM – 6:15 PM MONITOR: Jack Millman, Lauren Roper
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 88 Langan (Environmental/Geotechnical) – Jack Millman, Lauren Roper, Ashlene Bisran Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn, Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Marnie Chancey	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV continued installation of steel sheet piles in the southeastern part of the site for support-of-excavation (SOE) system installation. CCJV covered all exposed soil/fill and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Jack Millman LANGAN

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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	31	620	47	940	201	4,020

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	99	1,980	42	840

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

By: Jack Millman

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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, and PM10 that approached or exceeded the action level established by the CAMP (1.00 µg/m³, 5.0 ppm, and 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.018	0.0	0.01
PM-2	0.020	0.0	0.01
PM-3	0.016	0.0	0.00
PM-4	0.000	0.2	0.01
PM-5	0.020	0.0	0.01
PM-6	0.007	0.0	0.02
WZ-1	0.017	0.0	0.01
WZ-2	0.006	0.0	0.01
WZ-3	0.013	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.027	0.0	0.03
PM-2	0.041	0.0	0.03
PM-3	0.079	0.0	0.01
PM-4	0.000	0.5	0.04
PM-5	0.031	0.0	0.02
PM-6	0.014	0.2	0.31
WZ-1	0.027	0.0	0.03
WZ-2	0.019	0.0	0.03
WZ-3	0.045	0.0	0.02

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Jack Millman
			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 0.26 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:46am to 5:09pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:45am to 5:04pm during installation of steel sheet piles in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:45am to 5:01pm during installation of steel sheet piles in the southeastern part of the site.

Equipment Troubleshooting

- PM10 concentrations were not recorded at perimeter CAMP station PM-5 from 8:21am to 8:24am during recalibration of the DustTrak unit due to persistent negative readings. Data logging resumed at 8:25am and PM10 concentrations returned to background conditions following equipment recalibration. Ground-intrusive work did not begin until 9:00am and fugitive dust was not observed migrating from the site during this time.
- PM10 concentrations were not recorded at off-site CAMP station WZ-2 from 8:04am to 8:33am and from 1:18pm to 1:20pm due to a telemetry system error. In each instance, the modem within the CAMP station was reset and data logging resumed at 8:34am and 1:21pm, respectively. Ground-intrusive work did not begin until 9:00am and fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations above background conditions were not recorded at perimeter CAMP station PM-4, which was located between the work area and off-site CAMP station WZ-2.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 4:38pm and 5:09pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.05 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

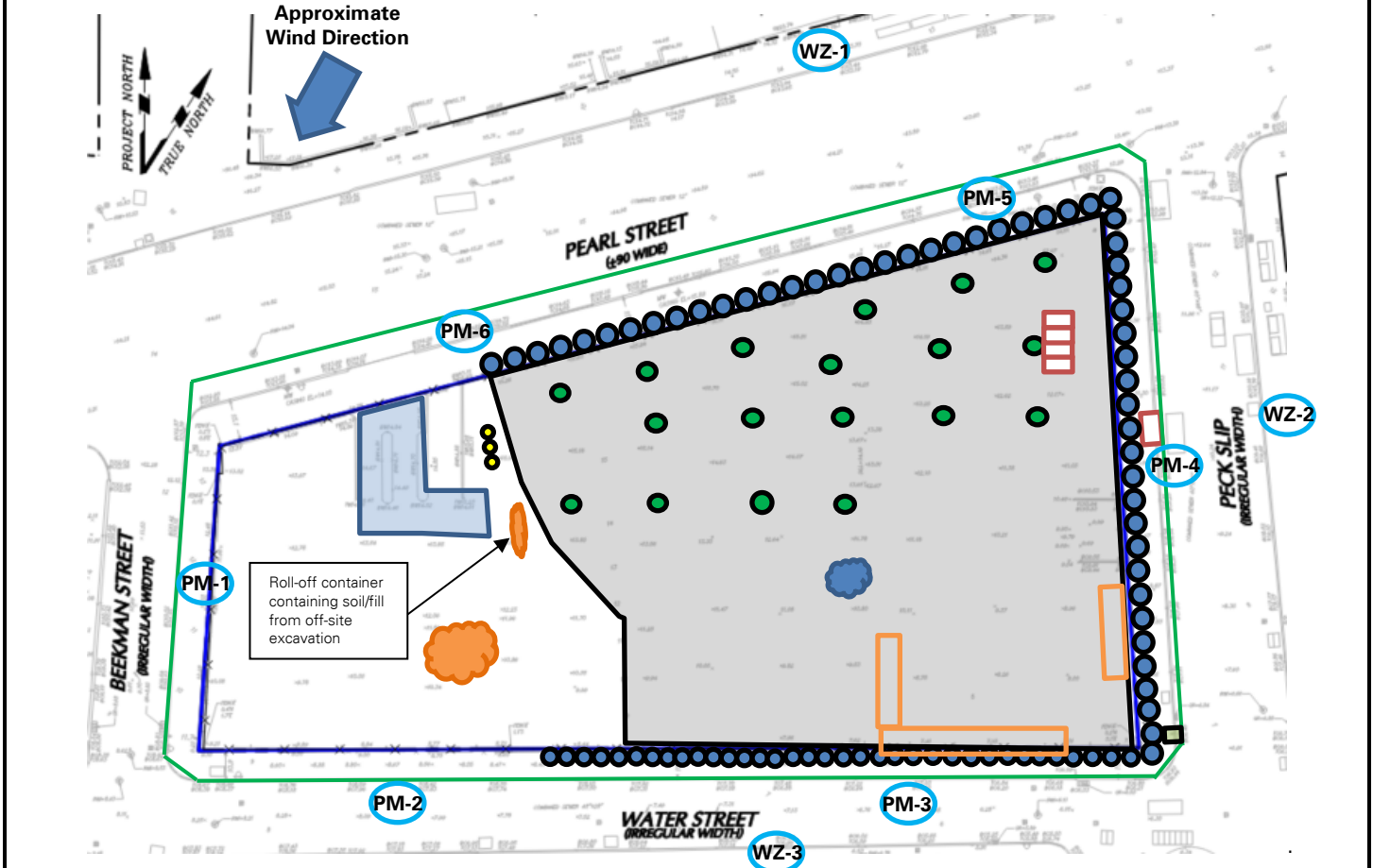
Anticipated Activities

- CCJV will continue installation of sheet piles for SOE system installation in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will remove previously identified underground storage tanks (USTs) from the northeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Jack Millman

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV installing a steel sheet pile for SOE system installation in the southeastern part of the site (facing northwest)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill in the eastern part of the site (facing southeast).

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Jack Millman LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Sunday, September 4, 2022 WEATHER: Sunny, 74.0 – 76.0 °F Wind: N @ 4.0 – 6.0 mph TIME: 8:15 AM – 10:45 AM MONITOR: Lexi Haley
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290	PRESENT AT SITE: Day 89 Langan (Environmental/Geotechnical) – Lexi Haley Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra LendLease (General Contractor)	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: <p>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).</p> <p>Site Activities</p> <ul style="list-style-type: none">CCJV covered all exposed soil/fill and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Lexi Haley	LANGAN

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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	31	620	47	940	201	4,020

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	99	1,980	42	840

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

By: Lexi Haley

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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 photoionization detector (PID) to monitor volatile organic compound (VOC) concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

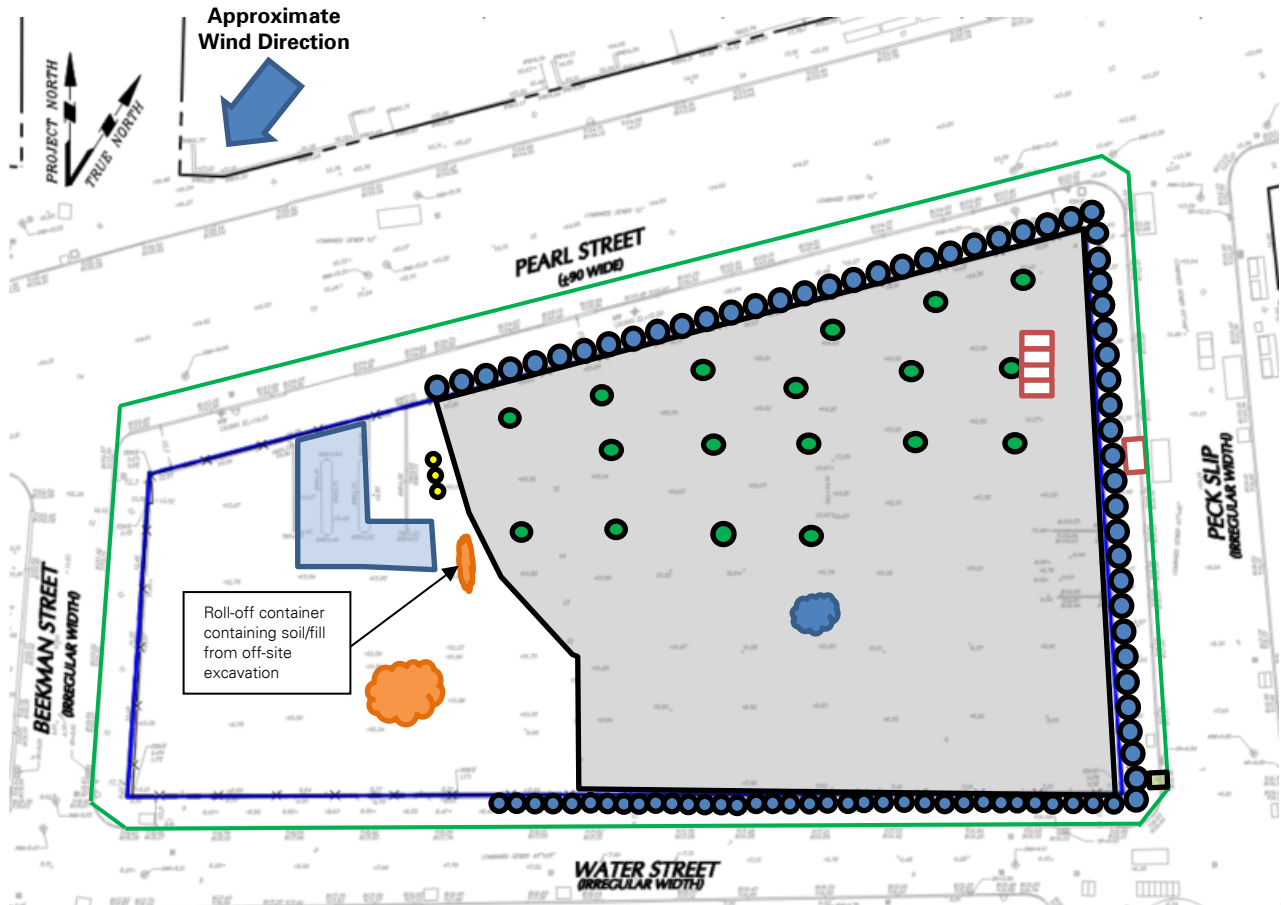
Anticipated Activities

- CCJV will continue installation of sheet piles for SOE system installation in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will remove previously identified underground storage tanks (USTs) from the northeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lexi Haley LANGAN
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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

- 1) Locations of air monitoring stations are approximate.

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

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

By: Lexi Haley

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill across the site (facing southwest).

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lexi Haley LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Monday, September 5, 2022 WEATHER: Sunny, 75.0 – 81.0 °F Wind: NNE @ 1.8 mph TIME: 9:00 AM – 10:00 AM MONITOR: Farielle Brazier
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290	PRESENT AT SITE: Day 90 Langan (Environmental/Geotechnical) – Farielle Brazier Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra LendLease (General Contractor)	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV covered all exposed soil/fill and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Farielle Brazier LANGAN

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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
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Project Total	5	85	31	620	47	940	201	4,020

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	99	1,980	42	840

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

By: Farielle Brazier

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Farielle Brazier
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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.
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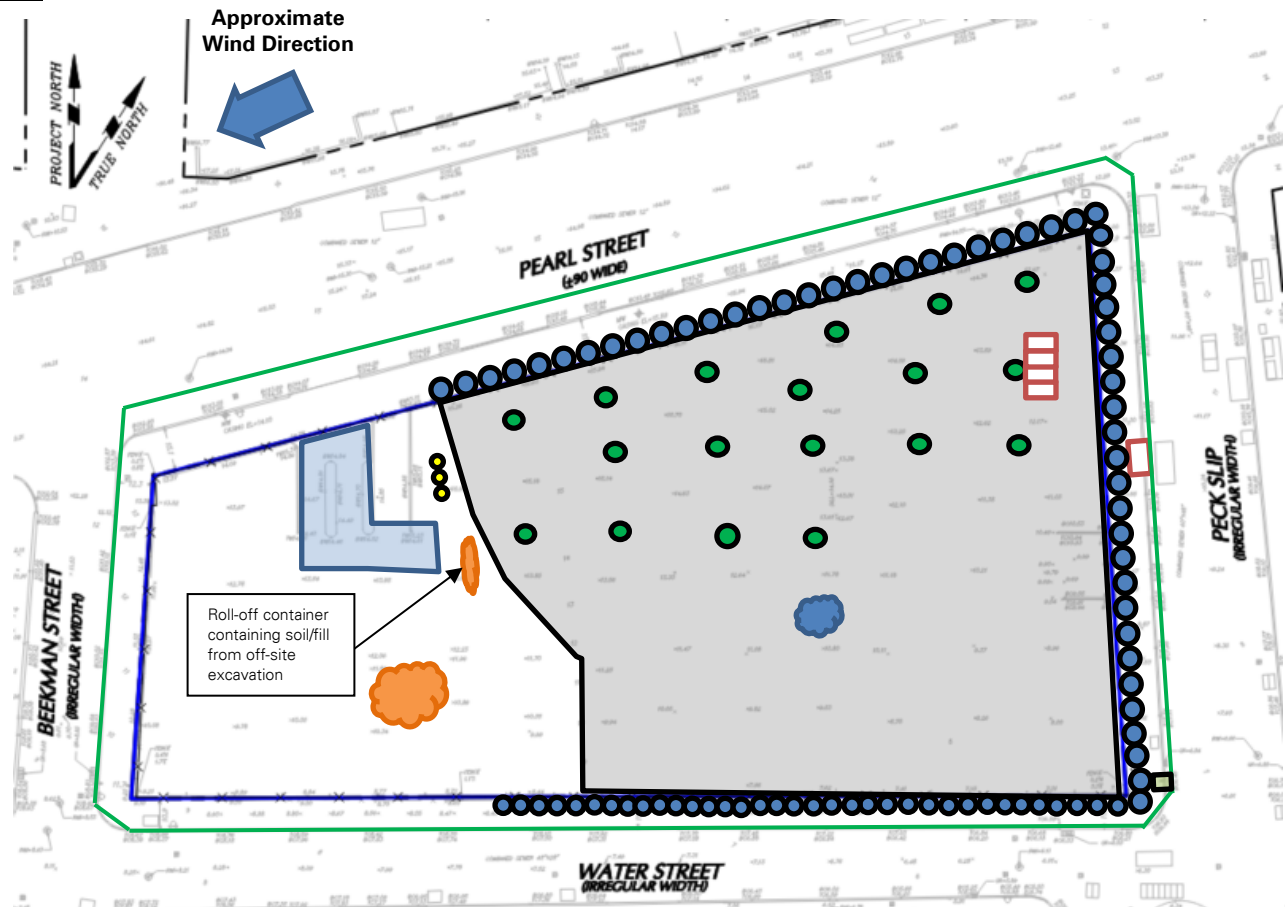
Anticipated Activities

- CCJV will continue installation of sheet piles for SOE system installation in the southeastern part of the site.
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- CCJV will remove previously identified underground storage tanks (USTs) from the northeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Farielle Brazier LANGAN
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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
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Notes:

1) Locations of air monitoring stations are approximate.

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- Approximate Location of Soldier Pile
- Approximate Perimeter Construction Fence Location
- Previous Excavation Area
- Approximate Excavation Area
- Approximate Backfill Area
- Approximate Endpoint Sample Location
- Approximate Location of Previously Collected Endpoint Sample

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

By: Farielle Brazier

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: Atmos® AC-645 dust/vapor suppressing foam applied to exposed soil/fill across the site (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Farielle Brazier
		LANGAN	

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Tuesday, September 6, 2022 WEATHER: Clear, 70.3 – 73.4 °F Wind: SE @ 0.7 – 4.6 mph TIME: 6:00 AM – 5:00 PM MONITOR: Elsay Boak, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 91 Langan (Environmental/Geotechnical) – Elsay Boak, Eddie Cai, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn, Jack Dettra Lendlease (General Contractor) – Marty Cohen Akela Contracting, LLC (Excavation Contractor) – Akille McCallister New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam AKRF – Theresa Imbriolo	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated previously stockpiled hazardous lead-impacted soil/fill in the southwestern part of the site (the former pile cap construction area) for removal and off-site disposal. Excavated soil/fill was loaded into tri-axle dump trucks for off-site disposal at the Clean Earth of North Jersey (CENJ) facility in Kearny, NJ. The trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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 odors, staining, or instrumental evidence of contamination was recorded. The remaining soil/fill was covered with polyethylene sheeting and was surrounded with silt fencing and hay bales for erosion and sediment control in preparation for off-site disposal at a later date. CCJV continued installation of steel sheet piles in the southeastern part of the site for support-of-excavation (SOE) system installation. CCJV covered all exposed soil/fill and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Eddie Cai LANGAN	

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 20 truckloads (approximately 400 cubic yards [CY]) of previously stockpiled hazardous lead-impacted soil/fill for off-site disposal at the Clean Earth of North Jersey facility, located in Kearney, 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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	20	400	0	0
Project Total	5	85	31	620	67	1,340	201	4,020

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	99	1,980	42	840

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

By: Eddie Cai

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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, and PM10 that approached or exceeded the action level established by the CAMP (1.00 µg/m³, 5.0 ppm, and 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 µg/m³ to 0.07 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.015	0.0	0.01
PM-2	0.028	0.0	0.00
PM-3	0.020	0.0	0.00
PM-4	0.000	0.1	0.01
PM-5	0.006	0.0	0.00
PM-6	0.021	0.3	0.01
WZ-1	0.055	0.0	0.01
WZ-2	0.008	0.0	0.00
WZ-3	0.017	0.4	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.035	0.0	0.02
PM-2	0.048	0.0	0.01
PM-3	0.034	0.0	0.00
PM-4	0.000	0.6	0.03
PM-5	0.009	0.0	0.01
PM-6	0.034	0.5	0.02
WZ-1	0.075	0.0	0.02
WZ-2	0.023	0.0	0.01
WZ-3	0.033	0.7	0.02

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Eddie Cai
			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 0.14 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:08am to 3:15pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:58am to 3:16pm during installation of steel sheet piles in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:08am to 3:15pm during installation of steel sheet piles in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:15pm and 3:16pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.09 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

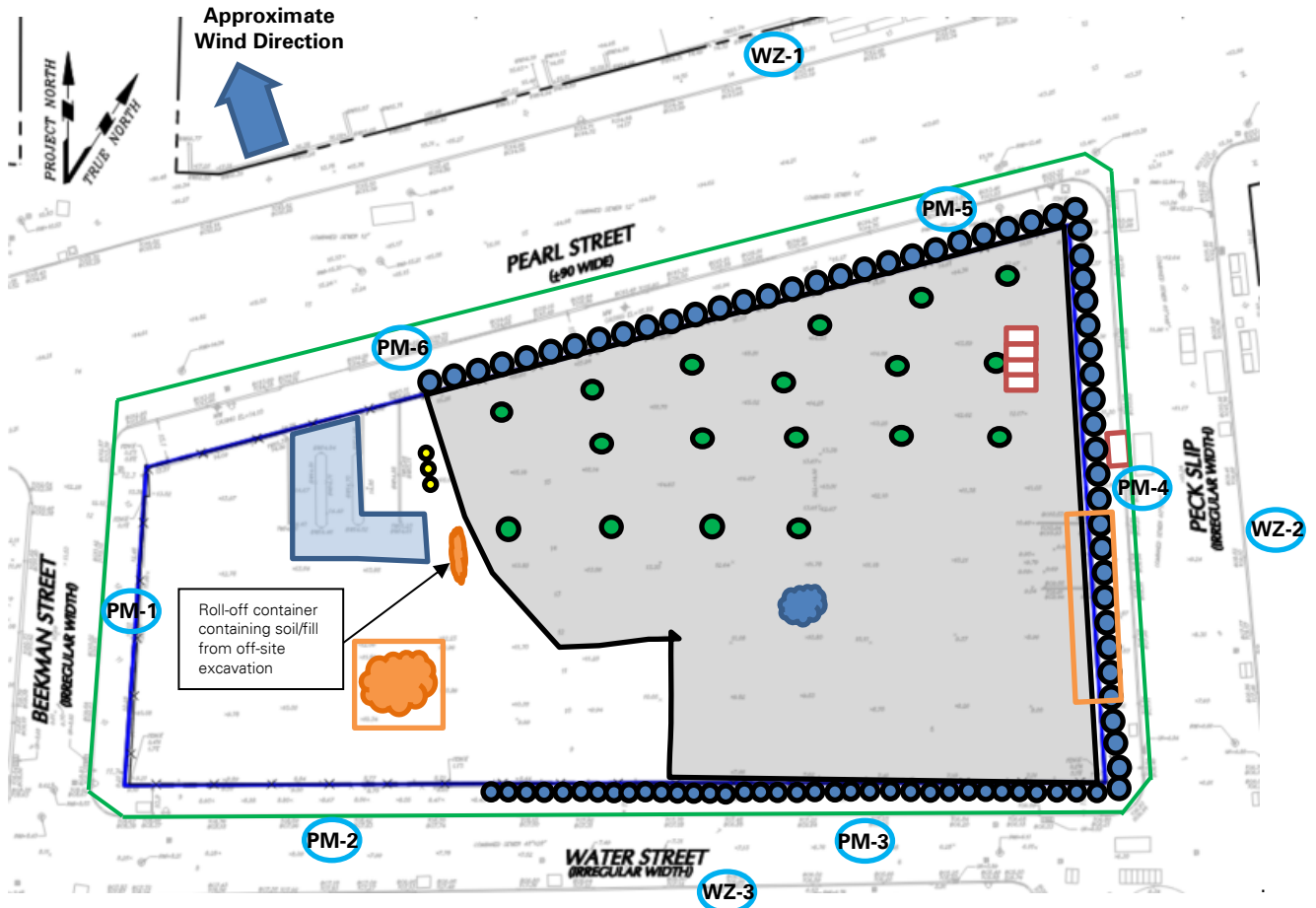
Anticipated Activities

- CCJV will continue installation of sheet piles for SOE system installation in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will remove previously identified underground storage tanks (USTs) from the northeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Eddie Cai
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Eddie Cai

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: Hazardous lead-impacted soil/fill stockpile covered with polyethylene sheeting and surrounded with silt fencing and hay bales in the southwestern part of the site (facing southwest)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill at the end of the work day (facing southeast).

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

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Wednesday, September 7, 2022 WEATHER: Clear, 66.2 – 72.8 °F Wind: NE @ 0.8 – 8.9 mph TIME: 6:00 AM – 6:00 PM MONITOR: Elsay Boak, Brian Kenneally
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 92 Langan (Environmental/Geotechnical) – Elsay Boak, Brian Kenneally, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn, Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Aaron Fischer	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated previously stockpiled hazardous lead-impacted soil/fill in the southwestern part of the site (the former pile cap construction area) for removal and off-site disposal. Excavated soil/fill was loaded into tri-axle dump trucks for off-site disposal at the Clean Earth of North Jersey (CENJ) facility in Kearny, NJ. The trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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 odors, staining, or instrumental evidence of contamination was recorded. The remaining soil/fill was covered with polyethylene sheeting and was surrounded with silt fencing and hay bales for erosion and sediment control in preparation for off-site disposal at a later date. CCJV continued installation of steel sheet piles in the southeastern part of the site for support-of-excavation (SOE) system installation. <ul style="list-style-type: none"> Petroleum-like product was observed percolating to the ground surface along the interior face of the steel sheet pile wall during installation. CCJV placed absorbent pads along the steel sheet piles to remove the product and spent absorbent pads will be containerized in a 55-gallon steel drum in preparation for off-site disposal at a later date. CCJV removed four previously identified underground storage tanks (USTs) from the northeastern part of the site. The USTs were placed on and covered with polyethylene sheeting in the north-central part of the site in preparation for additional cleaning and disposal at a later date. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Elsay Boak LANGAN

SITE OBSERVATION REPORT

- The USTs were screened for odors, staining, organic vapors, and mercury vapor using a handheld PID and handheld Jerome® J505 mercury vapor analyzer, respectively. No odors, staining, or instrumental evidence of contamination was recorded.
- Following removal of the USTs, the surrounding soil/fill was temporarily graded into the former UST area and will be excavated to facilitate collection of a confirmation soil sample at a later date.
- CCJV covered all exposed soil/fill and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 6 truckloads (approximately 120 cubic yards [CY]) of previously stockpiled hazardous lead-impacted soil/fill for off-site disposal at the CENJ facility, located in Kearney, NJ.
- CCJV exported 1 roll-off container (approximately 20 CY) containing non-hazardous soil/fill from the off-site excavation area for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, 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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)								
Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	6	120	0	0
Project Total	5	85	31	620	73	1,460	201	4,020

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	99	1,980	42	840

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs, and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor, VOCs, and PM10 that approached or exceeded the action level established by the CAMP (1.00 µg/m³, 5.0 ppm, and 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.011	0.0	0.01
PM-2	0.018	0.0	0.00
PM-3	0.010	0.0	0.00
PM-4	0.004	0.0	0.01
PM-5	0.003	0.0	0.01
PM-6	0.011	0.0	0.01
WZ-1	0.073	0.0	0.01
WZ-2	0.006	0.0	0.00
WZ-3	0.007	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.014	0.0	0.02
PM-2	0.049	0.0	0.01
PM-3	0.016	0.0	0.01
PM-4	0.068	0.0	0.02
PM-5	0.006	0.0	0.03
PM-6	0.013	0.0	0.02
WZ-1	0.081	0.0	0.02
WZ-2	0.012	0.0	0.01
WZ-3	0.014	0.0	0.02

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			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 0.14 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:56am to 5:08pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:56am to 5:08pm during installation of steel sheet piles in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:20am to 5:05pm during excavation activities in the southern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued at 5:06pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station were recorded at 0.00 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

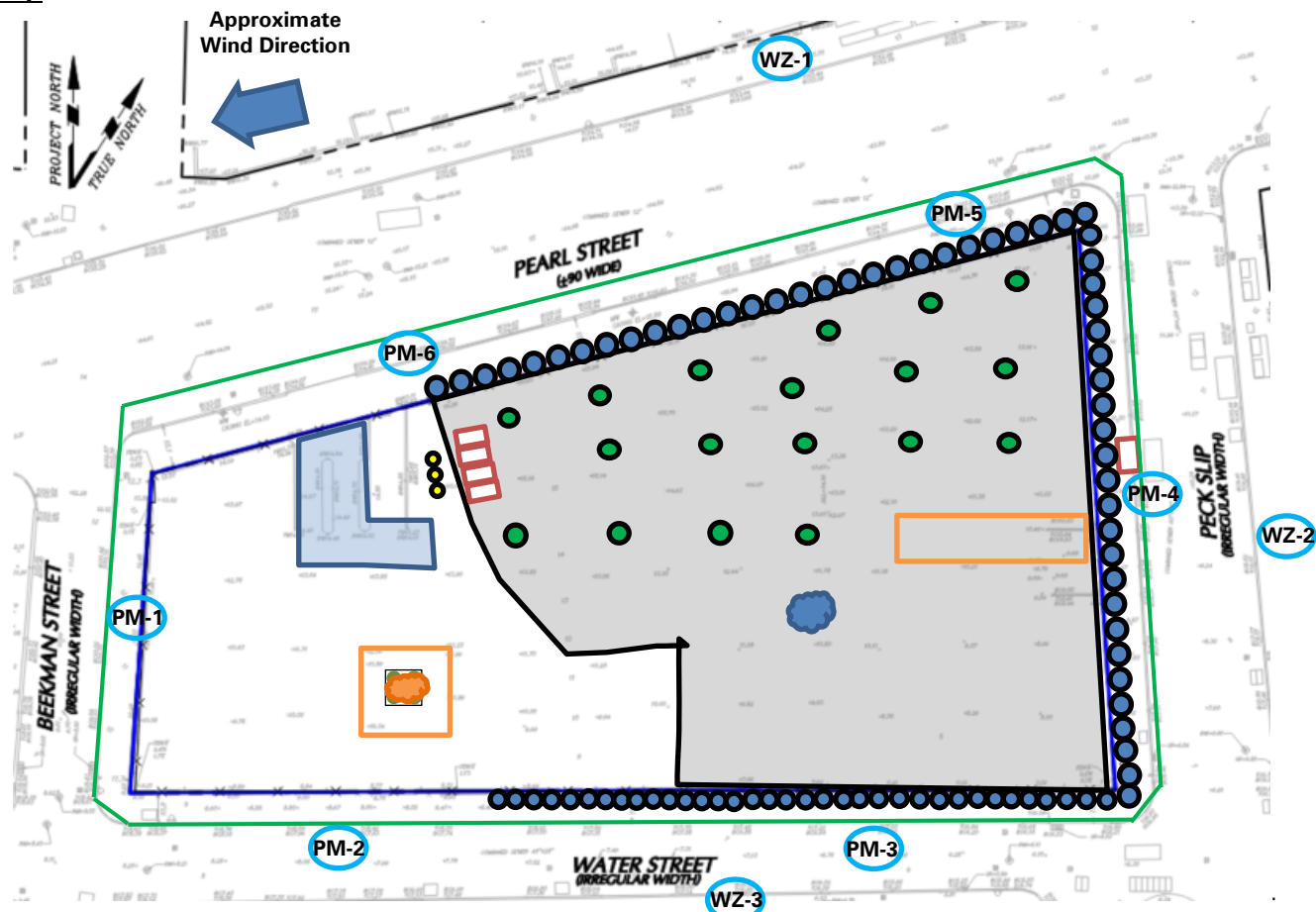
Anticipated Activities

- CCJV will continue installation of sheet piles for SOE system installation in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will clean previously removed underground storage tanks (USTs) in preparation for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV exporting hazardous lead-impacted soil/fill into tri-axle trucks for off-site disposal (facing southwest)



Photo 2: USTs placed on polyethylene sheeting in preparation for additional cleaning and off-site disposal (facing west)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Thursday, September 8, 2022 WEATHER: Clear, 67.6 – 73.2 °F Wind: NE @ 0.9 – 8.6 mph TIME: 6:00 AM – 6:00 PM MONITOR: Elsayh Boak, Brian Kenneally
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 93 Langan (Environmental/Geotechnical) – Elsayh Boak, Brian Kenneally, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated previously stockpiled hazardous lead-impacted soil/fill in the southwestern part of the site (the former pile cap construction area) for removal and off-site disposal. Excavated soil/fill was loaded into tri-axle dump trucks for off-site disposal at the Clean Earth of North Jersey (CENJ) facility in Kearny, NJ. The trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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 odors, staining, or instrumental evidence of contamination was recorded. The remaining soil/fill was covered with polyethylene sheeting and was surrounded with silt fencing and hay bales for erosion and sediment control in preparation for off-site disposal at a later date. CCJV graded an about 40-foot-long by 30-foot-wide area in the south-central part of the site for maintenance of the access ramp. CCJV completed installation of steel sheet piles in the southeastern part of the site for support-of-excavation (SOE) system installation. CCJV covered all exposed soil/fill and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 2 truckloads (approximately 40 cubic yards [CY]) of previously stockpiled hazardous lead-impacted soil/fill for off-site disposal at the CENJ facility, located in Kearney, 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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	2	40	0	0
Project Total	5	85	31	620	75	1,500	201	4,020

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	99	1,980	42	840

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs, and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor or VOCs that approached or exceeded the action level established by the CAMP (1.00 µg/m³ and 5.0 ppm, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 µg/m³ to 0.06 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.2 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.015	0.0	0.01
PM-2	0.018	0.0	0.00
PM-3	0.011	0.1	0.00
PM-4	0.003	0.0	0.01
PM-5	0.014	0.0	0.00
PM-6	0.009	0.0	0.01
WZ-1	0.032	0.0	0.01
WZ-2	0.004	0.0	0.01
WZ-3	0.007	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.045	0.0	0.03
PM-2	0.028	0.0	0.01
PM-3	0.031	0.1	0.01
PM-4	0.003	0.1	0.03
PM-5	0.199* @ 8:52am	0.1	0.02
PM-6	0.015	0.1	0.05
WZ-1	0.043	0.0	0.02
WZ-2	0.008	0.0	0.22
WZ-3	0.012	0.1	0.02

• mg/m³ = milligrams per cubic meter • ppm = parts per million • µg/m³ = micrograms per cubic meter

- * PM10 concentrations at perimeter CAMP station PM-5 exceeded the action level established in the CAMP (0.100 mg/m³) from 8:48am to 9:02am (15 minutes). The exceedance was not the result of ground-intrusive

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SITE OBSERVATION REPORT

activities associated with soil/fill at the site and work was halted to accommodate school drop-off during this time. Fugitive dust was not observed migrating from 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 µg/m³ to 0.13 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:01am to 5:06pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:59am to 5:06pm due to exposed soil/fill within 20 feet of the eastern site boundary.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:59am to 5:06pm during excavation and grading activities in the southern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 5:02pm and 5:06pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.04 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.2 ppm.

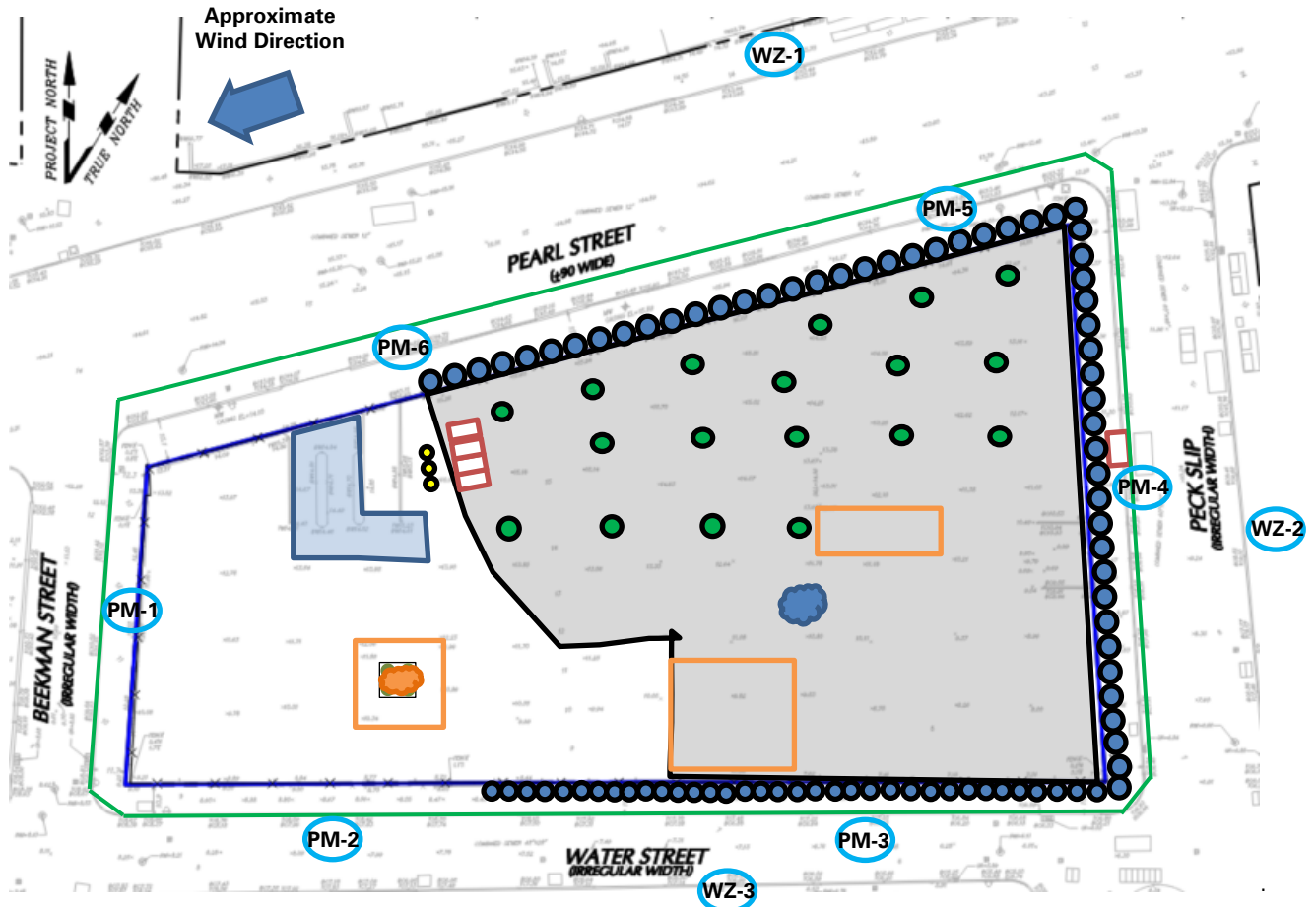
Anticipated Activities

- CCJV will begin welding for SOE system installation in the southeastern part of the site.
- CCJV will begin installing the dewatering system for future excavation in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will clean previously removed underground storage tanks (USTs) in preparation for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV loading hazardous lead-impacted soil/fill into a tri-axle truck for off-site disposal (facing east)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill to create a temporary overnight cover (facing north)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Friday, September 9, 2022 WEATHER: Clear, 65 – 82 °F Wind: ENE @ 1.2 – 6.4 mph TIME: 6:00 AM – 6:00 PM MONITOR: Brian Kenneally, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 94 Langan (Environmental/Geotechnical) – Brian Kenneally, Eddie Cai Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated previously stockpiled hazardous lead-impacted soil/fill in the southwestern part of the site (the former pile cap construction area) for removal and off-site disposal. Excavated soil/fill was loaded into tri-axle dump trucks for off-site disposal at the Clean Earth of North Jersey (CENJ) facility in Kearny, NJ. The trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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 odors, staining, or instrumental evidence of contamination was recorded. CCJV welded steel walers along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. Tristate Groundwater began installation of the dewatering system in the eastern part of the site. CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 2 truckloads (approximately 40 cubic yards [CY]) of previously stockpiled hazardous lead-impacted soil/fill for off-site disposal at the CENJ facility, located in Kearney, 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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	2	40	0	0
Project Total	5	85	31	620	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 or PM10 that approached or exceeded the action level established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$ and 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.02 $\mu\text{g}/\text{m}^3$.
- Background concentrations of VOCs at each CAMP station were recorded at 0.2 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.016	0.1	0.01
PM-2	0.021	0.0	0.01
PM-3	0.009	0.0	0.00
PM-4	0.000	0.6	0.02
PM-5	0.013	0.0	0.02
PM-6	0.009	0.0	0.02
WZ-1	0.017	0.0	0.01
WZ-2	0.009	0.0	0.01
WZ-3	0.006	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.027	0.3	0.04
PM-2	0.047	0.0	0.02
PM-3	0.022	0.1	0.01
PM-4	0.000	* 6.0 @ 11:39am	0.05
PM-5	0.022	0.1	0.04
PM-6	0.017	0.0	0.04
WZ-1	0.024	0.0	0.03
WZ-2	0.022	0.1	0.03
WZ-3	0.012	0.1	0.03

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

- * VOC concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (5.0 ppm) from 11:35am to 11:46am (12 minutes). The exceedance was caused by a sealant used to connect

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SITE OBSERVATION REPORT

PVC piping for the dewatering system adjacent to perimeter CAMP station PM-4 and was not the result of ground-intrusive activities associated with soil/fill at the site.

Equipment Troubleshooting

- The Jerome® J505 units at perimeter CAMP stations PM-1, PM-3, PM-5, and PM-6 intermittently did not transmit data through the remote telemetry system throughout the work day. The mercury vapor data from each Jerome® J505 unit was manually downloaded at the end of the work day and is reflected in the Daily Air Monitoring Report. During the below times, a Jerome® J405 unit was connected to telemetry to provide real-time mercury vapor data to field personnel while continuing to monitor each area with a Jerome® J505 unit.
 - Perimeter CAMP station PM-1 from 9:11am to 5:09pm
 - Perimeter CAMP station PM-3 from 7:02am to 5:08pm
 - Perimeter CAMP station PM-5 from 7:02am to 5:08pm
 - Perimeter CAMP station PM-6 from 3:48pm to 5:08pm

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 0.12 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:03am to 5:09pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:02am to 5:09pm due to exposed soil/fill within 20 feet of the eastern site boundary.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:02am to 5:09pm during excavation and loading of soil/fill in the southern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 5:08pm and 5:09pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station recorded at 0.00 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally LANGAN
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SITE OBSERVATION REPORT

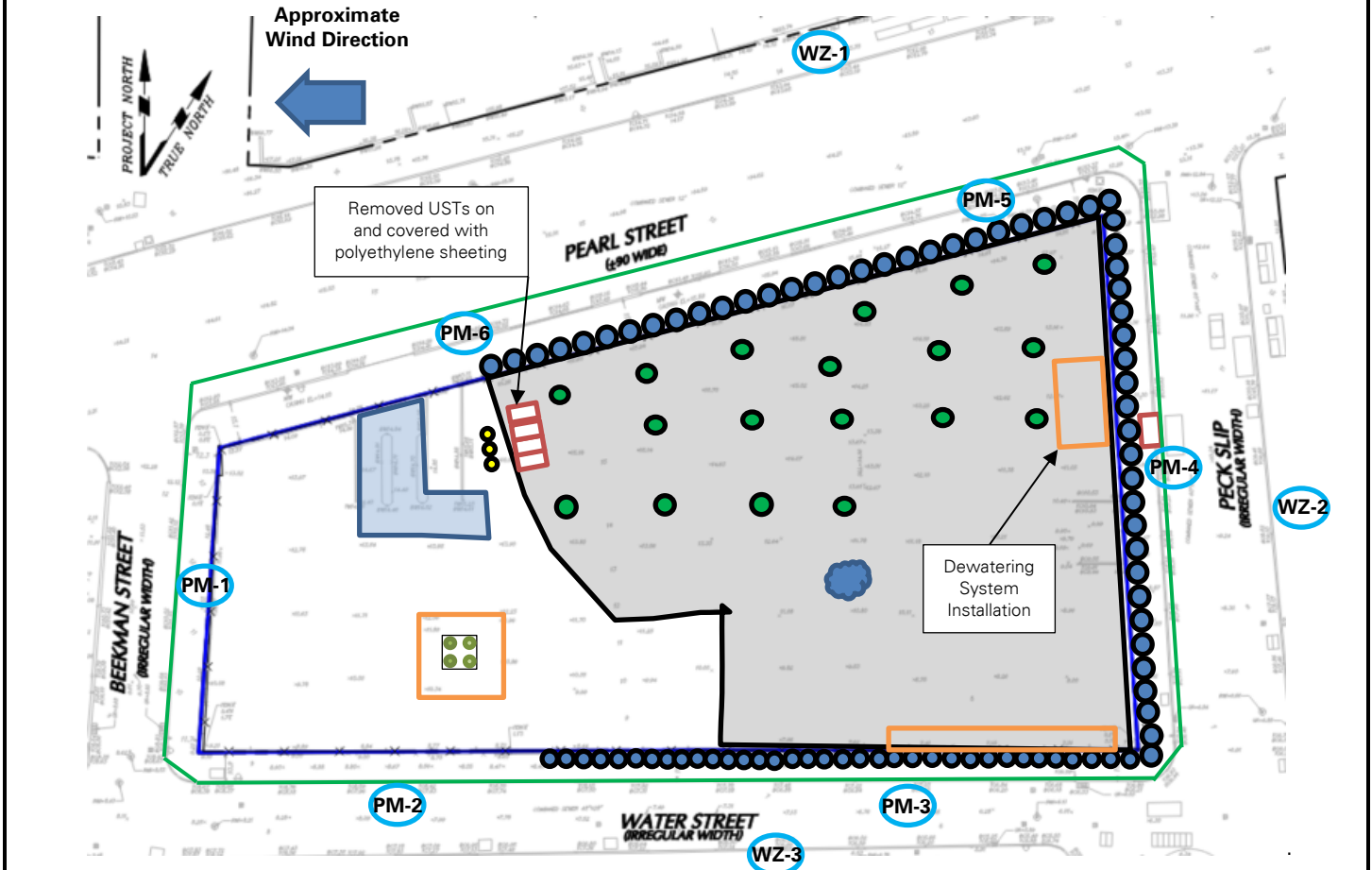
Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installing the dewatering system in the eastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will clean previously removed underground storage tanks (USTs) in preparation for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally LANGAN
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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: Dewatering system components in the eastern part of the site (facing east)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill to create a temporary overnight cover (facing south)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Saturday, September 10, 2022 WEATHER: Clear, 71.0 – 86.0 °F Wind: NW @ 0.6 – 3.8 mph TIME: 6:45 AM – 6:00 PM MONITOR: Eddie Cai, Joseph Kirsits
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 95 Langan (Environmental/Geotechnical) – Eddie Cai, Joseph Kirsits, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV installed tie-back rods and welded steel walers along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. Tristate Groundwater continued installation of the dewatering system in the eastern and southeastern parts of the site. CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Eddie Cai LANGAN

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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	31	620	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Eddie Cai

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Eddie Cai
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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs, and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor or VOCs that approached or exceeded the action level established by the CAMP (1.00 µg/m³ and 5.0 ppm, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 µg/m³ to 0.04 µg/m³.
- 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/m³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)
PM-1	0.022	0.0	0.01
PM-2	0.034	0.0	0.01
PM-3	0.028	0.0	0.00
PM-4	0.000	0.1	0.01
PM-5	0.022	0.1	0.02
PM-6	0.018	0.0	0.02
WZ-1	0.009	0.0	0.01
WZ-2	0.011	0.1	0.01
WZ-3	0.014	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.037	0.0	0.04
PM-2	0.059	0.0	0.24
PM-3	* 0.197 @ 9:26am	0.1	0.01
PM-4	0.000	0.5	0.03
PM-5	0.036	0.2	0.05
PM-6	0.027	0.0	0.04
WZ-1	0.020	0.0	0.03
WZ-2	0.018	0.3	0.03
WZ-3	0.031	0.1	0.03

• mg/m³ = milligrams per cubic meter • ppm = parts per million • µg/m³ = micrograms per cubic meter

- * PM10 concentrations at perimeter CAMP station PM-3 exceeded the action level established in the CAMP (0.100 mg/m³) from 9:15am to 9:30am (16 minutes). The exceedance was caused by welding adjacent to

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SITE OBSERVATION REPORT

perimeter CAMP station PM-3 and was not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site.

Equipment Troubleshooting

- The Jerome® J505 units at perimeter CAMP station PM-4 and off-site CAMP station WZ-3 intermittently did not transmit data through the remote telemetry system throughout the work day. The mercury vapor data from each Jerome® J505 unit was manually downloaded at the end of the work day and is reflected in the Daily Air Monitoring Report. During the below times, a Jerome® J405 unit was connected to telemetry to provide real-time mercury vapor data to field personnel while continuing to monitor each area with a Jerome® J505 unit.
 - Perimeter CAMP station PM-4 from 8:13am to 1:20pm
 - Off-site CAMP station WZ-3 from 1:28pm to 4:42pm

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. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 8:10am to 4:42pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 8:10am to 4:42pm due to exposed soil/fill within 20 feet of the eastern site boundary.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 8:10am to 4:42pm during tieback installation along the southern site boundary.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued at 4:42pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.03 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

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SITE OBSERVATION REPORT

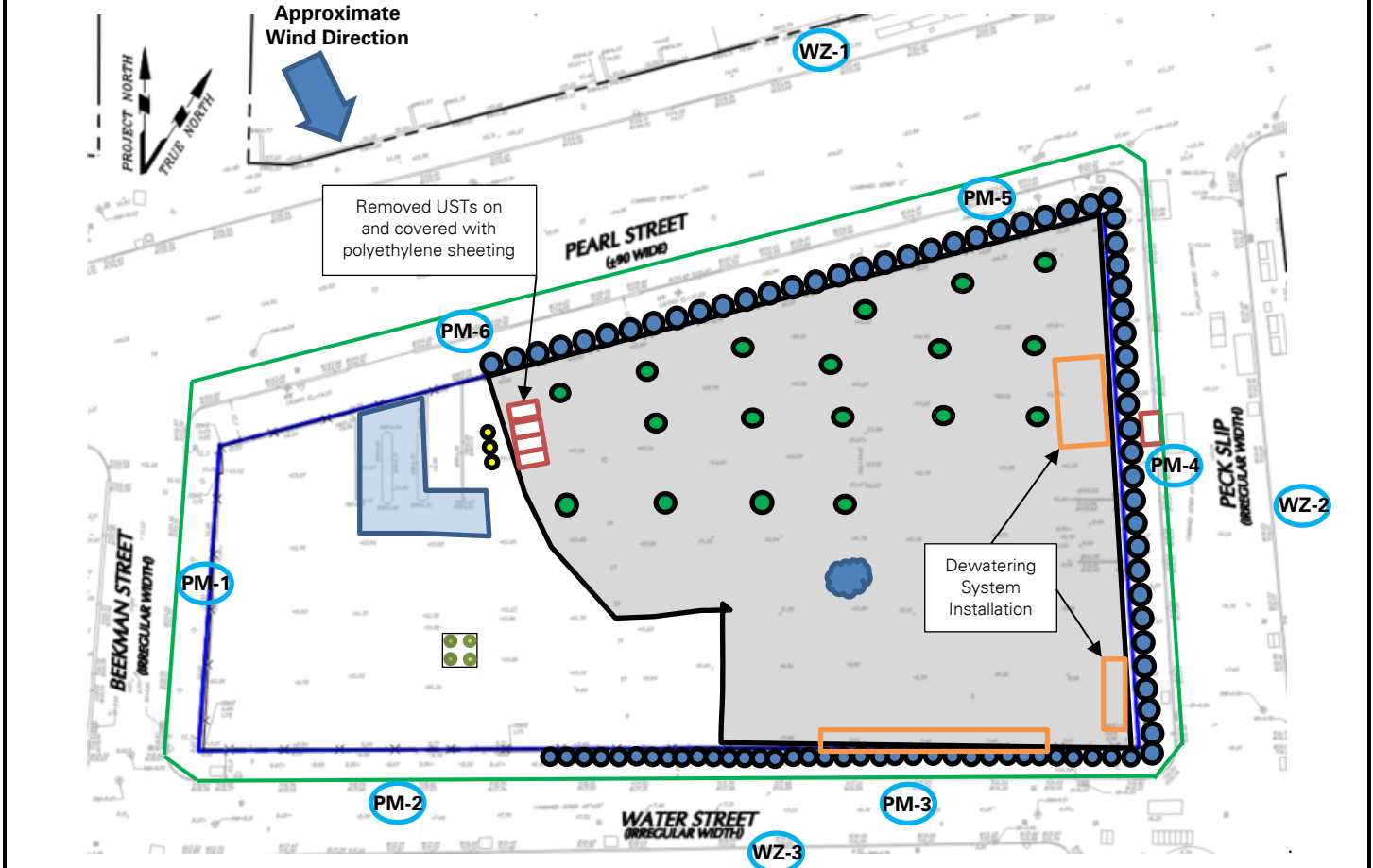
Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installing the dewatering system in the eastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will clean previously removed underground storage tanks (USTs) in preparation for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across 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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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By: Eddie Cai

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SITE OBSERVATION REPORT

Select Site Photographs:

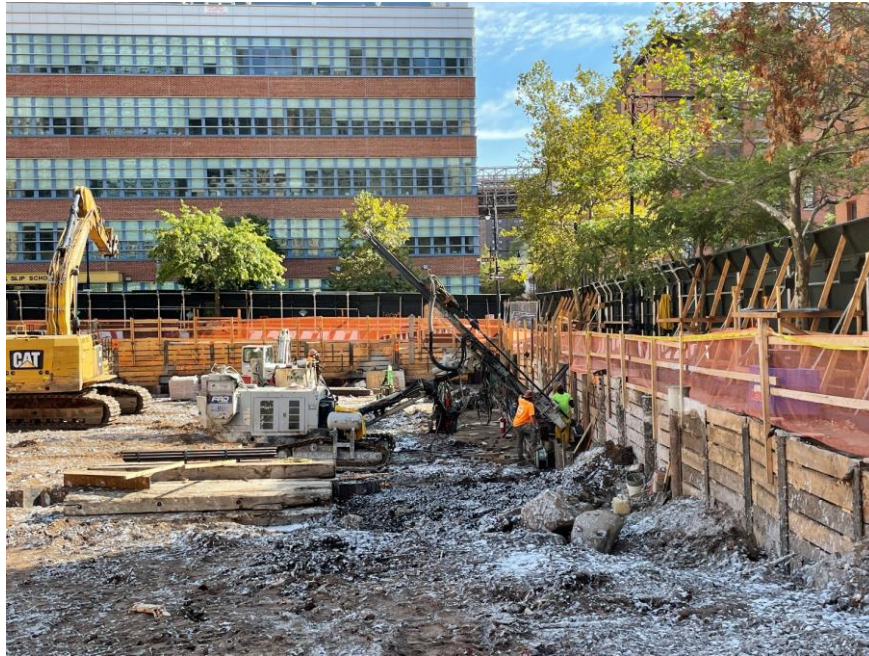


Photo 1: CCJV installing a tie-back along the southern boundary of the site (facing southeast)



Photo 2: Tristate Groundwater installing the dewatering system in the southeastern part of the site (facing northwest)

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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Sunday, September 11, 2022 WEATHER: Overcast/Rain, 72 – 75 °F Wind: SSW @ 1.2 mph TIME: 8:30 AM – 10:00 AM MONITOR: Camille Quick
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 96 Langan (Environmental) – Camille Quick Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra LendLease (General Contractor)	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Camille Quick LANGAN

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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	31	620	77	1,540	201	4,020

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	99	1,980	42	840

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By: Camille Quick

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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SITE OBSERVATION REPORT

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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 photoionization detector (PID) to monitor volatile organic compound (VOC) concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

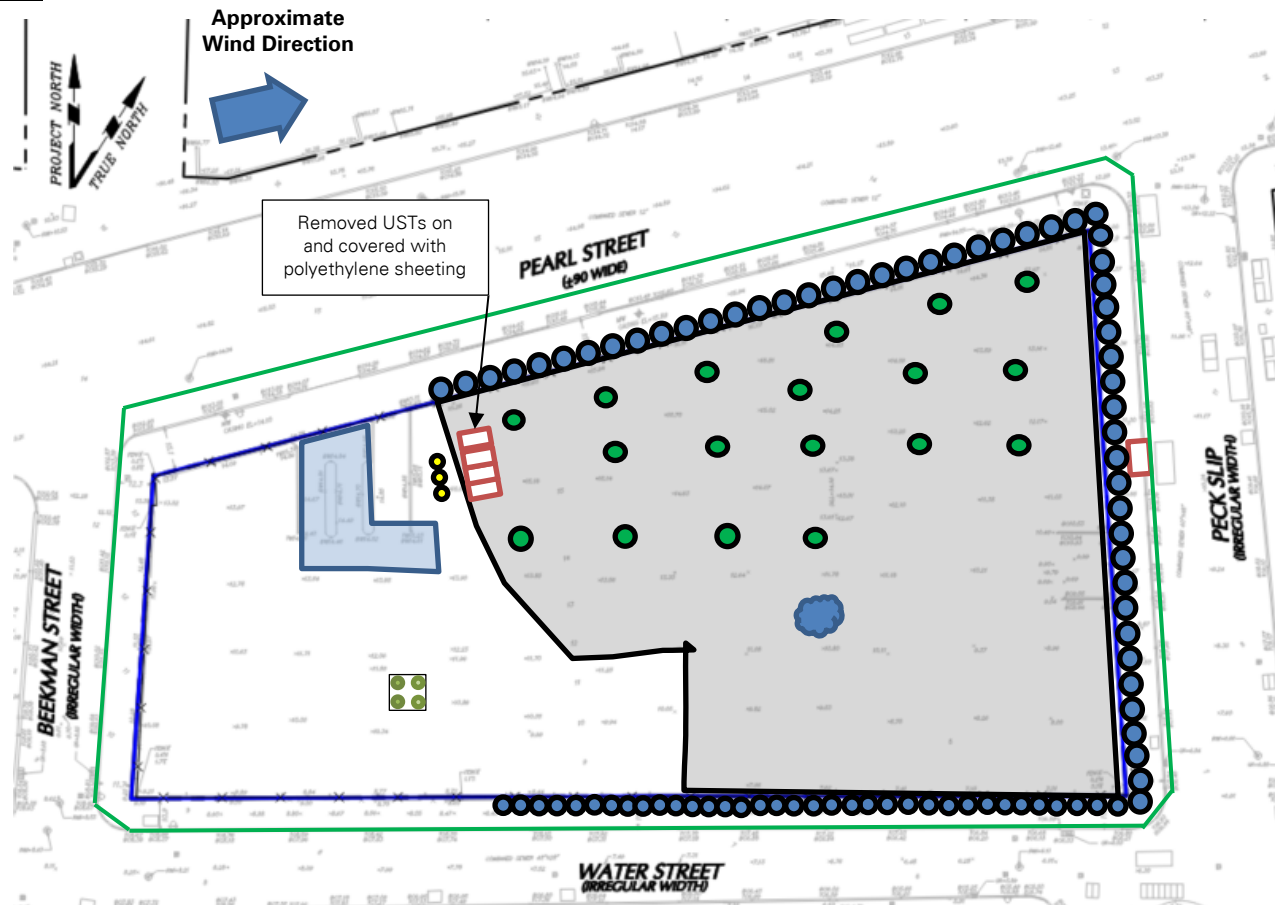
Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installing the dewatering system in the eastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will clean previously removed underground storage tanks (USTs) in preparation for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Camille Quick LANGAN
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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Camille Quick

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: Atmos® AC-645 dust/vapor suppressing foam applied to exposed soil/fill in the southeastern part of the site (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Camille Quick
		LANGAN	

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Monday, September 12, 2022 WEATHER: Overcast, 69.0 – 83.0 °F Wind: N @ 1.1 – 2.2 mph TIME: 6:00 AM – 5:30 PM MONITOR: Brian Kenneally, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 97 Langan (Environmental/Geotechnical) – Brian Kenneally, Eddie Cai, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff Brookside Environmental (UST Cleaning) – Oscar Perrero New York State Department of Environmental Conservation (NYSDEC) – Michael Solecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> • CCJV installed tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. • CCJV installed ten dewatering wells to depths ranging between 23 and 25 feet below grade surface (bgs) within the installed steel sheet pile wall for dewatering system installation in the southwestern part of the site. Drilling spoils were not generated during installation of the dewatering wells. • Tristate Groundwater continued installation of the dewatering system in the eastern and southeastern parts of the site. • Brookside Environmental removed residual sludge and/or petroleum product/water mixture from four previously removed underground storage tanks (USTs). The residual sludge and/or petroleum product/water mixture was containerized in five, sealed 55-gallon steel drums for off-site disposal at the Clean Water of New York facility, located in Staten Island, NY. • CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally LANGAN

SITE OBSERVATION REPORT

Material Tracking

- Brookside Environmental exported five 55-gallon drums containing residual sludge and/or petroleum product/water mixture for off-site disposal at the Clean Water of New York facility, located in Staten Island, NY.
- 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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	31	620	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, 0.100 mg/m³ respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.025	0.0	0.01
PM-2	0.033	0.0	0.00
PM-3	0.024	0.0	0.00
PM-4	0.002	0.4	0.00
PM-5	0.020	0.0	0.01
PM-6	0.020	0.0	0.01
WZ-1	0.030	0.0	0.01
WZ-2	0.007	0.0	0.00
WZ-3	0.018	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.045	0.0	0.03
PM-2	0.069	0.0	0.02
PM-3	0.048	0.0	0.01
PM-4	0.002	1.8	0.02
PM-5	0.039	0.1	0.04
PM-6	0.030	0.5	0.03
WZ-1	0.046	0.0	0.02
WZ-2	0.017	0.0	0.01
WZ-3	0.028	0.3	0.02

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

Equipment Troubleshooting

- The Jerome® J505 unit at perimeter CAMP station PM-3 intermittently did not transmit data through the remote telemetry system throughout the work day. The mercury vapor data from the Jerome® J505 unit was manually downloaded at the end of the work day and is reflected in the Daily Air Monitoring Report. Between 1:04pm and 4:28pm, a Jerome® J405 unit was connected to telemetry to provide real-time mercury vapor data to field personnel while continuing to monitor the area with a Jerome® J505 unit.

Ambient Air (Handheld Jerome® J505 and Handheld PID)

- The dedicated mobile monitor (Langan) used a handheld Jerome® J505 mercury vapor analyzer to monitor ambient air conditions at various heights throughout the site. Instantaneous mercury vapor concentrations throughout the site ranged from 0.00 µg/m³ to 0.15 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:12am to 4:29pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:03am to 4:29pm during installation of dewatering wells in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:03am to 4:29pm during tie-back and dewatering well installation in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued sequentially from 4:26pm to 4:28pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.02 µg/m³ to 0.10 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installing the dewatering system in the eastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will export four previously removed USTs for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

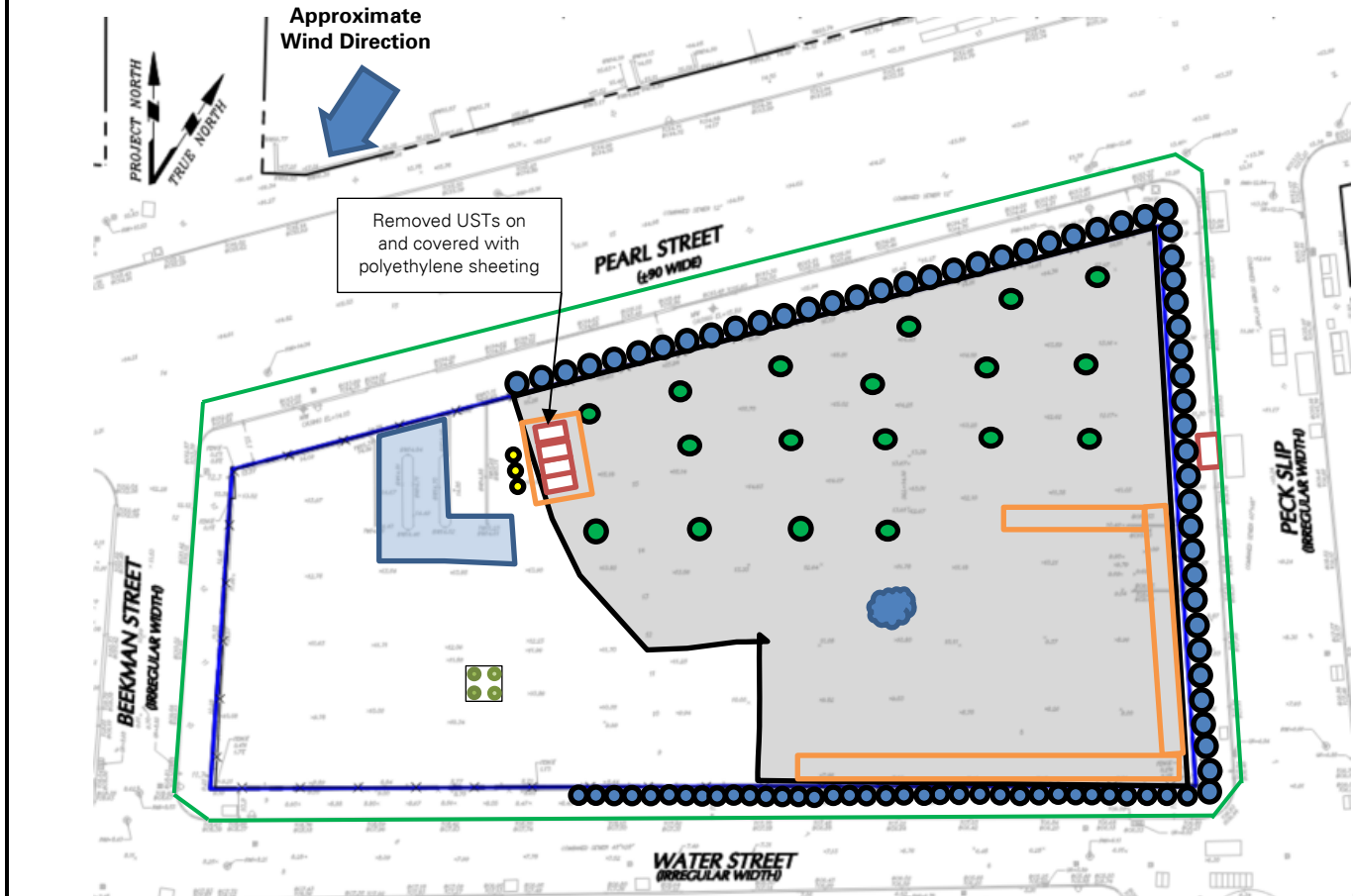
Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Brian Kenneally

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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV installing a dewatering well in the southeastern part of the site (facing northwest)



Photo 2: Brookside Environmental cleaning previously removed USTs in preparation for off-site disposal (facing northeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Tuesday, September 13, 2022 WEATHER: Overcast, 73.5 – 83.1 °F Wind: NNW @ 0.4 –5.8 mph TIME: 6:00 AM – 4:45 PM MONITOR: Brian Kenneally, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 98 Langan (Environmental/Geotechnical) – Brian Kenneally, Eddie Cai, Kevin Leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Michael Solecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV installed tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. CCJV used imported 1.5-inch clean bluestone to backfill and grade an approximately 30-foot-long by 20-foot-wide area in the northwestern part of the site for maintenance of the tracking pad. CCJV used imported general fill to backfill the space between installed timber lagging and the Water Street sidewalk. CCJV installed 16 dewatering wells to depths ranging between 23 and 25 feet below grade surface (bgs) within the installed steel sheet pile wall for dewatering system installation in the southwestern part of the site. Drilling spoils were not generated during installation of the dewatering wells. Tristate Groundwater continued installation of the dewatering system in the eastern and southeastern parts of the site. CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Eddie Cai LANGAN	

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 2 truckloads (about 40 cubic yards [CY]) of C&D for off-site disposal at the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- CCJV imported 1 truckload (21.04 tons) of 1.5-inch clean bluestone from the IRRC facility, located in Lyndhurst, NJ. The imported 1.5-inch clean bluestone was backfilled and graded in the northwestern part of the site for maintenance of the trucking pad.
- CCJV imported 1 truckload (22.29 tons) of general fill from the IRRC facility, located in Lyndhurst, NJ. The imported general fill was temporarily stockpiled in the southern part of the site for use as backfill behind previously installed timber lagging.

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	1	21.04	1	22.29
Project Total	8	184.42	0	0	6	129.56	18	433.24
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)								
Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	2	40	0	0	0	0
Project Total	5	85	33	660	77	1,540	201	4,020

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

By: Eddie Cai

LANGAN

SITE OBSERVATION REPORT

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	99	1,980	42	840

Sampling Activities

- No samples were collected.

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

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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, 0.100 mg/m^3 respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.05 $\mu\text{g}/\text{m}^3$.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.029	0.0	0.02
PM-2	0.038	0.0	0.01
PM-3	0.030	0.0	0.00
PM-4	0.002	0.2	0.01
PM-5	0.019	0.0	0.02
PM-6	0.026	0.0	0.02
WZ-1	0.036	0.0	0.02
WZ-2	0.008	0.0	0.00
WZ-3	0.022	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.046	0.0	0.04
PM-2	0.060	0.9	0.02
PM-3	0.058	0.0	0.01
PM-4	0.002	0.3	0.02
PM-5	0.033	0.1	0.04
PM-6	0.044	0.0	0.05
WZ-1	0.052	0.0	0.03
WZ-2	0.013	0.3	0.02
WZ-3	0.044	0.0	0.02

• mg/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:	Eddie Cai
			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 0.65 µg/m³. The instantaneous mercury vapor concentrations above background conditions were associated with an internal filter requiring replacement. The filter was replaced on September 14, 2022.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:56am to 4:00pm during maintenance of the tracking pad and due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:56am to 4:00pm during installation of dewatering wells in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:56am to 4:00pm during tie-back and dewatering well installation in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:55pm and 4:00pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.05 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

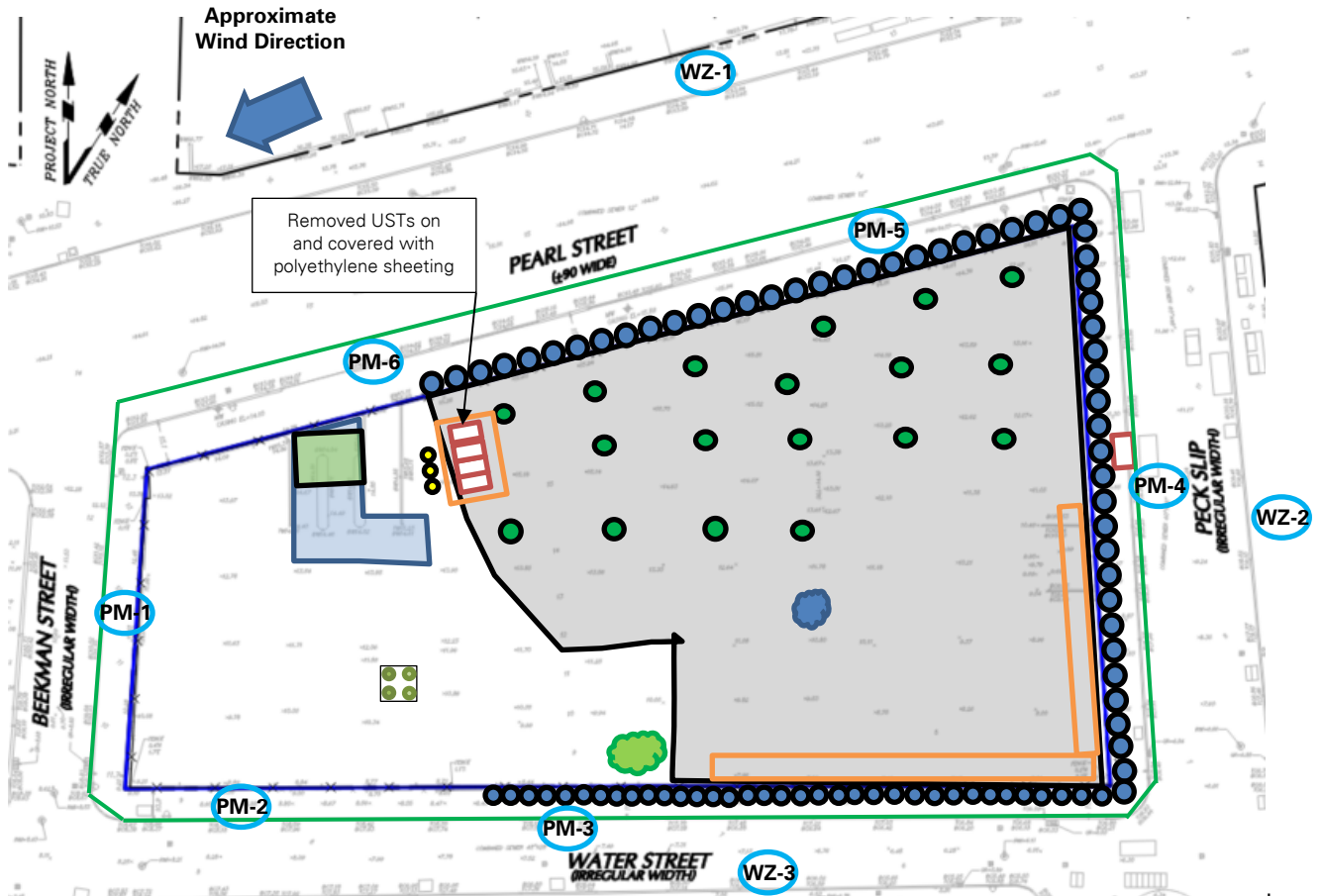
Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installation of the dewatering system in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will export four previously removed USTs for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Eddie Cai
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Eddie Cai

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV installing a tie-back along the southern boundary of the site (facing southeast)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill in the northern part of the site (facing west)

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

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Wednesday, September 14, 2022 WEATHER: Overcast, 70.7 – 82.9 °F Wind: SW @ 0.7 – 6.6 mph TIME: 6:00 AM – 4:30 PM MONITOR: Brian Kenneally, Elsayh Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 99 Langan (Environmental/Geotechnical) – Brian Kenneally, Elsayh Boak, Ashlene Bisram Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Michael Solecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV installed tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. CCJV used imported 1.5-inch clean bluestone to backfill and grade an approximately 30-foot-long by 20-foot-wide area in the northwestern part of the site for maintenance of the tracking pad. CCJV installed ten dewatering wells to depths ranging from 23 to 25 feet below grade surface (bgs) within the installed steel sheet pile wall for dewatering system installation in the southeastern part of the site. Drilling spoils were not generated during installation of the dewatering wells. Tristate Groundwater continued installing the dewatering system in the eastern and southeastern parts of the site. CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally LANGAN	

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 2 truckloads (about 40 cubic yards [CY]) of C&D for off-site disposal at the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- CCJV imported 1 truckload (20.39 tons) of 1.5-inch clean bluestone from the IRRC facility, located in Lyndhurst, NJ. The imported 1.5-inch clean bluestone was backfilled and graded in the northwestern part of the site for maintenance of the tracking pad.

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	1	20.39	0	0
Project Total	8	184.42	0	0	7	149.95	18	433.24
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	2	40	0	0	0	0
Project Total	5	85	35	700	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 µg/m³ to 0.05 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.022	0.0	0.01
PM-2	0.022	0.0	0.00
PM-3	0.012	0.0	0.00
PM-4	0.000	0.1	0.00
PM-5	0.020	0.0	0.01
PM-6	0.010	0.1	0.01
WZ-1	0.019	0.0	0.01
WZ-2	0.001	0.0	0.00
WZ-3	0.013	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.044	0.0	0.03
PM-2	0.028	0.0	0.01
PM-3	0.024	0.0	0.01
PM-4	0.000	0.2	0.01
PM-5	0.034	0.1	0.03
PM-6	0.027	0.2	0.04
WZ-1	0.038	0.0	0.06
WZ-2	0.018	0.2	0.01
WZ-3	0.022	0.0	0.01

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			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 0.13 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:57am to 3:34pm during maintenance of the tracking pad and due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:01am to 3:34pm during installation of dewatering wells in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:59am to 3:33pm during tie-back and dewatering well installation in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:33pm and 3:34pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.06 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

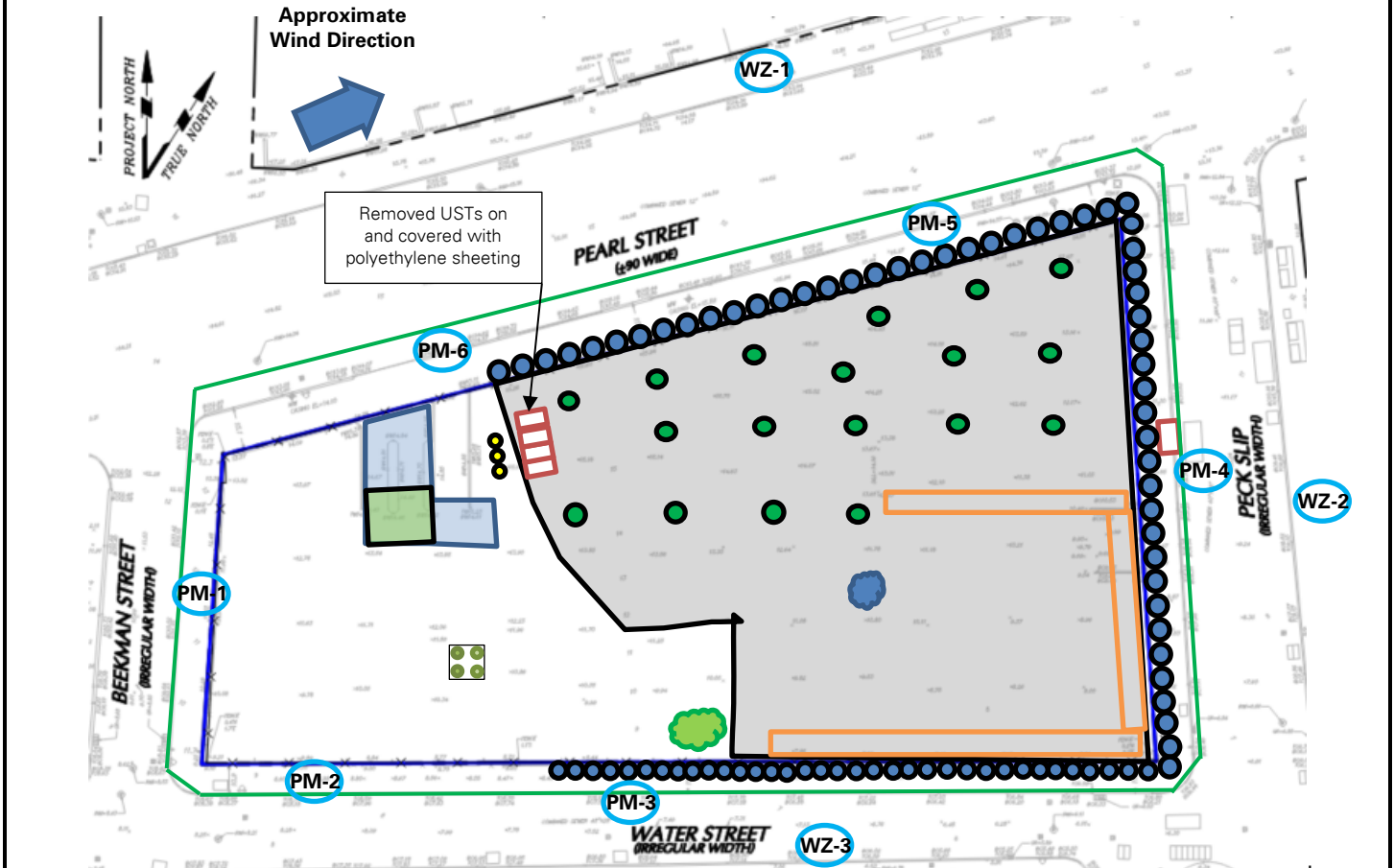
Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installation of the dewatering system in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will export four previously removed USTs for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV installing a tie-back along the southern boundary of the site (facing south)

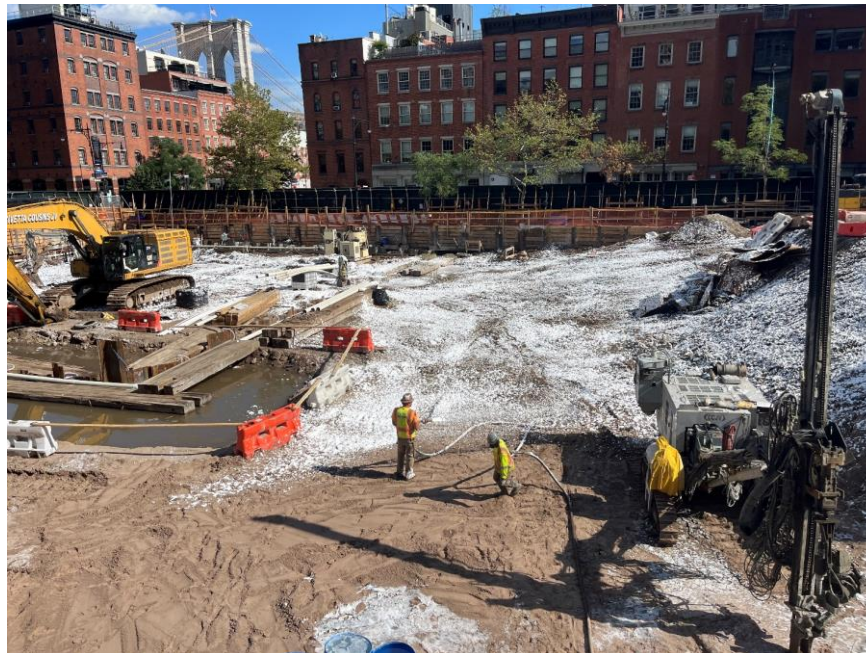


Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill in the central part of the site (facing south)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Thursday, September 15, 2022 WEATHER: Overcast, 66.0 – 76.1 °F Wind: WNW @ 0.7 – 10.0 mph TIME: 6:00 AM – 4:30 PM MONITOR: Brian Kenneally, Elsayh Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 100 Langan (Environmental/Geotechnical) – Brian Kenneally, Elsayh Boak, Ashlene Bisram Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Michael Solecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV tested tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. CCJV installed ten dewatering wells to depths ranging from 23 to 25 feet below grade surface (bgs) within the installed steel sheet pile wall for dewatering system installation in the southeastern part of the site. Drilling spoils were not generated during installation of the dewatering wells. <ul style="list-style-type: none"> CCJV pumped groundwater from the previously installed dewatering wells to facilitate future excavation in the southeastern part of the site. Groundwater was pumped directly to the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). Tristate Groundwater continued installation of the dewatering system in the eastern and southeastern parts of the site. CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Elsayh Boak LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported four underground storage tank (UST) carcasses for off-site disposal as scrap metal at Sal's Metal Corp, located in the Bronx, NY.
- 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	7	149.95	18	433.24
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Elsayh Boak

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.015	0.0	0.01
PM-2	0.018	0.0	0.01
PM-3	0.010	0.0	0.00
PM-4	0.000	0.1	0.00
PM-5	0.016	0.0	0.01
PM-6	0.011	0.2	0.02
WZ-1	0.016	0.0	0.01
WZ-2	0.007	0.0	0.01
WZ-3	0.007	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.020	0.0	0.03
PM-2	0.023	0.0	0.02
PM-3	0.016	0.0	0.01
PM-4	0.000	0.3	0.01
PM-5	0.027	0.1	0.04
PM-6	0.022	0.3	0.05
WZ-1	0.020	0.0	0.03
WZ-2	0.014	0.2	0.02
WZ-3	0.021	0.0	0.03

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

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

By: Elsayh Boak

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 0.12 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:58am to 3:18pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:58am to 3:17pm during installation of dewatering wells in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:58am to 3:12pm during installation of dewatering wells in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:12pm and 3:18pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station were recorded at 0.00 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

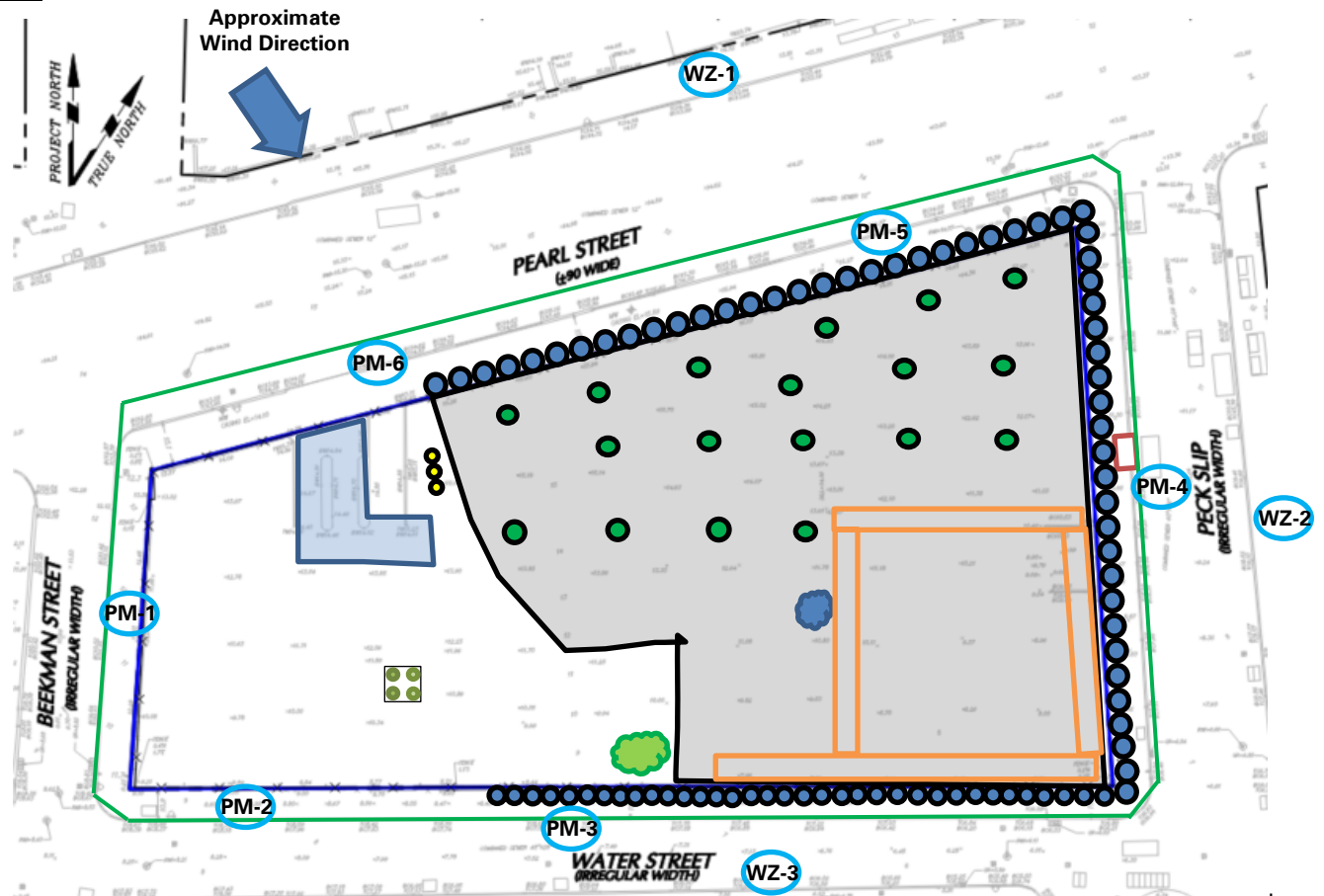
Anticipated Activities

- Tristate Groundwater will continue installation of the dewatering system in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will weld brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Elsayh Boak

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:

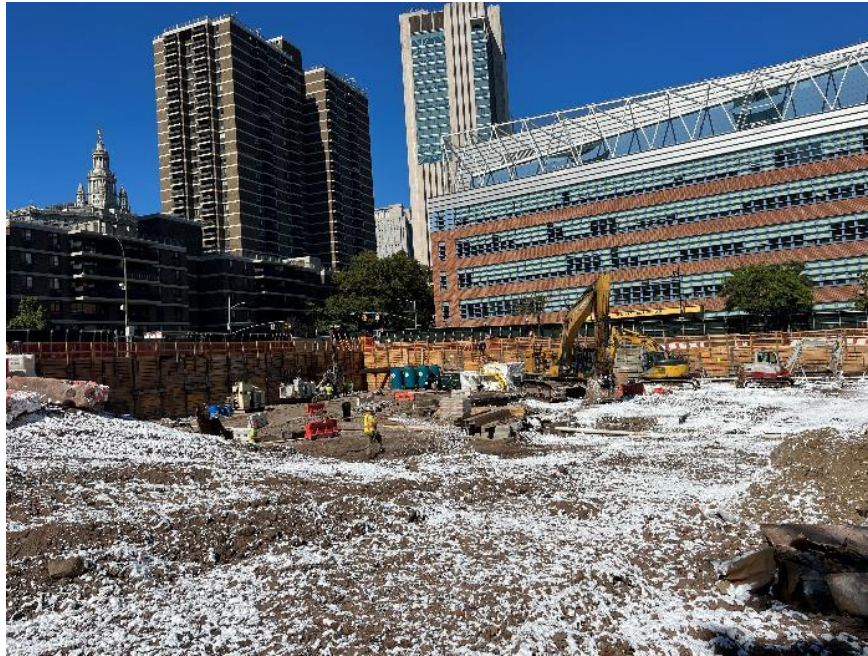


Photo 1: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill in the central part of the site (facing northwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Friday, September 16, 2022 WEATHER: Clear, 65.6 – 78.2 °F Wind: W @ 0.9 – 6.9 mph TIME: 6:00 AM – 4:15 PM MONITOR: Eddie Cai, Elsayh Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 101 Langan (Environmental/Geotechnical) – Eddie Cai, Elsayh Boak, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Michael Sollecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV tested tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. CCJV excavated an about 20-foot-long by 30-foot-wide area to a depth of about 5 feet below the existing grade within the steel sheet pile wall for removal of petroleum-impacted soil/fill from waste characterization cells WC09 and WC10. The excavated soil/fill was temporarily stockpiled within the steel sheet pile wall, sprayed with Atmos® AC-645 dust/vapor suppressing foam, and covered with polyethylene sheeting in preparation for off-site disposal. <ul style="list-style-type: none"> 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. Odors, staining and a maximum PID reading of 0.1 ppm was recorded. CCJV began welding for installation of additional bracing required for the support-of-excavation (SOE) system in the southeastern part of the site. CCJV pumped groundwater from the previously installed dewatering wells to facilitate future excavation in the southeastern part of the site. Groundwater was pumped directly to the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Elsayh Boak LANGAN	

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported one truckload (about 20 cubic yards [CY]) of scrap metal for off-site disposal at Sal's Metal Corp, located in the Bronx, NY.
- CCJV imported one truckload (22.45 tons) of general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ. The imported general fill was temporarily stockpiled on polyethylene sheeting in the southern part of the site for use as backfill behind previously installed lagging.

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	1	22.45
Project Total	8	184.42	0	0	7	149.95	19	455.69
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	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	100	2,000	42	840

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

By: Elsayh Boak

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.007	0.0	0.01
PM-2	0.016	0.0	0.00
PM-3	0.007	0.0	0.00
PM-4	0.000	0.2	0.00
PM-5	0.011	0.0	0.01
PM-6	0.008	0.3	0.01
WZ-1	0.013	0.0	0.01
WZ-2	0.007	0.0	0.00
WZ-3	0.007	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.017	0.0	0.02
PM-2	0.030	0.0	0.01
PM-3	0.012	0.0	0.00
PM-4	0.002	0.8	0.01
PM-5	0.022	0.1	0.02
PM-6	0.021	0.4	0.03
WZ-1	0.017	0.0	0.02
WZ-2	0.012	0.2	0.01
WZ-3	0.012	0.0	0.02

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			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 0.16 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:05am to 3:14pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:05am to 3:14pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:04am to 3:14pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:14pm and 3:15pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.02 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

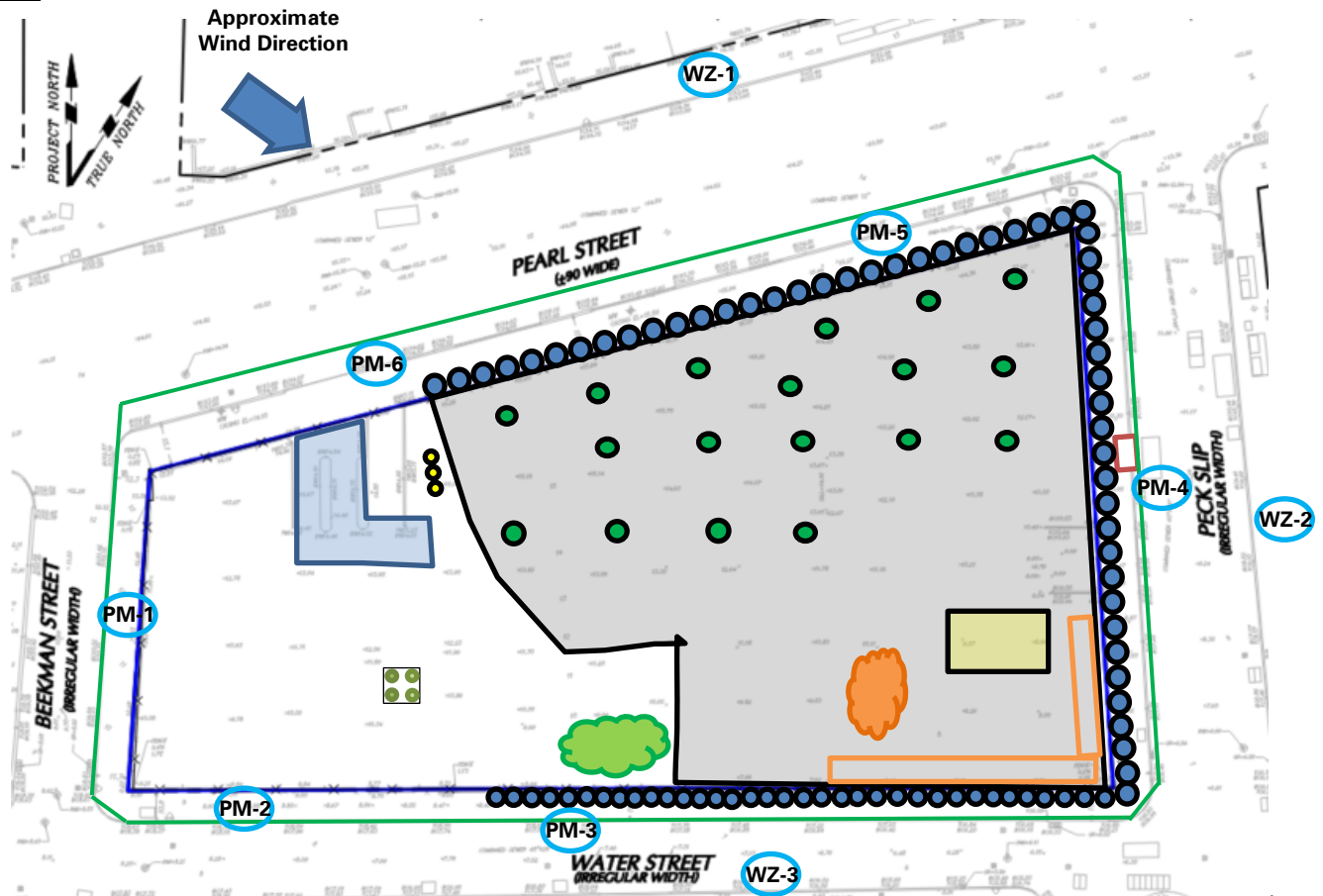
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will weld brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Elsayh Boak

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: Petroleum-impacted soil/fill stockpile covered in Atmos® AC-645 dust/vapor suppressing foam and polyethylene sheeting in the southeastern part of the site (facing east)



Photo 1: CCJV excavating soil/fill in the southeastern part of the site and actively applying Atmos® AC-645 dust/vapor suppressing foam (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Sunday, September 11, 2022 WEATHER: Overcast/Rain, 72 – 75 °F Wind: SSW @ 1.2 mph TIME: 8:30 AM – 10:00 AM MONITOR: Camille Quick
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 96 Langan (Environmental) – Camille Quick Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra LendLease (General Contractor)	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Camille Quick LANGAN

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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	31	620	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Camille Quick

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Camille Quick
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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 photoionization detector (PID) to monitor volatile organic compound (VOC) concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

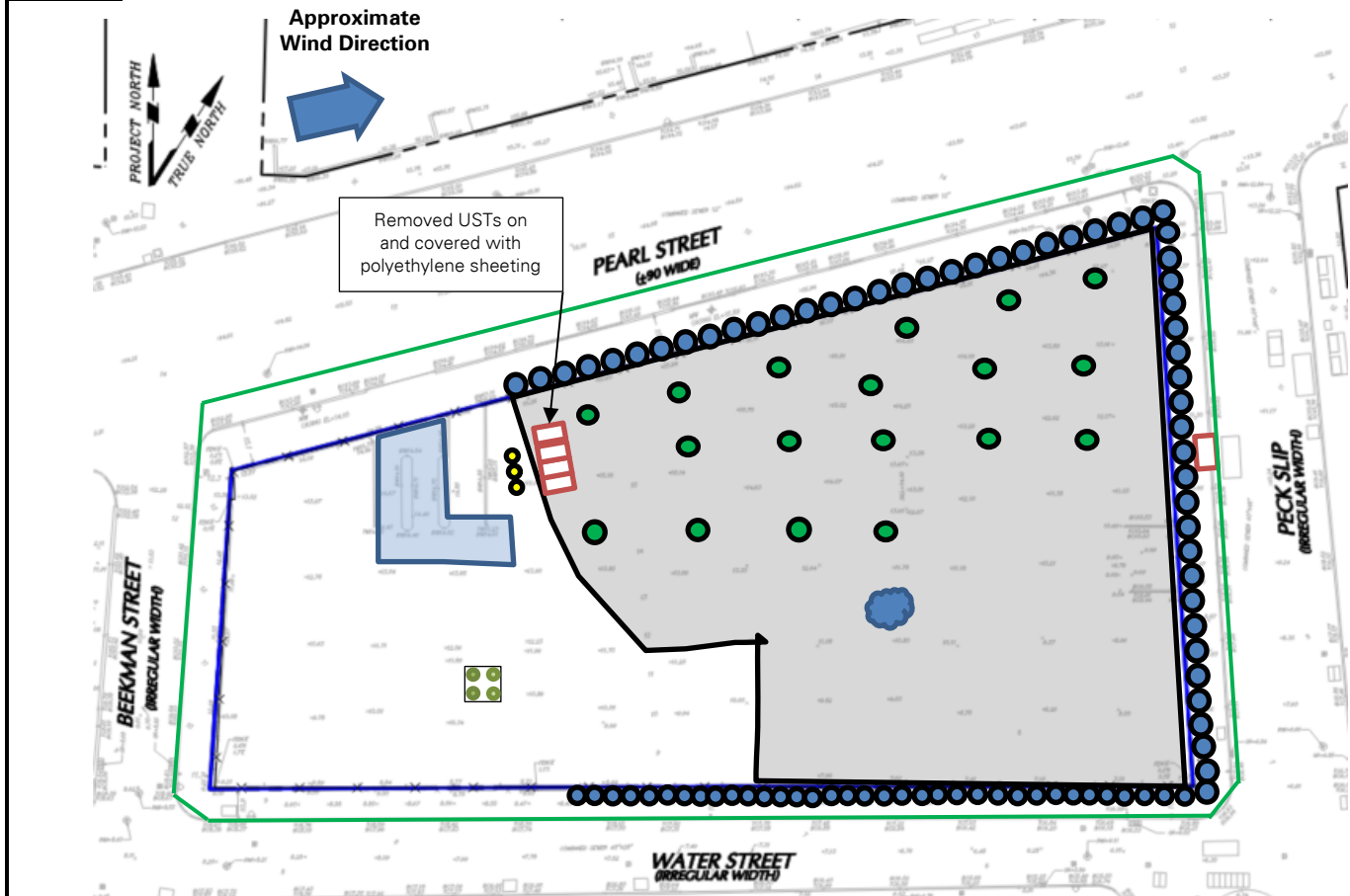
Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installing the dewatering system in the eastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will clean previously removed underground storage tanks (USTs) in preparation for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Camille Quick LANGAN
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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Camille Quick

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: Atmos® AC-645 dust/vapor suppressing foam applied to exposed soil/fill in the southeastern part of the site (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Camille Quick
		LANGAN	

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Monday, September 12, 2022 WEATHER: Overcast, 69.0 – 83.0 °F Wind: N @ 1.1 – 2.2 mph TIME: 6:00 AM – 5:30 PM MONITOR: Brian Kenneally, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 97 Langan (Environmental/Geotechnical) – Brian Kenneally, Eddie Cai, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff Brookside Environmental (UST Cleaning) – Oscar Perrero New York State Department of Environmental Conservation (NYSDEC) – Michael Solecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none">• CCJV installed tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation.• CCJV installed ten dewatering wells to depths ranging between 23 and 25 feet below grade surface (bgs) within the installed steel sheet pile wall for dewatering system installation in the southwestern part of the site. Drilling spoils were not generated during installation of the dewatering wells.• Tristate Groundwater continued installation of the dewatering system in the eastern and southeastern parts of the site.• Brookside Environmental removed residual sludge and/or petroleum product/water mixture from four previously removed underground storage tanks (USTs). The residual sludge and/or petroleum product/water mixture was containerized in five, sealed 55-gallon steel drums for off-site disposal at the Clean Water of New York facility, located in Staten Island, NY.• CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally	LANGAN

SITE OBSERVATION REPORT

Material Tracking

- Brookside Environmental exported five 55-gallon drums containing residual sludge and/or petroleum product/water mixture for off-site disposal at the Clean Water of New York facility, located in Staten Island, NY.
- 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	5	108.52	17	410.95
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	31	620	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Brian Kenneally

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

By: Brian Kenneally

LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, 0.100 mg/m³ respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.025	0.0	0.01
PM-2	0.033	0.0	0.00
PM-3	0.024	0.0	0.00
PM-4	0.002	0.4	0.00
PM-5	0.020	0.0	0.01
PM-6	0.020	0.0	0.01
WZ-1	0.030	0.0	0.01
WZ-2	0.007	0.0	0.00
WZ-3	0.018	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.045	0.0	0.03
PM-2	0.069	0.0	0.02
PM-3	0.048	0.0	0.01
PM-4	0.002	1.8	0.02
PM-5	0.039	0.1	0.04
PM-6	0.030	0.5	0.03
WZ-1	0.046	0.0	0.02
WZ-2	0.017	0.0	0.01
WZ-3	0.028	0.3	0.02

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

Equipment Troubleshooting

- The Jerome® J505 unit at perimeter CAMP station PM-3 intermittently did not transmit data through the remote telemetry system throughout the work day. The mercury vapor data from the Jerome® J505 unit was manually downloaded at the end of the work day and is reflected in the Daily Air Monitoring Report. Between 1:04pm and 4:28pm, a Jerome® J405 unit was connected to telemetry to provide real-time mercury vapor data to field personnel while continuing to monitor the area with a Jerome® J505 unit.

Ambient Air (Handheld Jerome® J505 and Handheld PID)

- The dedicated mobile monitor (Langan) used a handheld Jerome® J505 mercury vapor analyzer to monitor ambient air conditions at various heights throughout the site. Instantaneous mercury vapor concentrations throughout the site ranged from 0.00 µg/m³ to 0.15 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:12am to 4:29pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:03am to 4:29pm during installation of dewatering wells in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:03am to 4:29pm during tie-back and dewatering well installation in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued sequentially from 4:26pm to 4:28pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.02 µg/m³ to 0.10 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installing the dewatering system in the eastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will export four previously removed USTs for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

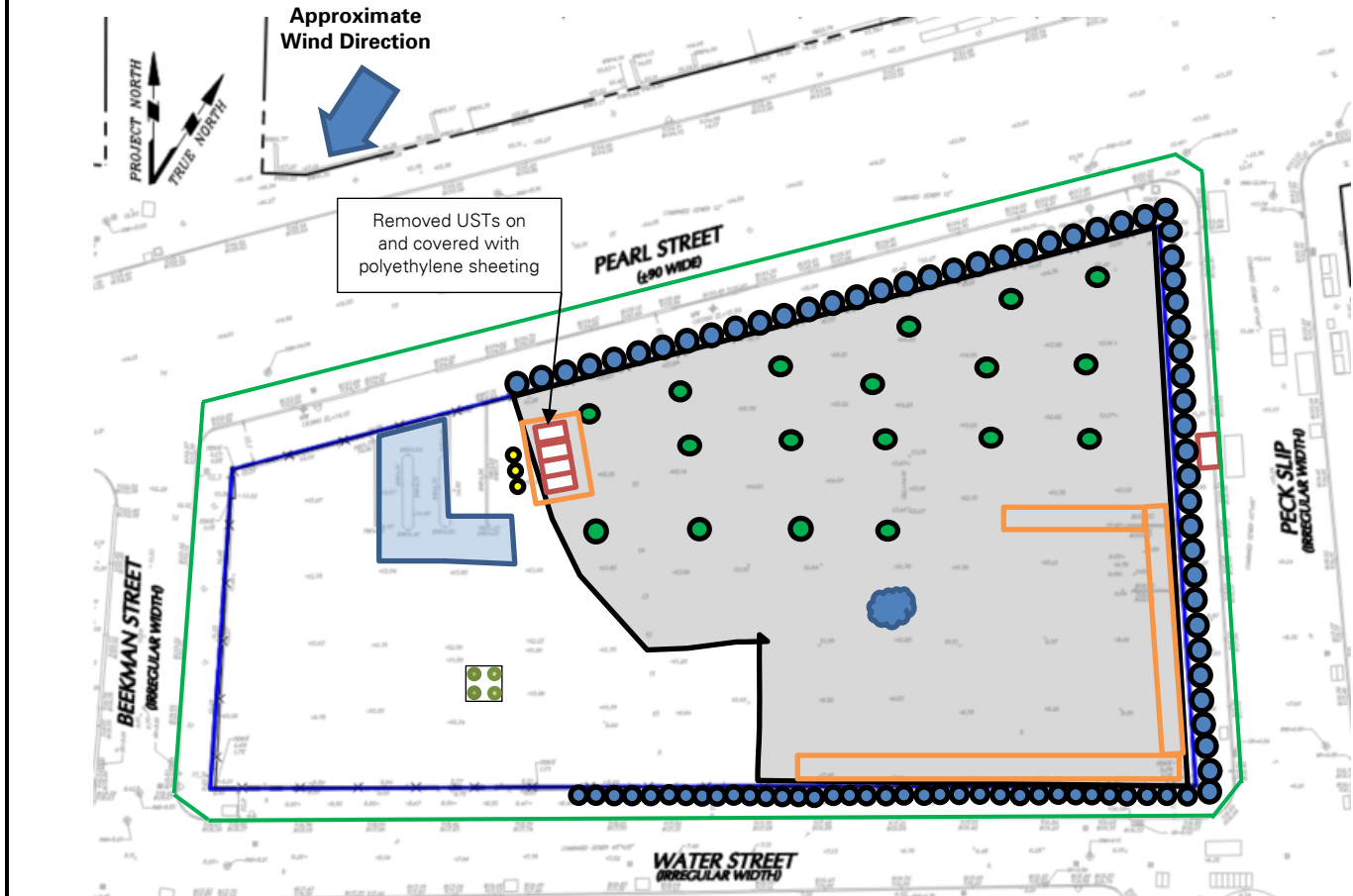
Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Brian Kenneally

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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV installing a dewatering well in the southeastern part of the site (facing northwest)



Photo 2: Brookside Environmental cleaning previously removed USTs in preparation for off-site disposal (facing northeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Tuesday, September 13, 2022 WEATHER: Overcast, 73.5 – 83.1 °F Wind: NNW @ 0.4 –5.8 mph TIME: 6:00 AM – 4:45 PM MONITOR: Brian Kenneally, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 98 Langan (Environmental/Geotechnical) – Brian Kenneally, Eddie Cai, Kevin Leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Michael Solecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> • CCJV installed tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. • CCJV used imported 1.5-inch clean bluestone to backfill and grade an approximately 30-foot-long by 20-foot-wide area in the northwestern part of the site for maintenance of the tracking pad. • CCJV used imported general fill to backfill the space between installed timber lagging and the Water Street sidewalk. • CCJV installed 16 dewatering wells to depths ranging between 23 and 25 feet below grade surface (bgs) within the installed steel sheet pile wall for dewatering system installation in the southwestern part of the site. Drilling spoils were not generated during installation of the dewatering wells. • Tristate Groundwater continued installation of the dewatering system in the eastern and southeastern parts of the site. • CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Eddie Cai LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 2 truckloads (about 40 cubic yards [CY]) of C&D for off-site disposal at the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- CCJV imported 1 truckload (21.04 tons) of 1.5-inch clean bluestone from the IRRC facility, located in Lyndhurst, NJ. The imported 1.5-inch clean bluestone was backfilled and graded in the northwestern part of the site for maintenance of the trucking pad.
- CCJV imported 1 truckload (22.29 tons) of general fill from the IRRC facility, located in Lyndhurst, NJ. The imported general fill was temporarily stockpiled in the southern part of the site for use as backfill behind previously installed timber lagging.

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	1	21.04	1	22.29
Project Total	8	184.42	0	0	6	129.56	18	433.24
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)								
Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	2	40	0	0	0	0
Project Total	5	85	33	660	77	1,540	201	4,020

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

By: Eddie Cai

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SITE OBSERVATION REPORT

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	99	1,980	42	840

Sampling Activities

- No samples were collected.

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

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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, 0.100 mg/m^3 respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.05 $\mu\text{g}/\text{m}^3$.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.029	0.0	0.02
PM-2	0.038	0.0	0.01
PM-3	0.030	0.0	0.00
PM-4	0.002	0.2	0.01
PM-5	0.019	0.0	0.02
PM-6	0.026	0.0	0.02
WZ-1	0.036	0.0	0.02
WZ-2	0.008	0.0	0.00
WZ-3	0.022	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.046	0.0	0.04
PM-2	0.060	0.9	0.02
PM-3	0.058	0.0	0.01
PM-4	0.002	0.3	0.02
PM-5	0.033	0.1	0.04
PM-6	0.044	0.0	0.05
WZ-1	0.052	0.0	0.03
WZ-2	0.013	0.3	0.02
WZ-3	0.044	0.0	0.02

• mg/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:	Eddie Cai
			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 0.65 µg/m³. The instantaneous mercury vapor concentrations above background conditions were associated with an internal filter requiring replacement. The filter was replaced on September 14, 2022.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:56am to 4:00pm during maintenance of the tracking pad and due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:56am to 4:00pm during installation of dewatering wells in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:56am to 4:00pm during tie-back and dewatering well installation in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:55pm and 4:00pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.05 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

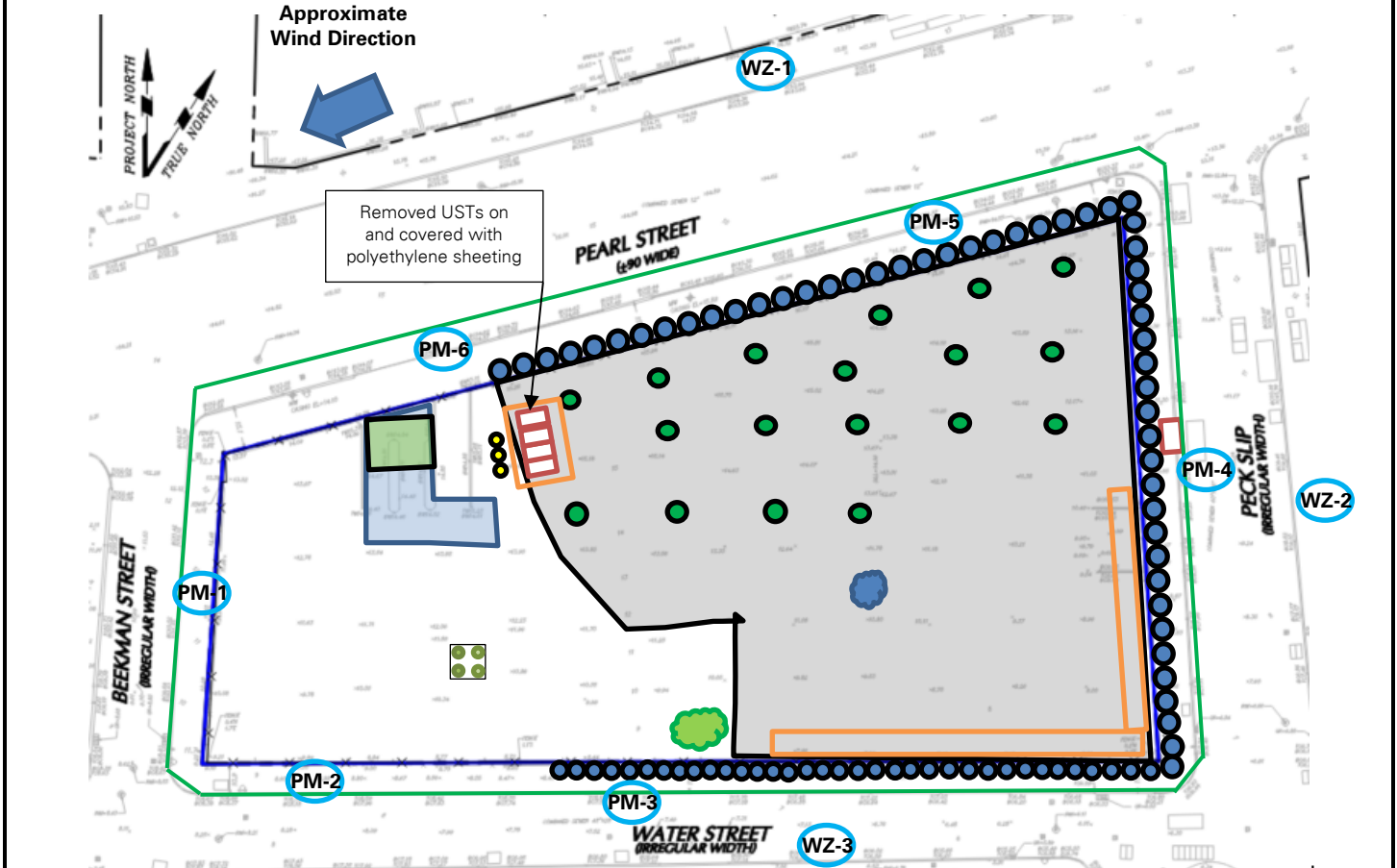
Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installation of the dewatering system in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will export four previously removed USTs for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Eddie Cai
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Eddie Cai

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV installing a tie-back along the southern boundary of the site (facing southeast)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill in the northern part of the site (facing west)

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

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Wednesday, September 14, 2022 WEATHER: Overcast, 70.7 – 82.9 °F Wind: SW @ 0.7 – 6.6 mph TIME: 6:00 AM – 4:30 PM MONITOR: Brian Kenneally, Elsayh Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 99 Langan (Environmental/Geotechnical) – Brian Kenneally, Elsayh Boak, Ashlene Bisram Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Michael Solecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV installed tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. CCJV used imported 1.5-inch clean bluestone to backfill and grade an approximately 30-foot-long by 20-foot-wide area in the northwestern part of the site for maintenance of the tracking pad. CCJV installed ten dewatering wells to depths ranging from 23 to 25 feet below grade surface (bgs) within the installed steel sheet pile wall for dewatering system installation in the southeastern part of the site. Drilling spoils were not generated during installation of the dewatering wells. Tristate Groundwater continued installing the dewatering system in the eastern and southeastern parts of the site. CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 2 truckloads (about 40 cubic yards [CY]) of C&D for off-site disposal at the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- CCJV imported 1 truckload (20.39 tons) of 1.5-inch clean bluestone from the IRRC facility, located in Lyndhurst, NJ. The imported 1.5-inch clean bluestone was backfilled and graded in the northwestern part of the site for maintenance of the tracking pad.

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	1	20.39	0	0
Project Total	8	184.42	0	0	7	149.95	18	433.24
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	2	40	0	0	0	0
Project Total	5	85	35	700	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Brian Kenneally

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

By: Brian Kenneally

LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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, 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.05 $\mu\text{g}/\text{m}^3$.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.022	0.0	0.01
PM-2	0.022	0.0	0.00
PM-3	0.012	0.0	0.00
PM-4	0.000	0.1	0.00
PM-5	0.020	0.0	0.01
PM-6	0.010	0.1	0.01
WZ-1	0.019	0.0	0.01
WZ-2	0.001	0.0	0.00
WZ-3	0.013	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.044	0.0	0.03
PM-2	0.028	0.0	0.01
PM-3	0.024	0.0	0.01
PM-4	0.000	0.2	0.01
PM-5	0.034	0.1	0.03
PM-6	0.027	0.2	0.04
WZ-1	0.038	0.0	0.06
WZ-2	0.018	0.2	0.01
WZ-3	0.022	0.0	0.01

• mg/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: Brian Kenneally

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 0.13 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:57am to 3:34pm during maintenance of the tracking pad and due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:01am to 3:34pm during installation of dewatering wells in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:59am to 3:33pm during tie-back and dewatering well installation in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:33pm and 3:34pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.06 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

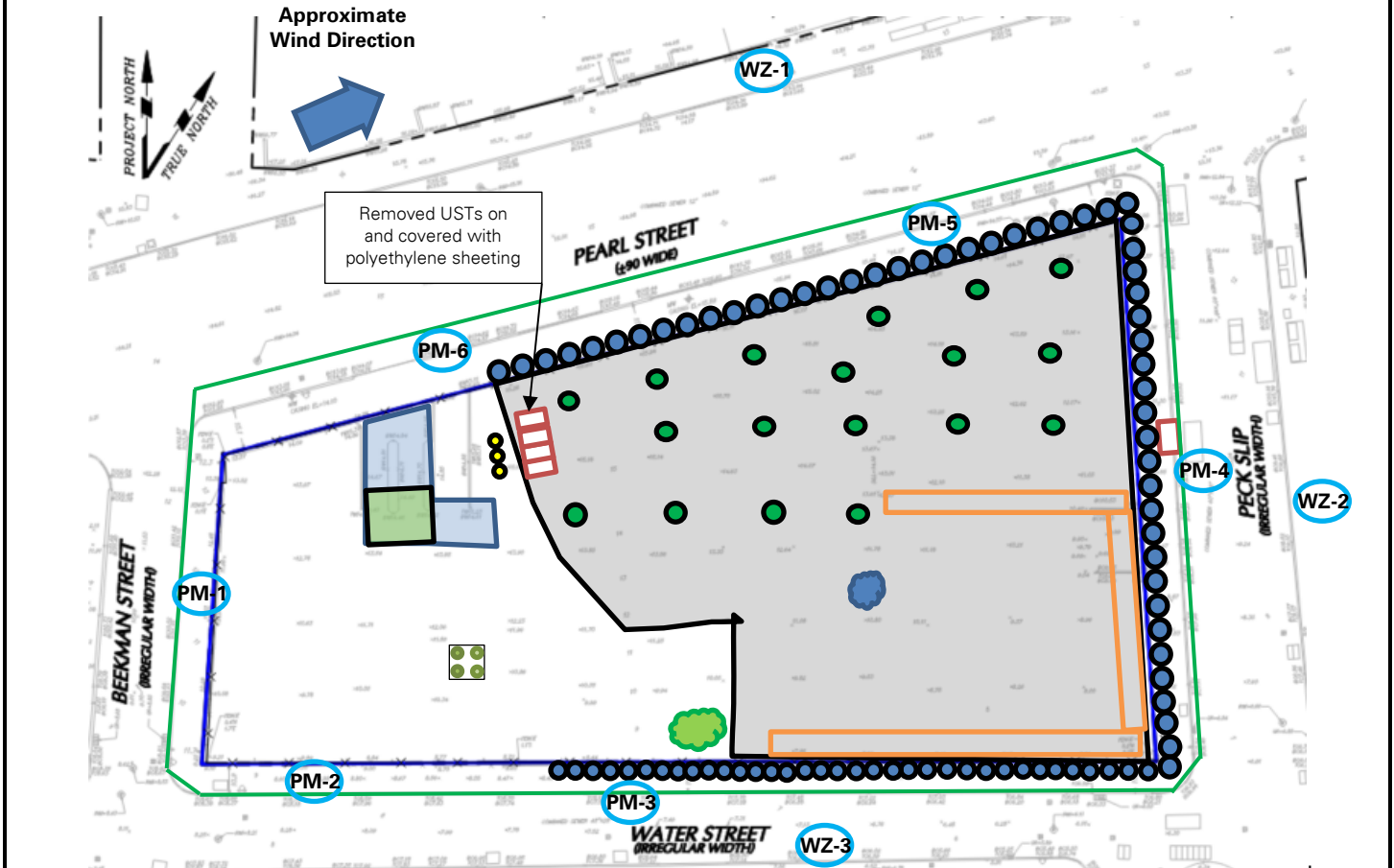
Anticipated Activities

- CCJV will continue welding and installation of tie-backs for SOE system installation in the southeastern part of the site.
- Tristate Groundwater will continue installation of the dewatering system in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will export four previously removed USTs for off-site disposal.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV installing a tie-back along the southern boundary of the site (facing south)

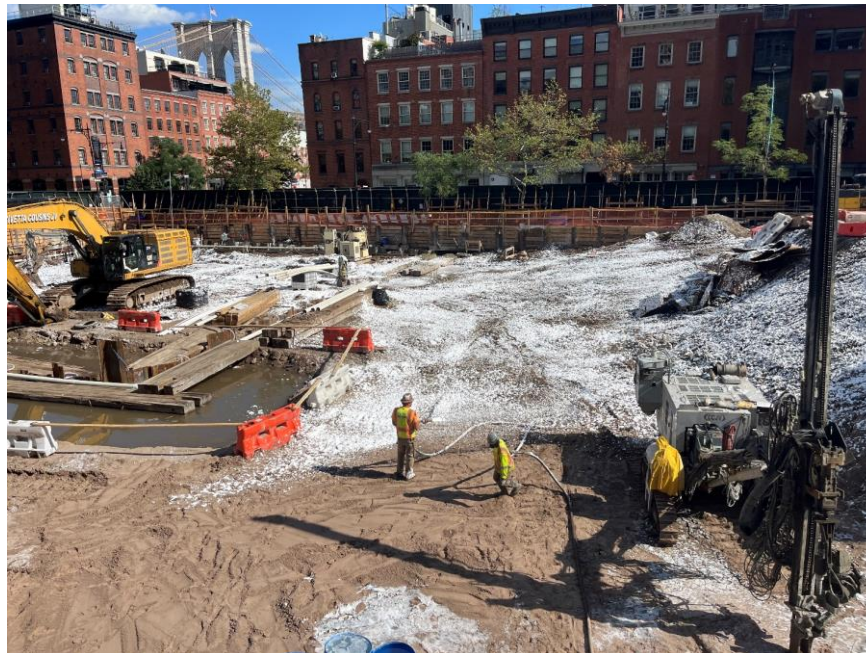


Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill in the central part of the site (facing south)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Thursday, September 15, 2022
PROJECT: 250 Water Street		WEATHER: Overcast, 66.0 – 76.1 °F Wind: WNW @ 0.7 – 10.0 mph
LOCATION: New York, NY		TIME: 6:00 AM – 4:30 PM
BCP SITE ID: C231127		MONITOR: Brian Kenneally, Elsayh Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 100 Langan (Environmental/Geotechnical) – Brian Kenneally, Elsayh Boak, Ashlene Bisram Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Michael Solecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: <p>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).</p> <p>Site Activities</p> <ul style="list-style-type: none">• CCJV tested tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation.• CCJV installed ten dewatering wells to depths ranging from 23 to 25 feet below grade surface (bgs) within the installed steel sheet pile wall for dewatering system installation in the southeastern part of the site. Drilling spoils were not generated during installation of the dewatering wells.<ul style="list-style-type: none">◦ CCJV pumped groundwater from the previously installed dewatering wells to facilitate future excavation in the southeastern part of the site. Groundwater was pumped directly to the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214).• Tristate Groundwater continued installation of the dewatering system in the eastern and southeastern parts of the site.• CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Elsayh Boak
		LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported four underground storage tank (UST) carcasses for off-site disposal as scrap metal at Sal's Metal Corp, located in the Bronx, NY.
- 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	7	149.95	18	433.24
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	201	4,020

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	99	1,980	42	840

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

By: Elsayh Boak

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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, 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ 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 (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.015	0.0	0.01
PM-2	0.018	0.0	0.01
PM-3	0.010	0.0	0.00
PM-4	0.000	0.1	0.00
PM-5	0.016	0.0	0.01
PM-6	0.011	0.2	0.02
WZ-1	0.016	0.0	0.01
WZ-2	0.007	0.0	0.01
WZ-3	0.007	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.020	0.0	0.03
PM-2	0.023	0.0	0.02
PM-3	0.016	0.0	0.01
PM-4	0.000	0.3	0.01
PM-5	0.027	0.1	0.04
PM-6	0.022	0.3	0.05
WZ-1	0.020	0.0	0.03
WZ-2	0.014	0.2	0.02
WZ-3	0.021	0.0	0.03

• mg/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:	Elsah Boak
			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 0.12 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:58am to 3:18pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:58am to 3:17pm during installation of dewatering wells in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:58am to 3:12pm during installation of dewatering wells in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:12pm and 3:18pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station were recorded at 0.00 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

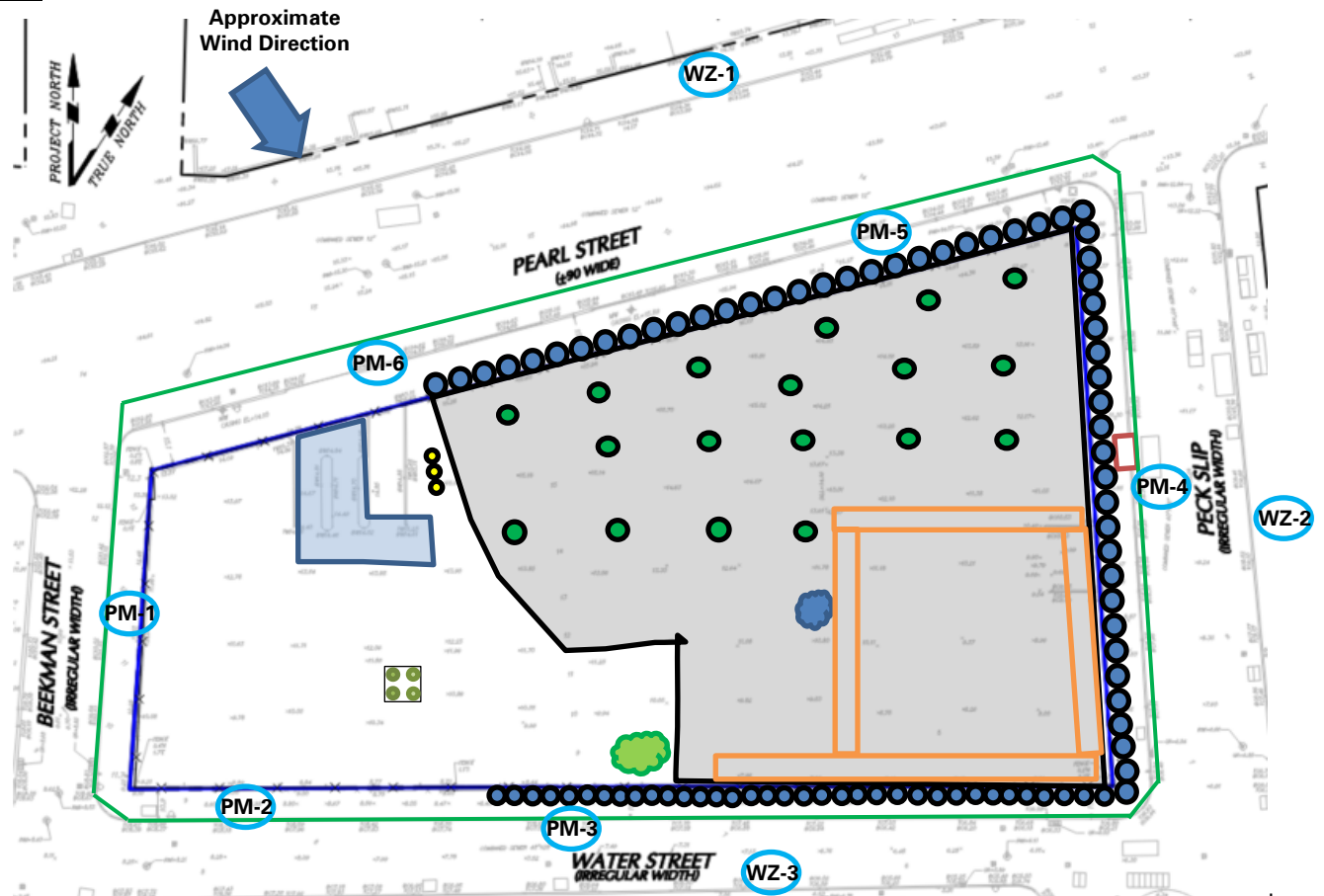
Anticipated Activities

- Tristate Groundwater will continue installation of the dewatering system in the southeastern part of the site.
- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will weld brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Elsayh Boak

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SITE OBSERVATION REPORT

Select Site Photographs:

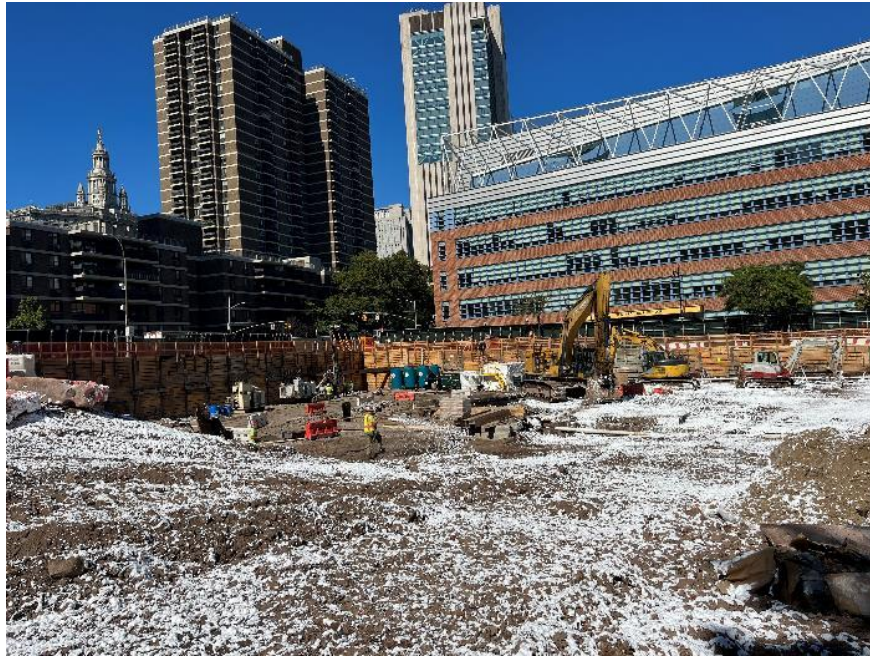


Photo 1: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill in the central part of the site (facing northwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Friday, September 16, 2022 WEATHER: Clear, 65.6 – 78.2 °F Wind: W @ 0.9 – 6.9 mph TIME: 6:00 AM – 4:15 PM MONITOR: Eddie Cai, Elsayh Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 101 Langan (Environmental/Geotechnical) – Eddie Cai, Elsayh Boak, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Michael Sollecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV tested tie-backs along the southern boundary of the site (Water Street) for support-of-excavation (SOE) system installation. CCJV excavated an about 20-foot-long by 30-foot-wide area to a depth of about 5 feet below the existing grade within the steel sheet pile wall for removal of petroleum-impacted soil/fill from waste characterization cells WC09 and WC10. The excavated soil/fill was temporarily stockpiled within the steel sheet pile wall, sprayed with Atmos® AC-645 dust/vapor suppressing foam, and covered with polyethylene sheeting in preparation for off-site disposal. <ul style="list-style-type: none"> 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. Odors, staining and a maximum PID reading of 0.1 ppm was recorded. CCJV began welding for installation of additional bracing required for the support-of-excavation (SOE) system in the southeastern part of the site. CCJV pumped groundwater from the previously installed dewatering wells to facilitate future excavation in the southeastern part of the site. Groundwater was pumped directly to the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Elsayh Boak LANGAN	

SITE OBSERVATION REPORT

Material Tracking

- CCJV exported one truckload (about 20 cubic yards [CY]) of scrap metal for off-site disposal at Sal's Metal Corp, located in the Bronx, NY.
- CCJV imported one truckload (22.45 tons) of general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ. The imported general fill was temporarily stockpiled on polyethylene sheeting in the southern part of the site for use as backfill behind previously installed lagging.

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	1	22.45
Project Total	8	184.42	0	0	7	149.95	19	455.69
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	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	100	2,000	42	840

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

By: Elsayh Boak

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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, 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ 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 (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.007	0.0	0.01
PM-2	0.016	0.0	0.00
PM-3	0.007	0.0	0.00
PM-4	0.000	0.2	0.00
PM-5	0.011	0.0	0.01
PM-6	0.008	0.3	0.01
WZ-1	0.013	0.0	0.01
WZ-2	0.007	0.0	0.00
WZ-3	0.007	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.017	0.0	0.02
PM-2	0.030	0.0	0.01
PM-3	0.012	0.0	0.00
PM-4	0.002	0.8	0.01
PM-5	0.022	0.1	0.02
PM-6	0.021	0.4	0.03
WZ-1	0.017	0.0	0.02
WZ-2	0.012	0.2	0.01
WZ-3	0.012	0.0	0.02

• mg/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:	Elsah Boak
			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 0.16 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:05am to 3:14pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:05am to 3:14pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:04am to 3:14pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:14pm and 3:15pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.02 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

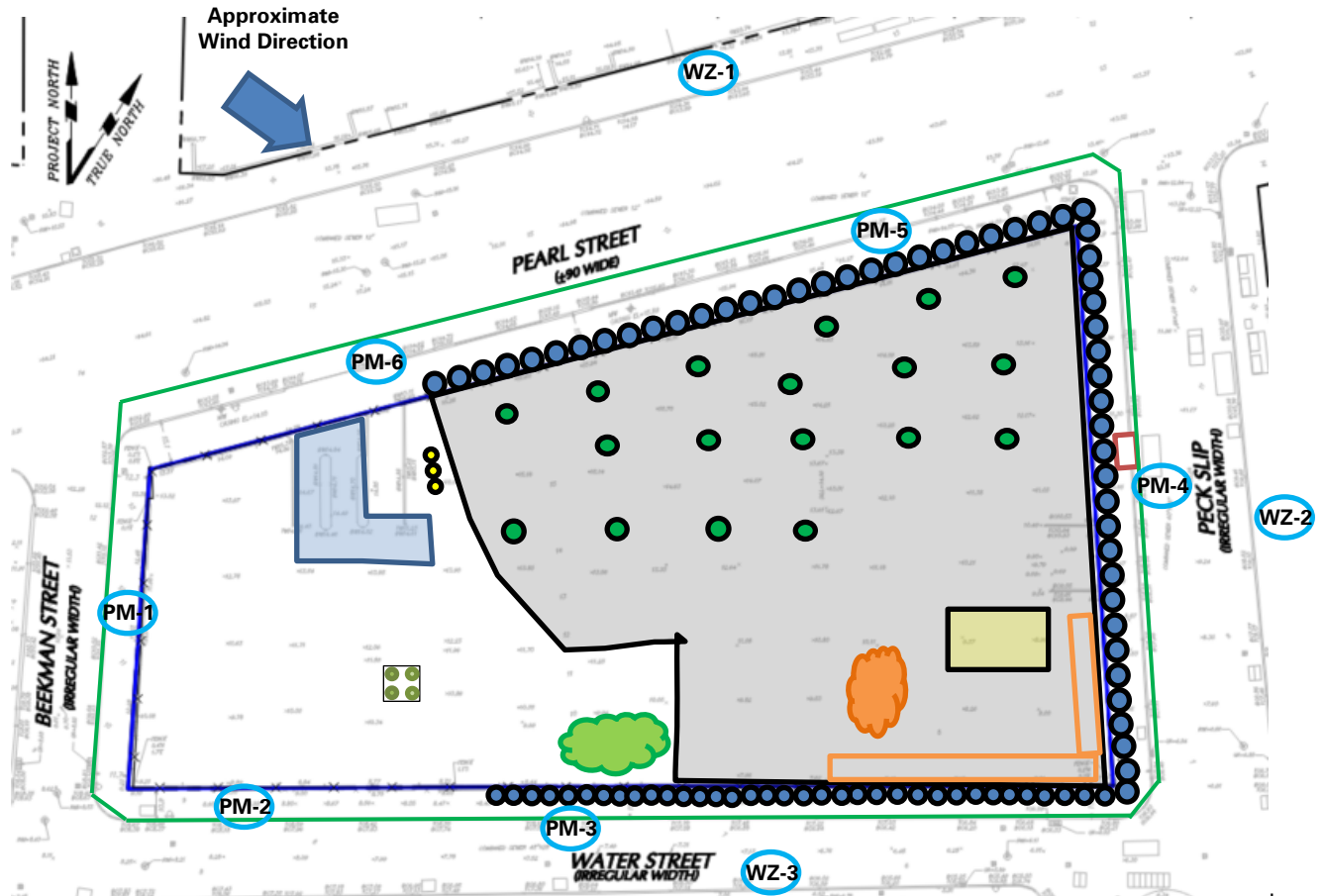
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will weld brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Elsayh Boak

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: Petroleum-impacted soil/fill stockpile covered in Atmos® AC-645 dust/vapor suppressing foam and polyethylene sheeting in the southeastern part of the site (facing east)



Photo 1: CCJV excavating soil/fill in the southeastern part of the site and actively applying Atmos® AC-645 dust/vapor suppressing foam (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Saturday, September 17, 2022 WEATHER: Overcast, 68.3 – 76.1 °F Wind: NNE @ 0.8 – 6.9 mph TIME: 7:45 AM – 5:30 PM MONITOR: Rachel Condon, Elsayh Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 102 Langan (Environmental/Geotechnical) – Rachel Condon, Elsayh Boak Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Michael Sollecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 50-foot-long by 15-foot-wide area to a depth of about 6 feet below the existing grade within the steel sheet pile wall for removal of petroleum-impacted soil/fill from waste characterization cells WC09 and WC10. The excavated soil/fill was temporarily stockpiled adjacent to the excavation area (within the steel sheet pile wall) and was sprayed with Atmos® AC-645 dust/vapor suppressing foam at the end of the work day in preparation for off-site disposal. <ul style="list-style-type: none"> 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. Odors, staining, and a maximum PID reading of 5.3 ppm was recorded. CCJV installed odor neutralizing sleeves on the interior of the perimeter construction fencing along the eastern boundary of the site (Peck Slip). CCJV continued welding for installation of additional bracing required for the support-of-excavation (SOE) in the southeastern part of the site. CCJV pumped groundwater from the previously installed dewatering wells to facilitate future excavation in the southeastern part of the site. Groundwater was pumped directly to the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Elsayh Boak LANGAN	

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	7	149.95	19	455.69
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	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	100	2,000	42	840

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

By: Elsayh Boak

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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, 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.013	0.0	0.01
PM-2	0.017	0.0	0.00
PM-3	0.010	0.0	0.00
PM-4	0.000	0.6	0.00
PM-5	0.019	0.0	0.02
PM-6	0.009	0.0	0.01
WZ-1	0.016	0.0	0.01
WZ-2	0.008	0.0	0.01
WZ-3	0.006	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.023	0.0	0.04
PM-2	0.032	0.0	0.02
PM-3	0.022	0.0	0.01
PM-4	0.000	1.8	0.01
PM-5	0.026	0.0	0.04
PM-6	0.017	0.1	0.03
WZ-1	0.024	0.0	0.03
WZ-2	0.011	0.1	0.02
WZ-3	0.013	0.0	0.21

• mg/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:	Elsah Boak
			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 0.11 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 9:22am to 4:27pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 9:11am to 4:27pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 9:11am to 4:27pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued at 4:27pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station were recorded at 0.00 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

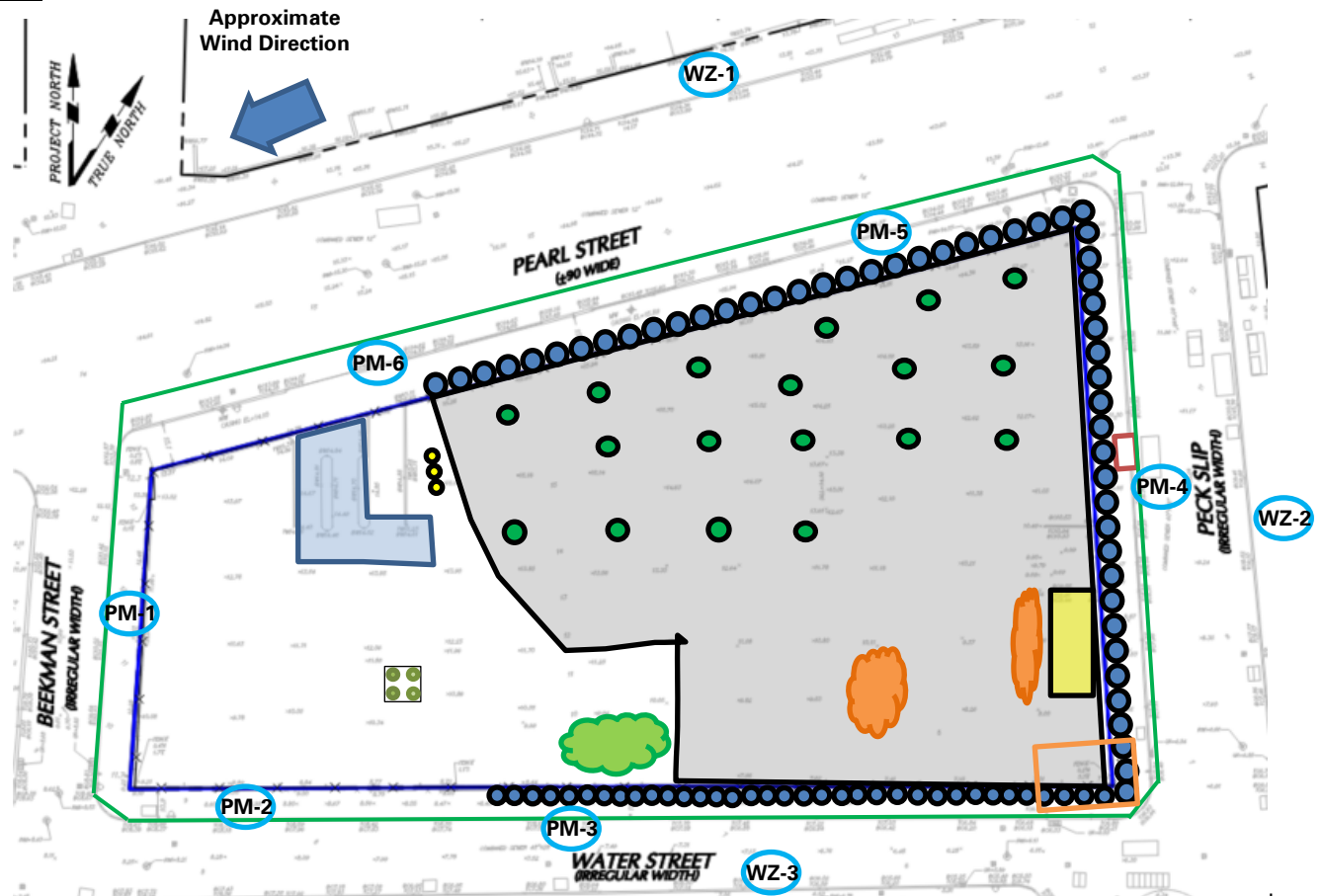
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will weld brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Elsayh Boak

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV applying Atmos® AC-645 dust/vapor suppressing foam in the southeastern part of the site (facing east)



Photo 2: CCJV excavating petroleum-impacted soil/fill in the southeastern part of the site (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Sunday, September 18, 2022 WEATHER: Partly Cloudy, 72 °F Wind: WSW @ 13 mph TIME: 9:00 AM – 10:15 AM MONITOR: Farielle Brazier
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 103 Langan (Environmental) – Farielle Brazier Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) - Jack Dettra LendLease (General Contractor) – Marty Cohen	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none">CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Farielle Brazier LANGAN

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	7	149.95	19	455.69
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	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	100	2,000	42	840

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

By: Farielle Brazier

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Farielle Brazier
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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 photoionization detector (PID) to monitor volatile organic compound (VOC) concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

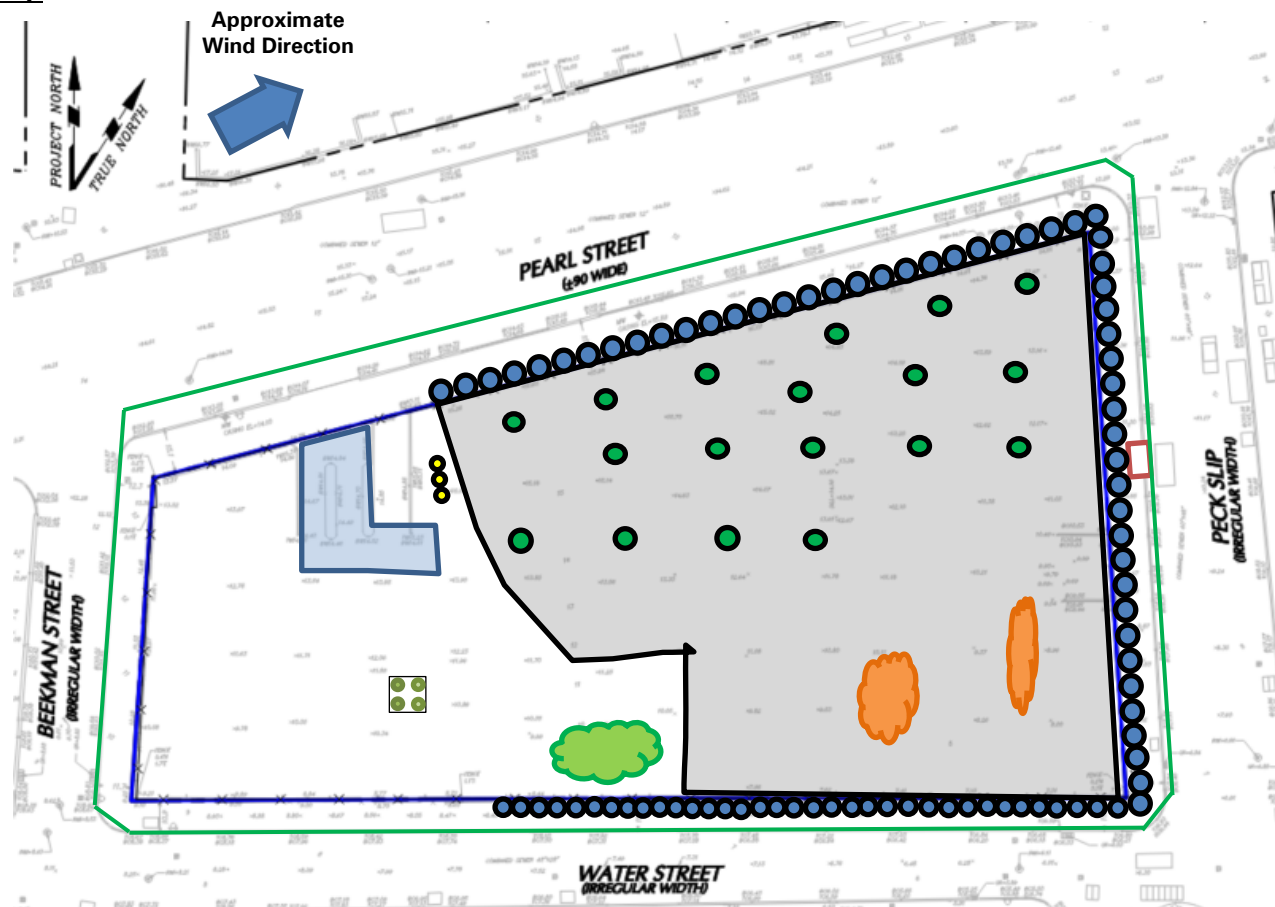
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will weld brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Farielle Brazier LANGAN
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SITE OBSERVATION REPORT

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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

Notes:

1) Locations of air monitoring stations are approximate.

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

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

By: Farielle Brazier

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:

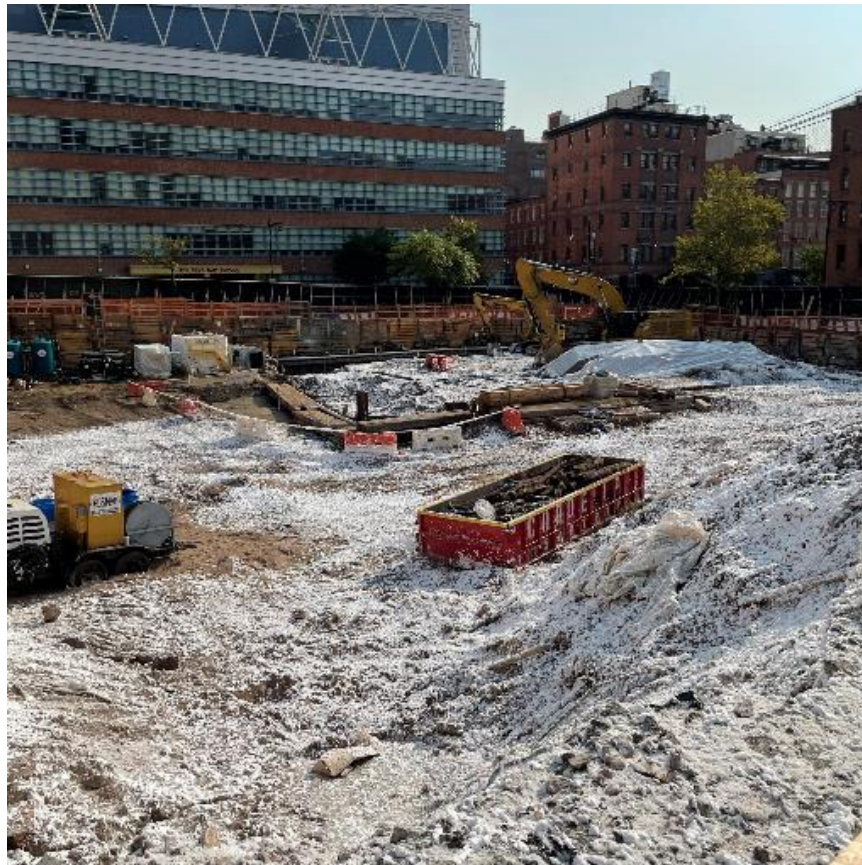


Photo 1: Atmos® AC-645 dust/vapor suppressing foam applied to exposed soil/fill in the southwestern part of the site (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Farielle Brazier
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Monday, September 19, 2022 WEATHER: Clear, 71.4 – 87.2 °F Wind: NNE @ 0.7 – 5.5 mph TIME: 6:00 AM – 4:30 PM MONITOR: Maitland Robinson, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 104 Langan (Environmental/Geotechnical) – Maitland Robinson, Eddie Cai Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Aaron Fischer New York City Fire Department (FDNY)	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 80-foot-long by 60-foot-wide area to a maximum depth of about 12 feet below grade surface (bgs) for removal and off-site disposal of petroleum-impacted soil/fill in the southeastern part of site (waste characterization cell WC10). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ. Trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. Petroleum-like odor and a maximum instantaneous PID reading of 114.1 parts per million (ppm) was recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal. CCJV installed odor neutralizing sleeves on the interior of the perimeter construction fencing along the eastern and southern boundaries of the site (Peck Slip and Water Street, respectively). CCJV pumped groundwater from the previously installed dewatering wells to facilitate excavation in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). FDNY conducted a site visit in response to a complaint regarding petroleum-like odors via 311. No adverse conditions were noted and no further action was required as a result of the site visit. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Maitland Robinson LANGAN	

SITE OBSERVATION REPORT

- CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson LANGAN
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SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 45 truckloads (about 900 cubic yards [CY]) of petroleum-impacted soil/fill from waste characterization cell WC10 for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, 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	7	149.95	19	455.69
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	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	45	900	0	0
Project Total	261	5,220	145	2,900	42	840

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

By: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 or VOCs that approached or exceeded the action levels established by the CAMP (1.00 µg/m³ and 5.0 ppm, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP ranged from 0.00 µg/m³ to 0.02 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.047	0.0	0.01
PM-2	0.064	0.0	0.00
PM-3	0.047	0.6	0.00
PM-4	0.000	0.8	0.00
PM-5	0.031	0.3	0.01
PM-6	0.033	0.2	0.01
WZ-1	0.056	0.0	0.01
WZ-2	0.034	0.0	0.00
WZ-3	0.035	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.078	0.0	0.03
PM-2	* 0.143 @ 11:53am	0.6	0.01
PM-3	0.076	1.3	0.01
PM-4	0.000	2.4	0.01
PM-5	0.044	0.7	0.02
PM-6	0.055	1.0	0.02
WZ-1	0.072	0.0	0.02
WZ-2	0.043	0.1	0.01
WZ-3	0.042	0.0	0.01

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

- *PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m³) intermittently between 11:18am to 12:01pm. PM10 concentrations did not exceed 0.150

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

mg/m³, which is the action level requiring work stoppage according to the CAMP. The exceedances were caused by tri-axle dump trucks entering and/or exiting the site upwind of perimeter CAMP station PM-2. During this time, CCJV was loading trucks with petroleum-impacted soil/fill in the southeastern part of the site while actively spraying Atmos® AC-645 dust/vapor suppressing foam across the work area. In accordance with the CAMP, additional dust suppression measures were implemented (e.g., spraying the ground surface with water) and PM10 concentrations returned to background conditions. Fugitive dust was not observed migrating from the 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 0.16 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations of ambient air around the excavation area in the southeastern part of the site ranged from 0.0 ppm to 114.1 ppm. Exposed soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading of trucks, and during periods of inactivity. VOC concentrations at perimeter and off-site CAMP stations did not exceed the action level established in the CAMP (5.0 ppm) throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:01am to 3:32pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:58am to 3:30pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:58am to 3:18pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued sequentially from 3:18pm to 3:43pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.05 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

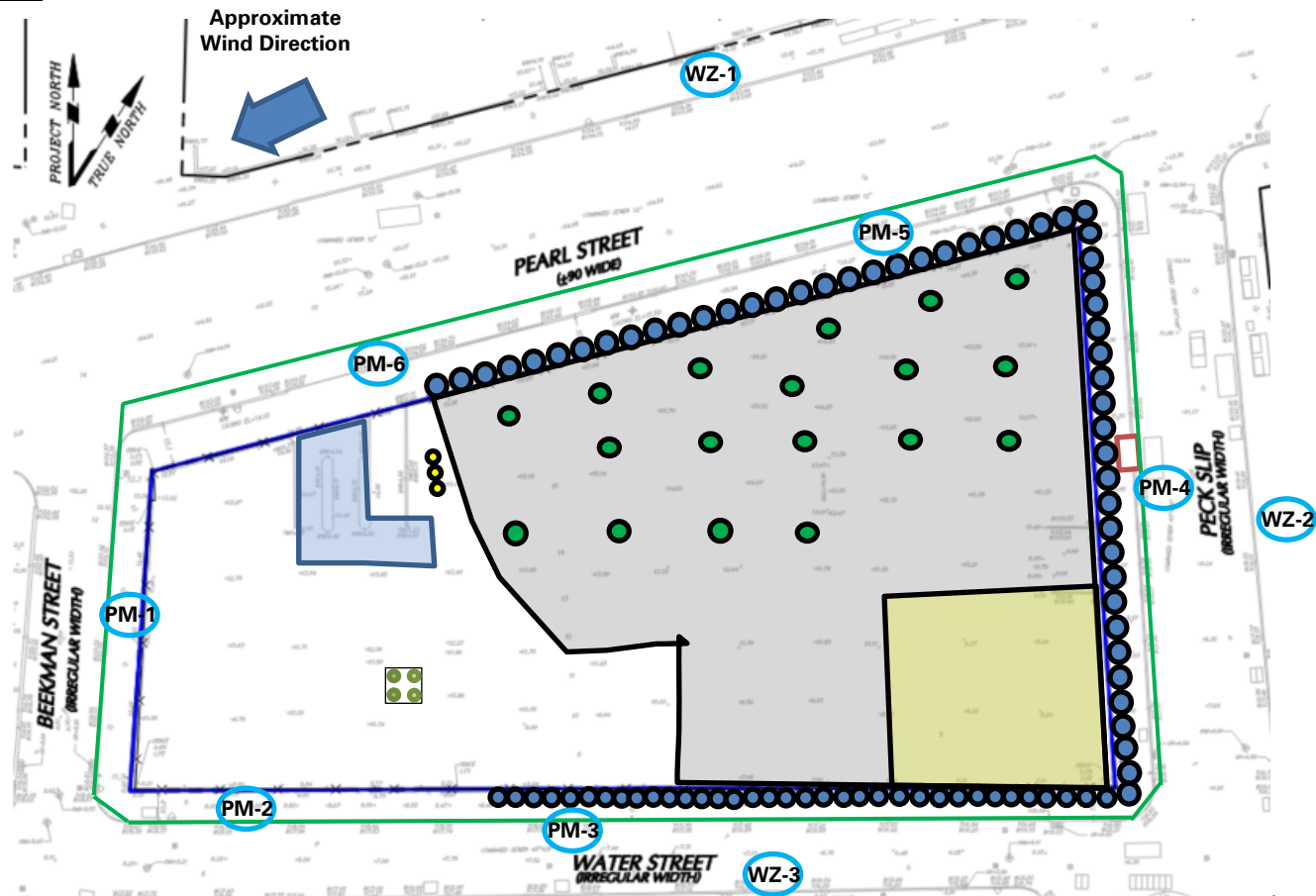
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue welding brackets and bracing for support-of-excavation system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson LANGAN
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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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Maitland Robinson

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 2: CCJV actively applying Atmos® AC-645 dust/vapor suppressing foam during excavation/loading in the southeastern part of the site (facing south)

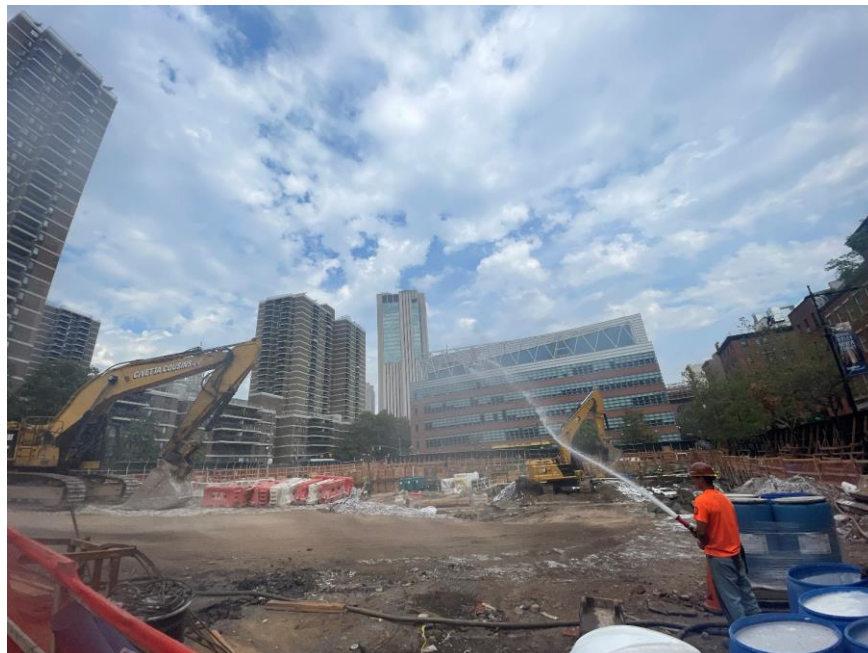


Photo 2: CCJV applying water to the ground surface for dust suppression in the central part of the site (facing northwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Tuesday, September 20, 2022 WEATHER: Clear, 69.4 – 82.4 °F Wind: NW @ 0.4 – 6.0 mph TIME: 6:00 AM – 4:00 PM MONITOR: Brian Kenneally, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 105 Langan (Environmental/Geotechnical) – Brian Kenneally, Eddie Cai Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Aaron Fischer AKRF Inc. (AKRF) (Archaeologist) – Elizabeth Meade	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 40-foot-long by 40-foot-wide area to a maximum depth of about 12 feet below grade surface (bgs) for removal and off-site disposal of petroleum-impacted soil/fill in the southeastern part of site (waste characterization cell WC10). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ. Trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. Petroleum-like odor and a maximum instantaneous PID reading of 7.8 parts per million (ppm) was recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal. CCJV installed odor neutralizing sleeves on the interior of the perimeter construction fencing along the eastern and southern boundaries of the site (Peck Slip and Water Street, respectively). CCJV pumped groundwater from the previously installed dewatering wells to facilitate excavation in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV continued welding for installation of additional bracing required for the support-of-excavation (SOE) system in the southeast corner of the site (Peck Slip and Water Street). 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally LANGAN	

SITE OBSERVATION REPORT

- CCJV used imported 1.5-inch clean bluestone to backfill and grade the northwestern part of the site for extension of the tracking pad.
- CCJV continued testing tie-backs along the southern boundary of the site (Water Street) for SOE system installation.
- CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally LANGAN
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SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 13 truckloads (about 260 cubic yards [CY]) of petroleum-impacted soil/fill from waste characterization cell WC10 for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ
- CCJV imported one truckload (20.57 tons) of 1.5-inch clean bluestone 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	1	20.57
Project Total	8	184.42	0	0	7	149.95	20	476.26
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	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	13	260	0	0
Project Total	261	5,220	158	3,160	42	840

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, and 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.026	0.0	0.01
PM-2	0.032	0.0	0.01
PM-3	0.020	0.0	0.00
PM-4	0.000	0.1	0.00
PM-5	0.019	0.0	0.02
PM-6	0.018	0.1	0.02
WZ-1	0.025	0.0	0.02
WZ-2	0.013	0.0	0.01
WZ-3	0.018	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.040	0.2	0.04
PM-2	0.045	0.0	0.02
PM-3	0.040	0.1	0.01
PM-4	0.001	0.3	0.02
PM-5	0.030	0.1	0.05
PM-6	0.039	0.9	0.05
WZ-1	0.039	0.0	0.04
WZ-2	0.020	0.1	0.02
WZ-3	0.031	0.0	0.02

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

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

By: Brian Kenneally

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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/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 of ambient air around the excavation area in the southeastern part of the site ranged from 0.0 ppm to 7.8 ppm. Exposed soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading of trucks, and during periods of inactivity. VOC concentrations at perimeter and off-site CAMP stations did not exceed the action level established in the CAMP (5.0 ppm) throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:01am to 3:18pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:01am to 3:13pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:01am to 3:09pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued sequentially from 3:06pm to 3:36pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.09 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue welding brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

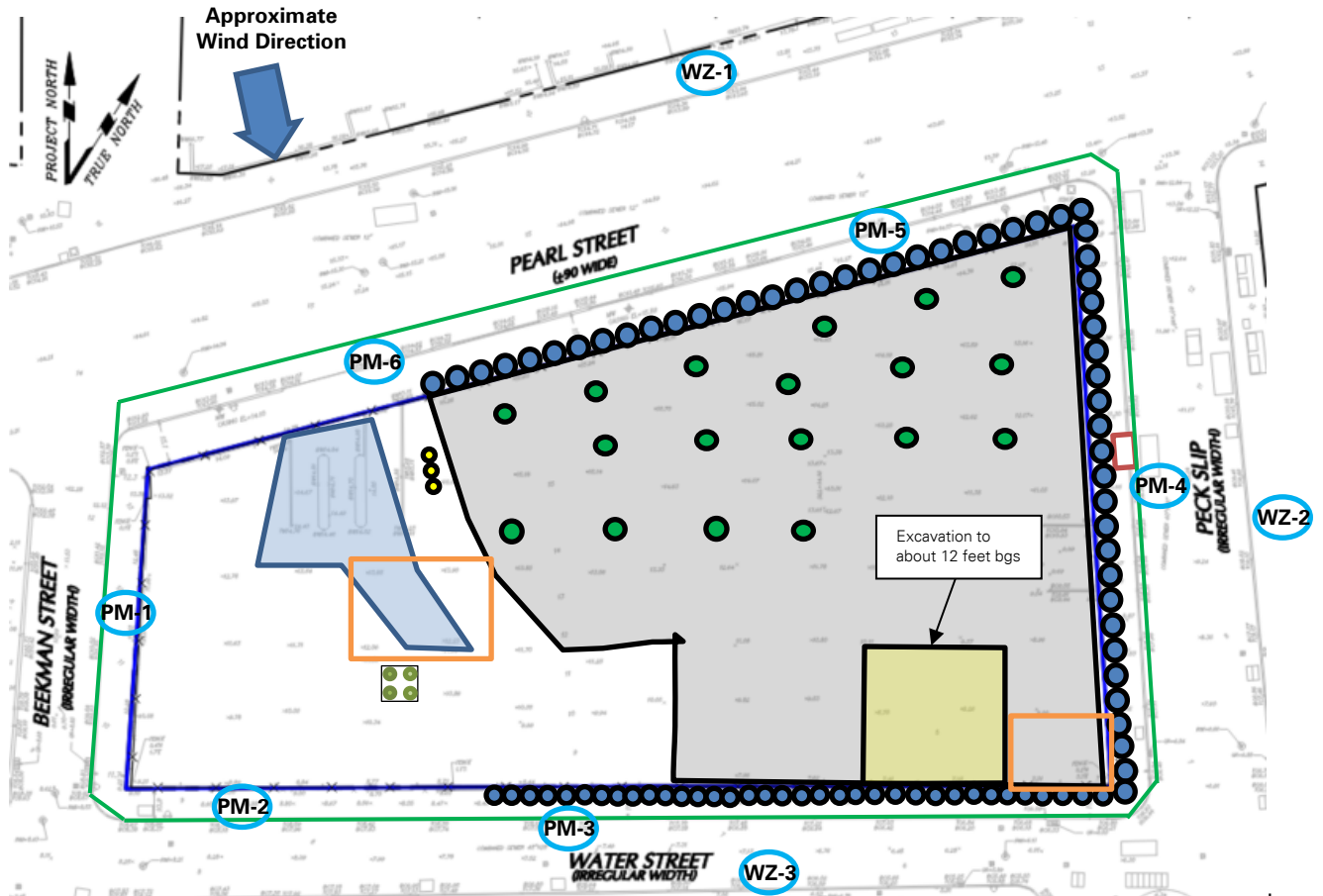
Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Brian Kenneally

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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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV actively applying Atmos® AC-645 dust/vapor suppressing foam during excavation/loading in the southeastern part of the site (facing west)



Photo 2: Atmos® AC-645 dust/vapor suppressing foam applied to exposed soil/fill for the temporary overnight cover (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Wednesday, September 21, 2022 WEATHER: Clear, 65.3 – 80.7 °F Wind: W @ 0.4 – 6.1 mph TIME: 6:00 AM – 6:00 PM MONITOR: Brian Kenneally, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 106 Langan (Environmental/Geotechnical) – Brian Kenneally, Eddie Cai, Michael Au Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Aaron Fischer AKRF Inc. (AKRF) (Archaeologist) – Theresa Imbriolo New York City Fire Department (FDNY) New York City Department of Environmental Protection (NYCDEP)	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 45-foot-long by 40-foot-wide area to a maximum depth of about 7 feet below the existing grade surface for removal and off-site disposal of petroleum-impacted soil/fill in the southeastern part of site (waste characterization cells WC09 and WC10). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ. Trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. Petroleum-like odor and a maximum instantaneous PID reading of 33.8 parts per million (ppm) was recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal. CCJV installed odor neutralizing sleeves on the interior of the perimeter construction fencing along the eastern and southern boundaries of the site (Peck Slip and Water Street, respectively). CCJV pumped groundwater from the previously installed dewatering wells to facilitate excavation in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the NYCDEP combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV continued welding for installation of additional bracing required for the support-of-excavation (SOE) system in the southeast corner of the site (Peck Slip and Water Street). FDNY and NYCDEP conducted site visits in response to complaints received via 311 for odors and noise, respectively. No adverse conditions were noted and no further action was required as a result of the site visits. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Eddie Cai LANGAN	

SITE OBSERVATION REPORT

- CCJV covered all exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Eddie Cai LANGAN
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SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 21 truckloads (about 420 cubic yards [CY]) of petroleum-impacted soil/fill from waste characterization cells WC09 and WC10 for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, 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	7	149.95	20	476.26
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	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	21	420	0	0
Project Total	261	5,220	179	3,580	42	840

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

By: Eddie Cai

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- Langan collected one groundwater sample from the influent of the dewatering system for laboratory analysis of NYSDEC Part 375/target compound list (TCL) volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).
- The sample was 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: Eddie Cai

LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor, VOCs, or PM10 that approached or exceeded the action levels established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$, 5.0 ppm, and 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.017	0.0	0.00
PM-2	0.028	0.0	0.01
PM-3	0.018	0.0	0.00
PM-4	0.000	0.3	0.00
PM-5	0.018	0.0	0.02
PM-6	0.014	0.4	0.02
WZ-1	0.021	0.0	0.01
WZ-2	0.007	0.0	0.01
WZ-3	0.014	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.033	0.0	0.01
PM-2	0.052	0.0	0.03
PM-3	0.035	0.1	0.01
PM-4	0.000	1.5	0.02
PM-5	0.034	0.7	0.04
PM-6	0.027	0.9	0.04
WZ-1	0.037	0.0	0.03
WZ-2	0.019	0.1	0.03
WZ-3	0.026	0.0	0.02

• mg/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:	Eddie Cai
			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 0.16 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations of ambient air around the excavation area in the southeastern part of the site ranged from 0.0 ppm to 33.8 ppm. Exposed soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading of trucks, and during periods of inactivity. VOC concentrations at perimeter and off-site CAMP stations did not exceed the action level established in the CAMP (5.0 ppm) throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:52am to 5:10pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:52am to 5:10pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:06am to 5:08pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued sequentially from 4:57pm to 5:10pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.07 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

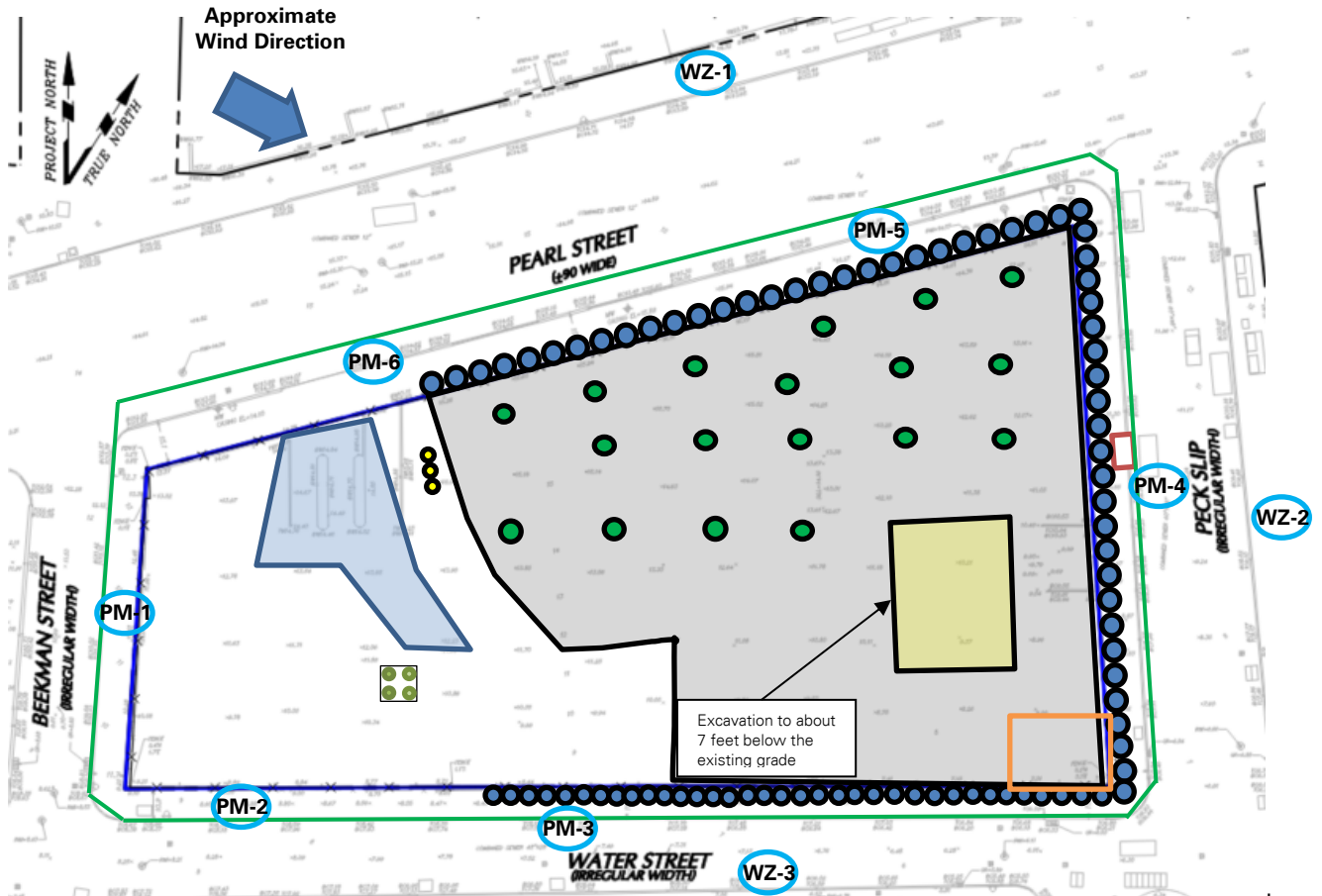
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue welding brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

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

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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Eddie Cai

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV actively applying Atmos® AC-645 dust/vapor suppressing foam during excavation/loading in the southeastern part of the site (facing west)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill for the temporary overnight cover (facing southwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Eddie Cai LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Thursday, September 22, 2022 WEATHER: Rain, 63.8 – 78.9 °F Wind: WSW @ 0.5 – 7.3 mph TIME: 6:00 AM – 5:30 PM MONITOR: Brian Kenneally, Maitland Robinson
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 107 Langan (Environmental/Geotechnical) – Brian Kenneally, Maitland Robinson Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen Tristate Groundwater (Dewatering Contractor) – John Ratcliff New York State Department of Environmental Conservation (NYSDEC) – Aaron Fischer, Rafi Alam AKRF Inc. (AKRF) (Archaeologist) – Elizabeth Meade New York City Department of Environmental Protection (NYCDEP)	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 60-foot-long by 50-foot-wide area to a maximum depth of about 7 feet below the existing grade surface for removal and off-site disposal of petroleum-impacted soil/fill in the southeastern part of site (waste characterization cells WC09 and WC10). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ. Trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. Petroleum-like odor and a maximum instantaneous PID reading of 7.4 parts per million (ppm) was recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal. CCJV pumped groundwater from the previously installed dewatering wells to facilitate excavation in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the NYCDEP combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV continued welding for installation of additional bracing required for the support-of-excavation (SOE) system in the southeast corner of the site (Peck Slip and Water Street). CCJV used imported 1.5-inch clean bluestone to backfill and grade an about 40-foot-long by 15-foot-wide area in the northwestern part of the site for maintenance of the tracking pad. NYCDEP conducted a site visit in response to a complaint regarding petroleum-like odors received via 311. No adverse conditions were noted and no further action was required as a result of the site visit. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Maitland Robinson LANGAN	

SITE OBSERVATION REPORT

- CCJV covered all exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson LANGAN
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SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 31 truckloads (about 620 cubic yards [CY]) of petroleum-impacted soil/fill from waste characterization cells WC09 and WC10 for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ.
- CCJV imported one truckload (about 22.09 tons) of 1.5-inch clean bluestone from the Impact Reuse and 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	1	22.09	0	0
Project Total	8	184.42	0	0	8	172.04	20	476.26
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	77	1,540	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	31	620	0	0
Project Total	261	5,220	210	4,200	42	840

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

By: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected today.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, and 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.037	0.0	0.01
PM-2	0.039	0.0	0.00
PM-3	0.034	0.0	0.00
PM-4	0.000	0.0	0.00
PM-5	0.011	0.3	0.01
PM-6	0.028	0.1	0.01
WZ-1	0.035	0.0	0.01
WZ-2	0.018	0.0	0.00
WZ-3	0.026	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.070	0.0	0.03
PM-2	0.072	0.0	0.01
PM-3	0.065	0.0	0.00
PM-4	0.001	0.4	0.02
PM-5	0.028	0.6	0.04
PM-6	0.049	0.2	0.02
WZ-1	0.077	0.0	0.03
WZ-2	0.048	0.0	0.02
WZ-3	0.073	0.0	0.01

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

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

By: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

Equipment Troubleshooting

- The Jerome® J505 units at perimeter CAMP station PM-5 and off-site CAMP station WZ-1 intermittently did not transmit data through the remote telemetry system throughout the work day. The mercury vapor data from each Jerome® J505 unit was manually downloaded at the end of the work day and is reflected in the Daily Air Monitoring Report. During the below times, a Jerome® 405 unit was connected to telemetry to provide real-time mercury vapor data to field personnel while continuing to monitor each area with a Jerome® J505 unit.
 - Perimeter CAMP station PM-5 from 6:50am to 4:21pm
 - Off-site station WZ-1 from 1:49pm to 4:21pm

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 of ambient air around the excavation area in the southeastern part of the site ranged from 0.0 ppm to 7.4 ppm. Exposed soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading of trucks, and during periods of inactivity. VOC concentrations at perimeter and off-site CAMP stations did not exceed the action level established in the CAMP (5.0 ppm) throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:48am to 4:21pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:48am to 4:21pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:48am to 4:21pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued at 4:21pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.05 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

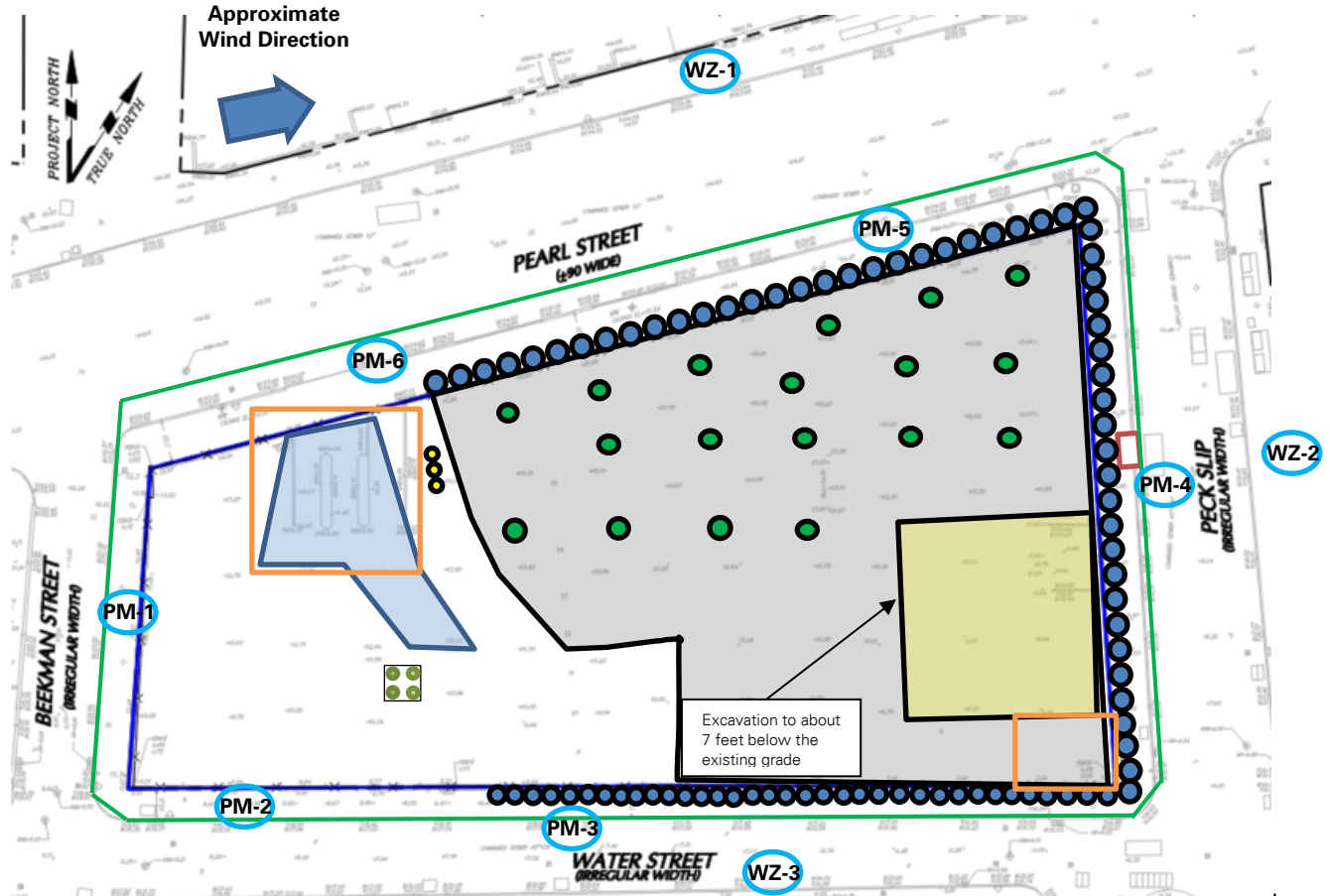
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue welding brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson LANGAN
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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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Maitland Robinson

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV actively applying Atmos® AC-645 dust/vapor suppressing foam during excavation/loading in the southeastern part of the site (facing south)

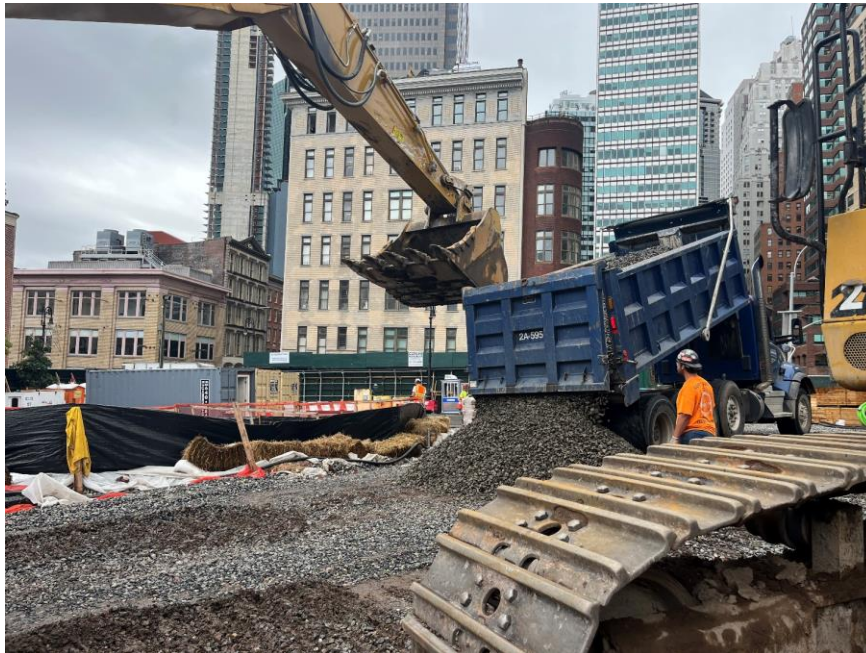


Photo 2: CCJV importing 1.5-inch clean bluestone for maintenance of the tracking pad in the northwestern part of the site (facing northwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Friday, September 23, 2022 WEATHER: Clear, 52.8 – 66.0 °F Wind: E @ 0.7 – 6.4 mph TIME: 6:00 AM – 3:45 PM MONITOR: Brian Kenneally, Maitland Robinson
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 108 Langan (Environmental/Geotechnical) – Brian Kenneally, Maitland Robinson Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Mike Palmieri New York State Department of Environmental Conservation (NYSDEC) – Aaron Fischer, Rafi Alam AKRF Inc. (AKRF) (Archaeologist) – Theresa Imbiolo	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 45-foot-long by 45-foot-wide area to a maximum depth of about 8 feet below the existing grade surface for removal and off-site disposal of petroleum-impacted soil/fill in the southeastern part of site (waste characterization cells WC09 and WC10). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ. Trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. Petroleum-like odor and a maximum instantaneous PID reading of 1.8 parts per million (ppm) was recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal. CCJV excavated an about 25-foot-long by 12-foot-wide area to a maximum depth of about 3 feet below the existing grade surface for removal and off-site disposal of hazardous lead-impacted soil/fill in the southeastern part of site. Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Clean Earth of North Jersey (CENJ) facility, located in Kearney NJ. Trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. No evidence of impacts were recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally LANGAN	

SITE OBSERVATION REPORT

- CCJV pumped groundwater from the previously installed dewatering wells to facilitate excavation in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the NYCDEP combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214).
- CCJV continued welding for installation of additional bracing required for the support-of-excavation (SOE) system in the southeast corner of the site (Peck Slip and Water Street).
- CCJV covered all exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally LANGAN
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SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 30 truckloads (about 600 cubic yards [CY]) of petroleum-impacted soil/fill from waste characterization cells WC09 and WC10 for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ.
- CCJV exported two truckloads (about 40 CY) of hazardous lead-impacted soil/fill for off-site disposal at the CENJ facility, located in Kearny, 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	8	172.04	20	476.26
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	2	40	0	0
Project Total	5	85	35	700	79	1,580	216	4,320

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

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	30	600	0	0
Project Total	261	5,220	240	4,800	42	840

Sampling Activities

- Langan collected three confirmation endpoint soil samples (EP52_EL_-8.0, EP53_EL_-8.0, and EP54_EL_-8.0) and associated quality assurance/quality control (QA/QC) samples for laboratory analysis of NYSDEC Part 375/target compound list (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, target analyte list (TAL) metals (including hexavalent/trivalent chromium and total cyanide), per- and polyfluoroalkyl substances (PFAS), and 1,4-dioxane.
- Samples were relinquished to Alpha Analytical, Inc. an Environmental Laboratory Accredited Program (ELAP)-certified laboratory under standard chain-of-custody protocol.
- Sample elevations were surveyed by a professional surveyor.

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

By: Brian Kenneally

LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor, VOCs, or PM10 that approached or exceeded the action levels established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$, 5.0 ppm, and 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.09 $\mu\text{g}/\text{m}^3$.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.006	0.0	0.01
PM-2	0.018	0.0	0.01
PM-3	0.006	0.0	0.00
PM-4	0.001	0.1	0.00
PM-5	0.000	0.0	0.01
PM-6	0.004	0.5	0.01
WZ-1	0.008	0.0	0.01
WZ-2	0.003	0.0	0.01
WZ-3	0.004	0.1	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.026	0.0	0.04
PM-2	0.036	0.0	0.02
PM-3	0.017	0.0	0.02
PM-4	0.003	0.2	0.01
PM-5	0.006	0.1	0.03
PM-6	0.007	0.7	0.04
WZ-1	0.031	0.0	0.03
WZ-2	0.005	0.0	0.03
WZ-3	0.006	0.1	0.02

• mg/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: Brian Kenneally

LANGAN

SITE OBSERVATION REPORT

Equipment Troubleshooting

- PM10 concentrations were not recorded at perimeter CAMP stations PM-4 and PM-5 from 12:18pm to 12:20pm, and from 12:14pm to 12:17pm, respectively, during replacement of the DustTrak units for annual calibration by the manufacturer. Replacement occurred during the lunch break and there were no ongoing ground-intrusive activities at the site and fugitive dust was not observed migrating from the site.
- The Jerome® J505 units at perimeter CAMP station PM-5 and off-site CAMP station WZ-1 intermittently did not transmit data through the remote telemetry system throughout the work day. The mercury vapor data from each Jerome® J505 unit was manually downloaded at the end of the work day and is reflected in the Daily Air Monitoring Report. During the below times, a Jerome® 405 unit was connected to telemetry to provide real-time mercury vapor data to field personnel while continuing to monitor each area with a Jerome® J505 unit.
 - Perimeter CAMP station PM-5 from 6:50am to 2:53pm
 - Off-site station WZ-1 from 1:49pm to 2:53pm

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 0.32 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:52am to 2:53pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:51am to 2:53pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:59am to 2:53pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued at 2:53pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.08 µg/m³.
- VOC concentrations at each CAMP station ranged from 0.0 ppm to 0.1 ppm.

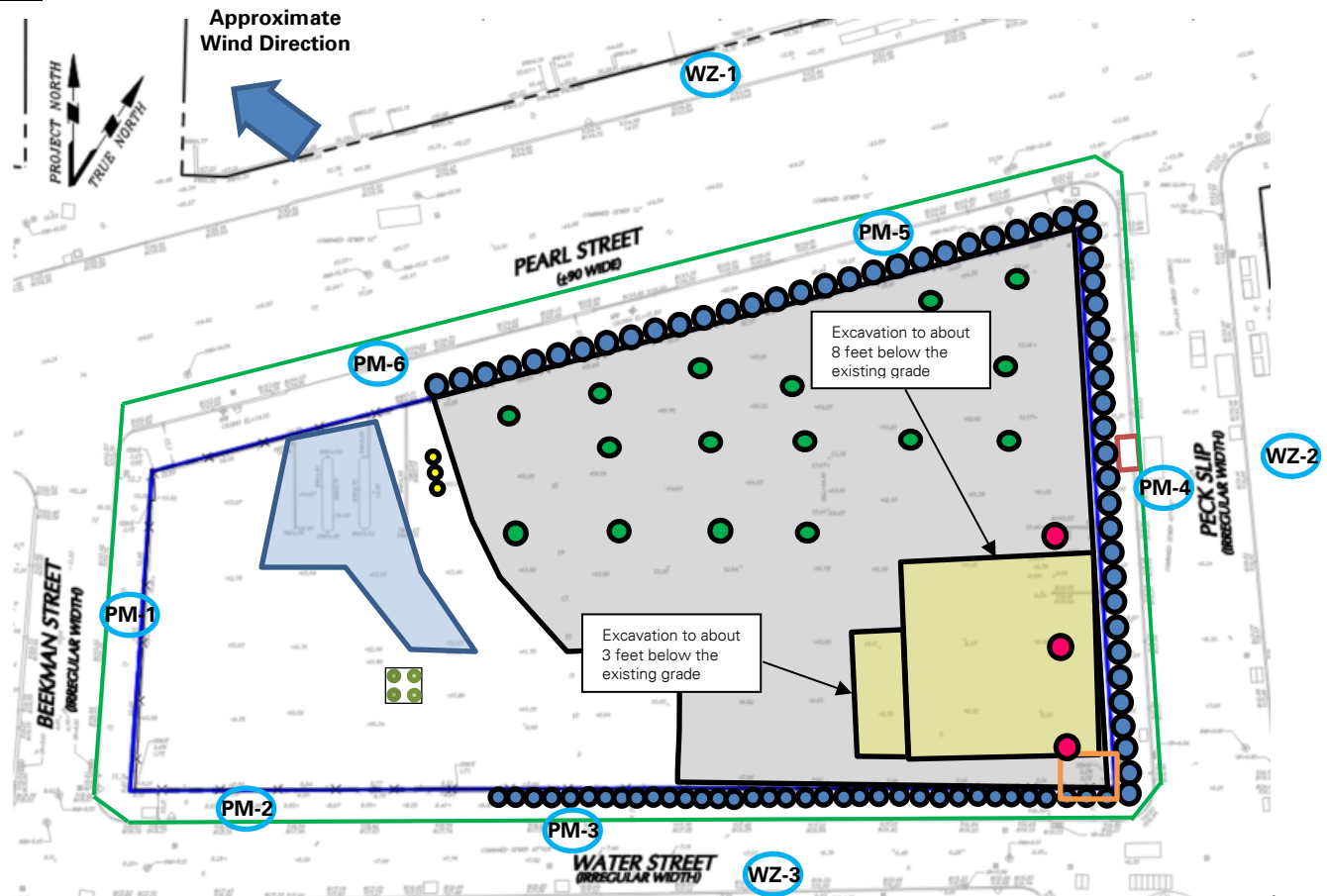
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue welding brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			LANGAN

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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV actively applying Atmos® AC-645 dust/vapor suppressing foam during excavation/loading in the southeastern part of the site (facing south)



Photo 2: Tri-axle dump truck loaded with excavated soil/fill for off-site disposal, secured with a tight-fitting cover (facing east)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Saturday, September 24, 2022 WEATHER: Clear, 54– 71°F Wind: NW @ 5 – 15 mph TIME: 9:00 AM – 4:15 PM MONITOR: Maitland Robinson
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 109 Langan (Environmental/Geotechnical) – Maitland Robinson Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Mike Palmieri New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV continued welding for installation of additional bracing required for the support-of-excavation (SOE) system along the southern boundary of the site (Water Street). No ground-intrusive activities were completed throughout the work day. CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Maitland Robinson LANGAN	

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	8	172.04	20	476.26
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	79	1,580	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	240	4,800	42	840

Sampling Activities

- No samples were collected today.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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 0.12 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld photoionization detector (PID) to monitor volatile organic compound (VOC) concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

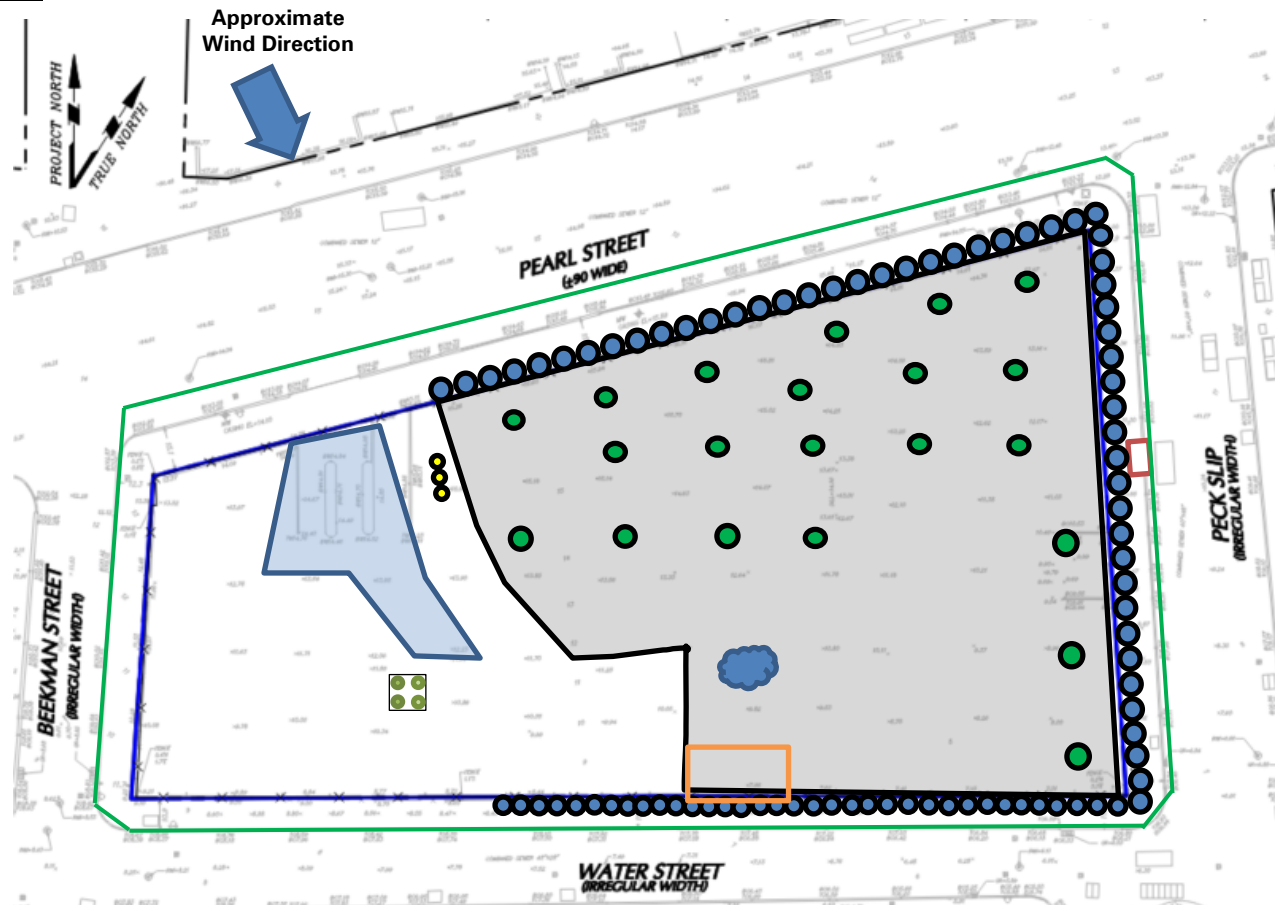
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue welding brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson LANGAN
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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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Endpoint Sample Location |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:

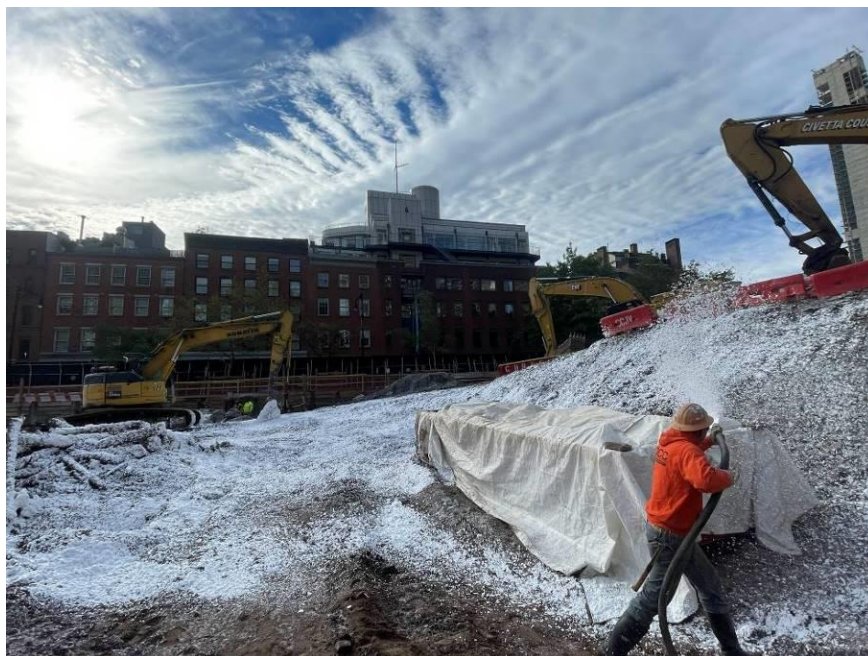


Photo 1: CCJV applying Atmos® AC-645 dust/vapor suppressing foam for reinstallation of the temporary overnight cover (facing southwest).

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Sunday, September 25, 2022 WEATHER: Cloudy, 63.0 – 72.0 °F Wind: N @ 1.8 – 3.7 mph TIME: 8:30 AM – 9:30 AM MONITOR: Lauren Roper
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 110 Langan (Environmental/Geotechnical) – Lauren Roper Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Lauren Roper LANGAN	

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	8	172.04	20	476.26
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	79	1,580	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	240	4,800	42	840

Sampling Activities

- No samples were collected today.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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 0.03 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld photoionization detector (PID) to monitor volatile organic compound (VOC) concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

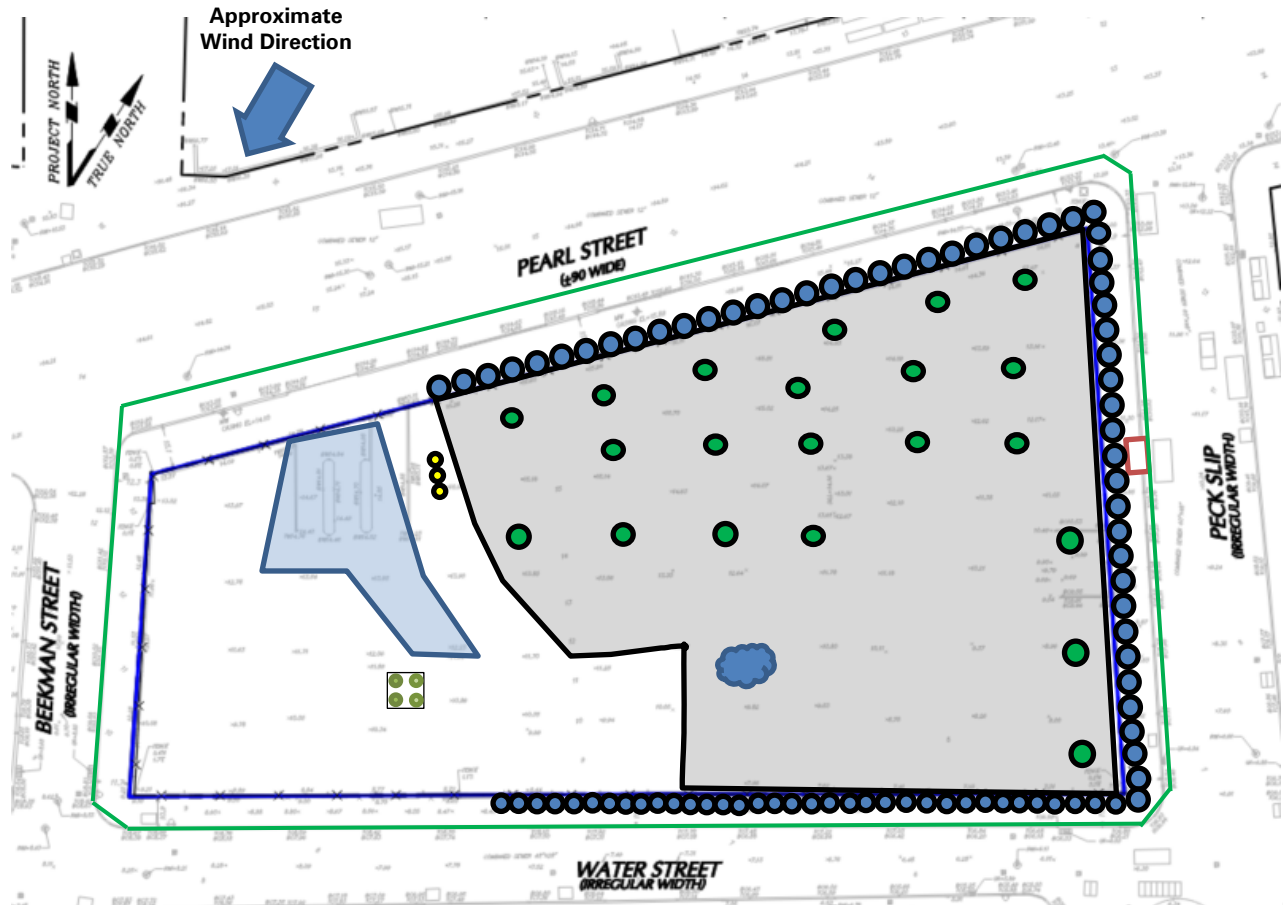
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue welding brackets and bracing for SOE system installation in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper LANGAN
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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 | Yellow circle | Approximate Location of 55-gallon drum |
| Orange rectangle | Approximate Work Area | Blue circle | Approximate Location of Soldier Pile |
| White square | Approximate Location of Installed Pile Cap | Green line | Approximate Perimeter Construction Fence Location |
| Green circle | Approximate Location of Foundation Piles Completed | Black rectangle | Previous Excavation Area |
| Blue rectangle | Approximate Location of Truck Tracking Pad | Yellow rectangle | Approximate Excavation Area |
| Blue cloud | Approximate Location of C&D Stockpile | Green rectangle | Approximate Backfill Area |
| Green cloud | Approximate Location of General Fill Stockpile | Pink circle | Approximate Endpoint Sample Location |
| Grey cloud | Approximate Location of Stockpiled Virgin Stone | Green circle | Approximate Location of Previously Collected Endpoint Sample |
| Orange cloud | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Lauren Roper

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV applying Atmos® AC-645 dust/vapor suppressing foam for reinstallation of the temporary overnight cover (facing east).

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Lauren Roper
		LANGAN	

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Monday, September 26, 2022 WEATHER: Cloudy, 60.9 – 75.7 °F Wind: W @ 0.9 – 5.4 mph TIME: 6:00 AM – 4:00 AM MONITOR: Brian Kenneally, Elsayh Boak, Camille Quick
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 111 Langan (Environmental/Geotechnical) – Brian Kenneally, Elsayh Boak, Camille Quick, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Mike Palmieri New York State Department of Environmental Conservation (NYSDEC) – Aaron Fischer, Rafi Alam AKRF Inc. (AKRF) (Archaeologist) – Theresa Imbiolo Lakewood Environmental Services Corp. (Lakewood) (Drilling Contractor) – Tim Kelly	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV excavated an about 40-foot-long by 30-foot-wide area to a maximum depth of about 8 feet below the existing grade surface for removal and off-site disposal of petroleum-impacted soil/fill in the southeastern part of site (waste characterization cells WC09 and WC10). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ. Trucks were covered with tight-fitting covers and were inspected and washed before leaving the site. <ul style="list-style-type: none"> 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. A maximum instantaneous PID reading of 2.4 parts per million (ppm) was recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal. CCJV excavated an about 20-foot-long by 12-foot-wide area to a maximum depth of about 5 feet below the existing grade surface for removal and off-site disposal of hazardous lead-impacted soil/fill in the southeastern part of site. Excavated soil/fill was temporarily stockpiled on and covered with polyethylene sheeting immediately west of the steel sheet pile wall in preparation for off-site disposal. <ul style="list-style-type: none"> 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. A maximum instantaneous PID reading of 1.6 ppm was recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation. CCJV pumped groundwater from the previously installed dewatering wells to facilitate excavation in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally LANGAN

SITE OBSERVATION REPORT

settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214).

- CCJV continued welding for installation of additional bracing required for the support-of-excavation (SOE) system along the southern boundary of the site (Water Street).
- Lakewood used a Geoprobe® direct-push drill rig with 4-foot-long Macro-Core® samplers to advance 10 soil borings to determine the extents of previous identified hazardous lead-impacted soil/fill and to facilitate off-site disposal of soil/fill in the western part of the site. Langan observed and documented the work, screened the soil samples for environmental impacts, and collected soil samples:
 - Soil borings **WC03AR, WC03A_N1, WC03A_N2, WC03A_NE2, WC03A_N3, and WC03CR** were advanced to a depth of about 16 feet below grade surface (bgs). Material was screened for odors staining, and organic vapors using a PID. No odors, staining, or instrumental evidence of contamination was recorded.
 - Soil borings **WC02A, WC02B, WC03E, and WC03F** were advanced to a depth of about 12 feet bgs. Material was screened for odors staining, and organic vapors using a PID. No odors, staining, or instrumental evidence of contamination was recorded.
 - Soil borings were backfilled with non-impacted drilling cuttings and/or clean sand.
- CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally LANGAN
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SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 22 truckloads (about 440 cubic yards [CY]) of petroleum-impacted soil/fill from waste characterization cells WC09 and WC10 for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, 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	8	172.04	20	476.26
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	79	1,580	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	22	440	0	0
Project Total	261	5,220	262	5,240	42	840

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

By: Brian Kenneally

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- Langan collected six confirmation endpoint soil samples and associated quality assurance/quality control (QA/QC) samples for laboratory analysis of NYSDEC Part 375/target compound list (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, target analyte list (TAL) metals (including hexavalent/trivalent chromium and total cyanide), per- and polyfluoroalkyl substances (PFAS), and/or 1,4-dioxane:
 - EP42_EL_-8.0
 - EP43_EL_-8.0
 - EP44_EL_-8.0
 - EP48_EL_-8.0
 - EP49_EL_-8.0
 - EP50_EL_-8.0
- Langan collected seven grab soil samples for laboratory analysis of total and toxicity characteristic leaching procedure (TCLP) lead.
 - 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.
- Langan collected one waste characterization soil sample set (one composite soil sample and one grab soil sample) for laboratory analysis of Part 375/target compound list (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), target analyte list (TAL) metals (including hexavalent/trivalent chromium and total cyanide), TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, Resource Conservation and Recovery Act (RCRA) characteristics, and/or paint filter.
 - An additional five grab soil samples were collected and placed on hold with the laboratory for potential analysis of total and TCLP metals, 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.
- Confirmation endpoint soil sample locations and elevations were surveyed by a professional surveyor.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally LANGAN
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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor, VOCs, or PM10 that approached or exceeded the action levels established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$, 5.0 ppm, and 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.010	0.0	0.01
PM-2	0.024	0.0	0.01
PM-3	0.020	0.0	0.00
PM-4	0.011	0.0	0.00
PM-5	0.006	0.0	0.01
PM-6	0.012	0.2	0.01
WZ-1	0.021	0.0	0.01
WZ-2	0.008	0.0	0.01
WZ-3	0.005	0.1	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.028	0.0	0.04
PM-2	0.043	0.0	0.02
PM-3	0.042	0.0	0.01
PM-4	0.024	0.2	0.02
PM-5	0.013	0.1	0.04
PM-6	0.021	1.6	0.04
WZ-1	0.030	0.0	0.03
WZ-2	0.015	0.0	0.03
WZ-3	0.013	0.2	0.02

• mg/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:	Brian Kenneally
			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 0.15 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:56am to 3:06pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:56am to 3:06pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:56am to 3:06pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 2:56pm and 3:06pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station were recorded at 0.00 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

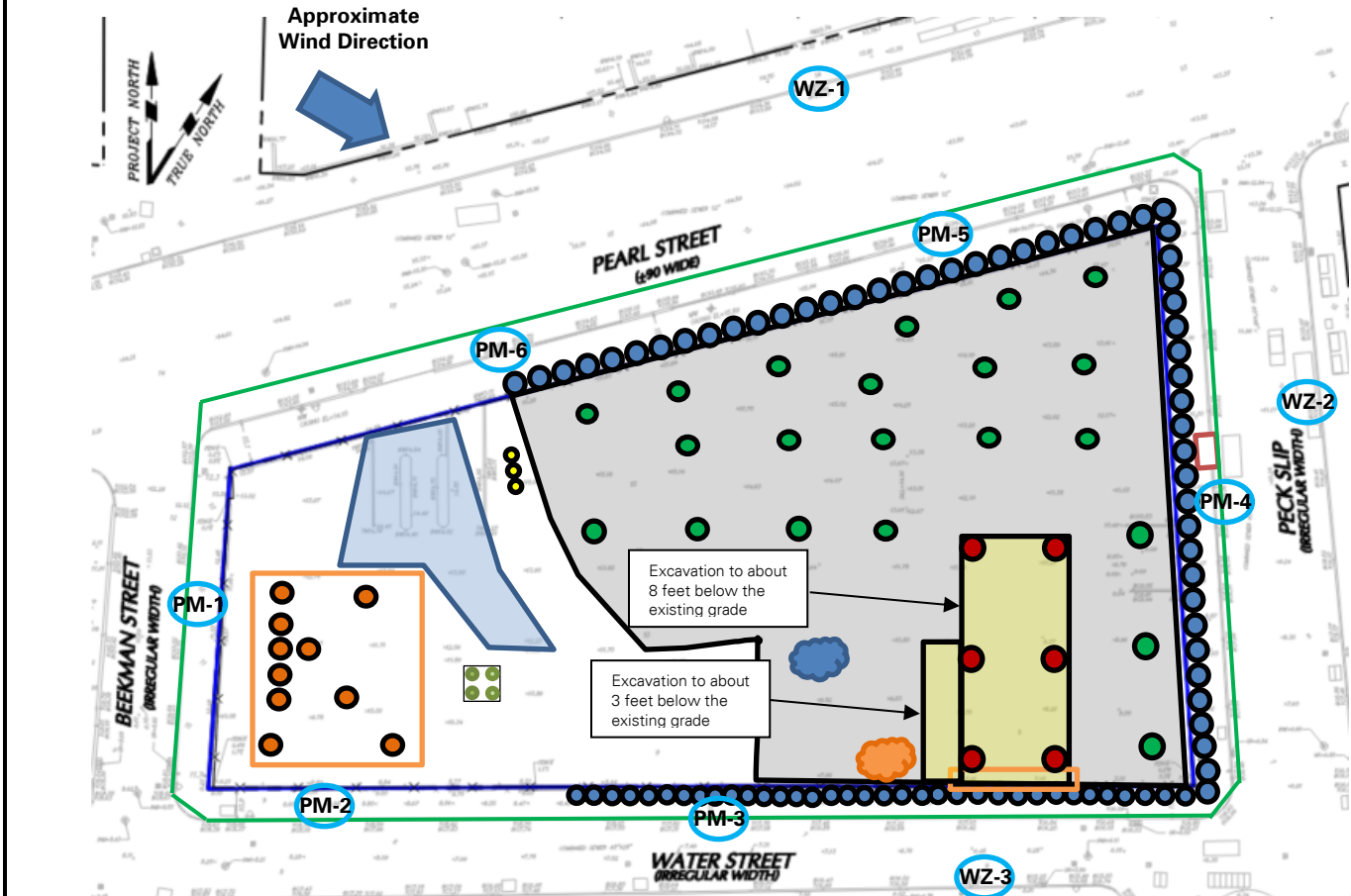
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

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 Excavation Area
- Approximate Backfill Area
- Approximate Location of Endpoint Sample
- Approximate Location of Previously Collected Endpoint Sample
- Approximate Soil Boring Location

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV actively applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill during excavation and loading activities (facing south)



Photo 2: CCJV live-loading petroleum-impacted soil/fill into a tri-axle dump truck for off-site disposal (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Tuesday, September 27, 2022
PROJECT: 250 Water Street		WEATHER: Partly Cloudy, 61.0 – 71.0 °F Wind: WSW @ 1.3 – 6.6 mph
LOCATION: New York, NY		TIME: 6:00 AM – 3:45 PM
BCP SITE ID: C231127		MONITOR: Eddie Cai, Elsayh Boak, Camille Quick
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 112 Langan (Environmental/Geotechnical) – Eddie Cai, Elsayh Boak, Camille Quick Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Aaron Fischer, Rafi Alam AKRF Inc. (AKRF) (Archaeologist) – Elizabeth Meade Lakewood Environmental Services Corp. (Lakewood) (Drilling Contractor) – Tim Kelly	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: <p>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).</p> <p>Site Activities</p> <ul style="list-style-type: none">CCJV excavated an about 40-foot-long by 10-foot-wide area to a maximum depth of about 8 feet below the existing grade surface for removal and off-site disposal of petroleum-impacted soil/fill in the southeastern part of site (waste characterization cells WC09 and WC10). Excavated soil/fill was live-loaded into tri-axle dump trucks for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, NJ. Trucks were covered with tight-fitting covers and were inspected and washed before leaving the site.<ul style="list-style-type: none">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 odors, staining, or instrumental evidence of contamination was recorded. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal.CCJV pumped groundwater from the previously installed dewatering wells in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214).Lakewood used a Geoprobe® direct-push drill rig with 4-foot-long Macro-Core® samplers to advance 4 soil borings to determine the extents of previous identified hazardous lead-impacted soil/fill in the western part of the site. Langan observed and documented the work, screened the soil samples for environmental impacts, and collected soil samples:		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Elsayh Boak
		LANGAN

SITE OBSERVATION REPORT

- Soil borings **WC11N1**, **WC11N2**, **WC11S1**, and **WC11SW1** were advanced to a depth of about 20 feet below grade surface (bgs). Material was screened for odors staining, and organic vapors using a PID. No odors, staining, or instrumental evidence of contamination was recorded.
- Soil borings were backfilled with non-impacted drilling cuttings and/or clean sand.
- CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos[®] AC-645 dust/vapor suppressing foam to create a temporary overnight cover.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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SITE OBSERVATION REPORT

Material Tracking

- CCJV exported 5 truckloads (about 100 cubic yards [CY]) of petroleum-impacted soil/fill from waste characterization cells WC09 and WC10 for off-site disposal at the Bayshore Soil Management facility, located in Keasbey, 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	8	172.04	20	476.26
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	35	700	79	1,580	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	5	100	0	0
Project Total	261	5,220	267	5,340	42	840

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

By: Elsayh Boak

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SITE OBSERVATION REPORT

Sampling Activities

- Langan collected three composite soil samples for laboratory analysis of total and toxicity characteristic leaching procedure (TCLP) lead.
 - An additional five composite 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: Elsah Boak

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, and 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 µg/m³ to 0.08 µg/m³.
- 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/m³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)
PM-1	0.011	0.0	0.02
PM-2	0.017	0.0	0.00
PM-3	0.011	0.0	0.00
PM-4	0.004	0.0	0.00
PM-5	0.004	0.0	0.01
PM-6	0.009	0.2	0.01
WZ-1	0.014	0.0	0.01
WZ-2	0.004	0.0	0.00
WZ-3	0.005	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.022	0.0	0.36
PM-2	0.041	0.0	0.01
PM-3	0.022	0.0	0.01
PM-4	0.011	0.1	0.01
PM-5	0.078	0.1	0.03
PM-6	0.022	0.3	0.02
WZ-1	0.018	0.0	0.02
WZ-2	0.009	0.1	0.01
WZ-3	0.009	0.0	0.01

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

Equipment Troubleshooting

- PM10 concentrations were not recorded at off-site CAMP station WZ-2 from 7:33am to 7:57am (25 minutes), due to a malfunction of the remote telemetry system causing the DustTrak unit to shut down. PM10 concentrations were not recorded at concentrations above background conditions at perimeter CAMP station PM-4, which was located between the work area and off-site CAMP station WZ-2. Data logging for PM10 resumed at 7:58am and fugitive dust was not observed migrating from the 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 0.15 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:11am to 2:43pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:53am to 2:30pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:53am to 2:43pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 2:30pm and 2:43pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.08 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

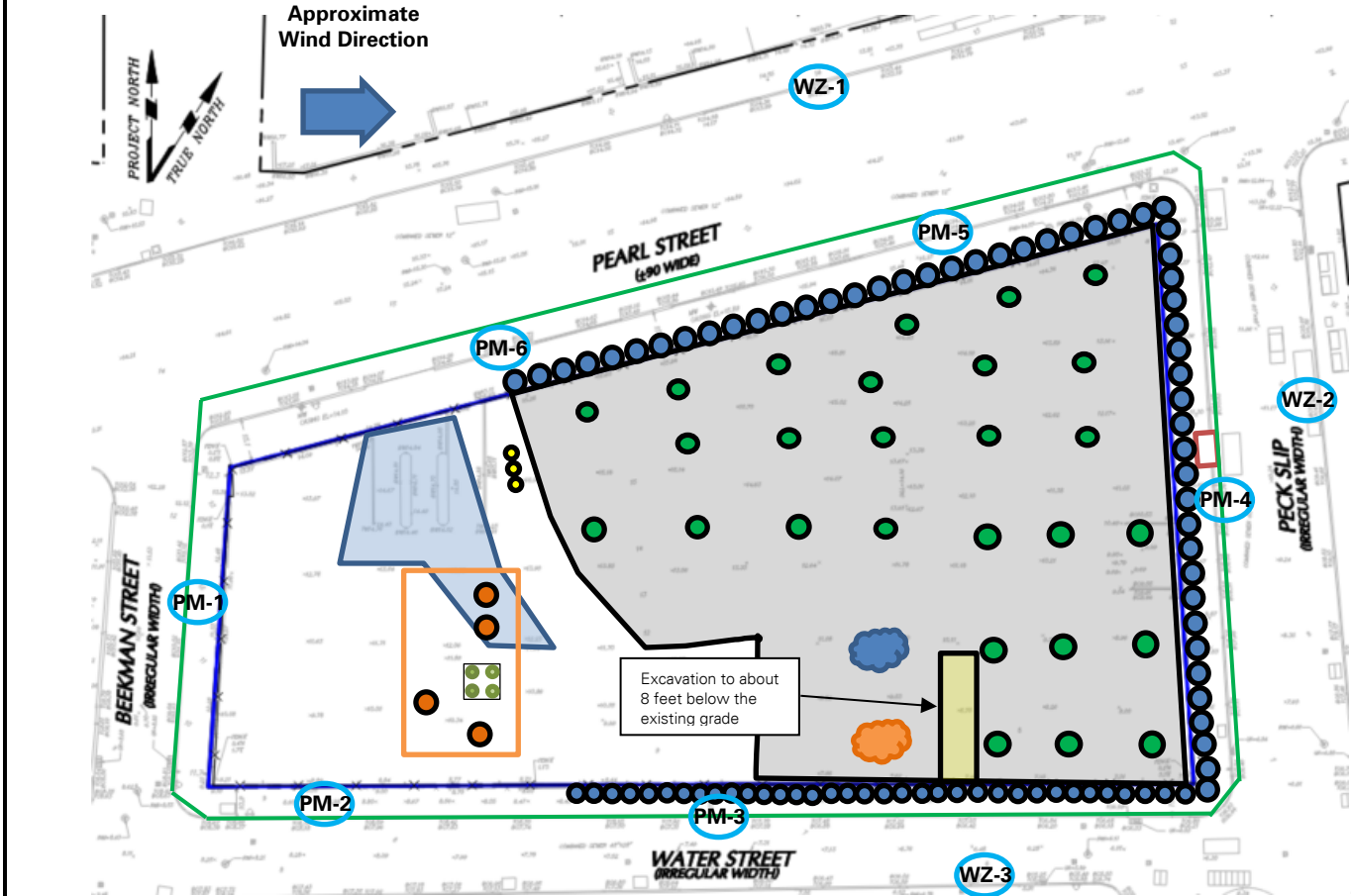
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will import general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- CCJV will backfill the southeastern part of the site using imported general fill.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			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 C&D Stockpile
- Approximate Location of General Fill Stockpile
- Approximate Location of Stockpiled Virgin Stone
- Approximate Excavated Soil/Fill Stockpile

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 Excavation Area
- Approximate Backfill Area
- Approximate Location of Endpoint Sample
- Approximate Location of Previously Collected Endpoint Sample
- Approximate Soil Boring Location

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

By: Elsayh Boak

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV actively applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill during excavation and loading activities (facing south)



Photo 2: Excavation progress in the southeastern part of the site (facing northwest)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Wednesday, September 28, 2022 WEATHER: Partly Cloudy, 55.0 – 72.8 °F Wind: WNW @ 0.4 – 6.0 mph TIME: 6:00 AM – 5:30 PM MONITOR: Maitland Robinson, Eddie Cai
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig	PRESENT AT SITE: Day 113 Langan (Environmental/Geotechnical) – Maitland Robinson, Eddie Cai, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam, Michael Sollecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV used imported general fill to backfill an about 90-foot-long by 40-foot-wide area from about elevation (el) -8 to el 1 within the sheeted area in the southeastern part of site. CCJV pumped groundwater from the previously installed dewatering wells in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Maitland Robinson LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV imported 30 truckloads (746.87 tons) of general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- No material was exported from the site.

Material Import Summary								
Facility Name Location Type of Material	Stone Industries, Inc. Haledon, NJ 1.5/2.5-inch Virgin Stone		Stone Industries, Inc. Haledon, NJ 0.75-inch Virgin Stone		Impact Reuse & Recovery Center or Impact Materials Jersey City, Lyndhurst/Jersey City, NJ 1.5-inch Clean Bluestone		Impact Reuse & Recovery Center, Lyndhurst, NJ General Fill	
Quantities	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)
Today	0	0	0	0	0	0	30	746.87
Project Total	8	184.42	0	0	9	192.61	49	1,202.56
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	37	740	79	1,580	216	4,320

Material Export Summary (2 of 2)

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

Sampling Activities

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

- Langan collected one waste characterization sample set (one composite soil sample and one grab soil sample) to facilitate off-site disposal of hazardous lead-impacted soil in the south-central part of site. The samples were sent for laboratory analysis of NYSDEC Part 375/target compound list (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, target analyte list (TAL) metals (including hexavalent/trivalent chromium and total cyanide), toxicity characteristic leaching procedure (TCLP) Metals, TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, Resource Conservation and Recovery Act (RCRA) characteristics, and/or paint filter.
 - SB28_GRAB_10-14
 - SB28_COMP_10-14
- 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:	Maitland Robinson LANGAN
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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.09 $\mu\text{g}/\text{m}^3$.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.008	0.0	0.01
PM-2	0.014	0.0	0.01
PM-3	0.006	0.0	0.00
PM-4	0.002	0.1	0.00
PM-5	0.002	0.1	0.01
PM-6	0.009	0.2	0.01
WZ-1	0.012	0.0	0.01
WZ-2	0.006	0.0	0.01
WZ-3	0.003	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.022	0.0	0.02
PM-2	0.033	0.0	0.02
PM-3	0.012	0.0	0.02
PM-4	0.012	0.3	0.02
PM-5	0.009	0.1	0.05
PM-6	0.051	0.4	0.03
WZ-1	0.018	0.0	0.03
WZ-2	0.016	0.1	0.02
WZ-3	0.009	0.0	0.03

• mg/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:	Maitland Robinson
			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 0.13 µg/m³ with the exception of one instantaneous concentration recorded above background conditions.
 - One instantaneous mercury vapor reading of 4.33 µg/m³ was recorded at 10:48am due to an internal filter requiring replacement within the handheld Jerome® J505 unit. The filter was replaced on September 29, 2022.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:48am to 4:26pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:48am to 4:26pm during backfilling activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:48am to 4:26pm during backfilling activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 4:26pm and 4:27pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.03 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

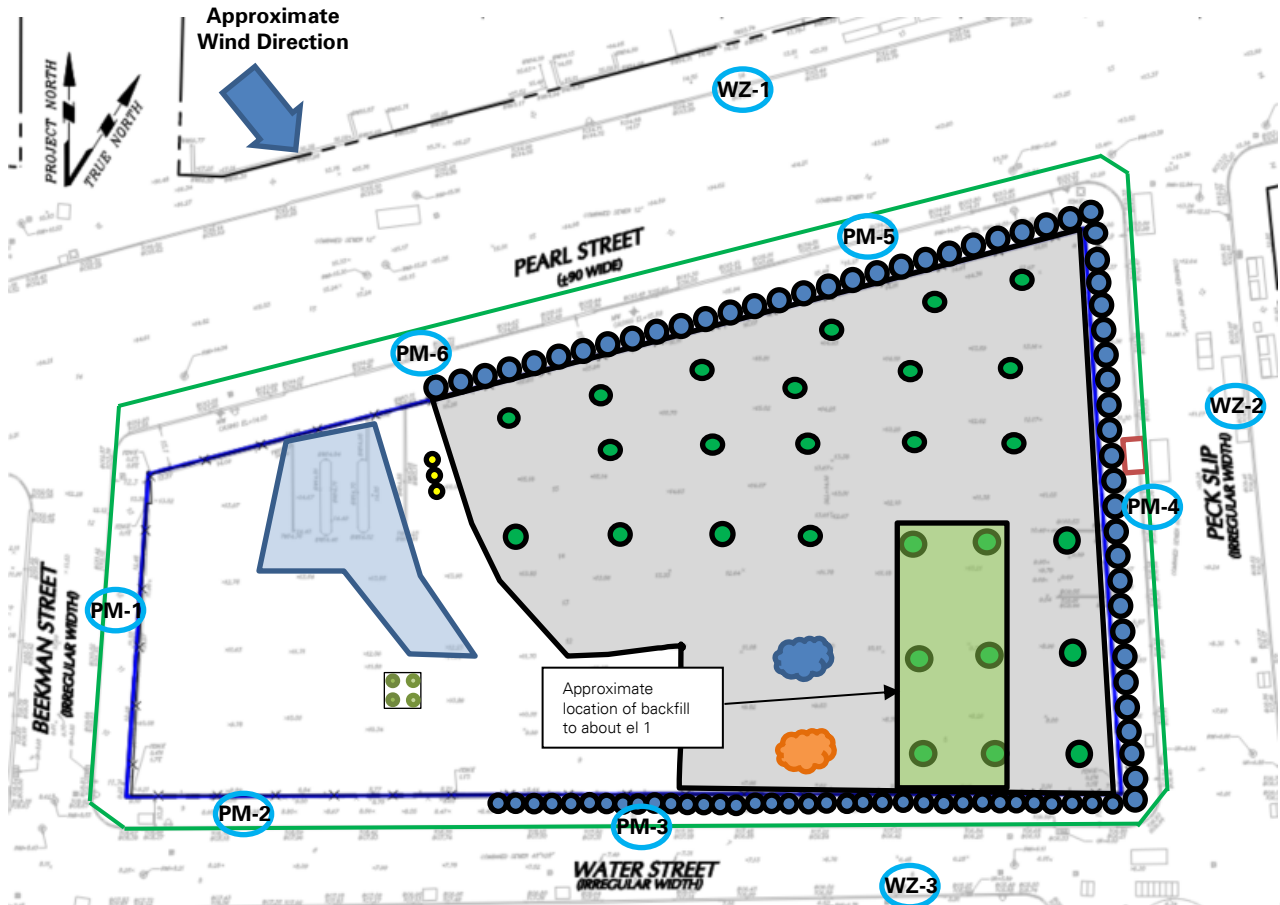
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue to import and backfill general fill in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Location of Endpoint Sample |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: Backfill progress in the southeastern part of the site and CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill to create a temporary overnight cover (facing east)



Photo 2: CCJV implementing dust suppression along the truck tracking pad in the northwestern part of the site (facing east)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Thursday, September 29, 2022 WEATHER: Clear, 56.6 – 69.0 °F Wind: WSW @ 0.7 – 8.4 mph TIME: 6:00 AM – 4:45 PM MONITOR: Maitland Robinson, Elsay Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig Wacker Neuson RTSC3 Wacker Neuson OPU6555	PRESENT AT SITE: Day 114 Langan (Environmental/Geotechnical) – Maitland Robinson, Elsay Boak, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam, Michael Sollecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV used imported general fill to backfill an about 90-foot-long by 20-foot-wide area from about elevation (el) -8 to el -3 within the sheeted area in the southeastern part of site. <ul style="list-style-type: none"> The backfill was placed in one- to two-foot lifts and was compacted using a vibratory roller. CCJV used imported 1.5-inch clean bluestone to backfill and grade the northwestern part of the site for maintenance of the tracking pad. CCJV exported previously stockpiled hazardous lead-impacted soil/fill for off-site disposal at the Clean Earth of North Jersey (CENJ) facility, located in Kearny, NJ. Excavated soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading for off-site disposal. CCJV pumped groundwater from the previously installed dewatering wells in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Elsay Boak LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV imported 32 truckloads (800.30 tons) of general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- CCJV imported 2 truckloads (49.06 tons) of 1.5-inch clean bluestone from the IRRC facility, located in Lyndhurst, NJ.
- CCJV exported 2 truckloads (about 40 CY) of previously stockpiled hazardous lead-impacted fill for off-site disposal at the Clean Earth of North Jersey (CENJ) facility, located in Kearny, 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	2	49.06	32	800.30
Project Total	8	184.42	0	0	11	241.67	81	2,002.86
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)								
Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	2	40	0	0
Project Total	5	85	37	740	81	1,620	216	4,320

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

By: Elsayh Boak

LANGAN

SITE OBSERVATION REPORT

Material Export Summary (2 of 2)						
Facility Name Location Type of Material	Middlesex County Landfill East Brunswick, NJ Non-hazardous Soil/Fill		Bayshore Soil Management Keasbey, NJ Petroleum-Impacted Soil/Fill		Clean Earth of Carteret, NJ Carteret, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0
Project Total	261	5,220	267	5,340	42	840

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 µg/m³, 5.0 ppm, and 0.100 mg/m³, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

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

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.006	0.0	0.01
PM-2	0.013	0.0	0.00
PM-3	0.006	0.0	0.00
PM-4	0.006	0.1	0.00
PM-5	0.003	0.0	0.01
PM-6	0.010	0.1	0.01
WZ-1	0.011	0.0	0.00
WZ-2	0.004	0.0	0.01
WZ-3	0.003	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.019	0.0	0.02
PM-2	0.025	0.0	0.01
PM-3	0.025	0.0	0.00
PM-4	0.010	0.2	0.01
PM-5	0.006	0.0	0.03
PM-6	0.095	0.2	0.02
WZ-1	0.021	0.0	0.02
WZ-2	0.020	0.1	0.03
WZ-3	0.007	0.0	0.02

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			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 0.25 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:59am to 3:54pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:54am to 3:54pm during backfilling activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:56am to 3:53pm during backfilling activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:53pm and 3:54pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.04 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

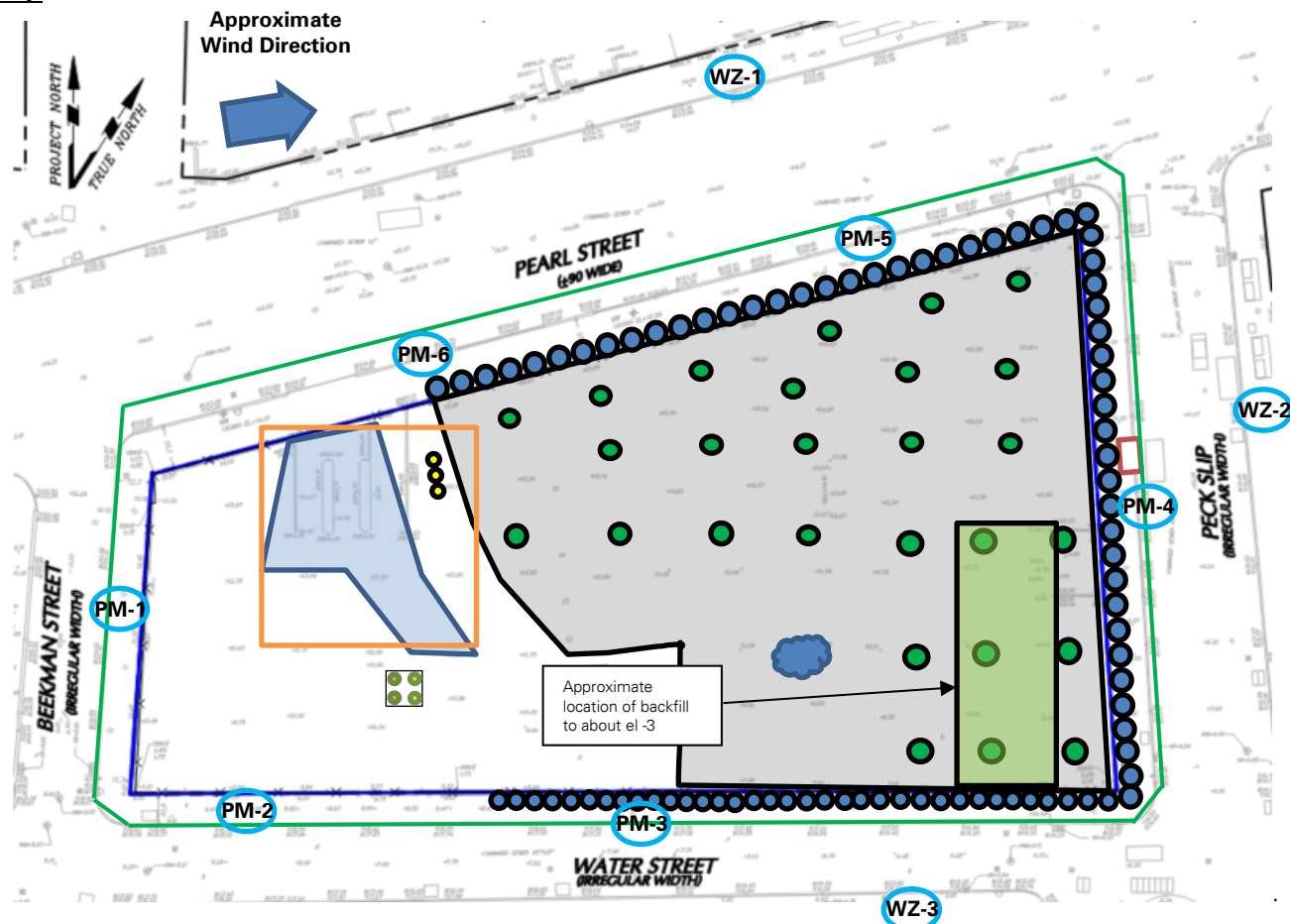
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue to import and backfill general fill in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak LANGAN
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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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Location of Endpoint Sample |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Elsayh Boak

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV grading and compacting the backfilled general fill in the southeastern part of the site (facing west)



Photo 2: CCJV actively applying Atmos® AC-645 dust/vapor suppressing foam during excavation and loading of previously stockpiled hazardous lead-impacted soil/fill (facing southeast)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Elsah Boak
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Friday, September 30, 2022 WEATHER: Overcast, 54.3 – 62.2 °F Wind: WSW @ 0.9 – 8.1 mph TIME: 6:00 AM – 3:45 PM MONITOR: Maitland Robinson, Elsayh Boak
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig Wacker Neuson RTSC3 Wacker Neuson OPU6555	PRESENT AT SITE: Day 115 Langan (Environmental/Geotechnical) – Maitland Robinson, Elsayh Boak, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Rafi Alam, Michael Sollecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV used imported general fill to backfill an about 95-foot-long by 95-foot-wide area from about elevation (el) -8 to el -1 within the sheeted area in the southeastern part of site. <ul style="list-style-type: none"> The backfill was placed in one- to two-foot lifts and was compacted using a vibratory roller and vibratory plate compactor. CCJV pumped groundwater from the previously installed dewatering wells in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Maitland Robinson LANGAN	

SITE OBSERVATION REPORT

Material Tracking

- CCJV imported 31 truckloads (771.43 tons) of general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- No material was exported from the site.

Material Import Summary

Facility Name Location Type of Material	Stone Industries, Inc. Haledon, NJ 1.5/2.5-inch Virgin Stone		Stone Industries, Inc. Haledon, NJ 0.75-inch Virgin Stone		Impact Reuse & Recovery Center or Impact Materials Jersey City, Lyndhurst/Jersey City, NJ 1.5-inch Clean Bluestone		Impact Reuse & Recovery Center, Lyndhurst, NJ General Fill	
Quantities	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)
Today	0	0	0	0	0	0	31	772.53
Project Total	8	184.42	0	0	11	241.67	112	2,775.39
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	37	740	81	1,620	216	4,320

Material Export Summary (2 of 2)

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

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

By: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

By: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine 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 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ 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 (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.005	0.0	0.01
PM-2	0.015	0.0	0.00
PM-3	0.006	0.0	0.00
PM-4	0.024	0.0	0.00
PM-5	0.003	0.0	0.01
PM-6	0.010	0.0	0.01
WZ-1	0.014	0.0	0.01
WZ-2	0.005	0.0	0.00
WZ-3	0.004	0.0	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.012	0.0	0.03
PM-2	0.025	0.0	0.01
PM-3	0.011	0.0	0.01
PM-4	0.087	0.1	0.01
PM-5	0.008	0.1	0.02
PM-6	0.014	0.0	0.02
WZ-1	0.023	0.0	0.02
WZ-2	0.011	0.0	0.01
WZ-3	0.009	0.0	0.02

• mg/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: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

Equipment Troubleshooting

- PM10 concentrations were not recorded at perimeter CAMP station PM-3 from 1:12pm to 1:17pm (6 minutes) due to a loose connection to the external battery. Data logging for PM10 resumed at 1:18pm after replacement and reconnection of the wire. Fugitive dust was not observed migrating from the site and PM10 concentrations at off-site CAMP station WZ-3 were not recorded above background conditions 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 0.10 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:56am to 2:57pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:56am to 2:57pm during backfilling activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:56am to 2:57pm during backfilling activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 2:56pm and 2:57pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.04 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

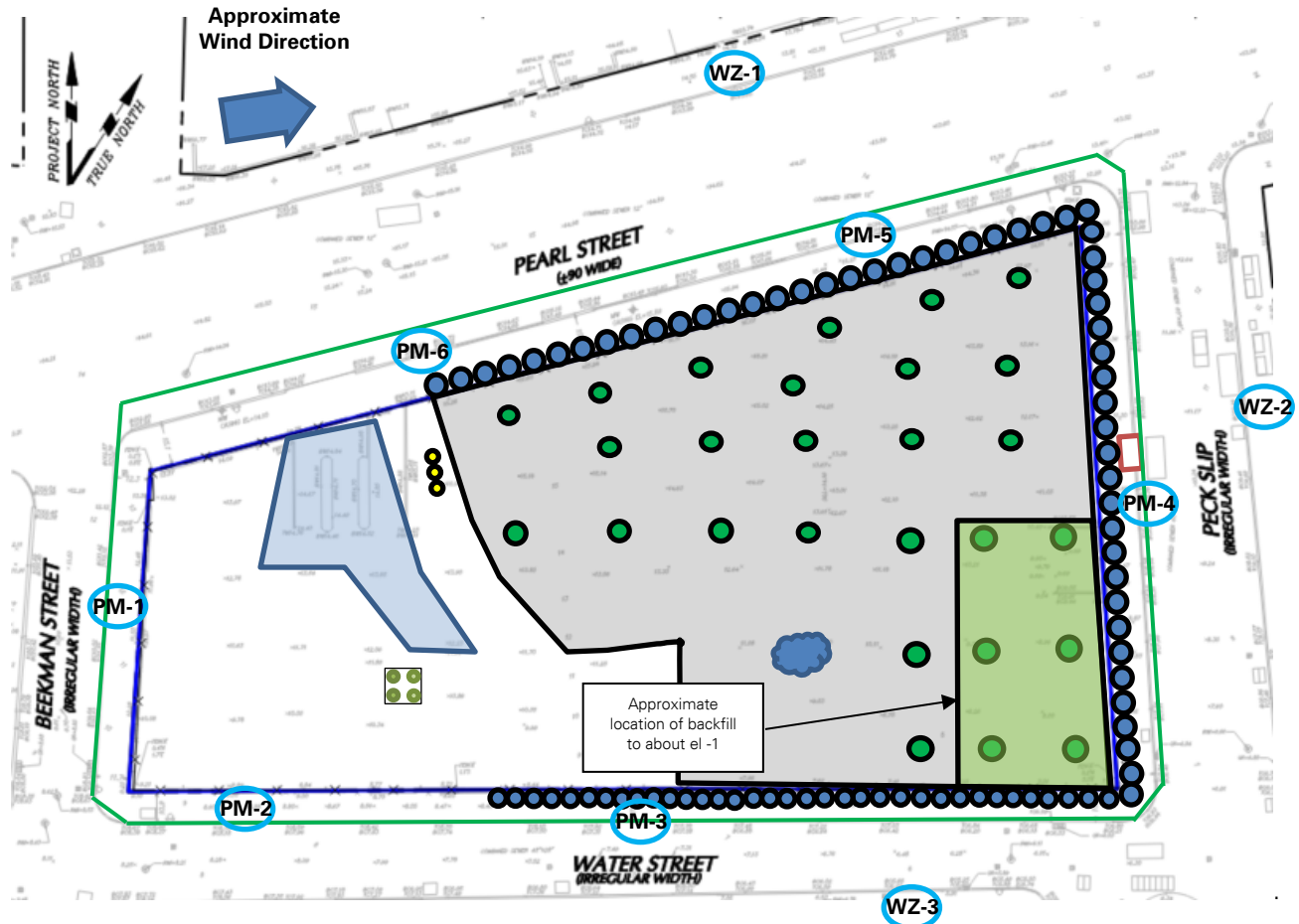
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue to import and backfill general fill in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson LANGAN
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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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Location of Endpoint Sample |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Maitland Robinson

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV backfilling and compacting general fill in the southeastern part of the site (facing east)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill to create a temporary overnight cover (facing east)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Saturday, October 1, 2022 WEATHER: Overcast/Rain, 52 – 55 °F Wind: NE @ 10 – 26 mph TIME: 7:45 AM – 9:45 AM MONITOR: Yaskira Mota diaz
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig Wacker Neuson RTSC3 Wacker Neuson OPU6555	PRESENT AT SITE: Day 116 Langan (Environmental/Geotechnical) – Yaskira Mota diaz Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none">CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Maitland Robinson LANGAN

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	11	241.67	112	2,775.39
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	37	740	81	1,620	216	4,320

Material Export Summary (2 of 2)

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

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

By: Yaskira Mota Diaz

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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 0.38 µg/m³ with the exception of two instantaneous concentrations recorded above background conditions.
 - Two instantaneous mercury vapor readings of 6.61 µg/m³ and 0.91 µg/m³ were recorded at 9:48am and 9:49am, respectively. Readings returned to background following the two instantaneous readings. The filter on the handheld unit was replaced on October 3, 2022.
- The dedicated mobile monitor (Langan) used a handheld photoionization detector (PID) to monitor volatile organic compound (VOC) concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

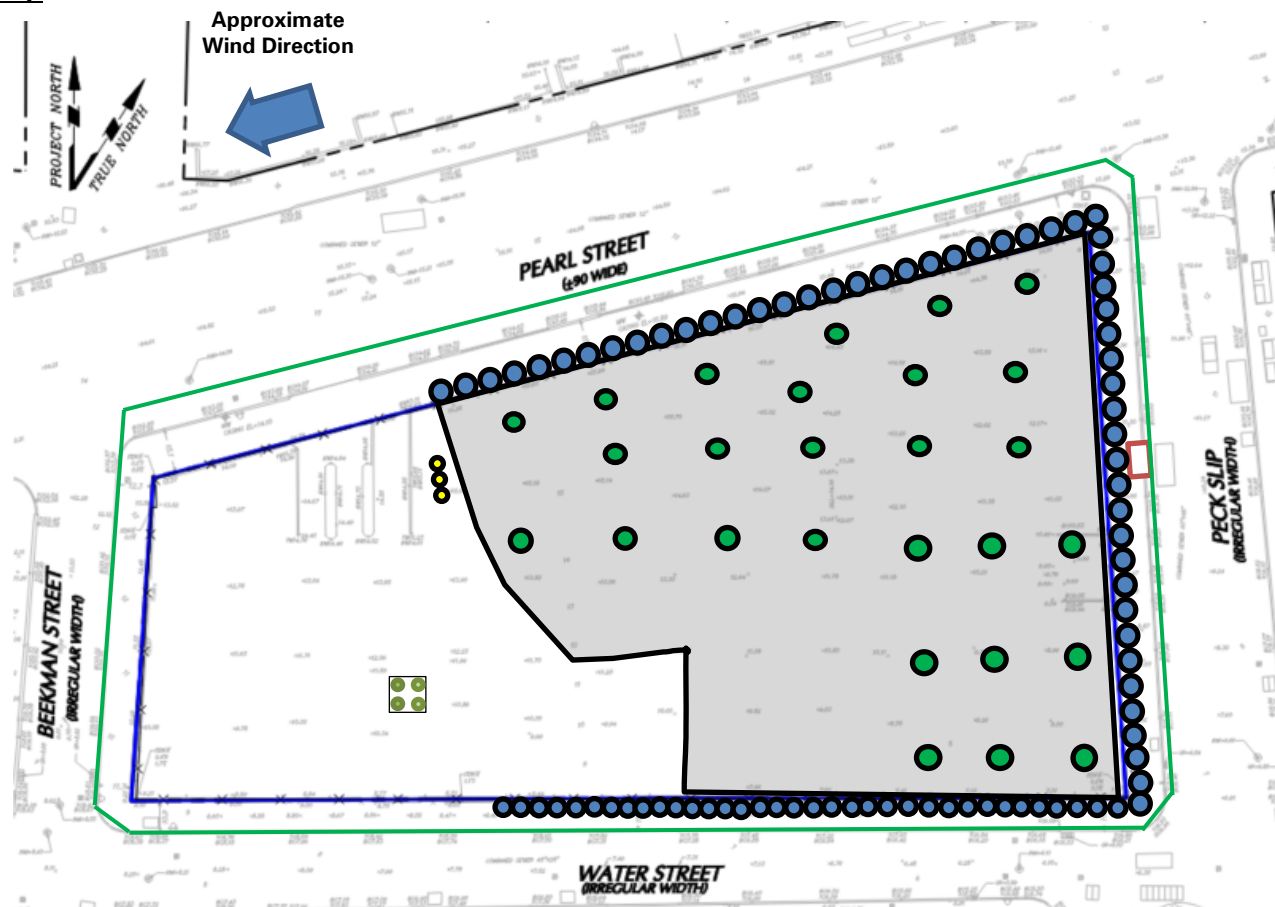
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue to import and backfill general fill in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Yaskira Mota Diaz
			LANGAN

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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Location of Endpoint Sample |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Yaskira Mota Diaz

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill to create a temporary overnight cover (facing west).

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Yaskira Mota Diaz LANGAN
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SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Sunday, October 2, 2022 WEATHER: Overcast, 57.0 – 61.0 °F Wind: NE @ 13.0 mph TIME: 8:30 AM – 9:30 AM MONITOR: Caroline Devin
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig Wacker Neuson RTSC3 Wacker Neuson OPU6555	PRESENT AT SITE: Day 117 Langan (Environmental/Geotechnical) – Caroline Devin Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Maitland Robinson LANGAN

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	11	241.67	112	2,775.39
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	37	740	81	1,620	216	4,320

Material Export Summary (2 of 2)

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

Sampling Activities

- No samples were collected.

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

By: Caroline Devin

LANGAN

SITE OBSERVATION REPORT

CAMP Activities

The community air monitoring plan (CAMP) was not implemented, as there were no ground-intrusive activities ongoing at the site. Langan performed ambient air monitoring across the site using a handheld photoionization detector (PID) and handheld Jerome® J505 mercury vapor analyzer during reinstallation of the temporary overnight cover.

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 0.11 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld photoionization detector (PID) to monitor volatile organic compound (VOC) concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

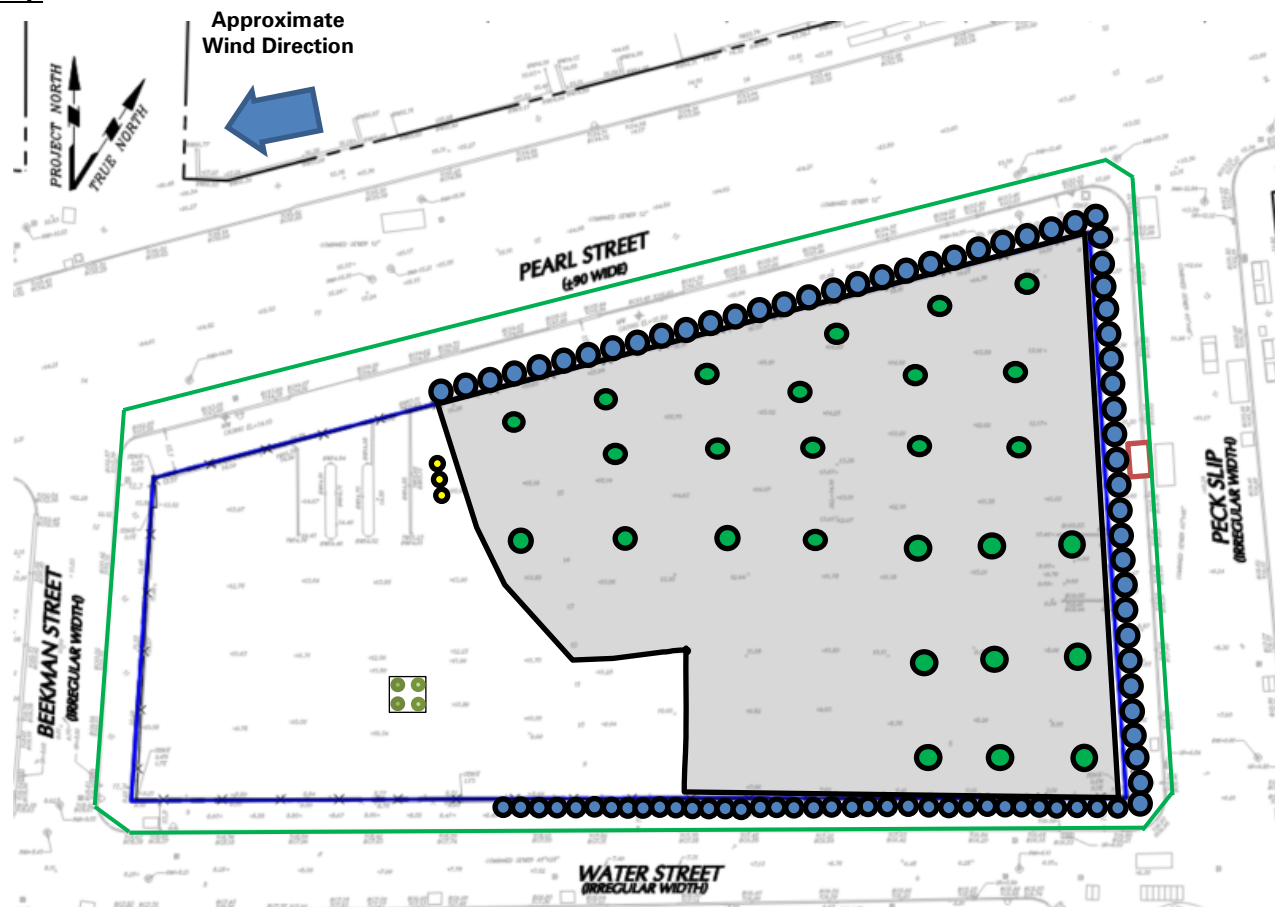
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue to import and backfill general fill in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Caroline Devin LANGAN
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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 55-gallon drum |
|  Approximate Work Area |  Approximate Location of Soldier Pile |
|  Approximate Location of Installed Pile Cap |  Approximate Perimeter Construction Fence Location |
|  Approximate Location of Foundation Piles Completed |  Previous Excavation Area |
|  Approximate Location of Truck Tracking Pad |  Approximate Excavation Area |
|  Approximate Location of C&D Stockpile |  Approximate Backfill Area |
|  Approximate Location of General Fill Stockpile |  Approximate Location of Endpoint Sample |
|  Approximate Location of Stockpiled Virgin Stone |  Approximate Location of Previously Collected Endpoint Sample |
|  Approximate Excavated Soil/Fill Stockpile | |

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

By: Caroline Devin

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill to create a temporary overnight cover (facing south).

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

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Monday, October 3, 2022 WEATHER: Overcast/Rain, 51.6 – 53.0 °F Wind: WSW @ 1.5 – 9.7 mph TIME: 6:00 AM – 4:50 PM MONITOR: Eddie Cai, Brian Kenneally
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig Wacker Neuson RTSC3 Wacker Neuson OPU6555	PRESENT AT SITE: Day 118 Langan (Environmental/Geotechnical) – Eddie Cai, Brian Kenneally, Kevin leong Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Marnie Chancey, Michael Sollecito Triumvirate Environmental (Triumvirate) - TiQuan Spencer	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV used imported general fill to backfill an about 45-foot-long by 45-foot-wide area from about elevation (el) -8 to el -1 within the sheeted area in the southeastern part of site. <ul style="list-style-type: none"> The backfill was placed in one- to two-foot lifts and was compacted using a vibratory roller and vibratory plate compactor. CCJV pumped groundwater from the previously installed dewatering wells in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). Triumvirate replaced external batteries and telemetry system modems within each CAMP station (perimeter and off-site). CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc: M. Raygorodetsky, P. McMahon, M. Au	By: Eddie Cai LANGAN	

SITE OBSERVATION REPORT

Material Tracking

- CCJV imported 44 truckloads (1,090.40 tons) of general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- CCJV imported 1 truckload (22.34 tons) of 1.5-inch Clean Bluestone from the IRRC facility, located in Lyndhurst, NJ.
- No material was exported from the site.

Material Import Summary								
Facility Name Location Type of Material	Stone Industries, Inc. Haledon, NJ 1.5/2.5-inch Virgin Stone		Stone Industries, Inc. Haledon, NJ 0.75-inch Virgin Stone		Impact Reuse & Recovery Center or Impact Materials Jersey City, Lyndhurst/Jersey City, NJ 1.5-inch Clean Bluestone		Impact Reuse & Recovery Center, Lyndhurst, NJ General Fill	
Quantities	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)
Today	0	0	0	0	1	22.34	44	1,090.40
Project Total	8	184.42	0	0	12	264.01	156	3,865.79
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)								
Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	37	740	81	1,620	216	4,320

Material Export Summary (2 of 2)						
Facility Name Location Type of Material	Middlesex County Landfill East Brunswick, NJ Non-hazardous Soil/Fill		Bayshore Soil Management Keasbey, NJ Petroleum-Impacted Soil/Fill		Clean Earth of Carteret, NJ Carteret, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0
Project Total	261	5,220	267	5,340	42	840

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

By: Eddie Cai

LANGAN

SITE OBSERVATION REPORT

Sampling Activities

- Langan collected one groundwater sample from the influent of the dewatering system for laboratory analysis of NYSDEC Part 375/target compound list (TCL) volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs).
- The sample was 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:	Eddie Cai
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor, VOCs, or PM10 that approached or exceeded the action levels established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$, 5.0 ppm, and 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.09 $\mu\text{g}/\text{m}^3$.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.001	0.0	0.01
PM-2	0.013	0.0	0.01
PM-3	0.004	0.0	0.00
PM-4	0.010	0.0	0.00
PM-5	0.003	0.2	0.01
PM-6	0.008	0.0	0.01
WZ-1	0.012	0.0	0.01
WZ-2	0.003	0.0	0.01
WZ-3	0.004	0.0	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.005	0.0	0.03
PM-2	0.017	0.0	0.02
PM-3	0.007	0.0	0.01
PM-4	0.085	0.0	0.01
PM-5	0.038	0.2	0.03
PM-6	0.012	0.4	0.03
WZ-1	0.021	0.0	0.03
WZ-2	0.009	0.0	0.03
WZ-3	0.007	0.0	0.02

• mg/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: Eddie Cai

LANGAN

SITE OBSERVATION REPORT

Equipment Troubleshooting

- CAMP stations were sequentially turned off between 12:32pm and 12:59pm to accommodate replacement of the external battery and telemetry system modem in each station. Each CAMP station was turned off for a maximum period of 6 minutes. PM10 and VOC concentrations were not recorded while maintenance was performed at each respective station. Data logging sequentially resumed between 12:37pm and 1:03pm following replacement of the external battery and modem. Fugitive dust was not observed migrating from the site during these times.
- PM10 concentrations were not recorded at perimeter CAMP station PM-2 from 1:31pm to 1:43pm (13 minutes) due to low power from one of the replacement batteries. The external battery was replaced and data logging resumed at 1:44pm. Fugitive dust was not observed migrating from the site and PM10 concentrations at off-site CAMP station WZ-3 were not recorded above background conditions 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 $\mu\text{g}/\text{m}^3$ to 0.14 $\mu\text{g}/\text{m}^3$.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:57am to 4:23pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:04am to 4:09pm during backfilling activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:57am to 4:06pm during backfilling activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 3:49pm and 4:23pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station were recorded at 0.00 $\mu\text{g}/\text{m}^3$.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

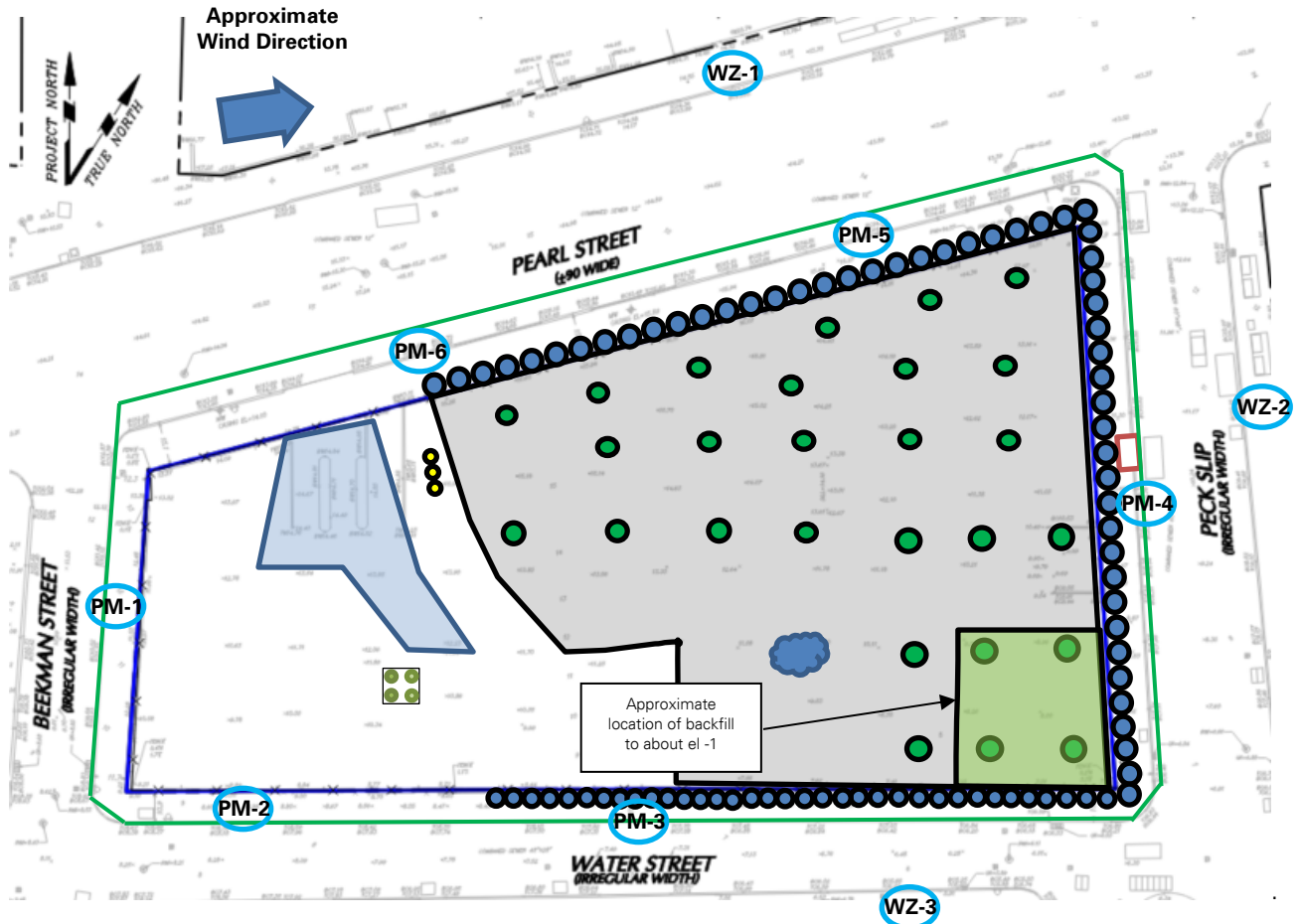
Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue to import and backfill general fill in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

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

SITE OBSERVATION REPORT

Site Map



Notes:

- 1) Locations of air monitoring stations are approximate.

Legend:

- | | |
|--|--|
| Approximate Location of Air Monitoring Station | Approximate Location of 55-gallon drum |
| Approximate Work Area | Approximate Location of Soldier Pile |
| Approximate Location of Installed Pile Cap | Approximate Perimeter Construction Fence Location |
| Approximate Location of Foundation Piles Completed | Previous Excavation Area |
| Approximate Location of Truck Tracking Pad | Approximate Excavation Area |
| Approximate Location of C&D Stockpile | Approximate Backfill Area |
| Approximate Location of General Fill Stockpile | Approximate Location of Endpoint Sample |
| Approximate Location of Stockpiled Virgin Stone | Approximate Location of Previously Collected Endpoint Sample |
| Approximate Excavated Soil/Fill Stockpile | |

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

By: Eddie Cai

LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV backfilling and compacting imported general fill in the southeastern part of the site (facing southwest)



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

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

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Tuesday, October 4, 2022 WEATHER: Overcast/Rain, 48.2 – 54.5 °F Wind: WSW @ 1.2 – 9.2 mph TIME: 6:00 AM – 4:00 PM MONITOR: Maitland Robinson, Brian Kenneally
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig Wacker Neuson RTSC3 Wacker Neuson OPU6555	PRESENT AT SITE: Day 119 Langan (Environmental/Geotechnical) – Maitland Robinson, Brian Kenneally Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – George Washburn Lendlease (General Contractor) – Marty Cohen New York State Department of Environmental Conservation (NYSDEC) – Marnie Chancey, Michael Sollecito	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan was present to document remediation activities in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> CCJV used imported general fill to backfill an about 40-foot-long by 40-foot-wide area from about elevation (el) -8 to el 0 within the sheeted area in the southeastern part of site. <ul style="list-style-type: none"> The backfill was placed in one- to two-foot lifts and was compacted using a vibratory roller and vibratory plate compactor. CCJV pumped groundwater from the previously installed dewatering wells in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214). CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover. 		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Maitland Robinson LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV imported 31 truckloads (758.22 tons) of general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- No material was exported from the site.

Material Import Summary

Facility Name Location Type of Material	Stone Industries, Inc. Haledon, NJ 1.5/2.5-inch Virgin Stone		Stone Industries, Inc. Haledon, NJ 0.75-inch Virgin Stone		Impact Reuse & Recovery Center or Impact Materials Jersey City, Lyndhurst/Jersey City, NJ 1.5-inch Clean Bluestone		Impact Reuse & Recovery Center, Lyndhurst, NJ General Fill	
Quantities	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)
Today	0	0	0	0	0	0	31	758.22
Project Total	8	184.42	0	0	12	264.01	187	4,624.11
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	37	740	81	1,620	216	4,320

Material Export Summary (2 of 2)

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

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

By: Maitland Robinson

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor, VOCs, or PM10 that approached or exceeded the action levels established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$, 5.0 ppm, and 0.100 mg/m^3 , respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ 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 (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
PM-1	0.000	0.0	0.01
PM-2	0.013	0.0	0.00
PM-3	0.005	0.0	0.00
PM-4	0.006	0.0	0.00
PM-5	0.002	0.1	0.01
PM-6	0.008	0.0	0.00
WZ-1	0.015	0.0	0.01
WZ-2	0.001	0.0	0.00
WZ-3	0.008	0.1	0.00

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m^3)	Organic Vapor (ppm)	Mercury Vapor ($\mu\text{g}/\text{m}^3$)
Action Level	0.100 mg/m^3	5.0 ppm	1.00 $\mu\text{g}/\text{m}^3$
PM-1	0.004	0.0	0.02
PM-2	0.014	0.0	0.01
PM-3	0.007	0.0	0.01
PM-4	0.008	0.1	0.01
PM-5	0.004	0.1	0.03
PM-6	0.011	0.0	0.02
WZ-1	0.020	0.0	0.02
WZ-2	0.003	0.0	0.01
WZ-3	0.015	0.1	0.02

• mg/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: Maitland Robinson

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SITE OBSERVATION REPORT

Equipment Troubleshooting

- PM10 concentrations were not recorded at perimeter CAMP station PM-5 from 1:01pm to 1:06pm (6 minutes), due to a malfunction of the remote telemetry system causing the DustTrak unit to shut down. Data logging for PM10 resumed at 1:07pm after resetting the remote telemetry system. Fugitive dust was not observed migrating from the site and off-site CAMP station WZ-1, which was located across Pearl Street, did not record PM10 at concentrations above background conditions 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 0.08 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:00am to 3:04pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:52am to 3:01pm during backfilling activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:09am to 2:57pm during backfilling activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 2:48pm and 3:08pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.01 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.1 ppm.

Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue to import and backfill general fill in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

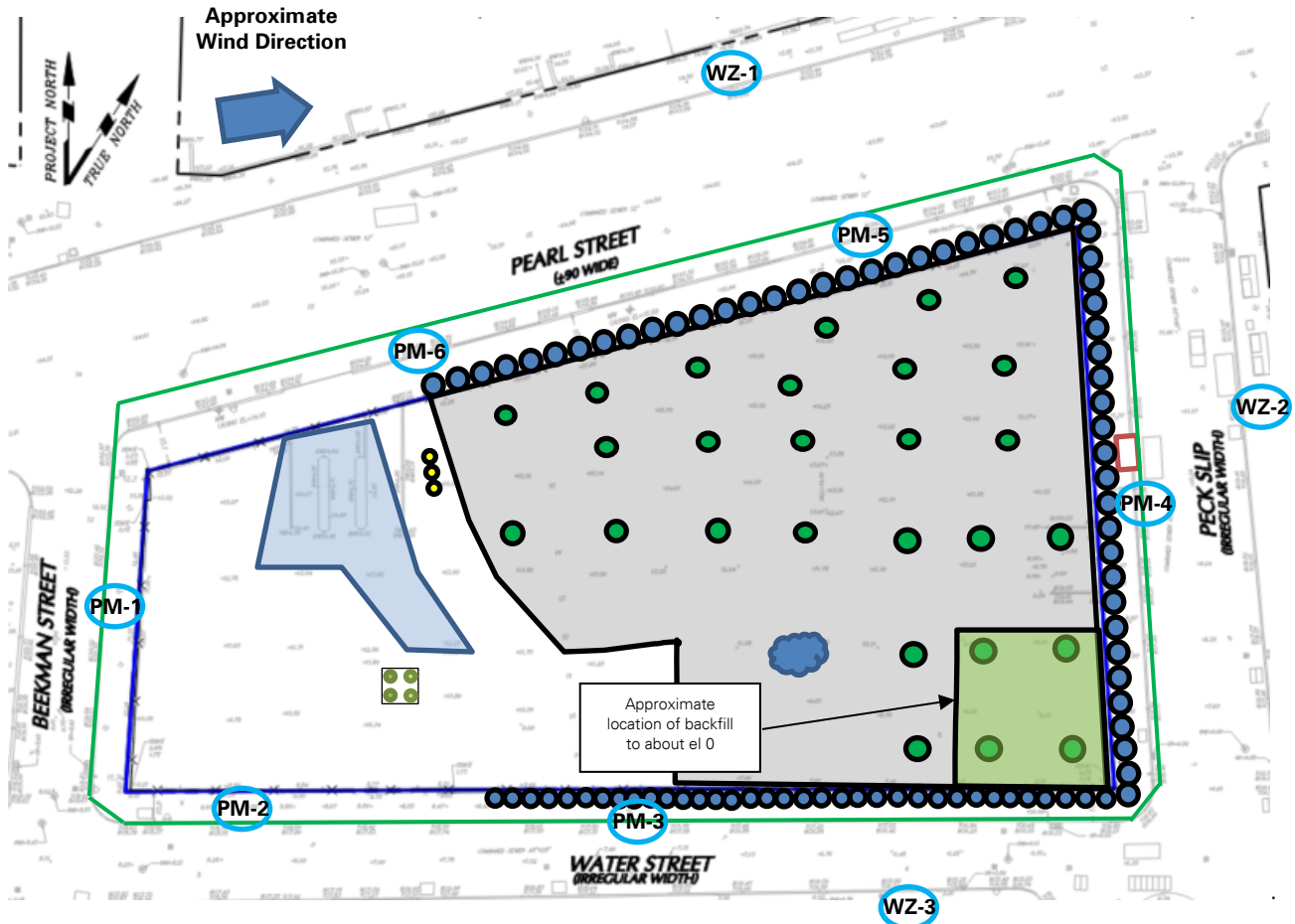
Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Maitland Robinson

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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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Location of Endpoint Sample |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Maitland Robinson

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV washing and inspecting truck prior to exiting the site (facing east)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill to create a temporary overnight cover (facing east)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Maitland Robinson
			LANGAN

SITE OBSERVATION REPORT

PROJECT No.: 170381202	CLIENT: 250 Seaport District, LLC c/o The Howard Hughes Corporation	DATE: Wednesday, October 5, 2022
PROJECT: 250 Water Street		WEATHER: Overcast/Rain, 57.5 – 61.5 °F Wind: WSW @ 0.6 – 7.1 mph
LOCATION: New York, NY		TIME: 6:00 AM – 4:00 PM
BCP SITE ID: C231127		MONITOR: Maitland Robinson, Brian Kenneally
EQUIPMENT: MiniRAE 3000 PID DustTrak II Jerome J405® Jerome J505® Hand tools CAT 374F Komatsu 969 Komatsu 228 Takeuchi TB290 JCB 110W Hydradig Wacker Neuson RTSC3 Wacker Neuson OPU6555	PRESENT AT SITE: Day 120 Langan (Environmental/Geotechnical) – Maitland Robinson, Brian Kenneally Civetta Cousins JV, LLC (CCJV) (Foundation Contractor) – Jack Dettra Lendlease (General Contractor) – Jeff Keelly New York State Department of Environmental Conservation (NYSDEC) – Marnie Chancey	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: <p>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).</p> <p>Site Activities</p> <ul style="list-style-type: none">• CCJV used imported general fill to backfill an about 95-foot-long by 85-foot-wide area from about elevation (el) -8 to el 1 within the sheeted area in the southeastern part of site.<ul style="list-style-type: none">◦ The backfill was placed in one- to two-foot lifts and was compacted using a vibratory roller and vibratory plate compactor.• CCJV pumped groundwater from the previously installed dewatering wells in the southeastern part of the site. Groundwater was pumped directly into the dewatering system, consisting of a settling tank, oil-water separator, and filtration system, before being discharged to the New York City Department of Environmental Protection (NYCDEP) combined sewer beneath Peck Slip in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214).• CCJV covered exposed soil/fill that has not been confirmed to meet Track 2 remediation criteria and construction and demolition (C&D) debris with Atmos® AC-645 dust/vapor suppressing foam to create a temporary overnight cover.		
Cc:	M. Raygorodetsky, P. McMahon, M. Au	By: Brian Kenneally
		LANGAN

SITE OBSERVATION REPORT

Material Tracking

- CCJV imported 30 truckloads (716.76 tons) of general fill from the Impact Reuse and Recovery Center (IRRC) facility, located in Lyndhurst, NJ.
- No material was exported from the site.

Material Import Summary

Facility Name Location Type of Material	Stone Industries, Inc. Haledon, NJ 1.5/2.5-inch Virgin Stone		Stone Industries, Inc. Haledon, NJ 0.75-inch Virgin Stone		Impact Reuse & Recovery Center or Impact Materials Jersey City, Lyndhurst/Jersey City, NJ 1.5-inch Clean Bluestone		Impact Reuse & Recovery Center, Lyndhurst, NJ General Fill	
Quantities	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)	No. of Loads	Approx. Volume (Tons)
Today	0	0	0	0	0	0	30	716.76
Project Total	8	184.42	0	0	12	264.01	217	5,340.87
NYSDEC Approved:	1,800 tons*				720 tons*		7,500 tons*	

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

Material Export Summary (1 of 2)

Facility Name Location Type of Material	Allocco Recycling Brooklyn, NY Construction & Demolition (C&D) Debris		IRRC Lyndhurst, NJ Construction & Demolition (C&D) Debris		Clean Earth of North Jersey Kearny, NJ Hazardous Lead-Impacted Soil/Fill		Clean Earth of North Jersey Kearny, NJ Non-hazardous Soil/Fill	
Quantities	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)	No. of Loads	Approx. Volume (CY)
Today	0	0	0	0	0	0	0	0
Project Total	5	85	37	740	81	1,620	216	4,320

Material Export Summary (2 of 2)

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

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Sampling Activities

- No samples were collected.

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring at the perimeter of the site and at work zones at nine total locations for mercury vapor, VOCs and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor or VOCs that approached or exceeded the action levels established by the CAMP (1.00 µg/m³ and 5.0 ppm, respectively).

Background Concentrations

Prior to implementation of ground-intrusive work each day, instantaneous background concentrations of mercury vapor and VOCs were recorded using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 µg/m³ to 0.06 µg/m³.
- Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.007	0.0	0.01
PM-2	0.011	0.0	0.01
PM-3	0.006	0.0	0.00
PM-4	0.007	0.0	0.00
PM-5	0.001	0.1	0.01
PM-6	0.017	0.0	0.01
WZ-1	0.014	0.0	0.01
WZ-2	0.006	0.0	0.01
WZ-3	0.006	0.2	0.01

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
Action Level	0.100 mg/m³	5.0 ppm	1.00 µg/m³
PM-1	0.091	0.0	0.03
PM-2	0.022	0.0	0.02
PM-3	0.010	0.0	0.01
PM-4	0.015	0.0	0.01
PM-5	0.006	0.1	0.04
PM-6	*0.284 @ 12:50pm	0.0	0.03
WZ-1	0.028	0.0	0.02
WZ-2	0.011	0.0	0.02
WZ-3	0.010	0.2	0.03

•mg/m³ = milligrams per cubic meter •ppm = parts per million •µg/m³ = micrograms per cubic meter

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
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SITE OBSERVATION REPORT

- * PM10 concentrations at perimeter CAMP station PM-6 exceeded the action level established in the CAMP (0.100 mg/m³) from 12:37pm to 12:51pm (15 minutes). The exceedance was caused by exhaust from an active generator located upwind of perimeter CAMP station PM-6 and was not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site and off-site CAMP station (WZ-1), which was located across Pearl Street, did not record PM10 at concentrations above background conditions 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 0.07 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:58am to 3:33pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:55am to 3:23pm during backfilling activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:52am to 3:24pm during backfilling activities in the southeastern part of the site.

Prior to CAMP Shutdown

Prior to discontinuing CAMP, air quality at each CAMP station was verified using the handheld PID and handheld Jerome® J505 mercury vapor analyzer and no readings above background concentrations were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations were discontinued between 2:51pm and 3:33pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.05 µg/m³.
- VOC concentrations at each CAMP station ranged from 0.0 ppm to 0.1 ppm.

Anticipated Activities

- CCJV will continue excavation and off-site disposal of soil/fill in the central and southern parts of the site.
- CCJV will continue to import and backfill general fill in the southeastern part of the site.
- Langan will continue collection of confirmation endpoint soil samples across the site.

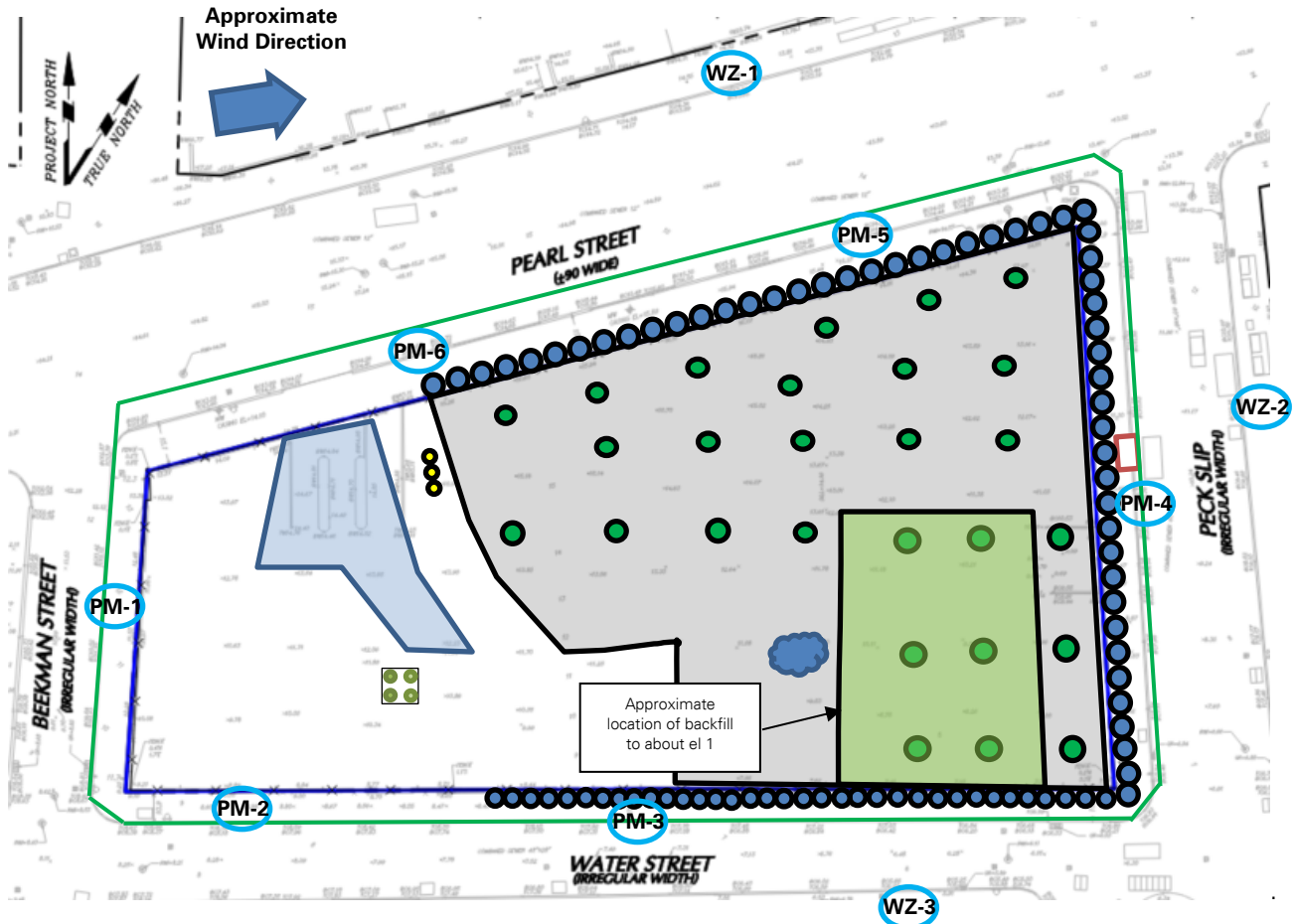
Cc: M. Raygorodetsky, P. McMahon, M. Au

By: Brian Kenneally

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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 55-gallon drum |
| | Approximate Work Area | | Approximate Location of Soldier Pile |
| | Approximate Location of Installed Pile Cap | | Approximate Perimeter Construction Fence Location |
| | Approximate Location of Foundation Piles Completed | | Previous Excavation Area |
| | Approximate Location of Truck Tracking Pad | | Approximate Excavation Area |
| | Approximate Location of C&D Stockpile | | Approximate Backfill Area |
| | Approximate Location of General Fill Stockpile | | Approximate Location of Endpoint Sample |
| | Approximate Location of Stockpiled Virgin Stone | | Approximate Location of Previously Collected Endpoint Sample |
| | Approximate Excavated Soil/Fill Stockpile | | |

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

By: Brian Kenneally

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SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: CCJV backfilling imported general fill in the southeastern part of the site (facing northwest)



Photo 2: CCJV applying Atmos® AC-645 dust/vapor suppressing foam to exposed soil/fill to create a temporary overnight cover (facing south)

Cc:	M. Raygorodetsky, P. McMahon, M. Au	By:	Brian Kenneally
			LANGAN