			1		
PROJECT No.:	170381202		DATE:	Monday, August 17, 2020	
PROJECT:	250 Water Street	CLIENT: 250 Seaport District, LLC	WEATHER:	Sunny, 72-79 ⁰ F Wind: WNW @ 0-3 mph	
LOCATION:	New York, NY				
BCP SITE ID:	C231127		TIME:	6:45 am – 3:30 pm	
CONTRACTOR	AARCO Environn	nental Services Corp. (AARCO)	LANGAN RE	P.: Tyler Zorn Thomas Schiefer	
EQUIPMENT: Geoprobe 7822 Niton XL3t XRF Jerome J505 an MiniRAE 3000 Dusttrak DRX	DT d J405	PRESENT AT SITE: Tyler Zorn, Thomas Schiefer, Giu Rohn Dixon, Jose Garcia – AARO	uliana Frizzi, Pa CO Environme	RI Day 11 Iul McMahon – Langan ntal Services Corp.	
OBSERVATION	S, DISCUSSIONS,	TEST RESULTS, ETC.:			
Langan began State Departm located at 250 '	implementing Phase ent of Environmenta Water Street (Manha	e 4 of the May 13, 2020 Remedi al Conservation (NYSDEC) Browr attan Block 98, Lot 1).	al Investigatio Ifield Cleanup	n Work Plan (RIWP) for New York Program (BCP) Site No. C231127	
Site Activities					
 AARCO borings soil sar) used a Geoprobe 7 s. Langan documen mples for laboratory	7822 DT drill rig with 4- or 5-foot-lo ted the work, screened the soil s analysis.	ong Macro-Cor amples for env	e® samplers to advance three soil vironmental impacts, and collected	
0	 Boring SB26: Boring was advanced to refusal at about 6 feet below grade surface (bgs). Concrete was identified in the cutting shoe at the refusal depth. Five step-off borings were attempted around the original boring location. No petroleum-like odors, staining, or photoionization detector (PID) readings above background were observed. Visual evidence of elemental mercury was not identified. A maximum mercury vapor concentration above background of 0.20 micrograms per cubic meter (µg/m³) was identified with a Jerome J505 unit from 4 to 6 feet bgs. A maximum total mercury concentration of 18 parts per million (ppm) was identified with the Niton XL3t XRF (XRF) from 4 to 6 feet bgs. 				
0	 Boring SB29: Boring was advanced to refusal at about 15 feet bgs. Three step-off borings were attempted around the original boring location. Petroleum-like odors, staining, and PID readings up to 162 ppm were observed from about 0 to 4 feet bgs. Visual evidence of elemental mercury was not identified. Mercury vapor concentrations were not identified above background with the Jerome J505. Total mercury concentrations evaluated with the XRF were less than the limit of detection (LOD). 				
0	Boring SB36: Borin at the refusal dep Petroleum-like odo bgs. Visual eviden not identified above the XRF were less	centrations evaluated with the XRF were less than the limit of detection (LOD). Ing was advanced to refusal at 5 feet bgs. Concrete was identified in the cutting shoe oth. Five step-off borings were attempted around the original boring location. Ins, staining, and PID readings up to 50.1 ppm were observed from about 0 to 5 feet ince of elemental mercury was not identified. Mercury vapor concentrations were the background with the Jerome J505. Total mercury concentrations evaluated with than the LOD.			

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Thomas Schiefer
			LANGAN

SITE OBSERVATION REPORT

Material Tracking

- No material was imported to the site.
- No material was exported from the site.
- No investigation derived waste (i.e. soil cutting or groundwater) was generated during site activities.

<u>Sampling</u>

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, herbicides, metals including mercury and hexavalent and trivalent chromium, total cyanide, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS):
 - o <u>SB26</u>: 0-2 feet bgs
 - o <u>SB29</u>: 0-2, 2-4, and 13-15 feet bgs
 - o <u>SB36</u>: 2-4 feet bgs
- The following sample depths were submitted for analysis of VOCs, SVOCs, and Part 375/TAL metals:
 - o <u>SB29</u>: 7-9 feet bgs
- The following sample depths were submitted for analysis of total mercury:
 - o <u>SB26</u>: 4-6 feet bgs
- One quality assurance/quality control soil sample (one equipment blank) was collected and submitted for analysis.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Thomas Schiefer
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of mercury vapor, particulate matter smaller than 10 microns in diameter (PM10), and VOCs did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m³) for PM10, 0.5 ppm for VOCs, and 0.0 µg/m³ for mercury vapor. Due to a faulty charging cable and/or broken charging port, one of the Jerome J405 mercury vapor analyzer was malfunctioning. The NYSDEC was contacted and approved intrusive work without a Jerome J405 at the air monitoring station farthest from the work area (PM-2). The equipment provider was contacted to repair or replace the Jerome J405 mercury vapor analyzer and associated cables at the PM-2 air monitoring station.

Daily Average Concentrations							
Station ID	Particulate (mg/m³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.018	0.2	0.0				
PM-2	0.025	0.1	NA				
PM-3	0.021	0.0	0.0				
PM-4	0.011	0.0	0.0				
PM-5	0.010	0.8	0.0				
PM-6	0.020	0.3	0.0				
WZ-1	0.011	0.0	0.0				

mg/m³ = milligrams per cubic meter

ppm = parts per million

 μ g/m³ = micrograms per cubic meter

NA = Not Applicable

Maximum 15-Minute-Average Concentration							
Station ID	Particulate (mg/m³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.032	3.0	0.0				
PM-2	0.033	1.6	NA				
PM-3	0.043	0.1	0.0				
PM-4	0.017	0.0	0.2				
PM-5	0.012	1.1	0.0				
PM-6	0.024	2.7	0.0				
WZ-1	0.025	0.1	0.0				

Anticipated Activities

• AARCO and Langan will continue to advance and sample soil borings and install monitoring wells at the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Thomas Schiefer
			LANGAN

SITE OBSERVATION REPORT



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SITE OBSERVATION REPORT

Select Site Photographs:





Photo 2: Perimeter CAMP station PM-4 and off-site CAMP station WZ-1 along Pearl Street during the drilling of boring SB29 (facing west).

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Thomas Schiefer
			LANGAN



Photo 3: AARCO drilling boring SB36 (facing northwest).



Photo 4: AARCO drilling boring SB29 (facing north).

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Thomas Schiefer
			LANGAN

PROJECT No.:	170381202			DATE:	Tuesday, August 18, 2020	
PROJECT:	250 Water Street	CLIENT: 250 Seaport District,	LLC	WEATHER:	Sunny, 66-84 ⁰F Wind: WNW @ 0-7 mph	
LOCATION:	New York, NY			TINAC	0.45	
BCP SITE ID:	C231127				6:45 am – 3:45 pm	
CONTRACTOR	AARCO Environn	nental Services Corp.	(AARCO)	LANGAN RE	P.: Tyler Zorn Thomas Schiefer	
EQUIPMENT: Geoprobe 7822 Niton XL3t XRF Jerome J505 an MiniRAE 3000 Dusttrak DRX	DT d J405	PRESENT AT SITE: Tyler Zorn, Thomas S Rohn Dixon, Jose Ga	Schiefer – arcia – AAF	_angan ICO Environme	RI Day 12 ntal Services Corp.	
OBSERVATION	S, DISCUSSIONS,	TEST RESULTS, ETC	.:			
Langan began State Departm located at 250	implementing Phase ent of Environmenta Water Street (Manha	e 4 of the May 13, 20 al Conservation (NYSE attan Block 98, Lot 1).	20 Remea DEC) Brow	lial Investigatio nfield Cleanup	n Work Plan (RIWP) for New York Program (BCP) Site No. C231127	
Site Activities						
 AARCO Langar sample 	Dused a Geoprobe 7 documented the vest for laboratory analysis	822 DT drill rig with 4- work, screened the s ysis.	foot-long N oil sample	lacro-Core® sa s for environn	mplers to advance five soil borings. nental impacts, and collected soil	
0	Boring SB13: Borin staining, or photoio of elemental merc background with th (XRF) were less that	bring SB13: Boring was advanced to 20 feet below grade surface (bgs). No petroleum-like odors, aining, or photoionization detector (PID) readings above background were observed. Visual evidence elemental mercury was not identified. Mercury vapor concentrations were not identified above ickground with the Jerome J505. Total mercury concentrations evaluated with the Niton XL3t XRF RE) were less than the limit of detection (LOD).				
0	Boring SB16: Borin or PID readings ab identified. Mercury Total mercury cond	ing was advanced to refusal at about 12 feet bgs. No petroleum-like odors, staining, above background were observed. Visual evidence of elemental mercury was not ry vapor concentrations were not identified above background with the Jerome J505.				
0	Boring SB21: Borin at the refusal depth from about 6 to 8 f concentrations we concentrations eva	21: Boring was advanced to refusal at 11 feet bgs. Wood was identified in the cutting shoe sal depth. Petroleum-like odors, staining, and PID readings up to 68.2 ppm were observed t 6 to 8 feet bgs. Visual evidence of elemental mercury was not identified. Mercury vapor cions were not identified above background with the Jerome J505. Total mercury tions evaluated with the XRF were less than the LOD.				
0	Boring SB22: Borin readings above bac Mercury vapor cor mercury concentra	ring was advanced to refusal at 10 feet bgs. No petroleum-like odors, staining, or F background were observed. Visual evidence of elemental mercury was not identifie concentrations were not identified above background with the Jerome J505. To trations evaluated with the XRF were less than the LOD.			etroleum-like odors, staining, or PID mental mercury was not identified. und with the Jerome J505. Total e LOD.	
Cc: J. Yanov	witz, P. McMahon, N	1. Raygorodetsky	By: Ty	er Zorn, Thoma NGAN	as Schiefer	

SITE OBSERVATION REPORT

- Boring SB28: Boring was advanced to 20 feet bgs. No petroleum-like odors, staining, or PID readings above background were observed. Visual evidence of elemental mercury was not identified. Mercury vapor concentrations were not identified above background with the Jerome J505. Total mercury concentrations evaluated with the XRF were less than the LOD.
- AARCO used a Geoprobe 7822 DT drill rig to install monitoring well MW28.
 - MW28 consists of a 2-inch diameter polyvinyl chloride (PVC) monitoring well with 20-slot well screen from about 4 to 14 feet bgs. MW28 will be developed at a future date.
- All soil borings were backfilled with clean drill cuttings from the borehole, clean sand, and/or bentonite and then patched with cold patch asphalt after sampling was completed

<u>Material Tracking</u>

- No material was imported to the site.
- No material was exported from the site.
- No investigation derived waste (i.e. soil cutting or groundwater) was generated during site activities.

<u>Sampling</u>

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, herbicides, metals including mercury and hexavalent and trivalent chromium, total cyanide, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS):
 - o <u>SB13</u>: 0-2, 4-6, and 12-14 feet bgs
 - o <u>SB16</u>: 0-2, 6-8, and 10-12 feet bgs
 - o <u>SB21</u>: 0-2, 6-8, and 9-11 feet bgs
 - o <u>SB22</u>: 0-2, 4-6, and 8-10 feet bgs
 - o <u>SB28</u>: 0-2, 4-6, and 12-14 feet bgs
- The following sample depths were placed on hold for analysis of total mercury:
 - o <u>SB21</u>: 4-6 feet bgs
 - o <u>SB22</u>: 2-4 feet bgs
- Six quality assurance/quality control soil sample (a trip blank, equipment blank, field blank, duplicate, and MS/MSD) was collected and submitted for analysis.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Thomas Schiefer
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of mercury vapor and VOCs did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m³) for PM10, 0.5 ppm for VOCs, and 0.0 µg/m³ for mercury vapor.

• The fifteen-minute average concentration of particulate matter smaller than 10 microns in diameter (PM10) exceeded action levels from 9:18 am to 9:33 am at air monitoring station PM-6. Air monitoring station PM-6 was being used as the work zone air monitoring station during this time because work was being conducted within 20 feet of the site boundary. Air monitoring station WZ-1 was located on the southern Water Street sidewalk. The fifteen-minute average concentration action level for PM10 was not exceeded at air monitoring station WZ-1. Work was stopped and the source of the exceedance was identified. The exceedance was caused by cutting asphalt to install a monitoring well cover for monitoring well MW28. Work resumed with increased dust suppression after the fifteen-minute average concentration at PM-6 dropped below the CAMP action level.

Daily Average Concentrations								
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)					
PM-1	0.016	0.0	0.0					
PM-2	0.031	0.1	0.0					
PM-3	0.017	0.0	0.0					
PM-4	0.010	0.0	0.0					
PM-5	0.010	0.8	0.0					
PM-6	0.039	0.0	0.0					
WZ-1	0.011	0.0	0.0					

mg/m³ = milligrams per cubic meter

ppm = parts per million

µg/m³ = micrograms per cubic meter

Maximum 15-Minute-Average Concentration							
Station ID	Particulate (mg/m³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.035	0.0	0.0				
PM-2	0.106	0.2	0.0				
PM-3	0.026	0.0	0.0				
PM-4	0.014	0.0	0.0				
PM-5	0.019	1.9	0.9				
PM-6	0.526	0.0	0.1				
WZ-1	0.034	0.0	0.2				

Anticipated Activities

• AARCO and Langan will continue to advance and sample soil borings and install monitoring wells at the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Thomas Schiefer
			LANGAN



SITE OBSERVATION REPORT

Select Site Photographs:





Photo 2: Perimeter CAMP station PM-6 and off-site CAMP station WZ-1 along Water Street during the drilling of boring SB28 (facing east).

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Thomas Schiefer
1			LANGAN



	170001000				
PROJECT No.:	170381202			DATE:	Wednesday, August 19, 2020
PROJECT:	250 Water Street	CLIENT: 250 Seaport District,	LLC	WEATHER:	Sunny, 66-72 ⁰ F Wind: 0.0 mph (10:28 am) to N @ 5.8 mph (9:48 am)
LOCATION:	New York, NY				0.45
BCP SITE ID:	C231127			TIME:	6:45 am – 16:45 pm
CONTRACTOR	R: AARCO Environr	nental Services Corp.	nental Services Corp. (AARCO) LANGAN REP. : Tyler Zorn Lexi Haley		EP.: Tyler Zorn Lexi Haley
EQUIPMENT:PRESENT AT SITE:RIGeoprobe 7822 DTTyler Zorn, Lexi Haley – LanganNiton XL3t XRFRohn Dixon, Alex Pothemont – AARCO Environmental Services CoJerome J505 and J405MiniRAE 3000Dusttrak DRXImage: Constraint of the service of the servic			RI Day 13 Inmental Services Corp.		
OBSERVATIO	NS, DISCUSSIONS,	TEST RESULTS, ETC	.:		
Langan contin State Departn located at 250	ued implementing Ph nent of Environment Water Street (Manha	nase 4 of the May 13, 2 al Conservation (NYSE attan Block 98, Lot 1).	2020 Rer DEC) Bro	nedial Investigati wnfield Cleanup	on Work Plan (RIWP) for New York Program (BCP) Site No. C231127
Site Activities					
 AARC boring soil satisfies 	O used a Geoprobe is. Langan documen imples for laboratory	7822 DT drill rig with ted the work, screene analysis.	h 4-foot- d the so	ong Macro-Core I samples for en	® samplers to advance three soil vironmental impacts, and collected
0	Boring SB11: Boring was advanced to 20 feet below grade surface (bgs). No petroleum-like odors, staining, or photoionization detector (PID) readings above background were observed. Visual evidence of elemental mercury was not identified. Total mercury concentrations evaluated with the Niton XL3t XRF (XRF) were less than the limit of detection (LOD).				ce (bgs). No petroleum-like odors, nd were observed. Visual evidence tions evaluated with the Niton XL3t
0	Boring SB14: Borin above background mercury concentra	g was advanced to 20 were observed. Visu tions evaluated with th	feet bgs ual evide ne XRF w	No petroleum- nce of elemental ere less than the	like odors, staining, or PID readings I mercury was not identified. Total e LOD.
0	Boring SB15: Borin above background mercury concentra	g was advanced to 20 were observed. Visu tions evaluated with th	feet bgs al evider ne XRF w	. No petroleum- ce of elemental ere less than the	like odors, staining, or PID readings mercury was not identified. Total e LOD.
AARC	O used a Geoprobe 7	7822 DT drill rig to inst	all monit	oring wells MW1	1 and MW15.
0	MW11 consists of from about 12 to 2	a 2-inch-diameter poly 2 feet bgs. MW11 will	vvinyl chl be deve	oride (PVC) moni [.] oped at a future	toring well with 20-slot well screen date.
0	MW15 consists of feet bgs. MW15 w	a 2-inch-diameter PVC ill be developed at a fu	c monitor uture date	ng well with 20- 9.	slot well screen from about 5 to 15
 All so then p 	il borings were backf patched with cold pat	illed with clean drill cu ch asphalt after sampli	uttings fr ing was o	om the borehole ompleted	e, clean sand, and/or bentonite and
Cc: J. Yand	witz, P. McMahon, N	/I. Raygorodetsky	By: 1	yler Zorn, Lexi H	aley
			I	ANGAN	

SITE OBSERVATION REPORT

Material Tracking

- No material was imported to the site.
- No material was exported from the site.
- No investigation derived waste (i.e. soil cutting or groundwater) was generated during site activities.

<u>Sampling</u>

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, herbicides, metals including mercury and hexavalent and trivalent chromium, total cyanide, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS):
 - o <u>SB11</u>: 0-2, 6-8, and 18-20 feet bgs
 - o <u>SB14</u>: 0-2, 8-10, and 18-20 feet bgs
 - o <u>SB15</u>: 0-2, 8-10, and 14-16 feet bgs
- Four quality assurance/quality control soil sample (a trip blank, equipment blank, field blank, and duplicate) was collected and submitted for analysis.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of mercury vapor and VOCs did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m³) for PM10, 0.5 ppm for VOCs, and 0.0 µg/m³ for mercury vapor.

• The fifteen-minute average concentration of particulate matter smaller than 10 microns in diameter (PM10) exceeded action levels from 14:38 am to 14:52 am at work zone air monitoring station. Intrusive work for the day was previously completed and the exceedance was caused by sweeping excess quick-dry cement used to set monitoring well covers. Housekeeping activities were stopped and the fifteen-minute average concentration dropped below the CAMP action level.

Daily Average Concentrations							
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.017	0.3	0.0				
PM-2	0.026	0.0	0.0				
PM-3	0.022	0.0	0.0				
PM-4	0.012	0.0	0.0				
PM-5	0.014	0.5	0.0				
PM-6	0.019	0.0	0.0				
WZ-1	0.023	0.0	0.0				

mg/m³ = milligrams per cubic meter

ppm = parts per million

 μ g/m³ = micrograms per cubic meter

Maximum 15-Minute-Average Concentration								
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)					
PM-1	0.045	0.0	0.0					
PM-2	0.040	0.0	0.0					
PM-3	0.029	0.0	0.0					
PM-4	0.017	0.0	0.0					
PM-5	0.020	1.0	0.0					
PM-6	0.038	0.4	0.0					
WZ-1	0.206	0.0	0.1					

Anticipated Activities

• AARCO and Langan will continue to advance and sample soil borings and install monitoring wells at the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN



SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: View of soil from boring SB15.



Photo 2: Perimeter CAMP station WZ-1 and off-site CAMP station PM-1 along Water Street during the drilling of boring SB28 (facing east).

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN



PROJECT No.:	170381202			DATE:	Thursday, August 20, 2020	
PROJECT:	250 Water Street	CLIENT: 250 Seaport District, LLC		WEATHER:	Sunny, 68-82 °F Wind: 0.0 mph (7:43 am) to NE @ 6.9 mph (10:13 am)	
LOCATION:	New York, NY			TINAE.	0.45 and 10.15 and	
BCP SITE ID:	C231127				6:45 am – 16:15 pm	
CONTRACTOR	: AARCO Environr	nental Services Corp.	ental Services Corp. (AARCO) LANGAN REP. : Tyler Zorn Lexi Haley		P. : Tyler Zorn Lexi Haley	
EQUIPMENT:PRESENT AT SITE:RI DayGeoprobe 7822 DTTyler Zorn, Lexi Haley – LanganNiton XL3t XRFRohn Dixon, Alex Pothemont – AARCO Environmental Services Corp.Jerome J505 and J405MiniRAE 3000Dusttrak DRXR		RI Day 14 nmental Services Corp.				
OBSERVATION	IS, DISCUSSIONS,	TEST RESULTS, ETC	.:			
Langan continu State Departm located at 250	ied implementing Ph ent of Environmenta Water Street (Manha	ase 4 of the May 13, 2 al Conservation (NYSE attan Block 98, Lot 1).	2020 Rem DEC) Brov	edial Investigati vnfield Cleanup	on Work Plan (RIWP) for New York Program (BCP) Site No. C231127	
Site Activities						
 AARCO Langar sample 	D used a Geoprobe 7 a documented the v es for laboratory anal	822 DT drill rig with 4-f work, screened the s ysis.	oot-long N oil sampl	Vacro-Core® sar es for environm	mplers to advance four soil borings. nental impacts, and collected soil	
0	 Boring SB12: Boring was advanced to 20 feet below grade surface (bgs). No petroleum-like odors staining, or photoionization detector (PID) readings above background were observed. Visual evidenc of elemental mercury was not identified. Total mercury concentrations evaluated with the Niton XL3 XRF (XRF) were less than the limit of detection (LOD). 					
0	 Boring SB27: Boring was advanced to 24 feet bgs. Petroleum-like odors, staining, and PID readings up to 3.0 parts per million (ppm) were observed from about 18 to 20 feet bgs. Visual evidence o elemental mercury was not identified. Total mercury concentrations evaluated with the XRF were less than the LOD. 					
0	 Boring SB30: Boring was advanced to 32 feet bgs. Petroleum-like odors, staining, and PID readings ranging from 1.4 to 15,000 ppm were observed from about 13 to 28 feet bgs. Visual evidence of elemental mercury was not identified. Total mercury concentrations evaluated with the XRF were less than the LOD. 					
0	 Boring SB37: Boring was advanced to 20 feet bgs. No petroleum-like odors, staining, or PID readings above background were observed. Visual evidence of elemental mercury was not identified. Tota mercury concentrations evaluated with the XRF were less than the LOD. 					
AARCO	D developed previou	sly installed monitoring	g wells M	W11, MW15, ar	nd MW28.	
 All soil then participation 	borings were backf atched with cold pate	illed with clean drill cu ch asphalt after sampli	uttings fro ng was co	om the borehole ompleted.	, clean sand, and/or bentonite and	
Cc: J. Yanov	witz, P. McMahon, N	1. Raygorodetsky	By: Ty	/ler Zorn, Lexi H	aley	
			L	ANGAN		

SITE OBSERVATION REPORT

Material Tracking

- No material was imported to the site.
- No material was exported from the site.
- Impacted soil cuttings from soil borings SB27 and SB30 and purged groundwater from monitoring wells MW11, MW15, and MW28 were containerized and sealed in 55-gallon drums. The drums were stored on-site for future off-site disposal.

<u>Sampling</u>

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, herbicides, metals including mercury and hexavalent and trivalent chromium, total cyanide, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS):
 - o <u>SB12</u>: 1-3, 6-8, and 14-16 feet bgs
 - o <u>SB27</u>: 0-2, 10-12, and 18-20 feet bgs
 - o <u>SB30</u>: 0-2, 16-18, and 30-32 feet bgs
 - o <u>SB37</u>: 2-4, 6-8, and 12-14 feet bgs
- The following sample depths were submitted for analysis of VOCs and SVOCs and Part 375/TAL Metals:
 - o <u>SB27</u>: 20-22 feet bgs
- The following sample depths were submitted an placed on hold for analysis of mercury:
 - o <u>SB27</u>: 2-4
- Three quality assurance/quality control soil samples (a trip blank, equipment blank, and field blank) were collected and submitted for analysis.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of mercury vapor, VOCs, and particulate matter smaller than 10 microns in diameter (PM10) did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m³) for PM10, 0.5 ppm for VOCs, and 0.0 µg/m³ for mercury vapor.

Daily Average Concentrations								
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)					
PM-1	0.008	0.0	0.0					
PM-2	0.023	0.1	0.0					
PM-3	0.008	0.0	0.0					
PM-4	0.005	0.0	0.0					
PM-5	0.005	0.4	0.0					
PM-6	0.006	0.1	0.0					
WZ-1	0.005	0.0	0.0					

mg/m³ = milligrams per cubic meter

ppm = parts per million

 $\mu g/m^3 = micrograms per cubic meter$

Maximum 15-Minute-Average Concentration							
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.014	0.0	0.0				
PM-2	0.030	0.2	0.0				
PM-3	0.021	0.0	0.0				
PM-4	0.010	0.0	0.3				
PM-5	0.010	1.0	0.0				
PM-6	0.010	0.8	0.0				
WZ-1	0.018	0.0	0.0				

Anticipated Activities

• AARCO and Langan will continue to advance and sample soil borings and install monitoring wells at the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT



LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: View of soil from boring SB30



Photo 2: Perimeter CAMP station WZ-1 and off-site CAMP station PM-2 along Beekman Street during the drilling of boring SB37 (facing southwest)

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN



Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

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PROJECT No.: 170381202			DATE:	Friday, August 21, 2020		
PROJECT: 250 Water St	reet CLIENT: 250 Seaport District,	LLC	WEATHER:	Sunny, 69-82 ^o F Wind: SW @ 4.5 mph (3:13 pm) to N @ 10.1 mph (2:08 pm)		
LOCATION: New York, N	Y		TINAE	0.00 17.00		
BCP SITE ID: C231127				6:00 am – 17:00 pm		
CONTRACTOR: AARCO En	vironmental Services Corp.	(AARCO)	LANGAN RE	EP.: Tyler Zorn Lexi Haley		
EQUIPMENT: Geoprobe 7822 DT Hand Auger Niton XL3t XRF Jerome J505 and J405 MiniRAE 3000 Dusttrak DRX	PRESENT AT SITE: Tyler Zorn, Lexi Hale Rohn Dixon, Alex Po	PRESENT AT SITE:RI Day 15Tyler Zorn, Lexi Haley – LanganRohn Dixon, Alex Pothemont – AARCO Environmental Services Corp.				
OBSERVATIONS, DISCUSSIO	ONS, TEST RESULTS, ETC.	:				
Langan continued implement State Department of Environ located at 250 Water Street (I	ing Phase 4 of the May 13, 2 Imental Conservation (NYSE Manhattan Block 98, Lot 1).	2020 Reme DEC) Brow	dial Investigati nfield Cleanup	on Work Plan (RIWP) for New York Program (BCP) Site No. C231127		
Site Activities						
 AARCO used a Geopt Langan documented samples for laborator 	robe 7822 DT drill rig with 4-f the work, screened the s y analysis.	oot-long M oil sample	acro-Core® sa s for environn	mplers to advance two soil borings. nental impacts, and collected soil		
 Boring SB32: attempted ar location. Pet per million (p was not iden than the limit 	Boring was advanced to 28 round the original boring loo roleum-like odors, staining, a pm) were observed from ab- tified. Total mercury concer of detection (LOD).	feet belov cation after and photoic out 10 to 2 ntrations ev	y grade surface refusal was o nization detec 2 feet bgs. Vis aluated with th	e (bgs). Four step-off borings were encountered at the original boring tor (PID) readings up to 740.1 parts sual evidence of elemental mercury he Niton XL3t XRF (XRF) were less		
 Boring SB33: up to 6.6 ppr was not iden 	Boring was advanced to 20 m were observed from abou tified. Total mercury concen) feet bgs. ut 11 to 16 trations eva	Petroleum-like feet bgs. Vise luated with the	e odors, staining, and PID readings ual evidence of elemental mercury e XRF were less than the LOD.		
AARCO installed mor	nitoring wells MW33 and MN	N32.				
 AARCO attempted to Two additional step-or was encountered at t 	 AARCO attempted to advance off-site soil boring SB34/MW34 using a hand augur but encountered refusal Two additional step-off borings were attempted around the original boring location. Concrete or utility piping was encountered at the refusal depths. 					
 All soil borings were backfilled with clean drill cuttings from the borehole, clean sand, and/or bentonite and then patched with cold patch asphalt or concrete after sampling was completed. 						
Material Tracking	·		- '			
No material was impo	orted to the site.					
Cc: J. Yanowitz, P. McMa	hon, M. Raygorodetsky	By: Tyl	er Zorn, Lexi H NGAN	aley		

SITE OBSERVATION REPORT

- No material was exported from the site.
- Impacted soil cuttings from soil borings SB32 and SB33 were containerized in sealed 55-gallon drums. The drums were stored on-site for future off-site disposal.

<u>Sampling</u>

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, herbicides, metals including mercury and hexavalent and trivalent chromium, total cyanide, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS):
 - o <u>SB32</u>: 0-2, 11-13, and 18-20 feet bgs
 - o <u>SB33</u>: 0-2, 14-16, and 26-28 feet bgs
- The following sample depths were submitted an placed on hold for analysis of mercury:
 - o <u>SB33</u>: 6-8 feet bgs
- Three quality assurance/quality control soil samples (a trip blank, equipment blank, and field blanks) were collected and submitted for analysis.

Soil samples were collected and relinquished to Alpha Analytical Labs, a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Mahwah, New Jersey (ELAP No. 11148) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of Total petroleum hydrocarbon (TPH) diesel range organics (DRO) and gasoline range organics (GRO), nitrite, nitrate, ammonia, sulfate, phosphate, iron and manganese, total organic carbon (TOC), chemical oxygen demand (COD), biological oxygen demand (BOD), and alkalinity:
 - o <u>SB32</u>: 14-16 feet bgs
 - o <u>SB32</u>: 26-28 feet bgs

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of mercury vapor, VOCs, and particulate matter smaller than 10 microns in diameter (PM10) did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m³) for PM10, 0.5 ppm for VOCs, and 0.0 µg/m³ for mercury vapor.

Daily Average Concentrations							
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.018	0.0	0.0				
PM-2	0.032	0.0	0.0				
PM-3	0.019	0.0	0.0				
PM-4	0.011	0.2	0.0				
PM-5	0.014	0.3	0.0				
PM-6	0.014	0.6	0.0				
WZ-1	0.010	0.0	0.0				

mg/m³ = milligrams per cubic meter

ppm = parts per million

 $\mu g/m^3 = micrograms per cubic meter$

Maximum 15-Minute-Average Concentration							
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.031	0.0	0.0				
PM-2	0.045	0.0	0.0				
PM-3	0.040	0.0	0.0				
PM-4	0.013	2.4	0.0				
PM-5	0.024	0.6	0.1				
PM-6	0.021	1.7	0.0				
WZ-1	0.025	0.0	0.0				

Anticipated Activities

• AARCO and Langan will continue to advance and sample soil borings and install monitoring wells at the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN



SITE OBSERVATION REPORT

Select Site Photographs:



Photo 2: Perimeter CAMP station WZ-1 and off-site CAMP station PM-5 along Peck Slip during the attempted drilling of boring SB34 (facing northeast)

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN



PROJECT No.: 170381202			DATE:	Monday, August 24, 2020	
PROJECT: 250 Water Street	CLIENT: 250 Seaport District, LLC		WEATHER:	Sunny, 80-89 ^o F Wind: 0 mph to SW @ 6.9 mph (3:09 pm)	
LOCATION: New York, NY					
BCP SITE ID: C231127			TIME:	6:00 am – 16:45 pm	
CONTRACTOR: AARCO Environr	nental Services Corp.	(AARCO)	LANGAN RE	EP.: Tyler Zorn Lexi Haley	
EQUIPMENT: Geoprobe 7822 DT Niton XL3t XRF Jerome J505 and J405 MiniRAE 3000 Dusttrak DRX	PRESENT AT SITE:RI Day 16Tyler Zorn, Lexi Haley – LanganRohn Dixon, Alex Pothemont – AARCO Environmental Services Corp.				
OBSERVATIONS, DISCUSSIONS,	TEST RESULTS, ETC	.:			
Langan continued implementing Ph State Department of Environment located at 250 Water Street (Manha	nase 4 of the May 13, 2 al Conservation (NYSE attan Block 98, Lot 1).	2020 Ren DEC) Brov	nedial Investigati vnfield Cleanup	on Work Plan (RIWP) for New York Program (BCP) Site No. C231127	
Site Activities					
 AARCO used an AMS Pow soil borings. Langan doc collected soil samples for la 	rer Probe 9580-VT drill umented the work, s aboratory analysis.	rig with 4 creened	-foot-long Macro the soil sample	p-Core® samplers to advance three is for environmental impacts, and	
 Boring SB26: Boring staining, or photoic of elemental merce XRF (XRF) were less 	 Boring SB26: Boring was advanced to 20 feet below grade surface (bgs). No petroleum-like odors staining, or photoionization detector (PID) readings above background were observed. Visual evidence of elemental mercury was not identified. Total mercury concentrations evaluated with the Niton XL3 XRF (XRF) were less than the limit of detection (LOD). 				
 Boring SB31: Boring readings up to 1,2 evidence of eleme XRF were less that 	 Boring SB31: Boring was advanced to refusal at 32 feet bgs. Petroleum-like odors, staining, and PID readings up to 1,202 parts per million (ppm) were observed from about 10 to 24 feet bgs. Visua evidence of elemental mercury was not identified. Total mercury concentrations evaluated with the XBE were less than the LOD. 				
 Boring SB36: Boring was advanced to 24 feet bgs. Petroleum-like odors, staining, and PID readings up to 26.2 ppm were observed from about 2 to 6 feet and 16 to 20 feet bgs. Visual evidence of elemental mercury was not identified. Total mercury concentrations evaluated with the XRF were less than the LOD. 					
AARCO installed monitorin	g wells MW26 and M\	W31.			
 MW26 consists of a 2-inch-diameter polyvinyl chloride (PVC) monitoring well with 20-slot well scree from about 11 to 21 feet bgs. MW26 will be developed at a future date. 					
 MW31 consists of feet bgs. MW31 w 	 MW31 consists of a 2-inch-diameter PVC monitoring well with 20-slot well screen from about 8 feet bgs. MW31 will be developed at a future date. 				
Co: Vanovuitz D Mallahan M	1 Baygorodotoky	By: T	lor Zorn Lovill	alov	
	и. паудогодетску	Dy: I	ANGAN	dity	

SITE OBSERVATION REPORT

• All soil borings were backfilled with clean drill cuttings from the borehole, clean sand, and/or bentonite and then patched with cold patch asphalt or concrete after sampling was completed.

Material Tracking

- No material was imported to the site.
- No material was exported from the site.
- Impacted soil cuttings from soil borings SB31 and SB36 were containerized in sealed 55-gallon drums. The drums were stored on-site for future off-site disposal.

<u>Sampling</u>

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, herbicides, metals including mercury and hexavalent and trivalent chromium, total cyanide, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS):
 - o <u>SB26</u>: 0-2, 6-8, and 13-15 feet bgs
 - o <u>SB31</u>: 0-2, 18-20, and 26-28 feet bgs
 - o <u>SB36</u>: 0-2, 16-18, and 30-32 feet bgs
- The following sample depths were submitted an placed on hold for analysis of mercury:
 - o <u>SB36</u>: 2-4 feet bgs
- Three quality assurance/quality control soil samples (a trip blank, equipment blank, and a duplicate) were collected and submitted for analysis.

Soil samples were collected and relinquished to Alpha Analytical Labs, a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Mahwah, New Jersey (ELAP No. 11148) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of Total petroleum hydrocarbon (TPH) diesel range organics (DRO) and gasoline range organics (GRO), nitrite, nitrate, ammonia, sulfate, phosphate, iron and manganese, total organic carbon (TOC), chemical oxygen demand (COD), biological oxygen demand (BOD), and alkalinity:
 - o <u>SB31</u>: 18-20 and 30-32 feet bgs

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of mercury vapor and VOCs did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m³) for PM10, 0.5 ppm for VOCs, and 0.0 µg/m³ for mercury vapor.

The fifteen-minute average concentration of particulate matter smaller than 10 microns in diameter (PM10) exceeded action levels from 12:09 pm to 12:23 pm at the work zone air monitoring station. The fifteen-minute average concentration action level for PM10 was not exceeded at any perimeter air monitoring station. Work was stopped and the source of the exceedance was identified. The exceedance was caused by cutting asphalt to install a monitoring well cover for monitoring well MW26. Work was resumed with increased dust suppression after the fifteen-minute average concentration at work zone dropped below the CAMP action level.

Daily Average Concentrations								
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)					
PM-1	0.016	0.0	0.0					
PM-2	0.032	0.0	0.1					
PM-3	0.017	0.0	0.0					
PM-4	0.013	0.5	0.0					
PM-5	0.011	0.6	0.0					
PM-6	0.012	0.0	0.0					
WZ-1	0.015	0.0	0.0					

mg/m³ = milligrams per cubic meter

ppm = parts per million

 $\mu g/m^3 = micrograms per cubic meter$

Maximum 15-Minute-Average Concentration							
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.027	0.0	0.0				
PM-2	0.049	0.0	0.3				
PM-3	0.035	0.0	0.2				
PM-4	0.024	3.8	0.0				
PM-5	0.024	0.9	0.0				
PM-6	0.030	0.6	0.0				
WZ-1	0.203	0.0	0.0				

Anticipated Activities

• AARCO and Langan will continue to advance and sample soil borings and install monitoring wells at the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN



SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: View of soil from boring SB36



Photo 2: CAMP station WZ-1 and perimeter CAMP station PM-4 along Pearl Street during the drilling of boring SB36 (facing northwest)

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

Langan PN: 170381202 Monday, August 24, 2020 Page 6 of 6



PROJECT No.: 170381202			DATE:	Tuesday, August 25, 2020	
PROJECT : 250 Water Street	CLIENT: 250 Seaport District,	LLC	WEATHER:	Sunny, 75-88 ⁰F Wind: 0 mph to W @ 9.2 mph (1:05 pm)	
LOCATION: New York, NY					
BCP SITE ID: C231127			TIME:	5:45 am – 15:45 pm	
CONTRACTOR: AARCO Environn	nental Services Corp.	(AARCO)	LANGAN RE	EP.: Tyler Zorn Lexi Haley	
EQUIPMENT: AMS Power Probe 9580-VTR Niton XL3t XRF Jerome J505 and J405 MiniRAE 3000 Dusttrak DRX	PRESENT AT SITE: RI Day 17 Tyler Zorn, Lexi Haley – Langan Rohn Dixon, Alex Pothemont – AARCO Environmental Services Corp.				
OBSERVATIONS, DISCUSSIONS,	TEST RESULTS, ETC	.:			
Langan continued implementing Ph State Department of Environmenta located at 250 Water Street (Manha	ase 4 of the May 13, 2 al Conservation (NYSE attan Block 98, Lot 1).	2020 Ren DEC) Bro	nedial Investigati wnfield Cleanup	on Work Plan (RIWP) for New York Program (BCP) Site No. C231127	
Site Activities					
 AARCO used an AMS Pow soil borings. Langan doc collected soil samples for la 	er Probe 9580-VTR dri umented the work, s aboratory analysis.	ll rig with creened	4-foot-long Mac the soil sample	ro-Core® samplers to advance two s for environmental impacts, and	
 Boring SB34: Bori encountered from (million (ppm) were not identified. Tota the limit of detection 	ng was advanced to 0 to 4 feet bgs. Petrolo observed from about 7 al mercury concentration on (LOD).	20 feet eum-like 11 to 16 f ons evalu	below grade s odors, staining, a eet bgs. Visual e ated with the Ni	urface (bgs). A void space was and PID readings up to 4.2 parts per evidence of elemental mercury was ton XL3t XRF (XRF) were less than	
 Boring SB35: Borin staining, and PID re of elemental mercu less than the LOD. 	ng was advanced to re- eadings up to 21.0 ppm ury was not identified.	fusal at 2 were ob Total me	8 feet bgs. Petr served from abou ercury concentra	oleum-like and creosote-like odors, ut 9 to 24 feet bgs. Visual evidence tions evaluated with the XRF were	
AARCO installed monitoring	g well MW34.				
 MW34 consists of from about 9 to 19 	a 2-inch-diameter poly feet bgs. MW34 will b	vinyl chlo be develo	pride (PVC) monit ped at a future d	toring well with 20-slot well screen late.	
 All soil borings were backf then patched with cold pate 	illed with clean drill cu ch asphalt or concrete	uttings fr after sar	om the borehole opling was comp	, clean sand, and/or bentonite and leted.	
Material Tracking					
• No material was imported t	to the site.				
• No material was exported f	rom the site.				
Cc: J. Yanowitz, P. McMahon, N	1. Raygorodetsky	By: T	yler Zorn, Lexi H	aley	

SITE OBSERVATION REPORT

• Impacted soil cuttings from soil borings SB34 were containerized in sealed 55-gallon drums. The drums were stored on-site for future off-site disposal.

<u>Sampling</u>

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), pesticides, herbicides, metals including mercury and hexavalent and trivalent chromium, total cyanide, 1,4-dioxane, and per- and polyfluoroalkyl substances (PFAS):
 - o <u>SB34</u>: 4-6, 10-12, and 12-14 feet bgs
 - o <u>SB35</u>: 0-2, 8-10, and 26-28 feet bgs
- The following sample depths were submitted for analysis of VOCs, SVOCs, and Part 375/TAL metals:
 - o <u>SB34</u>: 18-20 feet bgs
- One quality assurance/quality control soil samples (an equipment blank) was collected and submitted for analysis.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT

CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of particulate matter smaller than 10 microns in diameter (PM10), mercury vapor, and VOCs did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m³) for PM10, 0.5 ppm for VOCs, and 0.0 μ g/m³ for mercury vapor.

Daily Average Concentrations								
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)					
PM-1	0.026	0.0	0.0					
PM-2	0.035	0.0	0.0					
PM-3	0.032	0.0	0.0					
PM-4	0.018	0.0	0.0					
PM-5	0.022	0.6	0.0					
PM-6	0.024	0.0	0.0					
WZ-1	0.023	0.0	0.0					

mg/m³ = milligrams per cubic meter

ppm = parts per million

 μ g/m³ = micrograms per cubic meter

Maximum 15-Minute-Average Concentration							
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)				
PM-1	0.035	0.0	0.0				
PM-2	0.050	0.0	0.0				
PM-3	0.039	0.0	0.0				
PM-4	0.025	0.0	0.1				
PM-5	0.029	1.4	0.0				
PM-6	0.030	0.0	0.0				
WZ-1	0.062	0.0	0.0				

Anticipated Activities

• AARCO and Langan will continue to advance and sample soil borings and develop monitoring wells at the site.

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN

SITE OBSERVATION REPORT



LANGAN

SITE OBSERVATION REPORT

Select Site Photographs:



Photo 1: View of soil from boring SB35



Photo 2: Perimeter CAMP station WZ-1 and off-site CAMP station PM-6 along Water Street during the drilling of boring SB35 (facing southeast)

Cc:	J. Yanowitz, P. McMahon, M. Raygorodetsky	By:	Tyler Zorn, Lexi Haley
			LANGAN



PROJECT No.: 170381	202		DATE:	Wednesday, August 26, 2020		
PROJECT: 250 Wa	ater Street CLIENT: 250 Seaport District	, LLC	WEATHER:	Sunny, 70-82 ^o F Wind: NW @ 3.5 mph (7:51 am) to WNW @ 10.4 mph (12:07 pm)		
LOCATION: New Yo	ork, NY					
BCP SITE ID: C23112	7		TIME:	5:45 am – 15:00 pm		
CONTRACTOR: AAR	CO Environmental Services Corp.	(AARCO)	LANGAN RE	P.: Tyler Zorn Lexi Haley		
EQUIPMENT: AMS Power Probe 9580 Niton XL3t XRF Jerome J505 and J405 MiniRAE 3000 Dusttrak DRX	-VTR Tyler Zorn, Lexi Hale Rohn Dixon, Alex Po	PRESENT AT SITE:RI Day 18Tyler Zorn, Lexi Haley – Langan Rohn Dixon, Alex Pothemont – AARCO Environmental Services Corp.				
OBSERVATIONS, DISC	USSIONS, TEST RESULTS, ETC	D.:				
Langan continued imple State Department of E located at 250 Water St	ementing Phase 4 of the May 13, nvironmental Conservation (NYS reet (Manhattan Block 98, Lot 1).	2020 Remedi DEC) Brownfi	ial Investigatio ield Cleanup	on Work Plan (RIWP) for New York Program (BCP) Site No. C231127		
Site Activities						
 AARCO used an additional soil b for environmen 	AMS Power Probe 9580-VTR dri orings requested by the NYSDE tal impacts, and collected soil sar	ll rig with 4-foc C. Langan do mples for labo	ot-long Macro ocumented the oratory analysi	-Core® samplers to advance seven e work, screened the soil samples is.		
 Boring staining of elem 	SB4N3: Boring was advanced to g, or photoionization detector (PID nental mercury was not identified	12 feet below 1) readings abo	v grade surfa ove backgrour	ce (bgs). No petroleum-like odors, nd were observed. Visual evidence		
 Boring up to 9 was no 	SB4NE3: Boring was advanced to .2 ppm were observed from abo t identified.	o 16 feet bgs. out 12 to 14 fe	Petroleum-lik eet bgs. Visu	e odors, staining, and PID readings ual evidence of elemental mercury		
 Boring up to 2 elemer 	SB4SE3: Boring was advanced to 18.0 parts per million (ppm) were tal mercury was not identified.	16 feet bgs. e observed fro	Petroleum-lik om about 12	e odors, staining, and PID readings to 16 feet bgs. Visual evidence of		
 Boring up to 1 was no 	SB4S3: Boring was advanced to 02.8 ppm were observed from ak t identified.	16 feet bgs. F pout 14 to 16 f	Petroleum-like feet bgs. Vis	e odors, staining, and PID readings ual evidence of elemental mercury		
 Boring SB4SW3: Boring was advanced to 12 feet bgs. No petroleum-like odors, staining, or f readings above background were observed. Visual evidence of elemental mercury was not identifi 						
 Boring above I 	SB4W3: Boring was advanced to background were observed. Visu	12 feet bgs. N al evidence of	lo petroleum- f elemental m	like odors, staining, or PID readings hercury was not identified.		
 Boring reading 	SB4NW3: Boring was advanced s above background were observ	to 16 feet b ved. Visual evi	ogs. No petr vidence of ele	oleum-like odors, staining, or PID mental mercury was not identified.		
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- AARCO installed monitoring well MW30.
 - MW30 consists of a 2-inch-diameter polyvinyl chloride (PVC) monitoring well with 20-slot well screen from about 9 to 19 feet bgs. MW34 was developed after installation.
- AARCO developed monitoring wells MW26, MW30, MW31, MW32, MW33, and MW34.
- All soil borings were backfilled with clean drill cuttings from the borehole, clean sand, and/or bentonite and then patched with cold patch asphalt or concrete after sampling was completed.

Material Tracking

- No material was imported to the site.
- No material was exported from the site.
- Impacted soil cuttings from soil borings SB4NE3, SB4SE3, and SB4S3 were containerized in sealed 55-gallon drums. The drums were stored on-site for future off-site disposal.

<u>Sampling</u>

Soil samples were collected and relinquished to Eurofins Lancaster Laboratories Environmental, Inc. (Eurofins) a New York State Department of Environmental Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory in Lancaster, Pennsylvania (ELAP No. 10670) for analyses proposed in the RIWP:

- The following sample depths were submitted for total mercury
 - o <u>SB4N3</u>: 0-2, 2-3, 6-8, 9-10, and 10-12 feet bgs
 - o <u>SB4NE3</u>: 0-2, 2-4, 5-6, 6-8, 9-10, 10-12, 13-14, and 14-16 feet bgs
 - o <u>SB4SE3</u>: 0-2, 2-4, 4-6, 6-8, 8-10, 10-12, 12-14, and 14-16 feet bgs
 - o <u>SB4S3</u>: 0-2, 2-3, 5-6, 6-8, 8-10, 10-12, 13-14, and 14-16 feet bgs
 - o <u>SB4SW3</u>: 0-2, 2-3, 4-6, 6-8, 8-10, and 10-12 feet bgs
 - o <u>SB4W3</u>: 0-2, 2-4, 4-6, 6-8, 8-10, and 10-12 feet bgs
 - o <u>SB4NW3</u>: 0-2, 2-3, 4-6, 6-8, 9-10, 10-12. 12-14, and 14-16 feet bgs
- The following sample depths were submitted and placed on hold for analysis of TCLP mercury:
 - o <u>SB4N3</u>: 2-3 feet bgs
 - <u>SB4NE3</u>: 2-4 feet bgs
 - o <u>SB4SE3</u>: 2-4 feet bgs
 - <u>SB4S3</u>: 2-3 feet bgs
 - o <u>SB4SW3</u>: 2-3 feet bgs
 - o <u>SB4W3</u>: 2-4 feet bgs
 - o <u>SB4NW3</u>: 2-3 feet bgs
- Twelve quality assurance/quality control soil samples (three field blanks, three MS/MSD, and three duplicates) were collected and submitted for analysis.

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CAMP Activities

Langan performed air monitoring during ground-intrusive activities. Fifteen-minute average concentrations of particulate matter smaller than 10 microns in diameter (PM10), mercury vapor, and VOCs did not exceed action levels for the duration of work activities. Daily background concentrations for PM10, VOCs, and mercury vapor based on the June 16, 2020 baseline air monitoring event were 0.025 milligrams per cubic meter (mg/m³) for PM10, 0.5 ppm for VOCs, and 0.0 μ g/m³ for mercury vapor.

Daily Average Concentrations			
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)
PM-1	0.005	0.0	0.0
PM-2	0.016	0.0	0.0
PM-3	0.005	0.0	0.0
PM-4	0.004	1.1	0.0
PM-5	0.004	0.6	0.0
PM-6	0.000	0.0	0.0
WZ-1	0.001	0.0	0.0

mg/m³ = milligrams per cubic meter

ppm = parts per million

 $\mu g/m^3 = micrograms per cubic meter$

Maximum 15-Minute-Average Concentration				
Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m³)	
PM-1	0.007	0.0	0.0	
PM-2	0.024	0.0	0.0	
PM-3	0.009	0.0	0.0	
PM-4	0.015	2.4	0.2	
PM-5	0.009	1.0	0.0	
PM-6	0.006	0.0	0.0	
WZ-1	0.006	0.2	0.0	

Anticipated Activities

• Phase 5 of the RIWP (groundwater sampling) is anticipated to be begin on August 31, 2020.

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SITE OBSERVATION REPORT

Select Site Photographs:





Photo 2: Perimeter CAMP station WZ-1 and off-site CAMP station PM-4 along Pearl Street during the drilling of boring SB4N3 (facing north)

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