

SITE OBSERVATION REPORT

PROJECT No.: 170381202 PROJECT: 250 Water Street LOCATION: New York, NY BCP SITE ID: C231127	CLIENT: 250 Seaport District, LLC	DATE: Saturday, February 12, 2022 WEATHER: Partly Cloudy, 53.4-59.3 °F Wind: SSW @ 1.1-6.0 mph TIME: 6:30 am – 7:00 pm
CONTRACTOR: AARCO Environmental Services Corp. (AARCO)		LANGAN REP. : Michael Au
EQUIPMENT: Bobcat E35i Excavator Jerome J405 Jerome J505 RKI GX-6000 PID MiniRAE 3000 PID DustTrak II	PRESENT AT SITE: Remedial Design Investigation Day 1 Langan Mimi Raygorodetsky, Paul McMahon, Michael Au, Gabriel Enriquez Castro AARCO Brian Wyble, Will Scheiner, Juan Torres Excel Environmental Resources, Inc. (Excel) Abby Lodge	
OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.: Langan began implementation of the New York State Department of Environmental Conservation (NYSDEC)-approved February 11, 2022 Remedial Design Investigation Work Plan (RDIWP) at the 250 Water Street site (NYSDEC Brownfield Cleanup Program [BCP] Site No. C231127). Site Activities <ul style="list-style-type: none"> • AARCO used a Bobcat E35i excavator to excavate four test pits in the north-central, central and southwestern parts of the site. Langan conducted ambient air monitoring across the site during ground-intrusive activities: <ul style="list-style-type: none"> ○ TP01 (about 6 feet long by 4 feet wide) was excavated to a maximum depth of about 8 feet below grade surface (bgs). <ul style="list-style-type: none"> ▪ Excavated material consisted of historic fill with varying amounts of brick, concrete and pottery fragments to about 4 feet bgs followed by an apparent native layer consisting of medium- to fine-grained brown sand with varying amounts of gravel to about 8 feet bgs (the test pit termination depth). ▪ Ambient air between the work zone and CAMP stations was screened using a photoionization detector (PID) and handheld Jerome® J505 mercury analyzer. Instantaneous VOC readings did not exceed background concentrations. Instantaneous mercury vapor readings throughout the site ranged from 0.00 µg/m³ to 0.09 µg/m³ (maximum mercury vapor reading observed within the work zone). ▪ Excavated soil/fill was screened using a PID and a handheld Jerome® J505 mercury analyzer. A maximum PID reading of 0.0 parts per million (ppm) and a maximum mercury vapor reading of 0.00 µg/m³ was observed. ○ TP02 (about 6 feet long by 4 feet wide) was excavated to a maximum depth of about 8 feet bgs. <ul style="list-style-type: none"> ▪ Excavated material consisted of historic fill with varying amounts of brick and concrete to about 8 feet bgs (the test pit termination depth). ▪ Ambient air between the work zone and CAMP stations was screened using a PID and handheld Jerome® J505 mercury analyzer. Instantaneous VOC readings did not exceed 		
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background concentrations. Instantaneous mercury vapor readings throughout the site ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.16 $\mu\text{g}/\text{m}^3$ (maximum mercury vapor reading observed within the work zone).

- Excavated soil/fill was screened using a photoionization detector (PID) and a handheld Jerome® J505 mercury analyzer. A maximum PID reading of 0.0 ppm and a maximum mercury vapor reading of 0.36 $\mu\text{g}/\text{m}^3$ was observed.
- TP03 (about 5 feet long by 5 feet wide) was excavated to a maximum depth of about 8 feet bgs.
 - Excavated material consisted of an about 1-foot-thick layer of gravel followed by historic fill with varying amounts of brick, wood, and abandoned utility piping to about 8 feet bgs (the test pit termination depth).
 - Ambient air between the work zone and CAMP stations was screened using a PID and handheld Jerome® J505 mercury analyzer. Instantaneous VOC readings did not exceed background concentrations. Instantaneous mercury vapor readings throughout the site ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.06 $\mu\text{g}/\text{m}^3$ (maximum mercury vapor reading observed within the work zone).
 - Excavated soil/fill was screened using a photoionization detector (PID) and a handheld Jerome® J505 mercury analyzer. A maximum PID reading of 0.0 ppm and a maximum mercury vapor reading of 0.04 $\mu\text{g}/\text{m}^3$ was observed.
- TP05 (about 5 feet long by 5 feet wide) was excavated to a maximum depth of about 8 feet bgs.
 - Excavated material consisted of historic fill, primarily consisting of brick, to about 4 feet bgs followed by an apparent native layer consisting of medium- to fine-grained brown sand with varying amounts of silt and gravel to about 8 feet bgs (the test pit termination depth).
 - Ambient air between the work zone and CAMP stations was screened using a PID and handheld Jerome® J505 mercury analyzer. Instantaneous VOC readings did not exceed background concentrations. Instantaneous mercury vapor readings throughout the site ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.09 $\mu\text{g}/\text{m}^3$ (maximum mercury vapor reading observed within the work zone).
 - Excavated soil/fill was screened using a photoionization detector (PID) and a handheld Jerome® J505 mercury analyzer. A maximum PID reading of 0.0 ppm and a maximum mercury vapor reading of 0.13 $\mu\text{g}/\text{m}^3$ was observed.

Prior to excavation, access to each test pit work zone was restricted by chain-link fencing and Echo Barrier H9™ acoustic curtains. Excavated soil/fill was temporarily stockpiled on polyethylene sheeting within the established work zone, before being backfilled after completion of one hour of ambient air monitoring. Test pits were restored to match the surrounding grade using cold patch asphalt immediately after backfilling. Excess soil/fill (about 2 cubic yards) was temporarily stockpiled on and covered with polyethylene sheeting in the north-central part of the site and will be containerized in sealed 55-gallon drums on February 13, 2022.

Material Tracking

- No material was imported to the site.
- No material was exported from the site.

Sampling

- None

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CAMP Activities

Langan performed air monitoring during field activities and to monitor ambient air conditions as a component of the Remedial Design Investigation (RDI).

Daily Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.027	0.0	0.0
PM-2	0.015	0.0	0.0
PM-3	0.029	0.2	0.0
PM-4	0.017	0.0	0.0
PM-5	0.019	0.0	0.0
PM-6	0.016	0.1	0.0
WZ-1	0.017	0.2	0.0
WZ-2	N/A	N/A	N/A

Maximum 15-Minute-Average Concentrations

Station ID	Particulate (mg/m ³)	Organic Vapor (ppm)	Mercury Vapor (µg/m ³)
PM-1	0.048	0.0	0.0
PM-2	0.035	0.1	1.3 @ 12:48pm
PM-3	0.048	0.5	0.0
PM-4	0.036	0.0	0.1
PM-5	0.032	0.0	0.0
PM-6	0.034	0.4	0.0
WZ-1	0.134	3.5	0.0
WZ-2	N/A	N/A	N/A

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

- Concentrations of particulate matter smaller than 10 microns in diameter (PM10) exceeded the action level established in the CAMP from 10:32am to 10:43am at work zone station WZ-1 due to exhaust from the vibratory plate tamper in close proximity to the work zone station during restoration of test pit TP-01. No ground-intrusive activities were completed at the time of the exceedance.
- Mercury vapor concentrations exceeded the action level established in the CAMP from 12:48pm to 1:01pm at perimeter station PM-2, which was located along Pearl Street, next to the parking lot entrance. During this time, AARCO was in the process of backfilling test pit TP-02 after the test pit was open for one hour. Perimeter station PM-2 was located about 120 feet and in an upwind direction from the TP-02 work zone.
 - Instantaneous mercury vapor concentrations within the work zone during this time were collected using the Jerome® J505 mercury analyzer and readings ranged from 0.00 µg/m³ to 0.05 µg/m³.
 - The work zone station (WZ-1) was located between TP-02 and PM-2 and Jerome® J405 15-minute average mercury concentrations remained at 0.0 µg/m³ throughout this time period.
 - Two instantaneous readings of 14.30 µg/m³ and 4.50 µg/m³ were recorded at PM-2 before returning to the daily average of 0.0 µg/m³. The instantaneous readings were immediately checked at the perimeter station using the Jerome® J505 mercury analyzer and a maximum concentration of 0.01 µg/m³ was recorded.
 - Additionally, the independent community monitoring conducted continuous monitoring with a Jerome® J405 throughout the day and reported that mercury vapor was not detected, with all readings measured at 0.0 µg/m³.

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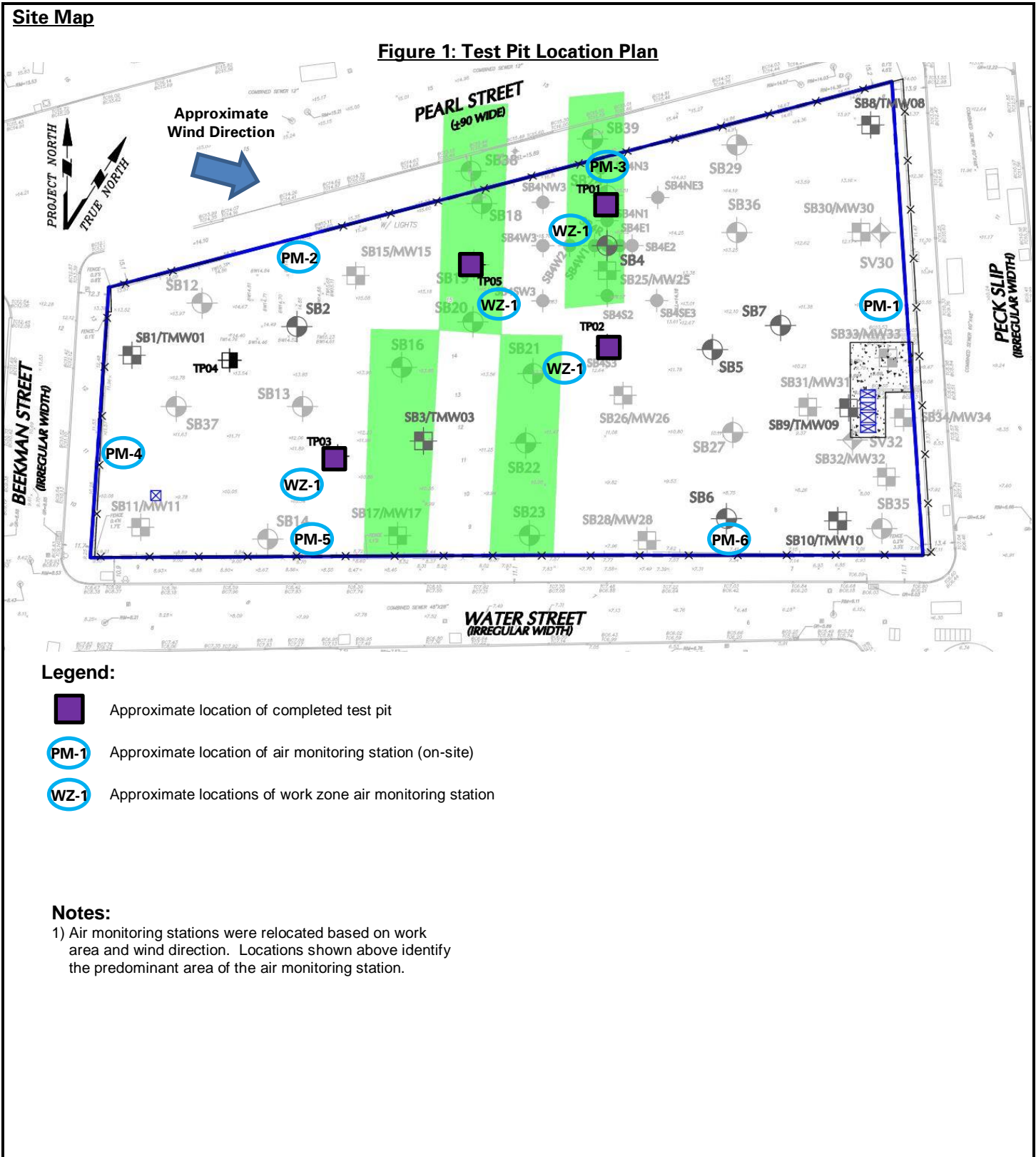
- The exceedance was determined to be an erroneous high reading resulting from an equipment malfunction or unknown interference and mercury vapor data from the work zone station (WZ-1) and mobile monitoring data from the Jerome® J505 mercury analyzer indicate the erroneously high reading is not a result of ground-intrusive activities.
- Prior to discontinuing the CAMP at the conclusion of ground-intrusive activities, VOC and mercury vapor concentrations were confirmed to return to background conditions at each perimeter station.

Anticipated Activities

- AARCO will excavate test pit TP04 as part of the RDI on February 13, 2022.

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Select Site Photographs:

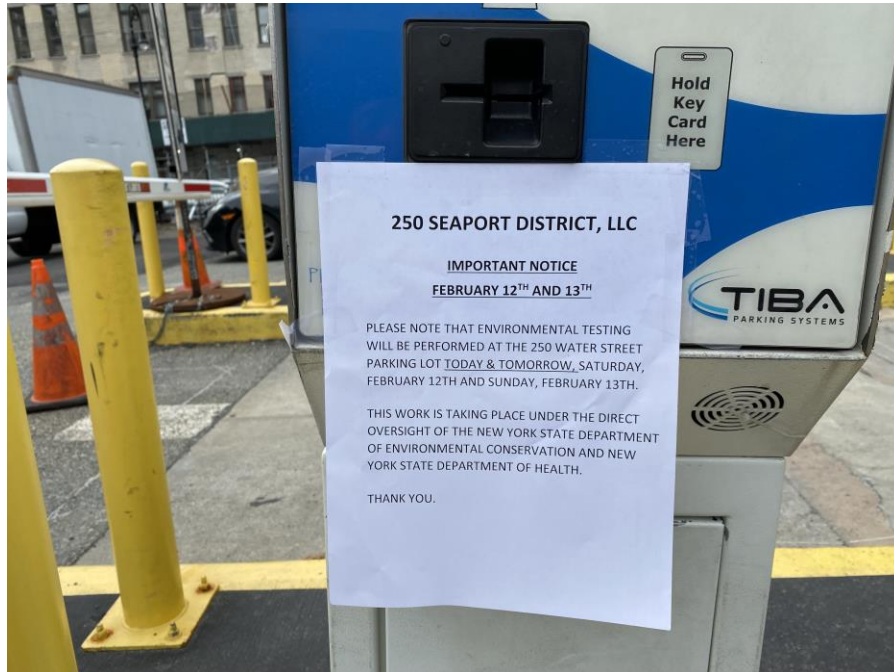


Photo 1: View of typical signage posted at the entrance to the site (facing west).



Photo 2: View of typical work zone fencing with chain-link fence and Echo Barrier H9™ acoustic curtains (facing northwest).

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Photo 3: View of AARCO excavating test pit TP03 and stockpiling excavated soil/fill on polyethylene sheeting (facing southeast).



Photo 4: View of test pit TP05, restored to the surrounding grade using cold patch asphalt (facing north).

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Photo 5: View of Langan screening excavated soil/fill from test pit TP01 using a Jerome® J505 mercury analyzer.

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