LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

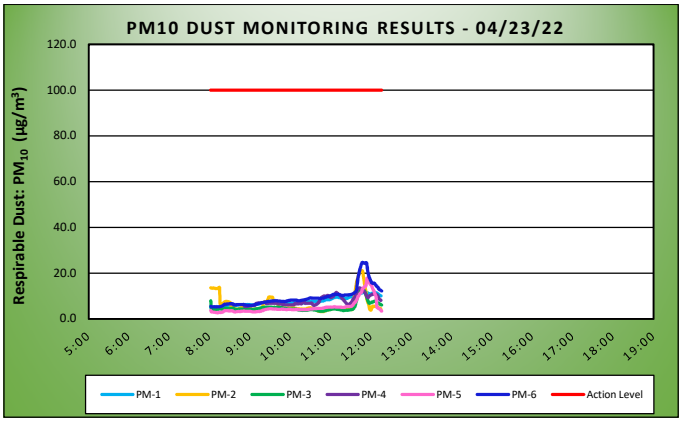
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

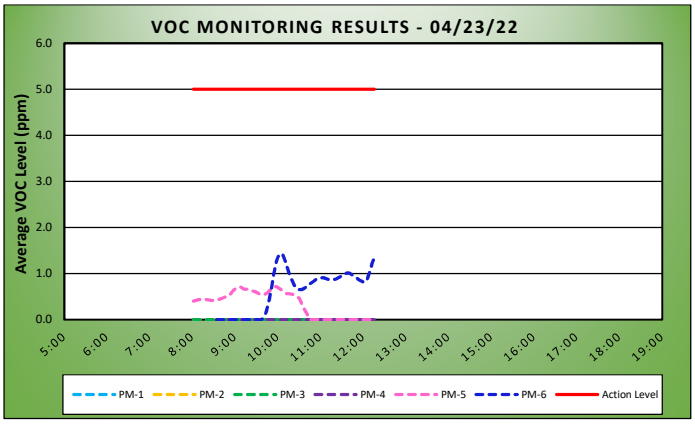
04/23/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

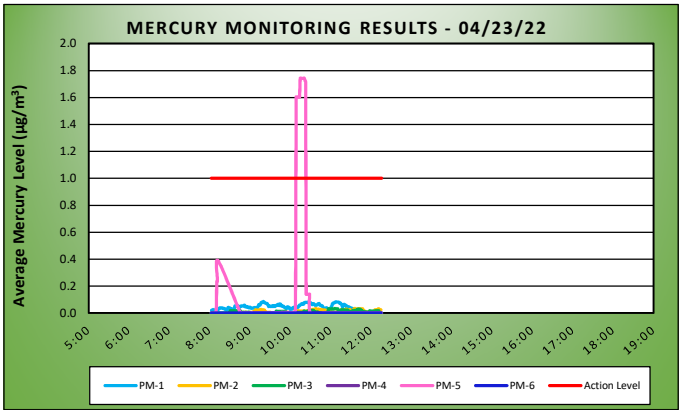
Weather Data Range for Work Day		Wind Direction	S	Relative Humidity (%)	27.2 - 38.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	53.7 - 60.4	Wind Speed (MPH)	0.7 - 6.1	Barometer (inHg)	30.44 - 30.50			

Station Location Work Area	Daily Avg. Dust Concentration (µg/m³)	Max 15 Minute Dust Concentration (µg/m³)	Time of Maximum 15 Minute Avg Dust Reading	Daily Avg. VOC Concentration (ppm)	Max 15 Minute VOC Concentration (ppm)	Time of Max 15 Minute Avg VOC Reading
PM-1	7.7	11.8	11:51	0.0	0.0	8:02
PM-2	6.3	21.3	11:45	0.0	0.0	8:02
PM-3	6.1	12.8	11:48	0.0	0.0	8:02
PM-4	7.9	13.6	11:43	0.0	0.0	8:51
PM-5	5.1	17.8	11:54	0.3	0.7	9:57
PM-6	9.5	24.7	11:48	0.6	1.4	10:05

Station Location Work Area	Daily Avg. Mercury Concentration (µg/m³)	Max 15 Minute Mercury Concentration (µg/m³)	Time of Max 15 Minute Avg Mercury Reading
PM-1	0.0	0.1	9:20
PM-2	0.0	0.0	11:36
PM-3	0.0	0.0	11:06
PM-4	0.0	0.0	8:53
PM-5	0.2	*1.7	10:15
PM-6	0.0	0.0	8:03



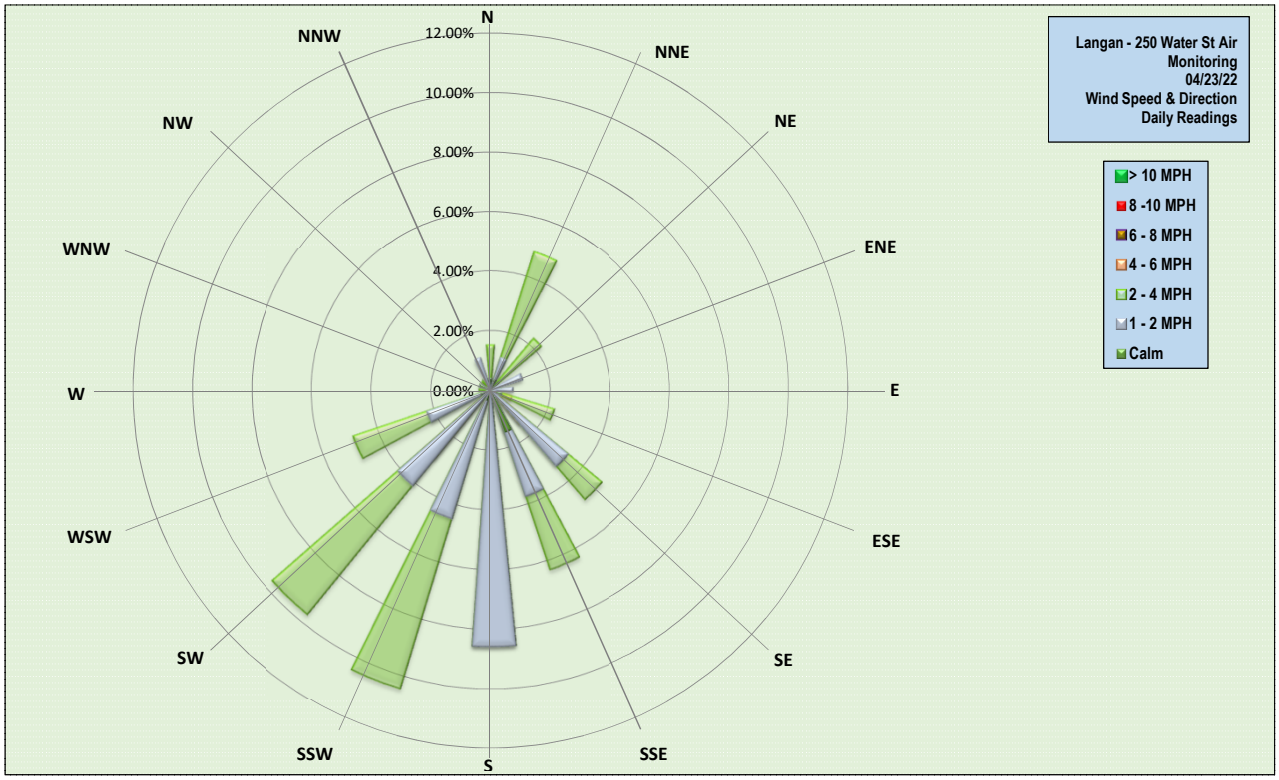




Air Monitoring Notes:

* Mercury vapor concentrations exceeded the action level established in the CAMP from 10:09am to 10:23am at perimeter station PM-5, located along Pearl Street. The exceedances were determined to be erroneous high readings resulting from an equipment malfunction and not a result of ground-intrusive activities associated with drilling activities.
  - Two instantaneous mercury vapor concentrations causing the erroneous exceedance were recorded at 2.1 µg/m³ and 23.6 µg/m³. During the time of the exceedance, AARCO was in the process of advancing waste characterization soil boring WC11B.
  - Drilling activities were immediately halted to investigate the validity of the exceedance. Langan used a Jerome® J505 mercury vapor analyzer to collect readings from the station intake and instantaneous mercury vapor concentrations ranged from 0.00 µg/m³ to 0.07 µg/m³.
  - The Jerome® J405 at perimeter station PM-5 was temporarily disconnected from the remote telemetry system to troubleshoot the issue and was replaced with the spare unit. The Jerome® J505 was used during the equipment replacement and instantaneous mercury vapor concentrations ranged from 0.00 µg/m³ to 0.06 µg/m³.
  - The spare Jerome® J405 unit at perimeter station PM-5 continued to read 0.00 µg/m³ for the remainder of the day.
- Langan used a Jerome® J505 mercury analyzer to monitor ambient air conditions throughout the site. Instantaneous mercury vapor concentrations ranged from 0.00 µg/m³ to 0.10 µg/m³.
- Perimeter air monitoring station PM-1 was relocated to the western sidewalk of Beekman Street from 11:39am to 11:59am during advancement of soil borings WC03A_N1 and WC03A_S1.
- 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. CAMP was discontinued at 12:15pm, after AARCO demobilized from the site.

EMILCOTT
environmental, health & safety experts


Langan - 250 Water St Air Monitoring
04/23/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%