LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

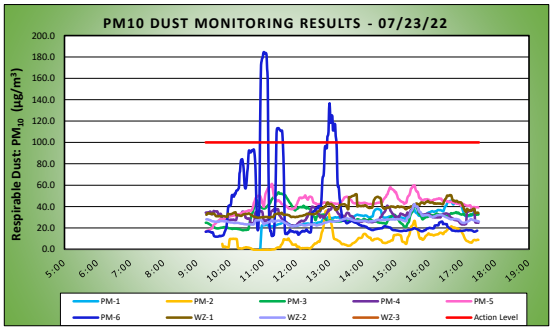
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

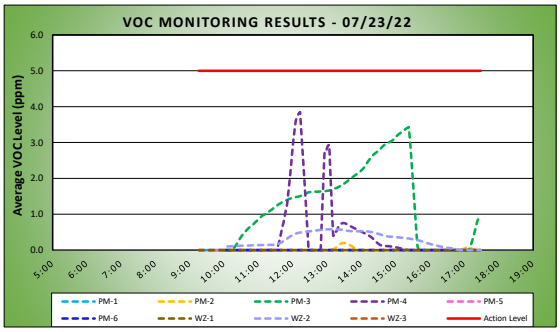
07/23/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

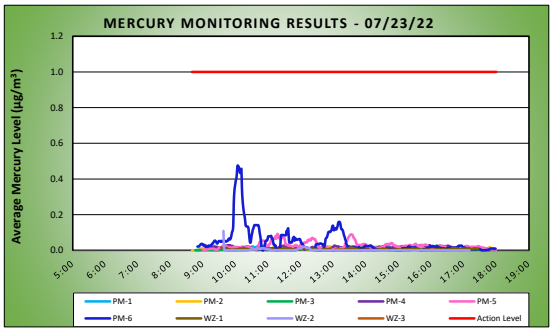
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	25.6 - 35.6	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	90.5 - 97.8	Wind Speed (MPH)	1.2 - 6.2	Barometer (inHg)	30.04 - 30.09			

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	14.2	45.4	16:40	0.0	0.0	9:26
PM-2	8.9	36.4	12:56	0.0	0.2	13:30
PM-3	30.8	53.3	11:28	1.3	3.4	15:23
PM-4	31.0	41.6	15:33	0.4	3.9	12:13
PM-5	42.3	61.1	11:16	0.0	0.0	13:30
PM-6	37.1	184.6	11:01	0.0	0.0	10:03
WZ-1	37.5	51.6	13:48	0.0	0.0	9:16
WZ-2	26.9	42.2	15:33	0.3	0.6	13:05
WZ-3	N/A	N/A	N/A	N/A	N/A	N/A

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	0.01	0.03	16:10
PM-2	0.01	0.03	13:58
PM-3	0.00	0.01	17:29
PM-4	0.02	0.03	11:32
PM-5	0.02	0.09	11:17
PM-6	0.05	0.48	10:04
WZ-1	0.01	0.02	9:34
WZ-2	0.01	0.11	9:38
WZ-3	N/A	N/A	N/A







Air Monitoring Notes:

Langan performed air monitoring at the perimeter of the site and at the work zone at eight total locations for mercury vapor, volatile organic compounds (VOCs), and particulate matter less than 10 microns in diameter (PM10), during ground-intrusive activities. There were no fifteen-minute average concentrations for mercury vapor or VOCs that 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, 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

- * PM10 concentrations at perimeter CAMP station PM-6 exceeded the action level established in the CAMP (0.100 mg/m3) from 10:55am to 11:08am (14 minutes), 11:24am to 11:35am (12 minutes), and 12:56pm to 1:08pm (13 minutes). The exceedances were caused by welding activities in proximity to perimeter CAMP station PM-6 and were not a result of ground-intrusive activities at the site. In each instance, work was temporarily halted and dust suppression was implemented by spraying the work area with water. Fugitive dust was not observed migrating from the site during each of these times.

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 0.79 µg/m³ (mercury vapor concentrations above background concentrations are associated with ambient air screening in the north-central part of the site during excavation activities in the mercury-impacted area).
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentra tions were at or below background concentrations throughout the work day.

Off-Site CAMP Station Relocation

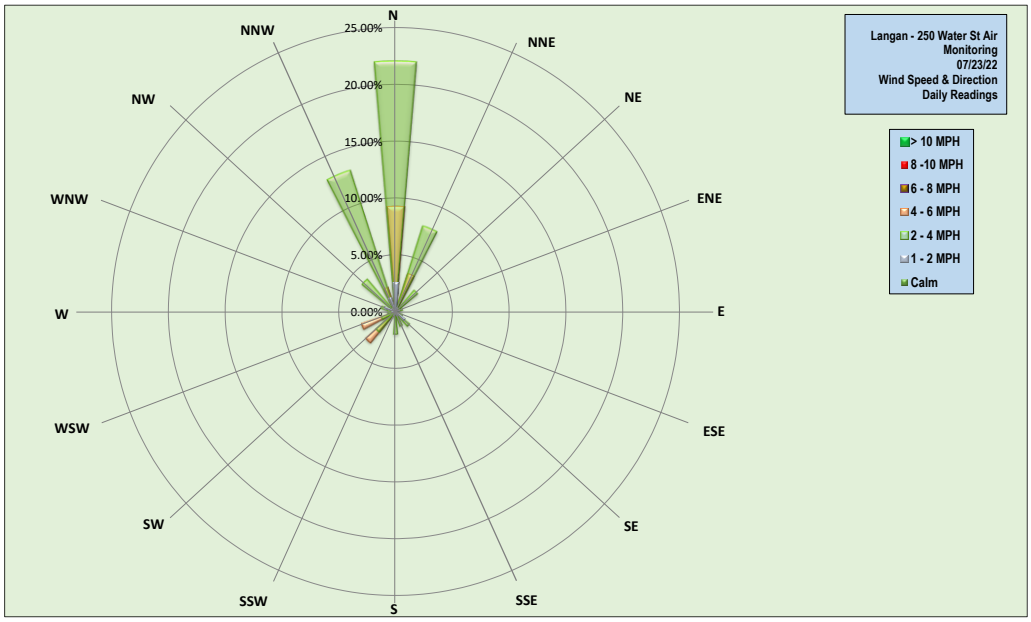
- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 9:19am to 5:27pm during excavation and demolition activities along the northern boundary of the site.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 9:51am to 5:11pm during installation of SOE soldier piles along the eastern boundary 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 5:07pm and 5:29pm 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.

EMILCOTT
environmental, health & safety experts


Langan - 250 Water St Air Monitoring
07/23/22
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
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%