LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

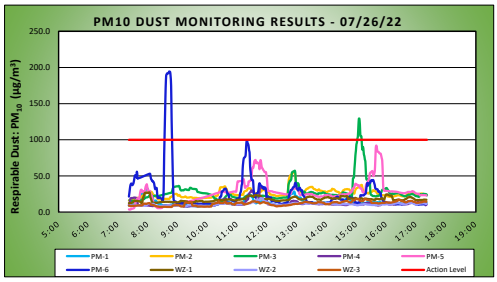
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

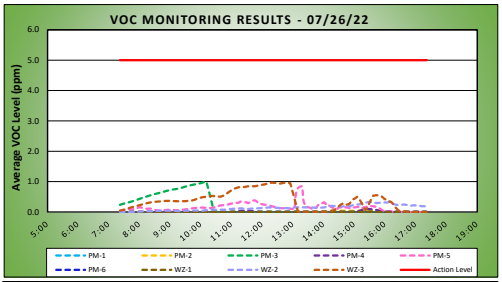
07/26/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

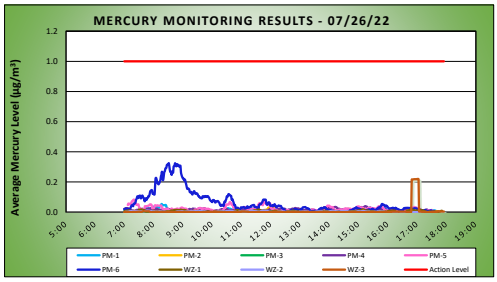
Weather Data Range for Work Day		Wind Direction	NNE	Relative Humidity (%)	0.0 - 0.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	72.1 - 82.9	Wind Speed (MPH)	0.5 - 7.4	Barometer (inHg)	30.04 - 30.12			

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	13.7	33.9	7:57	0.0	0.0	9:53
PM-2	25.9	55.3	12:54	0.0	0.0	15:22
PM-3	27.6	**129.4	15:05	0.2	1.0	10:11
PM-4	12.1	34.0	11:47	0.0	0.1	15:27
PM-5	27.9	92.1	15:40	0.2	0.8	13:18
PM-6	26.6	*194.5	8:43	0.0	0.0	7:22
WZ-1	17.6	27.3	8:03	0.0	0.0	7:22
WZ-2	10.9	19.3	11:48	0.1	0.3	15:31
WZ-3	12.0	18.2	15:00	0.4	1.0	12:20

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	0.05	8:16
PM-2	0.01	0.04	12:02
PM-3	0.00	0.00	7:23
PM-4	0.02	0.04	15:14
PM-5	0.02	0.08	7:19
PM-6	0.06	0.32	8:31
WZ-1	0.01	0.02	15:08
WZ-2	0.00	0.01	11:44
WZ-3	0.01	0.22	17:00







Air Monitoring Notes:

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 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 recorde d using a handheld Jerome® J505 mercury vapor analyzer and a handheld PID, respectively.

- Background concentrations of mercury vapor at each CAMP station ranged from at 0.00 to 0.03 µg/m ³.
- 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 8:34am to 8:48am (15 minutes). The exceedance was caused by active spraying of Mercon-X® in proximity to perimeter CAMP station PM-6 and was not the result of ground-intrusive activities at the site. During this time, work was temporarily halted due to instantaneous mercury vapor concentrations above background conditions recorded during screening of the ambient air in the north-central part of the site. Fugitive dust was not observed migrating from the site during this time.
- ** PM10 concentrations at perimeter CAMP station PM -3 exceeded the action level established in the CAMP (0.100 mg/m³) from 3:02pm to 3:10pm (9 minutes). During this time, CCJV was loading C&D debris into a truck for off-site disposal. Dust suppression was implemented by spraying the C&D debris with wat er and concentrations of PM10 returned to background conditions. Fugitive dust was not observed migrating from the site during this time.

Equipment Troubleshooting

- PM10 concentrations at perimeter CAMP station PM -6 were not recorded from 7:41am to 7:48am due to a malfunction with the e mote telemetry system. During this time, the dedicated mobile monitor visually monitored the PM10 concentrations on the DustTrak unit while restarting the telemetry syste m, however, the data was not able to be recovered. PM10 concentrations did not approach or exceed the action level established in CAMP (0.100 mg/m³). Fugitive dust was not observed migrating from the site during this time and data logging resumed at 7:49am.

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 0.63 µg/m³, with the exception of ambient air screening in the north -central part of the site during excavation in the mercury-impacted area. During this time, the maximum instantaneous mercury vapor concentration was recorded at 2.51 µg/m³, however, there were no 15-minute TWA concentrations for mercury vapor exceeding the action level established in the CAMP at any perimeter or work zone CAMP station.
- 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.

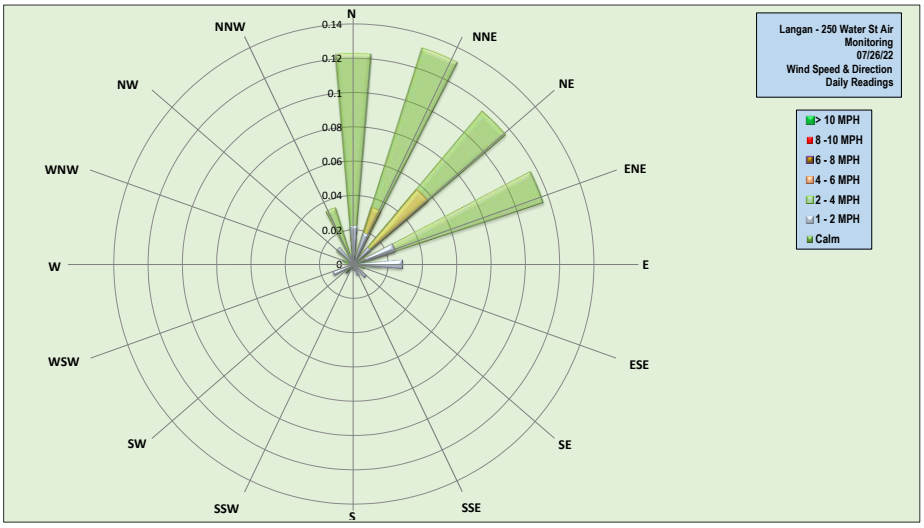
Off-Site CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:07am to 5:21pm during excavation/backfilling activities and SOE soldier pile installation along the northern boundary of the site.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 7:07am to 5:21pm during installation of SOE soldier piles along the eastern boundary of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:07am to 5:21pm during installation of the perimeter construction fence along the southern 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 at 5:21pm at the conclusion of ground-intrusive activities.

EMILCOTT
environmental, health & safety experts


Langan - 250 Water St Air Monitoring
07/26/22
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
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0