

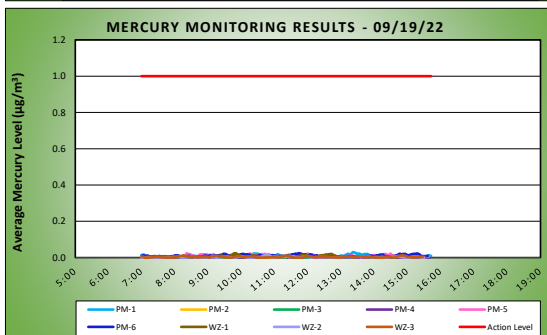
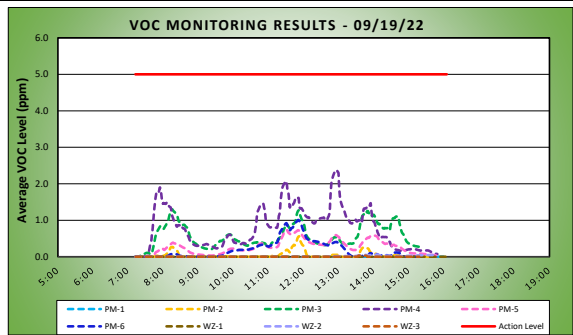
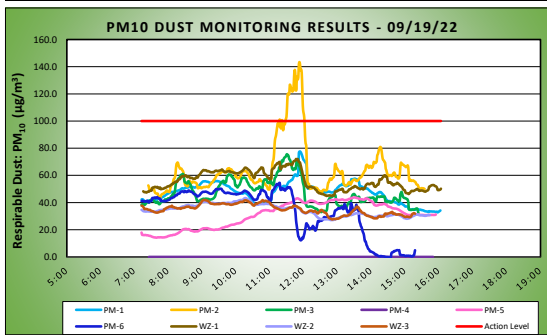
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

09/19/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level ($\mu\text{g}/\text{m}^3$)	100
VOC Action Level (ppm)	5
Hg Action Level ($\mu\text{g}/\text{m}^3$)	1.0

Weather Data Range for Work Day		Wind Direction	NNE	Relative Humidity (%)	40.8 - 75.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	71.4 - 87.2	Wind Speed (MPH)	0.7 - 5.5	Barometer (inHg)	29.89 - 30.03			

Station Location Work Area	Daily Avg. Dust Concentration ($\mu\text{g}/\text{m}^3$)	Max 15 Minute Dust Concentration ($\mu\text{g}/\text{m}^3$)	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	47.2	77.6	11:54	0.0	0.0	13:11
PM-2	63.7	* 143.4	11:53	0.0	0.6	11:53
PM-3	47.0	75.6	11:31	0.6	1.3	8:16
PM-4	0.0	0.0	7:26	0.8	2.4	12:56
PM-5	31.0	43.8	13:31	0.3	0.7	11:32
PM-6	33.1	54.5	11:18	0.2	1.0	11:51
WZ-1	55.8	72.1	11:47	0.0	0.0	11:20
WZ-2	34.3	43.3	10:17	0.0	0.1	14:08
WZ-3	35.0	42.0	9:04	0.0	0.0	13:35

Station Location Work Area	Daily Avg. Mercury Concentration ($\mu\text{g}/\text{m}^3$)	Max 15 Minute Mercury Concentration ($\mu\text{g}/\text{m}^3$)	Time of Max 15 Minute Avg Mercury Reading
PM-1	0.01	0.03	13:22
PM-2	0.00	0.01	12:07
PM-3	0.00	0.01	10:47
PM-4	0.00	0.01	10:45
PM-5	0.01	0.02	8:21
PM-6	0.01	0.02	11:43
WZ-1	0.01	0.02	9:47
WZ-2	0.00	0.01	10:50
WZ-3	0.00	0.01	14:51



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 levels established by the CAMP (1.00 $\mu\text{g}/\text{m}^3$ and 5.0 ppm, respectively).

Background Concentrations

- Prior to implementation of ground-intrusive work each day, 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 ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.02 $\mu\text{g}/\text{m}^3$.
- 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-2 exceeded the action level established in the CAMP (0.100 mg/m3) intermittently between 11:18am to 12:01pm. PM10 concentrations did not exceed 0.150 mg/m3, which is the action level requiring work stoppage according to the CAMP. The exceedances were caused by tri-axis dump trucks entering and/or exiting the site upwind of perimeter CAMP station PM-2. During this time, CCJV was loading trucks with petroleum-impacted soil/fill in the southeastern part of the site while actively spraying Atmos® AC-645 dust/vapor suppressing foam across the work area. In accordance with the CAMP, additional dust suppression measures were implemented (e.g., spraying the ground surface with water) and PM10 concentrations returned to background conditions. Fugitive dust was not observed migrating from the site during this time.

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 $\mu\text{g}/\text{m}^3$ to 0.16 $\mu\text{g}/\text{m}^3$.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. Instantaneous VOC concentrations of ambient air around the excavation area in the southeastern part of the site ranged from 0.0 ppm to 114.1 ppm. Exposed soil/fill was actively sprayed with Atmos® AC-645 dust/vapor suppressing foam during excavation and loading of trucks, and during periods of inactivity. VOC concentrations at perimeter and offsite CAMP stations did not exceed the action level established in the CAMP (5.0 ppm) throughout the work day.

CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:01am to 3:32pm due to exposed soil/fill within 20 feet of the northern site boundary.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:58am to 3:30pm during excavation activities in the southeastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:58am to 3:18pm during excavation activities in the southeastern part of the site.

Prior to CAMP Shutdowns

- 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 sequentially from 3:18pm to 3:43pm at the conclusion of ground-intrusive activities.
- Mercury vapor concentrations at each CAMP station ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.05 $\mu\text{g}/\text{m}^3$.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

