

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

05/16/22

Project number: 170381202

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Rev. No. 0

Dust Action Level ($\mu\text{g}/\text{m}^3$)

100

VOC Action Level (ppm)

5

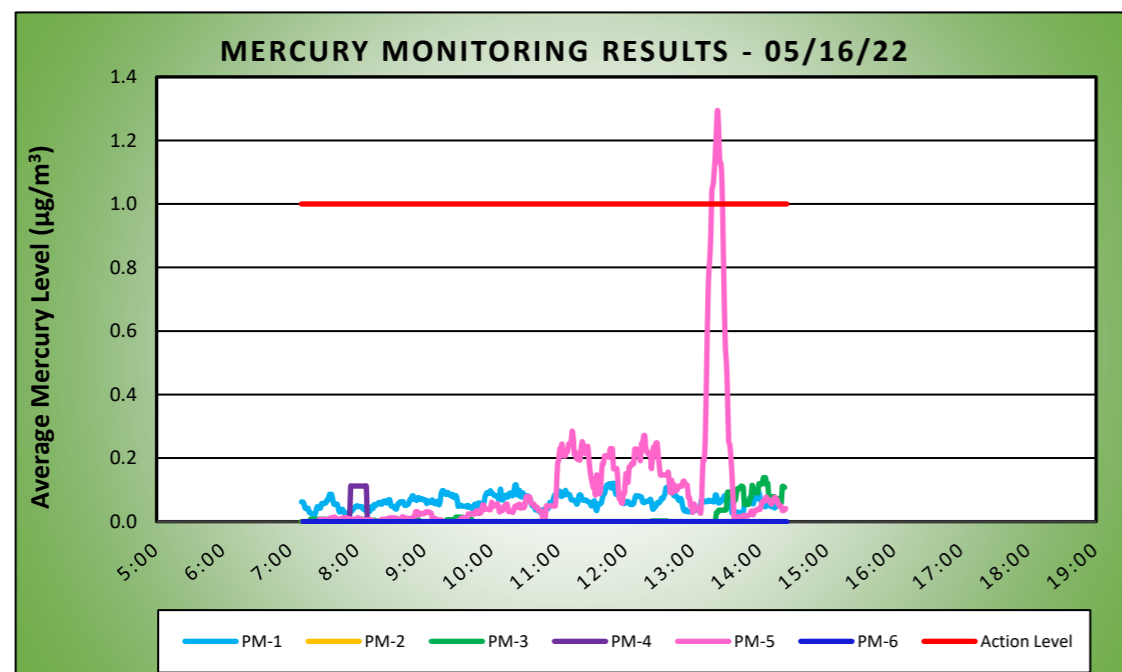
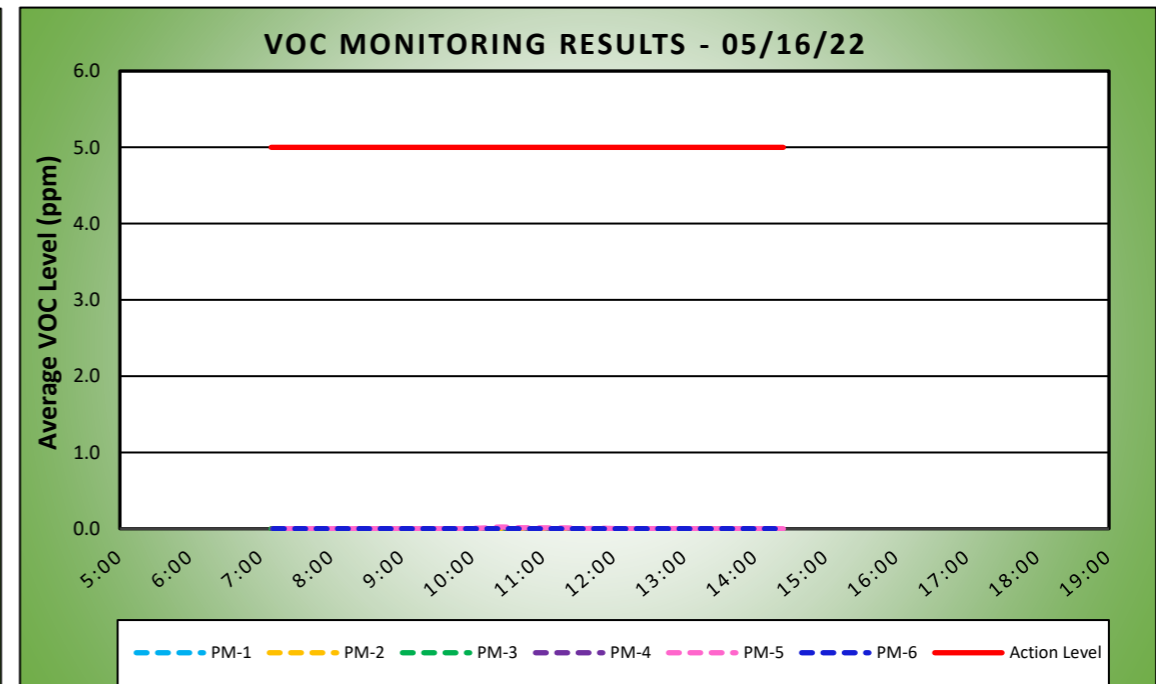
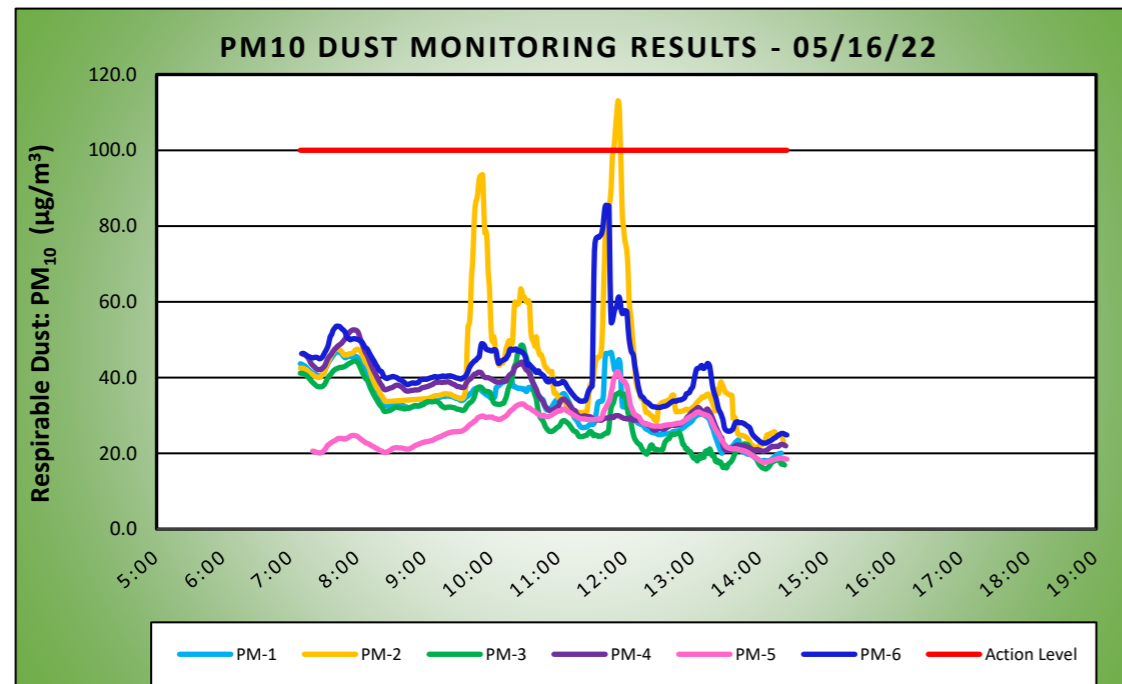
Hg Action Level ($\mu\text{g}/\text{m}^3$)

1.0

Weather Data Range for Work Day		Wind Direction	SSE	Relative Humidity (%)	52.0 - 84.0	Daily Rain (in)	0.05	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	63.0 - 78.0	Wind Speed (MPH)	1.7 - 5.7	Barometer (inHg)	29.60 - 29.70			

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	32.8	46.8	7:42	0.0	0.0	7:28
PM-2	42.1	* 113.1	11:53	0.0	0.0	7:09
PM-3	29.7	48.6	10:27	0.0	0.0	7:09
PM-4	34.3	52.6	7:56	0.0	0.0	7:10
PM-5	26.2	41.6	11:53	0.0	0.0	10:24
PM-6	41.0	85.4	11:42	0.0	0.0	7:11

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	0.1	0.1	11:49
PM-2	0.0	0.0	7:10
PM-3	0.0	0.1	14:03
PM-4	0.0	0.1	7:54
PM-5	0.1	** 1.3	13:22
PM-6	0.0	0.0	7:12



Air Monitoring Notes:

- *Particulate concentrations exceeded the action level established in the CAMP from 11:49am to 11:55am at perimeter station PM-2, located upwind of the work zone. During this time, CCJV was demobilizing a grout mixer and no ground-intrusive activities were ongoing at the site.
 - Dust suppression measures (ie. spraying the ground surface with water) were implemented and PM10 concentrations returned to background conditions.
 - Fugitive dust was not observed migrating from the site during this time.
- **Mercury vapor concentrations exceeded the action level established in the CAMP from 1:18pm to 1:26pm at perimeter station PM-5, located along Pearl Street. During this time, no ground-intrusive activities were ongoing at the site and CCJV was in the process of covering exposed soil/fill with polyethylene sheeting. No on-site source of mercury vapor was identified based on continuous screening with the Jerome J505 unit.
 - The 15-minute time-weighted-average concentrations of mercury vapor exceeding the action level ranged from 1.1 to 1.3 $\mu\text{g}/\text{m}^3$ and the exceedances were caused by instantaneous mercury vapor concentrations ranging from 0.0 $\mu\text{g}/\text{m}^3$ to 3.0 $\mu\text{g}/\text{m}^3$ between 1:08pm and 1:22pm.
 - Jerome® J505 mercury vapor analyzer concentrations ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.08 $\mu\text{g}/\text{m}^3$ during this time.
 - Based on the mercury vapor concentrations recorded from the Jerome® J405 unit within perimeter station PM-5 being inconsistent with all other observations from mercury vapor monitors on May 16, 2022 and on an evaluation of previous data from the unit, this unit is being replaced. The replacement unit is anticipated to arrive for use on Thursday, May 19, 2022.
- Langan used a handheld Jerome® J505 mercury analyzer to monitor ambient air conditions within the work zone and at various heights throughout the site. Instantaneous mercury vapor concentrations ranged from 0.00 $\mu\text{g}/\text{m}^3$ to 0.31 $\mu\text{g}/\text{m}^3$.
- Langan used a handheld PID to monitor VOC concentrations within the work zone and throughout the site. VOC concentrations were not detected above background concentrations throughout the work day.
- Concentrations of PM10, VOCs, and mercury vapor were not recorded at perimeter station PM-2, which was located upwind of the work area, from 8:26am to 8:46am, due to a disconnected power cable. The power cable was reconnected and data logging resumed at 8:47am. J405 data was downloaded from the PM-2 unit and all concentrations were 0.0 $\mu\text{g}/\text{m}^3$. Missing data from the PID and Jerome® J405 units will be retrieved and provided in updated Daily Field Reports and Daily Air Monitoring Reports.
 - Instantaneous mercury vapor concentrations recorded with the handheld Jerome® J505 mercury vapor analyzer at perimeter station PM-2 ranged from 0.05 $\mu\text{g}/\text{m}^3$ to 0.10 $\mu\text{g}/\text{m}^3$ during this time.
 - Fugitive dust and odors were not observed migrating from the site during this time.
- 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 stations were discontinued sequentially from 2:19pm to 2:26pm at the conclusion of ground-intrusive activities.
 - Mercury vapor concentrations at each CAMP station ranged from 0.04 $\mu\text{g}/\text{m}^3$ to 0.10 $\mu\text{g}/\text{m}^3$.
 - VOC concentrations at each CAMP station were recorded at 0.0 ppm.

