LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

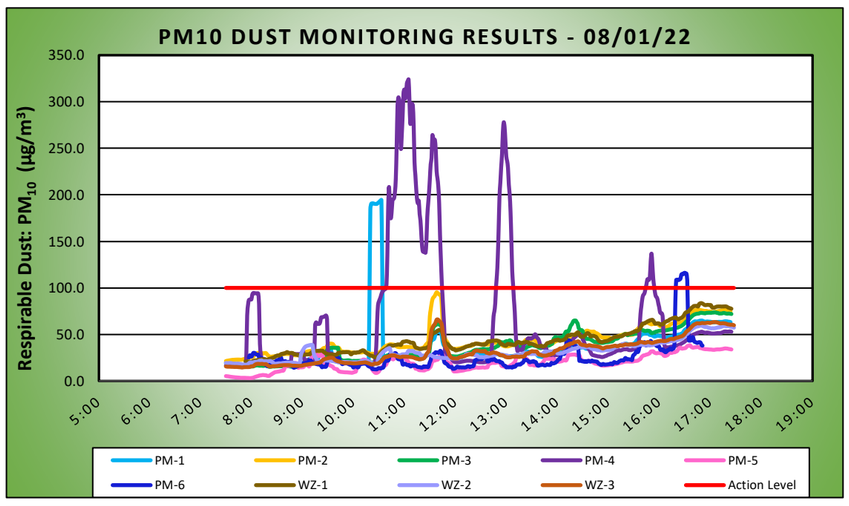
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

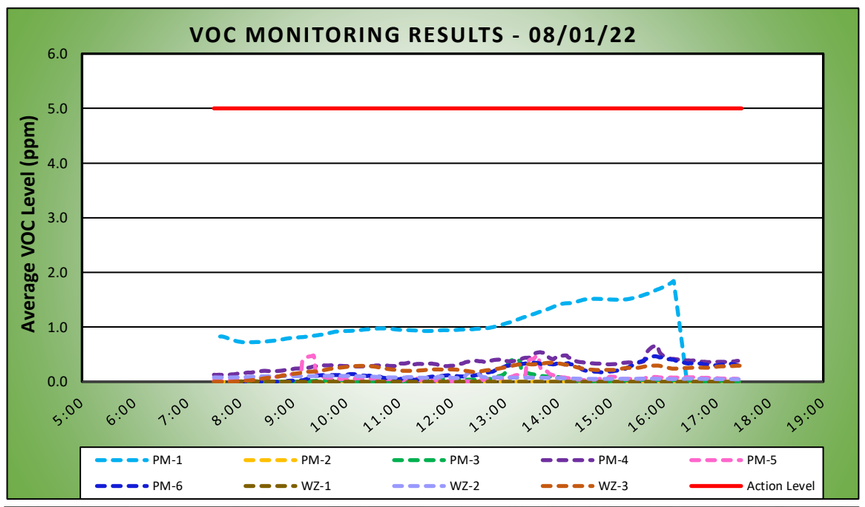
08/01/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

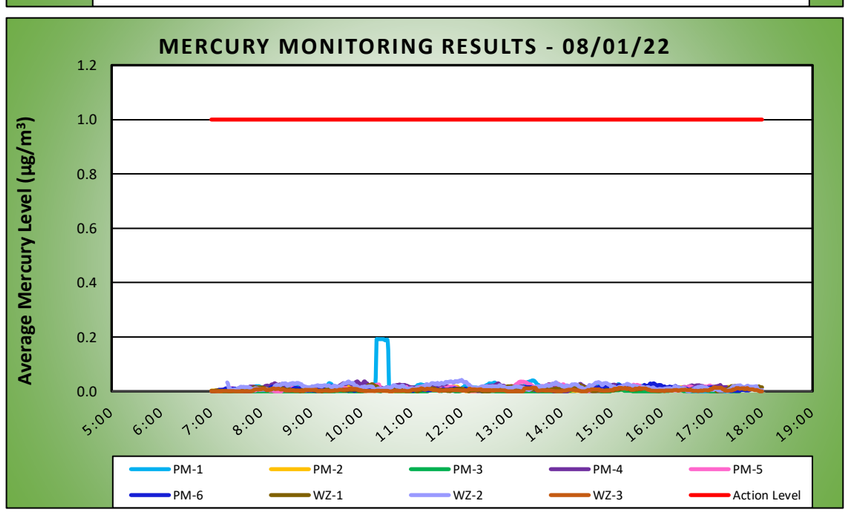
Weather Data Range for Work Day		Wind Direction	NE	Relative Humidity (%)	82.0 - 92.0	Daily Rain (in)	0.01	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	69.0 - 74.0	Wind Speed (MPH)	0.0 - 8.1	Barometer (inHg)	29.90 - 30.00			

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	37.1	194.4	10:33	1.0	1.8	16:11
PM-2	44.2	95.3	11:38	0.0	0.0	7:32
PM-3	38.5	73.7	17:05	0.0	0.4	13:12
PM-4	64.2	323.9	11:05	0.3	0.7	15:52
PM-5	19.6	38.4	16:36	0.1	0.5	9:23
PM-6	25.4	116.2	16:30	0.2	0.5	15:50
WZ-1	44.1	83.7	16:49	0.0	0.0	8:11
WZ-2	31.4	59.6	16:49	0.1	0.2	12:26
WZ-3	32.2	66.2	11:39	0.2	0.4	13:52

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	0.02	0.19	10:18
PM-2	0.01	0.02	9:49
PM-3	0.00	0.01	17:10
PM-4	0.02	0.04	9:55
PM-5	0.01	0.04	13:11
PM-6	0.01	0.03	15:50
WZ-1	0.01	0.03	10:12
WZ-2	0.02	0.04	12:00
WZ-3	0.00	0.01	17:03







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

- Background concentrations of mercury vapor at each CAMP station ranged from 0.00 to 0.02 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-1 exceeded the action level established in the CAMP (0.100 mg/m³) from 10:20am to 10:34am (15 minutes). The exceedance was caused by exhaust from a truck exiting the site following delivery of timber planks for the SOE system. Fugitive dust was not observed migrating from the site during this time.
- ** PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP from 10:39am to 11:44am (66 minutes), 12:48pm to 1:08pm (21 minutes), and 3:44pm to 3:54pm (11 minutes). The exceedances were caused by welding activities adjacent to perimeter CAMP station PM-4 along the eastern boundary of the site and were not the result of ground-intrusive activities at the site. The CAMP station was not able to be moved due to limited space along the eastern site boundary. Fugitive dust was not observed migrating from the site during each of these times.
- *** PM10 concentrations at perimeter CAMP station PM-6 exceeded the action level established in the CAMP from 4:20pm to 4:33pm (14 minutes). The exceedance was caused by welding activities adjacent to perimeter CAMP station PM-6 and was not the result of ground-intrusive activities at the site. 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 µg/m³ to 0.09 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 7:38am to 5:25pm during excavation activities in the north-central and northeastern parts of the site.
- CAMP station WZ-2 was relocated to the southern sidewalk of Water Street from 7:15am to 5:28pm due to exposed soil/fill within 20 feet of the southern fence line.
- CAMP station WZ-3 was relocated to the eastern sidewalk of Peck Slip from 7:15am to 5:28pm during excavation activities in the northeastern part 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 4:51pm and 5:28pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.02 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

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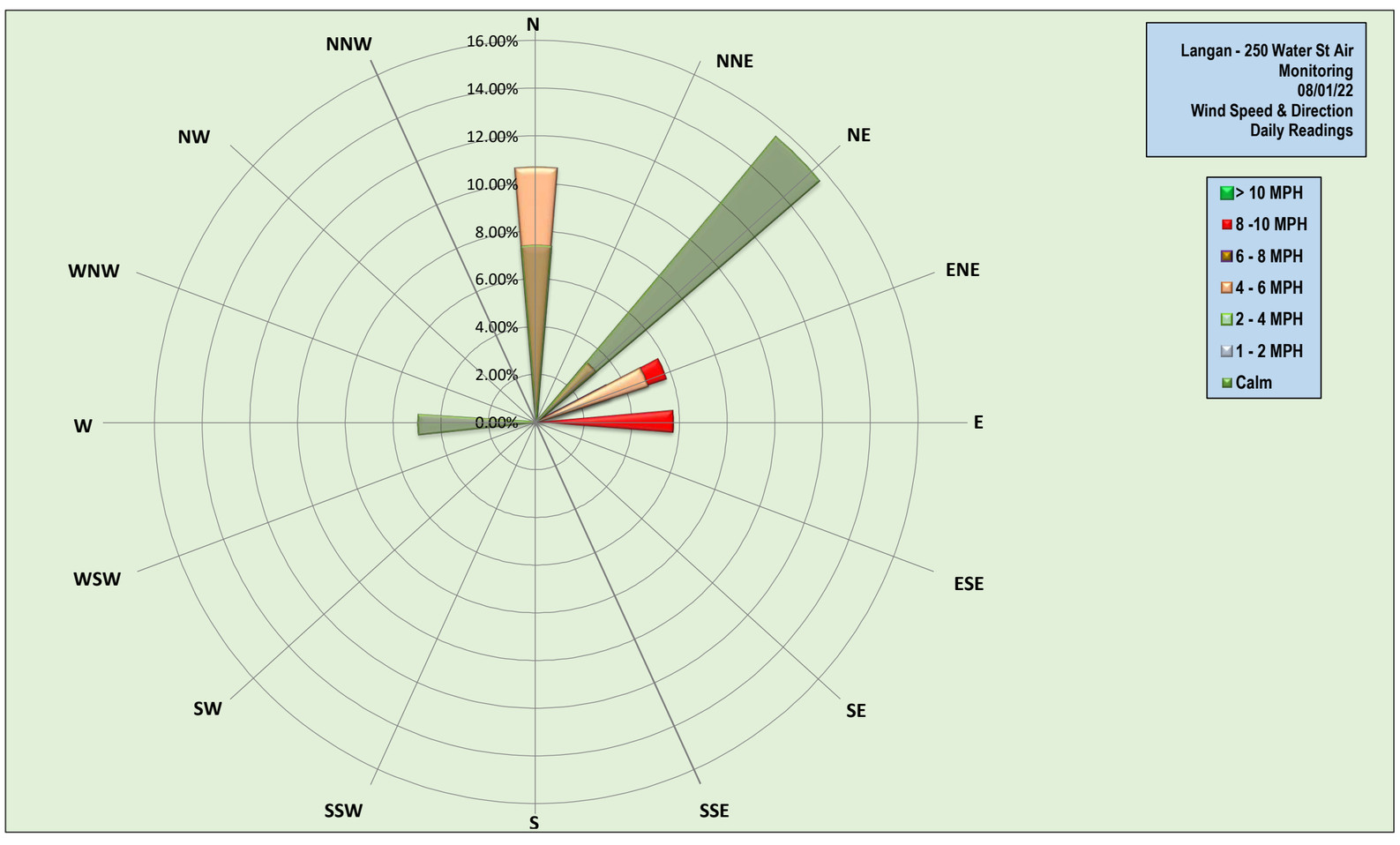
Langan - 250 Water St Air Monitoring
08/01/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
N
NNE
NE
ENE
E
ESE
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SSE
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SSW
SW
WSW
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WNW
NW
NNW
16.00%
14.00%
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%

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250 Water Street Remediation Site
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08/02/22	
Project number: 170381202	
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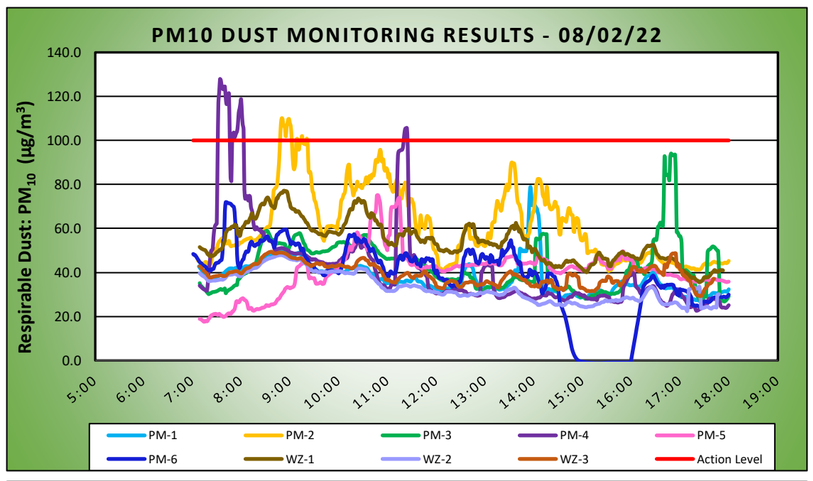
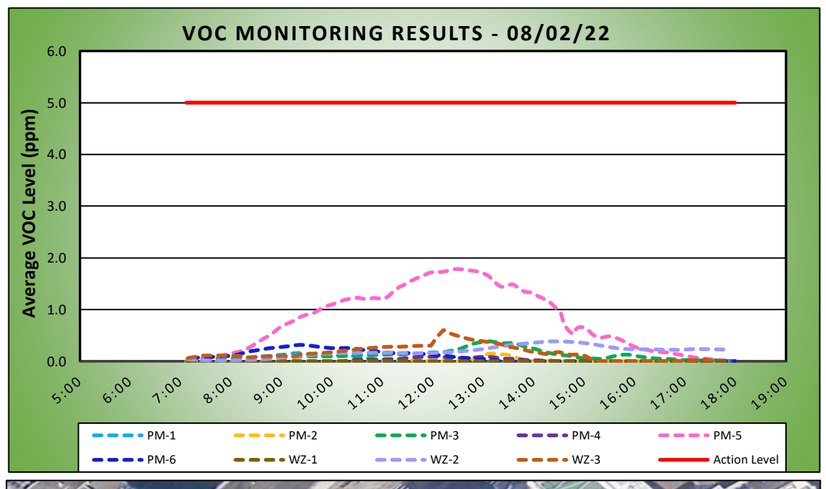
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

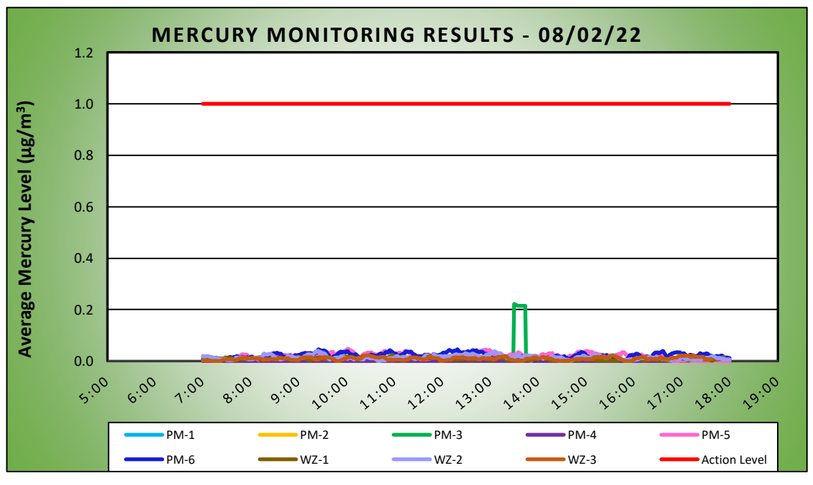
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	38.0 - 86.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	72.0 - 90.0	Wind Speed (MPH)	0.0 - 10.4	Barometer (inHg)	29.80 - 29.80			

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	37.7	78.9	13:56	0.0	0.2	9:21
PM-2	60.8	** 110.1	8:50	0.0	0.2	13:10
PM-3	42.6	94.0	16:49	0.1	0.4	13:08
PM-4	41.4	* 127.9	7:34	0.0	0.1	12:01
PM-5	40.2	75.2	10:48	0.8	1.8	12:28
PM-6	37.3	71.9	7:42	0.1	0.3	9:23
WZ-1	53.7	77.2	8:53	0.0	0.0	7:08
WZ-2	33.2	47.9	8:49	0.2	0.4	14:25
WZ-3	39.1	49.4	8:37	0.2	0.6	12:13

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	0.00	0.01	14:28
PM-2	0.01	0.02	11:39
PM-3	0.01	0.22	13:30
PM-4	0.00	0.00	7:00
PM-5	0.02	0.05	10:02
PM-6	0.02	0.05	12:19
WZ-1	0.01	0.02	10:57
WZ-2	0.01	0.04	9:24
WZ-3	0.01	0.02	17:14







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 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 station ranged from 0.00 to 0.01 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-4 exceeded the action level established in the CAMP (0.100 mg/m³) from 7:32am to 8:03am (32 minutes) and from 11:21am to 11:24am (4 minutes). The exceedances were caused by welding activities along the eastern boundary of the site (Peck Slip) adjacent to perimeter CAMP station PM-4 and were not the result of ground-intrusive activities associated with soil/fill at the site. The CAMP station was not able to be moved due to limited space along the eastern site boundary. Fugitive dust was not observed migrating from the site during these times.

** PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m³) intermittently from 8:49am to 9:21am (18 minutes in total). The exceedances were caused by fence construction activities in the southwestern part of the site in proximity to perimeter CAMP station PM-2 and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during 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 0.13 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:54am to 5:53pm due to exposed soil/fill within 20 feet of the northern fence line.
- CAMP station WZ-2 was relocated to the southern sidewalk of Water Street from 6:54am to 5:47pm during excavation of test pits along the southern boundary of the site.
- CAMP station WZ-3 was relocated to the eastern sidewalk of Peck Slip from 6:54am to 5:37pm during excavation activities in the eastern part 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:

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.05 µg/m³.
- VOC concentrations at each CAMP station were recorded at 0.0 ppm.

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 5:37pm and 6:23pm at the conclusion of ground-intrusive activities.

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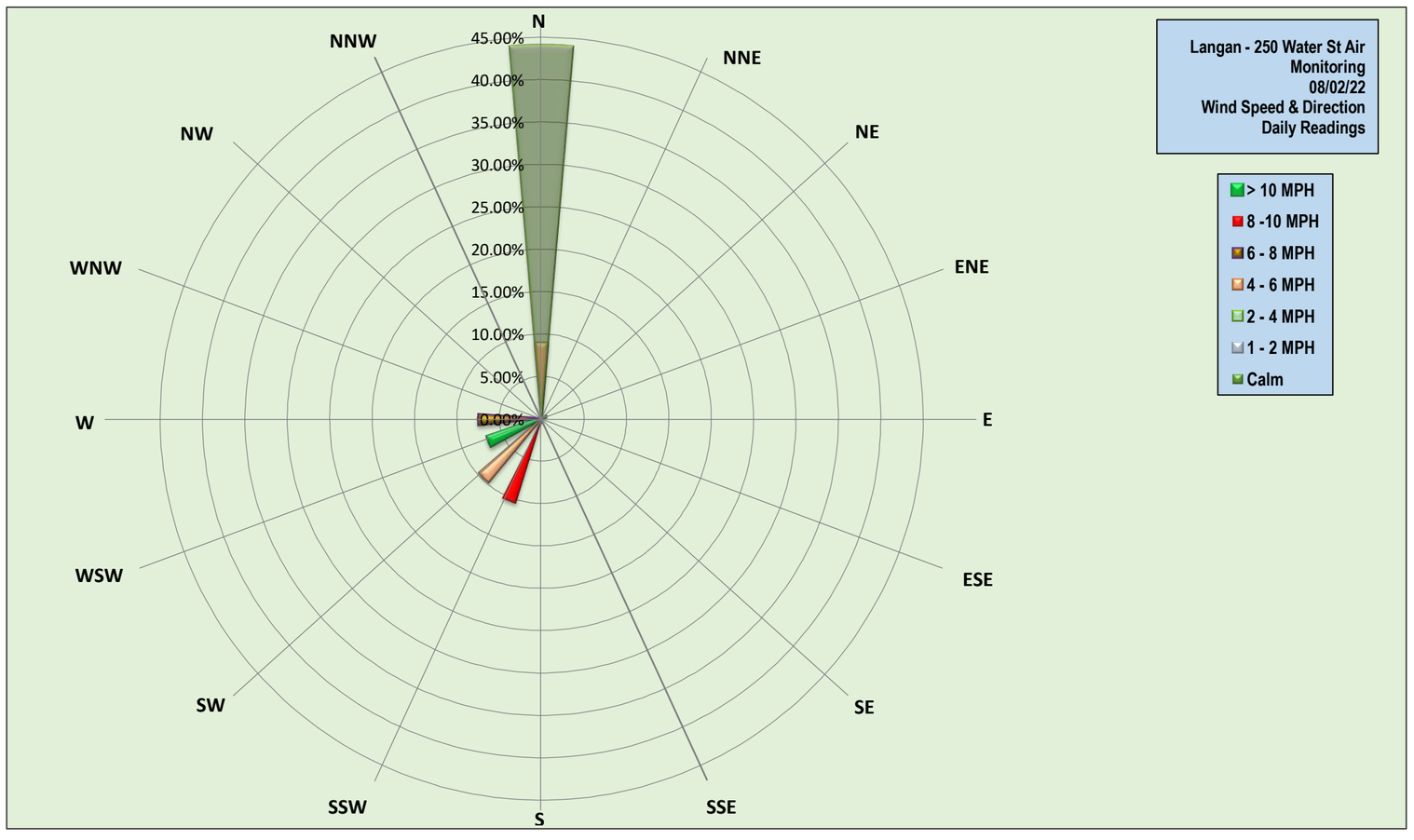
Langan - 250 Water St Air Monitoring
08/02/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
N
NNE
NE
ENE
E
ESE
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45.00%
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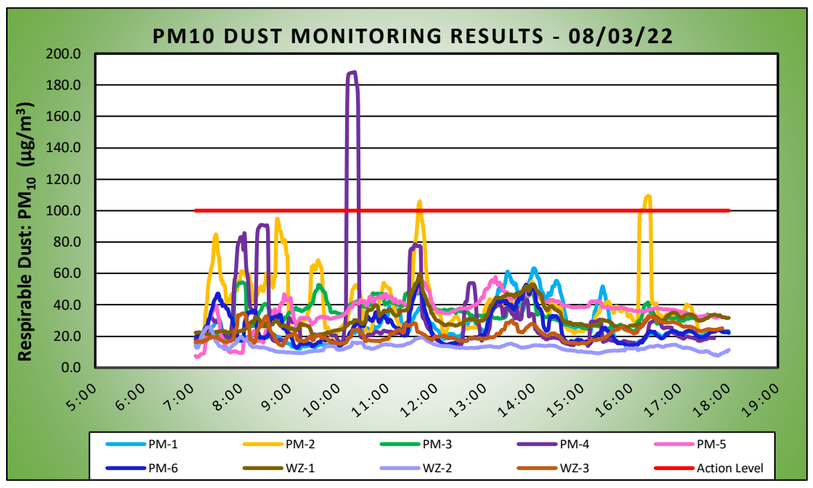
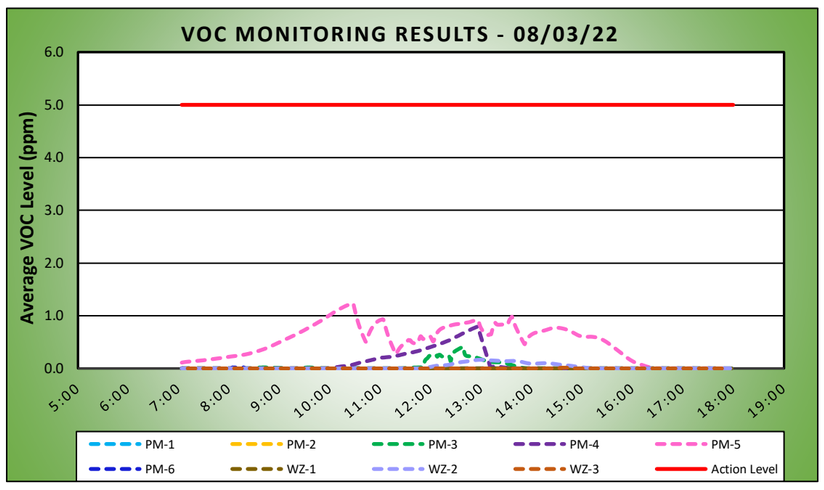
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

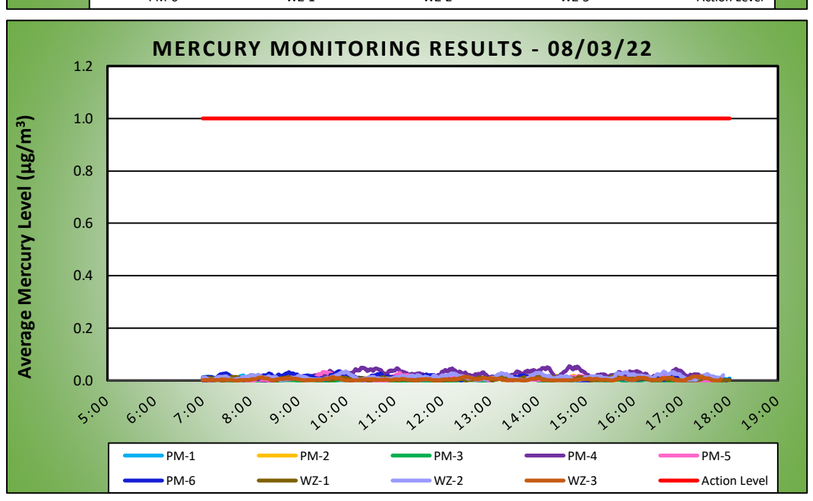
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	38.0 - 72.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	74.0 - 90.0	Wind Speed (MPH)	0.0 - 8.5	Barometer (inHg)	30.00 - 30.00			

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	26.4	63.3	14:00	0.0	0.0	7:04
PM-2	41.4	** 109.5	16:21	0.0	0.0	8:43
PM-3	34.0	54.3	8:02	0.0	0.4	12:39
PM-4	31.0	* 188.1	10:20	0.1	0.8	12:56
PM-5	36.2	57.9	13:13	0.5	1.2	10:28
PM-6	25.1	57.9	11:39	0.0	0.0	8:04
WZ-1	31.5	59.6	11:39	0.0	0.0	7:04
WZ-2	13.3	25.9	7:20	0.0	0.2	12:59
WZ-3	21.6	34.6	8:02	0.0	0.0	14:36

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	0.02	9:11
PM-2	0.01	0.02	14:23
PM-3	0.00	0.01	7:03
PM-4	0.02	0.05	14:39
PM-5	0.01	0.03	9:31
PM-6	0.01	0.04	9:50
WZ-1	0.01	0.02	8:00
WZ-2	0.01	0.03	9:59
WZ-3	0.00	0.02	17:15







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 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 station ranged from 0.00 to 0.03 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-4 exceeded the action level established in the CAMP (0.100 mg/m³) from 10:10am to 10:24am (15 minutes). The exceedance was caused by welding activities adjacent to perimeter CAMP station PM-4 along the eastern boundary of the site (Peck Slip) and were not the result of ground-intrusive activities associated with soil/fill at the site. The CAMP station was not able to be moved due to limited space along the eastern site boundary. Fugitive dust was not observed migrating from the site during this time.

** PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m³) from 11:38am to 11:41am (4 minutes) and from 4:12pm to 4:23pm (12 minutes). The exceedances were caused by pinched tubing connected to the inlet of the DustTrak unit at perimeter CAMP station PM-2, which was located along the southern boundary of the site (Water Street). The exceedances were not the result of ground-intrusive activities associated with soil/fill at the site. Following adjustment of the tubing and recalibration of the DustTrak unit, PM10 concentrations returned to background conditions in both instances. Fugitive dust was not observed migrating from the site during 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 0.13 µg/m³.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:49am to 6:05pm due to exposed soil/fill within 20 feet of the northern fence line.
- CAMP station WZ-2 was relocated to the southern sidewalk of Water Street from 6:49am to 5:52pm during excavation of test pits along the southern boundary of the site.
- CAMP station WZ-3 was relocated to the eastern sidewalk of Peck Slip from 6:56am to 5:49pm during excavation activities in the eastern part 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:

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m³ to 0.04 µg/m³.
- VOC concentrations at each CAMP station ranged from 0.0 ppm to 0.1 ppm.

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

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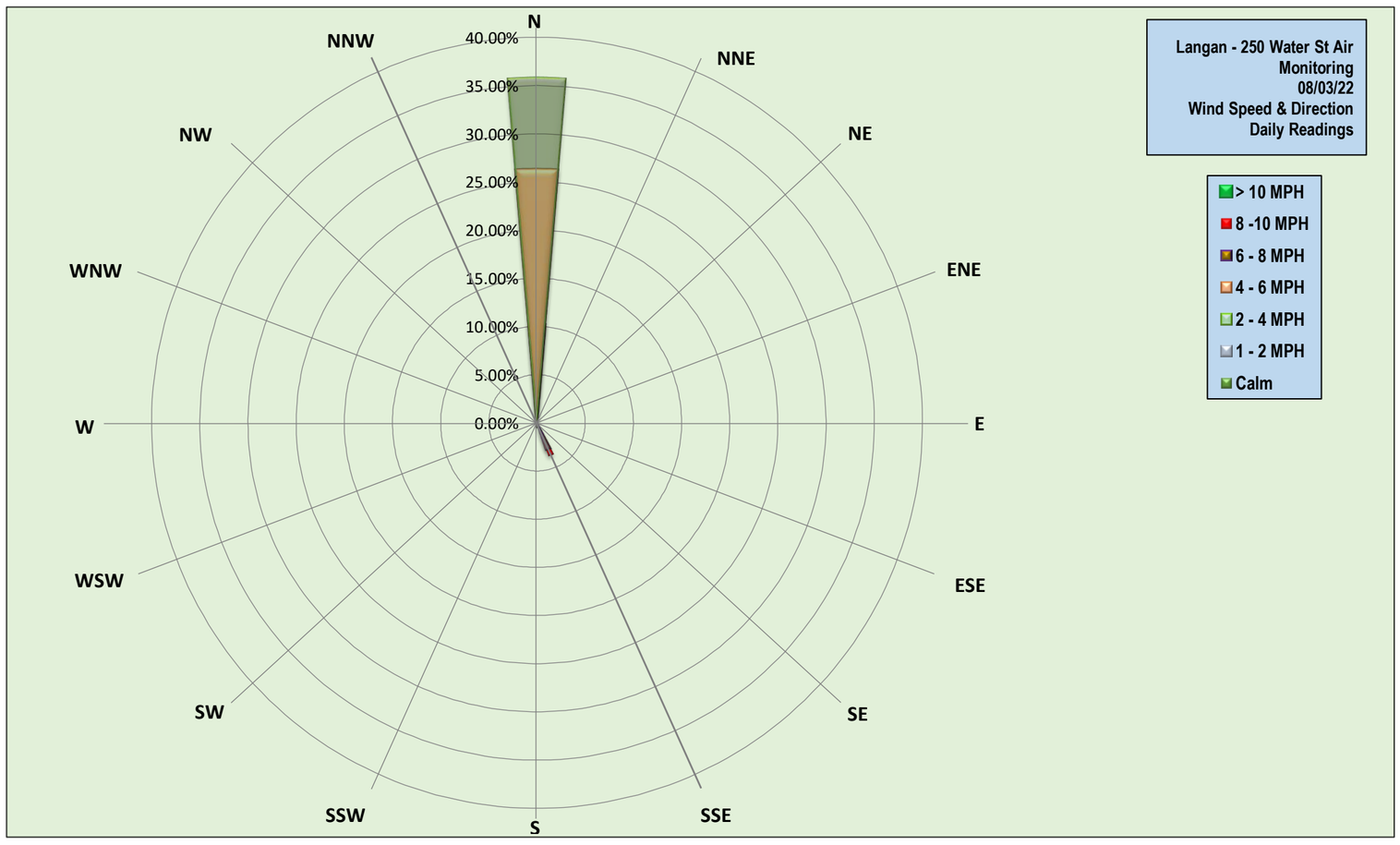
Langan - 250 Water St Air Monitoring
08/03/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
N
NNE
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30.00%
25.00%
20.00%
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08/04/22	
Project number: 170381202	
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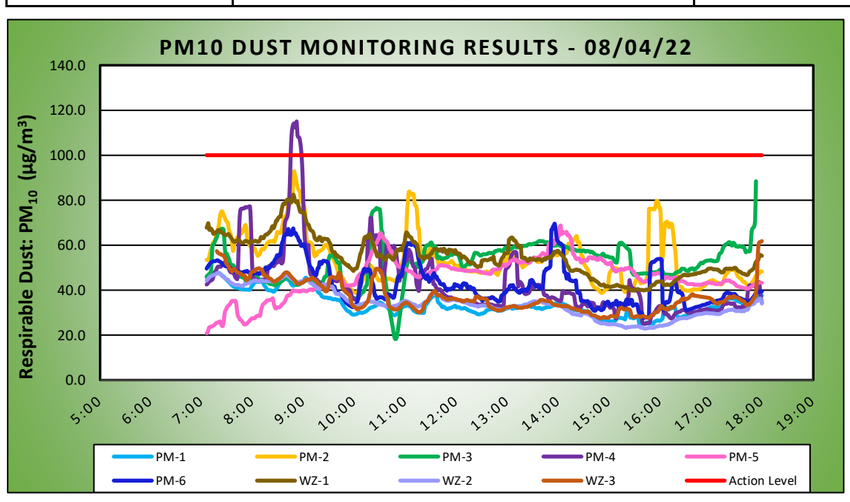
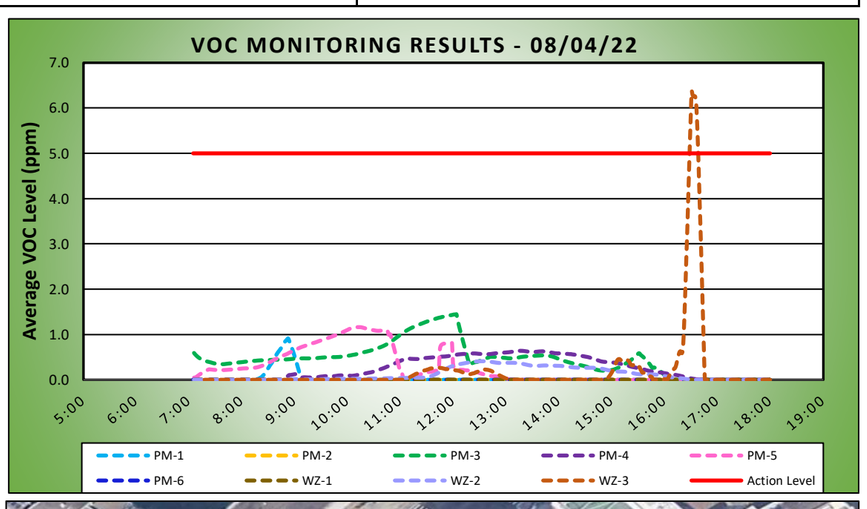
Dust Action Level (µg/m^3)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m^3)	1.0

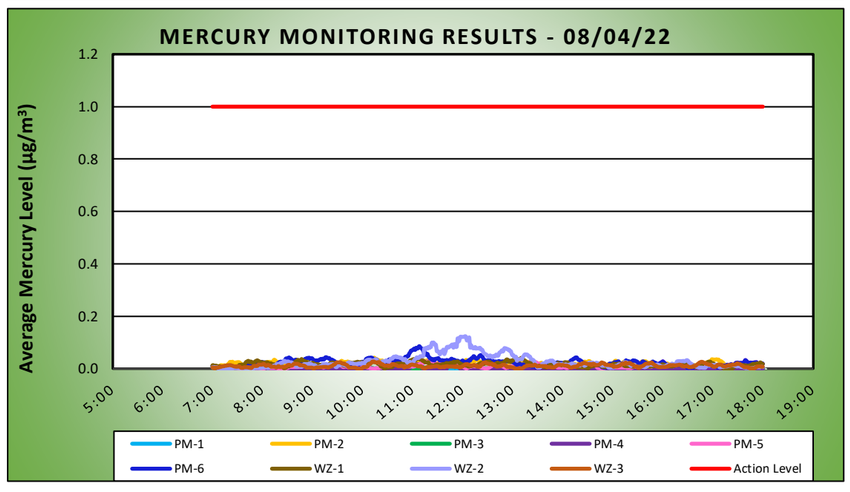
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	44.0 - 69.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	78.0 - 94.0	Wind Speed (MPH)	0.0 - 8.1	Barometer (inHg)	30.00 - 30.10			

Station Location Work Area	Daily Avg. Dust Concentration (µg/m^3)	Max 15 Minute Dust Concentration (µg/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	34.1	47.8	7:17	0.0	0.9	8:53
PM-2	53.6	92.9	8:49	0.0	0.0	10:55
PM-3	52.7	88.4	17:53	0.4	1.4	12:04
PM-4	42.5	114.9	8:52	0.2	0.6	13:16
PM-5	45.1	68.6	14:03	0.2	1.2	10:12
PM-6	43.0	69.5	13:56	0.0	0.0	7:05
WZ-1	54.9	82.4	8:48	0.0	0.0	7:06
WZ-2	34.4	47.5	7:19	0.1	0.4	12:35
WZ-3	37.7	64.0	18:04	0.2	6.4	16:31

Station Location Work Area	Daily Avg. Mercury Concentration (µg/m^3)	Max 15 Minute Mercury Concentration (µg/m^3)	Time of Max 15 Minute Avg Mercury Reading
PM-1	0.00	0.00	10:33
PM-2	0.02	0.04	10:14
PM-3	0.00	0.01	12:02
PM-4	0.00	0.02	10:57
PM-5	0.01	0.03	11:47
PM-6	0.02	0.09	11:08
WZ-1	0.02	0.04	13:03
WZ-2	0.03	0.12	12:03
WZ-3	0.01	0.03	10:12







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 that approached or exceeded the action level established by the CAMP (1.00 µg/m3).

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 station ranged from 0.00 to 0.01 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-4 exceeded the action level established in the CAMP (0.100 mg/m3) from 8:45am to 8:57am (12 minutes). The exceedance was caused by welding activities adjacent to perimeter CAMP station PM-4 along the eastern boundary of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. The CAMP station was not able to be moved due to limited space along the eastern site boundary. Fugitive dust was not observed migrating from the site during this time.
** VOC concentrations at off-site CAMP station WZ-3 exceeded the action level established in the CAMP (5.0 ppm) from 4:28pm to 4:38pm (10 minutes). The exceedance was caused by an idling motorcycle adjacent to work zone CAMP station WZ-3 along the southern boundary of the site and was not the result of ground-intrusive activities associated with soil/fill at the site. Work was temporarily paused while readings were collected with a hand-held PID unit. All perimeter CAMP stations remained at background concentrations, including PM-3, and the reading was determined to be not a cause of intrusive work. VOC readings fell below action levels and work resumed.

Equipment Troubleshooting

• PM10 concentrations at off-site CAMP station WZ-3 was not recorded during recalibration following a VOC exceedance due to an idling motorcycle from 4:41pm to 4:42pm (2 minutes).
• Work was halted while the DustTrak unit was recalibrated. Fugitive dust was not observed migrating from the site during this time. Additionally, corresponding perimeter CAMP station PM-3 (located along the southern border of the site) did not record concentrations of VOC above background conditions.

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 0.15 µg/m3.
• The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:51am to 6:04pm due to exposed soil/fill within 20 feet of the northern fence line.
• CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:51am to 5:12pm during excavation activities in the eastern part of the site.
• CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 7:03am to 6:04pm during excavation of test pits 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 between 6:01pm and 6:50pm at the conclusion of ground-intrusive activities.

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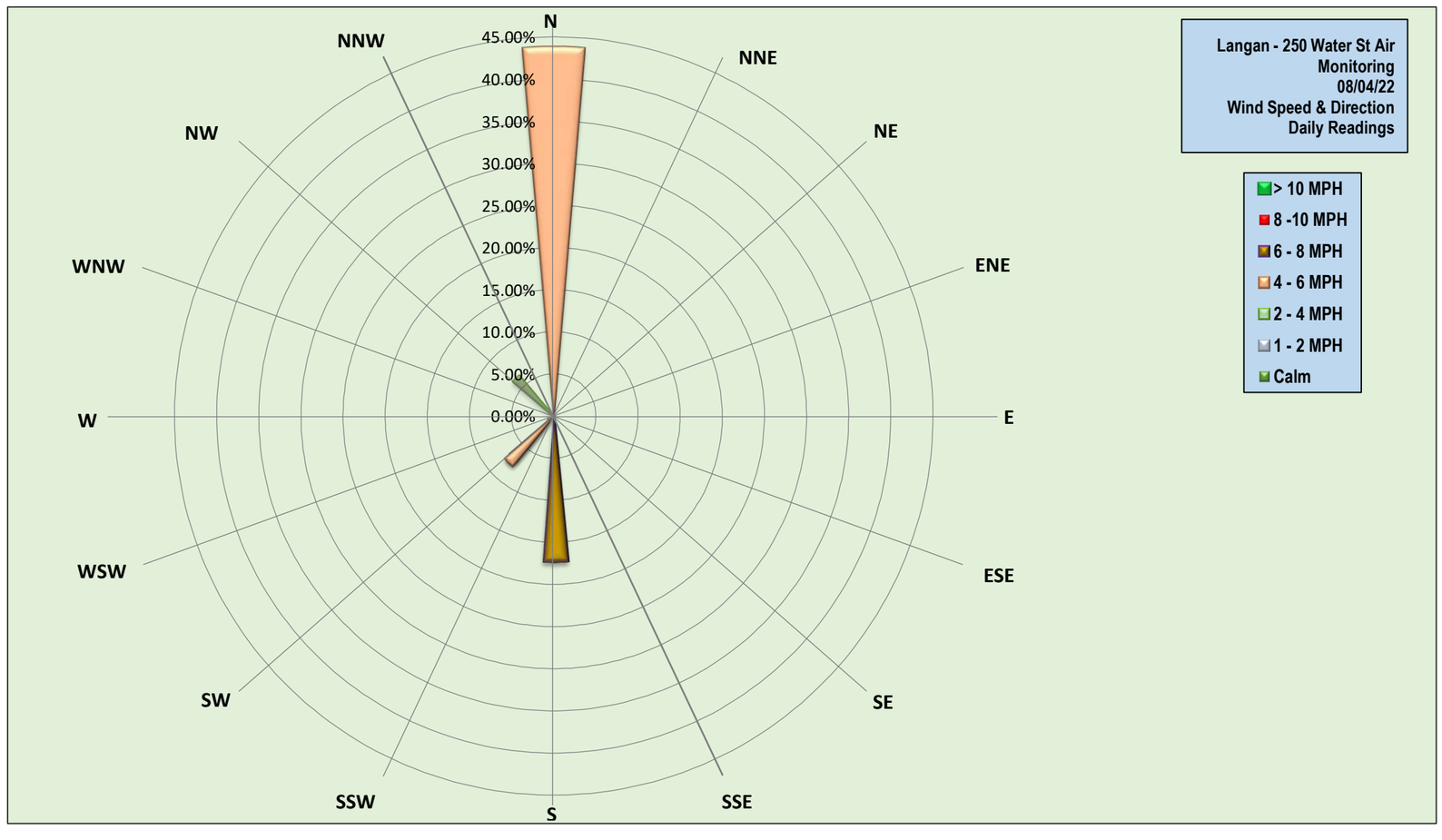
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Langan - 250 Water St Air Monitoring
08/04/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm

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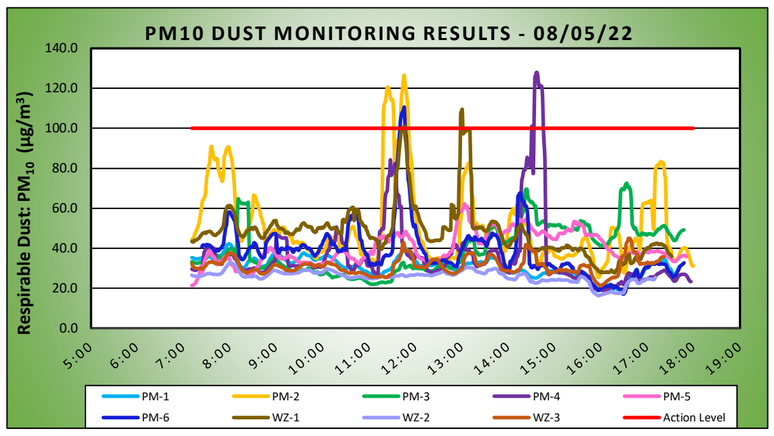
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

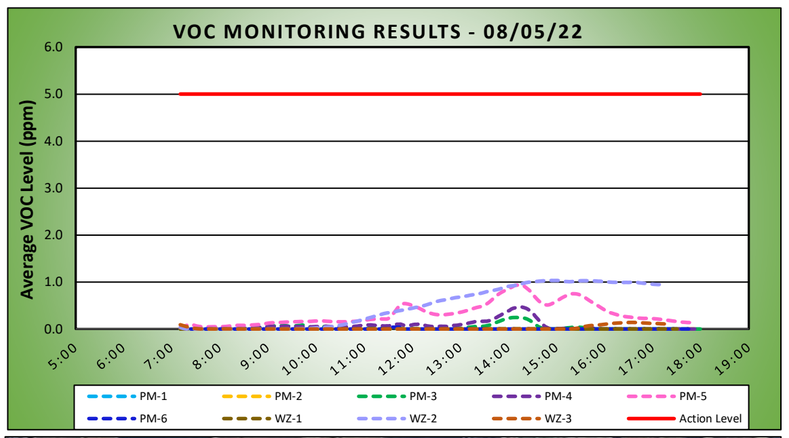
08/05/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m^3)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m^3)	1.0

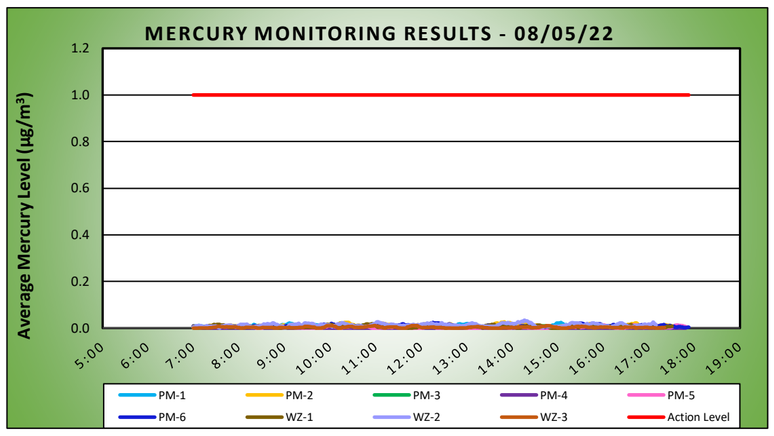
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	49.0 - 76.0	Daily Rain (in)	0.01	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	79.0 - 89.0	Wind Speed (MPH)	0.0 - 6.9	Barometer (inHg)	30.10 - 30.20			

Station Location Work Area	Daily Avg. Dust Concentration (µg/m^3)	Max 15 Minute Dust Concentration (µg/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	31.0	42.2	7:59	0.0	0.0	7:11
PM-2	50.5	126.4	11:46	0.0	0.0	7:11
PM-3	39.4	72.5	16:34	0.0	0.2	14:10
PM-4	36.0	128.0	14:37	0.1	0.5	14:17
PM-5	39.8	62.2	13:04	0.3	0.9	14:16
PM-6	38.4	110.5	11:46	0.0	0.0	11:36
WZ-1	48.0	109.4	13:01	0.0	0.0	7:11
WZ-2	25.8	32.7		0.5	1.0	15:01
WZ-3	31.1	45.0	16:37	0.0	0.1	16:35

Station Location Work Area	Daily Avg. Mercury Concentration (µg/m^3)	Max 15 Minute Mercury Concentration (µg/m^3)	Time of Max 15 Minute Avg Mercury Reading
PM-1	0.01	0.02	15:04
PM-2	0.01	0.03	13:50
PM-3	0.00	0.01	14:40
PM-4	0.00	0.00	7:12
PM-5	0.00	0.01	15:58
PM-6	0.01	0.02	12:16
WZ-1	0.01	0.02	10:57
WZ-2	0.01	0.03	14:16
WZ-3	0.00	0.01	10:58







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m3, 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 station ranged from 0.00 to 0.01 µg/m3.
• Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

Perimeter and Work Zone Concentrations

• 1* PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m3) intermittently from 11:19am to 11:51am (25 minutes in total). The exceedances were caused by wood saw-cutting associated with fence construction activities in the southwestern part of the site in proximity to perimeter CAMP station PM-2 and were not result of ground-intrusive activities associated with soil/fill at the site. Perimeter CAMP station PM-2 was relocated about 10 feet to the east, and PM10 concentrations returned to background levels. Fugitive dust was not observed migrating from the site during these times.
• 2* PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m3) intermittently from 2:31pm to 2:45pm (13 minutes in total). The exceedances were caused by welding activities adjacent to perimeter CAMP station PM-4 along the eastern boundary of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. The CAMP station was not able to be moved due to limited space along the eastern site boundary. Fugitive dust was not observed migrating from the site during these times.
• 3* PM10 concentrations at perimeter CAMP station PM-6 exceeded the action level established in the CAMP (0.100 mg/m3) from 11:41am to 11:47am (7 minutes). The exceedance was caused by grout-mixing activities for tieback installation, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-1) did not approach or exceed the action level established by the CAMP (0.100 mg/m3) during this time.
• 4* PM10 concentrations at off-site CAMP station WZ-1 exceeded the action level established in the CAMP (0.100 mg/m3) from 12:59pm to 1:01pm (3 minutes). The exceedance was a result of off-site activities, and was not the result of ground-intrusive activities associated with soil/fill at the site. PM10 concentrations at the closest perimeter CAMP stations (PM-5 and PM-6) did not approach or exceed the action level established by the CAMP (0.100 mg/m3) 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 µg/m3 to 0.36 µg/m3.
• The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:56am to 5:31pm due to exposed soil/fill within 20 feet of the northern fence line.
• CAMP station WZ-2 was relocated to the southern sidewalk of Water Street from 6:56am to 5:10pm during excavation of test pits along the southern boundary of the site.
• CAMP station WZ-3 was relocated to the eastern sidewalk of Peck Slip from 6:56am to 5:21pm during excavation activities in the eastern part 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 5:10pm and 5:51pm at the conclusion of ground-intrusive activities.

• Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m3 to 0.05 µg/m3.
• VOC concentrations at each CAMP station ranged from 0.0 ppm to 0.1 ppm.

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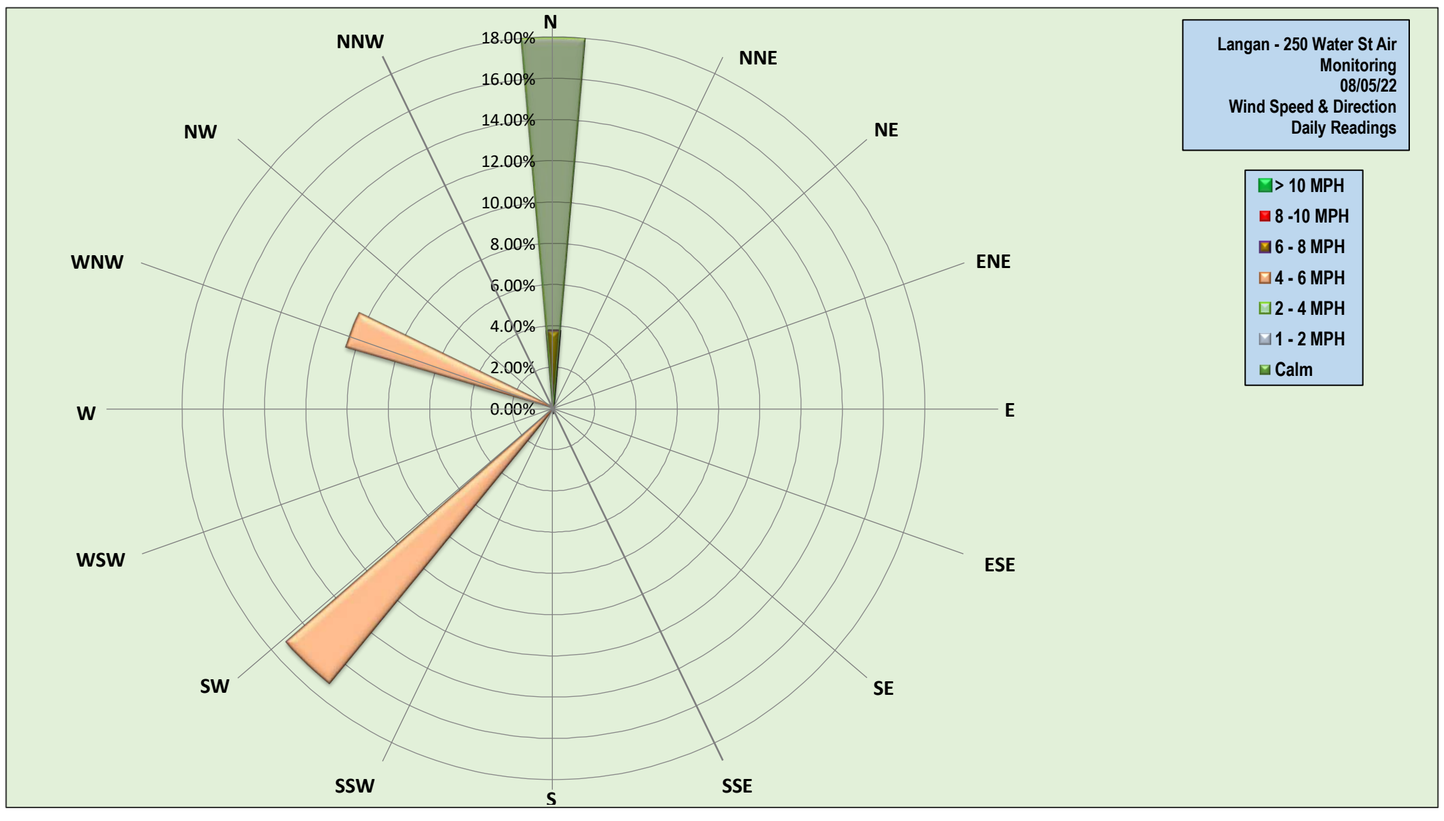
Langan - 250 Water St Air Monitoring
08/05/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
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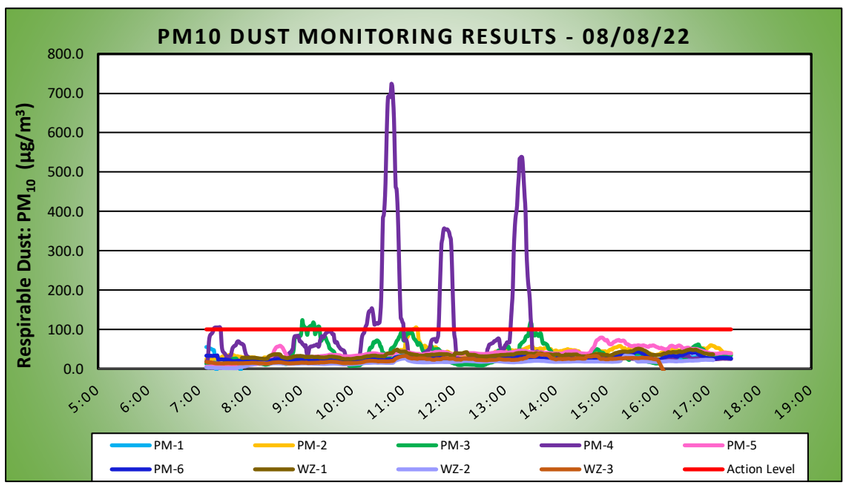
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

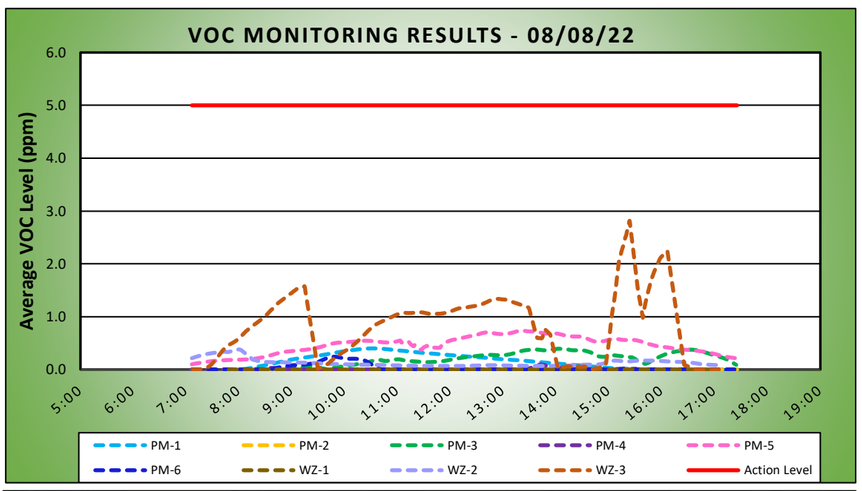
08/08/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m^3)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m^3)	1.0

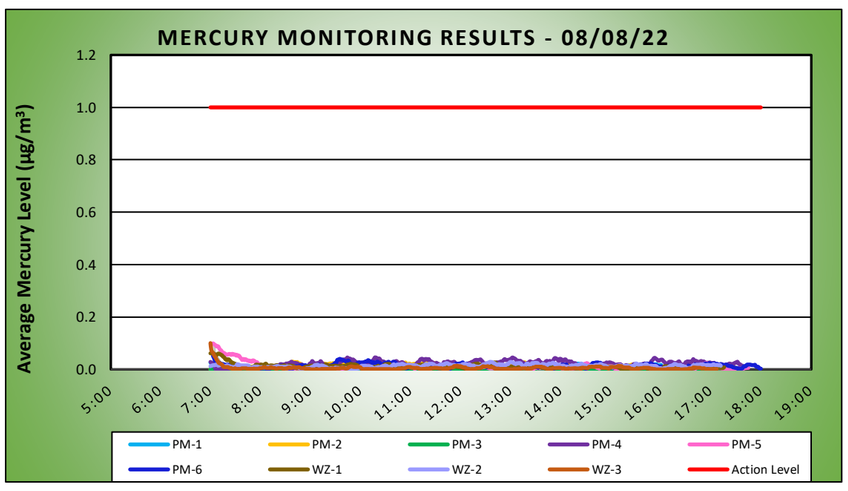
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	83.0 - 84.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	80.0 - 80.0	Wind Speed (MPH)	5.8 - 8.1	Barometer (inHg)	30.10 - 30.10			

Station Location Work Area	Daily Avg. Dust Concentration (µg/m^3)	Max 15 Minute Dust Concentration (µg/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	18.7	55.1	7:08	0.2	0.4	10:32
PM-2	40.4	105.4	11:15	0.0	0.0	7:07
PM-3	37.6	123.3	9:01	0.2	0.4	14:03
PM-4	78.1	723.9	10:46	0.0	0.1	13:43
PM-5	38.9	79.2	14:54	0.5	0.7	13:21
PM-6	25.9	43.9	15:35	0.0	0.2	9:46
WZ-1	35.5	50.9	15:37	0.0	0.0	8:24
WZ-2	16.0	33.1	15:22	0.1	0.4	8:00
WZ-3	14.9	38.2	13:39	0.8	2.8	15:24

Station Location Work Area	Daily Avg. Mercury Concentration (µg/m^3)	Max 15 Minute Mercury Concentration (µg/m^3)	Time of Max 15 Minute Avg Mercury Reading
PM-1	0.01	0.03	7:08
PM-2	0.01	0.03	9:41
PM-3	0.00	0.00	12:34
PM-4	0.02	0.05	9:44
PM-5	0.01	0.10	7:03
PM-6	0.01	0.05	7:03
WZ-1	0.01	0.06	7:02
WZ-2	0.01	0.03	12:36
WZ-3	0.01	0.10	7:00







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m3, 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 station were recorded at 0.00µg/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-3 exceeded the action level established in the CAMP (0.100 mg/m3) intermittently from 9:01am to 9:05am, 9:08am to 9:15am, and 9:18am to 9:21am (14 minutes in total). The exceedances were caused by wood saw-cutting associated with fence construction activities in the southeastern part of the site in proximity to perimeter CAMP station PM-3 and were not result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m3) during this time.
• **PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m3) intermittently from 10:15am to 11:00am, 11:42am to 11:59am, 1:07pm to 1:31pm, (86 minutes in total). The exceedances were caused by welding activities adjacent to perimeter CAMP station PM-4 along the eastern boundary of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. The CAMP station was not able to be moved due to limited space along the eastern site boundary. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-2) did not approach or exceed the action level established by the CAMP (0.100 mg/m3) during this time.
• ***PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m3) from 11:12am to 11:16am (4 minutes). The exceedance was caused by wood saw-cutting associated with fence construction activities in the southwestern part of the site in proximity to perimeter CAMP station PM-2 and were not result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m3) during this time.

Equipment Troubleshooting

• VOC concentrations at off-site CAMP station WZ-3 were not recorded during recalibration from 4:08pm to 4:10pm (2 minutes).

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 0.46 µg/m3.
• The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 7:35am to 5:05pm due to exposed soil/fill within 20 feet of the northern fence line.
• CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:53am to 5:05pm during excavation activities in the eastern part of the site.
• CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:53am to 5:05pm during soldier pile advancement 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 between 4:58pm and 5:10pm at the conclusion of ground-intrusive activities.

• Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m3 to 0.02 µg/m3.
• VOC concentrations at each CAMP station were recorded at 0.0 ppm.

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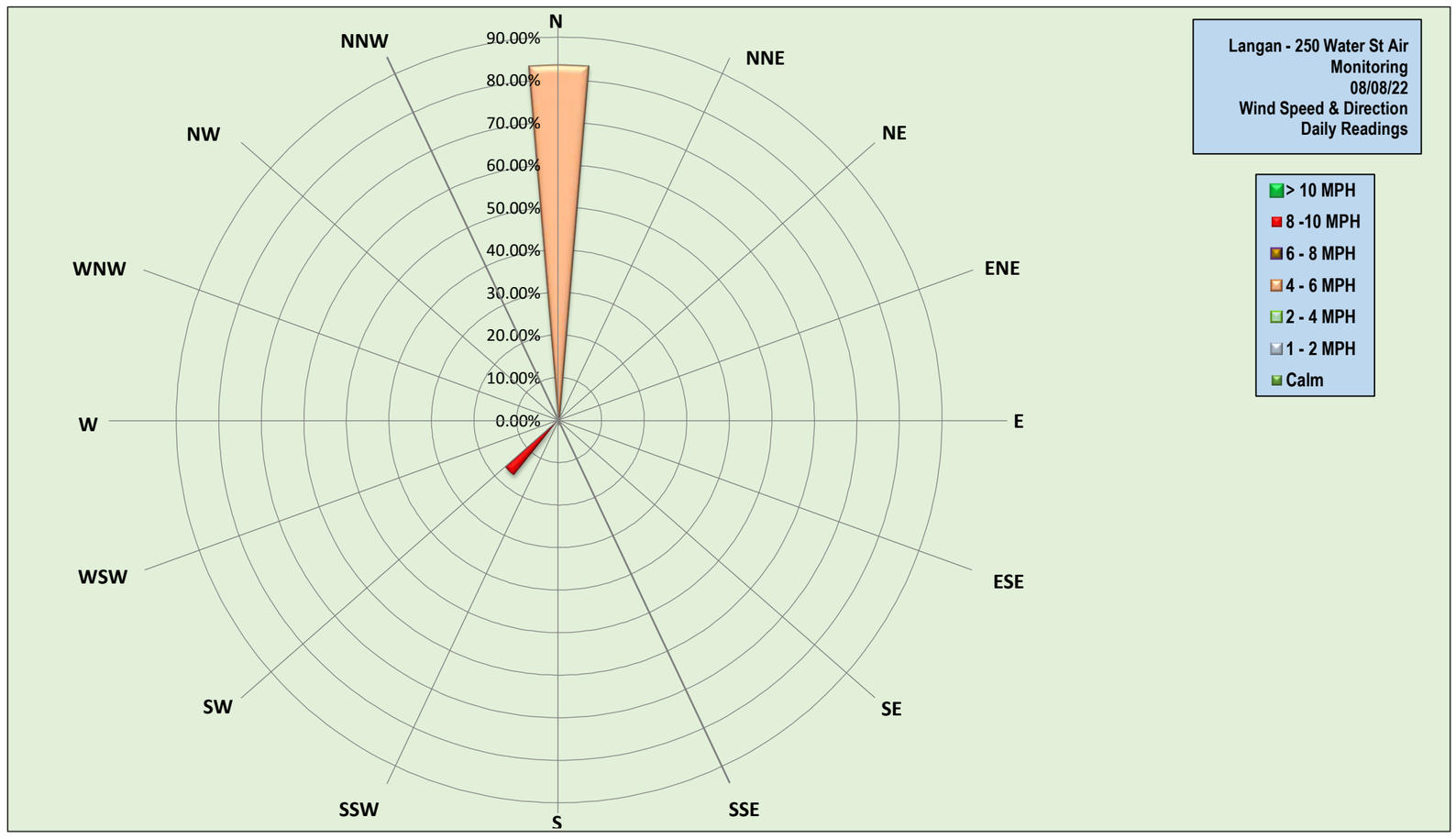
Langan - 250 Water St Air Monitoring
08/08/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
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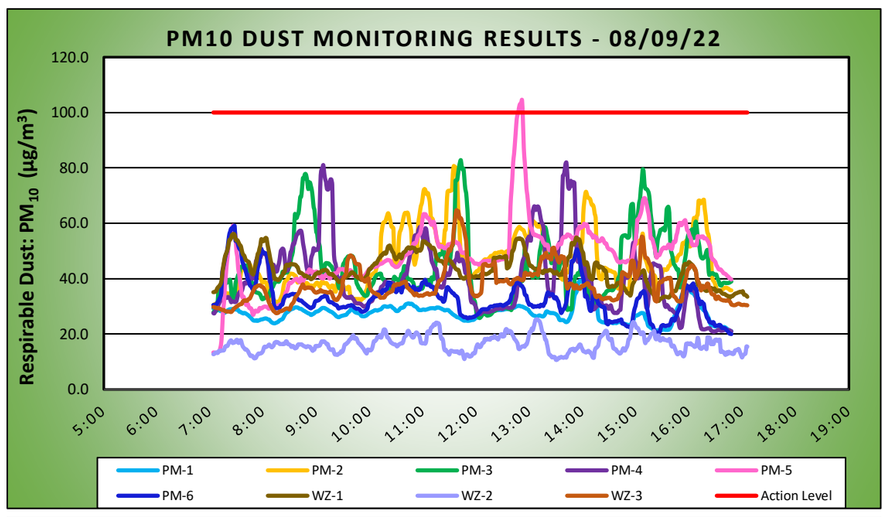
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

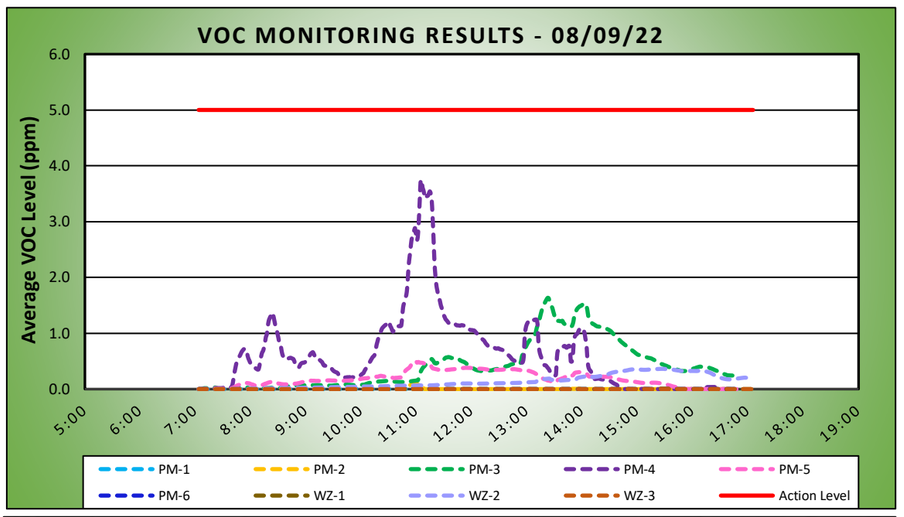
08/09/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m^3)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m^3)	1.0

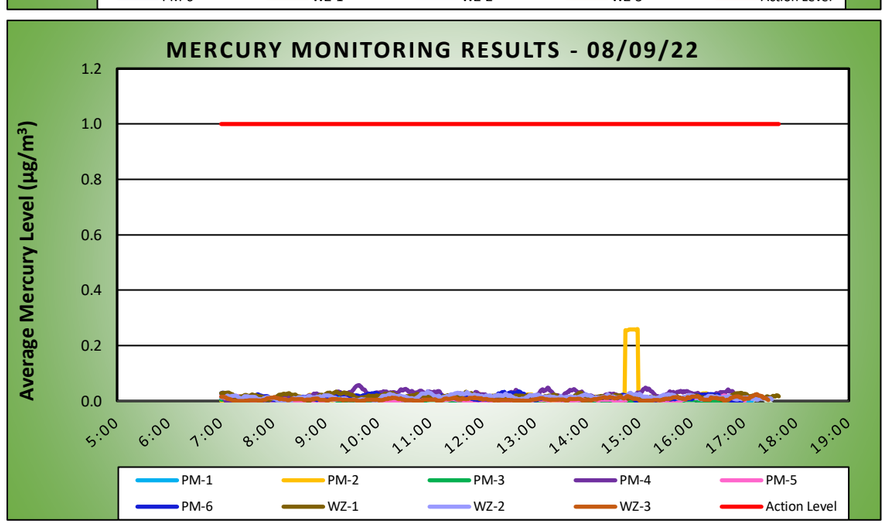
Weather Data Range for Work Day		Wind Direction	WSW	Relative Humidity (%)	42.0 - 83.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	81.0 - 97.0	Wind Speed (MPH)	3.5 - 11.9	Barometer (inHg)	29.90 - 29.90			

Station Location Work Area	Daily Avg. Dust Concentration (µg/m^3)	Max 15 Minute Dust Concentration (µg/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	27.6	43.6	14:03	0.0	0.0	9:53
PM-2	46.5	80.7	11:35	0.0	0.1	10:58
PM-3	44.1	82.8	11:43	0.4	1.6	13:23
PM-4	40.1	81.9	13:42	0.6	3.7	11:06
PM-5	47.9	104.5	12:52	0.2	0.5	11:00
PM-6	32.6	59.1	7:28	0.0	0.0	10:46
WZ-1	43.0	56.2	7:27	0.0	0.0	15:22
WZ-2	16.3	25.4	13:09	0.1	0.4	15:27
WZ-3	37.7	64.7	11:38	0.0	0.0	7:04

Station Location Work Area	Daily Avg. Mercury Concentration (µg/m^3)	Max 15 Minute Mercury Concentration (µg/m^3)	Time of Max 15 Minute Avg Mercury Reading
PM-1	0.01	0.03	7:00
PM-2	0.02	0.26	14:57
PM-3	0.00	0.01	13:18
PM-4	0.02	0.06	9:38
PM-5	0.00	0.02	16:37
PM-6	0.01	0.03	12:41
WZ-1	0.02	0.03	9:12
WZ-2	0.01	0.03	10:57
WZ-3	0.01	0.02	17:15







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m3, 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 station ranged from 0.00µg/m3 to 0.06µg/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-5 exceeded the action level established in the CAMP (0.100 mg/m3) from 12:48pm to 12:52pm (4 minutes). The exceedances were caused by welding activities adjacent to perimeter CAMP station PM-5 along the northeastern boundary of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-1) did not approach or exceed the action level established by the CAMP (0.100 mg/m3) 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 µg/m3 to 0.27 µg/m3.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:49am to 5:06pm due to exposed soil/fill within 20 feet of the northern fence line.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:49am to 5:06pm during excavation activities in the eastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:49am to 5:06pm during soldier pile advancement 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 were recorded. Additionally, areas of exposed soil/fill were covered with polyethylene sheeting and/or Atmos® AC-645 dust/vapor suppressing foam. CAMP stations wer and 4:46pm at the conclusion of ground-intrusive activities.

- Mercury vapor concentrations at each CAMP station ranged from 0.00 µg/m3 to 0.06 µg/m3.

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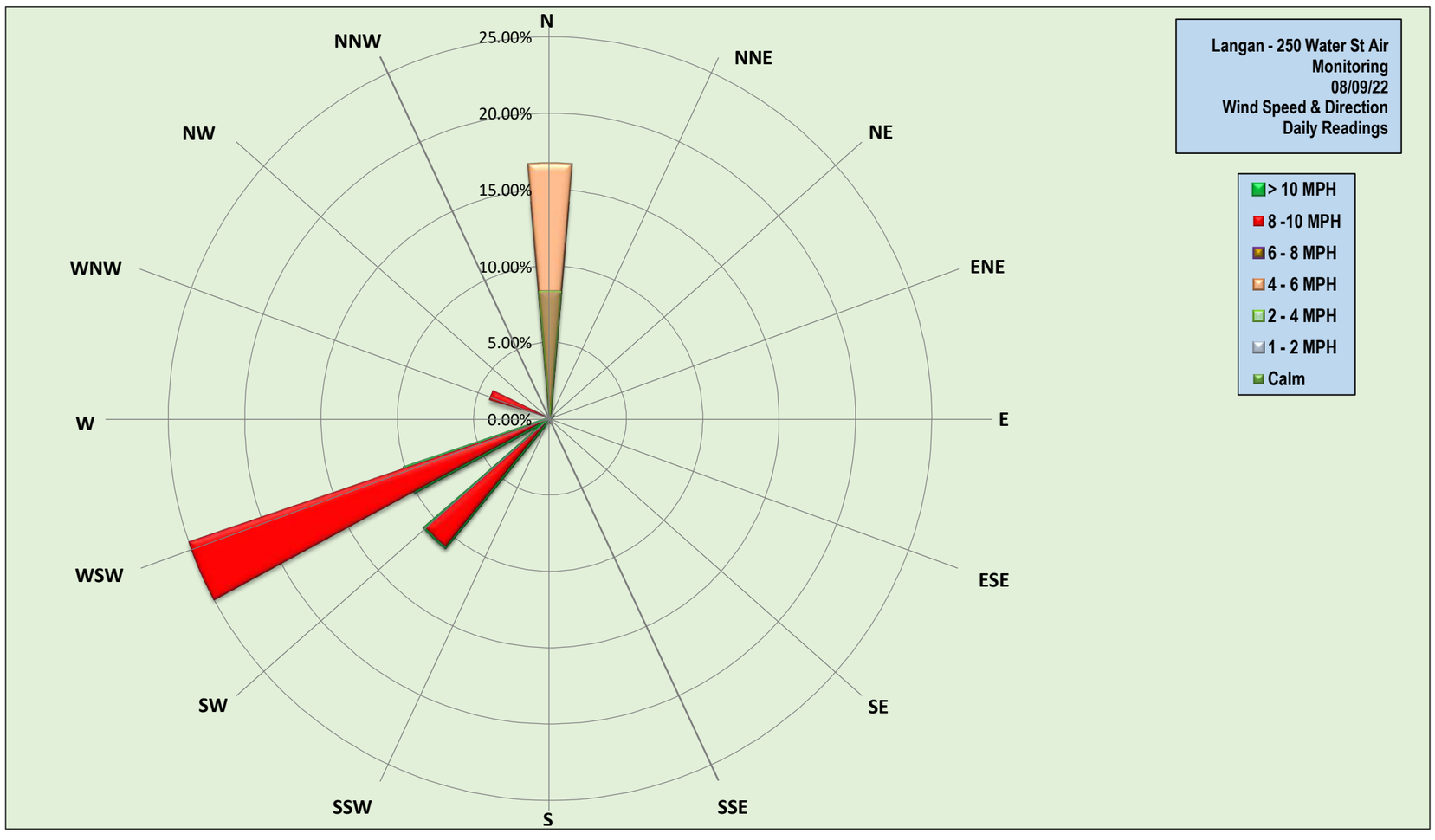
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Langan - 250 Water St Air Monitoring
08/09/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

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

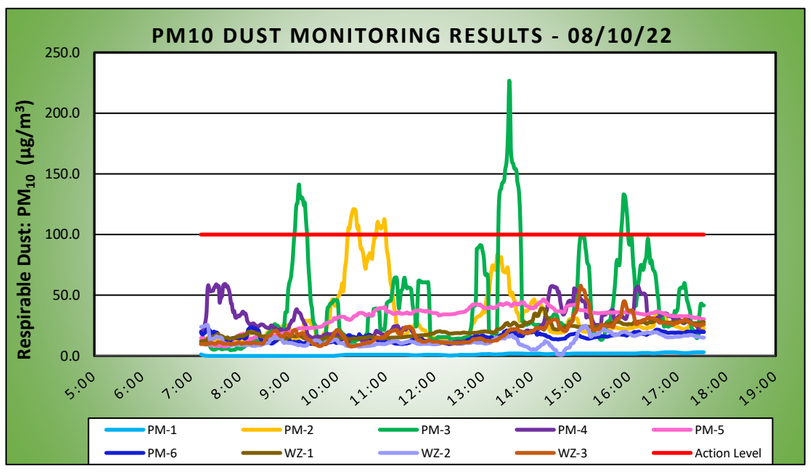
08/10/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m^3)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m^3)	1.0

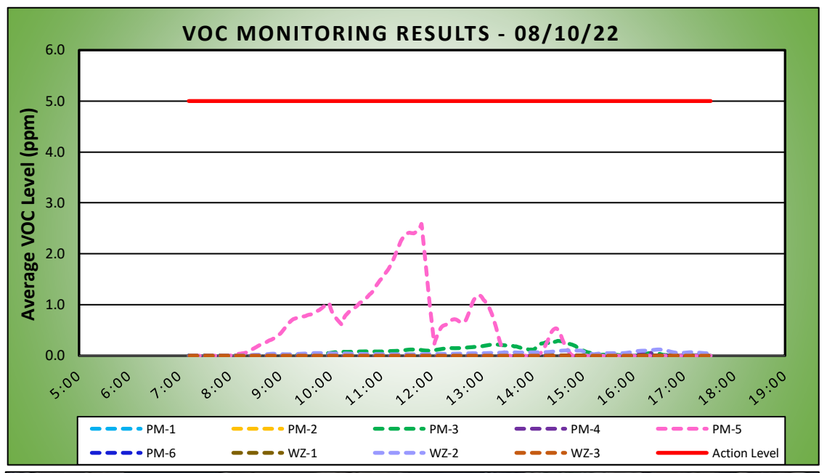
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	47.0 - 67.0	Daily Rain (in)	0.00
Temp (°F)	76.0 - 87.0	Wind Speed (MPH)	0.0 - 6.9	Barometer (inHg)	30.00 - 30.10		

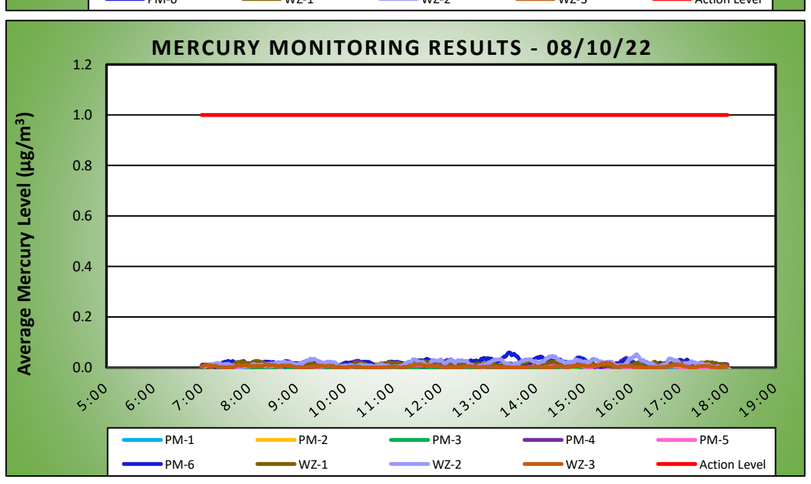
Readings in the summary table and graphs below are the reported downwind concentrations.

Station Location Work Area	Daily Avg. Dust Concentration (µg/m^3)	Max 15 Minute Dust Concentration (µg/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	1.2	3.0	16:45	0.0	0.0	7:11
PM-2	32.0	121.0	10:20	0.0	0.0	7:11
PM-3	42.4	226.5	13:32	0.1	0.3	14:30
PM-4	26.1	59.2	7:42	0.0	0.1	16:07
PM-5	31.3	46.7	14:14	0.5	2.6	11:48
PM-6	15.4	23.7	8:14	0.0	0.0	7:12
WZ-1	20.6	39.1	14:12	0.0	0.0	7:12
WZ-2	12.6	25.6	7:20	0.0	0.1	16:30
WZ-3	19.3	57.9	15:00	0.0	0.0	7:12

Station Location Work Area	Daily Avg. Mercury Concentration (µg/m^3)	Max 15 Minute Mercury Concentration (µg/m^3)	Time of Max 15 Minute Avg Mercury Reading
PM-1	0.01	0.03	10:18
PM-2	0.01	0.02	10:58
PM-3	0.00	0.01	10:32
PM-4	0.01	0.04	15:53
PM-5	0.01	0.02	14:03
PM-6	0.02	0.06	13:26
WZ-1	0.01	0.03	11:37
WZ-2	0.02	0.05	16:06
WZ-3	0.00	0.02	15:27







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m3, 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 station ranged from 0.00µg/m3 to 0.07µg/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-3 exceeded the action level established in the CAMP (0.100 mg/m3) from 9:08am to 9:22am, 13:19pm to 13:46pm, and 15:50pm to 15:59pm (50 minutes in total). The exceedances were caused by wood cutting for timer lagging adjacent to perimeter CAMP station PM-3 along the southeastern boundary of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. The station was relocated 15 feet east and PM10 concentrations fell below action levels. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m3) during this time.
- **PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m3) from 10:13am to 10:26am, and 10:48am to 10:59am (24 minutes in total). The exceedances were caused by welding activities adjacent to perimeter CAMP station PM-2 along the southern boundary of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m3) 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 µg/m3 to 0.83 µg/m3.
- The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

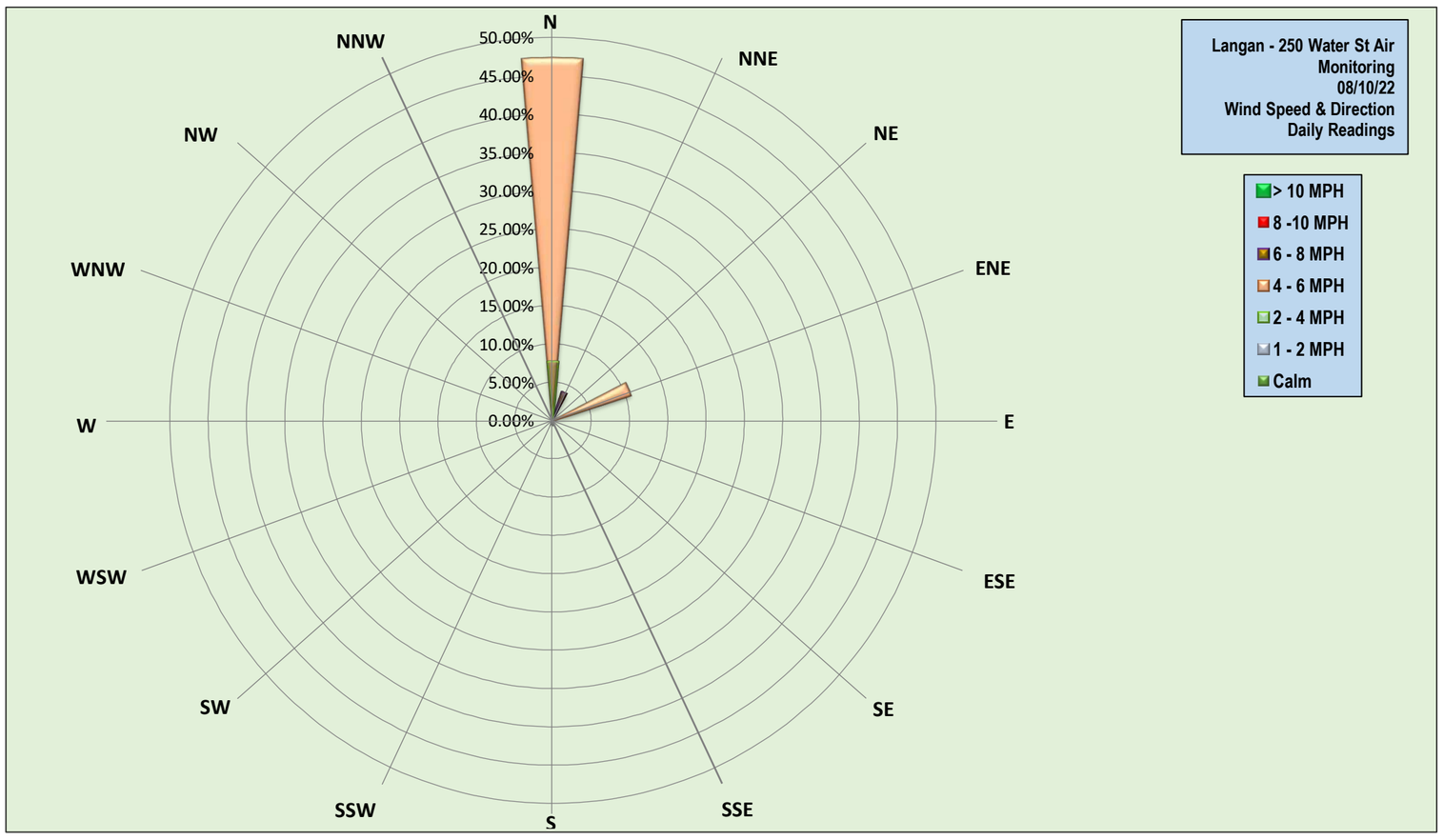
Off-Site CAMP Station Relocation

- CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:48am to 5:32pm due to exposed soil/fill within 20 feet of the northern fence line.
- CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:48am to 5:32pm during excavation activities in the eastern part of the site.
- CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:48am to 5:32pm during soldier pile advancement 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 between 5:17pm and 5:20pm 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 ranged from 0.0 ppm to 0.2 ppm.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Langan - 250 Water St Air Monitoring
08/10/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

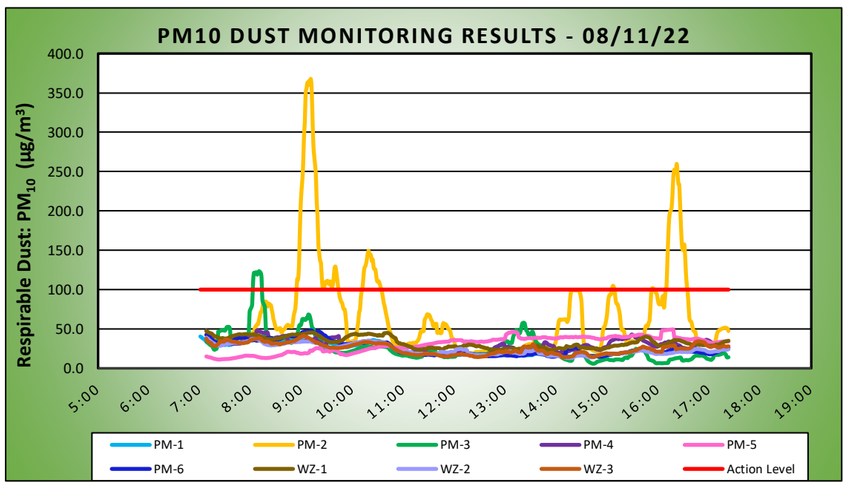
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

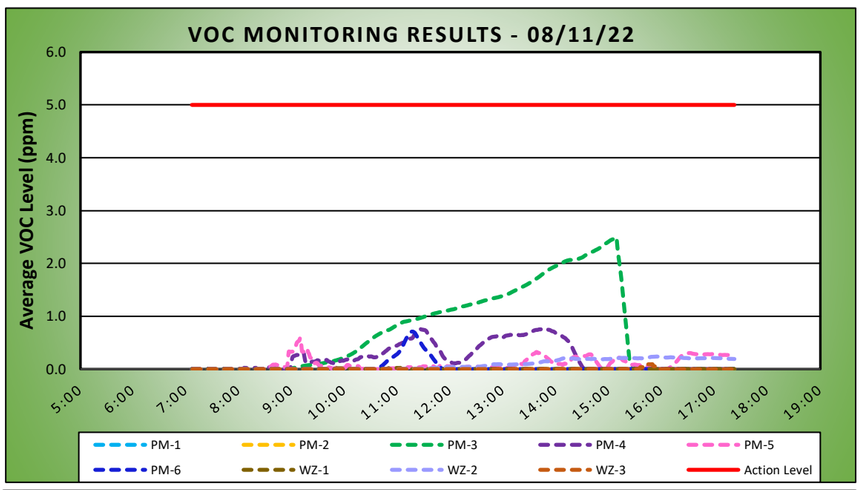
08/11/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m^3)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m^3)	1.0

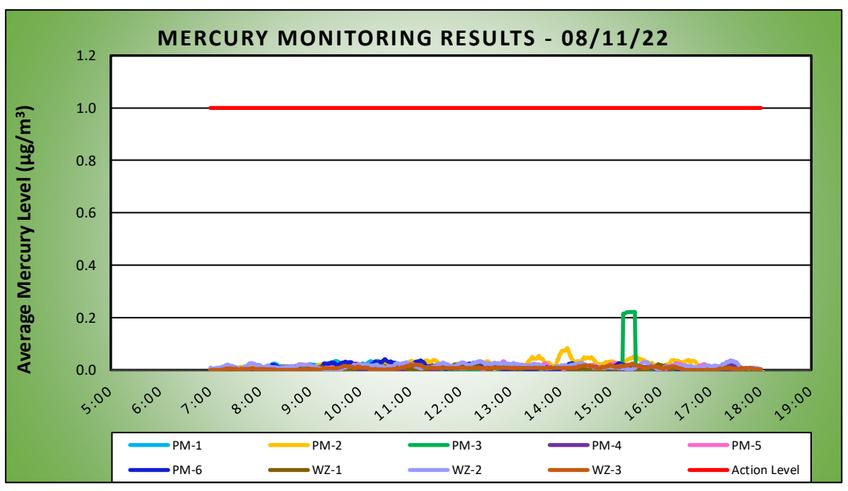
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	43.0 - 94.0	Daily Rain (in)	0.12	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	73.0 - 88.0	Wind Speed (MPH)	0.0 - 3.5	Barometer (inHg)	29.80 - 30.00			

Station Location Work Area	Daily Avg. Dust Concentration (µg/m^3)	Max 15 Minute Dust Concentration (µg/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	24.7	47.2	9:12	0.0	0.0	7:07
PM-2	65.7	367.9	9:11	0.0	0.0	15:41
PM-3	26.0	123.4	8:10	0.7	2.5	15:09
PM-4	29.6	48.3	8:08	0.2	0.8	13:46
PM-5	30.3	49.3	16:16	0.1	0.6	9:10
PM-6	25.5	48.3	9:11	0.0	0.7	11:17
WZ-1	33.1	47.4	7:08	0.0	0.0	10:51
WZ-2	24.1	38.9	7:08	0.1	0.2	15:57
WZ-3	25.4	41.4	9:02	0.0	0.1	15:41

Station Location Work Area	Daily Avg. Mercury Concentration (µg/m^3)	Max 15 Minute Mercury Concentration (µg/m^3)	Time of Max 15 Minute Avg Mercury Reading
PM-1	0.01	0.03	10:20
PM-2	0.02	0.08	14:08
PM-3	0.01	0.22	15:24
PM-4	0.00	0.02	17:24
PM-5	0.01	0.03	12:51
PM-6	0.01	0.04	10:29
WZ-1	0.01	0.02	15:57
WZ-2	0.02	0.04	17:23
WZ-3	0.01	0.02	15:26







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m^3, 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 station ranged from 0.00 µg/m^3 to 0.09 µg/m^3

Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

*PM10 concentrations at perimeter CAMP station PM-3 exceeded the action level established in the CAMP (0.100 mg/m^3) from 8:03am to 8:13am (10 minutes). The exceedance was caused by caused by welding activities upwind of perimeter CAMP station PM-3 along the southern boundary of the site and was not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m^3) during this time.

**PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m^3) from 8:55am to 9:43am, 10:12am to 10:34am, 15:06pm to 15:08pm, 15:53pm to 15:55pm, and 16:09pm to 16:34pm (99 minutes in total). The exceedances were caused by welding activities upwind of perimeter CAMP station PM-2 along the southern boundary of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m^3) during this time.

Equipment Troubleshooting

Mercury vapor concentrations at off-site CAMP station WZ-3 were not recorded following a battery outage from 11:29pm to 13:56pm (147 minutes in total).

Work was halted and Atmos® AC-645 dust/vapor suppressing foam was sprayed on exposed soil while the battery was charged and replaced. Mercury vapor concentrations at the corresponding perimeter CAMP station PM-4 did not approach or exceed the action level (1.00 µg/m^3) 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 µg/m^3 to 0.5 µg/m^3.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:53am to 5:23pm due to exposed soil/fill within 20 feet of the northern fence line.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:53am to 5:23pm due to exposed soil/fill within 20 feet of the eastern fence line.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:58am to 5:23pm during excavation activities 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 between 5:22pm and 5:23pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m^3 to 0.05 µg/m^3.

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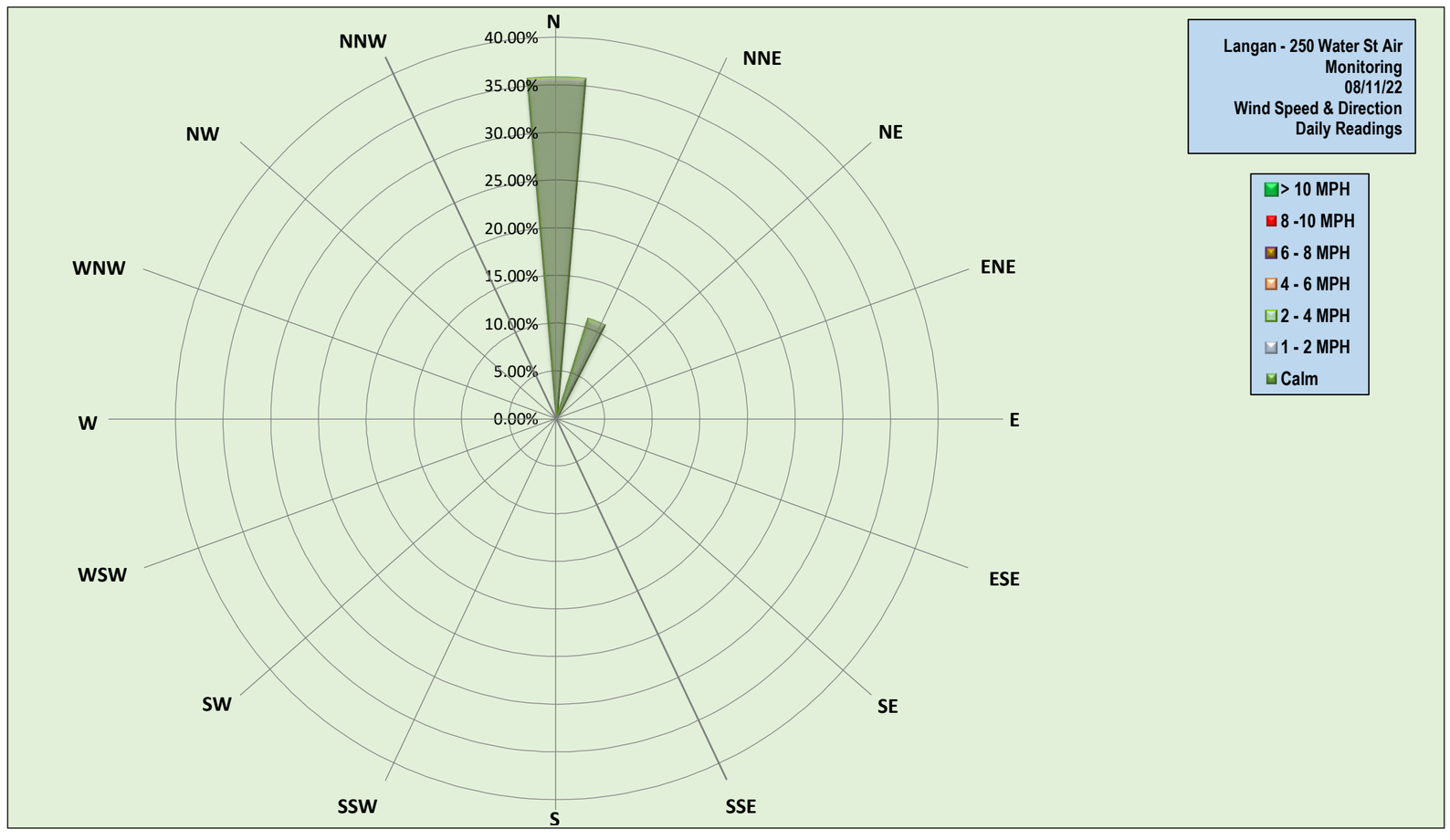
Langan - 250 Water St Air Monitoring
08/11/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
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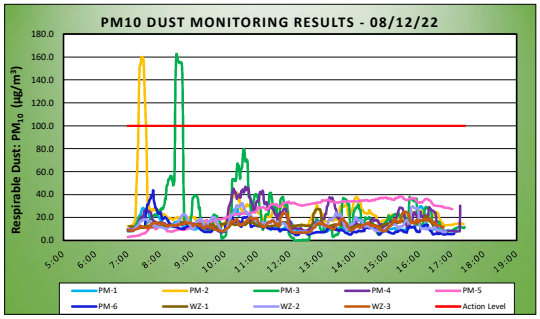
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

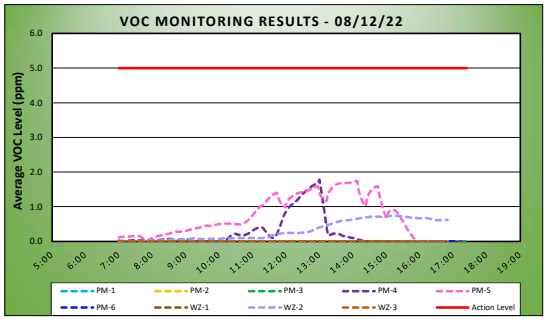
08/12/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

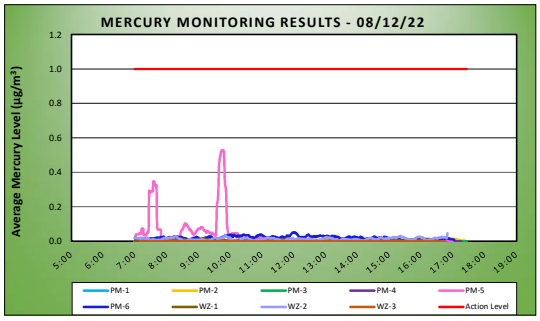
Weather Data Range for Work Day		Wind Direction	NE	Relative Humidity (%)	28.0 - 62.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	72.0 - 85.0	Wind Speed (MPH)	3.5 - 9.2	Barometer (inHg)	30.00 - 30.00			

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	13.4	29.8	16:02	0.0	0.0	7:00
PM-2	24.5	160.0	7:26	0.0	0.0	11:12
PM-3	23.8	162.7	8:30	0.0	0.0	7:00
PM-4	19.0	46.9	10:38	0.2	1.8	13:00
PM-5	25.4	38.6	15:24	0.7	1.7	14:07
PM-6	11.0	43.8	7:47	0.0	0.0	7:00
WZ-1	14.2	27.5	12:52	0.0	0.0	7:02
WZ-2	14.7	32.7	10:32	0.3	0.7	15:15
WZ-3	13.7	25.0	15:35	0.0	0.0	7:00

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	0.02	9:21
PM-2	0.01	0.02	14:08
PM-3	0.00	0.01	10:13
PM-4	0.00	0.00	11:41
PM-5	0.04	0.53	9:46
PM-6	0.02	0.05	11:59
WZ-1	0.01	0.02	9:11
WZ-2	0.01	0.05	16:50
WZ-3	0.00	0.00	7:10







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station ranged from 0.00 µg/m³ to 0.06 µg/m³

Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

*PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m³) from 7:20am to 7:33am (14 minutes). The exceedance was caused by welding activities upwind of perimeter CAMP station PM-2 along the southern boundary of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) during this time.

**PM10 concentrations at perimeter CAMP station PM-3 exceeded the action level established in the CAMP (0.100 mg/m³) from 8:28am to 8:42am (15 minutes). The exceedance was caused by welding activities upwind of perimeter CAMP station PM-3 along the southern boundary of the site and was not the result of ground-intrusive activities associated with soil/fill at the site. PM10 concentrations returned to background levels after relocation of perimeter CAMP station PM-3 about 20 feet to the east. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) during this time.

Equipment Troubleshooting

The filter of Jerome J505 mercury vapor analyzer at perimeter CAMP station PM-5 was replaced after notification of instantaneous concentrations above background levels at 7:27am and from 9:34am to 9:39am (6 minutes in total).

An instantaneous mercury vapor concentration of 3.57 µg/m³ was recorded at perimeter CAMP station PM-5 at 7:27am, which resulted in fifteen-minute weighted average concentrations of mercury vapor ranging from 0.30 µg/m³ to 0.35 µg/m³. Additionally, instantaneous mercury vapor concentrations ranging from 1.04 µg/m³ to 1.73 µg/m³ were recorded at perimeter CAMP station PM-5 intermittently from 9:34am to 9:39am (4 minutes), which resulted in fifteen-minute weighted average concentrations of mercury vapor ranging from 0.10 µg/m³ to 0.53 µg/m³ (below the action level established in the CAMP [1.00 µg/m³]). Instantaneous mercury vapor concentrations recorded at the handheld Jerome J505 mercury analyzer, located at perimeter CAMP station PM-5 during these times, ranged from 0.00 µg/m³ to 0.15 µg/m³, and from 0.00 µg/m³ to 0.08 µg/m³, respectively.

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 0.23 µg/m³.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:48am to 4:29pm due to exposed soil/fill within 20 feet of the northern fence line.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:37am to 4:50pm due to exposed soil/fill within 20 feet of the eastern fence line.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:55am to 4:45pm during excavation activities 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 between 4:29pm and 5:24pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.06 µg/m³.

VOC concentrations at each CAMP station was recorded at 0.0 ppm.

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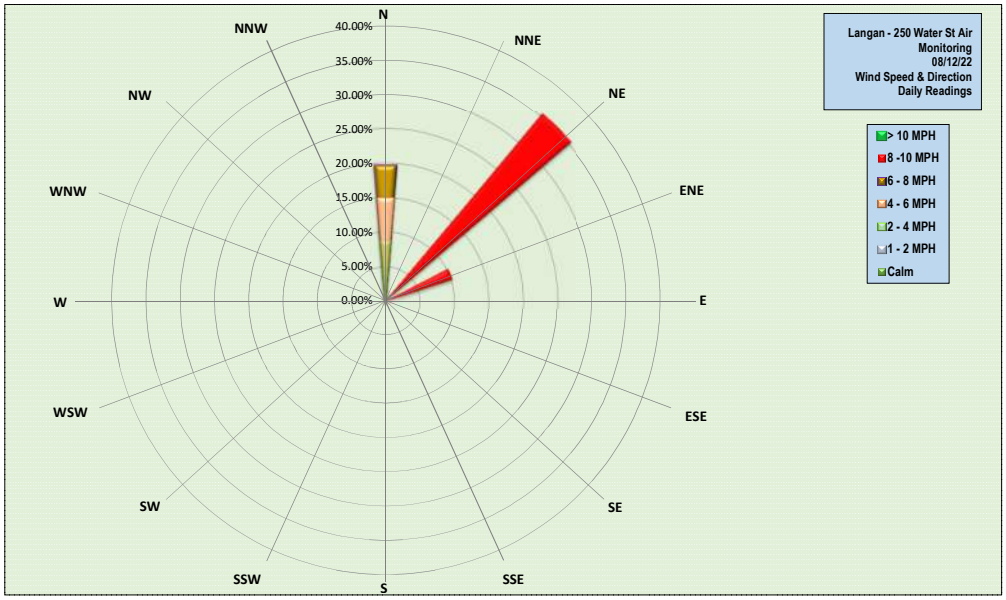
Langan - 250 Water St Air Monitoring
08/12/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
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NW
NNW
40.00%
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%

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ENGINEERING & ENVIRONMENTAL SERVICES

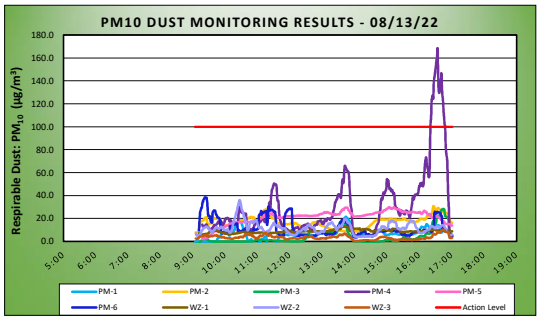
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

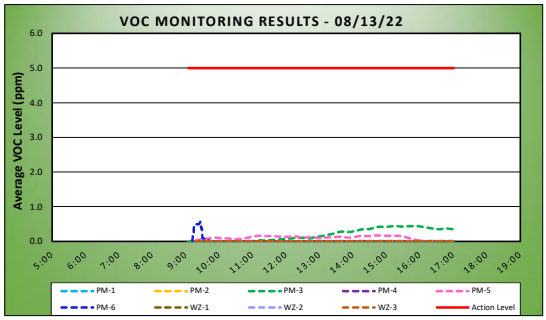
08/13/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

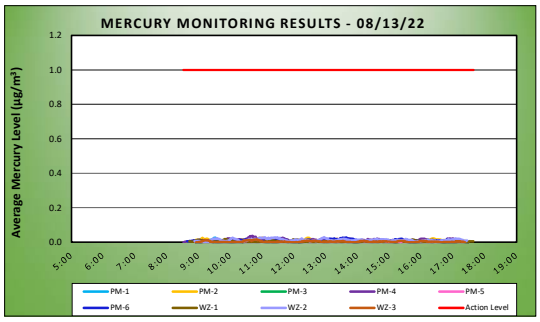
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	33.0 - 57.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	68.0 - 80.0	Wind Speed (MPH)	0.0 - 10.4	Barometer (inHg)	30.10 - 30.10			

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	6.4	21.6	13:44	0.0	0.0	9:05
PM-2	17.6	30.8	16:26	0.0	0.0	9:05
PM-3	4.1	28.4	16:44	0.2	0.4	15:14
PM-4	29.9	168.4	16:34	0.0	0.0	9:23
PM-5	20.7	29.9	15:04	0.1	0.2	14:44
PM-6	11.9	38.6	9:23	0.0	0.6	9:26
WZ-1	9.3	13.1	13:37	0.0	0.0	9:22
WZ-2	11.6	36.2	10:27	0.0	0.0	9:19
WZ-3	3.6	10.3	16:44	0.0	0.0	9:18

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	9:31
PM-2	0.01	0.03	12:27
PM-3	0.00	0.00	10:07
PM-4	0.01	0.04	10:42
PM-5	0.00	0.01	14:46
PM-6	0.01	0.03	13:39
WZ-1	0.01	0.02	9:50
WZ-2	0.01	0.03	12:57
WZ-3	0.00	0.02	10:49







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station ranged from 0.00 µg/m³ to 0.02 µg/m³

Background concentrations of VOCs at each CAMP station ranged from 0.0 ppm to 0.1 ppm.

Perimeter and Work Zone Concentrations

*PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m³) from 4:21pm to 4:47pm (27 minutes). The exceedance was caused by welding activities at the southeastern corner of the site, adjacent to perimeter CAMP station PM-4 along the eastern site boundary, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-2) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) during this time.

Equipment Troubleshooting

PM10 concentrations were not recorded at DustTrak of perimeter CAMP station PM-1 at 11:28am during recalibration of the DustTrak unit due to persistent negative readings. Data logging resumed at 11:29am and PM10 concentrations returned to background levels after equipment recalibration. Fugitive dust was not observed migrating from the site during this time.

PM10 concentrations were not recorded at DustTrak of perimeter CAMP station PM-2 intermittently from 1:01pm to 2:24pm (45 minutes in total), during troubleshooting efforts to resolve telemetry connectivity issues. Troubleshooting included powering on and off the equipment multiple times, which prevented data recording at the DustTrak unit during these times. Data logging resumed at 2:25pm, after troubleshooting was completed and telemetry issues were not observed thereafter. Fugitive dust was not observed migrating from the site during these times. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) during 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 0.13 µg/m³.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 9:07am to 5:01pm due to exposed soil/fill within 20 feet of the northern fence line.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 9:04am to 5:01pm due to exposed soil/fill within 20 feet of the eastern fence line.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 9:03am to 5:01pm during excavation activities 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 between 5:00pm and 5:01pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.09 µg/m³.

VOC concentrations at each CAMP station was recorded at 0.0 ppm.

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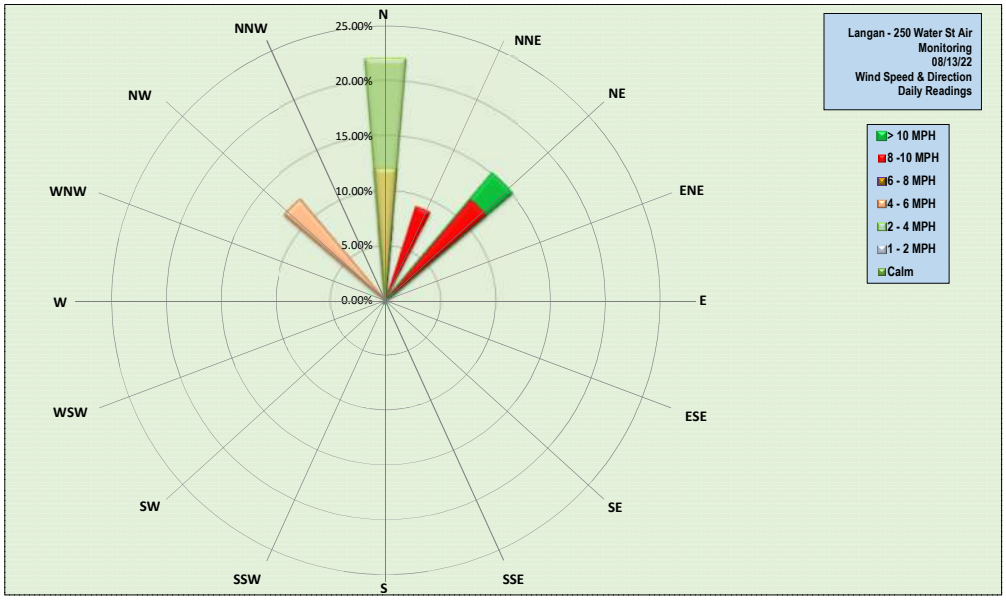
Langan - 250 Water St Air Monitoring
08/13/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
N
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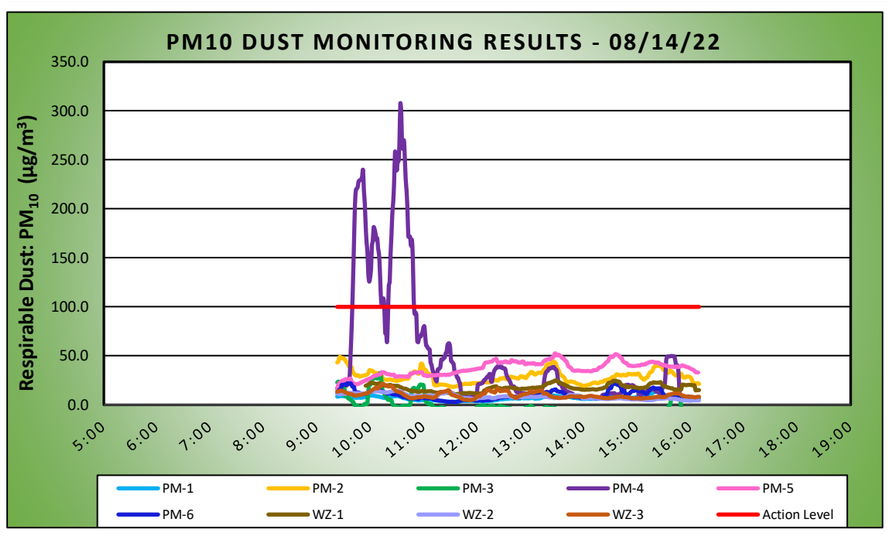
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

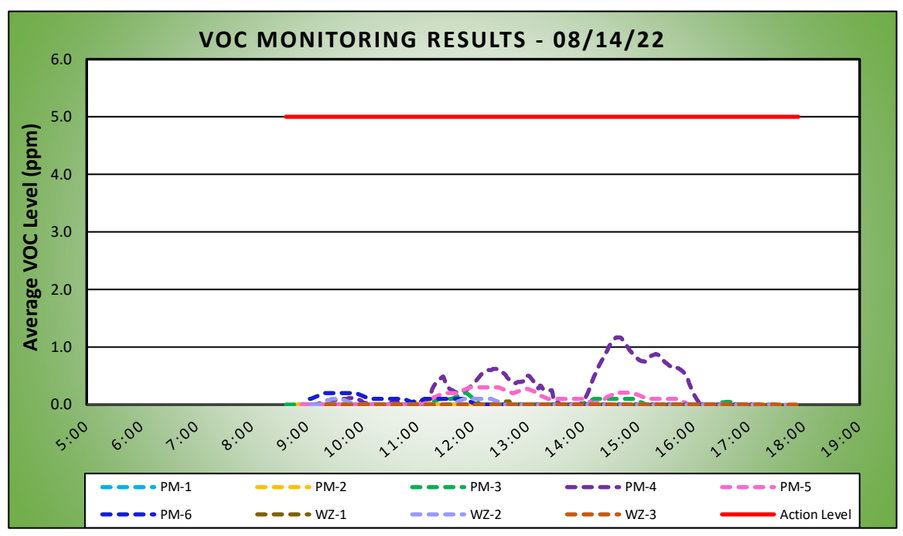
08/14/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

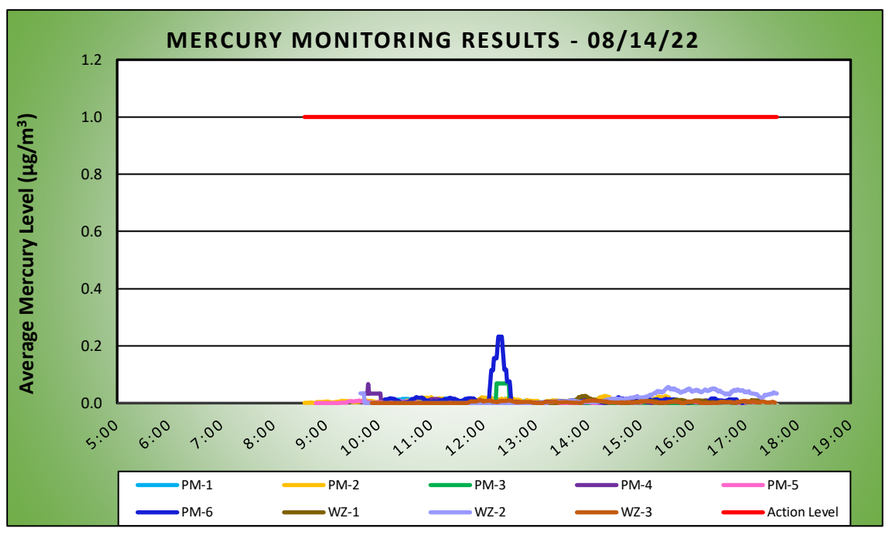
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	35.0 - 54.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	74.0 - 81.0	Wind Speed (MPH)	0.0 - 8.1	Barometer (inHg)	30.00 - 30.10			

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	6.9	13.5	15:26	0.0	0.0	8:50
PM-2	28.9	49.1	9:26	0.0	0.1	11:07
PM-3	-3.6	32.4	10:11	0.0	0.2	11:52
PM-4	49.1	307.2	10:34	0.3	1.2	14:39
PM-5	36.6	52.6	13:28	0.1	0.3	11:57
PM-6	9.9	22.1	9:38	0.1	0.2	9:19
WZ-1	17.4	25.0	13:29	0.0	0.1	12:27
WZ-2	8.5	14.3	10:28	0.0	0.1	9:27
WZ-3	10.2	21.4	10:14	0.0	0.0	9:21

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	0.0	14:14
PM-2	0.0	0.0	14:18
PM-3	0.0	0.1	12:15
PM-4	0.0	0.1	9:48
PM-5	0.0	0.0	9:38
PM-6	0.0	0.2	12:17
WZ-1	0.0	0.0	13:56
WZ-2	0.0	0.1	15:32
WZ-3	0.0	0.0	11:56







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station ranged from 0.00 µg/m³ to 0.02 µg/m³

Background concentrations of VOCs at each CAMP station ranged from 0.0 ppm to 0.1 ppm.

*PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m³) from 9:40am to 10:15am and 10:21am to 10:49am (63 minutes in total). The exceedances were caused by welding activities adjacent to perimeter CAMP station PM-4 along the eastern border of the site and were not the result of ground-intrusive activities associated with soil/fill at the site. The CAMP station was relocated approximately 20 feet south and PM10 readings fell below action levels. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-2) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) during this time.

Equipment Troubleshooting

Mercury vapor concentrations were not recorded off-site CAMP station WZ-1 from 12:06pm to 12:28pm due an equipment malfunction. The equipment was restarted and data logging resumed at 12:29pm. The handheld Jerome® J505 mercury unit was used to screen ambient air for mercury vapor during this time. No readings above background levels were observed.

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 0.15 µg/m³.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 9:40am to 4:10pm due to exposed soil/fill within 20 feet of the northern fence line.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 9:08am to 4:10pm during SOE activities along the eastern boundary of the site.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 9:08am to 4:10pm during SOE activities 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 between 3:47pm and 4:04pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.03 µg/m³.

VOC concentrations at each CAMP station was recorded at 0.0 ppm.

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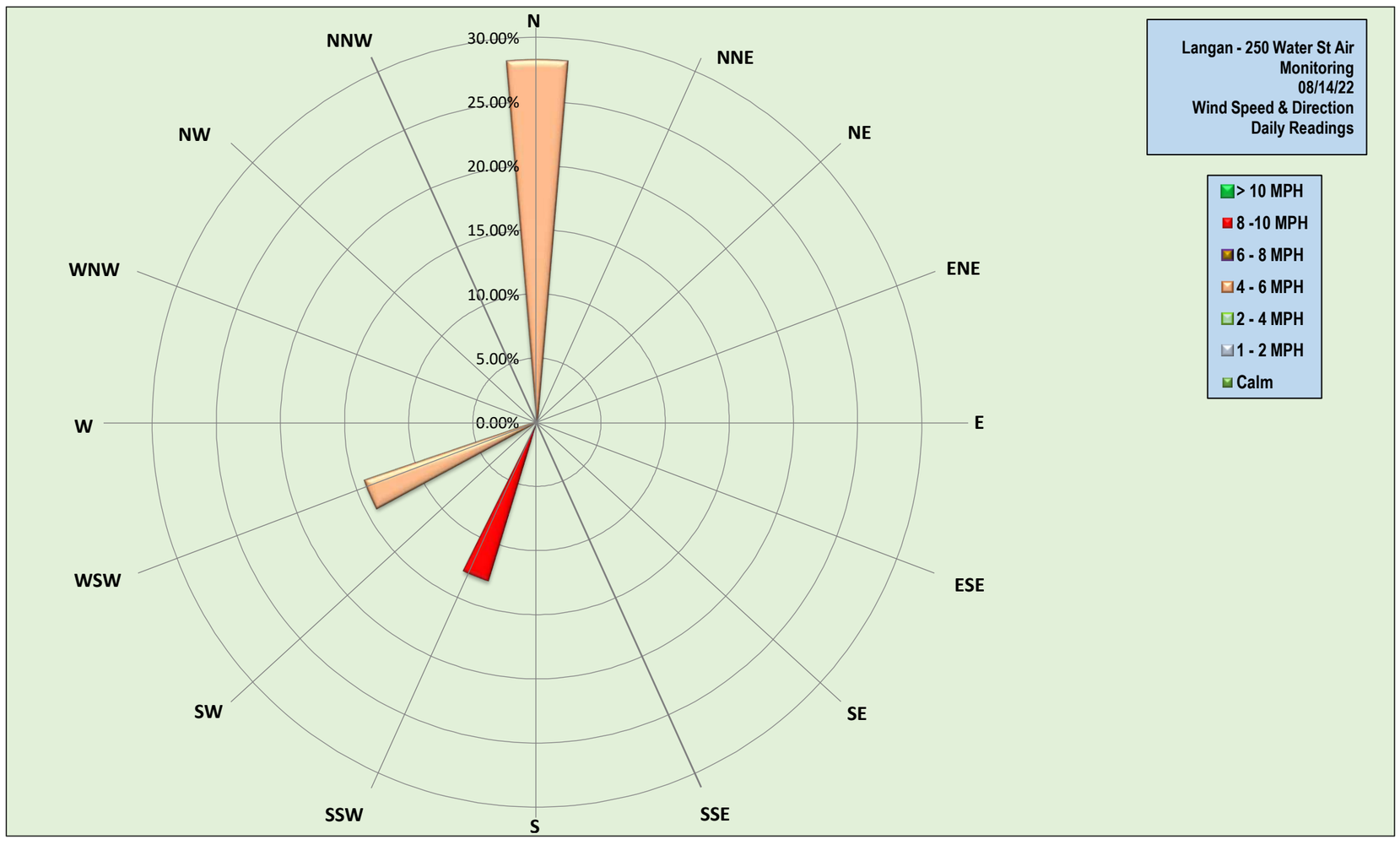
Langan - 250 Water St Air Monitoring
08/14/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
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LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

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

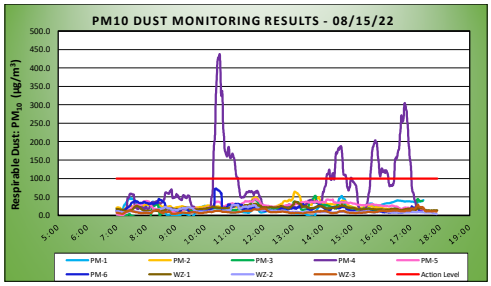
08/15/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

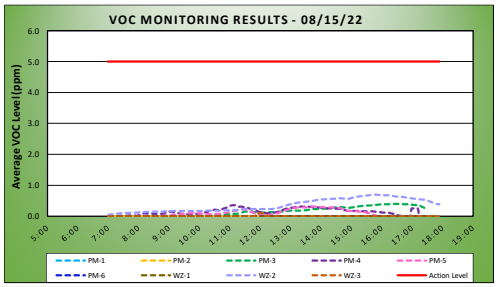
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	37.0 - 61.0	Daily Rain (in)	0.00
Temp (°F)	70.0 - 83.0	Wind Speed (MPH)	0.0 - 8.8	Barometer (inHg)	30.00 - 30.00		

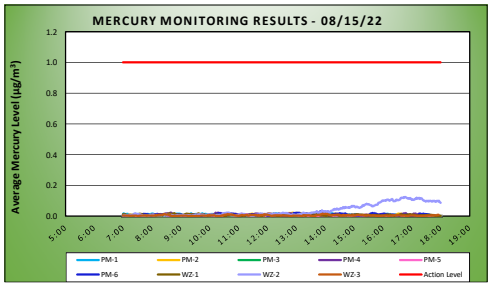
Readings in the summary table and graphs below are the reported downwind concentrations.

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	20.2	52.7	14:39	0.0	0.0	7:07
PM-2	26.4	64.4	13:03	0.0	0.0	7:08
PM-3	17.8	53.2	13:45	0.2	0.4	16:27
PM-4	74.1	437.6	10:30	0.2	0.4	11:07
PM-5	25.6	44.2	11:44	0.1	0.3	13:45
PM-6	19.5	72.8	10:23	0.0	0.0	7:00
WZ-1	19.7	37.6	13:04	0.0	0.0	7:00
WZ-2	12.2	29.0	10:57	0.4	0.7	15:47
WZ-3	10.1	29.3	17:15	0.0	0.1	12:05

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	0.01	0.02	14:08
PM-2	0.01	0.02	12:53
PM-3	0.00	0.00	10:13
PM-4	0.01	0.02	8:39
PM-5	0.00	0.01	11:06
PM-6	0.01	0.03	13:53
WZ-1	0.01	0.02	13:34
WZ-2	0.04	0.12	16:47
WZ-3	0.00	0.01	13:55







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station ranged from 0.00 µg/m³ to 0.03 µg/m³

Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

*PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m³) from 10:17am to 11:07am, and intermittently from 2:09pm to 5:01 (160 minutes in total). The exceedance was caused by welding activities upwind of the perimeter CAMP station PM-4 in the northeastern corner of the site, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-2) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) during this time.

Equipment Troubleshooting

The DustTrak II within perimeter CAMP station PM-3 did not record PM10 concentrations at 8:29am during an equipment swap following consistent negative readings on the device. The unit was replaced and recording of PM10 concentrations resumed at 8:30am.

The Jerome® J505 mercury vapor analyzer at off-site CAMP station WZ-2 recorded concentrations of mercury vapor ranging from 0.0 to 0.17 µg/m³ from about 2:33pm to 6:04pm. Fifteen-minute average concentrations did not exceed 0.12 µg/m³ (CAMP action level 1.00 µg/m³). The handheld Jerome® J505 unit was used to screen the area and recorded a reading of 0.0 µg/m³. The filter within the Jerome® J505 unit at WZ-2 will be replaced tomorrow.

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 0.0 µg/m³ to 0.7 µg/m³ during excavation in the mercury impacted area (WC05). Mercon-X was actively sprayed during excavation.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:45am to 5:54pm during excavation activities along the northern boundary of the site

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:45am to 5:53pm due to exposed soil/fill within 20 feet of the eastern fence line.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:45am to 5:53pm due to exposed soil/fill within 20 feet of the southern fence line.

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 5:15pm and 5:27pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.07 µg/m³.

VOC concentrations at each CAMP station was recorded at 0.0 ppm.

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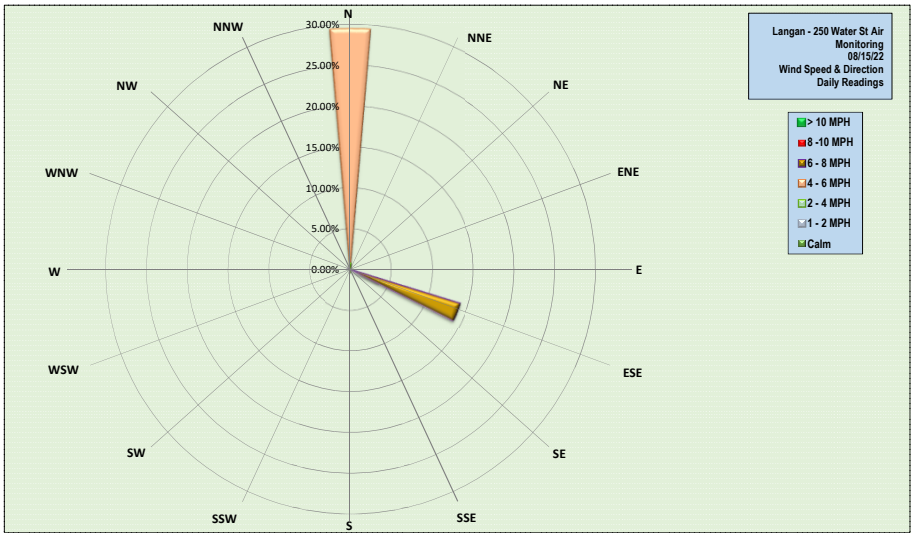
Langan - 250 Water St Air Monitoring
08/15/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
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LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

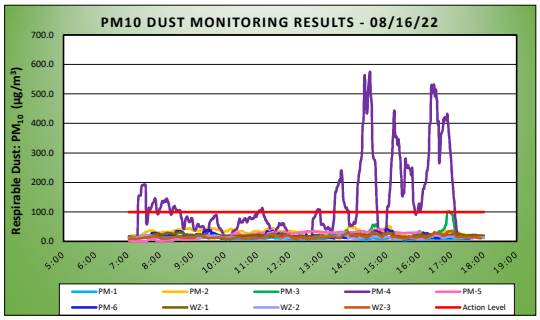
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

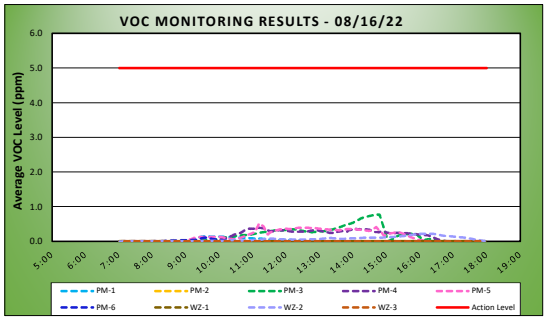
08/16/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

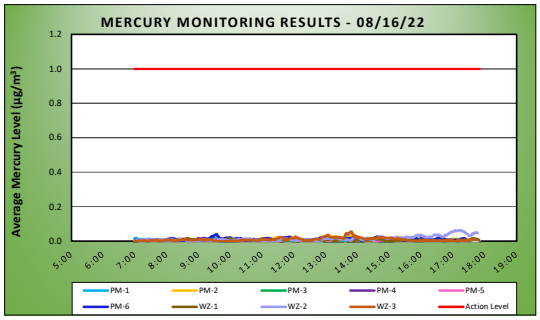
Weather Data Range for Work Day		Wind Direction	ENE	Relative Humidity (%)	32.0 - 75.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	68.0 - 84.0	Wind Speed (MPH)	0.0 - 13.8	Barometer (inHg)	30.00 - 30.00			

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	10.2	22.8	7:33	0.0	0.1	9:35
PM-2	32.6	52.2	15:01	0.0	0.0	7:02
PM-3	19.7	102.5	16:55	0.2	0.8	14:46
PM-4	122.0	575.3	14:29	0.2	0.4	11:11
PM-5	22.6	43.0	14:46	0.2	0.5	11:13
PM-6	18.4	41.8	14:59	0.0	0.1	9:36
WZ-1	21.0	30.9	8:38	0.0	0.0	7:01
WZ-2	14.2	32.6	11:29	0.1	0.2	16:12
WZ-3	15.8	34.6	16:56	0.0	0.0	7:10

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	0.02	13:42
PM-2	0.01	0.04	13:50
PM-3	0.00	0.00	17:14
PM-4	0.01	0.02	14:38
PM-5	0.00	0.02	13:33
PM-6	0.01	0.04	9:34
WZ-1	0.01	0.02	11:01
WZ-2	0.02	0.06	17:16
WZ-3	0.01	0.06	13:49







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station ranged from 0.00 µg/m³ to 0.04 µg/m³

Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

*PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m³) intermittently throughout the work day. The exceedances were caused by welding activities adjacent to the perimeter CAMP station PM-4 in the northeastern corner of the site, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-2) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) during this time.

**PM10 concentrations at perimeter CAMP station PM-3 exceeded the action level established in the CAMP (0.100 mg/m³) from 4:53pm to 4:56pm (3 minutes). The exceedance was caused by spraying of Atmos® AC-645 dust/vapor suppressing foam in close proximity to perimeter CAMP station PM-3 along the southern border of the site, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) 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 0.0 µg/m³ to 1.4 µg/m³ during loading of excavated soil/fill from waste characterization cell WC04 for off-site disposal.

Mercon-X was actively sprayed during excavation. Mercury vapor concentrations at the downwind CAMP station (PM-2) and off-site CAMP station (WZ-3) did not approach or exceed the action level (1.00 µg/m³) during this time.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 6:47am to 6:07pm during excavation activities along the northern boundary of the site.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:47am to 6:01pm due to exposed soil/fill within 20 feet of the eastern fence line.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:47am to 5:54pm during excavation activities along the southern boundary of the site.

CAMP station PM-4 was relocated to the northern side of Peck Slip due to access limitations on the Peck Slip side by the site safety manager. During excavation, the mobile monitor was positioned between the excavation area and the Peck Slip boundary.

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 5:20pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.03 µg/m³.

VOC concentrations at each CAMP station was recorded at 0.0 ppm.

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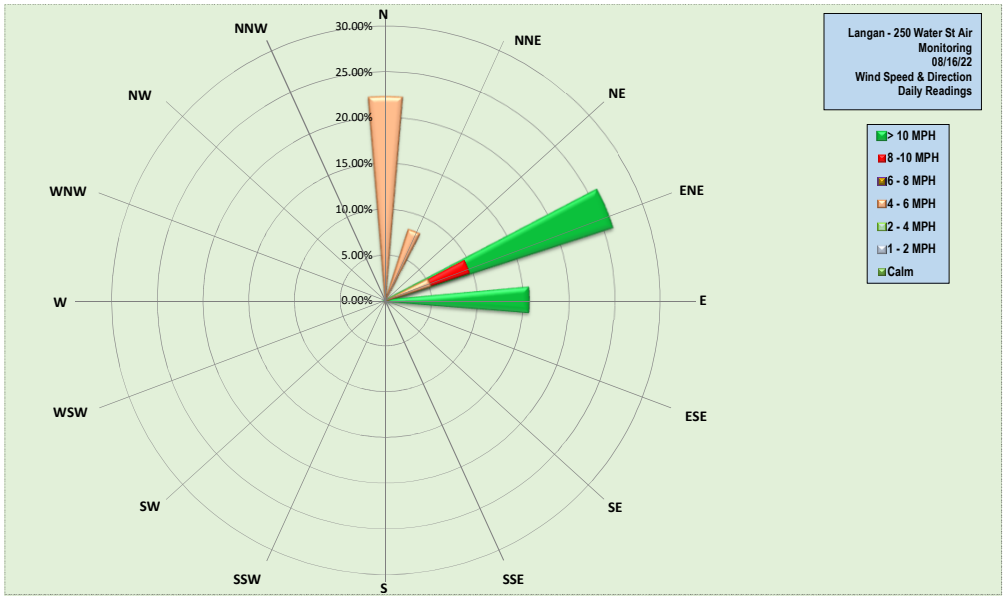
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Langan - 250 Water St Air Monitoring
08/16/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm

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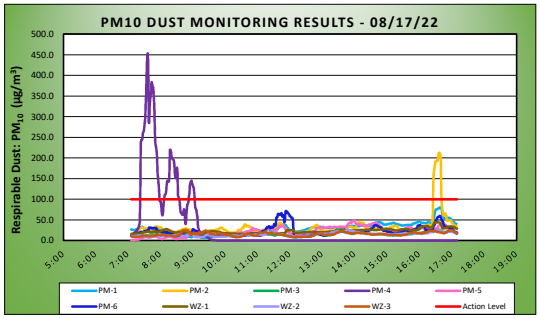
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

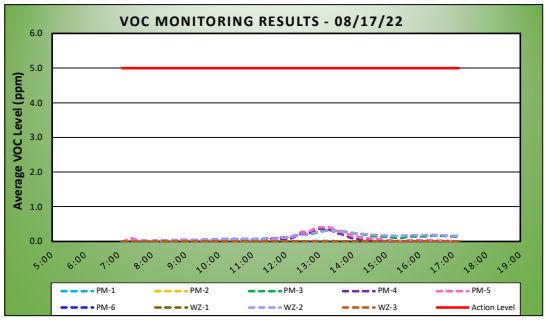
08/17/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

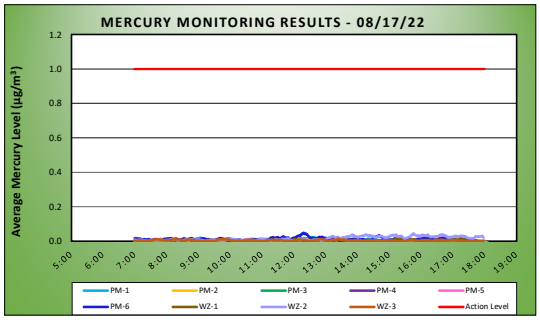
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	42.0 - 65.0	Daily Rain (in)	0.02	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	69.0 - 80.0	Wind Speed (MPH)	0.0 - 4.6	Barometer (inHg)	30.00 - 30.00			

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	29.3	80.0	16:39	0.0	0.0	13:14
PM-2	32.7	212.8	16:37	0.0	0.0	7:06
PM-3	15.5	32.4	13:31	0.1	0.3	13:17
PM-4	31.4	452.9	7:37	0.1	0.4	13:03
PM-5	21.8	48.1	13:59	0.1	0.4	13:14
PM-6	23.0	71.7	11:53	0.0	0.0	7:06
WZ-1	22.8	44.6	16:29	0.0	0.0	7:06
WZ-2	15.1	26.2	13:47	0.1	0.3	13:18
WZ-3	15.5	25.5	8:47	0.0	0.0	7:06

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	0.02	12:36
PM-2	0.01	0.02	13:14
PM-3	0.00	0.00	8:40
PM-4	0.01	0.02	7:02
PM-5	0.00	0.01	7:45
PM-6	0.01	0.05	12:19
WZ-1	0.01	0.02	17:12
WZ-2	0.02	0.05	15:46
WZ-3	0.00	0.01	13:26







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station were recorded at 0.00 µg/m³

Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

*PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m³) from 7:23am to 7:58am, 8:08am to 8:35am, and 8:53am to 9:03am (72 minutes in total). The exceedances were caused by welding activities adjacent to the perimeter CAMP station PM-4 in the northeastern corner of the site, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-2) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) during this time.

**PM10 concentrations at perimeter CAMP station PM-2 exceeded the action level established in the CAMP (0.100 mg/m³) from 4:26pm to 4:41pm (16 minutes). The exceedance was caused by spraying of Atmos® AC-645 dust/vapor suppressing foam in close proximity to perimeter CAMP station PM-2 along the southern border of the site, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-3) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) 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 0.0 µg/m³ to 1.98 µg/m³ during loading of excavated soil/fill from waste characterization cell WC04 for off-site disposal.

Mercon-X was actively sprayed during excavation. Mercury vapor concentrations at the downwind CAMP station (PM-2) and off-site CAMP station (WZ-3) did not approach or exceed the action level (1.00 µg/m³) during this time.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 6:52am to 5:10pm during excavation activities along the northern boundary of the site.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:52am to 5:10pm during excavation activities along the eastern boundary of the site.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:52am to 5:10pm during excavation activities along the southern boundary of the site.

Equipment Troubleshooting

The DustTrak II within perimeter CAMP station PM-1 did not record PM10 concentrations from 8:18am to 8:19am during an equipment swap for routine maintenance. The unit was replaced and recording of PM10 concentrations resumed at 8:20am.

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 5:02pm and 5:12pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.09 µg/m³.

VOC concentrations at each CAMP station was recorded at 0.0 ppm.

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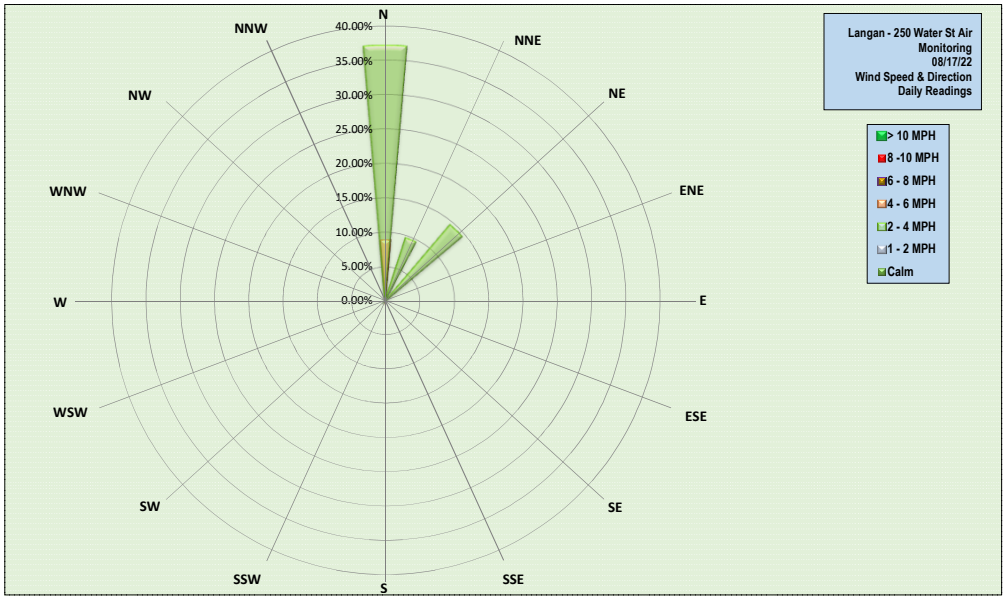
Langan - 250 Water St Air Monitoring
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Wind Speed & Direction
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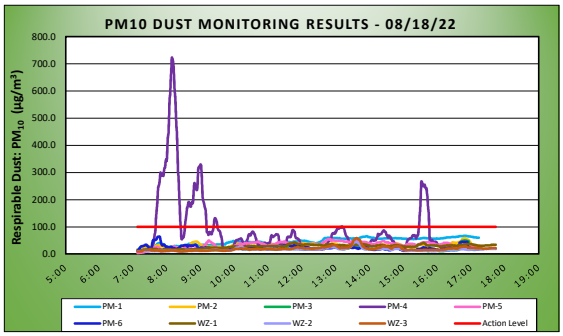
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

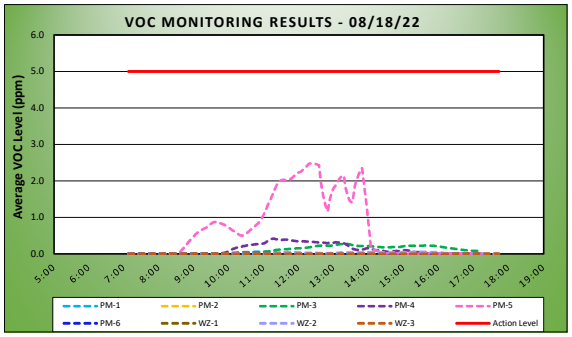
08/18/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

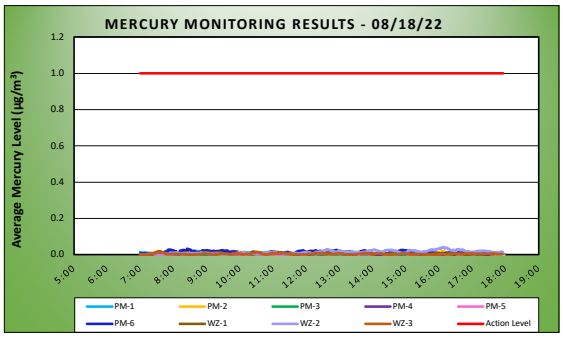
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	29.0 - 65.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	68.0 - 86.0	Wind Speed (MPH)	0.0 - 5.8	Barometer (inHg)	29.90 - 29.90			

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	46.7	66.6	16:49	0.0	0.1	11:03
PM-2	32.7	58.4	16:49	0.0	0.0	7:08
PM-3	17.8	50.0	16:49	0.1	0.3	13:20
PM-4	84.2	722.8	8:09	0.1	0.4	11:18
PM-5	33.2	55.6	12:50	0.7	2.5	12:24
PM-6	22.4	64.0	7:47	0.0	0.0	7:08
WZ-1	28.4	42.7	11:46	0.0	0.0	7:26
WZ-2	16.2	45.0	13:36	0.0	0.1	15:27
WZ-3	19.0	58.6	13:37	0.0	0.0	7:09

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	0.02	8:38
PM-2	0.01	0.02	12:15
PM-3	0.00	0.01	14:11
PM-4	0.01	0.02	9:29
PM-5	0.00	0.01	13:10
PM-6	0.01	0.03	8:25
WZ-1	0.01	0.02	12:45
WZ-2	0.01	0.04	16:08
WZ-3	0.00	0.01	10:31







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station ranged from at 0.00 µg/m³ to 0.04 µg/m³.

Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

*PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m³) intermittently throughout the work day. The exceedances were caused by welding activities adjacent to the perimeter CAMP station PM-4 in the northeastern corner of the site, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-2) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) 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 0.0 µg/m³ to 0.54 µg/m³.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:12am to 5:44pm during excavation activities along the northern boundary of the site.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:53am to 5:44pm due to exposed soil within 20 feet of the eastern site boundary.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:53am to 5:44pm due to exposed soil within 20 feet of the southern site boundary.

CAMP station PM-4 was returned to the location on Peck Slip at 3:40pm following confirmation from the site safety manager that the area could be accessed.

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 5:13pm and 5:14pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.08 µg/m³.

VOC concentrations at each CAMP station was recorded at 0.0 ppm.

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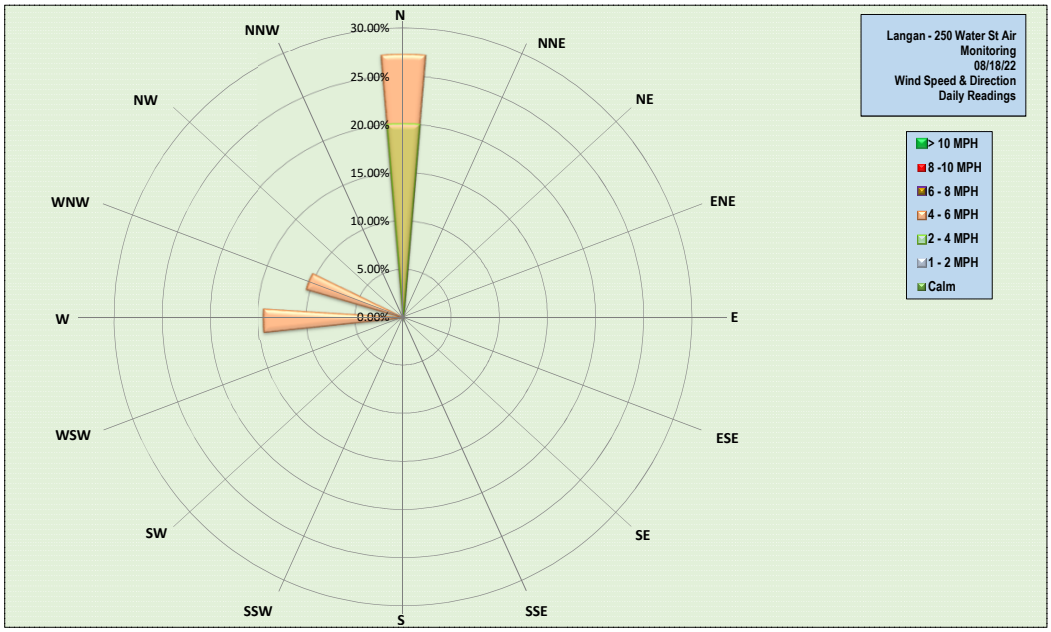
Langan - 250 Water St Air Monitoring
08/18/22
Wind Speed & Direction
Daily Readings
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8 -10 MPH
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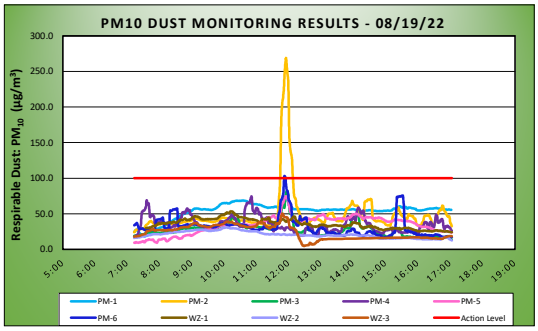
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

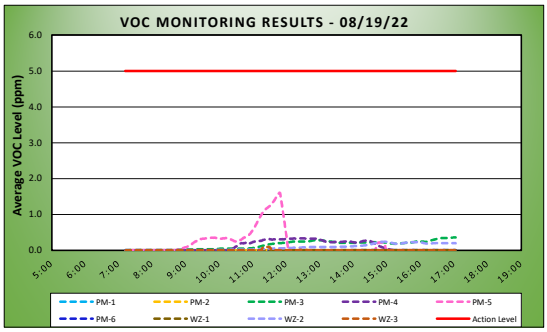
08/19/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

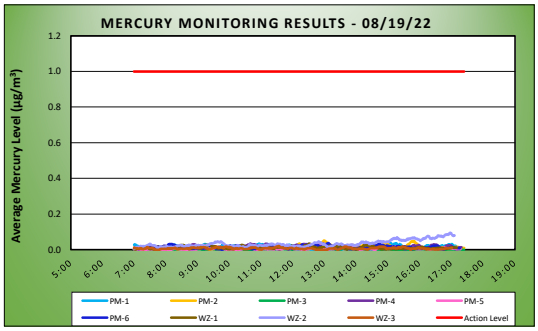
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	34.0 - 64.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	71.0 - 87.0	Wind Speed (MPH)	0.0 - 6.9	Barometer (inHg)	30.00 - 30.10			

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	53.7	72.0	11:54	0.0	0.0	7:13
PM-2	48.6	268.9	11:55	0.0	0.0	7:19
PM-3	27.7	82.4	11:57	0.1	0.4	17:03
PM-4	35.1	74.1	10:51	0.1	0.3	12:21
PM-5	34.0	74.5	11:55	0.2	1.6	11:48
PM-6	31.7	103.1	11:52	0.0	0.0	7:12
WZ-1	35.9	53.4	10:14	0.0	0.0	7:32
WZ-2	20.7	30.9	10:05	0.1	0.2	14:55
WZ-3	26.4	50.3	11:48	0.0	0.1	11:19

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	0.04	15:03
PM-2	0.02	0.05	12:59
PM-3	0.00	0.01	12:43
PM-4	0.02	0.03	10:40
PM-5	0.01	0.03	12:49
PM-6	0.01	0.04	13:07
WZ-1	0.01	0.03	12:31
WZ-2	0.03	0.09	16:58
WZ-3	0.01	0.02	11:34







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station ranged from at 0.00 µg/m³ to 0.03 µg/m³.

Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

*PM10 concentrations at perimeter CAMP stations PM-2 and PM-6 exceeded the action level established in the CAMP (0.100 mg/m³) from 11:45am to 12:07am and 11:52am to 11:53am, respectively. The exceedances were caused by smoke originating from the adjacent building upwind from the perimeter CAMP stations PM-2 and PM-4, and were not the result of ground-intrusive activities associated with soil/fill at the site. The CAMP stations were relocated above 10 feet south and PM10 concentrations fell below action levels. 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 0.0 µg/m³ to 0.28 µg/m³.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations were at or below background concentrations throughout the work day.

CAMP Station Relocation

CAMP station WZ-1 was relocated to the northern sidewalk of Pearl Street from 7:20am to 5:02pm during excavation activities along the northern boundary of the site.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 6:58am to 5:02pm due to exposed soil within 20 feet of the eastern site boundary.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 6:58am to 5:02pm due to exposed soil within 20 feet of the southern site boundary.

Equipment Troubleshooting

The DustTrak II within off-site CAMP station WZ-3 did not record PM10 concentrations from 1:04pm to 3:45pm due to a battery outage. The battery was replaced and recording of PM10 concentrations resumed at 3:46pm.

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 5:02pm, the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.04 µg/m³.

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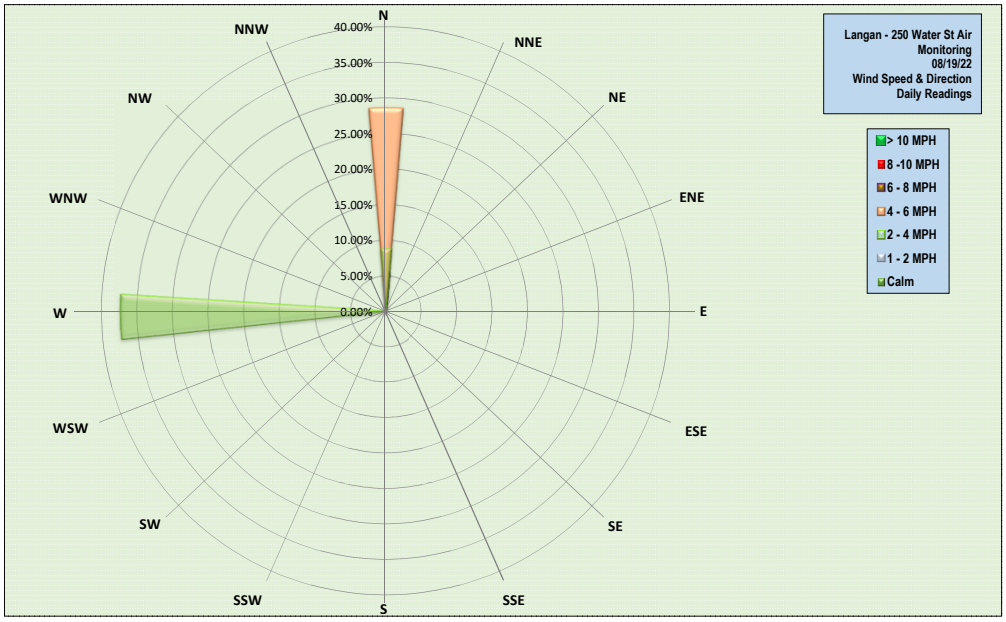

Langan - 250 Water St Air Monitoring
08/19/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
40.00%
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

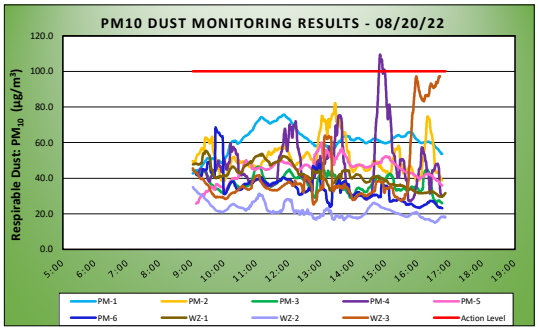
DAILY AIR MONITORING REPORT
250 Water Street Remediation Site
Manhattan, New York

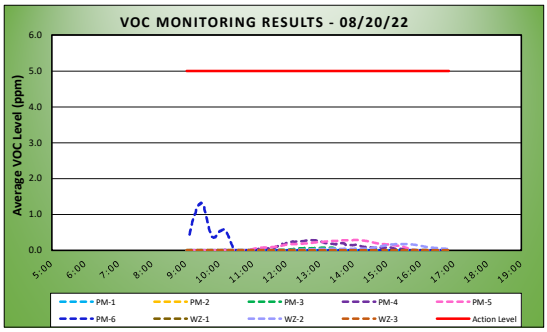
08/20/22	
Project number: 170381202	
Page 1 of 2	Rev. No. 0
Submitted By:	
Dust Action Level (µg/m³)	100
VOC Action Level (ppm)	5
Hg Action Level (µg/m³)	1.0

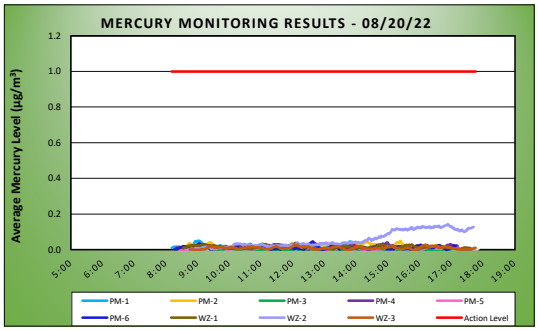
Weather Data Range for Work Day		Wind Direction	N	Relative Humidity (%)	44.0 - 69.0	Daily Rain (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temp (°F)	78.0 - 88.0	Wind Speed (MPH)	0.0 - 6.9	Barometer (inHg)	30.10 - 30.20			

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	60.9	75.7	11:50	0.0	0.0	9:08
PM-2	52.2	82.2	13:26	0.0	0.0	9:02
PM-3	37.2	46.5	11:03	0.0	0.1	13:13
PM-4	47.0	109.4	14:50	0.1	0.3	12:42
PM-5	44.5	60.0	13:01	0.1	0.3	14:04
PM-6	34.7	68.5	9:44	0.1	1.3	9:28
WZ-1	41.9	55.4	9:27	0.0	0.0	9:02
WZ-2	22.1	35.0	9:02	0.0	0.2	15:34
WZ-3	42.6	97.2	16:41	0.0	0.0	9:02

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	9:01
PM-2	0.02	0.05	15:23
PM-3	0.00	0.01	9:15
PM-4	0.02	0.04	14:59
PM-5	0.01	0.02	15:43
PM-6	0.01	0.05	12:38
WZ-1	0.01	0.04	12:05
WZ-2	0.06	0.14	16:53
WZ-3	0.01	0.03	12:09







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 VOCs, and mercury vapor that approached or exceeded the action level established by the CAMP (5.0 ppm, and 1.00 µg/m³, 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 station ranged from 0.00 µg/m³ to 0.06 µg/m³

Background concentrations of VOCs at each CAMP station were recorded at 0.0 ppm.

*PM10 concentrations at perimeter CAMP station PM-4 exceeded the action level established in the CAMP (0.100 mg/m³) from 4:48pm to 4:58pm (10 minutes). The exceedance was caused by welding activities at the southeastern corner of the site, adjacent to perimeter CAMP station PM-4 along the eastern site boundary, and were not the result of ground-intrusive activities associated with soil/fill at the site. Fugitive dust was not observed migrating from the site during this time. Additionally, PM10 concentrations at the closest off-site CAMP station (WZ-2) did not approach or exceed the action level established by the CAMP (0.100 mg/m³) 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 µg/m³ to 0.33 µg/m³.

The dedicated mobile monitor (Langan) used a handheld PID to monitor VOC concentrations throughout the site. VOC concentrations 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 8:47am to 4:51pm due to exposed soil/fill within 20 feet of the northern fence line.

CAMP station WZ-2 was relocated to the eastern sidewalk of Peck Slip from 8:47am to 4:51pm due to exposed soil/fill within 20 feet of the eastern fence line.

CAMP station WZ-3 was relocated to the southern sidewalk of Water Street from 8:47am to 4:41pm during excavation activities 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 between 4:38pm and 4:48pm at the conclusion of ground-intrusive activities.

Mercury vapor concentrations at each CAMP station ranged from 0.0 µg/m³ to 0.09 µg/m³.

VOC concentrations at each CAMP station was recorded at 0.0 ppm.

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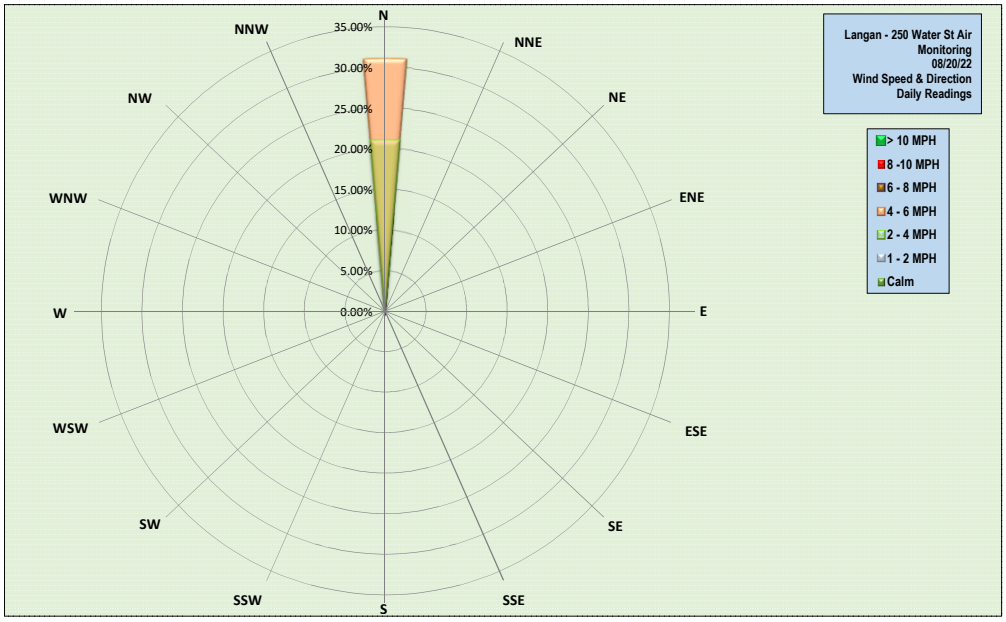
Langan - 250 Water St Air Monitoring
08/20/22
Wind Speed & Direction
Daily Readings
> 10 MPH
8 -10 MPH
6 - 8 MPH
4 - 6 MPH
2 - 4 MPH
1 - 2 MPH
Calm
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%