

## AIR, NOISE AND VIBRATION MONTHLY MONITORING REPORT Number 016 – November 2023

Prepared By: Gramercy Group Inc.

DDC. Project ID:		BBJ M DSS		Period Start: 11/01/23 End 11/30/23			
Project Name:		NYC Borough Based Jails System – Manhattan Dismantle and Swing Space					
DDC Pin No.:		8502021CR0004P-06P					
1) Community TWA – Time Weighte ug/m <sup>3</sup> - micrograms p	1) Community Air Monitoring Monthly Status Summary TWA – Time Weighted Average ug/m <sup>3</sup> - micrograms per cubic meter						
Number of Workdays in a Month	N	umber of Air Monitoring Days in a Month	Number of Days v Concentrations Action Concentra Month (100 ug/m <sup>3</sup> 15 minu	vith Dust above itions by ite TWA)	Comments		
21	30		0		There were zero days with dust concentration above action concentrations for the month of November. Air monitoring was continued throughout every day of the month even on weekends when no work was being performed. No construction-related exceedances were noted.		
Community Air I Action Concentration Stop Work Concentra	Community Air Monitoring Excursions and Corrective Actions Action Concentration =100 ug/m <sup>3</sup> 15 minute TWA above background concentration Stop Work Concentration = 150 ug/m <sup>3</sup> 15 minute TWA above background concentration						
Date: Time	N B	laximum Dust Reading efore Corrective Action 15 Minute TWA (ug/m <sup>3</sup> )	Maximum Dust F After Corrective 15 Minute T (ug/m <sup>3</sup> )	Reading Action WA	Corrective Action		
N/A	N/A		N/A		N/A		



Narrative Summary of Air Monitoring, Excursions and Corrective Actions:

In November 2023, construction-related levels of Particulate Matter (PM) PM10 did not surpass Daily Permissible Exposure Limits (PEL) as set by federal standards for the 24-hour Time Weighted Average (TWA), or daily value, and did not cause air quality concerns to the public or on-site workers. In the graphs below, you will see some gaps in the data at different instances for each of the monitors. This is because the batteries for the AQS monitors run on sunlight. The batteries may die over the weekend when there is no sunlight or anyone on site to change them. With that being said, we swap out the batteries as fast as possible to ensure proper monitoring coverage of the community around the job site. AQS #977, 975, 998, and 997 air monitor issues and needed to be replaced. You will see this in the graph below. Also please note that when a monitor is adjacent monitors are placed in locations that their coverage will cover the area of the monitor that is not recording for that time.

The contractor, Gramercy Group Inc, in conjunction with the contractor's environmental specialist, has successfully implemented mitigation techniques at Action Level as well as Permissible Exposure Limits (15-Minute TWA) to suppress construction activity effects on air quality throughout the project work-zone.

#### 2) Community Noise Monitoring Monthly Summary Weighted decibels (dBA) level

Number of Workdays in a Month	Number of Noise Monitoring Days in a Month		Number of Days with Noise Levels above Action Levels by Month (dBA)		Comments	
21 3	30		8		Noise monitoring for the month of November had 8 instances where we had readings greater than the threshold. Below you will see explanations for all the alerts. Monitoring was continued everyday throughout the week, and even on weekends.	
Community Noise Monitoring Excursions and Corrective Actions Action Level = 80 dBA Stop Work Level = 90 dBA						
Date: Time		Maximum Noise Reading before Corrective Action (dBA)		Maximum Noise Reading after Corrective Action (dBA)	Corrective Action	
AQS #975: 11/7/23 @ 11:	:30 AM	107.3 dBA		69.8 dBA	No corrective action was feasible as we went to investigate, and this was caused by the DOC bus sirens when entering the sallyport area where the monitor is located.	
AQS #975: 11/10/23 @ 2:	:30 PM	92.1 dBA		69.2 dBA	No corrective action was feasible as we went to investigate, and this was caused by the	



			NYPD sallyport entrance.
AQS #998: 11/21/23 @ 9:41 AM	93.1 dBA	72.2 dBA	Upon alert we immediately investigated the cause of the exceedance. This was due to us sorting debris in our yard near Baxter Street directly where this monitor is located. We spoke to our operator and told him to be more cautious when sorting the debris. The noise level was then within the threshold.
AQS #998: 11/21/23 @ 10:22 PM	92.8 dBA	74.5 dBA	No corrective action was feasible at this time as tis alert happened after hours while no work was being performed.
AQS #998: 11/22/23 @ 1:41 PM	90.1 dBA	76 dBA	Upon alert we immediately investigated the cause of the exceedance. This was due to us sorting debris in our yard near Baxter Street directly where this monitor is located. Even though the exceedance was very minor, we take this seriously and remediated the issue immediately.
AQS #997: 11/10/23 @ 3:30 PM	94.24 dBA	69.7 dBA	No corrective action was feasible as we went to investigate, this was caused by vehicle horns where there was traffic build up on the corner of Baxter and Walker Street.

Narrative Summary of Noise Monitoring, Excursions and Corrective Actions:

During the month of November 2023, we experienced noise levels greater than the alert threshold at times. Above you will see the monitors that had alerted us with dates and times. As you can see from the corrective action explanations, most of the alerts were not caused by construction activity. AQS #975 is located on Centre Street right near the traffic light / DOC sallyport where the DOC buses use their sirens to signal that they are outside the gate. Depending on how close they are to the monitor this siren will set it off and cause an alert. The graph for AQS #975 shows a flat line from the dates 11/15/23 – 11/28/23 and a gap in the data for air quality. This is because we had to relocate the unit due to construction fence reconfigurations. The monitor was back up and running as soon as we were able to have it reinstalled. With that being said, the other monitors serve as coverage and this monitor specifically is not located near the dismantlement. AQS #998 experiences noise levels above threshold 4 times. Two of which were not caused by construction activity see explanations above. AQS #997 had one instance during the month of November where noise levels exceeded threshold. After investigation this alert was not caused by construction activity see explanation above. You will also see in the graph below for AQS #997 that there is a gap in the data for the same time frame as AQS #975. We also had to relocate this monitor and as soon as we reinstalled it. We had it back up and running. As stated previously for AQS #975, the adjacent monitors serve as back up coverage. Overall, the noise levels for an A-weighted average 8-hour workday were below the threshold.

#### 3) Community Vibration Monitoring Monthly Summary Inches per second (in/sec)

Number of Workdays in a Month	Number of Vibration Monitoring Days in a Month	Number of Days with Vibration Levels above Action Levels by Month (in/sec)	Comments
21	30	1	During the month of November, we experienced reading that exceeded vibration level thresholds on unit R15. This was investigated immediately see explanation below.



#### **Community Vibration Monitoring Excursions and Corrective Actions**

Action Level = 0.5 in/sec Stop Work Level = 1.0 in/sec

Stop work Level = 1.0 in/sec			
Date: Time	Maximum Vibration Level before Corrective Action (in/sec)	Maximum Vibration Level after Corrective Action (in/sec)	Corrective Action
R15: 11/28/23 @ 3:54 PM	13.752 in/sec	0.018 in/sec	This monitor is located at 111 Center Street. The monitor is taped off but someone accidentally bumped into it causing it to trigger an alert. Unrelated to construction activities. No corrective action at this time. Monitoring was continued everyday of the week even on weekends.

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

During the Month of November 2023, there was 1 vibration monitor exceedances. When we got this alert, we investigated immediately. This exceedance was unrelated to construction activity. Below you will see a few days with gaps in the data for vibration monitors R01, R02, R03, R05, R07, & R12. This happens when batteries die, or the unit loses connection. When this happens, we have act Vibranalysis as quickly as possible to get these back up and running. Even though there is missing for data couple of days, the monitors are places in areas that even when they are down, the adjacent monitor covers that area as a back up to ensure we are within our limits.

#### ATTACHMENTS:

- 1 Include one map of monitoring station/locations
- 2 Include Data Plots
- 3 Include Baseline Reference
- 4 Glossary Terms



AECOM-Hill JV

# Map of Monitoring Locations:

Vibration Monitors R01 - R16

Air Quality System (AQS) # 933, 997, 975, 977, & 998.

# **Environmental Monitoring Manhattan**



\* Dismantle project vibration, air and noise monitoring devices are installed by Design-Build team in Phase 2, after sally port construction. A vibration monitoring station was installed in the DCTV Fire house at 87 Lafayette St.

\* The location of monitoring stations presented is referential. Air/Noise Monitoring station located in Sally Port area will be relocated in Phase 2.





#### Vibration Monitor – (R01) November 23:



### Vibration Monitor – (R02) November 23:





#### Vibration Monitor – (R03) November 23:



# Vibration Monitor – (R04) November 23:

vibr62/BBJ Dismantle/Vibration/R04-UM14718(96 Baxter St-Basement Maintenan(小文で)(逆)(24hr Chart





#### Vibration Monitor – (R05) November 23:



### Vibration Monitor – (R06) November 23:





# Vibration Monitor – (R07) November 23:



#### Vibration Monitor – (R08) November 23:

к, vibr62/BBJ Dismantle/Vibration/R08-UM8801 (137 Centre St-Basement Boiler Y - 17 Ξ Wall)/24hr Chat UM8801-PPV L1 UM8801-PPV T1 UM8801-PPV V1 UM8801-PVS1 Stop Work Limit Deak Particle Velocity (s) (i) (i) Warning Limit 0 8. Nov 10. 12 14. 16. 18. 20 22 24. 26. 28. 30 2. Nov 4. Nov 6. Nov • ш ۲



# Vibration Monitor – (R09) November 23:



# Vibration Monitor – (R10) November 23:

vibr62/BBJ Dismantle/Vibration/R10-UM8967 (91 Baxter St-Basement Sprinkler Cor Arguing 10/24 hr Chat





# Vibration Monitor – (R11) November 23:



# Vibration Monitor – (R12) November 23:





AECOM-Hill JV

### Vibration Monitor – (R13) November 23:



# Vibration Monitor – (R14) November 23:

vibr62/BBJ Dismantle/Vibration/R14-UM8740 (125 White St- NYC Family Court- N 孙 🏹 🗒 🖃 East-CJA Intake)/24hr Chat





#### Vibration Monitor – (R15) November 23:



# Vibration Monitor – (R16) November 23:





# Air Quality Systems #975 – Dust Monitoring Station – November 23:



# Air Quality Systems #975 – Noise Monitoring Station – November 23:





# <u>Air Quality Systems #977 – Dust Monitoring Station – November 23:</u>



# Air Quality Systems #977 – Noise Monitoring Station – November 23:





#### Air Quality Systems #993 – Dust Monitoring Station – November 23:



#### Air Quality Systems #993 – Noise Monitoring Station – November 23:





# Air Quality Systems #998 – Dust Monitoring Station – November 23:



#### Air Quality Systems #998 – Noise Monitoring Station – November 23:





#### Air Quality Systems #997 – Dust Monitoring Station – November 23:



# Air Quality Systems #997 – Noise Monitoring Station – November 23:

