



## AIR, NOISE AND VIBRATION MONTHLY MONITORING REPORT Number 012

Prepared By: Gramercy Group Inc.

DDC. Project ID:		BBJ M DSS		Period Start: 7/01/23 End 7/31/23	
Project Name:		NYC Borough Based Jails System – Manhattan Dismantle and Swing Space			
DDC Pin No.:		8502021CR0004P-06P			
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	above itions by	Comments
22	31		3		There were 3 alerts for the Month of July. One of which was caused by grinding steel that was next to the AQS unit in the sallyport. The other two were outside of working hours. Air monitoring was continued throughout every day of the month even on weekends when no work was being performed. No other construction-related exceedances were noted.
Community Air Monitoring Excursions and Corrective Actions   Action Concentration = 100 ug/m³ 15 minute TWA above background concentration   Stop Work Concentration = 150 ug/m³ 15 minute TWA above background concentration   Maximum Dust Reading   Before Corrective Action   After Corrective Action					
Date: Time		15 Minute TWA (ug/m³)	15 Minute T (ug/m³)	WA	Corrective Action
7/24/23 @ 2:45 PM	201.0		48.104		We put up a welding blanket to redirect / block the dust/smoke that was being thrown directly at the unit. After we better protected the area, the air quality was not an issue, and no dust was leaving the site.



Narrative Summary of Air Monitoring, Excursions and Corrective Actions:

*In July 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. Although data shows us having 3 days with levels above the alert threshold, 2 of these were not caused by any construction activity as these alerts happened after hours. The one alert caused by us was immediately acted on and remediated to ensure no issues to the public or our crew. You can also see from the data that we experienced technical difficulties with three out of the five monitors for the month of July. AQS 973, and 977 had to have parts switched out during this month. The monitors were on and running but not storing data. Since then, we have replaced components within the monitors and this issue has been resolved. We also relocated 998 from the inside of our site to the sidewalk of Baxter Street to get more accurate data and noise level readings for the residents for the month of August.

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
22	31	20	Noise monitoring for the month of July had 20 days that had readings greater than the threshold. AQS #998, located within our site positioned on Baxter Street. This monitor was able to determine that the baseline noise for this street is well above the threshold naturally without any construction activity. This is noise exceeding limits at times when there are zero construction activities being performed. It seems that the monitor is placed in a location along Baxter Street where there is an abundance of noise created from community activity as stated with traffic, horns, and sirens. We are still taking every alarm we get from AQS #998 seriously and investigate the cause and make sure it was not due to our construction procedures and operations. Vibranalysis has picked this unit up and it is no longer inside our site. We have installed a new one across the street on Baxter Street. This unit will give better accuracy to the noise the public is experiencing and will be incorporated in the next months report.



08/01/2023

Date: Time	Maximum Noise Reading before Corrective Action (dBA)	Maximum Noise Reading after Corrective Action (dBA)	Corrective Action
7/01/23 @ 3:41 PM – 7/14/23 @ 12:01 PM	110dBA	74.6dBA	No corrective action feasible as this noise is unrelated to construction activity.
7/28/23 @ 4:37 PM	114.6dBA	82.9dBA	No corrective action feasible as this noise is unrelated to construction activity. (after working hours)
7/21/21 to 7/26/23	N/A	N/A	Elevated reading due to technical issues with AQS 993 and AQS 977. No corrective actions.
Narrative Summary of No	ise Monitoring, Excursions a	nd Corrective Actions	:

Baxter Street. Unfortunately, this area has a ton of traffic throughout the day including police sirens and horns from cars. It was found that the alerts were from sirens from emergency service vehicles. As stated, every time we got an alert for this monitor, we made sure to go investigate and confirmed that the alarm was not set off by any of our ongoing construction activities. Currently, the monitor has been removed from the site and the new one on Baxter Street will be incorporated in next month's report with accurate levels of noise that the community will be experiencing. AQS 993 experienced technical issues on July 20<sup>th</sup>. You can see this in the data below where the graph has an increasing slope for a number of days. After the part came in to fix the monitor, Vibranalysis serviced the unit and had it back up and running showing accurate data.

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
22	31		All Vibration alerts were from R14 located in the CJA intake area. This is the monitor that gets knocked / bumped into by either officer or inmates during their processing procedures. We took every alert seriously and made sure it was not caused by our operations. We are in the process of relocating this monitor to a place in that area that will be more out of their way so we can stop having these false alarms.



AECOM-Hill JV 08/01/2023

#### **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
7/05/23 @ 11:55 AM	1.075 in/sec	0.008 in/sec	Unrelated to construction activities. No corrective action at this time.
7/11/23 @ 11:38 AM	5.229 in/sec	0.007 in/sec	Unrelated to construction activities. No corrective action at this time.
7/12/23 @ 11:32 AM	1.937 in/sec	0.005 in/sec	Unrelated to construction activities. No corrective action at this time.
7/20/23 @ 12:52 AM	1.042 in/sec	0.012 in/sec	Unrelated to construction activities. No corrective action at this time.
7/22/23 @ 10:20 AM	1.495 in/sec	0.011 in/sec	Unrelated to construction activities. No corrective action at this time.
7/26/23 @ 8:09 AM	7.328 in/sec	0.003 in/sec	Unrelated to construction activities. No corrective action at this time.

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

During the Month of July 2023, there were 6 vibration monitor exceedances. When we got these alerts, they were investigated immediately. I also want to reiterate that Vibration Monitor R14 located in the CJA Intake area that goes off multiple times every month due to all the foot traffic in this space and people physically hitting into the monitor. We still investigate this every time it happens, and we continue to remind the personnel in this area to be mindful of the monitor. None of the exceedances from R14 are related to construction activity. We also had 5 monitors that experienced technical issues. R01, R02, R03, R05, & R07. All these monitors also had connection issues and since then have been remediated. They have all been serviced and ae being checked up on twice a week from Vibranalysis and are now showing real-time data.

## ATTACHMENTS:

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

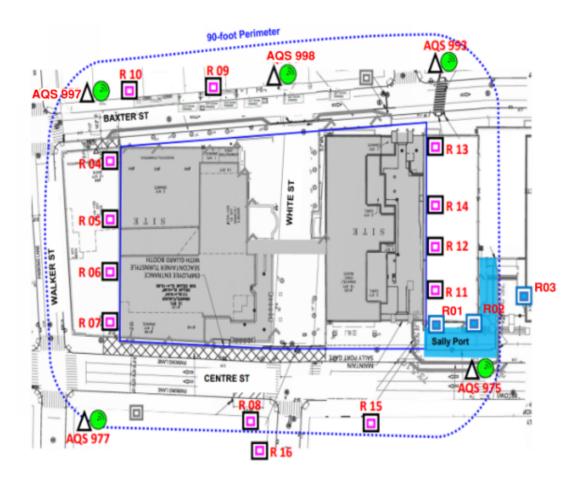




Map of Monitoring Locations:

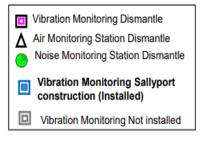
Vibration Monitors R01 – R16 Air Quality System (AQS) # 933, 973/997, 975, 977, & 998.

# **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.

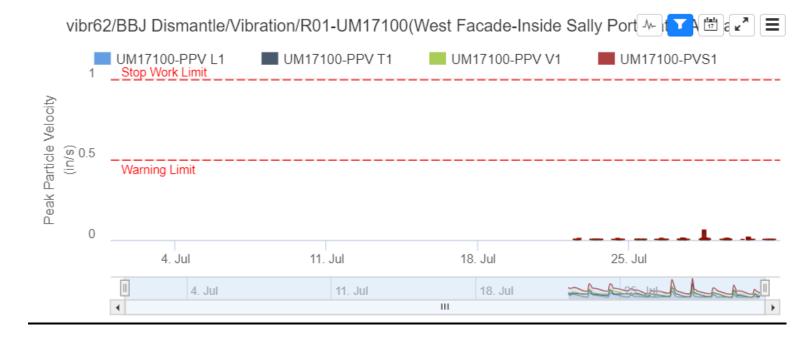
\* The location of monitoring stations presented is referential. Air/Noise Monitoring station located in Sally Port area will be relocated in Phase 2.



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## Vibration Monitor – (R01) July 23:



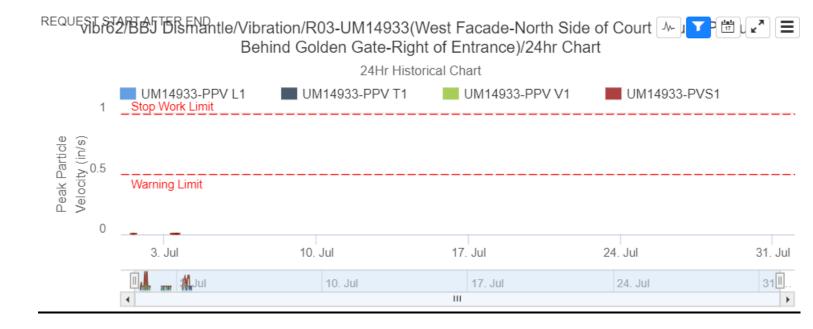
## Vibration Monitor – (R02) July 23:

REQUEST6278BJ Dismantle/Vibration/R02-UM9231(West Facade-North Side of Cour April 2010) Environmental Court and Cour

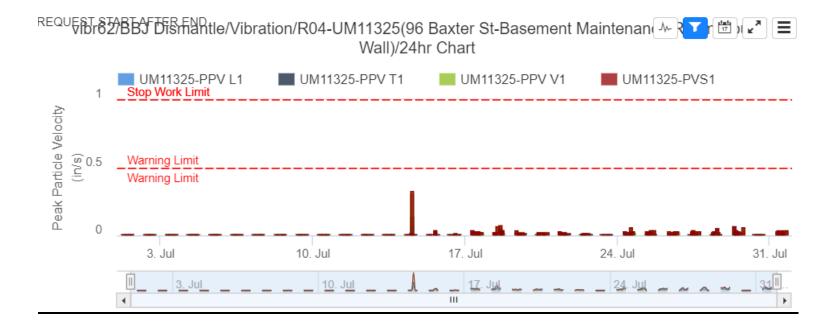




## Vibration Monitor – (R03) July 23:

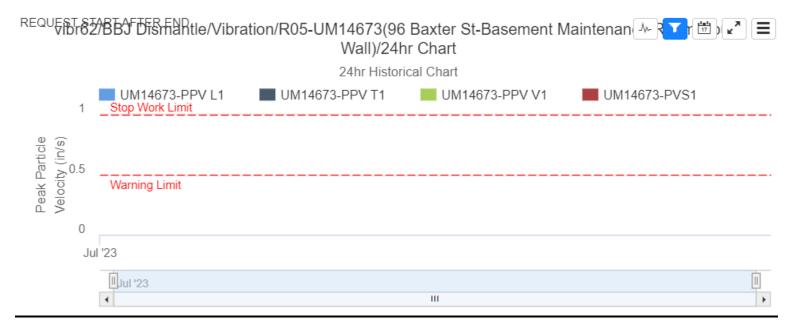


## Vibration Monitor – (R04) July 23:

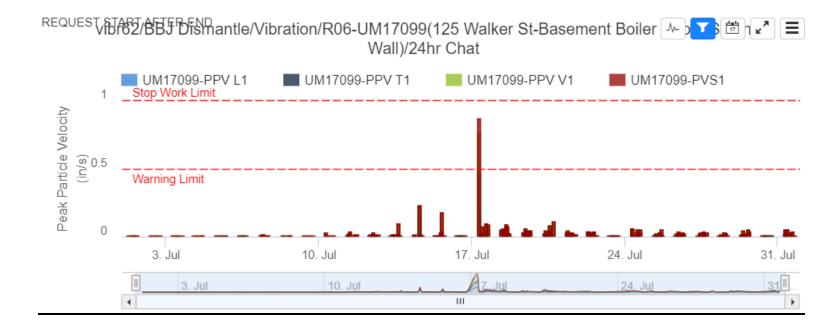




## Vibration Monitor – (R05) July 23:

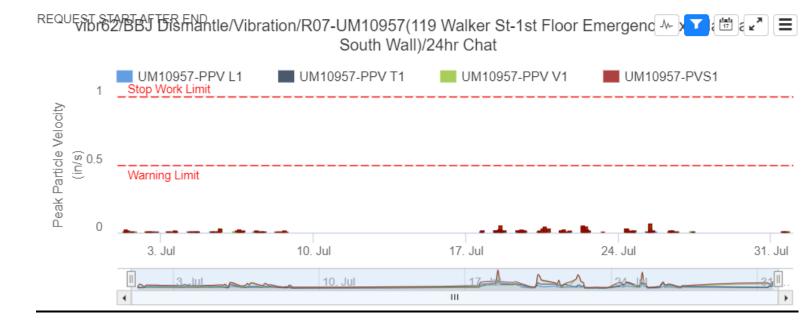


## Vibration Monitor – (R06) July 23:





# Vibration Monitor – (R07) July 23:

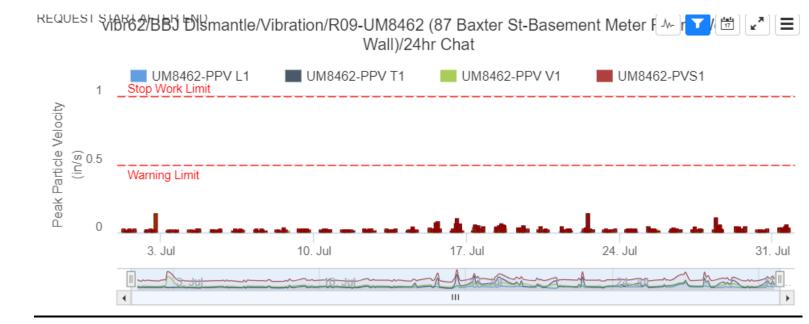


## Vibration Monitor – (R08) July 23:

Ξ Wall)/24hr Chat UM8801-PPV L1 UM8801-PPV T1 UM8801-PPV V1 UM8801-PVS1 Stop Work Limit 1 Peak Particle Velocity (s) (i) (i) Warning Limit 0 10. Jul 24. Jul 3. Jul 17. Jul 31. Jul 17 Ju 24 Jul 4 ш ۲

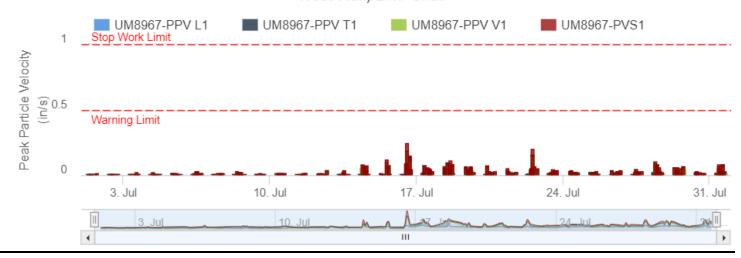


#### Vibration Monitor – (R09) July 23:



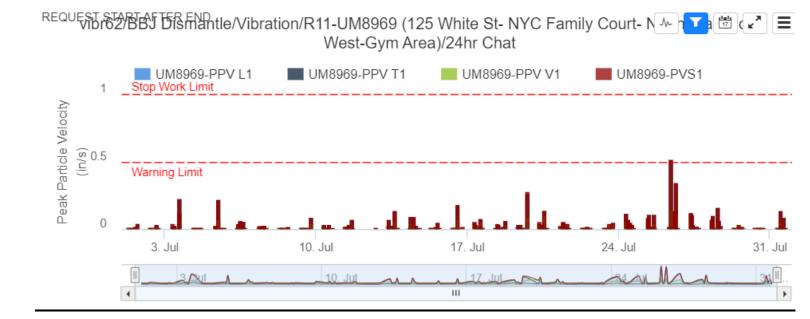
## Vibration Monitor – (R10) July 23:

REQUEST STATE BET Dismantle/Vibration/R10-UM8967 (91 Baxter St-Basement Sprinkler (....trf 🗒 🛃 = West Wall)/24hr Chat



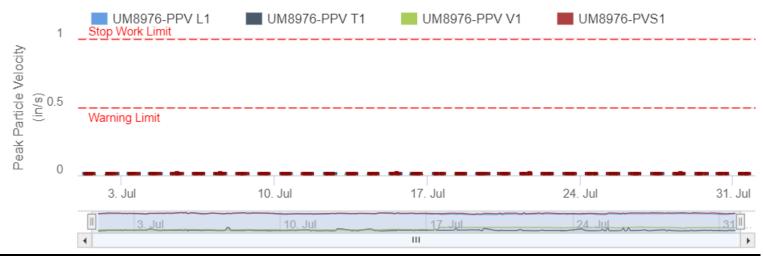


## Vibration Monitor – (R11) July 23:



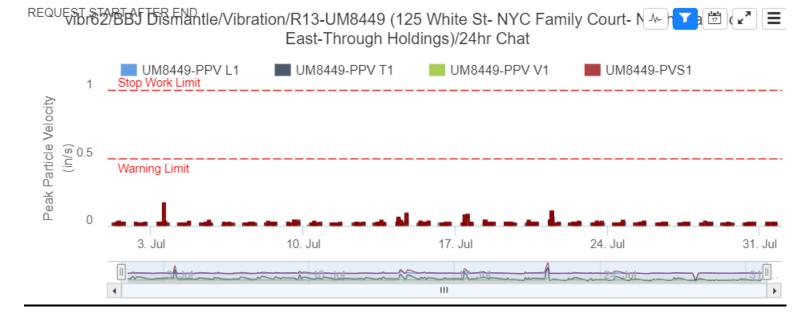
## Vibration Monitor – (R12) July 23:

REQUENTSTAREAFTER END Dismantle/Vibration/R12-UM8976 (125 White St- NYC Family Court- N( Model 12) ( 2010) ( 2

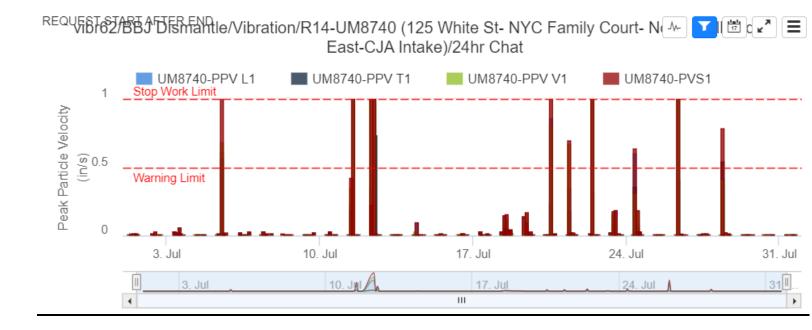




#### Vibration Monitor – (R13) July 23:

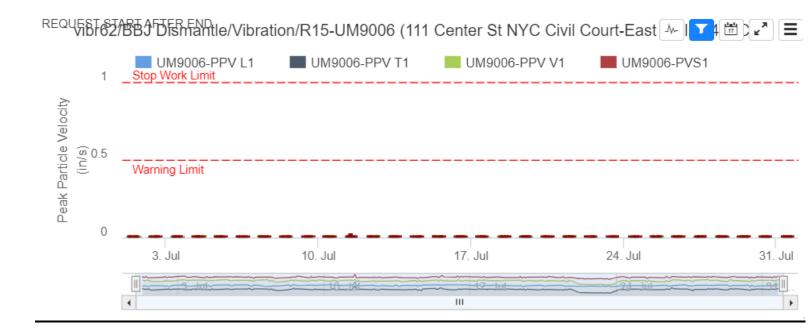


# Vibration Monitor – (R14) July 23:

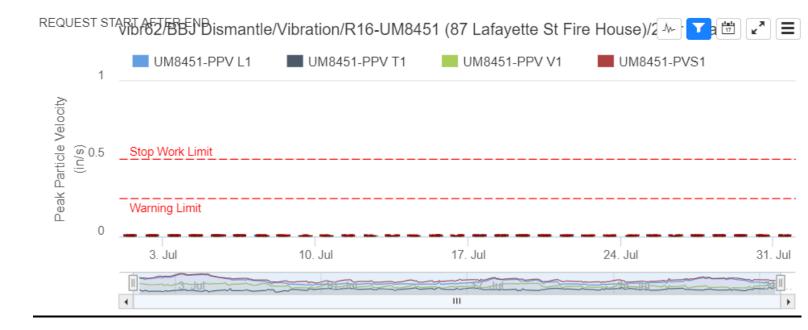




#### Vibration Monitor – (R15) July 23:

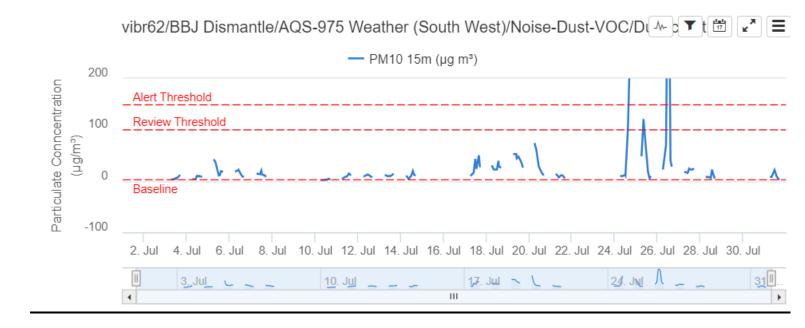


# Vibration Monitor – (R16) July 23:

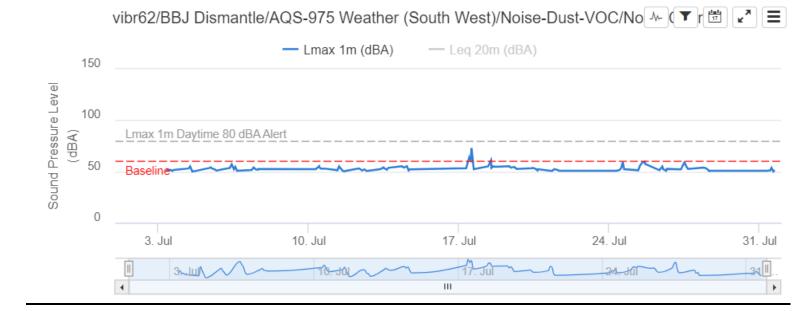




#### Air Quality Systems #975 – Dust Monitoring Station – July 23:

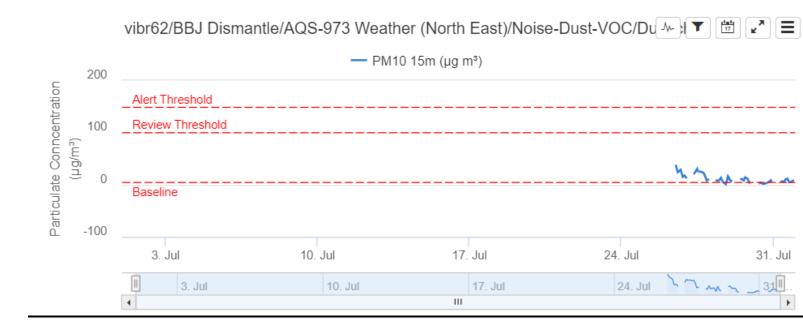


## Air Quality Systems #975 – Noise Monitoring Station – July 23:

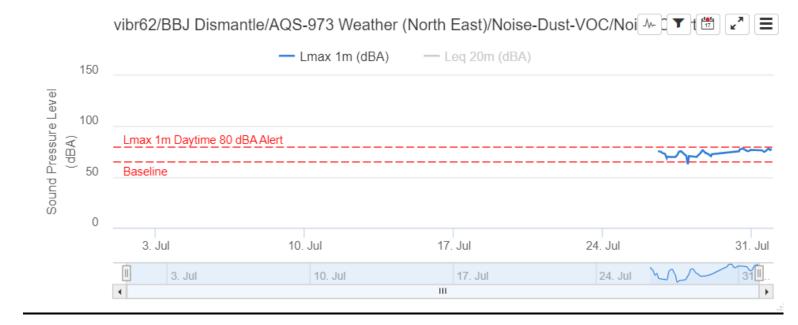




#### Air Quality Systems #973 – Dust Monitoring Station – July 23:

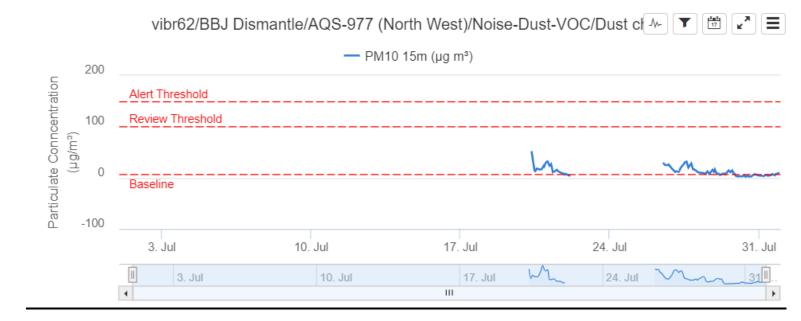


## Air Quality Systems #973 – Noise Monitoring Station – July 23:

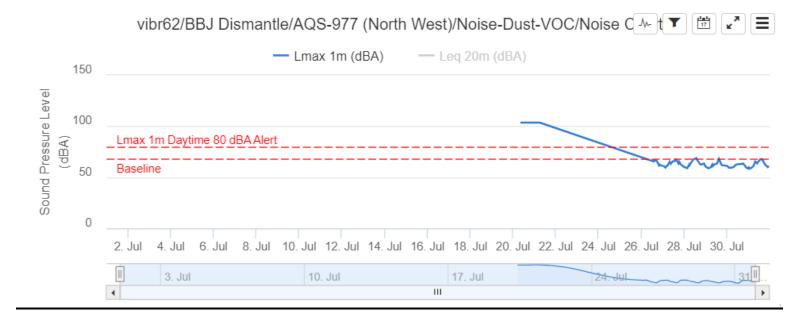




## Air Quality Systems #977 – Dust Monitoring Station – July 23:

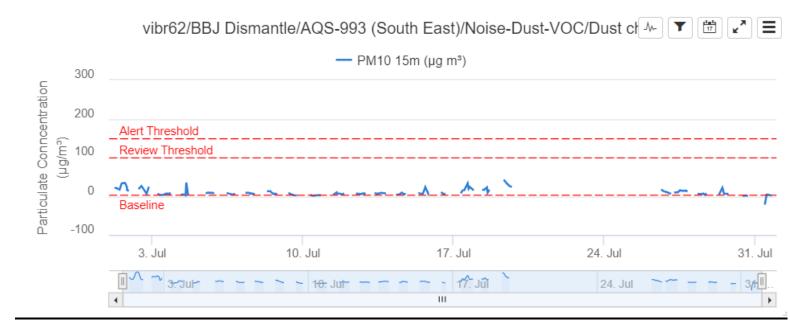


## Air Quality Systems #977 – Noise Monitoring Station – July 23:

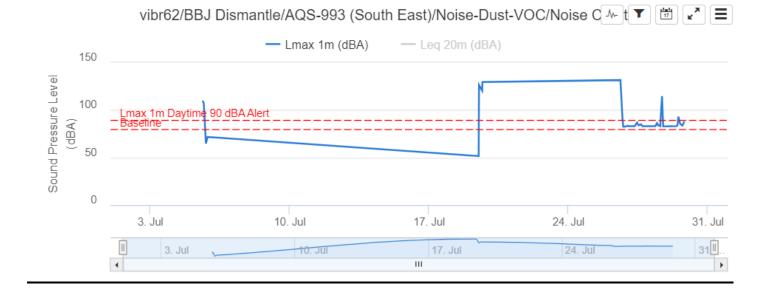




## Air Quality Systems #993 – Dust Monitoring Station – July 23:

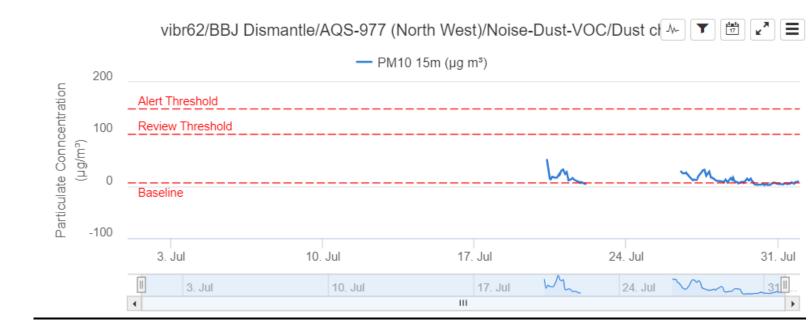


## Air Quality Systems #993 – Noise Monitoring Station – July 23:





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



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

