

**AIR, NOISE AND VIBRATION  
MONTHLY MONITORING REPORT  
Number 007**

Prepared By:  
Gramercy  
Group Inc.

<b>DDC. Project ID:</b>	BBJ M DSS	<b>Period Start:</b> 2/01/23 <b>End</b> 2/28/23
<b>Project Name:</b>	NYC Borough Based Jails System – Manhattan Dismantle and Swing Space	
<b>DDC Pin No.:</b>	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	Number of Air Monitoring Days in a Month	Number of Days with Dust Concentrations above Action Concentrations by Month (100 ug/m <sup>3</sup> 15 minute TWA)	Comments
20	28	0	Air monitoring was continued throughout everyday of the month even on weekends when no work was being performed. No exceedances were noted.

**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	Maximum Dust Reading Before Corrective Action 15 Minute TWA (ug/m <sup>3</sup> )	Maximum Dust Reading After Corrective Action 15 Minute TWA (ug/m <sup>3</sup> )	Corrective Action
N/A	N/A	N/A	N/A

**Narrative Summary of Air Monitoring, Excursions and Corrective Actions:**

*In February 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.*

*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
20	28	4	Noise monitoring for the month of February had 4 days that had readings greater than the threshold. AQS #993 located on Baxter Street next to the existing Sally Port is the Monitor that experiences the high noise levels. It is noted that these high readings are not caused by construction activity, and they are from police sirens and horns from the heavy traffic in this area. We adjusted the limit for this monitor in this area to account for the community noise. The police sirens are coming in just slightly over the threshold as shown below in the graph. You will also notice that AQS #973 has a consistent increase in noise levels for several days. This was a malfunction, and the monitor required a new part and maintenance. Since then, no exceedances were recorded once the monitor was serviced. Noise monitoring was continued throughout every day of the month including weekends even when not working. No further exceedances were noted.

**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
2/8/23 @ 11:05 AM	98 dBA	75.8 dBA	No corrective action feasible as this noise is unrelated to construction activity.

2/16/23 @ 3:00 PM	99.5 dBA	80.5 dBA	No corrective action feasible as this noise is unrelated to construction activity.
2/23/23 @ 10:00 AM	95.3 dBA	76.4 dBA	No corrective action feasible as this noise is unrelated to construction activity.
2/25/23 @ 2:22 AM	93.8 dBA	72.3 dBA	No corrective action feasible as this noise is unrelated to construction activity.

**Narrative Summary of Noise Monitoring, Excursions and Corrective Actions:**

*During the month of February, we experienced some noise levels greater than the alert threshold AQS monitor #993. After investigation of the cause of these spikes in noise for this area it was noted that all three of these alerts were not caused by construction activity. This monitor is located directly next to the exiting sally port exit on 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. Monitor #973 experienced a malfunction due to a part in the machine needing to be replaced. Once the monitor was serviced, no noise exceedances were accruing. Noise Monitoring for the other 2 AQS monitors for the month of February 2023 did not reach warning levels and no alarms were triggered. All construction related activities for the month of February stayed below the warning limit of 80 dBA. No corrective actions needed to be taken as the noise levels did not exceed the limit.*

**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
20	28	1	Throughout the month of February there was 1 day where a vibration monitor was triggered. The monitor that had readings greater than the threshold limit was monitor R12. R12 recorded a vibration level that exceeded the threshold on February 28th. This was due to DCAS moving boxes into this area for storage. I went down to the monitor and saw firsthand a box on top of the monitor. I instructed them to move the box and made them aware of the monitor. DDC was notified about the alert immediately.

			Vibration monitoring was continued throughout every day of the week even on weekends when no work was being performed. No further exceedances were noted.
<b>Community Vibration Monitoring Excursions and Corrective Actions</b>			
Action Level = 0.5 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
2/28/23 @ 9:23 AM	3.205 (in/sec)	0.011 (in/sec)	Spoke with DCAS and made them aware of the monitor in the area and removed box from contacting the monitor.
<i>Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:</i>			
<p><i>During the Month of February 2023, there was 1 vibration warnings/exceedances. As stated in the monthly summary, this was a false alarm. DCAS workers accidentally set a box on R12 vibration monitor and DDC was notified of this. However, no alarm was triggered during or by any construction activity. The corrective action for the accidental contact with the monitor was sectioning off that area and having a "Warning Monitoring In Progress" sign by this monitor. All other monitors showed results of vibration being under the warning limit of 0.5 (in/sec), so there was no need for corrective action at this time.</i></p>			

**ATTACHMENTS:**

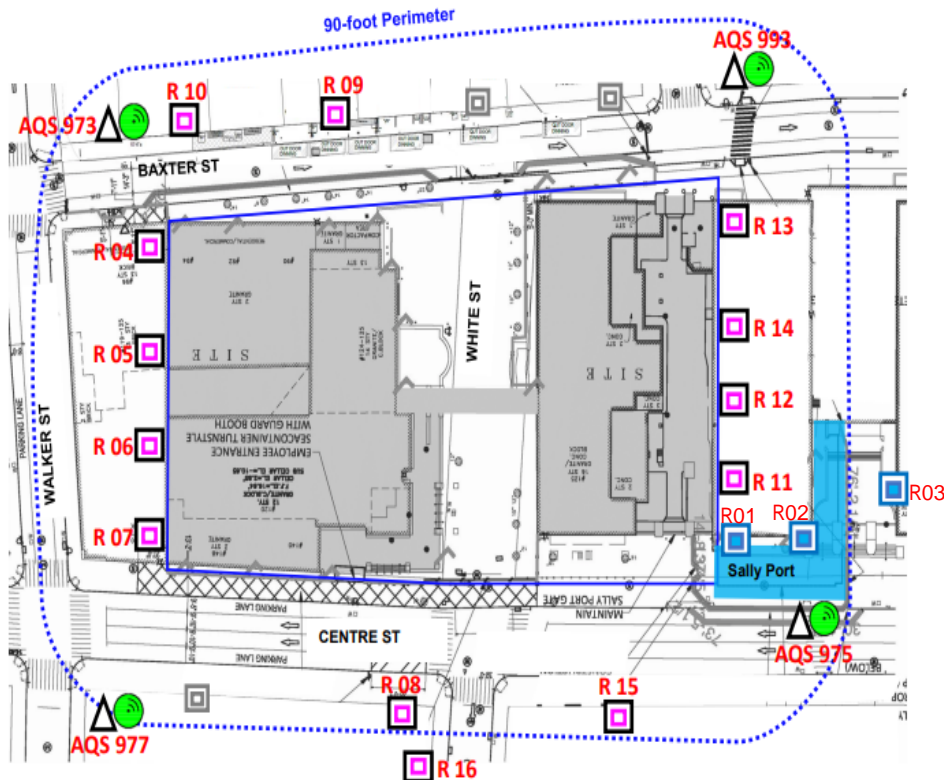
- 1 – Include one map of monitoring station/locations
- 2 – Include Data Plots
- 3 – Include Baseline Reference

## Map of Monitoring Locations:

Vibration Monitors R01 – R16

Air Quality System (AQS) # 933, 973, 975, & 977

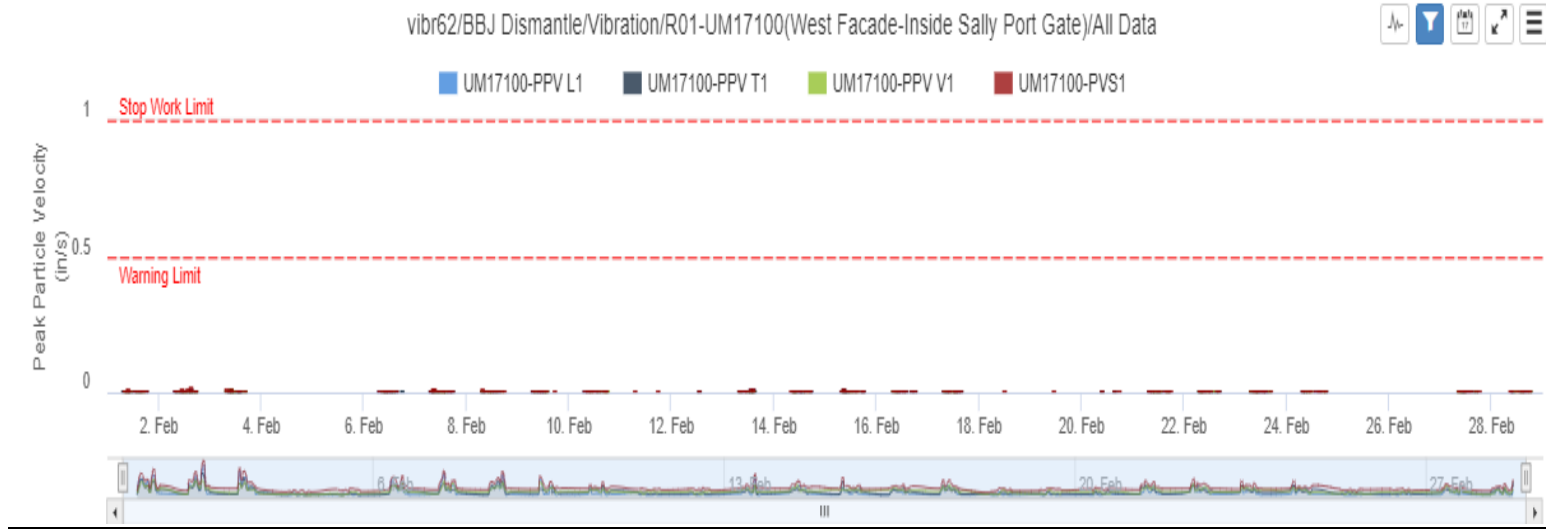
# Environmental Monitoring Manhattan



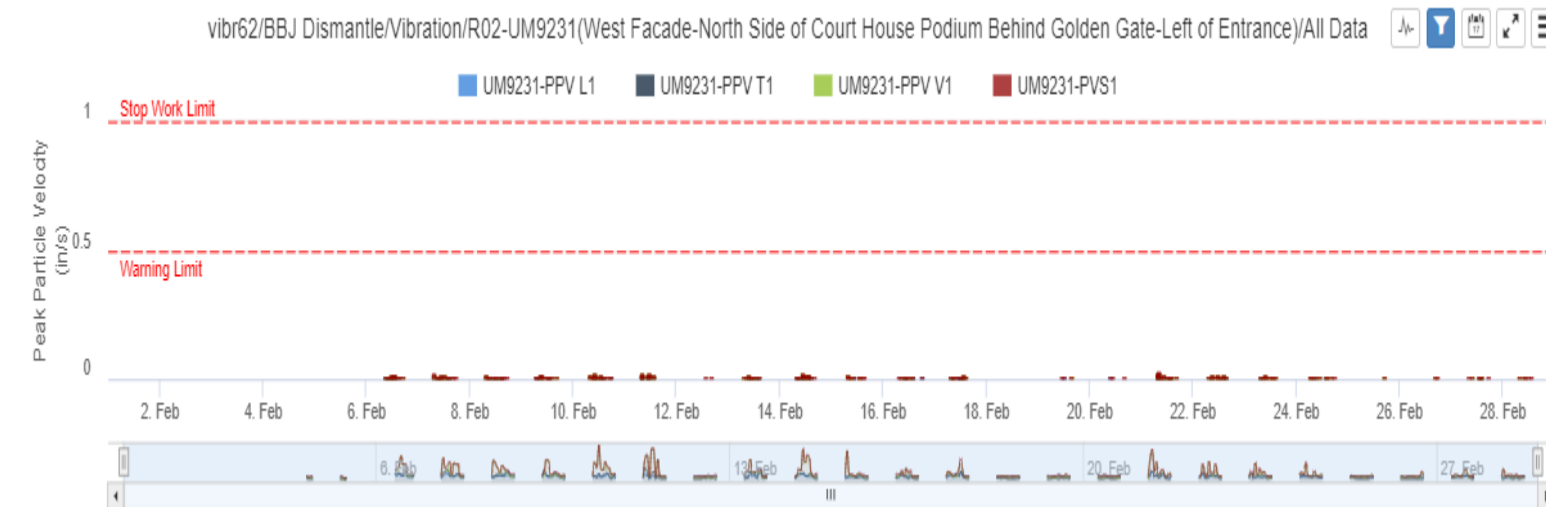
\* Dismantle project vibration, air and noise monitoring devices are installed by Design-Build team in Phase 2, after sally port construction. A vibration monitoring station was installed in the DCTV Fire house at 87 Lafayette St.

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

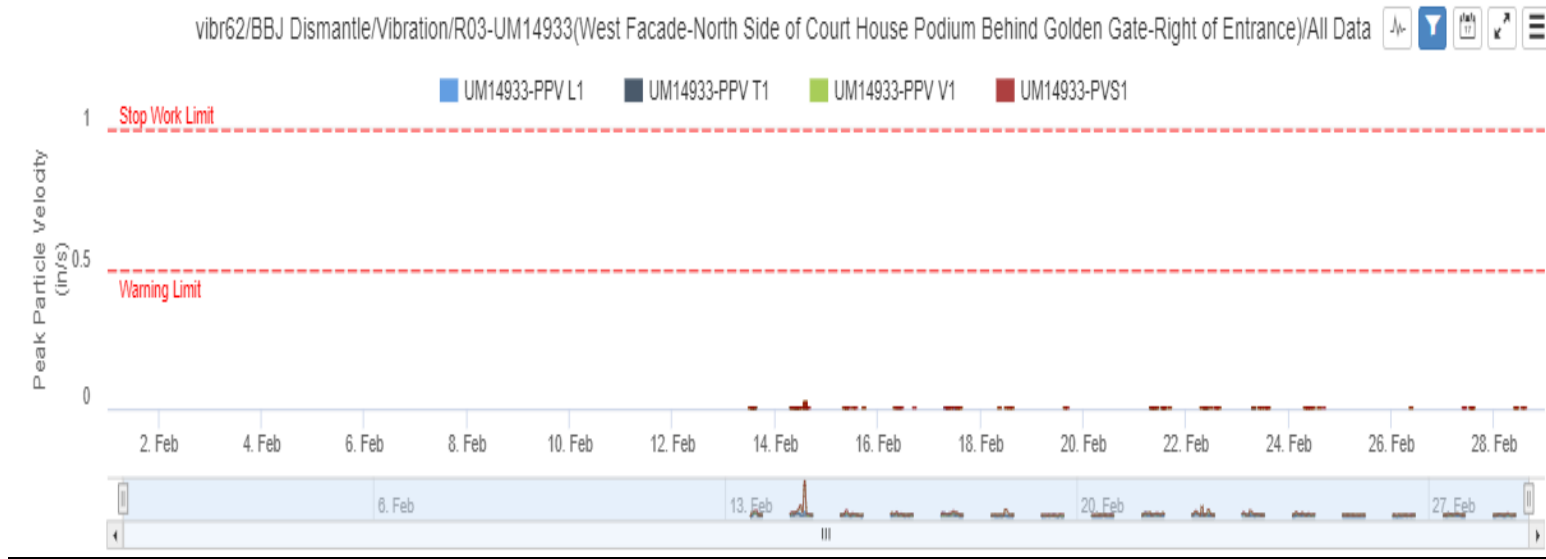
**Vibration Monitor – (R01) February 23:**



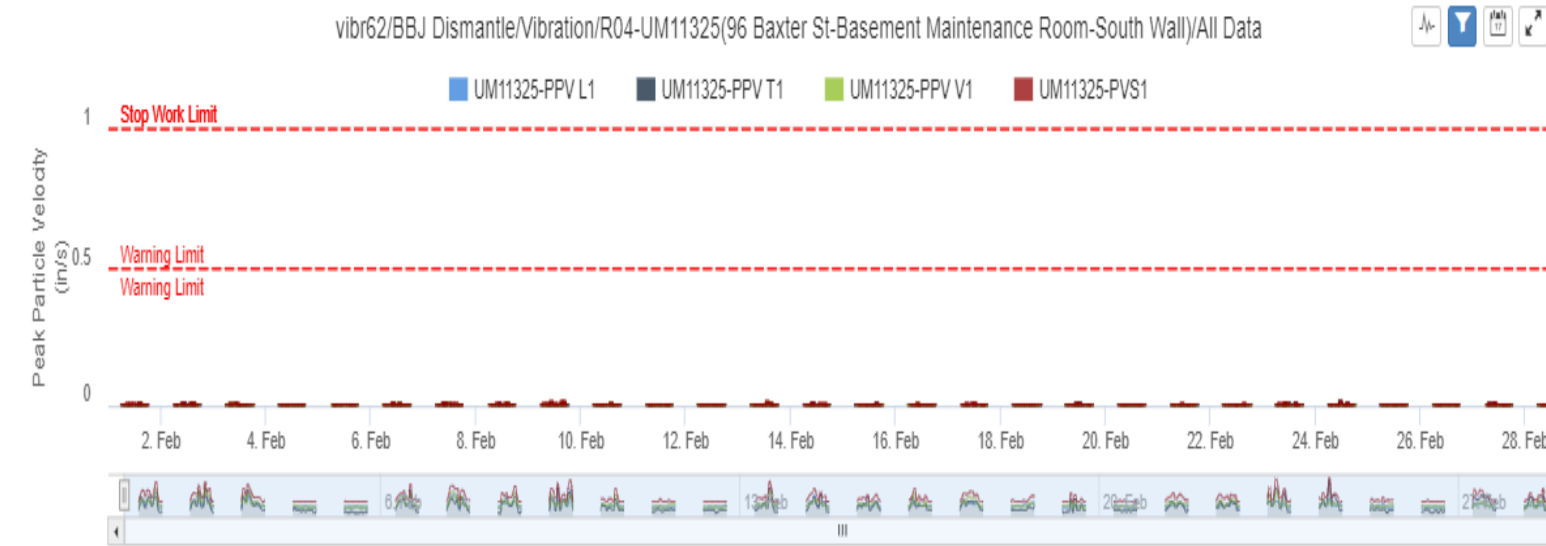
**Vibration Monitor – (R02) February 23:**



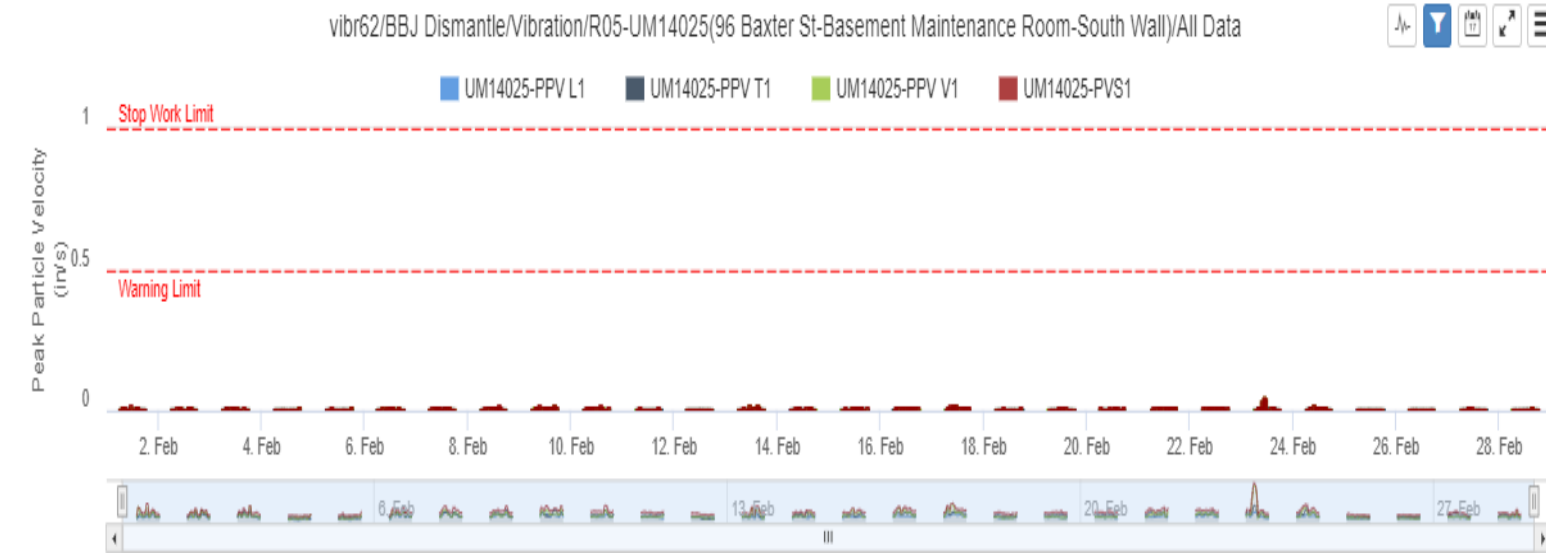
**Vibration Monitor – (R03) February 23:**



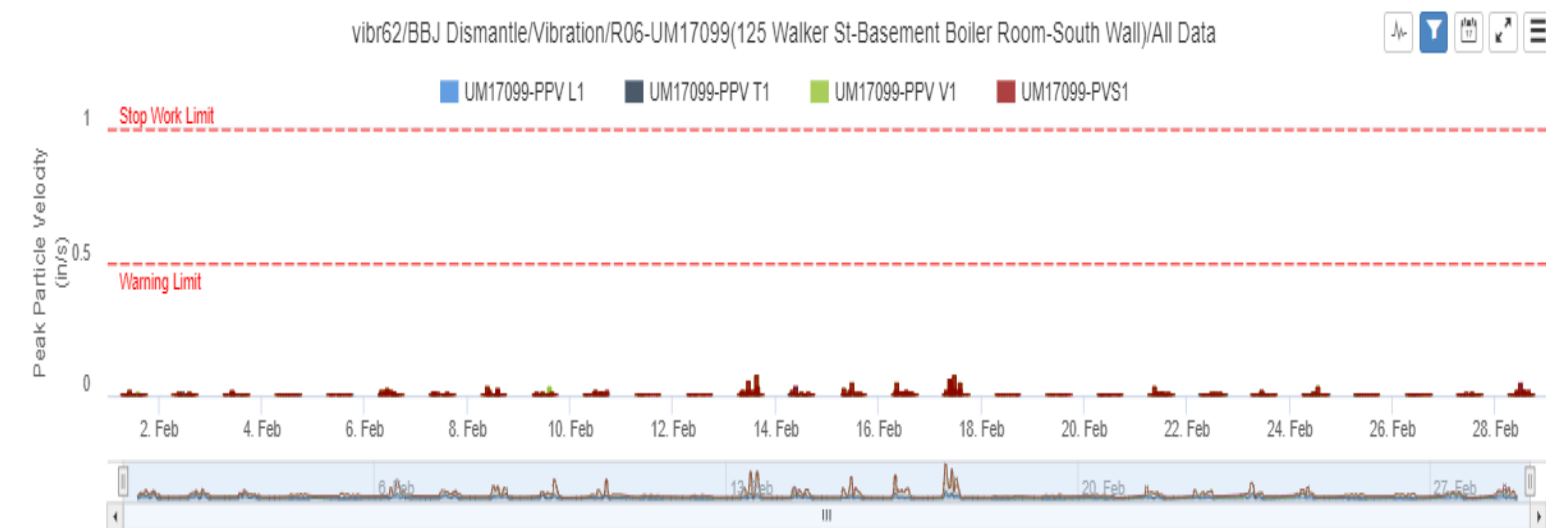
**Vibration Monitor – (R04) February 23:**



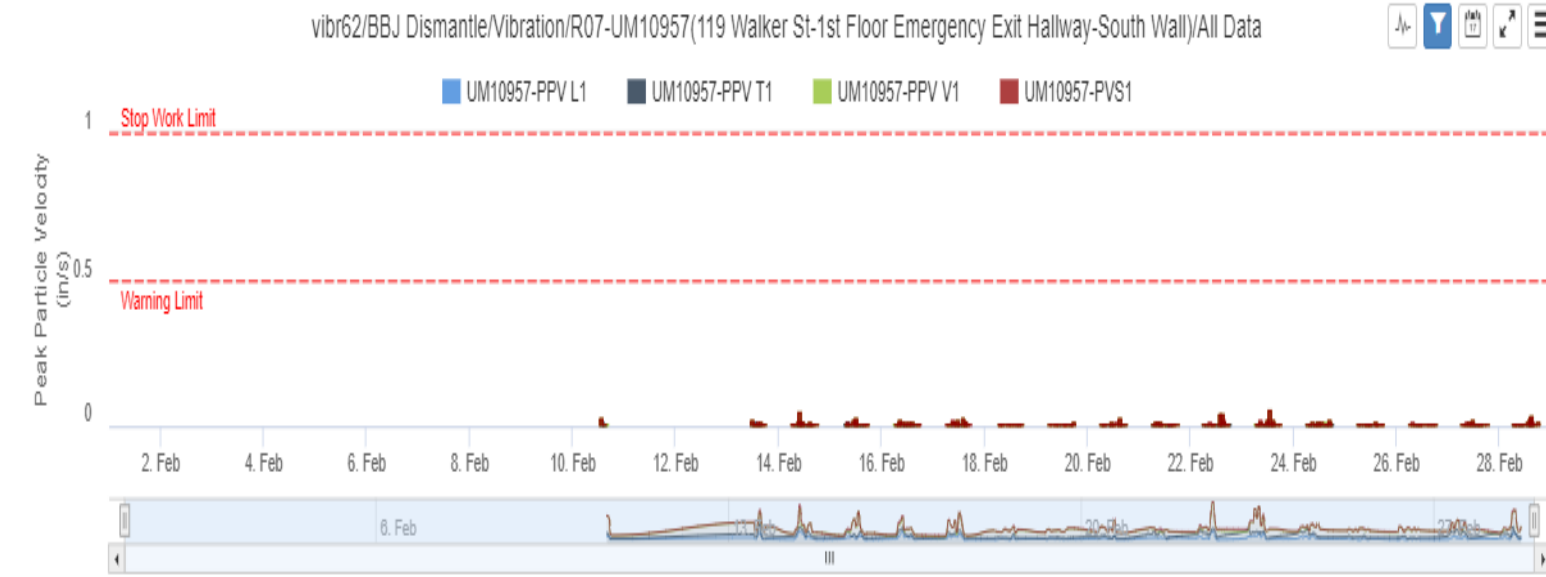
**Vibration Monitor – (R05) February 23:**



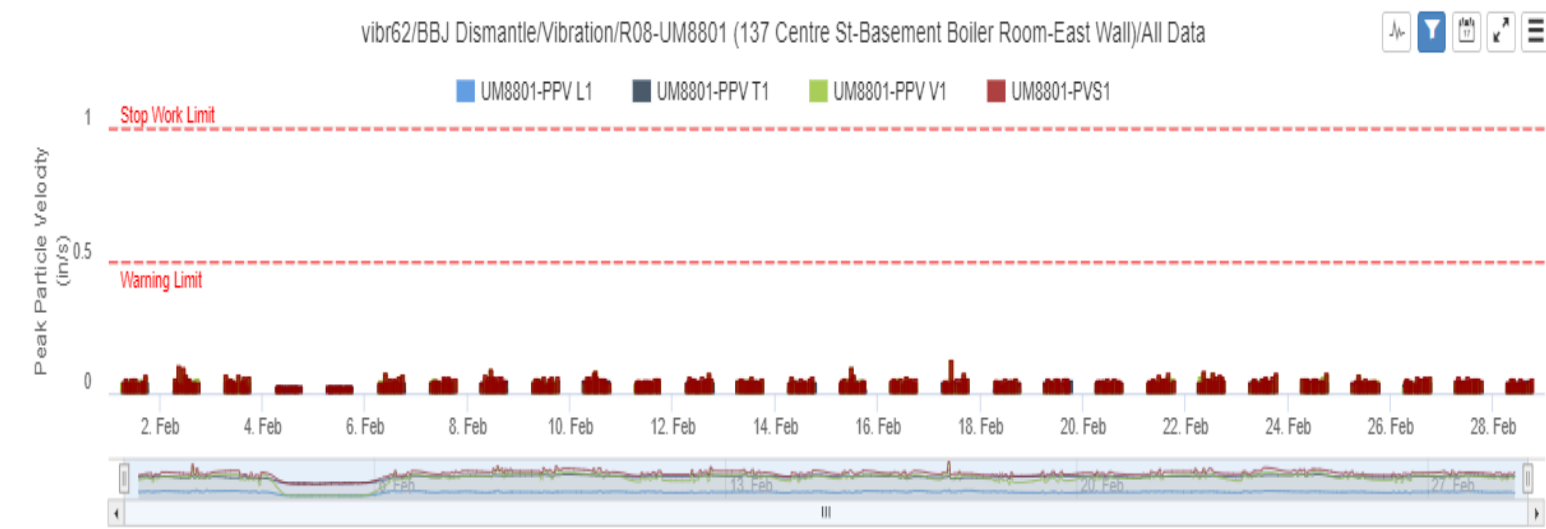
**Vibration Monitor – (R06) February 23:**



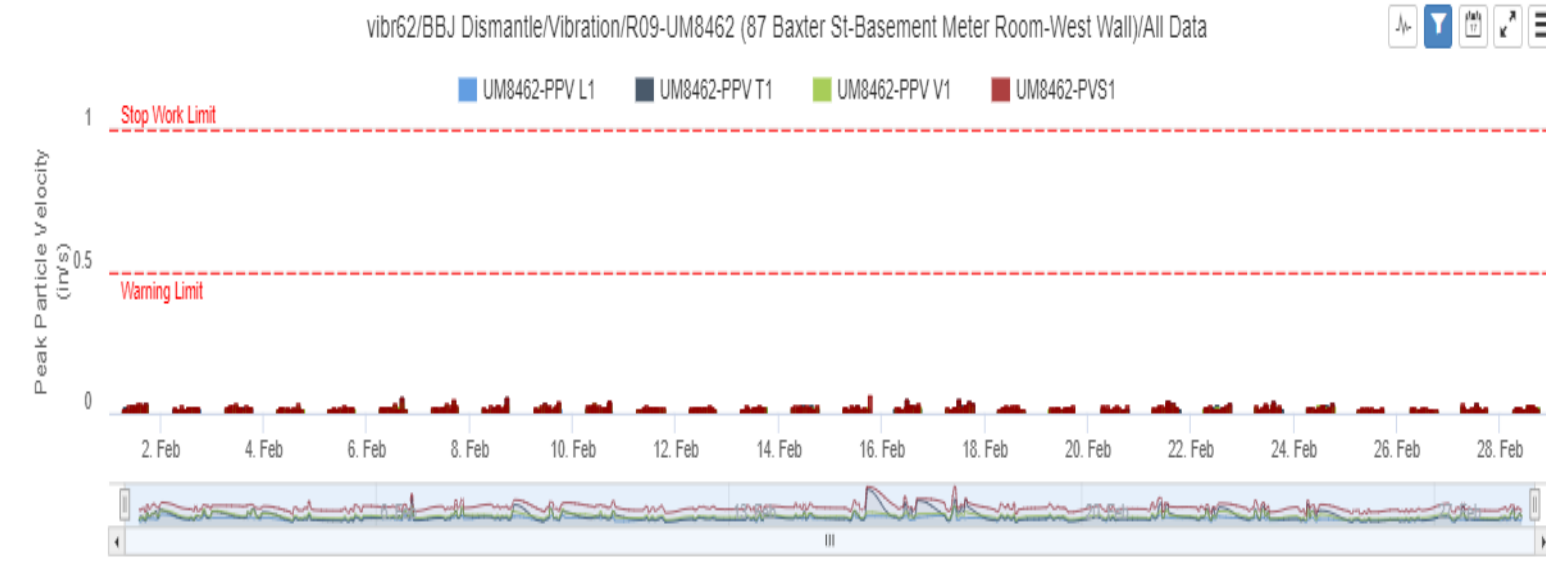
**Vibration Monitor – (R07) February 23:**



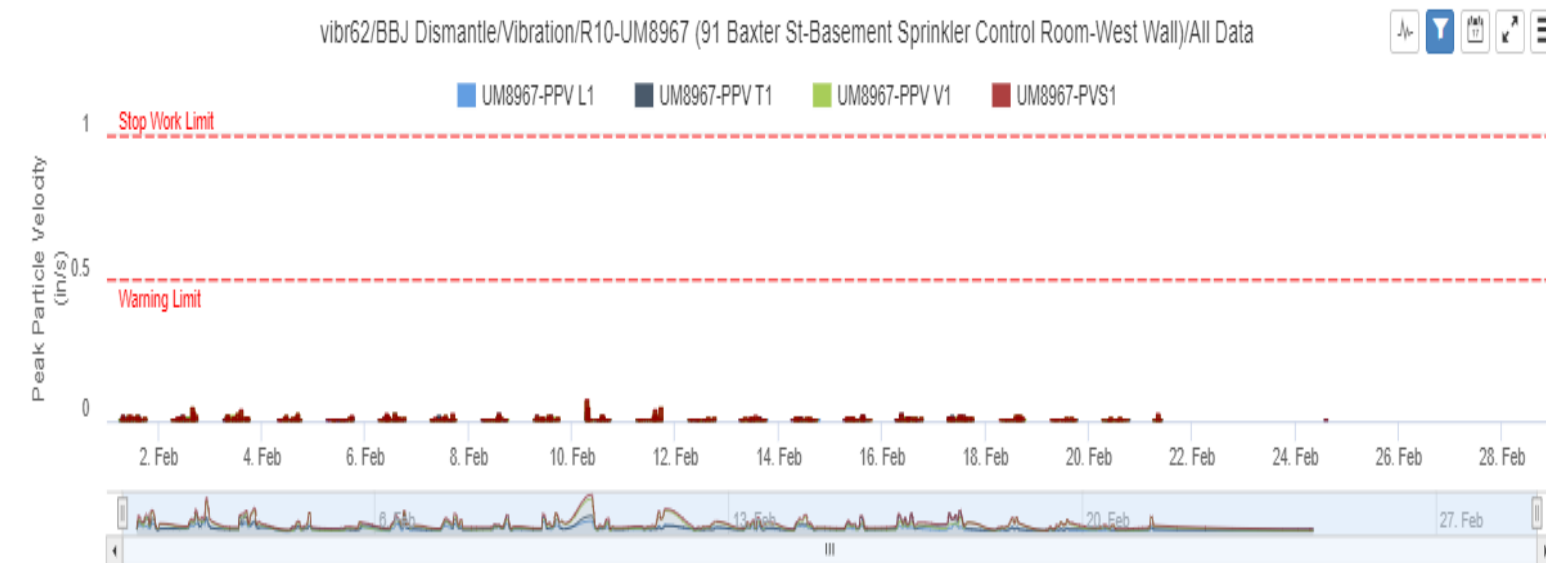
**Vibration Monitor – (R08) February 23:**



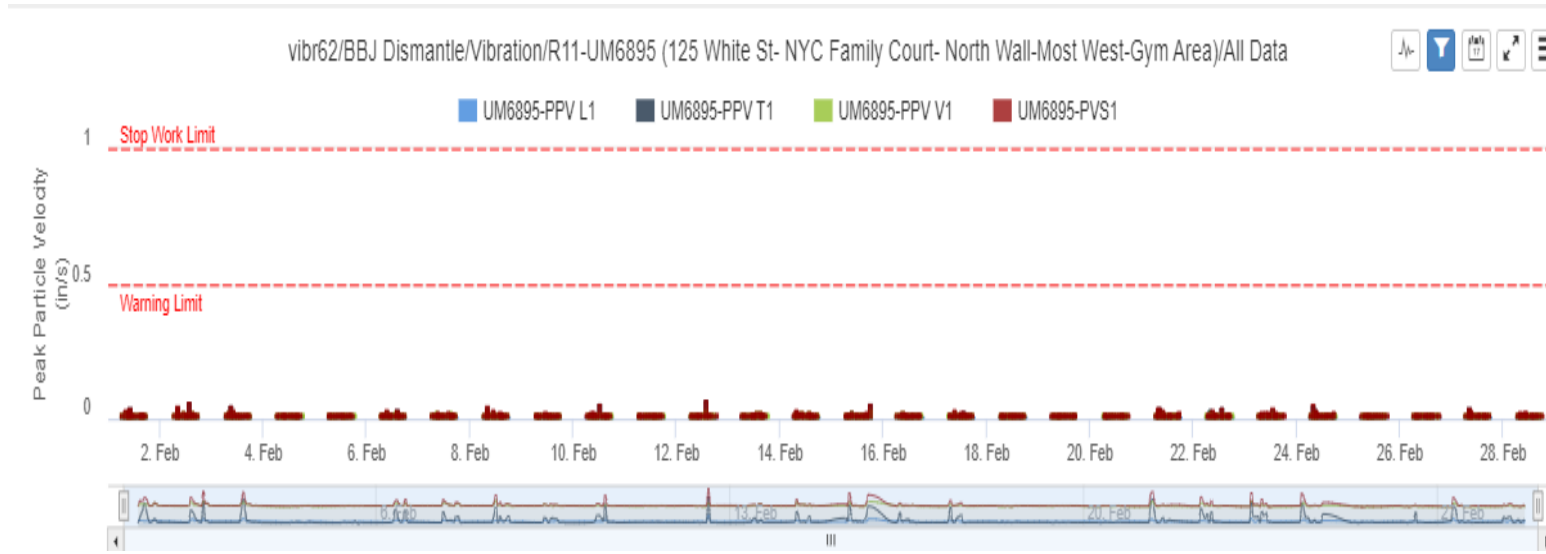
**Vibration Monitor – (R09) February 23:**



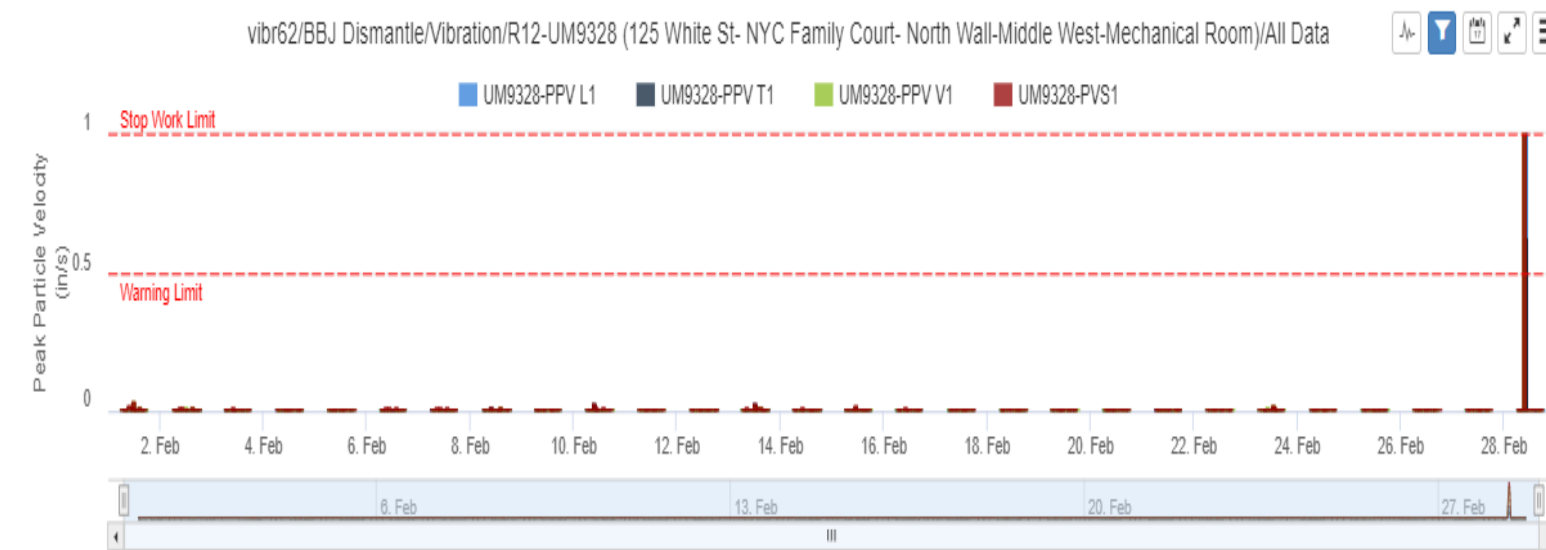
**Vibration Monitor – (R10) February 23:**



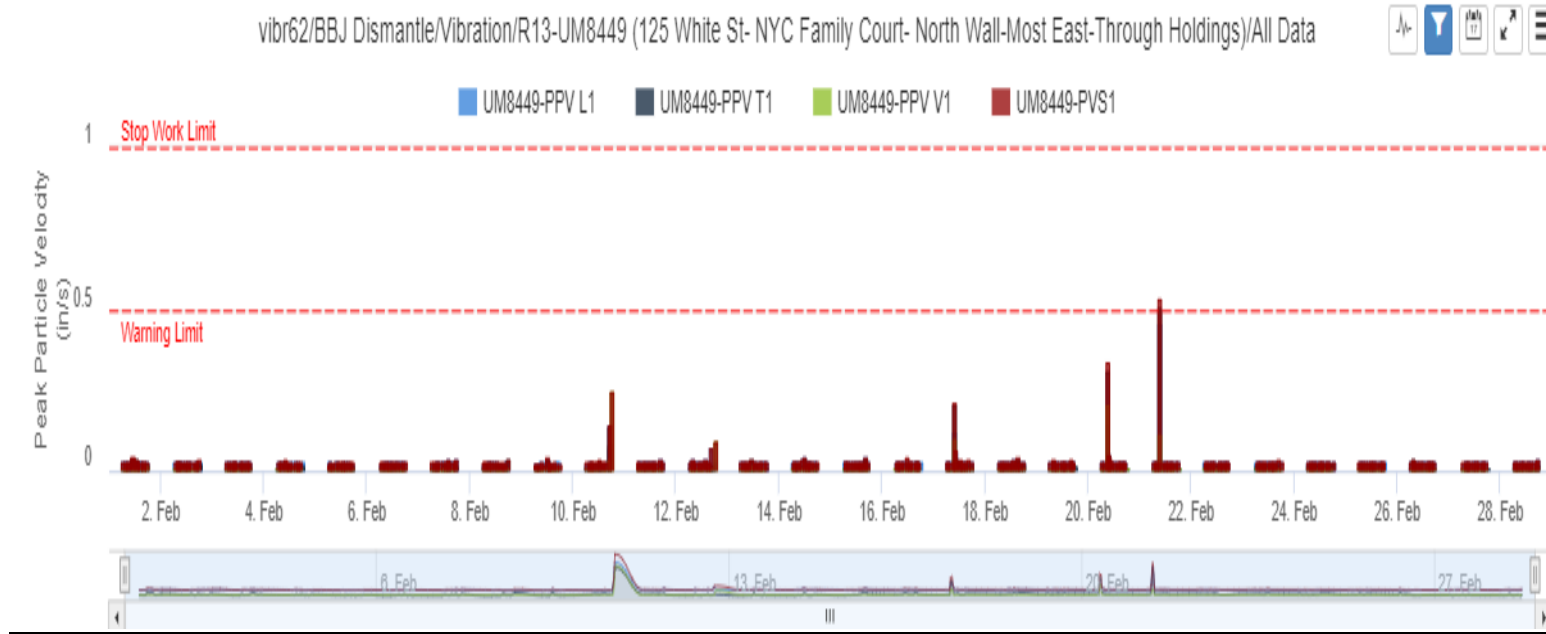
**Vibration Monitor – (R11) February 23:**



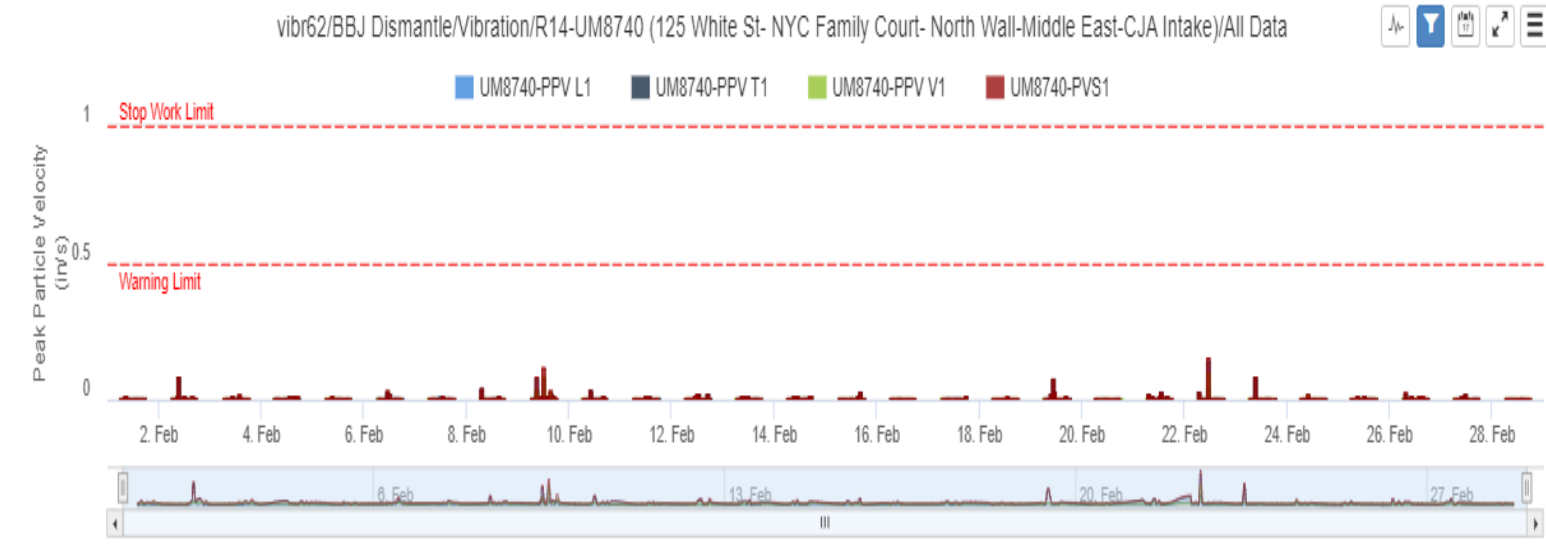
**Vibration Monitor – (R12) February 23:**



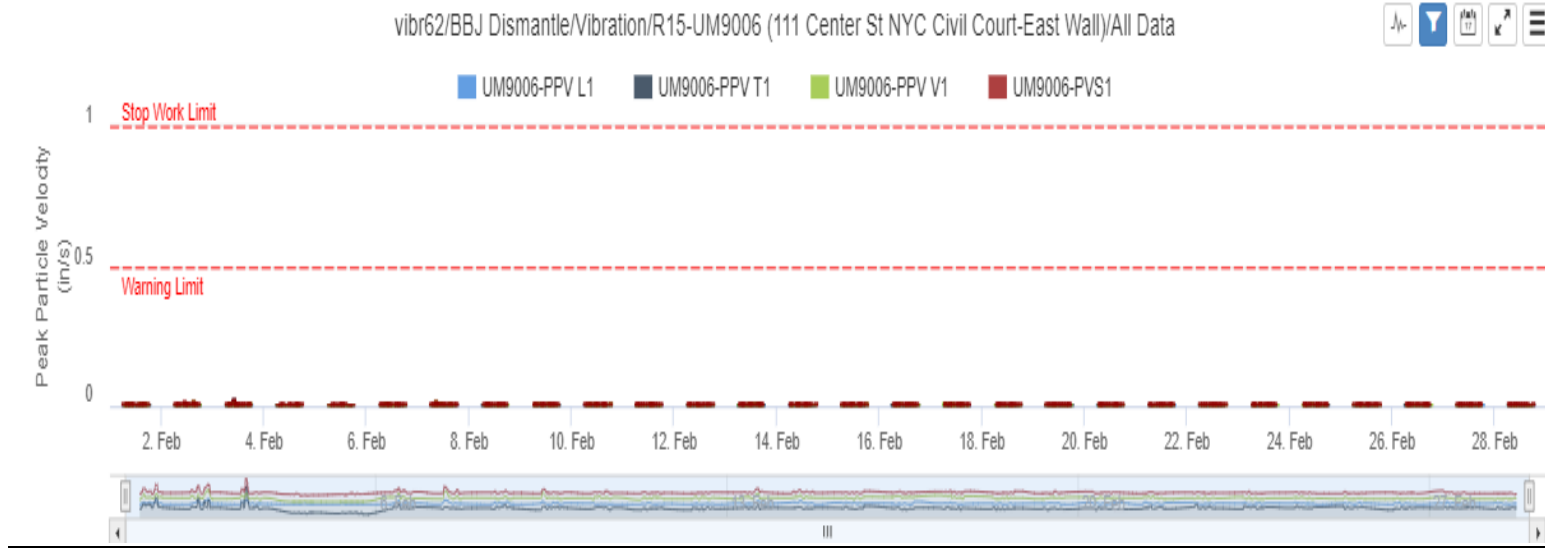
**Vibration Monitor – (R13) February 23:**



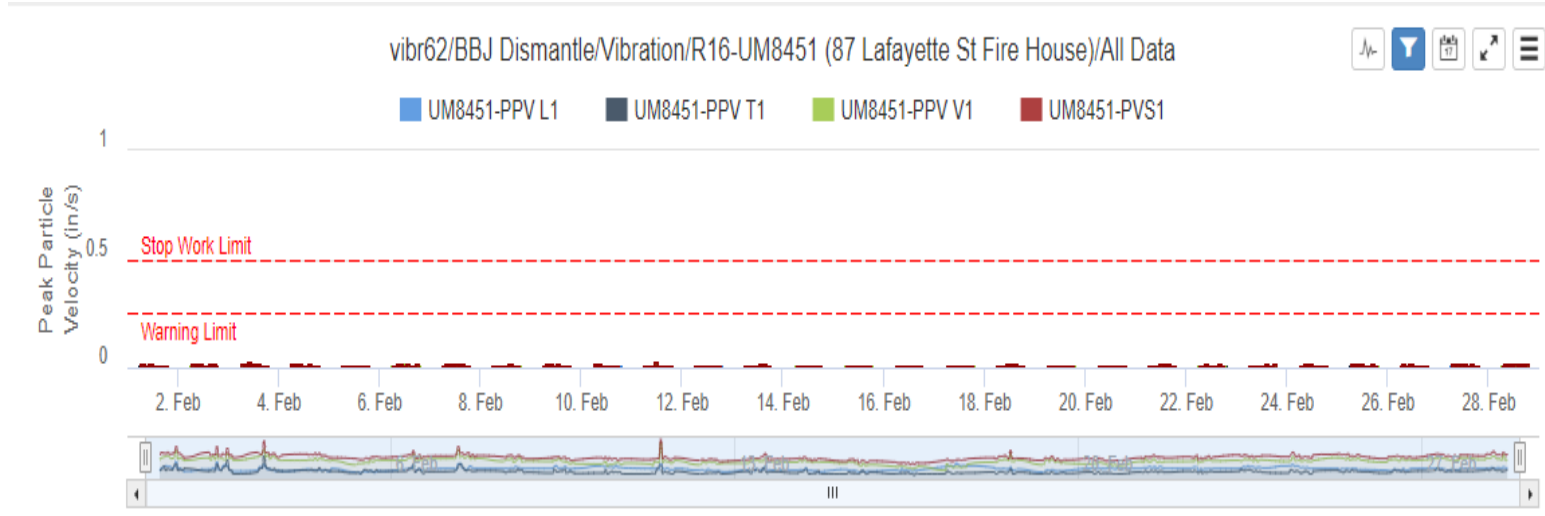
**Vibration Monitor – (R14) February 23:**



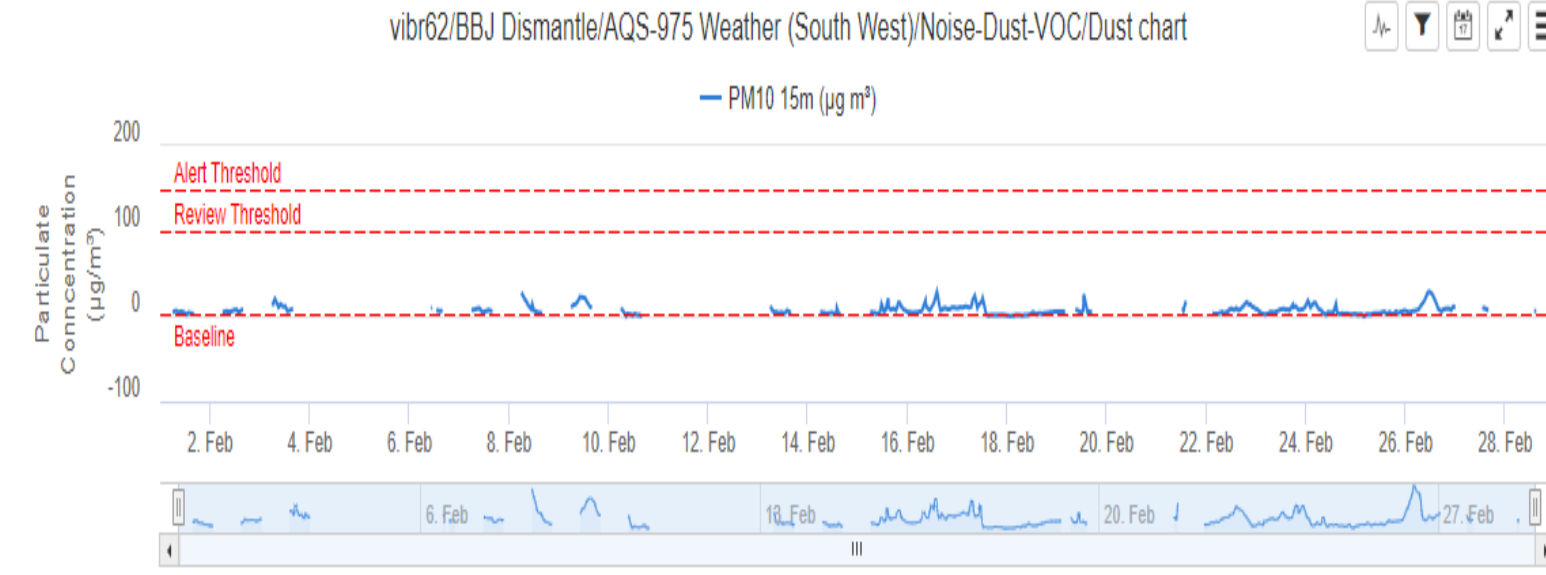
**Vibration Monitor – (R15) February 23:**



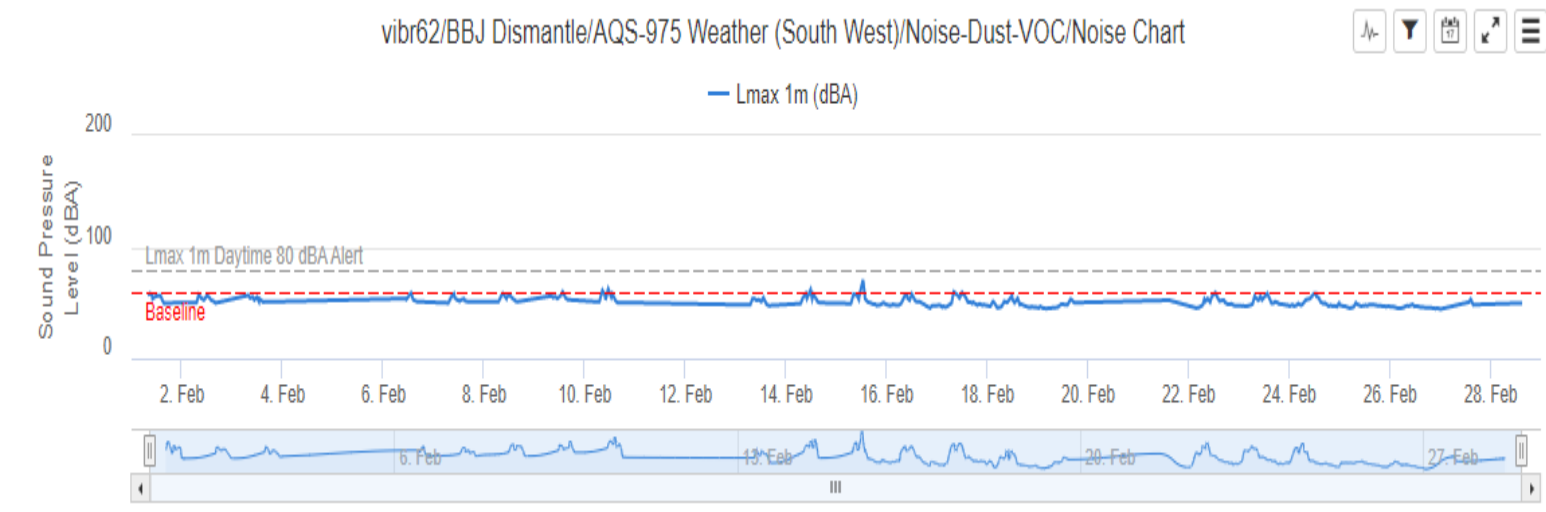
**Vibration Monitor – (R16) February 23:**



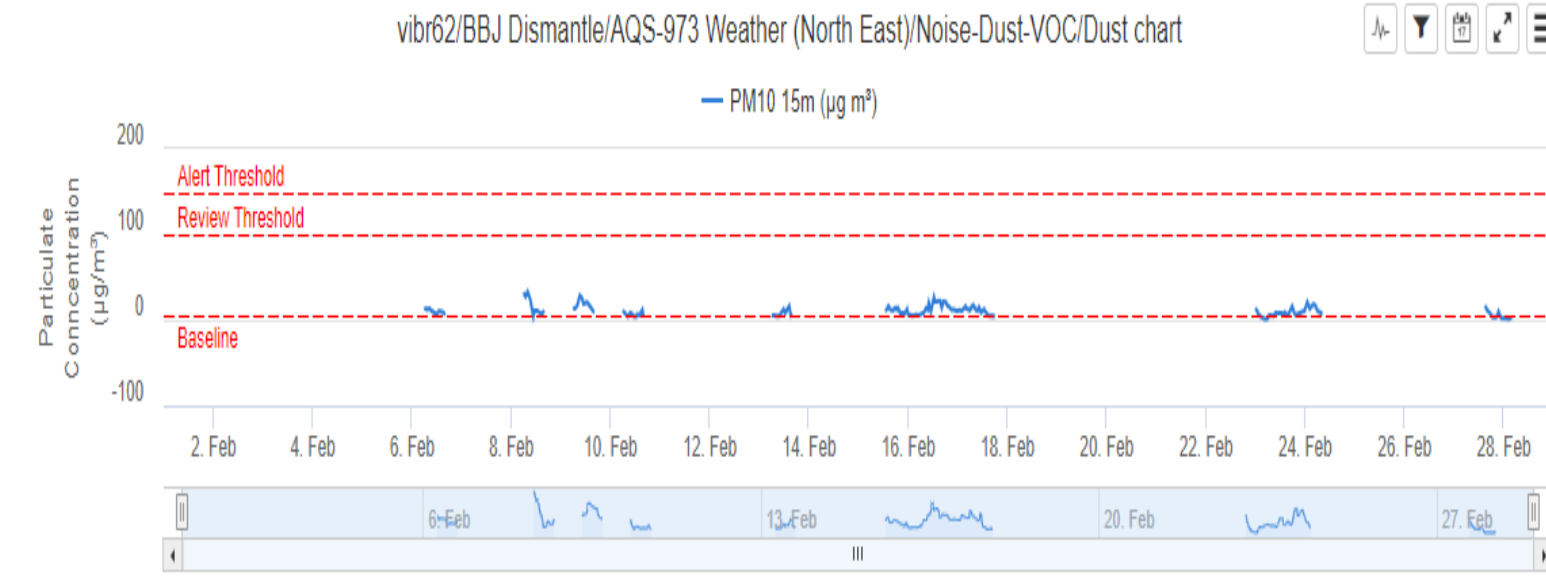
**Air Quality Systems #975 – Dust Monitoring Station – February 23:**



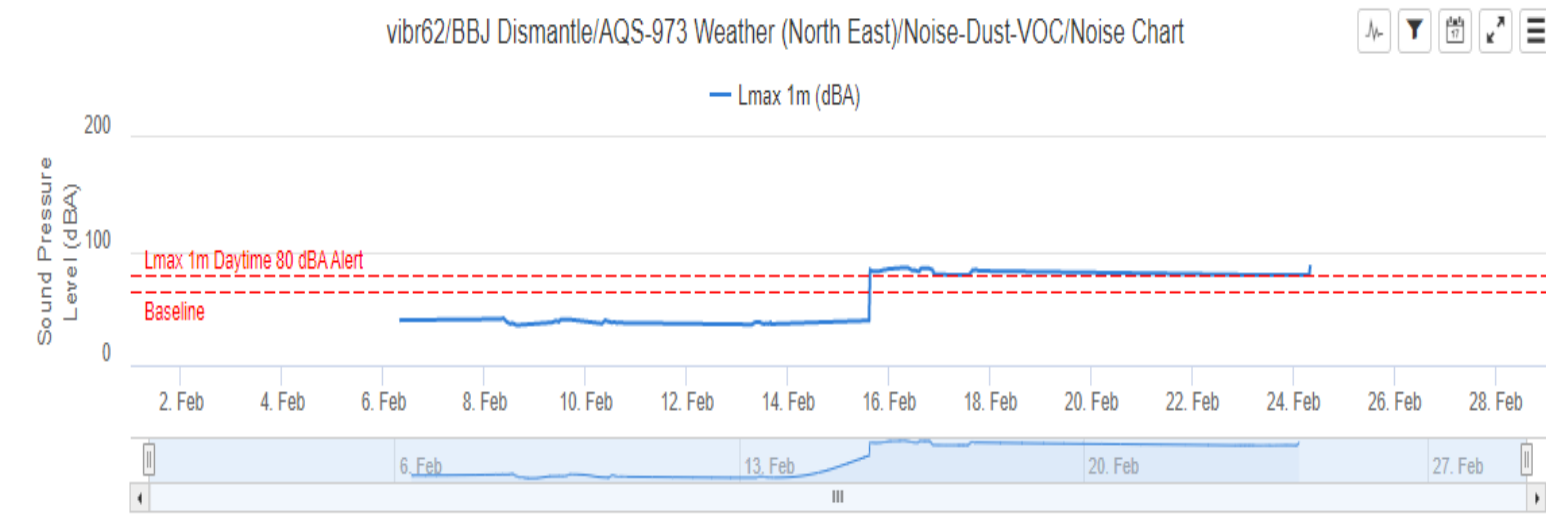
**Air Quality Systems #975 – Noise Monitoring Station – February 23:**



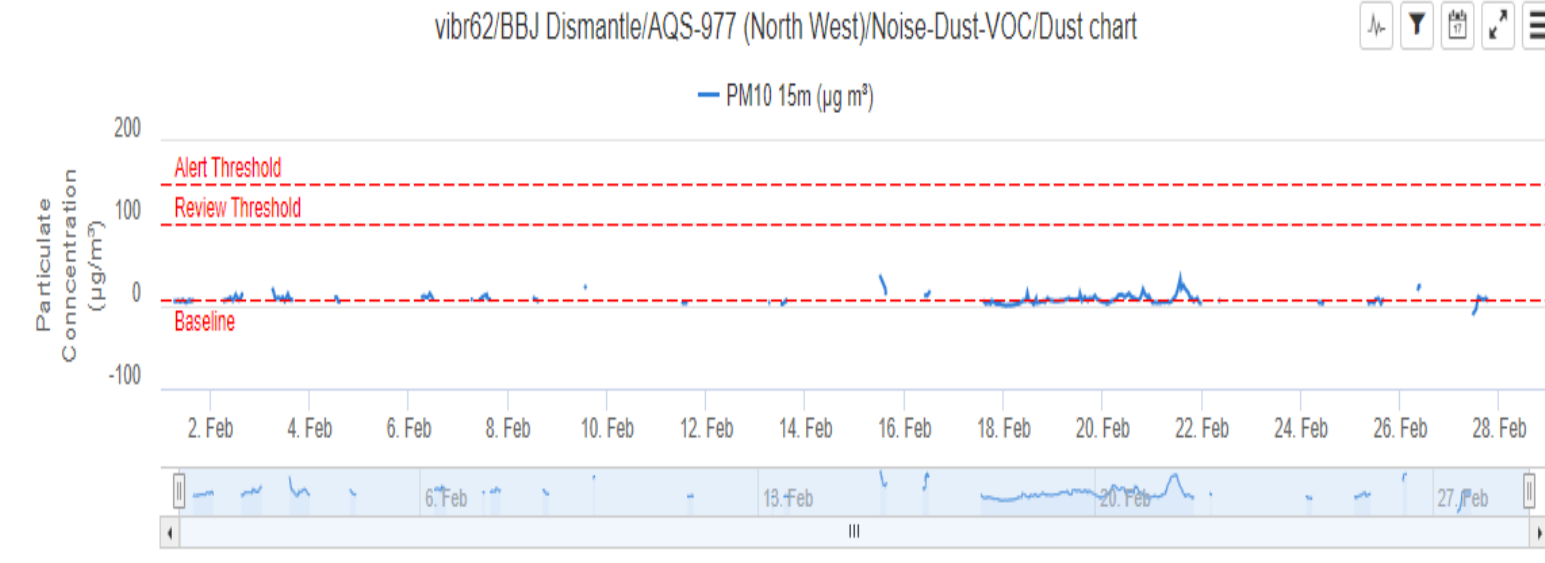
**Air Quality Systems #973 – Dust Monitoring Station – February 23:**



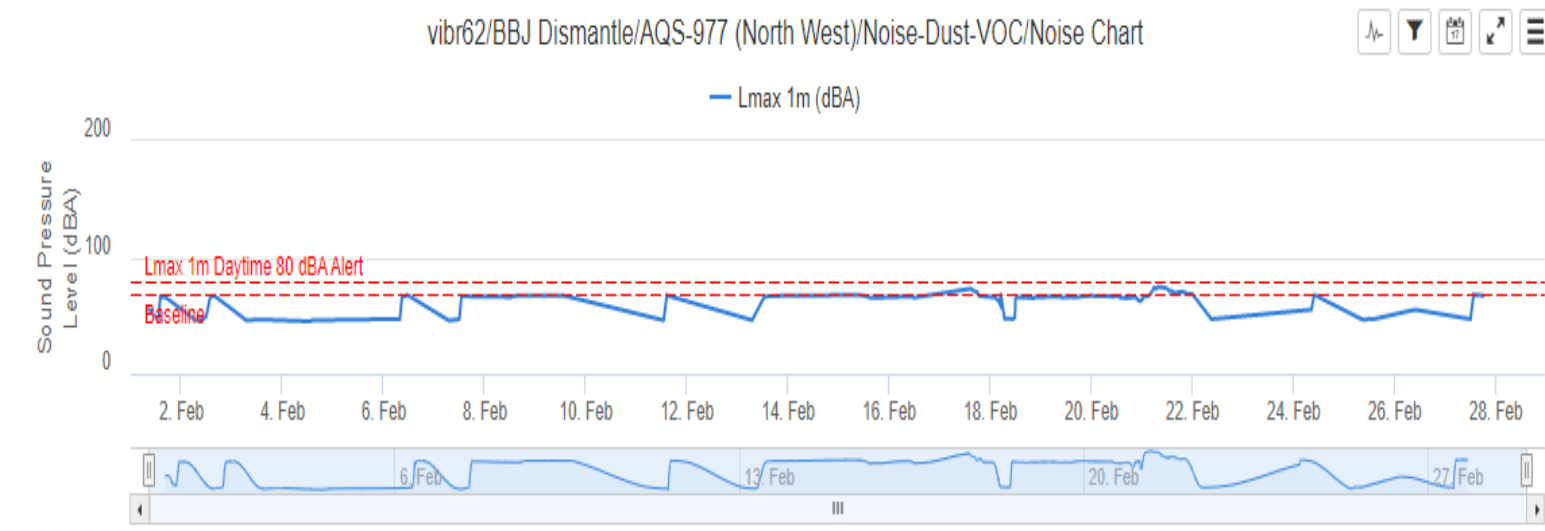
**Air Quality Systems #973 – Noise Monitoring Station – February 23:**



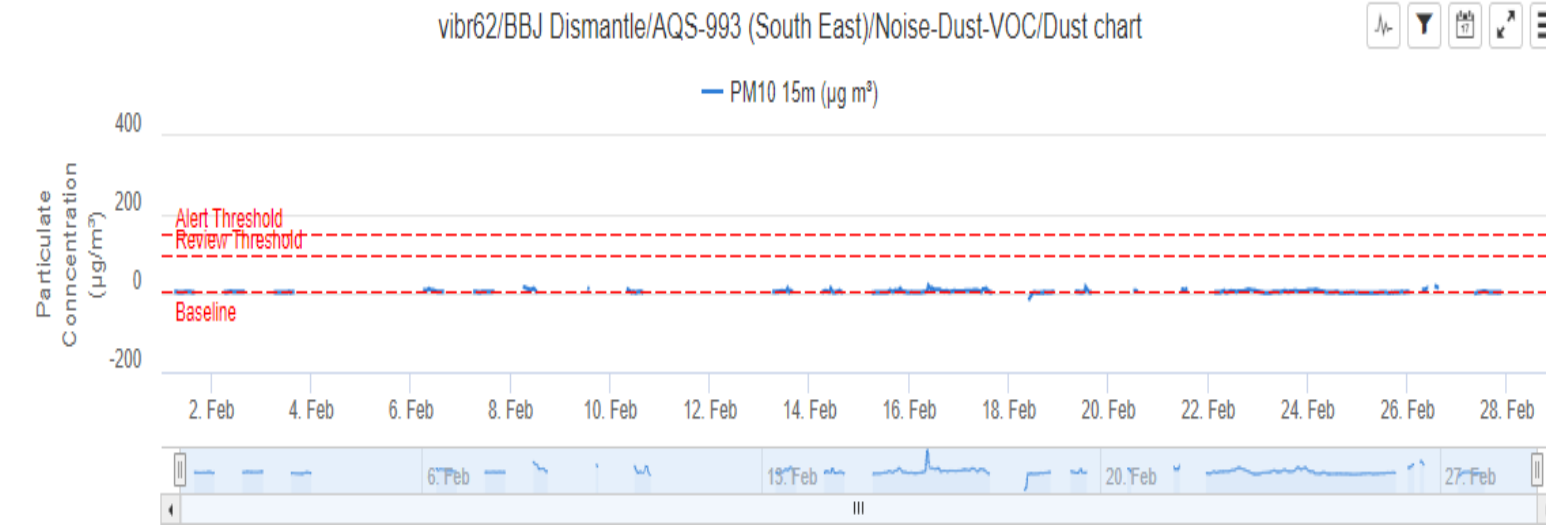
**Air Quality Systems #977 – Dust Monitoring Station – February 23:**



**Air Quality Systems #977 – Noise Monitoring Station – February 23:**



**Air Quality Systems #993 – Dust Monitoring Station – February 23:**



**Air Quality Systems #993 – Noise Monitoring Station – February 23:**

