

**AIR, NOISE AND VIBRATION  
MONTHLY MONITORING REPORT  
Number 033 – April 2025**

Prepared By:  
Gramercy  
Group Inc.

<b>DDC. Project ID:</b>	BBJ M DSS	<b>Period Start:</b> 4/01/25 <b>End</b> 4/30/25
<b>Project Name:</b>	NYC Borough Based Jails System – Manhattan Dismantle and Swing Space	
<b>DDC Pin No.:</b>	8502021CR0004P-06P	

<b>1) Community Air Monitoring Monthly Status Summary</b> 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
22	30	0	During the month of April 2025, there was ZERO instances where we had dust concentration exceedance Air monitoring was continued throughout every day of the month even on weekends when no work was being performed

<b>Community Air Monitoring Excursions and Corrective Actions</b> 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

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

During the month of April 2025, we experienced ZERO instances where the dust concentration was above threshold. 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 due to monitoring device maintenance. Please note that when a monitor is down, the adjacent monitors are placed in locations so 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.

<b>2) Community Noise Monitoring Monthly Summary</b>			
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	30	18	During the month of April 2025, we had 35 exceedances, one of them being caused by construction activities. Explanations and corrective actions can be seen below. Noise monitoring for the month of February was continued every day throughout the week, and even on weekends.

<b>Community Noise Monitoring Excursions and Corrective Actions</b>			
Stop Work Level = 80 dBA			
Date: Time	Maximum Noise Reading before Corrective Action (dBA)	Maximum Noise Reading after Corrective Action (dBA)	Corrective Action
AQS #975 – 4/28/25 @ 6:30PM	80.7 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #977 – 4/01/25 @ 1:00PM	84.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #977 – 4/01/25 @ 3:00PM	84.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #977 – 4/03/25 @ 9:00PM	84.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #977 – 4/04/25 @ 11:00AM	85.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #977 – 4/11/25 @ 3:00PM	86.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #977 – 4/12/25 @ 5:00PM	81.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #977 – 4/15/25 @ 6:00PM	82.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #977 – 4/17/25 @ 2:00PM	82.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #977 – 4/18/25 @ 6:00PM	89.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #977 – 4/22/25 @ 12:00PM	83.0 dBA	72.0 dBA	Caused by chopping concrete slab for test pit. Means and methods were adjusted no further exceedances recorded.
AQS #977 – 4/26/25 @ 12:00PM	87.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #977 – 4/26/25 @ 6:00PM	85.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #993 – 4/02/25 @ 1:00PM	81.8 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #993 – 4/02/25 @ 7:20PM	81.6 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #993 – 4/05/25 @ 4:20PM	85.5 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #993 – 4/11/25 @ 12:40AM	91.6 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #993 – 4/12/25 @ 2:20AM	84.0 dBA	N/A	No corrective action at this time. This was after working hours.

AQS #997 – 4/11/25 @ 11:00AM	88.1 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #998 – 4/05/25 @ 11:00AM	82.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #998 – 4/10/25 @ 2:00PM	83.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #998 – 4/11/25 @ 12:40AM	83.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #998 – 4/11/25 @ 10:00AM	85.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #998 – 4/11/25 @ 10:00AM	85.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #998 – 4/11/25 @ 12:00PM	82.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #998 – 4/15/25 @ 9:00AM	81.0 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #998 – 4/26/25 @ 10:20AM	87.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #998 – 4/30/25 @ 5:00PM	81.0 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #001 – 4/03/25 @ 2:40PM	88.8 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #001 – 4/04/25 @ 4:00PM	83.7 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #001 – 4/09/25 @ 1:00PM	80.5 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #001 – 4/10/25 @ 7:00PM	80.6 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #001 - 4/24/25 @ 7:20AM	81.4 dBA	N/A	No corrective action at this time. We are not performing work in this area.
AQS #001 – 4/25/25 @ 6:40PM	84.6 dBA	N/A	No corrective action at this time. This was after working hours.
AQS #001 - 4/30/25 @ 5:00PM	82.3 dBA	N/A	No corrective action at this time. This was after working hours.

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

During the month of April 2025, there was a total of 35 alerts on 18 separate days with instances of noise level exceedances. Out of the 35 alerts we received, one was found to be caused by construction/dismantlement activities upon investigation. Causes and explanations are stated above. As stated in previous reports we investigate every alert we get even in areas we know we are not working to verify that this was caused by either DOC buses / Sally Port gate siren or community noise and/or traffic. AQS #001 inside on the 3<sup>rd</sup> floor of the courthouse is directly next to holding cells where people in custody create a lot of noise. In this area we packed the temporary barrier with foam board and sound blankets to ensure our work was not setting off the monitor and the staff inside this area were safe. As per request, we have added the Lmax data as well as the Leq data shown on the graphs on pages 12-17. Please note that the OSHA 8-hr Time Weighted Average (TWA) Permissible Exposure Limit (PEL) is 90 dBA. The OSHA 15-minute TWA PEL is 115 dBA. For non-continuous or impact or impulsive noise, OSHA specifies that a peak unweighted sound level (Lmax) cannot exceed 140 decibels at any time during the workday.

Action levels are based on the time-weighted Leq values, and not Lmax values, as Lmax values are non-continuous and do not accurately reflect construction-related noise impacts on the community. The data provided above shows that some noise exceedances occurred when we were not performing any work. Additional noise exceedances, explanations, and corrective actions are explained above.

You will also see some gaps, typically on weekends when no work was being performed, or due to maintenance or batteries being swapped.

**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
22	30	3	During the month of April 2025, we experienced four instances where we received an alert, none being related to construction activity. Vibration monitoring continued every day of the week even when we were not working.

**Community Vibration Monitoring Excursions and Corrective Actions**  
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
R11 – 4/09/25 @ 8:30AM	1.134 (in/sec)	N/A	No corrective action as this was not caused by site operations. This monitor is located in the DOC gym and weights were dropped next to the monitor causing a spike in vibration.
R14 – 4/03/25 @ 5:38PM	2.601 (in/sec)	N/A	No corrective action as this was after working hours.
R14 – 4/07/25 @ 5:22PM	2.408 (in/sec)	N/A	No corrective action as this was after working hours.
R14 – 4/09/25 @ 12:48PM	1.433 (in/sec)	N/A	No corrective action as this was not caused by site operations. This monitor is located in the CJA intake area where persons in custody are lined up and the monitor sometimes get bumped / kicked.

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

During the Month of April 2025, there were 4 vibration exceedances. None of these exceedances were found to be related to site activities. All monitors showed results of vibration being under the stop work limit of 1.0 (in/sec), ensuring the structural integrity of the buildings adjacent to the site.

**ATTACHMENTS:**

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

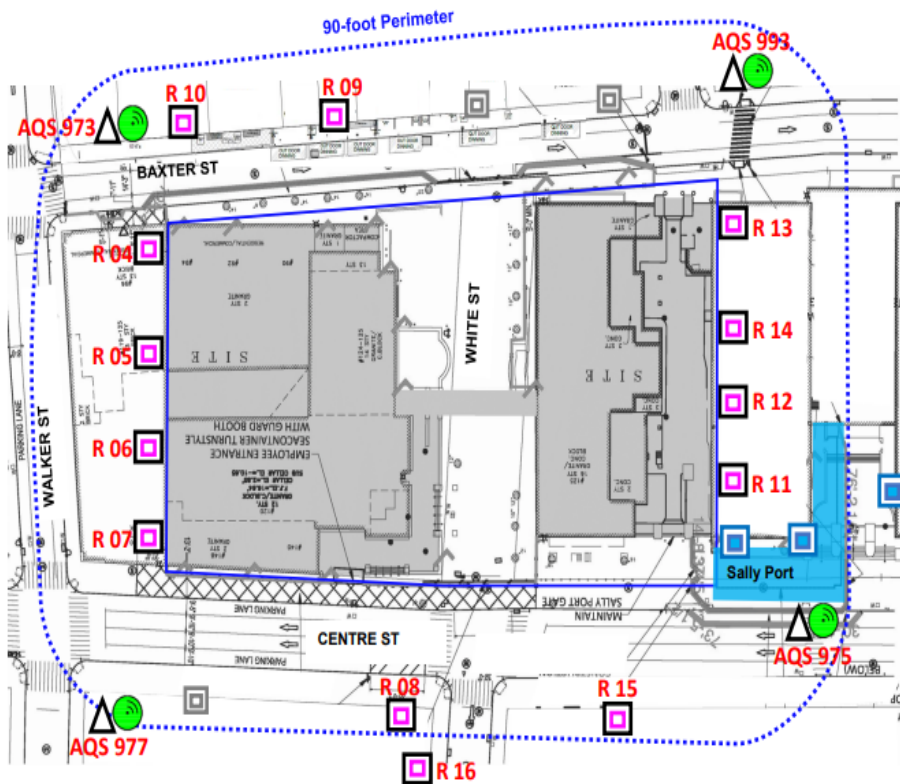
<b>Glossary of Terms</b>	
<b>Terms</b>	<b>Descriptions</b>
<i>Warning Alerts</i>	Warning limit line for vibration monitors is not an indication to stop work. This is to notify DB team to assess the operation and know that we are causing vibration, but not anything exceeding limits and to monitor this area more closely.
<i>After Hours Alert</i>	When a noise exceeding happens on the weekends or after working hours we have no way to correct or speak on what the cause was. Generally these are caused by trucks/car horns, emergency vehicle sirens, and sometimes even pedestrian
<i>Units of Measures</i>	For AQS monitors on the noise chart you will see two different units of measurement. The Lmax1min (blue line) shows the maximum noise level for a one minute reading. The Leq 20min (black line) shows the maximum noise level for a 20 minute average reading. this is the unit of measure we will use going forward. Exceeding the limit for Lmax1min is not something that is not allowable. OSHA standard allows for the noise output from a construction site to the public to be a weighted average
<i>Action Level</i>	employer must undertake certain duties of care for exposed workers. Typical values are 80 and 85 dB measured for a whole working day with 'A' frequency weighting.
<i>Ambient Sound</i>	The total amount of all noise present at a particular place and time in the environment at the point of
<i>Leq</i>	Equivalent continuous sound pressure level. A measure of the average sound pressure level during a period of time,
<i>Fine Particles (PM 2.5)</i>	Particles that are generally 2.5 µm in diameter or smaller. This group of particles also encompasses ultrafine particles and nanoparticles which are generally classified as having diameters less than 0.1 µm.

## Map of Monitoring Locations:

Vibration Monitors R04 – R17

Air Quality System (AQS) # 993, 997, 975, 977, 998, & 001

# Environmental Monitoring Manhattan

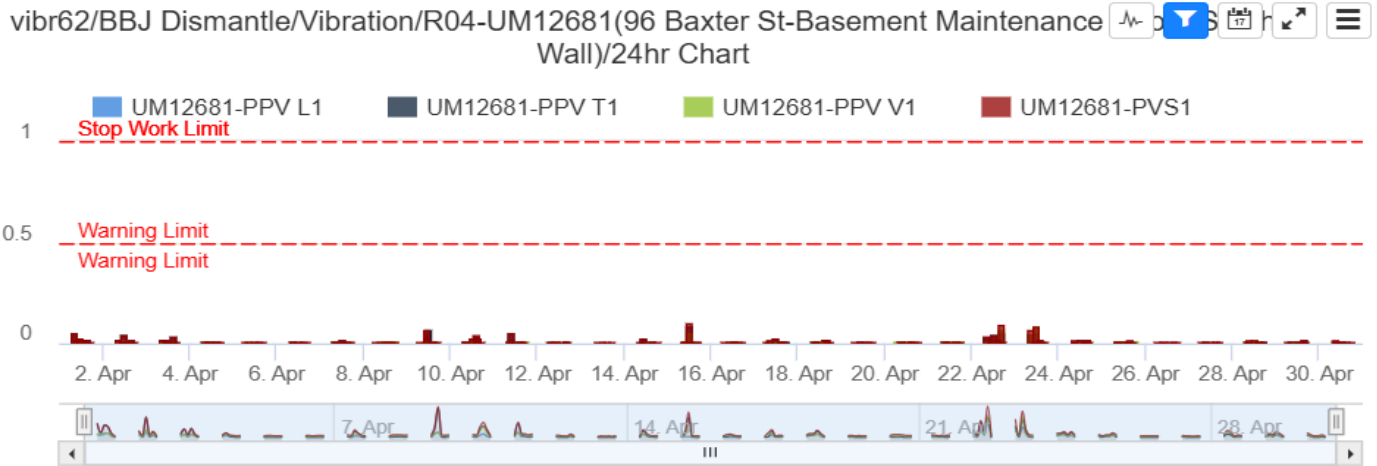


\* Dismantle project vibration, air and noise monitoring devices are installed by Design-Build team in Phase 2, after sally port construction. A vibration monitoring station was installed in the DCTV Fire house at 87 Lafayette St.

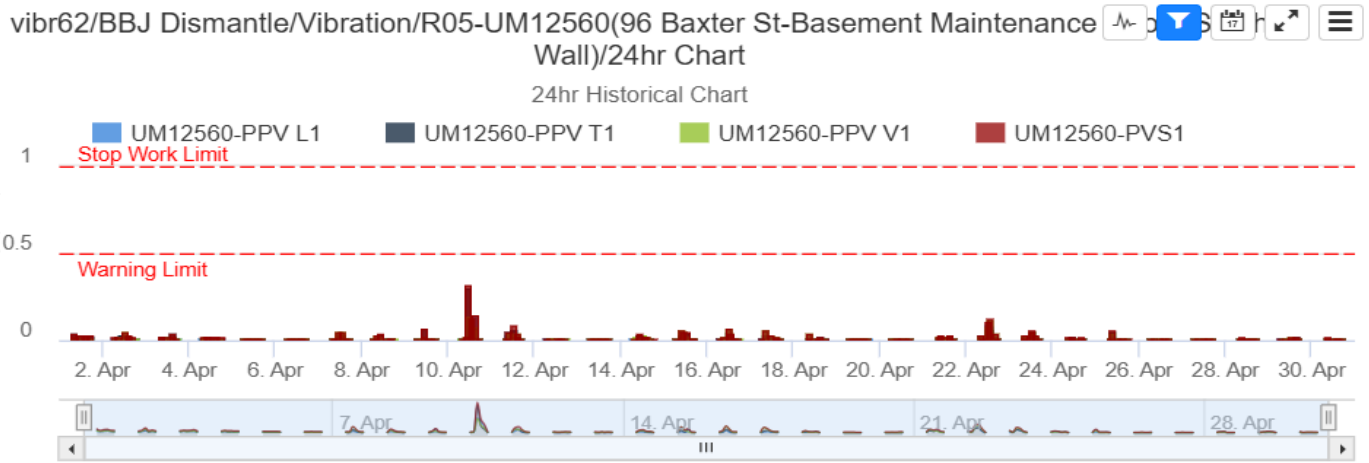
\* The location of monitoring stations presented is referential. Air/Noise Monitoring station located in Sally Port area will be relocated in Phase 2.

	Vibration Monitoring Dismantle
	Air Monitoring Station Dismantle
	Noise Monitoring Station Dismantle
	Vibration Monitoring Sallyport construction (Installed)
	Vibration Monitoring Not installed

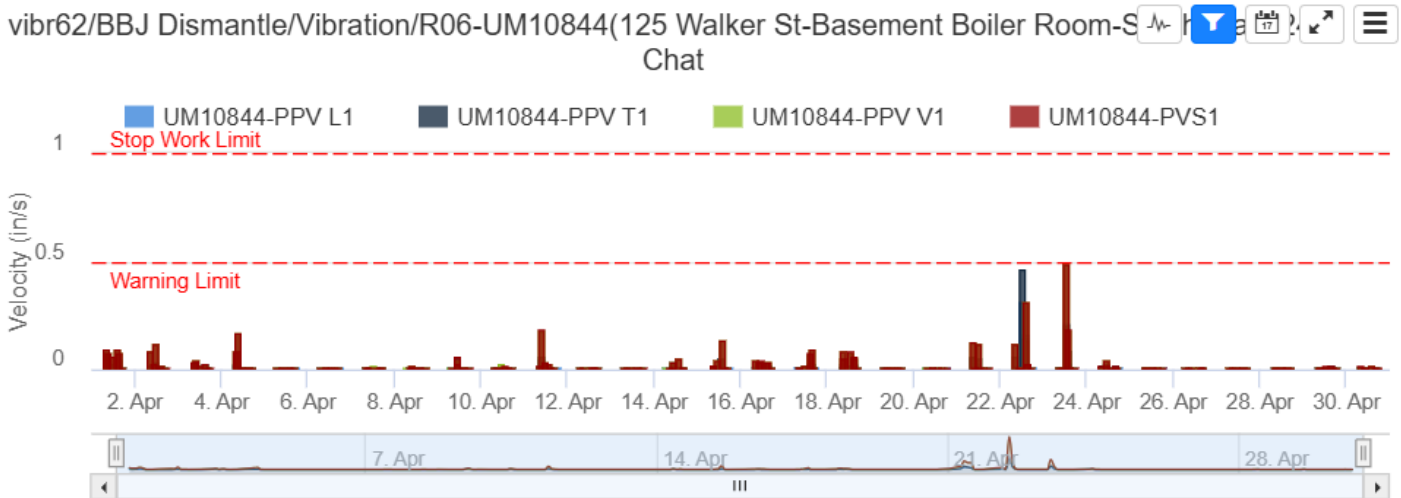
**Vibration Monitor – (R04) April 25:**



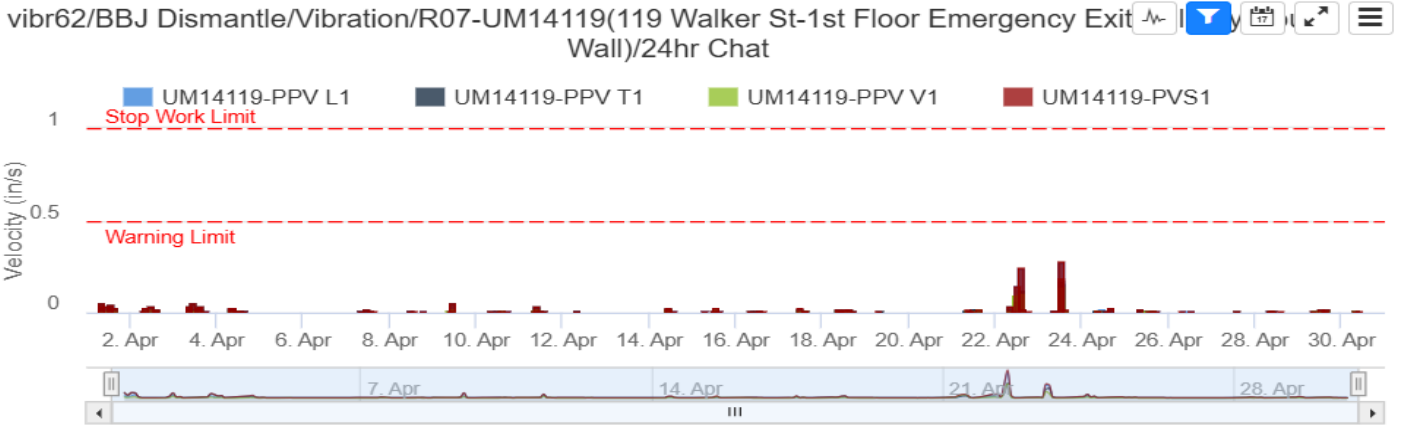
**Vibration Monitor – (R05) April 25:**



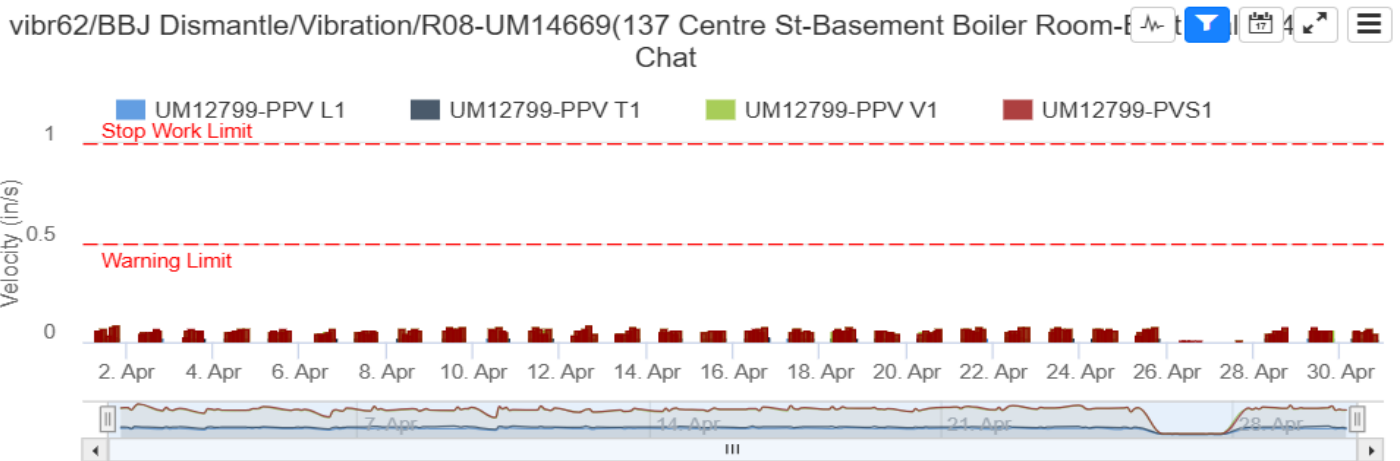
**Vibration Monitor – (R06) April 25:**



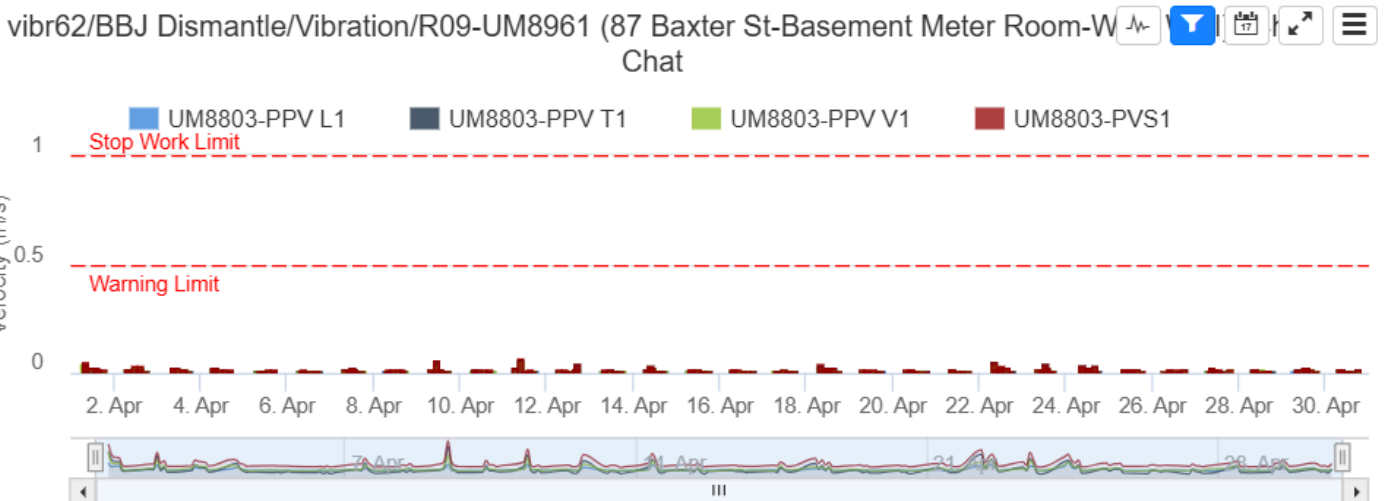
**Vibration Monitor – (R07) April 25:**



**Vibration Monitor – (R08) April 25:**

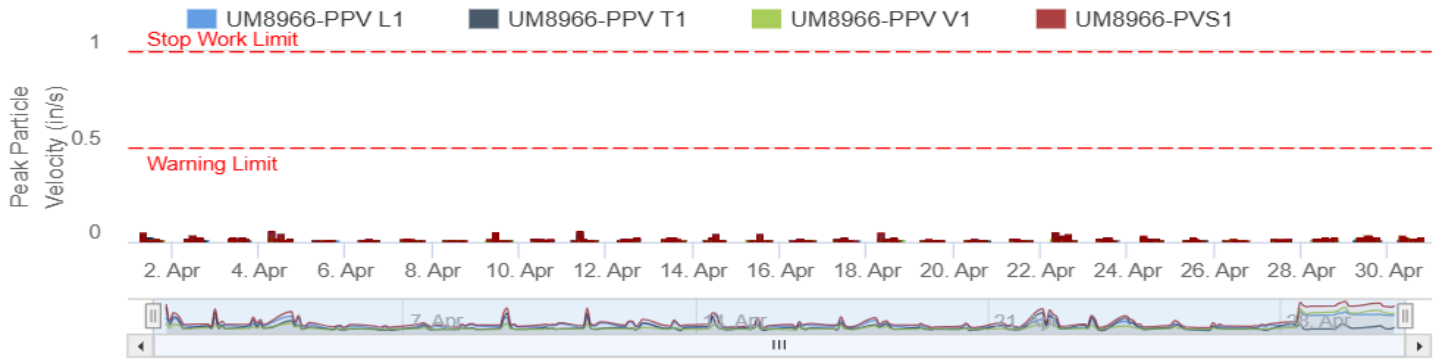


**Vibration Monitor – (R09) April 25:**



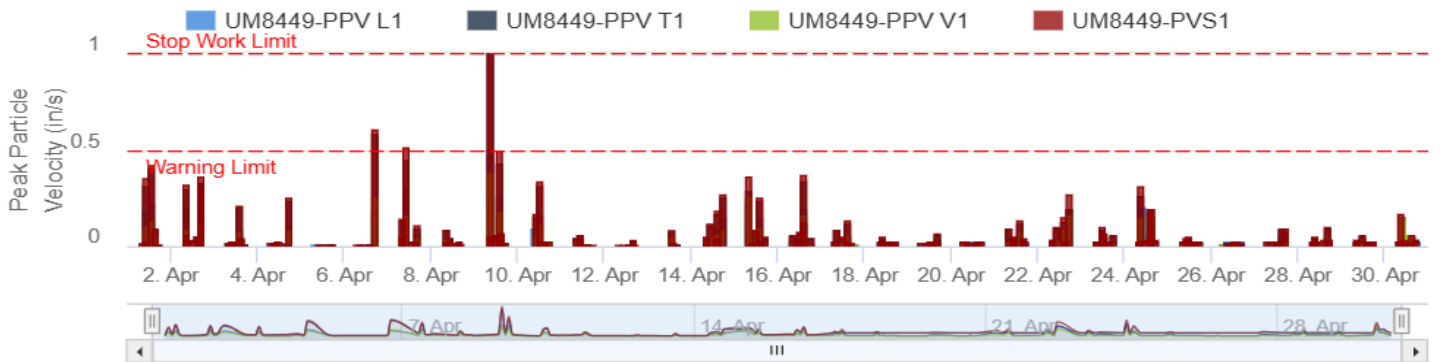
**Vibration Monitor – (R10) April 25:**

vibr62/BBJ Dismantle/Vibration/R10-UM8460 (91 Baxter St-Basement Sprinkler Contr Wall)/24hr Chat



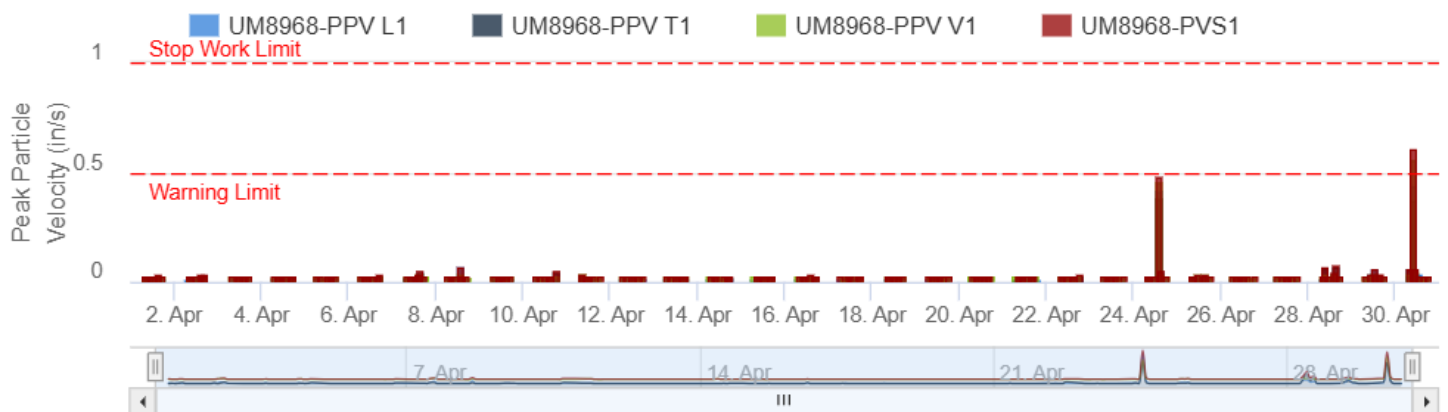
**Vibration Monitor – (R11) April 25:**

vibr62/BBJ Dismantle/Vibration/R11-UM8989 (125 White St- NYC Family Court- North Gym Area)/24hr Chat



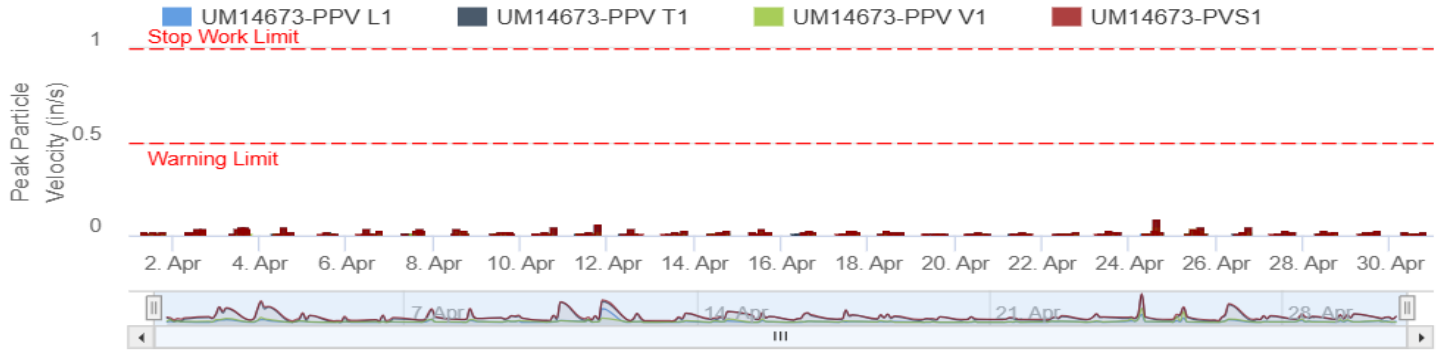
**Vibration Monitor – (R12) April 25:**

vibr62/BBJ Dismantle/Vibration/R12-UM8968 (125 White St- NYC Family Court- North West-Mechanical Room)/24hr Chat



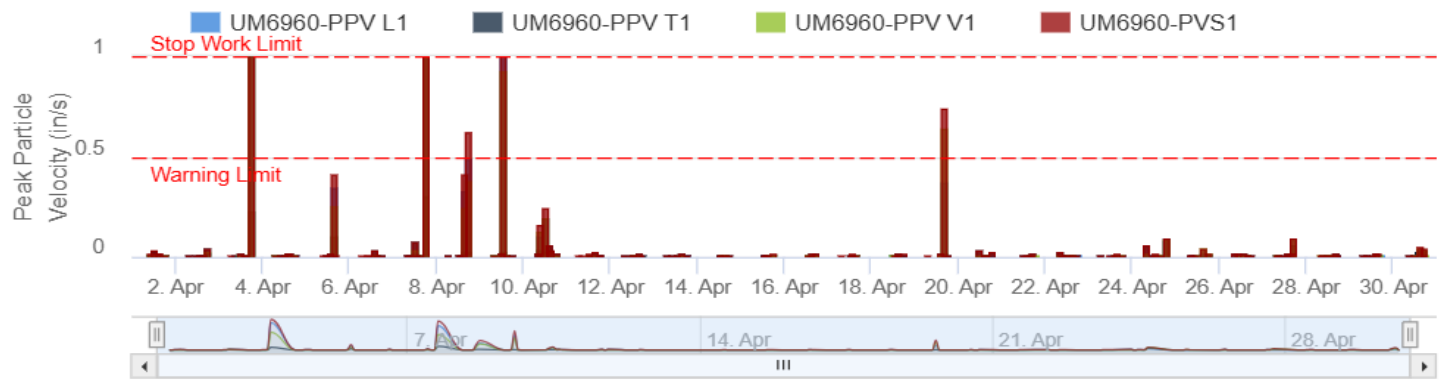
**Vibration Monitor – (R13) April 25:**

vibr62/BBJ Dismantle/Vibration/R13-UM14673 (125 White St- NYC Family Court- North Through Holdings)/24hr Chat



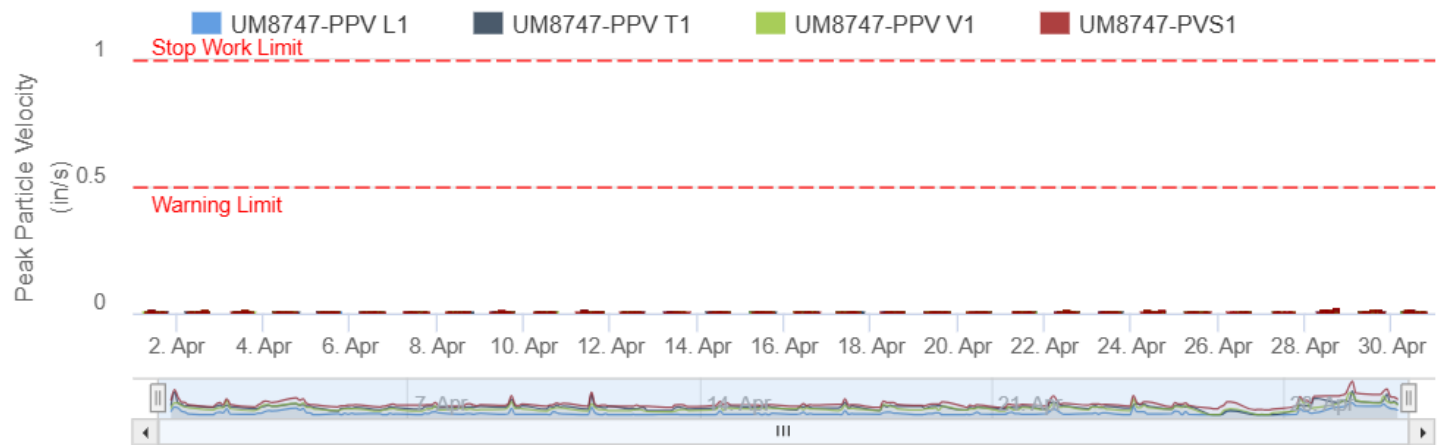
**Vibration Monitor – (R14) April 25:**

vibr62/BBJ Dismantle/Vibration/R14-UM14927 (125 White St- NYC Family Court- North East-CJA Intake)/24hr Chat

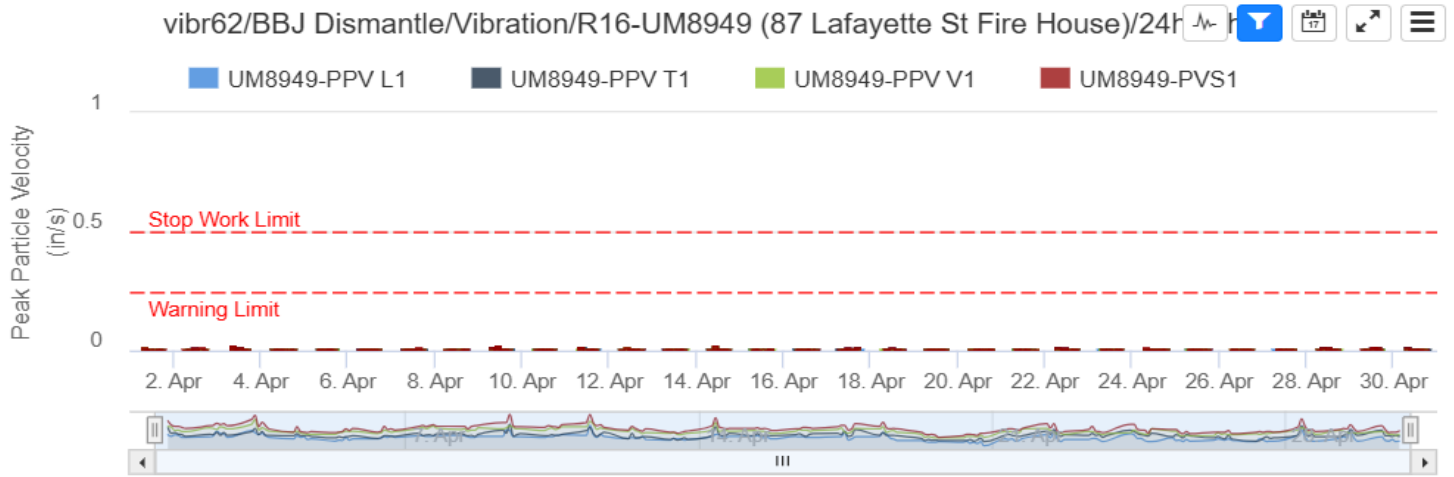


**Vibration Monitor – (R15) April 25:**

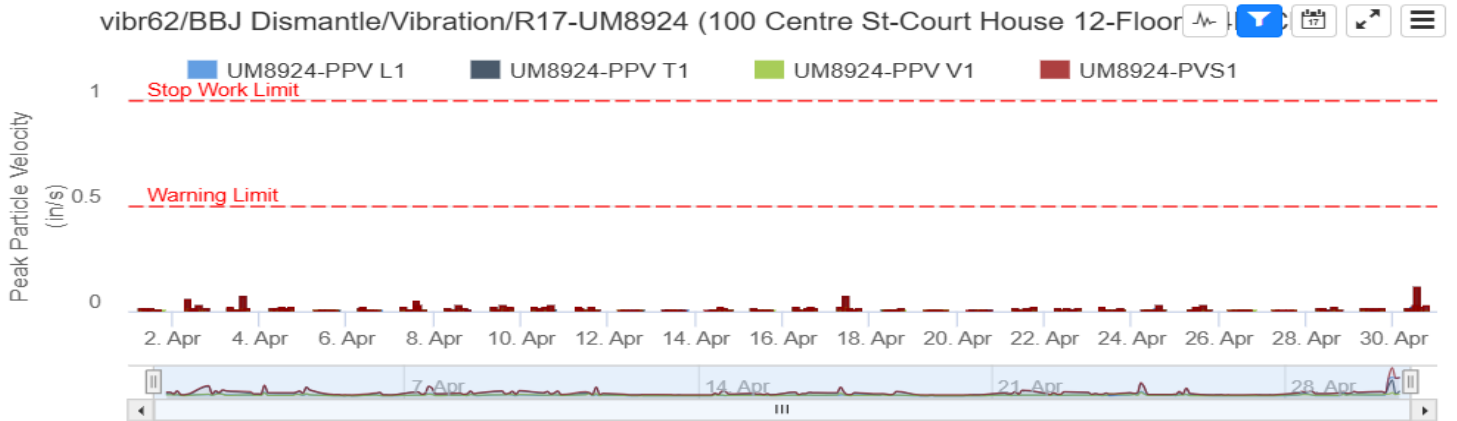
vibr62/BBJ Dismantle/Vibration/R15-UM8948 (111 Center St NYC Civil Court-East W...)/24hr Chat



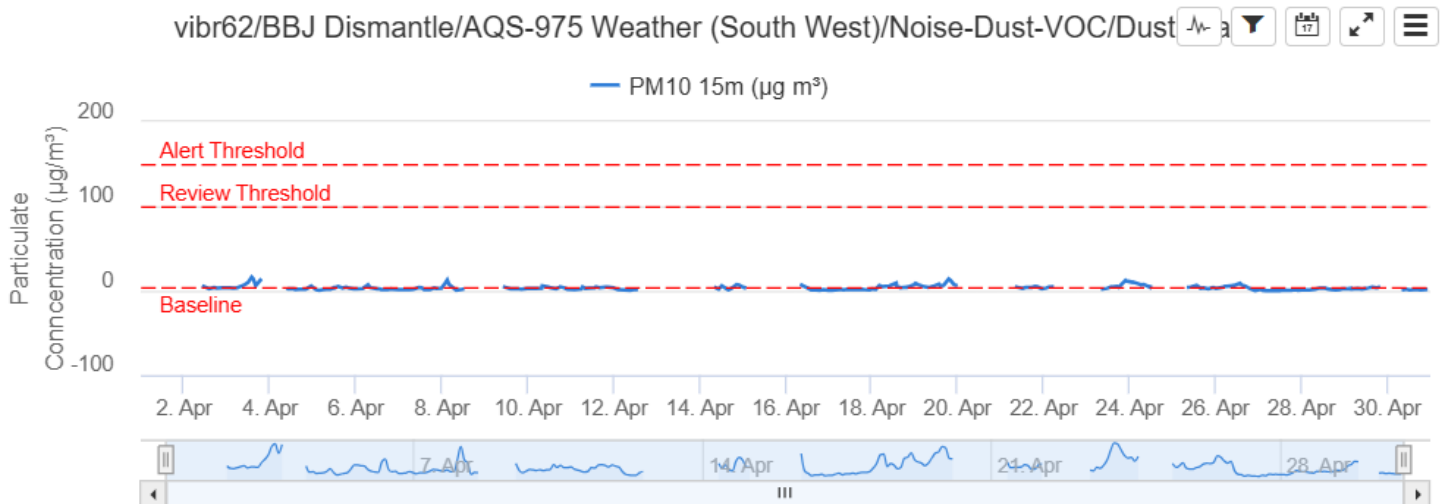
**Vibration Monitor – (R16) April 25:**



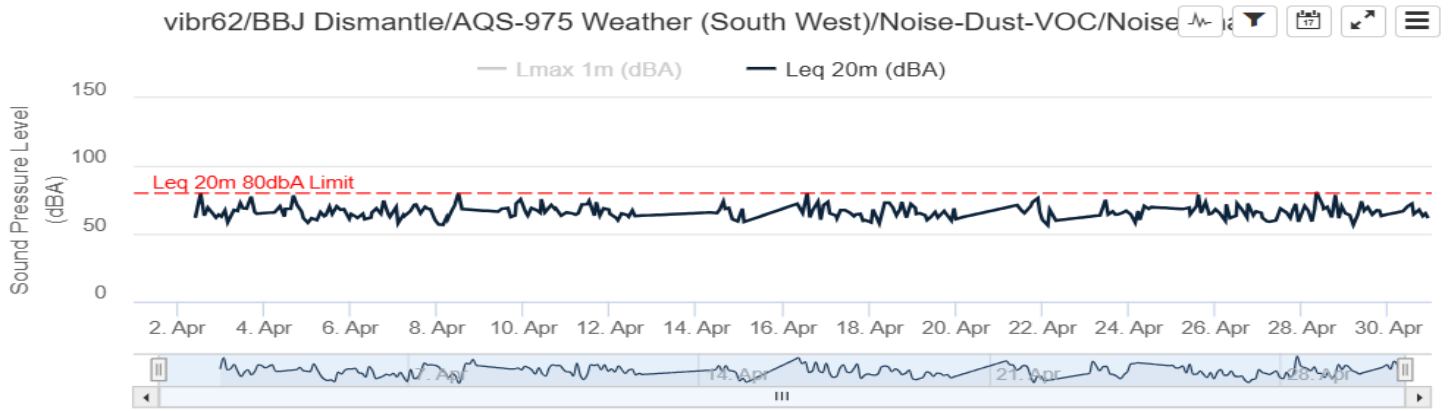
**Vibration Monitor – (R17) April 25:**



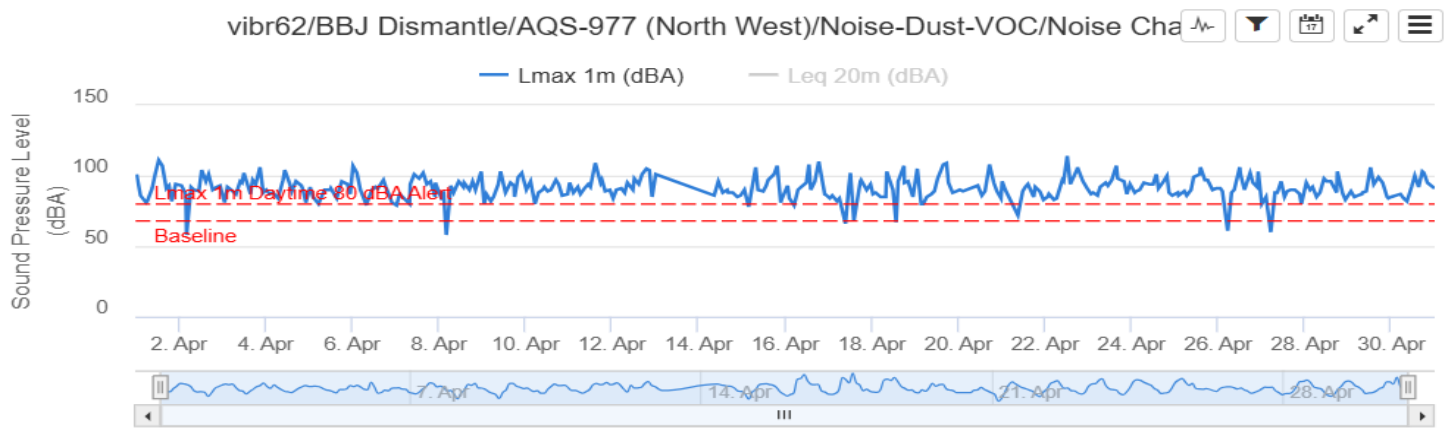
**Air Quality Systems #975 – Dust Monitoring Station – April 25:**



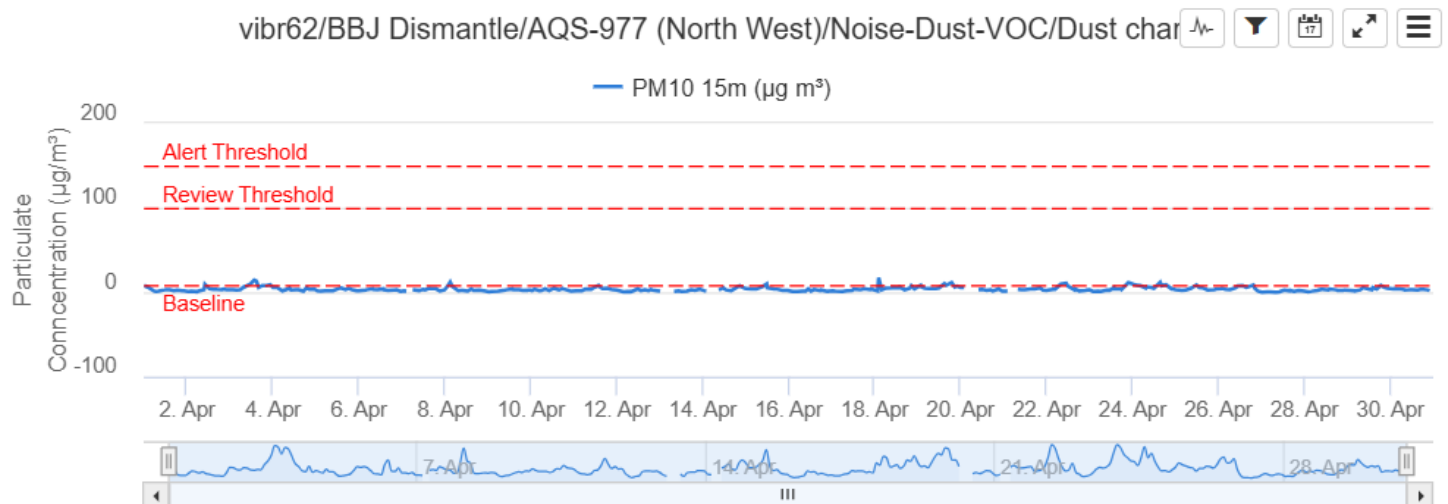
**Air Quality Systems #975 – Noise Monitoring Station – April 25:**



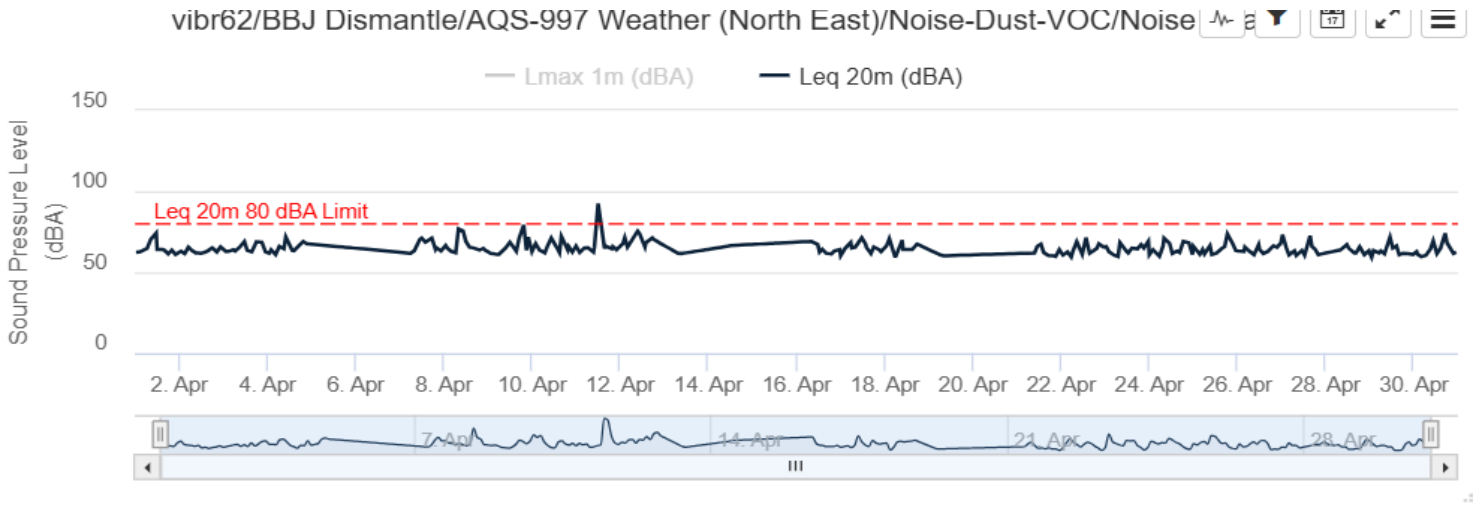
**Air Quality Systems #975 – Noise Monitoring Station (Lmax) – April 25:**



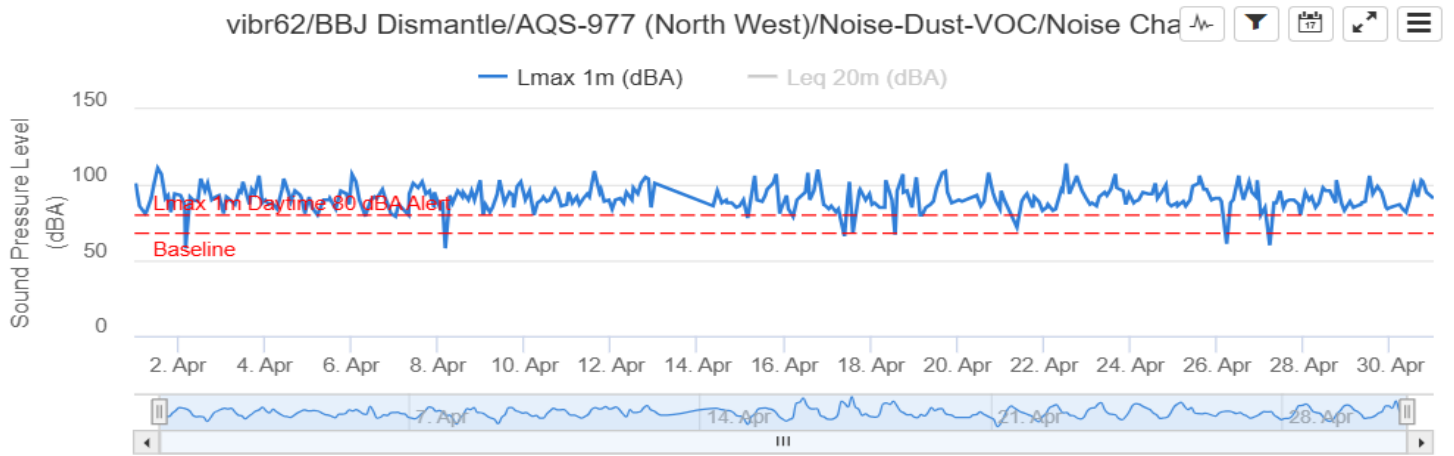
**Air Quality Systems #977 – Dust Monitoring Station – April 25**



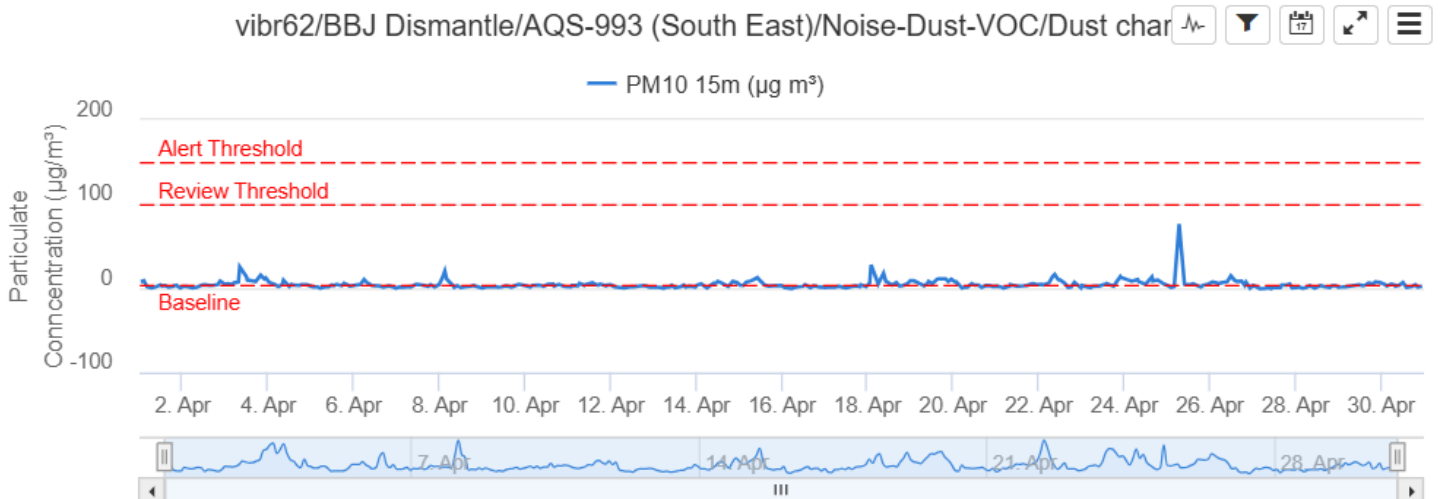
**Air Quality Systems #977 – Noise Monitoring Station – April 25:**



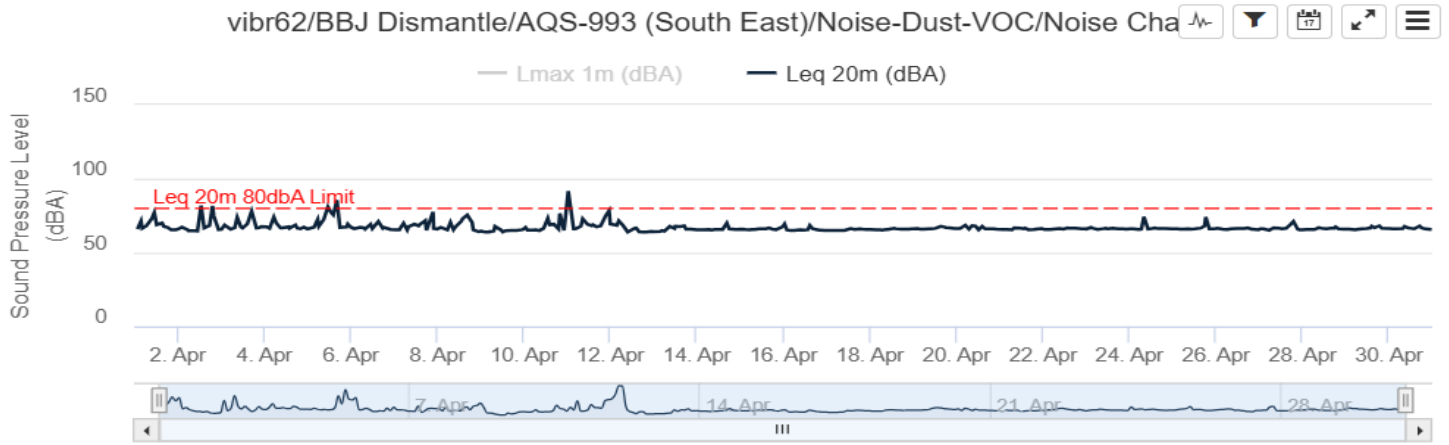
**Air Quality Systems #977 – Noise Monitoring Station (Lmax) – April 25:**



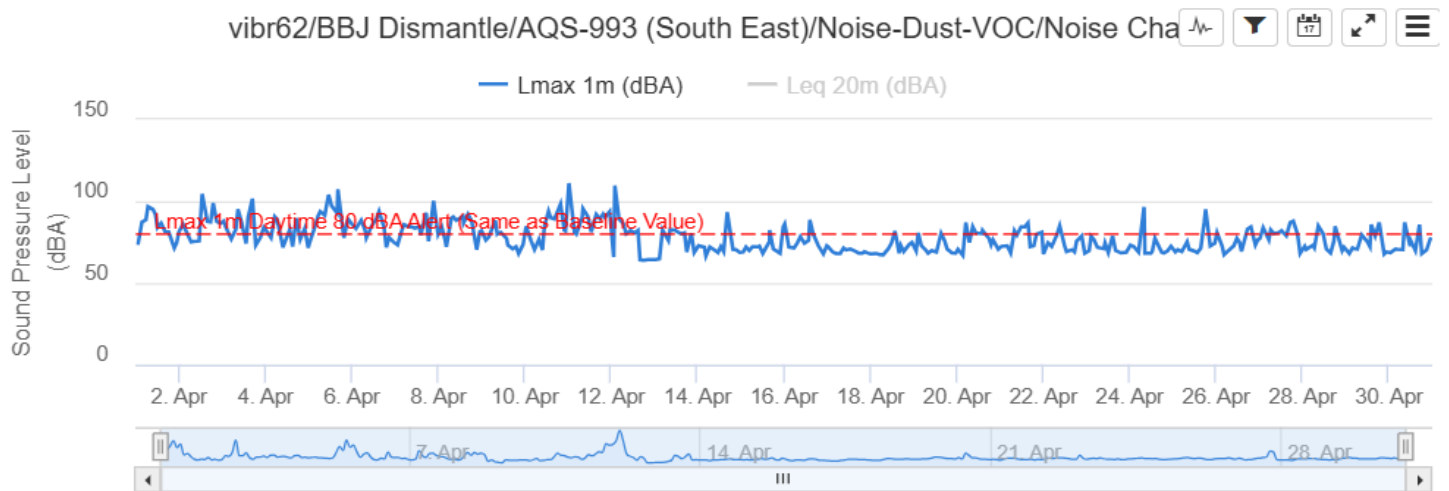
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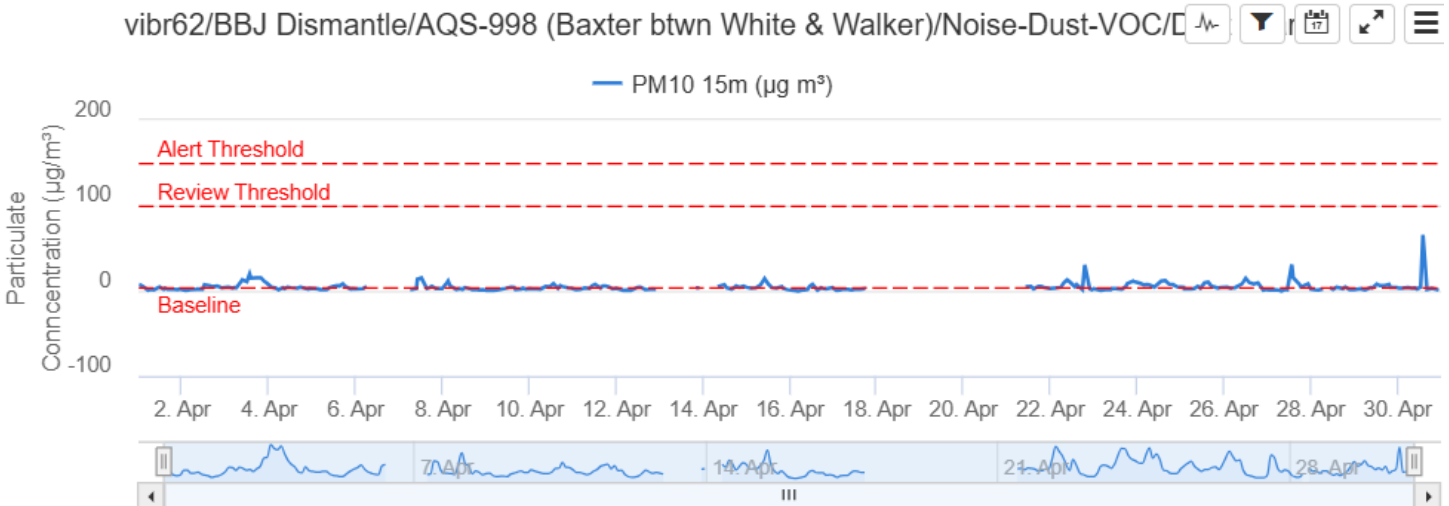
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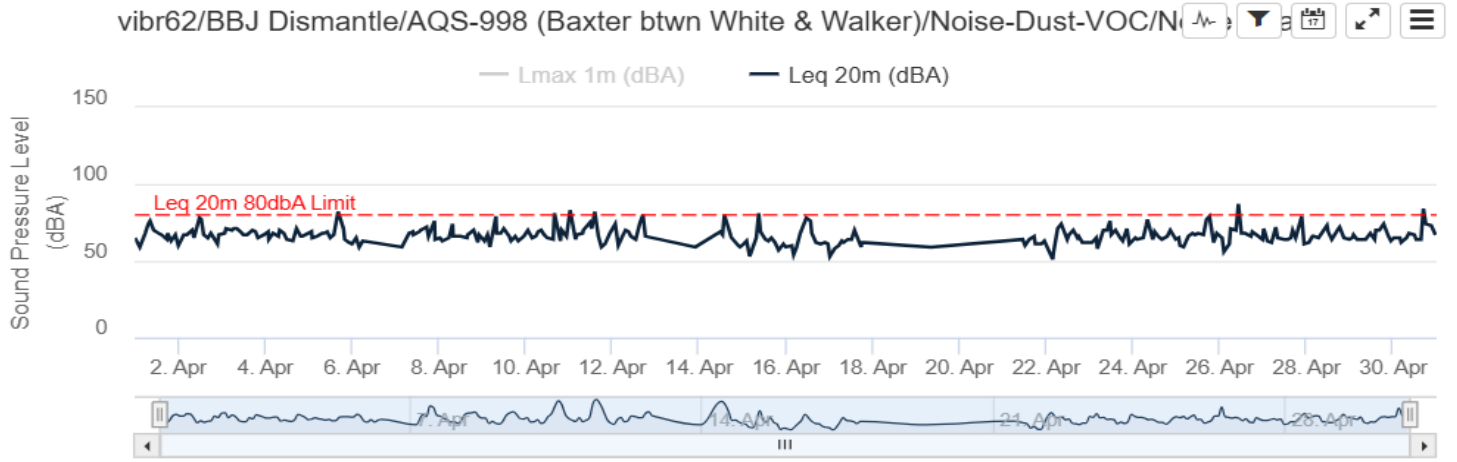
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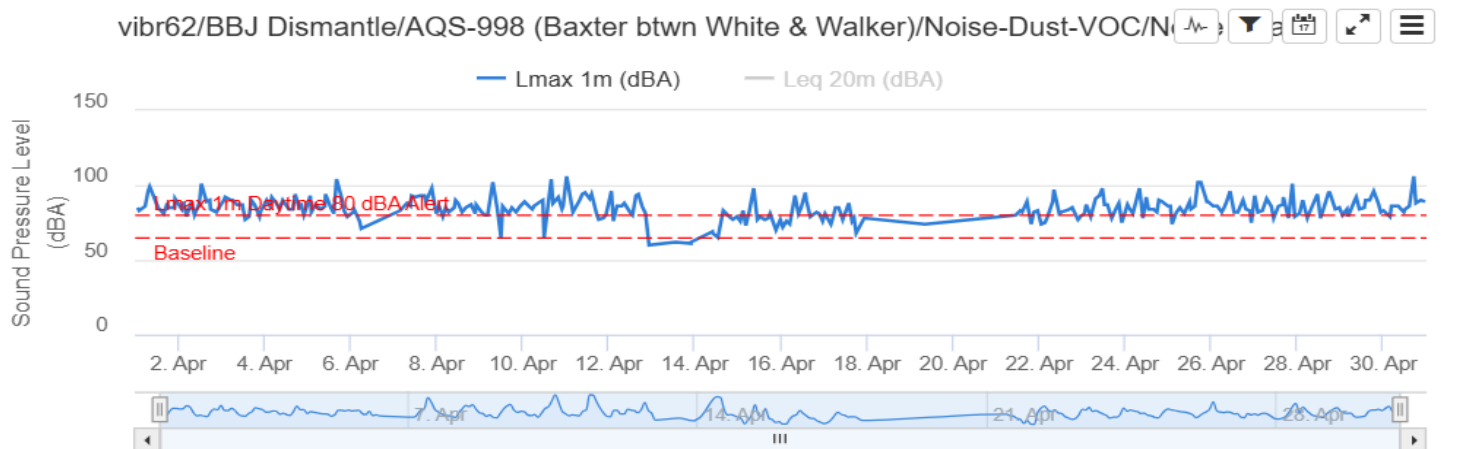
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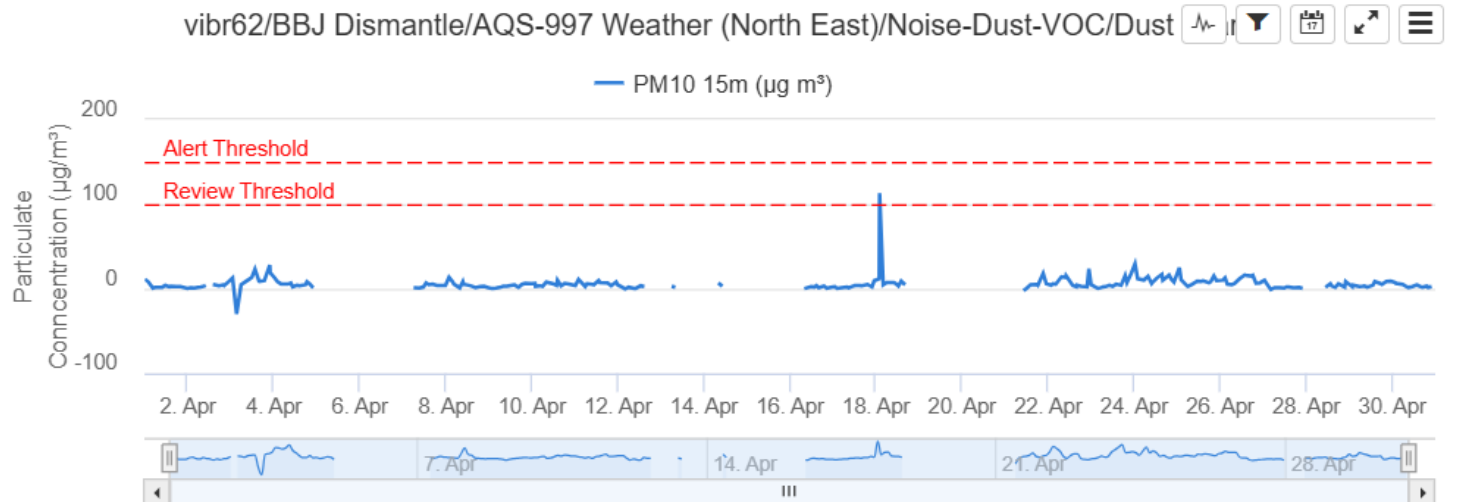
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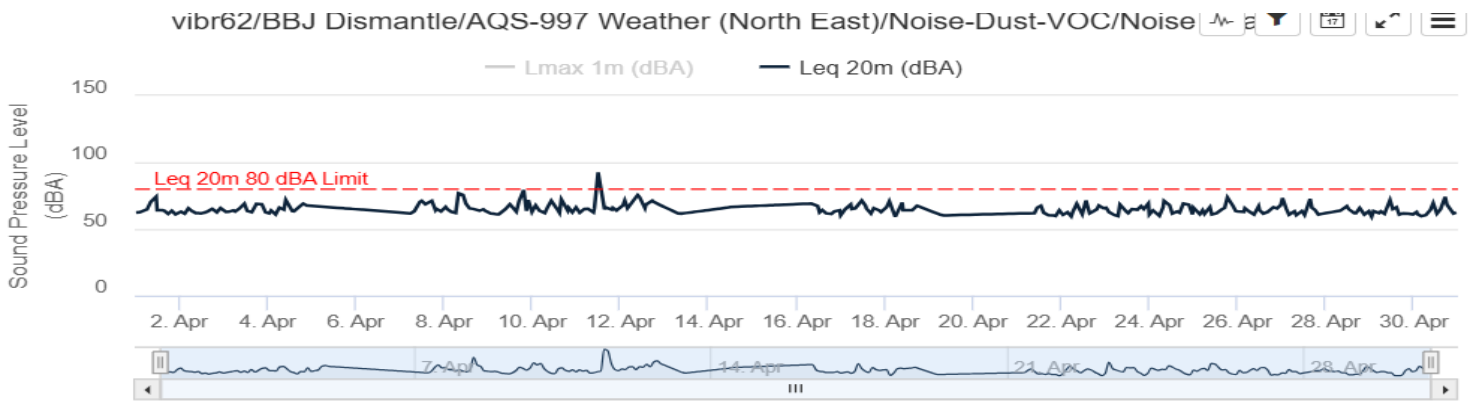
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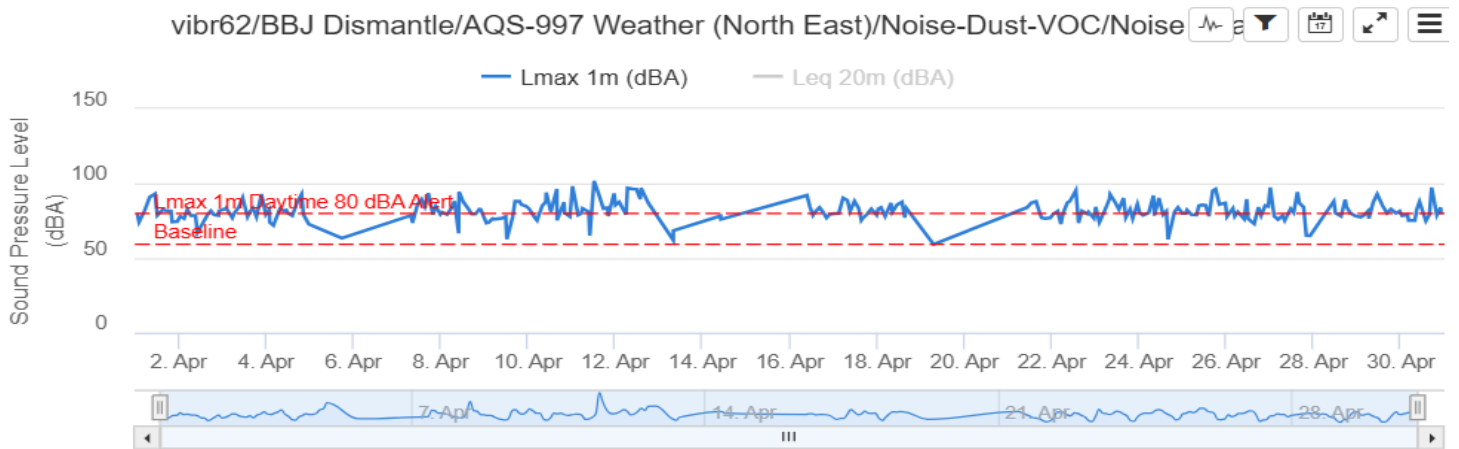
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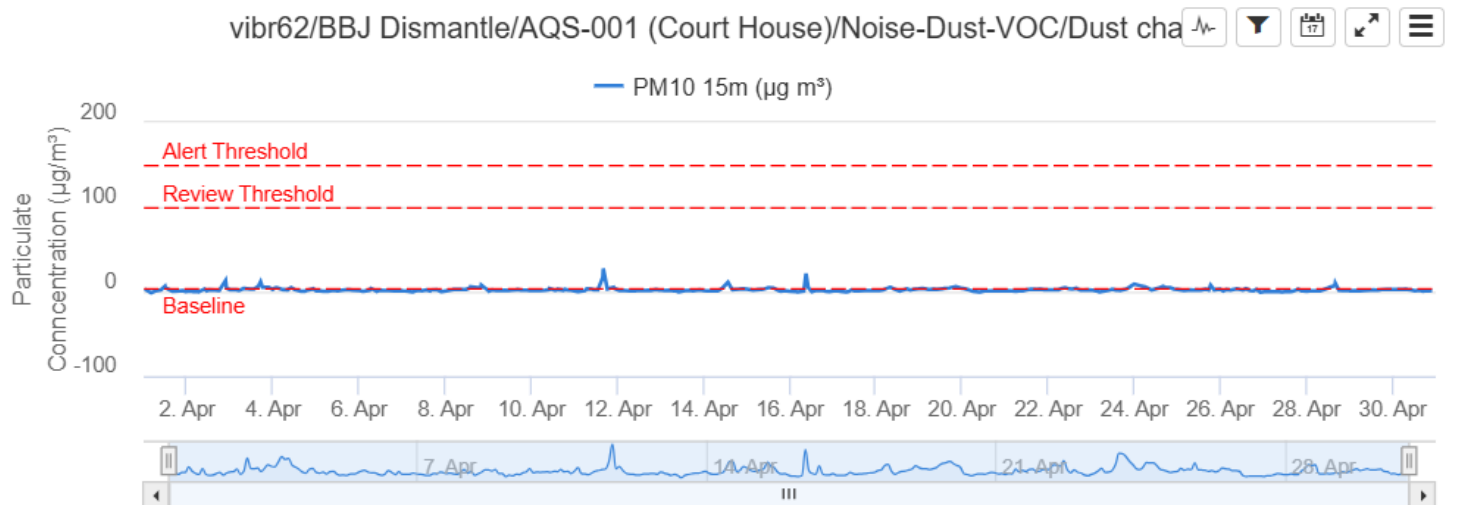
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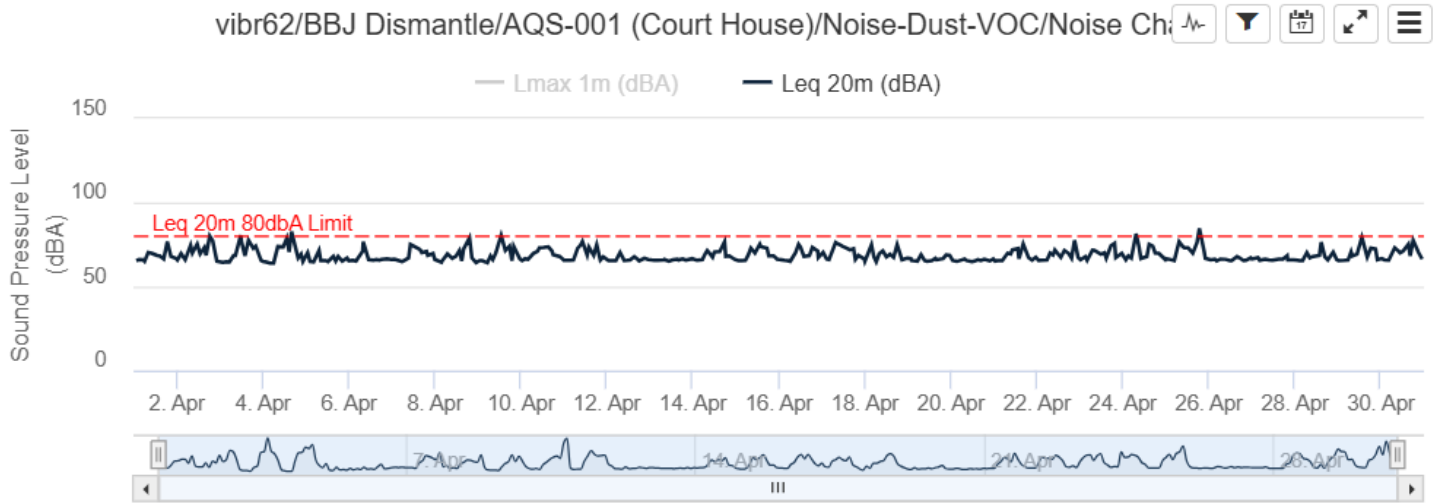
**Air Quality Systems #997 – Noise Monitoring Station (Lmax) – April 25:**



**Air Quality Systems #001 – Dust Monitoring Station – April 25:**



**Air Quality Systems #001 – Noise Monitoring Station – April 25:**



**Air Quality Systems #001 – Noise Monitoring Station (Lmax) – April 25:**

