

## AIR, NOISE AND VIBRATION MONTHLY MONITORING REPORT

Prepared By: NorthStar

<b>DDC. Project ID:</b>	BBJ K-DSS	<b>Period Start:</b> 1/1/24 <b>End</b> 1/31/24
<b>Project Name:</b>	NYC Borough Based Jails System – Brooklyn Dismantle and Swing Space Project	
<b>DDC Pin No.:</b>	8502020CR0043P	

### 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
22	31	0	Air Monitoring was performed during weekdays and weekends. 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

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

*During the month of January 2024, air monitoring devices were in continuous operation at the project site recording construction-related levels of Particulate Matter (PM). PM10 levels **did not** surpass Daily Permissible Exposure Limits (PEL) during this month as set by federal standards for the 24-hour Time Weighted Average (TWA), or daily value and did not trigger notifications to the project management construction team or contractor specific to air quality exceedances that could potentially impact the public or on-site workers.*

*The contractor, NorthStar Contracting Group, Inc. in with their environmental specialist, will implement mitigation techniques at Action Levels as well as Exceedances of Exposure Limits (15-minute TWA) to suppress construction activity effects on air quality when warranted throughout the Project work-zone.*

*No corrective actions or mitigations measures were required this month.*

## 2) Community Noise Monitoring Monthly Summary

Units are 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	Comments
22	31	0	Noise monitoring was performed during weekdays and weekends. No construction-related exceedances were recorded.

### Community Noise Monitoring Excursions and Corrective Actions

Action Level = 3 dBA above background

Stop Work Level = 5 dBA above background

Date: Time	Maximum Noise Reading before Corrective Action (DBA)	Maximum Noise Reading after Corrective Action (DBA)	Corrective Action
None to Date	No Exceedance	N/A	Noise monitoring was performed during weekdays and weekends. No construction-related exceedances were recorded.

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

*During the month of January 2024, noise monitoring devices were in continuous operation at the project site recording construction-related noise levels in units of (DBA). DBA levels **did not** surpass the Noise Limits identified by Local Law 113 during this month and did not cause noise concerns for the surrounding community. There were no notification triggers to the project management team or contractor specific to noise exceedances that could potentially impact the public or on-site workers.*

*The contractor, NorthStar Contracting Group, Inc. in conjunction with their environmental specialist, will implement mitigation techniques at Action Levels as well as Exceedances of Exposure Limits to suppress construction activity effects on Noise when warranted throughout the Project work-zone.*

*No corrective actions or mitigations measures were required this month.*

### 3) Community Vibration Monitoring Monthly Summary

Units are 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	Comments
22	31	6	No mitigation actions were required. Alerts triggered manually during off hours as well as during working hours.

### Community Vibration Monitoring Excursions and Corrective Actions

Action Level = 0.50 in/sec peak particle velocity

Stop Work Level = 1.00 in/sec peak particle velocity

Date: Time	Maximum Vibration Level before Corrective Action (in/sec)	Maximum Vibration Level after Corrective Action (in/sec)	Corrective Action
January 2, 2024; 06:16:17	0.624	0.021	No work taking place; no corrective action necessary. Work hours begin at 0700
January 2, 2024; 08:32:34	0.724	0.012	No deconstruction work taking place within 90' of sensor, trigger could have been rodents, heavy footsteps on metal cover plates, or debris from street falling into shaft-way. Sensor has been relocated to a position outside of shaft 1/15/24.
January 2, 2024; 13:15:14	0.637	0.012	No deconstruction work taking place within 90' of sensor, trigger could have been rodents, heavy footsteps on metal cover plates, or debris from street falling into shaft-way. Sensor has been relocated to a position outside of shaft 1/15/24.
January 3, 2024; 06:16:18	0.643	0.038	No work taking place; no corrective action necessary. Work hours begin at 0700
January 4, 2024; 06:16:21	2.275	0.028	No work taking place; no corrective action necessary. Work hours begin at 0700
January 4, 2024; 06:17:47	1.292	0.012	No work taking place; no corrective action necessary; Work hours begin at 0700
January 6, 2024; 06:00:14	1.468	0.012	No work; Saturday hours begin at 0900
January 6, 2024; 06:16:05	0.626	0.469	No work; Saturday hours begin at 0900
January 9, 2024; 12:18:37	1.023	0.016	No deconstruction work taking place within 90' of sensor, trigger could have been rodents, heavy footsteps on metal cover plates, or debris from street falling into shaft-way. Sensor has been relocated to a position outside of shaft 1/15/24.
January 14, 2024; 06:16:18	0.669	0.017	Sunday - No work taking place
January 14, 2024; 13:40:41	0.818	0.017	Sunday - No work taking place
January 14, 2024; 14:59:30	1.636	0.060	Sunday - No work taking place

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

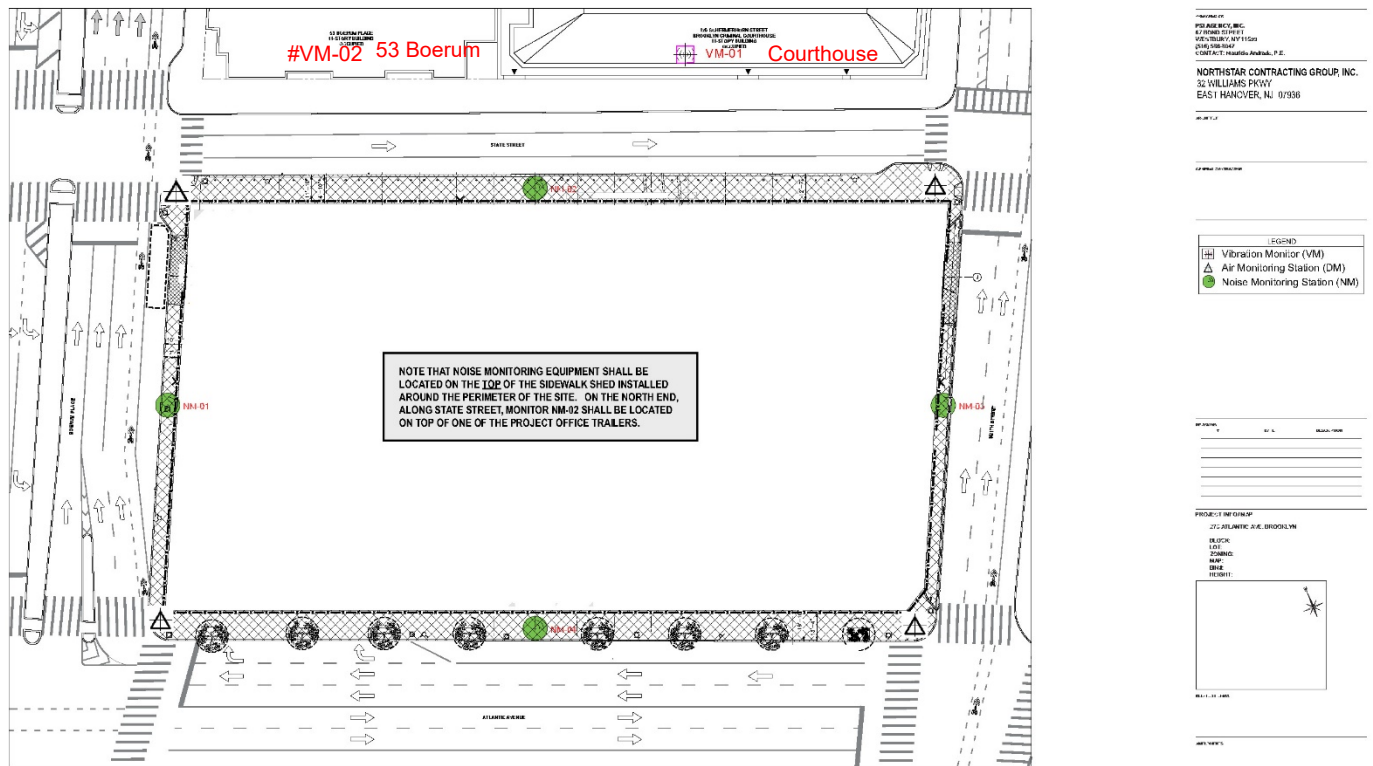
*Vibration monitors were installed within the MTA subway tunnel and in front of the Brooklyn Criminal Courthouse on State Street, to monitor vibrations during the dismantling of the Brooklyn Detention Center. The monitors in the subway tunnels were not activated, as the vibrations from train movements were determined to overwhelm or obscure the vibrations from the dismantling work. The monitor in front of the Courthouse was located in an access shaft in the sidewalk, under 2 metal hatch doors. The monitor is a highly sensitive instrument, so it records vibrations from heavy impact from footsteps, scooters, etc. on the metal access shaft cover plates, bits of debris dropped down the shaftway, rainfall, etc. as well as potential vibrations from the deconstruction across the street. Furthermore, the deconstruction work is greater than 90' away from the monitor, so allowing for dissipation of any vibration over distance, the source of the exceedances is more likely to be local than from that distance. Therefore, many of the exceedances recorded are discounted as being due to other factors than the dismantling. During the month of January 2024, vibration monitoring was ongoing throughout the entire month at the project site and vibration monitoring devices were in continuous operation at the project site recording construction-related vibration levels measured in inches per second (in/sec) or IPS. Throughout the month of January, action-level vibration threshold exceedances and stop-work level vibration exceedances were recorded above the Daily Permissible Exposure Limits (IPS) during this month as set by Action Levels = 0.5 in/sec above backgrounds and Stop Work Levels = 1.0 in/sec above backgrounds. These alerts were recorded during off hours when no work was taking place on site. No work was taking place within 90-feet of the vibration monitoring equipment when action level and stop-work level exceedances were recorded. A second monitor was added at 53 Boerum The contractor, NorthStar Contracting Group, Inc. in conjunction with their environmental specialist, will implement mitigation techniques at Action Levels as well as Exceedances to suppress construction activity effects that causes Vibration when warranted throughout the Project work-zone.*

*No corrective actions or mitigations measures were required this month as the alerts were triggered due to manual disturbance of the sensor during off hours as well as during work hours.*

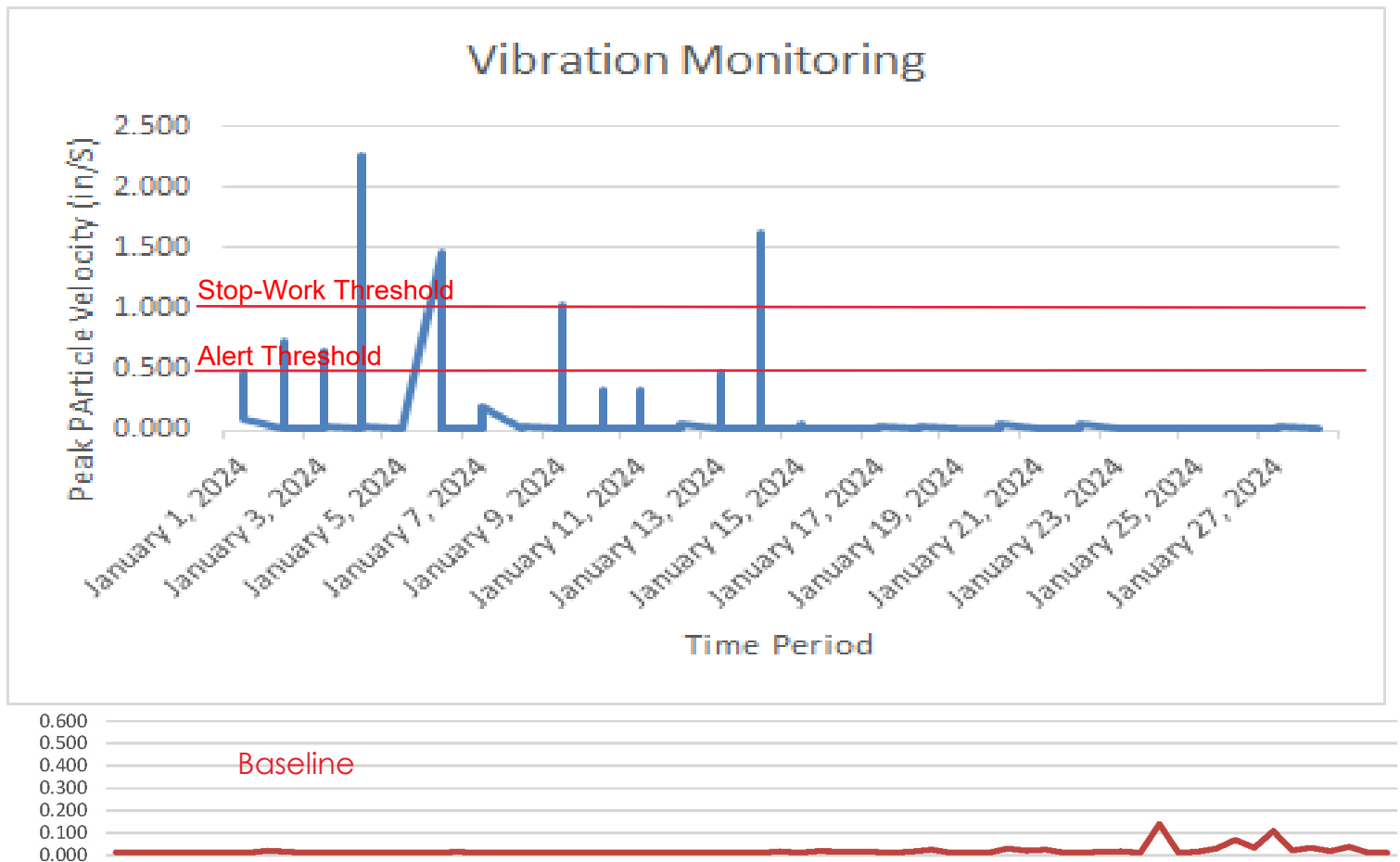
**ATTACHMENTS:**

- 1 – Map of monitoring station/locations
- 2 – Data Plots (Please add title to all the graphs)
- 3 – Baseline Reference

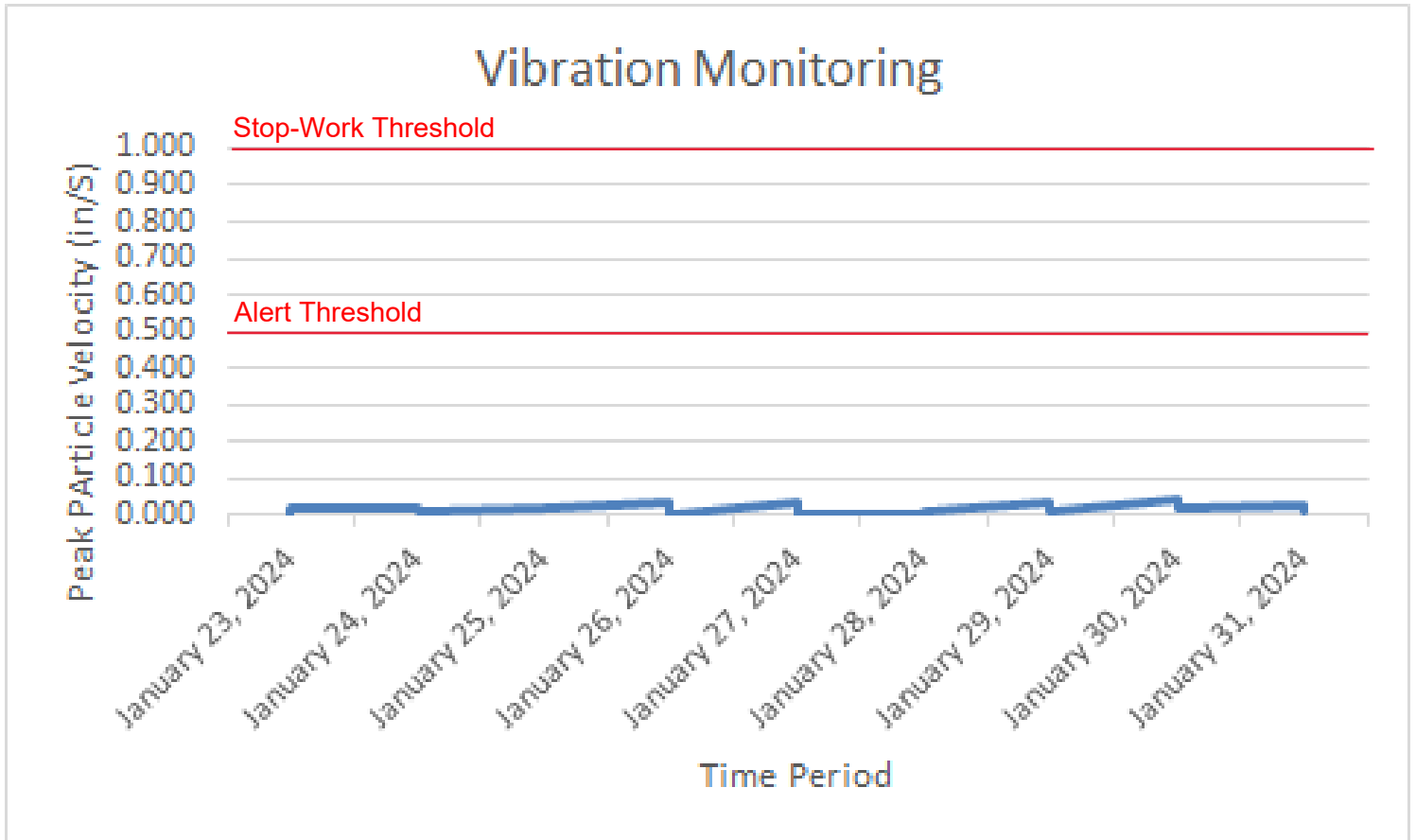
Map of Monitoring Locations:



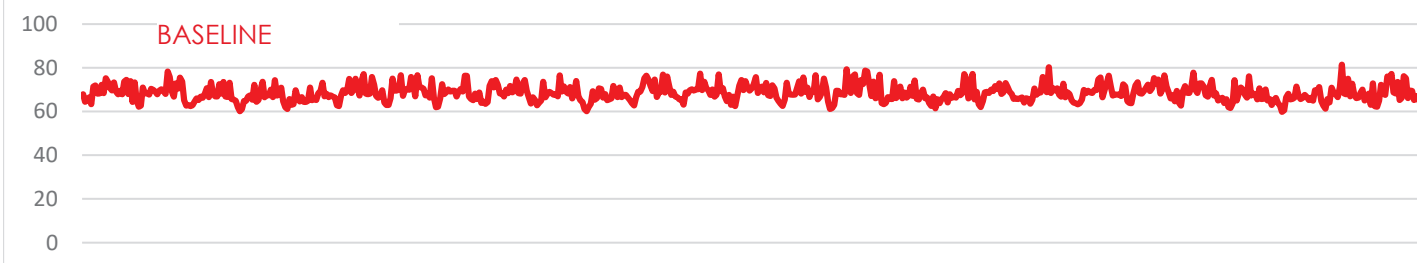
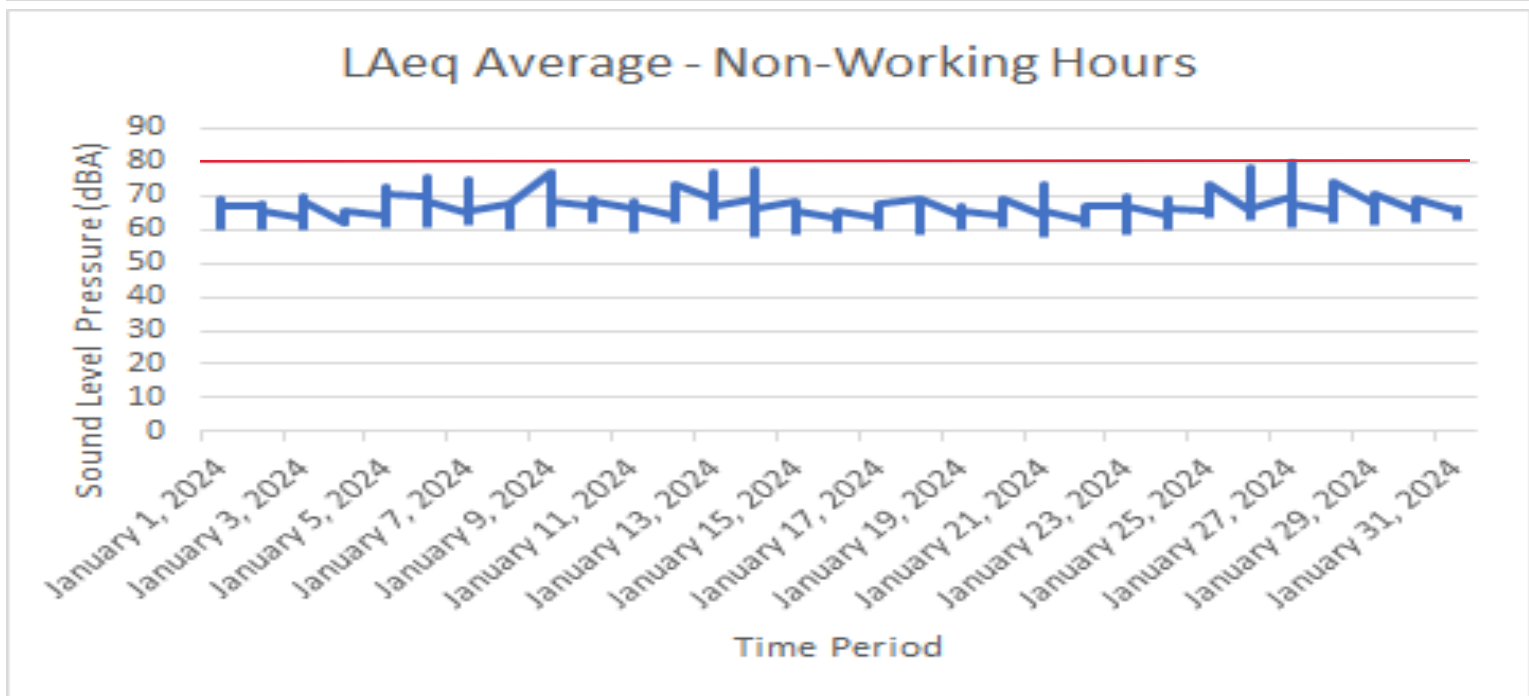
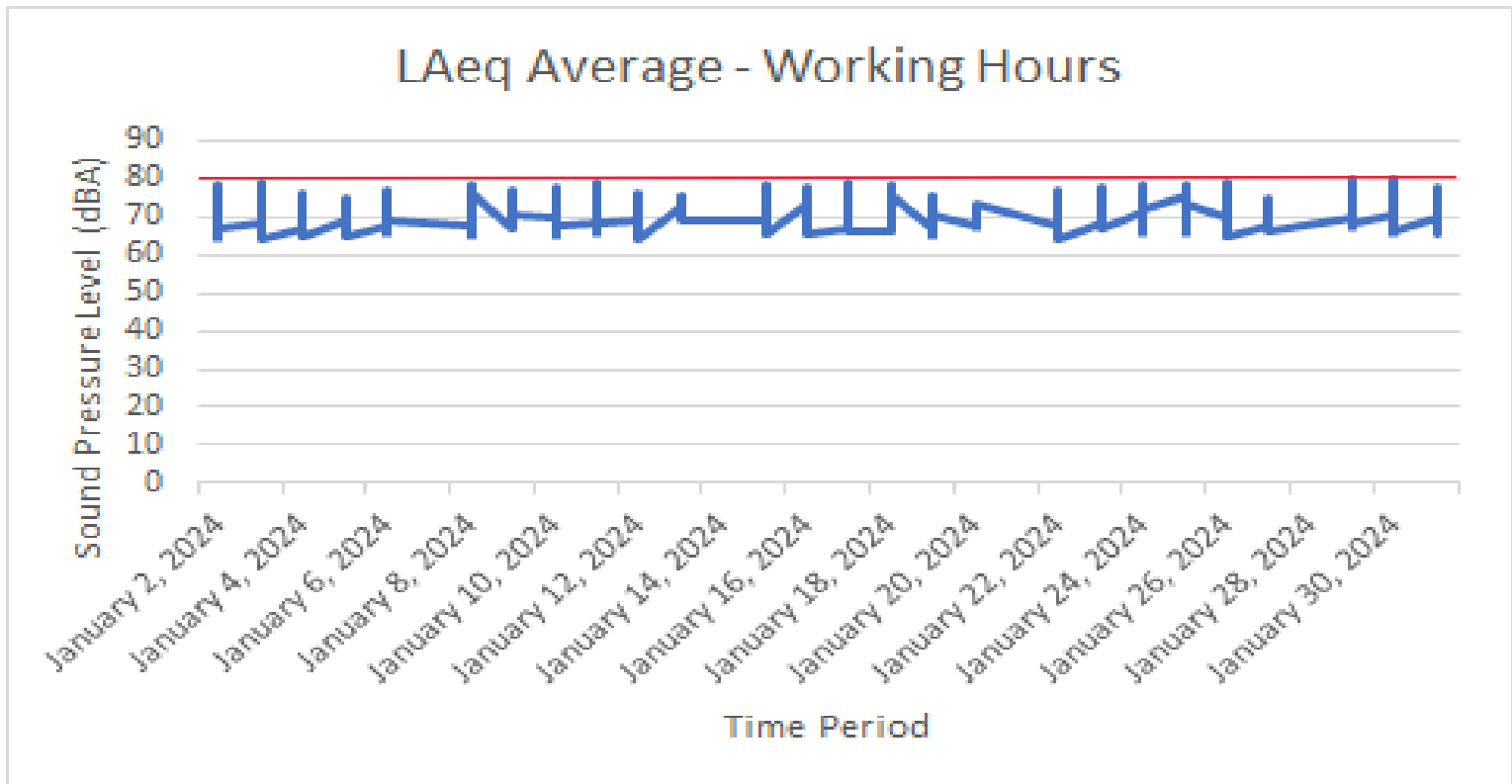
Vibration Monitor – VM-01 – January 2024: Courthouse



Vibration Monitor – VM-02 – January 2024: 53 Boerum

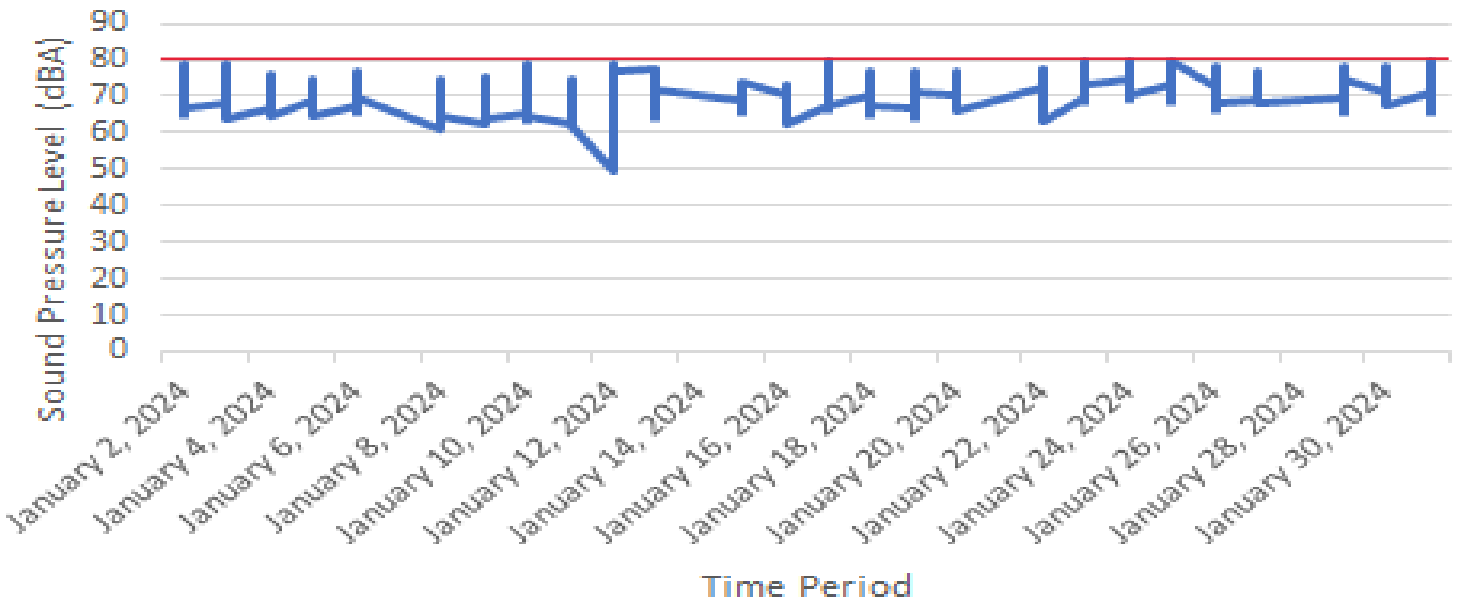


Noise Monitoring Unit #1674 - (Smith Street) – January 2024:

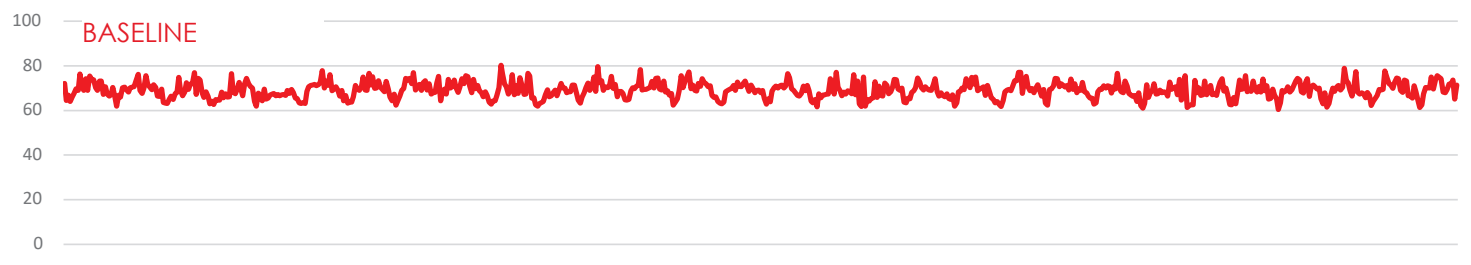
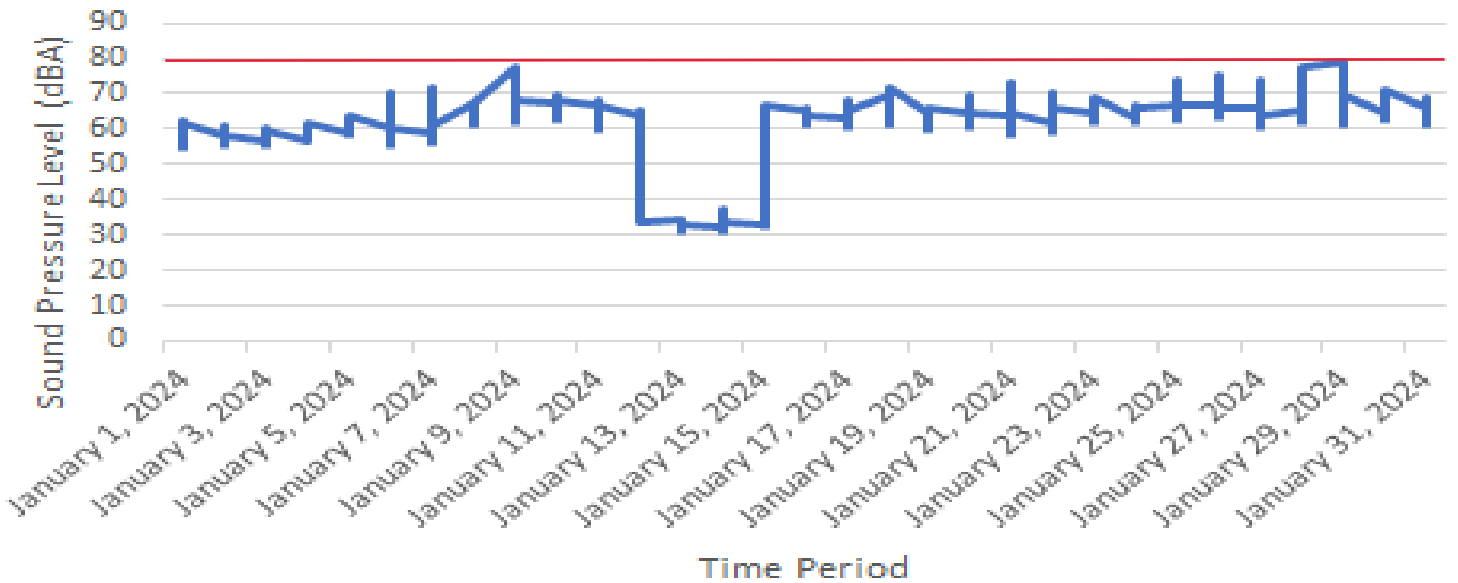


Noise Monitoring Unit #1493 - (Boerum Street) – January 2024:

### LAeq Average - Working Hours

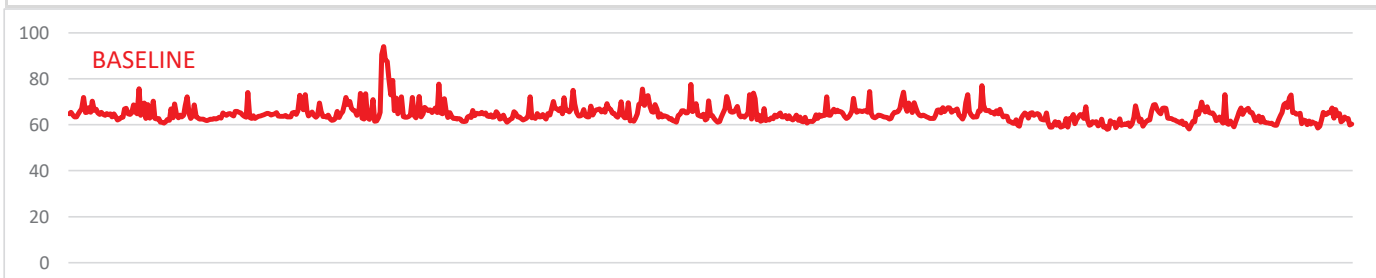
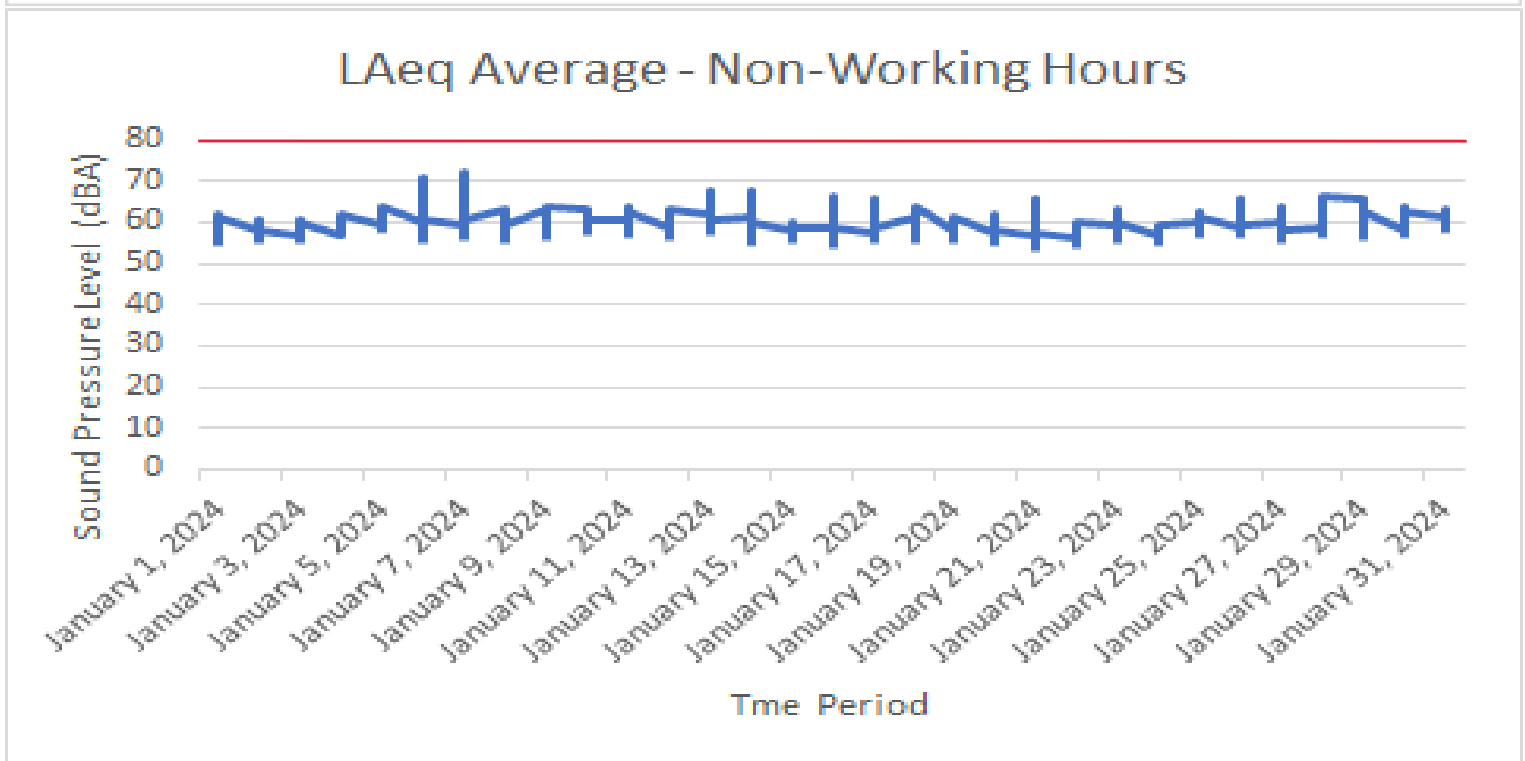
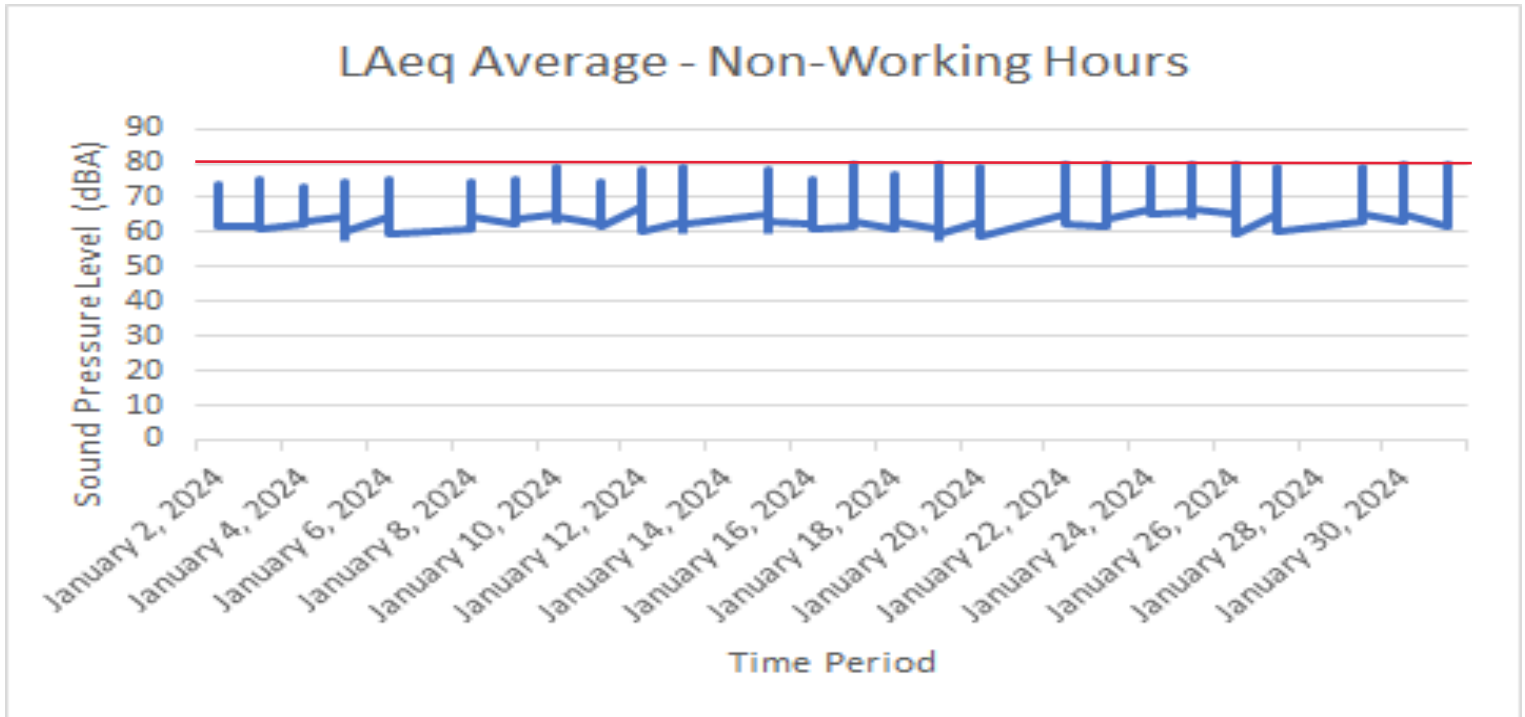


### LAeq Average - Non-Working Hours



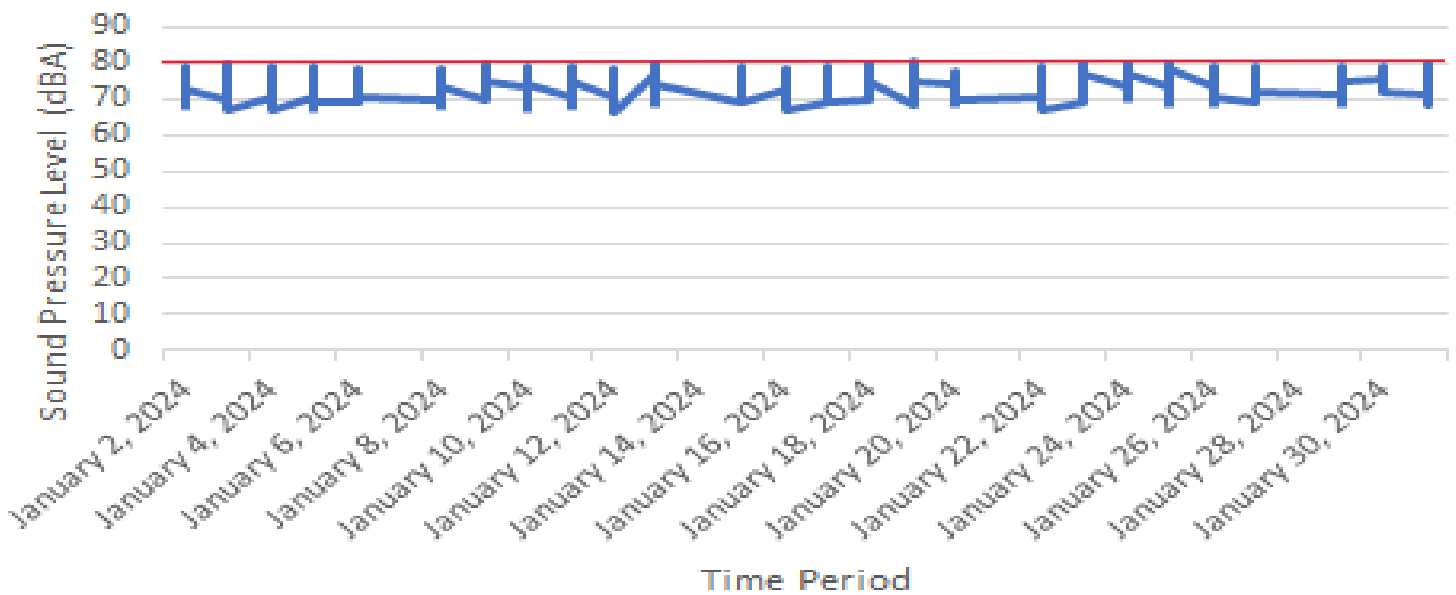


Noise Monitoring Unit #1494 - (State Street) – January 2024:

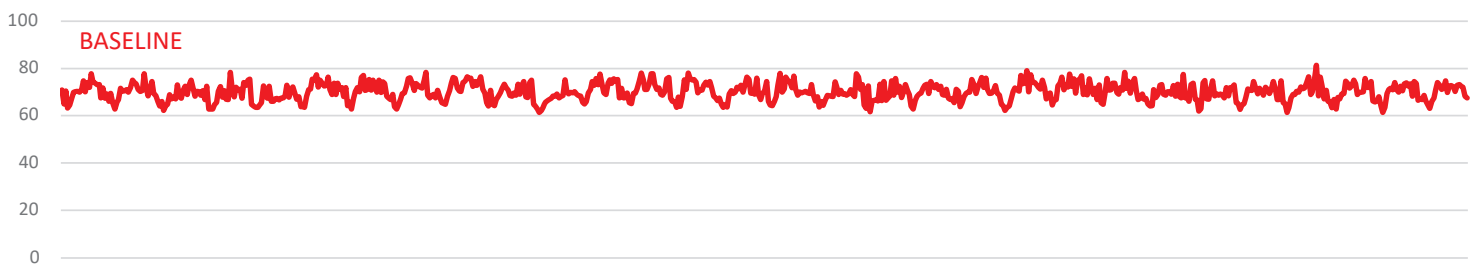
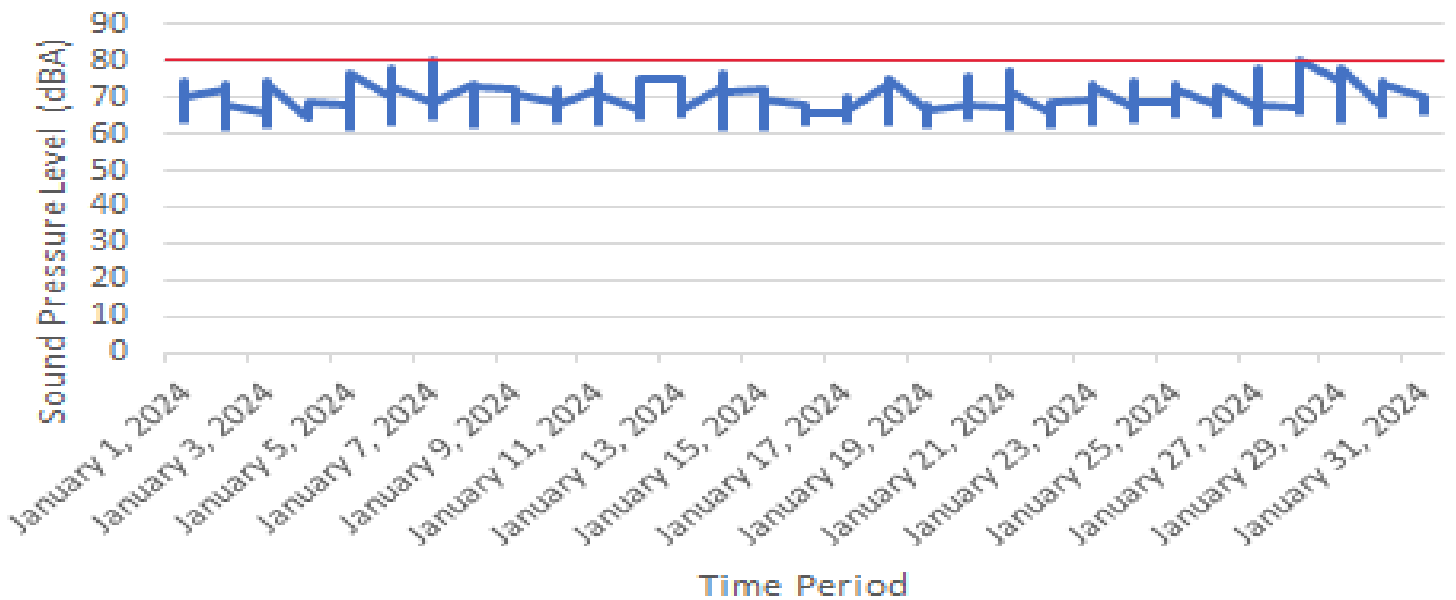


Noise Monitoring Unit #1532 - (Atlantic Avenue) – January 2024:

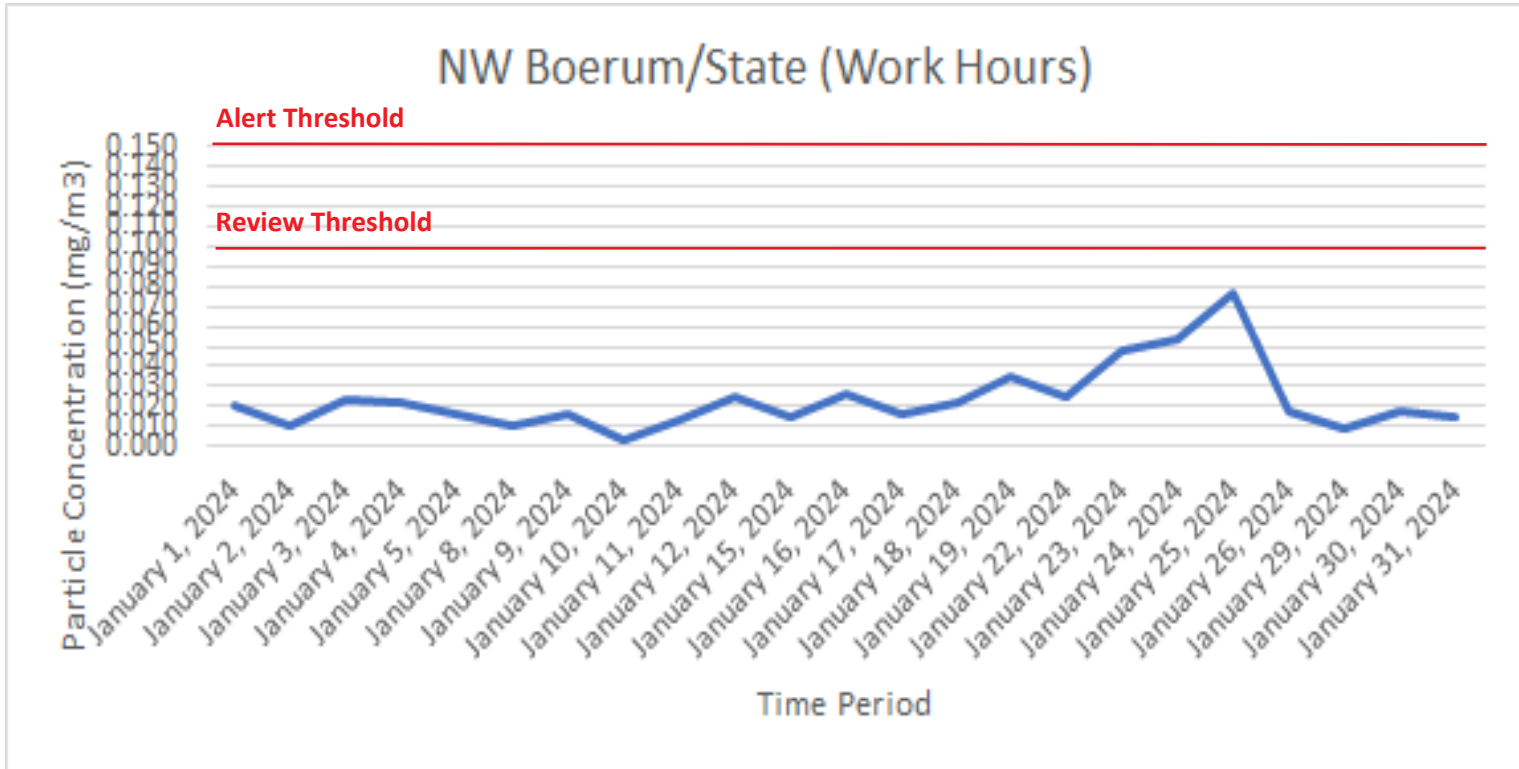
### LAeq Average - Working Hours



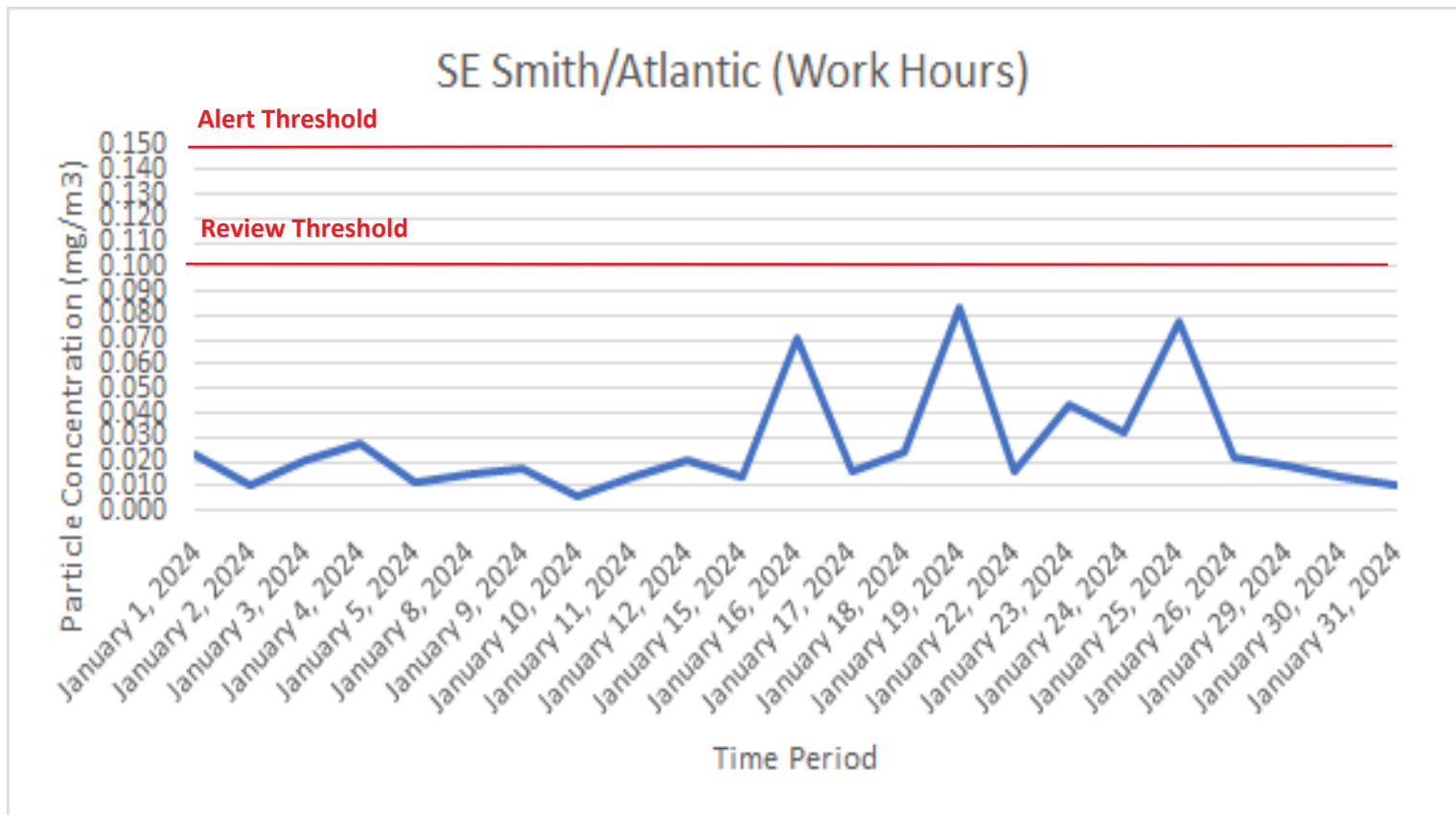
### LAeq Average - Non-Working Hours



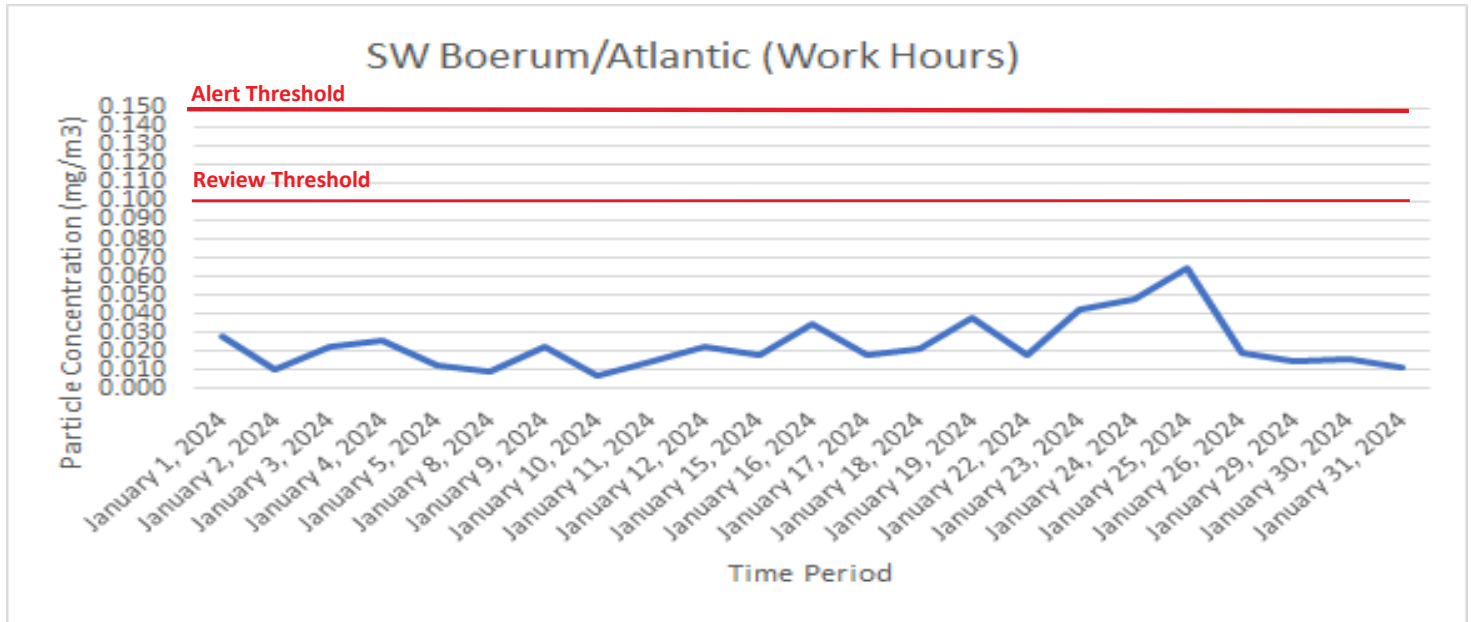
Dust Monitoring Unit – NW Corner – January 2024:



Dust Monitoring Unit – SE Corner – January 2024:



Dust Monitoring Unit – SW Corner – January 2024:



Dust Monitoring Unit – NE Corner – January 2024:

