

AIR, NOISE AND VIBRATION MONTHLY MONITORING REPORT

Prepared By:

Hajeong Lim (HRCG)

DDC Project No.: BBJ Q DSS Period Start: 11/01/23 End 11/30/23

DDC Pin No.: 8502020CR0046P

Project Name: NYC Borough Based Jails System - Queens Dismantle and Swing Space

1) Community Air Monitoring Monthly Status Summary

TWA – Time Weighted Average mg/m³- milligrams per cubic meter

Number of Workdays in a Month	Number of Air Monitoring Days in a Month	Number of Days with DustConcentrations above Action Concentrations by Month (0.1 mg/m³ 15 minute TWA)	Comments
23	22	None	Daily air monitoring was conducted by AKRF except 11/4 Saturday. Only a quarter number of labor was scheduled on 11/4/ Saturday for dropping the Hoist and debris clean up.

Community Air Monitoring Monthly Excursions and Corrective Actions

Action Concentration = 0.100 mg/m³ 15 minute TWA above background concentration* Stop Work Concentration = 0.150 mg/m³ 15 minute TWA above background concentration*

* Background concentration values vary daily. See Prestart/Background Condition Level in the attached graphs.

Date: Time	Maximum Dust Reading Before Corrective Action 15 Minute TWA (mg/m³)	Maximum Dust ReadingAfter Corrective Action 15 Minute TWA (mg/m³)	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.

The contractor, Hunter Roberts Construction Group, 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.



		Noise Monitorin d decibels (dBA) level	g Month	nly Summa	ary			
Number of Number of Noise Workdays in Monitoring Days a Month in a Month			Number of Days with NoiseLevels above Action Levelsby Month Cor		Comments			
2	23	3		None		According to the monitoring plan for the site, the number of days performing noise monitoring (3) is above the requirement of (2) days.		
Noise Mo Noise Mo Noise Mo Noise Mo	Community Noise Monitoring Monthly Excursions and Corrective Actions Noise Monitoring Location 1 Action Level (Day – 7 am to 5 pm / Night – 5 pm to 7 am): 75 / NA Noise Monitoring Location 2 Action Level (Day – 7 am to 5 pm / Night – 5 pm to 7 am): 75 / NA Noise Monitoring Location 3 Action Level (Day – 7 am to 5 pm / Night – 5 pm to 7 am): 69 / 68 Noise Monitoring Location 4 Action Level (Day – 7 am to 5 pm / Night – 5 pm to 7 am): 65 / 55 Noise Monitoring Location 5 Action Level (Day – 7 am to 5 pm / Night – 5 pm to 7 am): 68 / 67							
Date Time Location Readingbefore Corrective Rea				um Noise ing after rective on(dBA)	Baseline Noise Level Day/Night (dBA)	Corrective Action		
N/A	N/A	N/A]	N/A	N/A	N/A		
Marrativ	o Summa	ry of Noise Monitor	ing Eva	reione and	Corrective Action			

Narrative Summary of Noise Monitoring, Excursions and Corrective Actions:

Throughout November 2023, noise levels remained below the set thresholds at all five locations. Construction-related activities in the month stayed within or below the warning limit at various locations. No corrective actions were required as noise levels didn't surpass the limits.

Nighttime Action Levels are established for three residential location, location #3, #4, and #5, in case dismantling activities are performed between 5 pm and 7 am.

3) Community Vibration Monitoring Monthly Summary Units (in/sec) Number of D

Number of Workdays in a Month	Number of Vibration Monitoring Days in a Month	Number of Days withVibration Levels above Action Levels by Month	Comments
24	24	2	

Community Vibration Monitoring Monthly Excursions and Corrective Actions

Alert / Action Level = 0.3 in/s Stop Work Level = 0.5 in/s

Date: Time	Maximum Vibration Level before Corrective Action (in/s)	Exceedance Duration	Maximum Vibration Level Followed Exceedance without CorrectiveAction (in/s)	Corrective Action
Nov 6 12:03 pm at VM1 by Family Justice Center	1.23	< 30 sec	\ 0.009	N/A. This was during lunch time and there was no work. The exceedance lasted for less than 30 seconds and were preceded and followed by a PPV less than 0.009 in/sec each time. Consequently, the event was likely the result of direct contact with the transducer by small animals on site rather than vibrations in the structure.



Nov 14 1:05 pm at VM1 by Family Justice Center	1.09	< 30 sec	< 0.009	N/A. There was no work at VM1 location by Family Justice Center on this day. The exceedance lasted for less than 30 seconds and were preceded and followed by a PPV less than 0.009 in/sec each time. Consequently, the event was likely the result of direct contact with the transducer by small animals on site rather than vibrations in the structure.

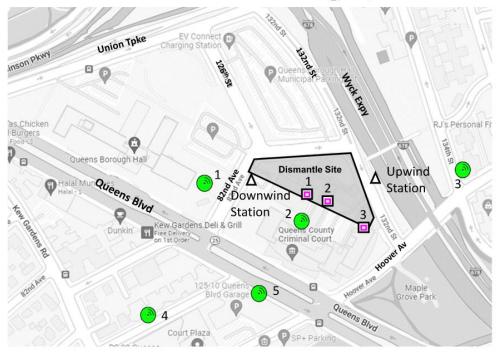
Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

During the Month of November 2023, there was Zero vibration monitor exceedance caused by dismantle or construction activities. All monitors showed results of vibration being under the warning limit of 0.3(in/sec) / stop work limit of 0.5(in/sec), except 11/06 and 11/14 when the vibration monitoring equipment #1 by Family Justice Center was contacted by small animals on site.

ATTACHMENTS:

- 1 Map of Monitoring Station/Locations
- 2 Baseline Reference
- 3 Data Plots

Environmental Monitoring Queens



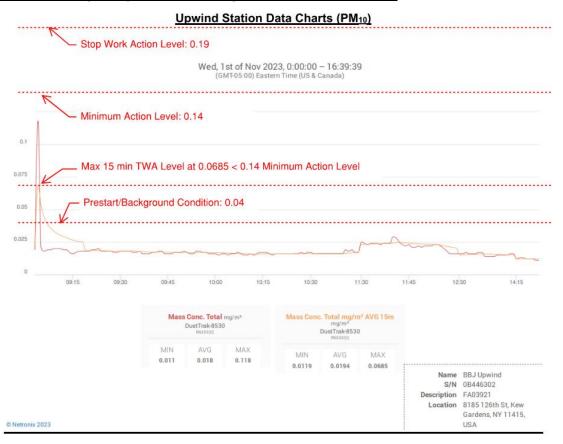
- Vibration Monitor (VM)
- ▲ Air Monitoring Station (DM)
 - Noise Monitoring Station (NM)



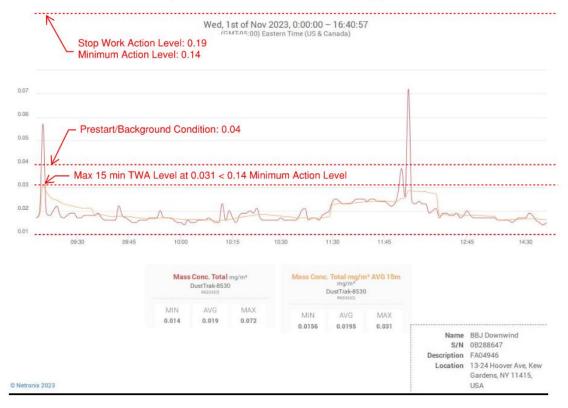
Construction Noise Threshold Limits in dBA

Location	Daytime Leq	Nighttime Leq
Adjacent to the easternmost façade of Queens Borough Hall	75	N/A
At the southwestern corner of the DA Wing	75	N/A
At the residences along 134th Street between 82nd Avenue and Hoover Avenue	69	68
At the residences on 82nd Road between Kew Gardens Road and Queens Boulevard, approximately 200 feet from Kew Gardens Road	65	55
At the residences on Queens Boulevard between 82nd Road and Lefferts Boulevard	68	67

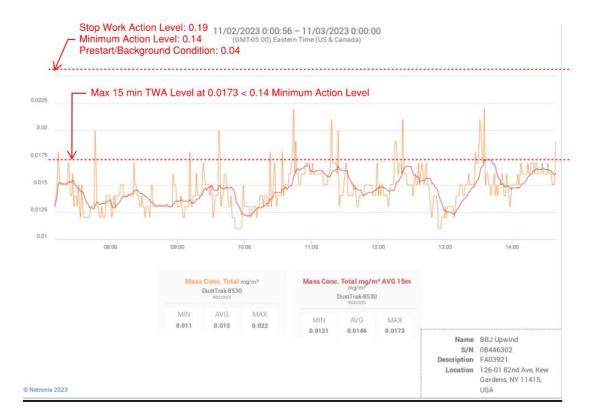
Dismantle Activity Daily Air Monitoring on November 01, 2023



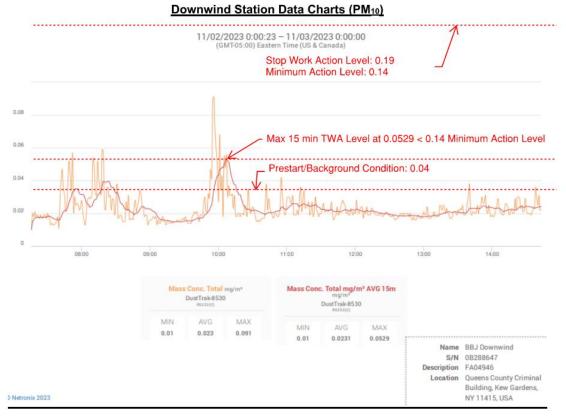




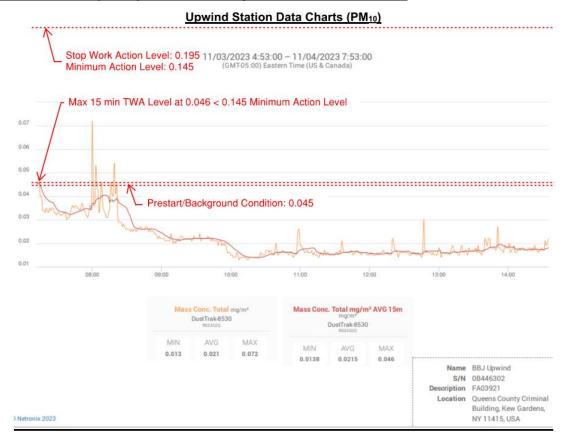
Dismantle Activity Air Daily Monitoring on November 02, 2023



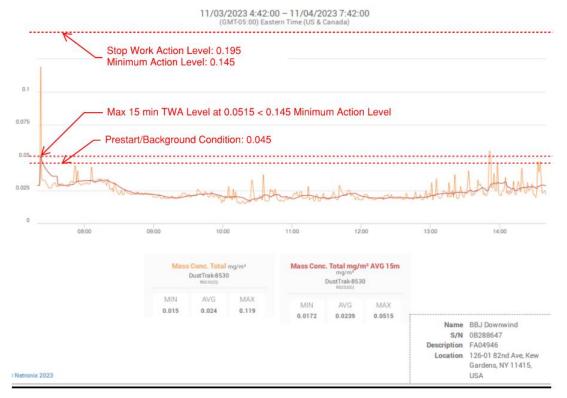




Dismantle Activity Daily Air Monitoring on November 03, 2023



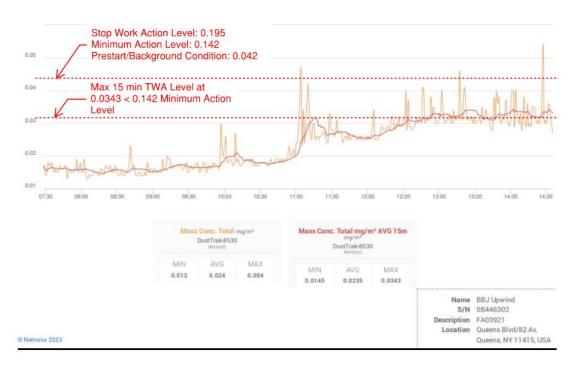




Dismantle Activity Daily Air Monitoring on November 06, 2023

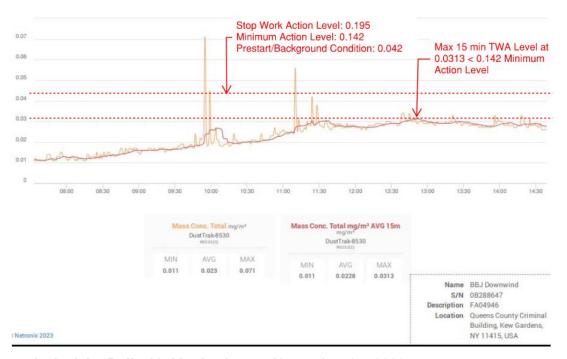
Upwind Station Data Charts (PM₁₀)

11/06/2023 0:00:53 - 11/07/2023 0:00:00 (GMT-05:00) Eastern Time (US & Canada)





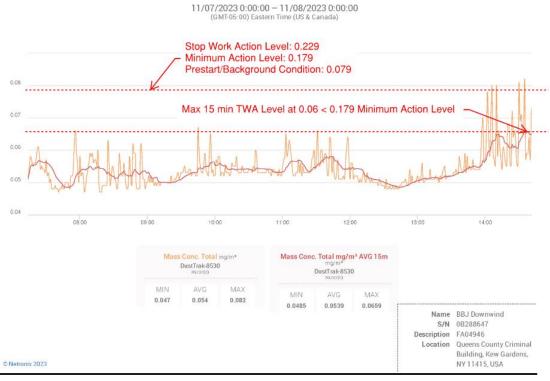
11/06/2023 0:00:32 - 11/07/2023 0:00:00 (GMT-05:00) Eastern Time (US & Canada)



Dismantle Activity Daily Air Monitoring on November 07, 2023

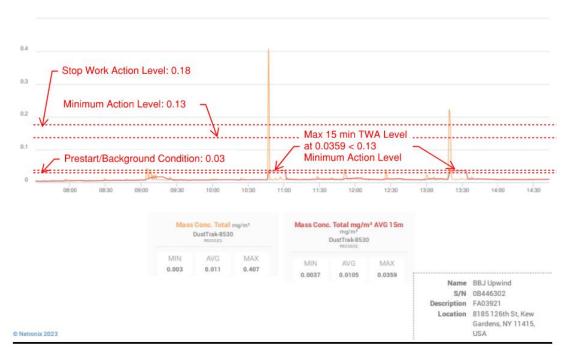






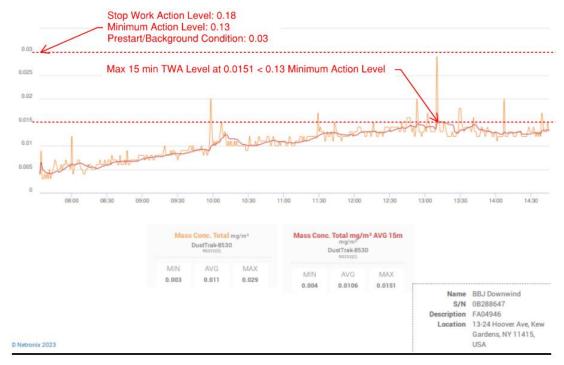
<u>Dismantle Activity Daily Air Monitoring on November 08, 2023</u> <u>Upwind Station Data Charts (PM₁₀)</u>

Wed, 8th of Nov 2023, 0:00:00 - 14:58:51 (GMT-05:00) Eastern Time (US & Canada)

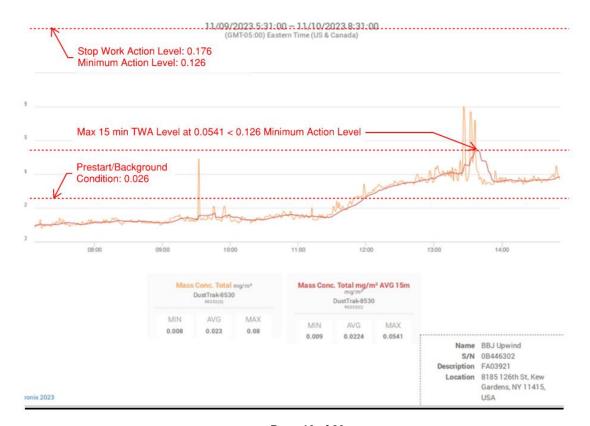




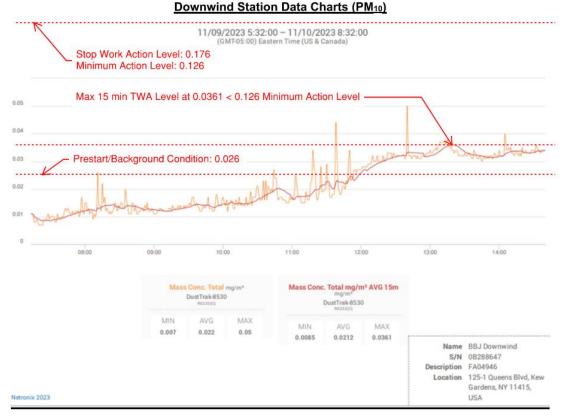
Wed, 8th of Nov 2023, 0:00:00 - 14:58:12 (GMT-05:00) Eastern Time (US & Canada)



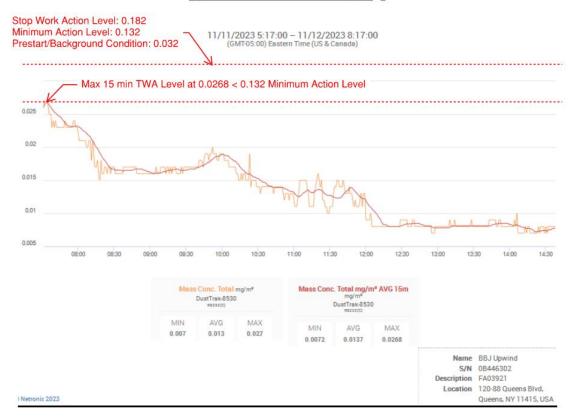
<u>Dismantle Activity Daily Air Monitoring on November 09, 2023</u> <u>Upwind Station Data Charts (PM₁₀)</u>



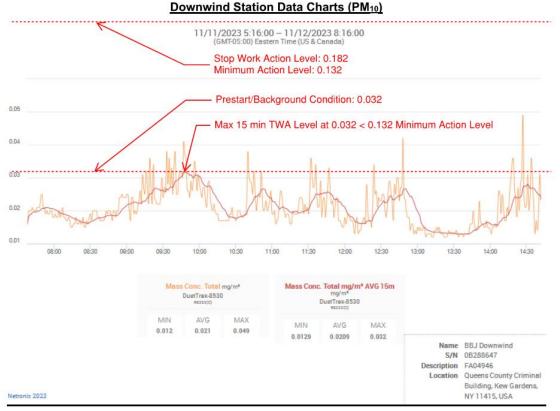




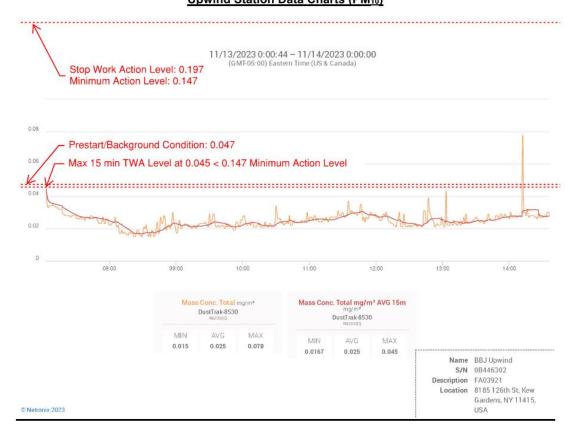
Dismantle Activity Daily Air Monitoring on November 11, 2023



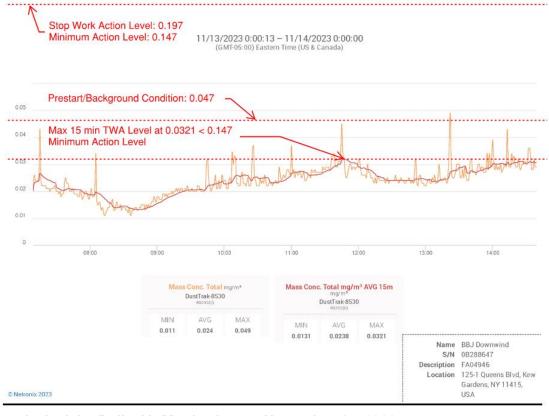




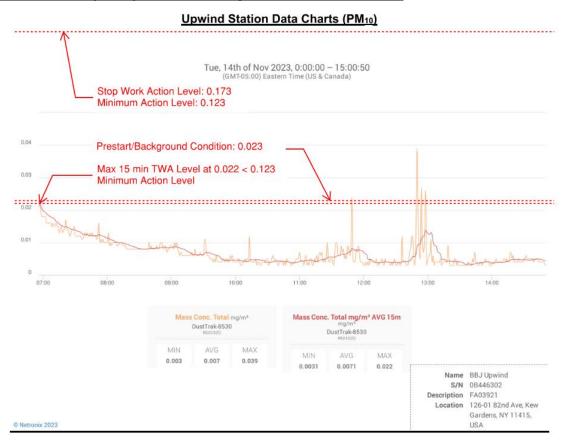
Dismantle Activity Daily Air Monitoring on November 13, 2023 Upwind Station Data Charts (PM₁₀)



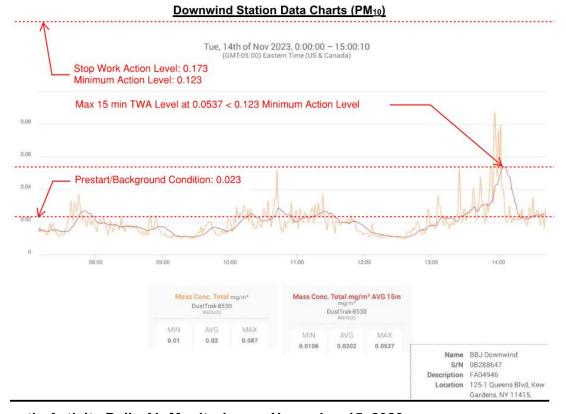




Dismantle Activity Daily Air Monitoring on November 14, 2023

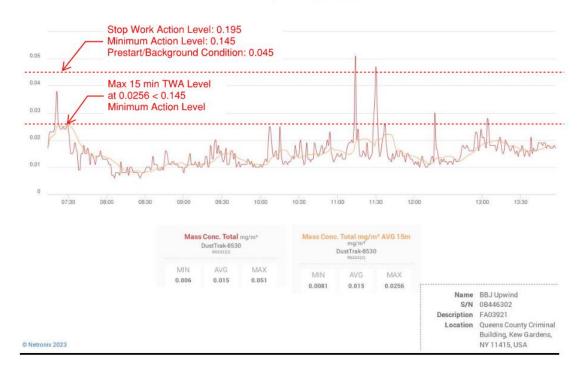






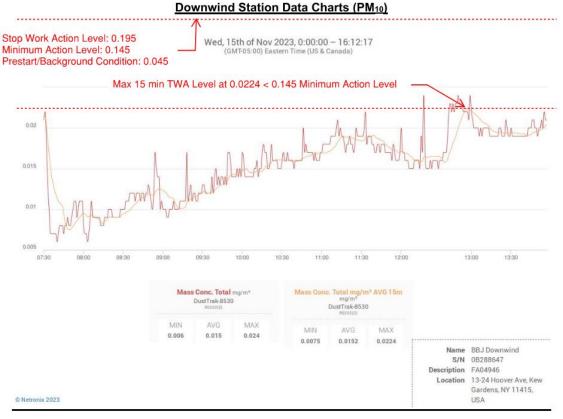
<u>Dismantle Activity Daily Air Monitoring on November 15, 2023</u> Upwind Station Data Charts (PM₁₀)

Wed, 15th of Nov 2023, 0:00:00 - 16:11:46 (GMT-05:00) Eastern Time (US & Canada)





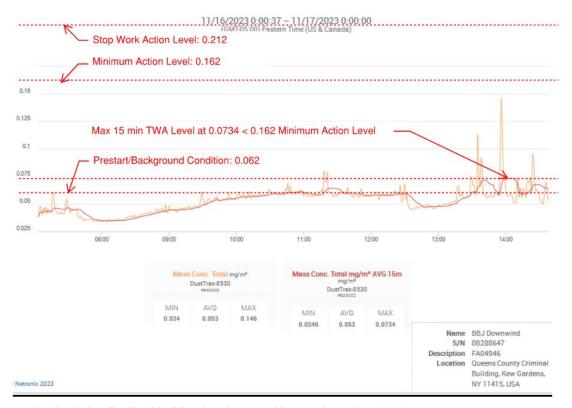
Netronix 2023



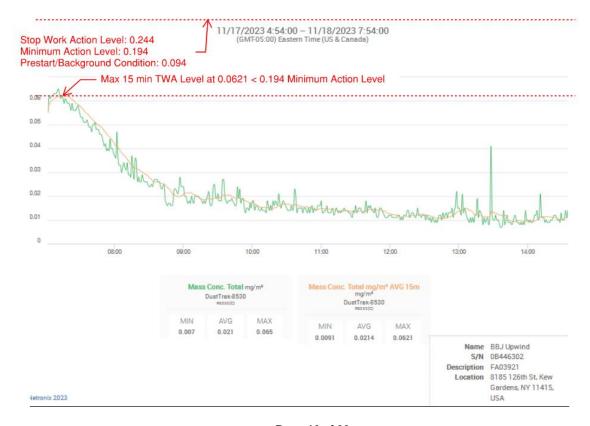
Dismantle Activity Daily Air Monitoring on November 16, 2023

Upwind Station Data Charts (PM₁₀) 11/16/2023 0:00:15 - 11/17/2023 0:00:00 (GMT-05:00) Eastern Time (US & Canada) Stop Work Action Level: 0.212 Minimum Action Level: 0.162 Max 15 min TWA Level at 0.0658 < 0.162 0.09 Minimum Action Level 0.08 Prestart/Background Condition: 0.062 0.04 09:00 10:00 Mass Conc. Total mg/m^a AVG 15m mg/m^e DustTrak-8530 DustTrak-8530 MIN AVG MIN AVG 0.038 0.055 0.0389 0.0552 0.0658

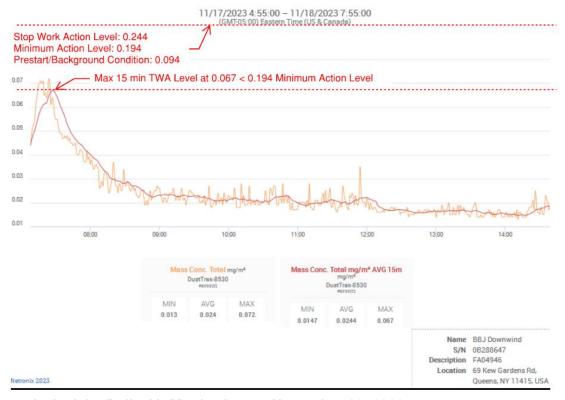




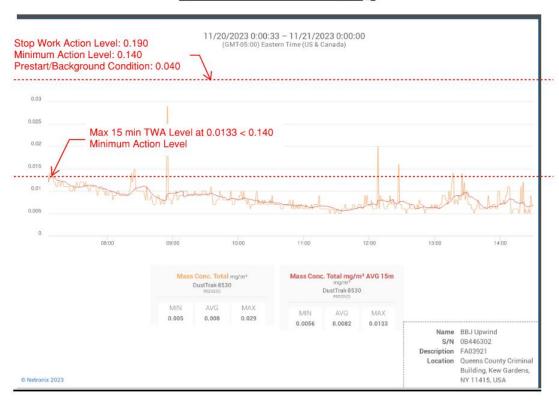
Dismantle Activity Daily Air Monitoring on November 17, 2023



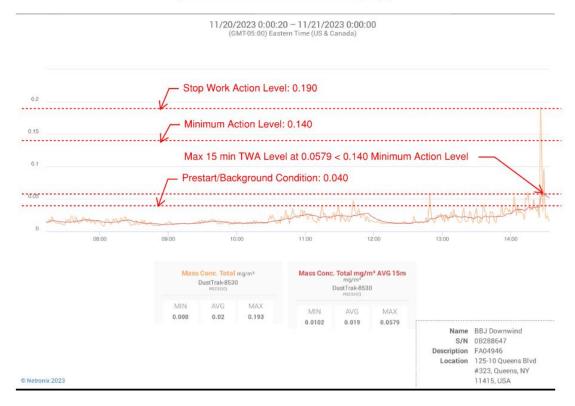




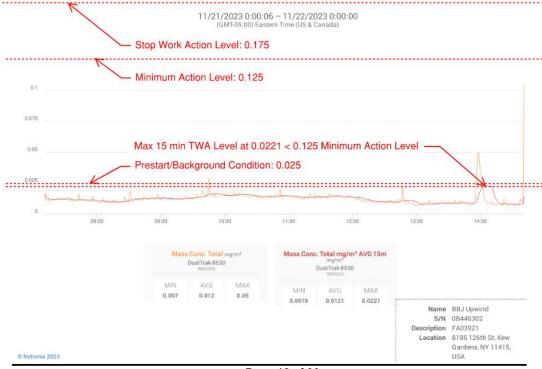
Dismantle Activity Daily Air Monitoring on November 20, 2023





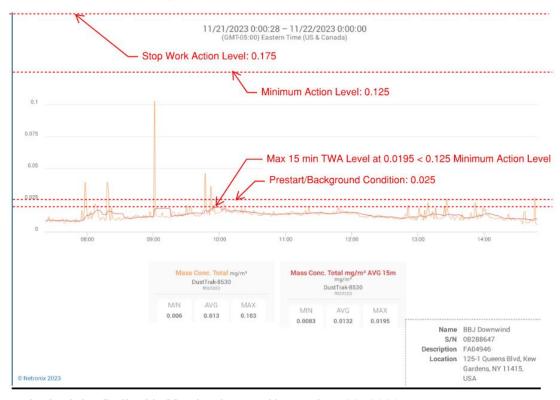


Dismantle Activity Daily Air Monitoring on November 21, 2023

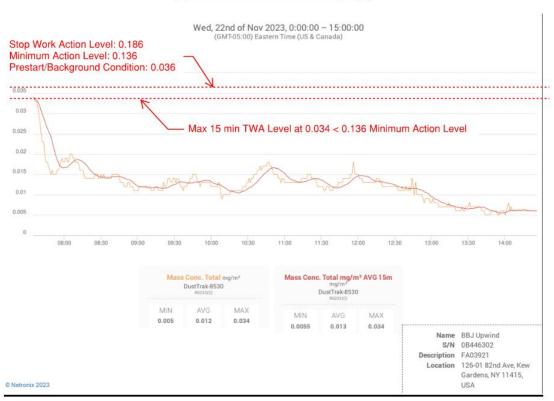


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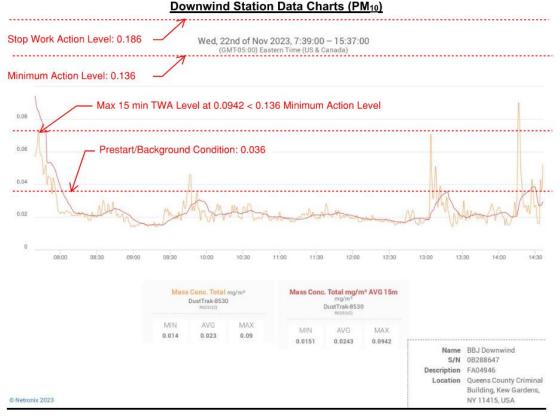




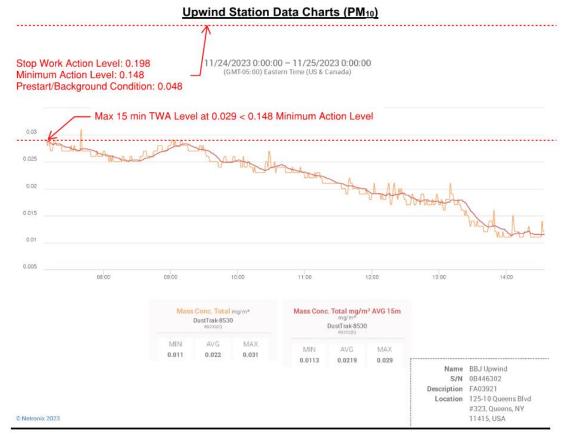
Dismantle Activity Daily Air Monitoring on November 22, 2023



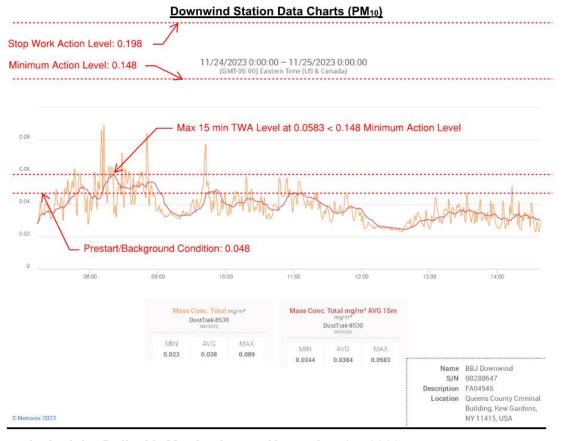




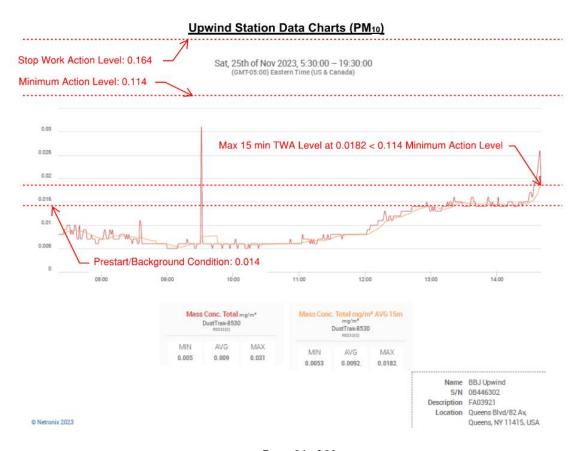
Dismantle Activity Daily Air Monitoring on November 24, 2023



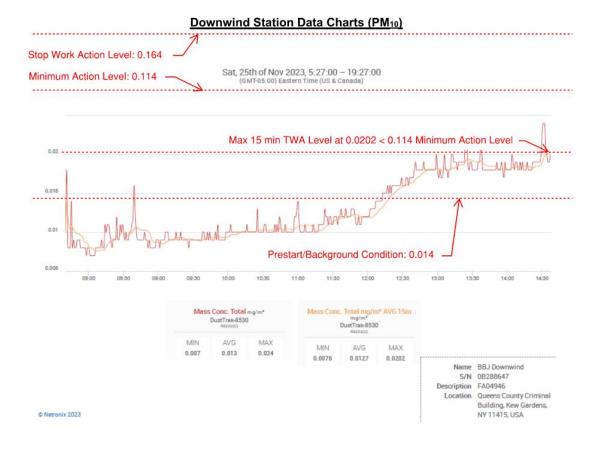




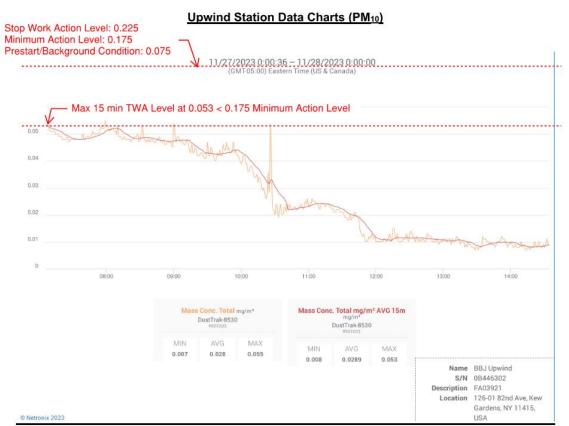
Dismantle Activity Daily Air Monitoring on November 25, 2023



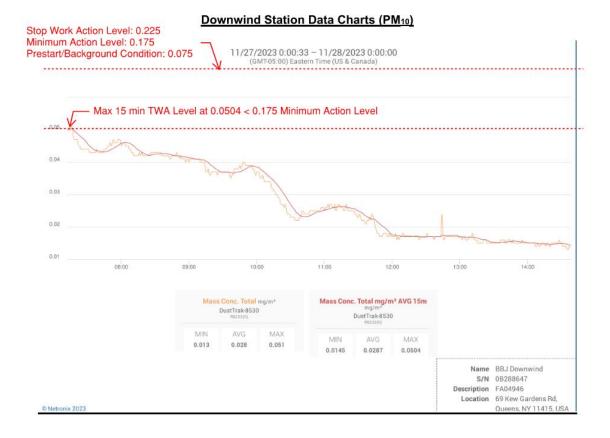




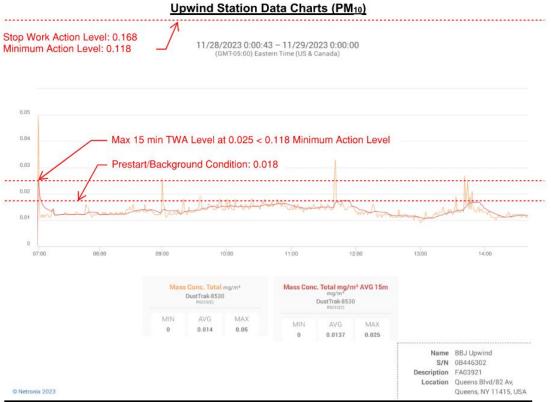
Dismantle Activity Daily Air Monitoring on November 27, 2023



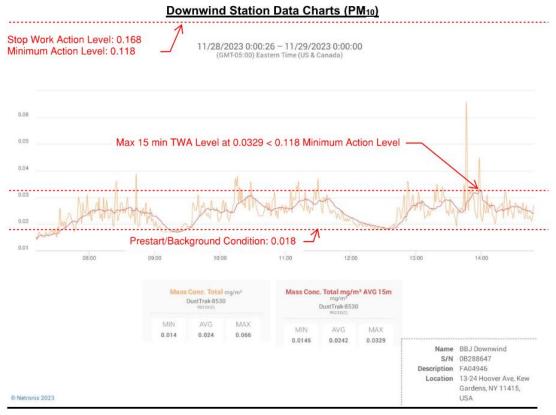




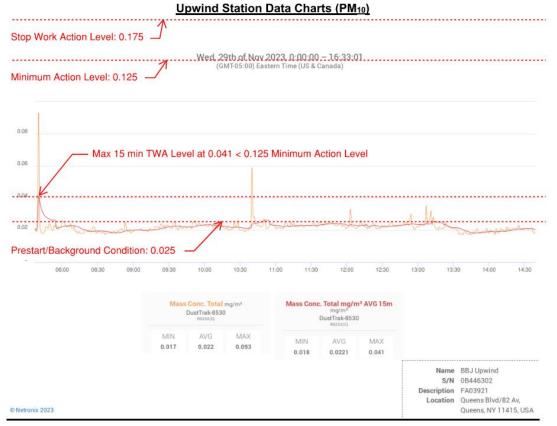
Dismantle Activity Daily Air Monitoring on November 28, 2023



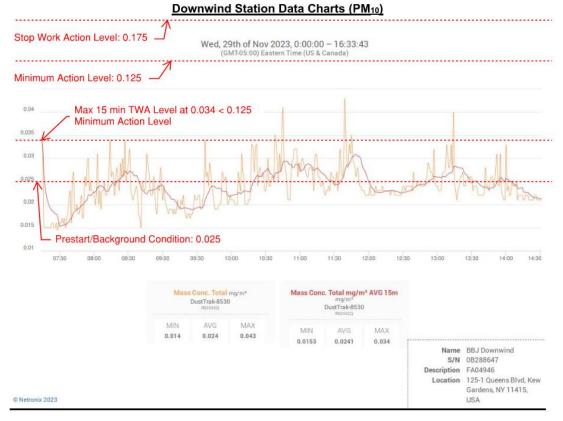




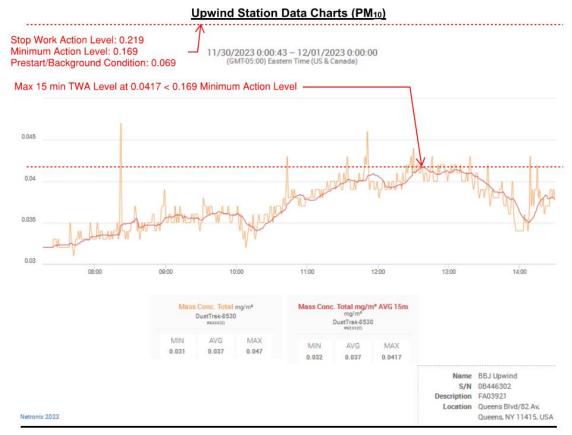
Dismantle Activity Daily Air Monitoring on November 29, 2023



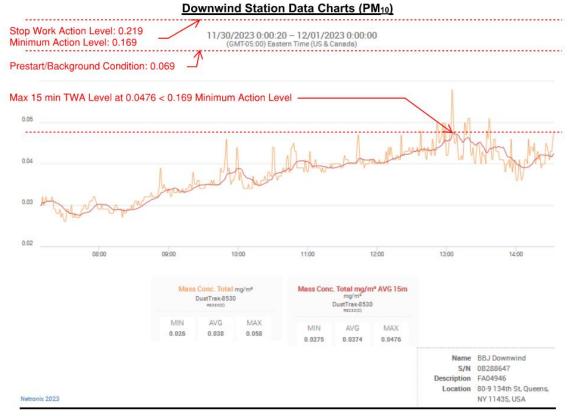




Dismantle Activity Daily Air Monitoring on November 30, 2023







Noise Monitoring - Biweekly Follow Up during Dismantle Phase IV

Project: DDC Que	ens Dismar	ntle & Sv	ving Space		
Date: 1 - 9-	2023	Thur	Weather:	cloudy	
Work Activities: _	Demo	5th	5(ab	0	
Prepared by:	Your				

NO.	Location	Time	Noise (dBA)	Noise Threshold (Day/Night)	Note
1	Queens Borough Hall	1:06	67	75 dBA	Daytime noise action threshold not exceeded.
2	Southwest corner of DA wing	12:42	68 <	75 dBA	Daytime noise action threshold not exceeded.
3	Corner of 134 th ST and Hoover Ave.			69 dBA/ 68 dBA	
4	200 ft away from Kew Garden Road on 82 nd Road			65 dBA/ 55 dBA	
5	Between 82 nd road and 83 rd Ave on Queens Blvd			68 dBA/ 67 dBA	



Project: DDC Queens Dismantle & Swing Space Date: 11-15-23 Wed Weather: Sunny Work Activities: Demo 5th floor slat & Cut Steels Prepared by: ____

NO.	Location	Time	Noise (dBA)	Noise Action Threshold (Day/Night)	Note
1	Queens Borough Hall	10:01	70 <	75 dBA	Daytime noise action threshold not exceeded.
2	Southwest corner of DA wing	9:35	69 <	75 dBA	Daytime noise action threshold not exceeded.
3	Corner of 134 th ST and Hoover Ave.	11110	68	69 dBA/	Daytime noise action threshold not exceeded.
4	200 ft away from Kew Garden Road on 82 nd Road	10:48	64	65 dBA/ 55 dBA NA	Daytime noise action threshold not exceeded.
5	Between 82 nd road and 83 rd Ave on Queens Blvd	10:25	67	68 dBA/ 67 dBA	Daytime noise action threshold not exceeded.

Corrective Action:

Project: DDC Queens Dismantle & Swing Space

Date: 11-29-2023 Wed Weather: Sung

Work Activities: Dem slabon 4th fl

Prepared by: ____

NO.	Location	Time	Noise (dBA)	Noise Action Threshold (Day/Night)		Note
1	Queens Borough Hall	9:28	70 <	75 dBA	NH	Daytime noise action threshold not exceeded
2	Southwest corner of DA wing	9:50	69 <	75 dBA		Daytime noise action threshold not exceeded
3	Corner of 134 th ST and Hoover Ave.	10:12	68<	69 dBA/ 68 dBA NA		Daytime noise action threshold not exceeded
4	200 ft away from Kew Garden Road on 82 nd Road	12:36	64	65 dBA/ 55 dBA NA		Daytime noise action threshold not exceeded
5	Between 82 nd road and 83 rd Ave on Queens Blvd	1:00	66 <	68 dBA/ 67 dBA NA		Daytime noise action threshold not exceeded

Corrective Action: \mathcal{N}/\mathcal{A}



<u>Vibration Monitor – VM1 November 2023</u>

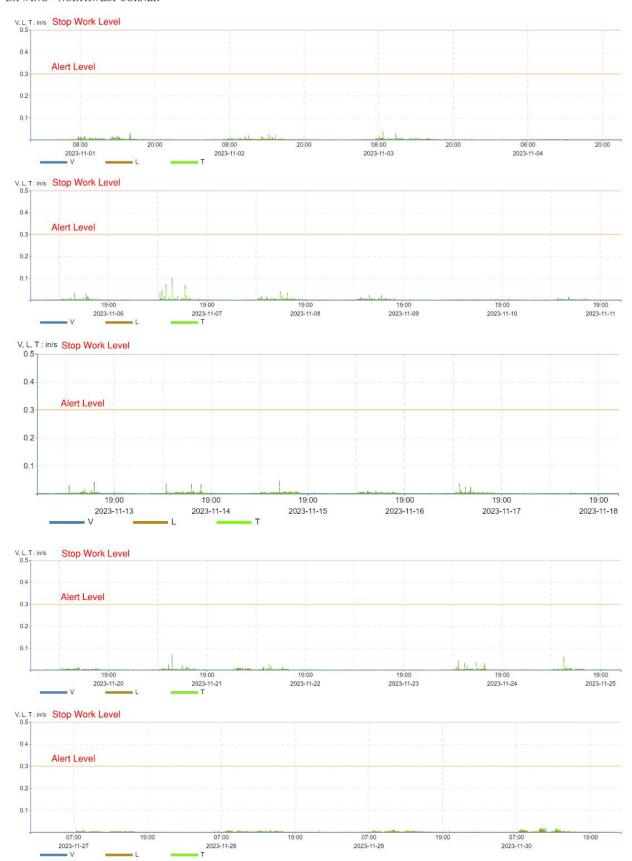
FAMILY JUSTICE CENTER - NORTHEAST CORNER





Vibration Monitor - VM2 November 2023

DA WING - NORTHWEST CORNER





<u>Vibration Monitor – VM3 November 2023</u>

ANNEX - BASEMENT FIRE PUMP ROOM

