

AIR, NOISE AND VIBRATION MONTHLY MONITORING REPORT

Prepared By:

Hajeong Lim (HRCG)

DDC Project No.: BBJ Q DSS

Period Start: 03/01/24 End 03/31/24

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 Dust Concentrations above Action Concentrations by Month (0.1 mg/m³ 15 minute TWA)	Comments
26	13	None	Daily dust monitoring was suspended due to lack of site grading activities until March 11, 2024. Daily dust monitoring has been resumed on March 12, 2024, when the dismantle site grading subcontractor was mobilized.

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 Reading After Corrective Action 15 Minute TWA (mg/m³)	Corrective Action

Narrative Summary of Air Monitoring, Excursions and Corrective Actions:

In March 2024, dismantle 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 Design Builder, Hunter Roberts Construction Group, in conjunction with the Design Builder'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.



		nity Noise Monitorin ghted decibels (dBA) level	g Montl	hly Summa	ary	
Number of Workday s in a Month		Number of Noise Monitoring Days in a Month		Number of Days with Noise Levels above Action Levels by Month		Comments
26 4		0		According to the monitoring plan for the site, the number of days performing noise monitoring (4) is more than the requirement of (2) days.		
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): 75 / NA): 75 / NA): 69 / 68): 65 / 55	
	oca on	Maximum Noise Reading before Corrective Action (dBA)	Read Cor	ium Noise ling after rective on (dBA)	Baseline Noise Leve Day/Night (dBA)	Corrective Action
N. II. G		5N : M :				

Narrative Summary of Noise Monitoring, Excursions and Corrective Actions:

Throughout March 2024, noise levels remained below the set thresholds at all five locations. Dismantle-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 due to ongoing dismantle activities.

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) Communum Units (in/sec)	nity Vibration Monitoring Mon	ithly Summary	
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
26	26	1	

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 Corrective Action (in/s)	Corrective Action
March 28 approx. 8:30 am at VM2 by DA Wing	> 0.5	< 30 sec	< 0.01	N/A. AKRF picked up the monitor and changed the batteries. This exceedance was caused by a direct contact by AKRF staff when changing batteries. Not caused by on going site grading activities.

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

During the Month of March 2024, 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).

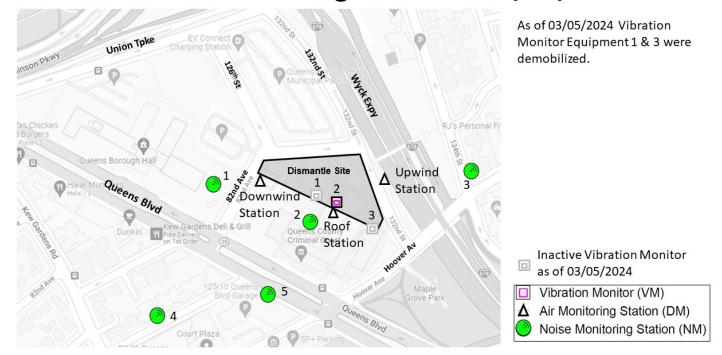
On March 5th, 2024, Vibration Monitor Equipment at Location 1 & 3 were demobilized with confirmation from Environmental Monitoring Engineer AKRF as there are no activities that would affect the existing building structures adjacent to the Vibration Monitor Equipment at Location 1 & 3.

ATTACHMENTS:

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



Environmental Monitoring Queens - 03/05/24



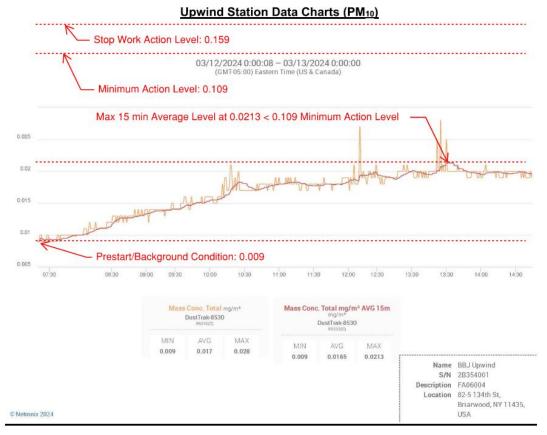
Noise Threshold Limits in dBA - Baseline Survey April 2022

Construction Noise Threshold Limits in dBA

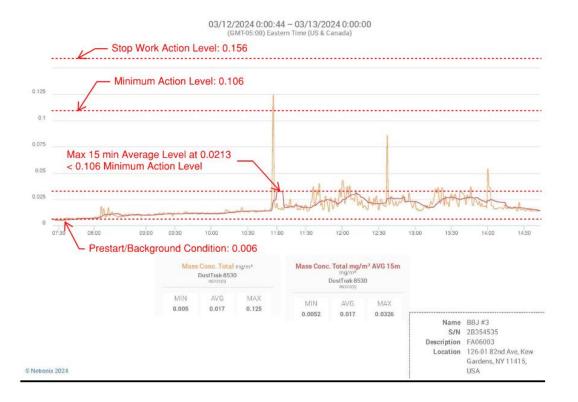
Location	Daytime Leq	Nighttime Leq
Adjacent to the easternmost façade of Queens Borough Hall	75	N/A
At the southwestern corner of the DA Wing	75	N/A
At the residences along 134th Street between 82nd Avenue and Hoover Avenue	69	68
At the residences on 82nd Road between Kew Gardens Road and Queens Boulevard,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



Site Grading Activity Daily Air Monitoring on March 12, 2024

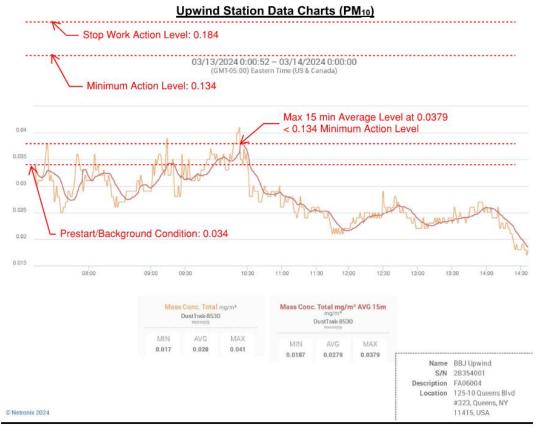


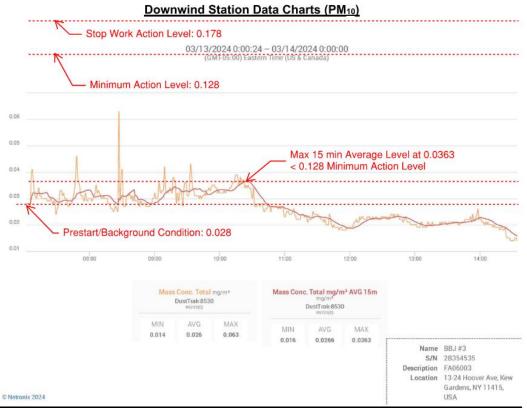
Downwind Station Data Charts (PM₁₀)





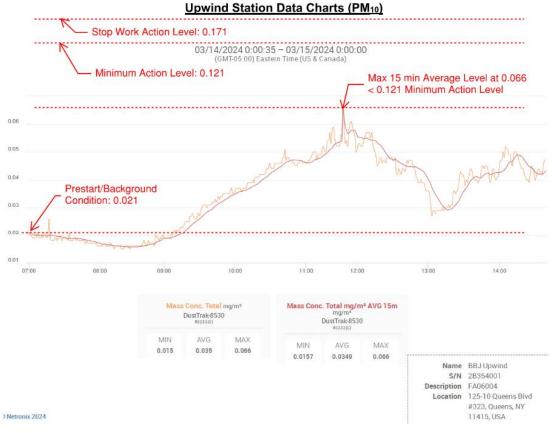
Site Grading Activity Air Daily Monitoring on March 13, 2024



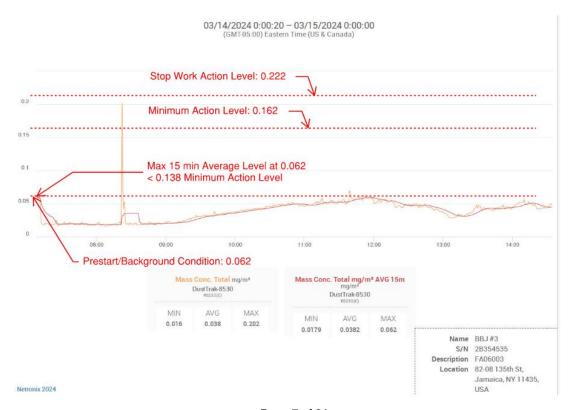




Site Grading Activity Daily Air Monitoring on March 14, 2024

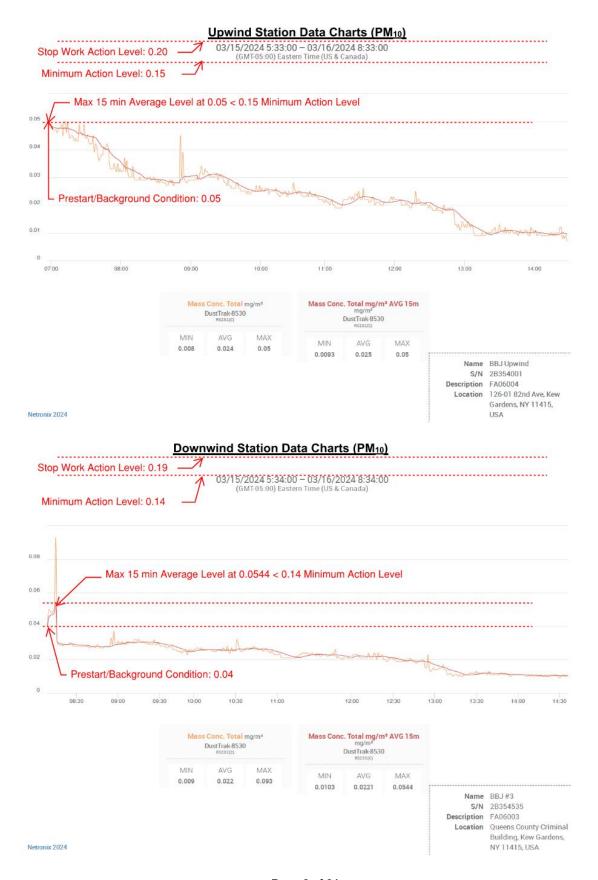


Downwind Station Data Charts (PM₁₀)



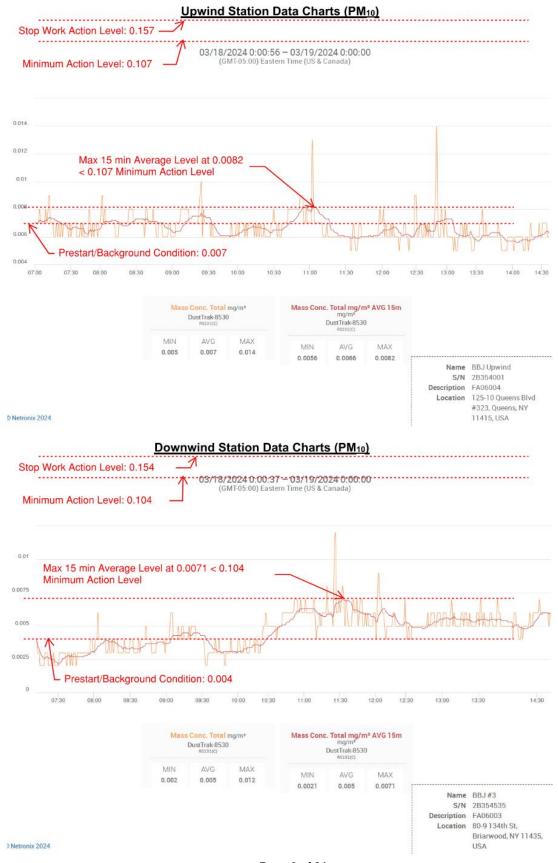


Site Grading Activity Daily Air Monitoring on March 15, 2024



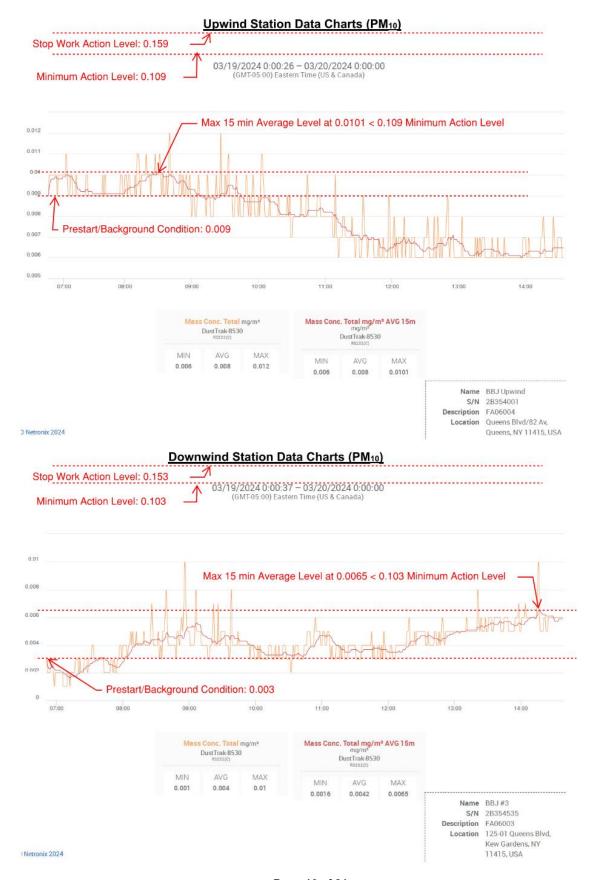


Site Grading Activity Daily Air Monitoring on March 18, 2024



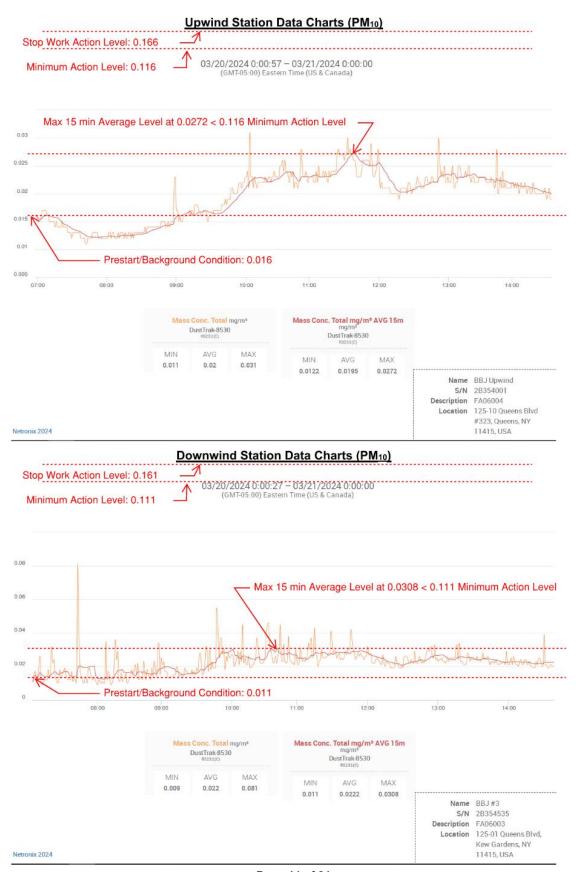


Site Grading Activity Daily Air Monitoring on March 19, 2024



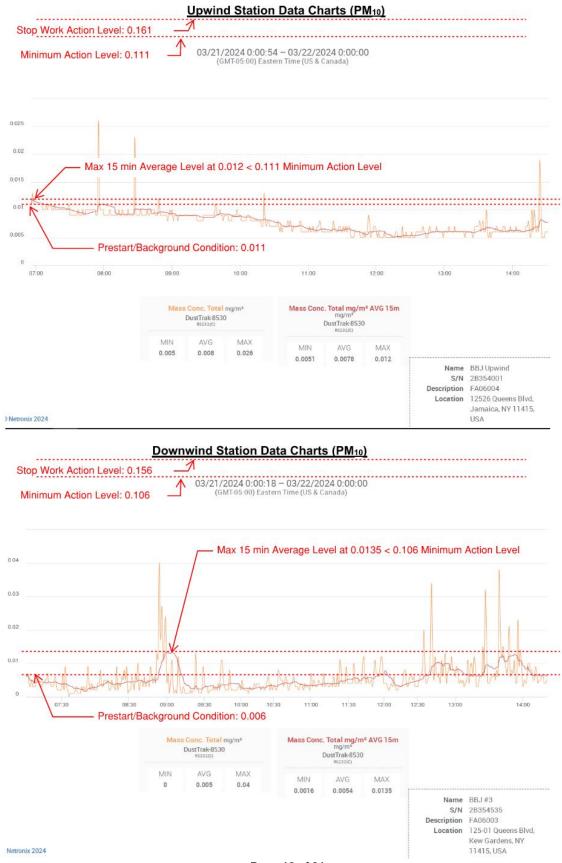


Site Grading Activity Daily Air Monitoring on March 20, 2024





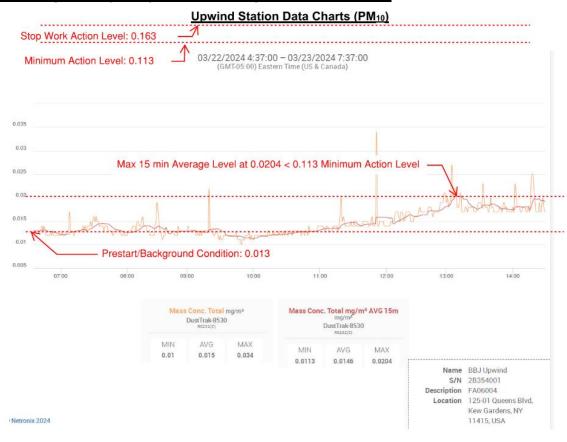
Site Grading Activity Daily Air Monitoring on March 21, 2024

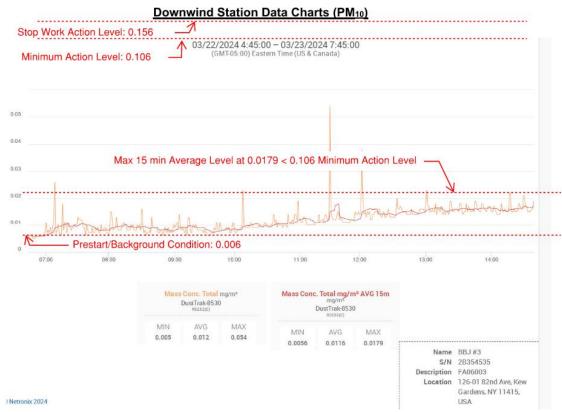


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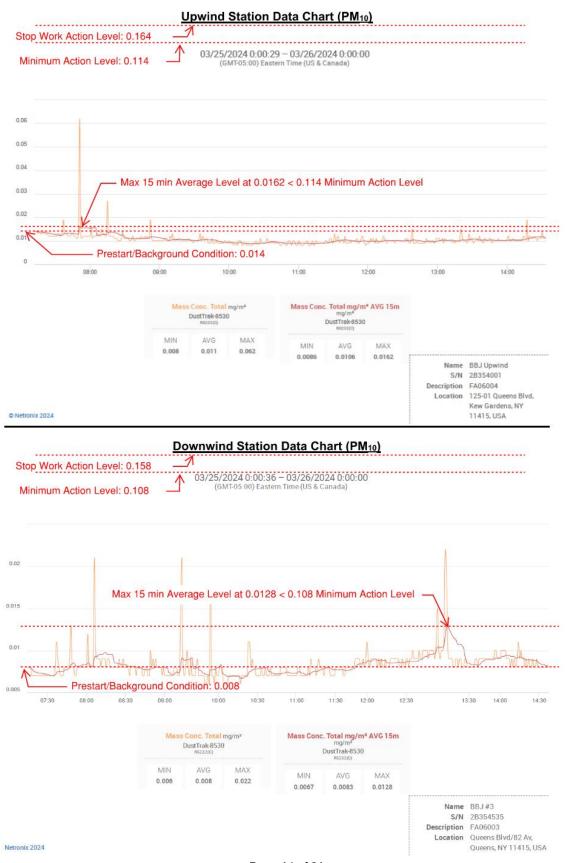
Site Grading Activity Daily Air Monitoring on March 22, 2024





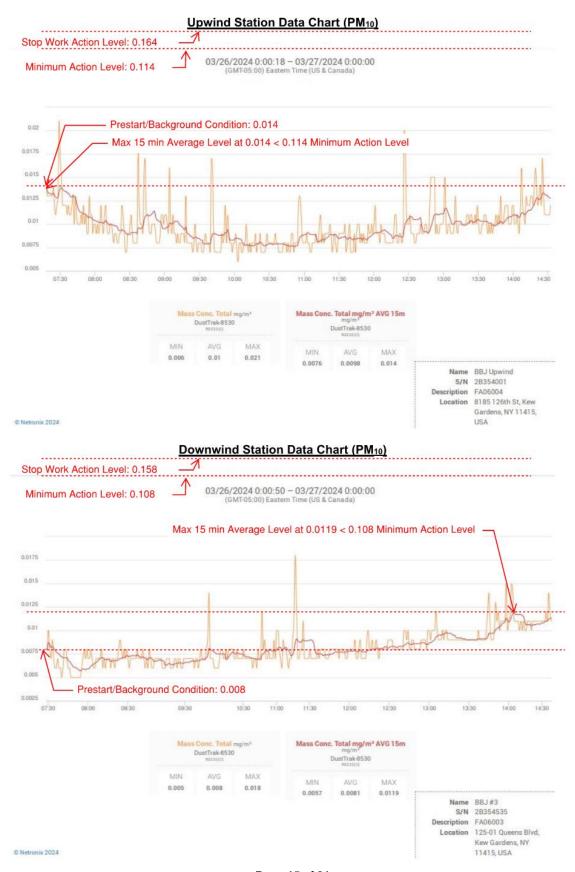


Site Grading Activity Daily Air Monitoring on March 25, 2024



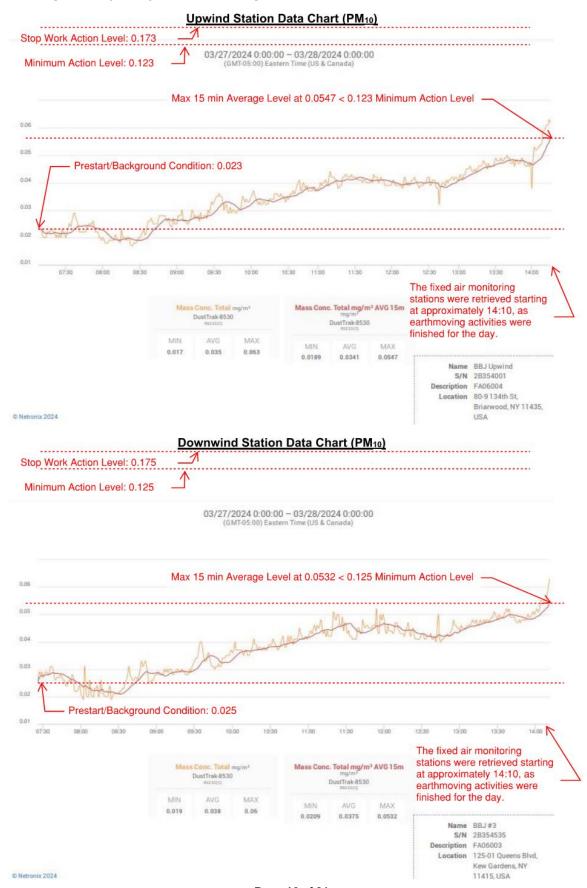


Site Grading Activity Daily Air Monitoring on March 26, 2024



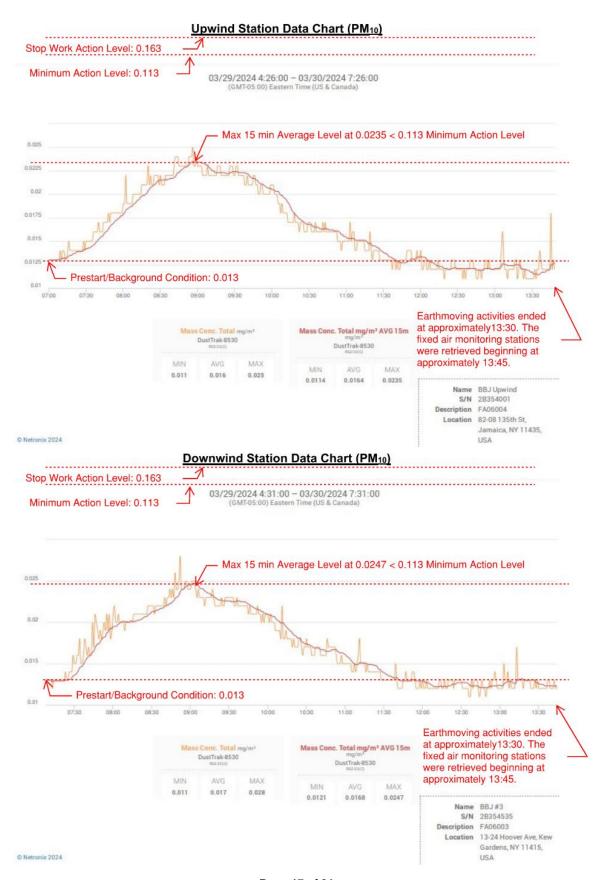


Site Grading Activity Daily Air Monitoring on March 27, 2024





Site Grading Activity Daily Air Monitoring on March 29, 2024





Noise Monitoring - Biweekly Follow Up during Dismantle Phase V

Noise Monitoring



Project: DDC Queens Dismantie & Swing Space	. 0
Date: 3-4-2024 Monday Weather	: 49 F Cloudy.
Work Activities: Remove Of scaffold &	2 DA Studo prep.
Prepared by:	
V	

NO.	Location	Time	Noise (dBA)	Noise Action Threshold (Day/Night)	Note
1	Queens Borough Hall	9:40	61 <	75 dBA	Daytime noise action threshold not exceeded
2	Southwest corner of DA wing	9:12	62<	75 dBA	Daytime noise action threshold not exceeded.
3	Corner of 134 th ST and Hoover Ave.	10:04	68.1	69 dBA/ 68 dBA NA^	Daytime noise action threshold not exceeded.
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	

Corrective Action:

Noise Monitoring



Project: DDC Que	ens Dism	antle & Swi	ng Space		
Date: 3 - 15	- 202	4 Fri	_ Weather:	Sumy 68°F	
Work Activities: _	site	grading	& stucco	On DA Wall	
Prepared by:	You				

NO.	Location	Time	Noise (dBA)	Noise Action Threshold (Day/Night)	Note
1	Queens Borough Hall	9:37	62<	75 dBA	Daytime noise action threshold not exceeded.
2	Southwest corner of DA wing	9:13	63 <	75 dBA	Daytime noise action threshold not exceeded.
3	Corner of 134 th ST and Hoover Ave.	10:02	67	69 dBA/ 68 dBA NA°	Daytime noise action threshold not exceeded.
4	200 ft away from Kew Garden Road on 82 nd Road	10:25	64	65 dBA/ 55 dBA NA	Daytime noise action threshold not exceeded.
5	Between 82 nd road and 83 rd Ave on Queens Blvd	10:48	67,2	68 dBA/ 67 dBA NA	Daytime noise action threshold not exceeded.



Noise Monitoring



Project: DDC Queens Dismantle & S	wing Space
Date: 3-19-2024 Tues	Weather: 40 F Sumy
Work Activities: Lite grading	ry or QDC
Prepared by:	<u> </u>

NO.	Location	Time	Noise (dBA)	Noise Action Threshold (Day/Night)	Note
1	Queens Borough Hall	9:37	61 <	75 dBA	Daytime noise action threshold not exceeded.
2	Southwest corner of DA wing	9:13	63 <	75 dBA	Daytime noise action threshold not exceeded.
3	Corner of 134 th ST and Hoover Ave.	10,50	68.2	69 dBA/ 68 dBA NA°	Daytime noise action threshold not exceeded.
4	200 ft away from Kew Garden Road on 82 nd Road	10:03	64	65 dBA/ 55 dBA NA	Daytime noise action threshold not exceeded.
5	Between 82 nd road and 83 rd Ave on Queens Blvd	10:27	67.1	68 dBA/ 67 dBA NA	Daytime noise action threshold not exceeded.

ONA

Noise Monitoring



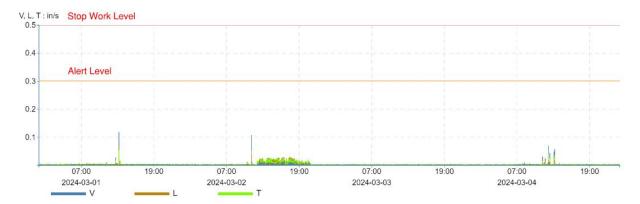
Project: DDC Queens Dismantle & Swing Space	
Date: 3-29-2024 Friday Weather: Sumy 50°F	
Work Activities: Site grading	
Prepared by:	

NO.	Location	Time	Noise (dBA)	Noise Action Threshold (Day/Night)	Note
1	Queens Borough Hall	9:46	61 <	75 dBA	Daytime noise action threshold not exceeded.
2	Southwest corner of DA wing	9:23	64 <	75 dBA	Daytime noise action threshold not exceeded.
3	Corner of 134 th ST and Hoover Ave.	10,10	68 <	69 dBA/ 68 dBA NA*	Daytime noise action threshold not exceeded.
4	200 ft away from Kew Garden Road on 82 nd Road	10:33	64.1	65 dBA/ 55 dBA NA	Daytime noise action threshold not exceeded.
5	Between 82 nd road and 83 rd Ave on Queens Blvd	10:55	67.3	68 dBA/ 67 dBA NA	Daytime noise action threshold not exceeded.



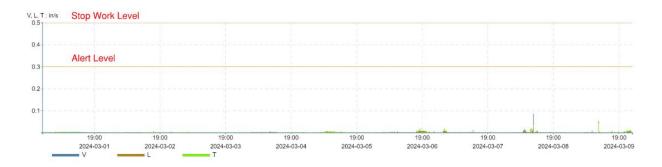
<u>Vibration Monitor – VM1 March 2024</u>

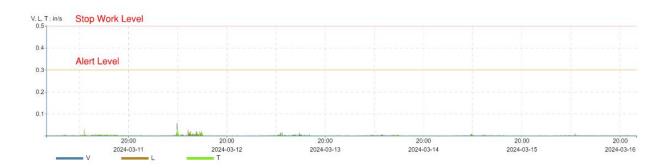
FAMILY JUSTICE CENTER - NORTHEAST CORNER



Vibration Monitor - VM2 March 2024

DA WING - NORTHWEST CORNER









Vibration Monitor - VM3 March 2024

ANNEX - BASEMENT FIRE PUMP ROOM

