

# Environmental Health Impact Assessment Report

## Manhattan Detention Complex Demolition/Dismantlement

124-125 White Street

New York, NY



Prepared by: Tri Huynh and Antonio Saporito  
Doctoral Graduate Students in Environmental Health Sciences  
NYU Grossman School of Medicine

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For more information, contact:

Yi-Ling Tan, MPH  
Program Manager  
Center for the Study of Asian American Health at NYU Langone Health (NYU CSAAH)  
Email: [yi-ling.tan@nyulangone.org](mailto:yi-ling.tan@nyulangone.org)

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## EXECUTIVE SUMMARY

**Background and Purpose.** The demolition and reconstruction of the former Manhattan Detention Complex (MDC) at 124–125 White Street have been an ongoing source of concern among local residents and community organizations. The Manhattan facility is located in the heart of Chinatown, a densely populated, predominantly low-income immigrant neighborhood recognized as an environmental justice community. Throughout the demolition and dismantlement phase, community members reported persistent dust emissions, uncovered and idling trucks, and ongoing noise disruptions.

The upcoming reconstruction phase is expected to extend from 2026 through approximately 2032, with proposed extended construction hours from 6am through midnight most days of the week. This prolonged duration and intensity of activity raises additional concerns regarding cumulative environmental exposures and long-term health impacts on nearby residents.

In response to community concerns regarding potential health impacts on this community, the Chinatown Environmental Health Working Group, a coalition of community-based organizations, neighborhood advocacy groups and academic partners commissioned this report, which summarizes findings from environmental monitoring data and dust characterization analyses to provide an overview of the air quality and construction impacts, highlight gaps in transparency and oversight, and inform strategies to protect community health during ongoing and future construction phases.

### **Key Findings**

#### **1) Persistent localized air pollution near the MDC site**

- PM<sub>2.5</sub> levels near the MDC site in 2025 were consistently higher than those in the broader Chinatown area and across NYC.
- Elevated concentrations occurred across months and seasons, indicating sustained local exposure rather than short-term spikes.
- Dust samples collected beyond the site perimeter were largely concrete-derived, consistent with ongoing construction activity.

**Implications:** Residents likely experienced chronic exposure throughout the demolition period, not only during peak construction. Older adults and other vulnerable populations may face greater health risks from ongoing dust and particulate matter exposure.

#### **2) Incomplete and inconsistent construction site monitoring**

- Environmental monitoring reports by AECOM-Hill JV, the city's contracted construction vendor, did not fully or reliably characterize particulate matter exposures at or beyond the MDC site perimeter.
- The monitoring approach appears insufficient to fully characterize particulate matter exposures at and beyond the site perimeter.

**Implications:** Statements such as “no exceedances noted” may misrepresent actual conditions, as missing or flawed data prevent independent verification of stated findings.

### **3) Limited transparency and accessibility of monitoring information**

- While an Independent Community Monitor (ICM) was engaged, there was no mechanism for routine, accessible public review of raw monitoring data.
- Community members and researchers reported difficulty accessing clear, comprehensive information.

**Implications:** Limited transparency restricts meaningful oversight and prevents residents and stakeholders from assessing environmental and health risks in real time.

### ***Recommended Mitigation Strategies***

To address these challenges during upcoming construction phases, mitigation strategies should prioritize early and continuous monitoring, full real-time data transparency, and strengthened, community-centered independent oversight. These include:

#### **1) Data Transparency and Accountability**

- **Public release of raw, time-stamped monitoring data in real time:** All air quality, dust, noise and vibration measurements should be publicly accessible as they are collected. Real-time availability enables independent review, meaningful community oversight, and timely action to reduce harmful exposure.
- **Clear labeling of missing or invalid data:** Any absent, invalid or uninterpretable data should be explicitly flagged, and not treated as evidence of compliance, ensuring accurate interpretation of environmental conditions.
- **Centralized, real-time data repository:** A centralized, easily accessible repository should provide both historical and live data, allowing community stakeholders, researchers and regulators to independently analyze trends and respond quickly to emerging hazards when pollutant levels spike.

#### **2) Continuous Monitoring**

- **Monitoring across all construction phases:** Continuous air quality, dust, noise, and vibration monitoring should be maintained from the start of site preparation through construction and final build-out.  
**Ongoing vigilance during lower-intensity phases:** Recognize that routine or lower-intensity construction activities can contribute to chronic, cumulative exposures. Maintaining monitoring during these periods ensures that prolonged exposures are detected and addressed.

#### **3) Limit Construction Hours**

- **Limit daily construction hours:** Reduce early morning and late evening work to minimize prolonged exposure to noise and air pollution.

- **Strengthen oversight of after-hours variances:** Ensure extended-hour permits require clear justification, public posting, and regular review rather than routine renewal.

#### 4) Independent Oversight and Community-Centered Governance

- **Appoint an independent environmental monitor (ICM) from the pre-construction phase through project completion:** Involve the ICM upstream in the design of monitoring plans, including:
  - Selection and placement of monitors
  - Determination of parameters to be measured
  - Data validation protocols and reporting formats
- **Empower the monitor:** Ensure the ICM has the following authority:
  - Unrestricted access to monitoring data and construction activities
  - Authority to investigate anomalies, data gaps, and community complaints
  - A clear mandate to recommend corrective actions when concerns arise
- **Formalize bidirectional community communication:** Establish ongoing mechanisms that allow residents and community-based organizations to provide input to both the ICM and the city on monitoring priorities, data interpretation, and recommendations.

#### 5) Health Impact Monitoring and Impact Assessment

- **Implement independent longitudinal health monitoring** to assess potential impacts on surrounding communities.
- **Focus on vulnerable populations:** Particular attention should be paid to populations more vulnerable to environmental exposures, including children, pregnant women, older adults, and individuals with pre-existing respiratory or cardiovascular conditions.
- **Partner with local clinics, hospitals, public health agencies, and academic institutions** to track neighborhood-level health trends during the construction period, including:
  - Asthma and other respiratory conditions requiring emergency department visits or hospitalization
  - Lung health outcomes and other respiratory symptoms associated with particulate exposure
  - Cardiovascular events and hospitalizations
  - Long-term cancer risk and other chronic conditions potentially associated with prolonged construction-related exposure.

## INTRODUCTION

The Chinatown Environmental Health Working Group is a collaborative partnership of community-based organizations in Manhattan’s Chinatown and researchers from NYU Grossman School of Medicine, NYU Tandon School of Engineering, and NYU Langone Perlmutter Cancer Center. The Working Group was formed to address longstanding environmental health concerns in Chinatown and to ensure that community voices are integrated into assessments of local environmental conditions.

In recent years, community members, organizations and policymakers have raised sustained concerns about the demolition and reconstruction of the former Manhattan Detention Complex (MDC) at 124–125 White Street as part of New York City’s Closing Rikers initiative.<sup>1–4</sup> The Manhattan facility - often referred to as a “jailscraper”- is located in the heart of Chinatown, a densely populated, predominantly low-income immigrant neighborhood with a high proportion of older adults, multigenerational households, and residents living in rent-stabilized housing.<sup>5</sup>

Chinatown is widely recognized as an environmental justice community - a neighborhood that already bears a disproportionate share of environmental burdens, including elevated levels of air pollution, heavy traffic exposures, and historical contamination, relative to other parts of New York City.<sup>6</sup> Residents in Chinatown have also been affected by the legacy of the World Trade Center disaster, including proximity to 9/11-related environmental impacts, adding to the cumulative exposure burden in the area.<sup>7</sup>

Community concerns about the MDC site have centered on whether demolition and construction activities contribute to elevated air pollution, dust, noise, and vibration exposures, and whether the duration of these exposures over multiple years may pose health risks or exacerbate ongoing health issues, particularly for older adults and residents with pre-existing respiratory or cardiovascular conditions. These concerns are amplified by the neighborhood’s existing environmental burdens and high rates of residents with health, social and structural vulnerabilities such as age, chronic disease, and linguistic and economic barriers to accessing health information and care.<sup>8,9</sup>

In response, the Chinatown Environmental Health Working Group commissioned this report to independently review publicly available environmental monitoring data, assess the quality and transparency of existing reporting, examine potential implications for community health during the MDC demolition and dismantlement period (2022–2024), and identify potential mitigation strategies for the next phase of construction (2026–2032).

### Background

**Chinatown Demographics.** Manhattan’s Chinatown is a densely populated, predominantly low-income, immigrant neighborhood with a high proportion of older adults, multigenerational households, and residents living in rent-stabilized housing. Approximately one-third of residents are foreign-born, with the majority from Asian countries. Among Asian residents, individuals of Chinese descent constitute the largest subgroup. A large share of residents speak a non-English language at home. Median household income is estimated at between \$55,000 and \$60,000, with nearly one-quarter of residents living below the federal poverty level, significantly higher than citywide and statewide averages.<sup>5,10,11</sup>

**Chinatown as an Environmental Justice Community.** Chinatown and the surrounding Lower East Side are widely understood to be environmental justice communities—neighborhoods that bear disproportionate environmental and health burdens due to longstanding socioeconomic and environmental inequities. Under New York City’s environmental justice framework (established through Local Laws 60 and 64), the City has identified Environmental Justice Areas that encompass census tracts with high pollution burdens and associated social vulnerabilities, including parts of Community District 3 that cover Chinatown and the Lower East Side. A majority of census tracts in this district were designated as Environmental Justice Areas in 2024 by the Mayor’s Office of Climate & Environmental Justice, reflecting outsized negative impacts from pollution and inequitable protection under existing environmental laws and regulations.<sup>6,12</sup>

Similarly, at the state level, New York’s Climate Leadership and Community Protection Act directs that Disadvantaged Communities (DACs)—areas with heightened environmental, health, and socioeconomic vulnerabilities—receive priority benefits from climate and clean air investments, and census tracts meeting DAC criteria include much of Lower Manhattan, including Chinatown.<sup>13</sup> These official designations are consistent with the demographic, economic, and environmental conditions observed in Chinatown—high population density, low income, linguistic isolation, and a history of cumulative exposures—which together contribute to a disproportionate risk of harm from environmental stressors such as traffic pollution, construction dust, and noise.

**Borough-Based Jails.** NYC has long grappled with issues of overcrowding, aging infrastructure, and poor conditions at Rikers Island, its primary jail complex. In response, the Closing Rikers initiative was launched to phase out the island’s large, centralized jail and replace it with a network of smaller, borough-based facilities. The goals of this plan include improving conditions for people in custody, increasing access to family and community support and reducing the reliance on long-term incarceration in a single centralized facility.<sup>4</sup>

As part of this initiative, the city has proposed four new borough-based jail (BBJ) facilities. The Manhattan Detention Complex (MDC) at 124–125 White Street was selected to host the Manhattan facility and has been the most controversial of the borough-based jails, drawing opposition from community organizations, elected officials, and local residents. Concerns include potential disruption during demolition and construction, impacts on local air quality and noise levels, and effects on the neighborhood’s quality of life. Amid these concerns, the demolition of the former MDC proceeded with repeated delays and monitoring challenges, prompting community stakeholders to call for independent oversight and rigorous environmental assessment.<sup>9</sup>

**Construction-Related Environmental Exposures and Health.** Demolition and construction activities at the MDC site generated airborne particulate matter (PM), including coarse particles (PM<sub>10</sub>) and fine particles (PM<sub>2.5</sub>), as well as elevated noise and vibration. PM<sub>2.5</sub> is of particular concern because its small size allows it to penetrate deep into the lungs and ultimately enter the bloodstream, where it has been linked to respiratory and cardiovascular disease, exacerbation of asthma and chronic obstructive pulmonary disease (COPD), and increased mortality. These risks are amplified with repeated and long-term exposure, even at moderate concentrations. Current scientific evidence indicates that there is no clear threshold below which particulate matter exposure is without risk, and adverse health effects have been observed even at relatively low levels.<sup>14,15</sup> Coarse particles (PM<sub>10</sub>) can also irritate the airways and contribute to long-term lung

damage. Repeated or prolonged exposure to construction dust may further increase the risk of diseases such as silicosis and lung cancer, particularly when materials containing silica or other harmful minerals are disturbed.<sup>16,17</sup>

Noise and vibration from construction can also adversely affect health. Environmental noise is associated with sleep disturbance, cardiovascular disease, cognitive impacts in children, and mental health effects, with risks increasing with both intensity and duration of exposure. Adverse effects have been observed even at relatively low levels, with no clearly defined safe threshold.<sup>18,19</sup> In addition, high levels of construction noise may interfere with communication and concentration. Construction-related vibration may further contribute to annoyance, sleep disruption and stress, particularly with repeated or prolonged exposure. These impacts may be especially pronounced in dense urban neighborhoods, where residents live in close proximity to active construction sites and have limited ability to avoid exposure.<sup>20,21</sup>

For environmental justice communities like Chinatown, which already experience disproportionate environmental burdens, these construction exposures take on additional significance. Residents of Chinatown face a history of cumulative pollution, including industrial emissions, diesel traffic, and 9/11-related contaminants, as well as a high population density, low-income housing, and a substantial proportion of older adults, including those living at Chung Pak, a low-income senior housing facility next to MDC. Even moderate increases in particulate matter, noise, or vibration may lead to detrimental health effects, particularly for vulnerable populations such as older adults, children, pregnant women, and residents with pre-existing conditions.<sup>8,22</sup>

**MDC Demolition and Dismantlement Timeline.** The demolition and dismantlement of the MDC was carried out from June 2022 through June 2025. To construct an updated chronology of key construction activities, reports and meeting presentations produced by the Manhattan Facility Project Working Group during this period were reviewed.

All compiled data were integrated into a single interactive timeline, which is publicly accessible through [a dedicated link](#). This timeline highlights the sequential progression of site activities, identifies periods of high-intensity work, and provides a clear visual record of demolition milestones over the three-year period. By systematically documenting events from June 2022 to June 2025, this timeline serves as a foundation for correlating construction activities with environmental monitoring data, community reports, and potential exposure events in the surrounding Chinatown neighborhood (Figure 1).

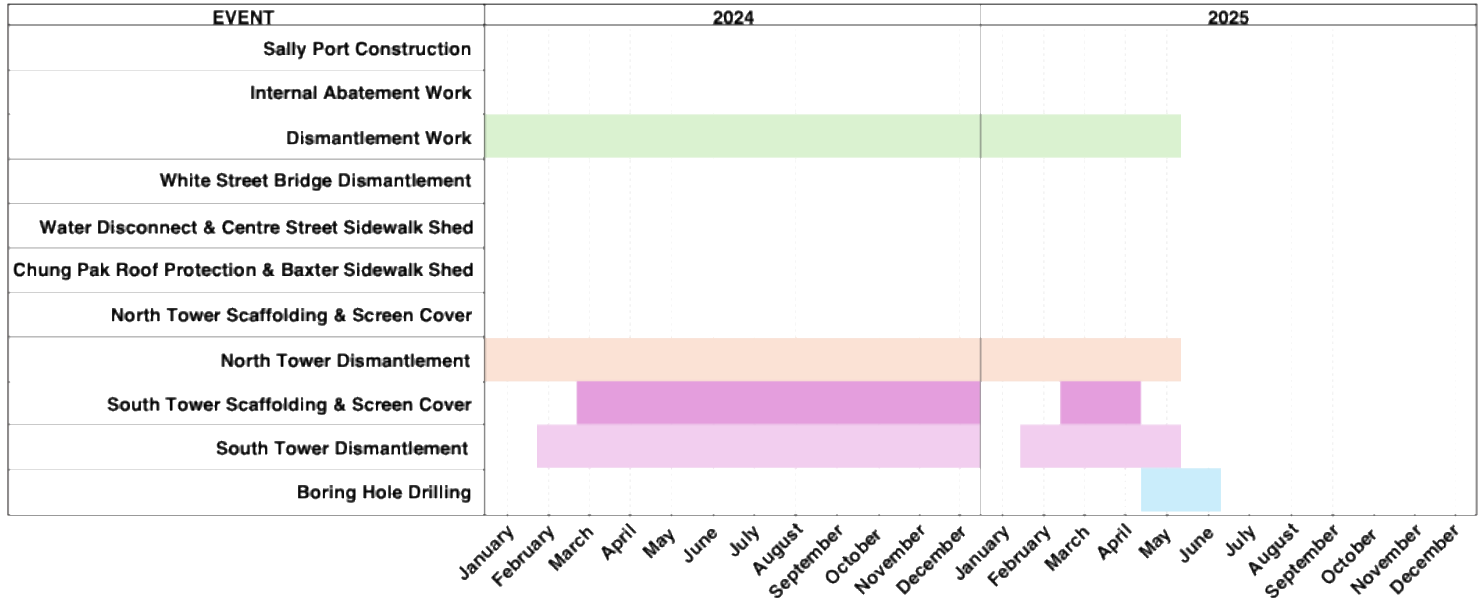
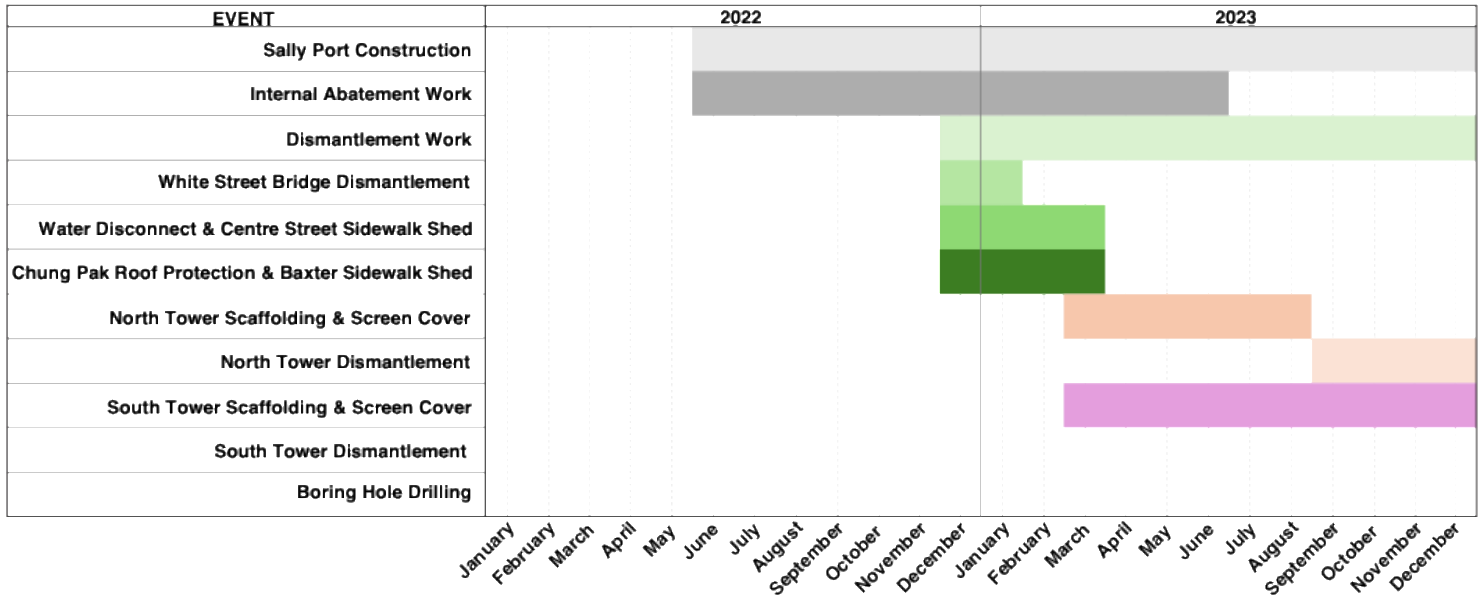


Figure 1. MDC Dismantlement Timeline

**Regulatory Context and Community Monitoring.** NYC requires construction sites to implement noise and dust mitigation plans and to conduct environmental monitoring to ensure compliance with local regulations.<sup>23,24</sup> The Program Management Consultants for the MDC project—AECOM and Hill International Joint Venture, along with their contractors, Gramercy Group Inc.—are responsible for adhering to these requirements and for accurately reporting environmental conditions.

Despite existing environmental monitoring requirements, Chinatown residents and community organizations reported recurring issues throughout the demolition period, including visible dust emissions, uncovered or idling trucks, and noise levels that often exceeded allowable limits. Independent oversight was only implemented late in the process. The NYC Department of Design and Construction (NYCDDC) contracted Excel Environmental Resources, Inc. as an independent community monitor (ICM) for the latter portion of the demolition phase, with monitoring beginning well after demolition activities had already started and continuing through June 2025. In 2023, community advocates also deployed several PurpleAir sensors around the MDC site to track particulate matter. This report, commissioned by the Chinatown Environmental Health Working Group in Fall 2025, draws on these independent and community-based data sources to assess environmental exposures and inform mitigation strategies.

**Scope and Objectives of Report.** This report covers the period from August 1st, 2022, through December 31, 2025.

The objectives of this report were to:

1. Compare air quality near the MDC site with conditions in the surrounding Chinatown neighborhood and across New York City.
2. Characterize dust generated by demolition activities, including elemental composition and potential sources.
3. Review environmental monitoring records related to MDC demolition and dismantlement activities and assess the completeness, accuracy, and transparency of publicly available monitoring data.
4. Evaluate potential public health impacts on nearby residents, with particular attention to vulnerable populations.
5. Identify and recommend mitigation strategies to reduce exposure during the next phase of construction.

### **Data Sources and Approach**

To assess environmental exposures associated with the demolition and dismantlement of the MDC, multiple sources of data were compiled, reviewed, and analyzed. Reports and presentations can be accessed at the [Closing Rikers website](#) or the [Borough-Based Jail Program website](#).

1. U.S. Environmental Protection Agency (EPA) Air Quality Data

Daily PM<sub>10</sub> and PM<sub>2.5</sub> measurements for NYC were obtained from EPA AirNow database. For PM<sub>10</sub>, the EPA collects 24-hour concentrations every sixth day at two fixed monitoring locations in the city (Figure A9), with data available from January 2023 through October 2025. PM<sub>2.5</sub> data were obtained from 12 citywide monitors sourced from the [New York City Department of Health and Mental Hygiene \(NYC DOHMH\) real-time air quality portal](#), which reports data from rooftop monitors operated by the New York State Department of Environmental Conservation (NYS DEC).<sup>25</sup> The daily average was compared to readings from the Manhattan Bridge monitor (Canal & Elizabeth Street) - the closest monitor to the MDC site - to contextualize air quality trends near Chinatown (Figure A10).

## 2. PurpleAir Air Quality Data

To better capture localized exposure, PurpleAir low-cost sensors were used to collect PM<sub>10</sub> and PM<sub>2.5</sub> measurements near the MDC site.<sup>26</sup> PurpleAir provides public access to its crowdsourced air quality sensor data via the PurpleAir API. Data were available from March 2023 through December 2025, except for August and September 2024 due to monitoring interruptions (Figure A11). These sensors record continuous, high-frequency measurements, allowing for comparisons with monthly and seasonal trends observed citywide.

## 3. BBJ Manhattan MN DSS Monthly Monitoring Reports and Community Presentations

The AECOM-Hill JV monthly monitoring reports produced for the Manhattan Dismantle and Swing Space (MN DSS) project were prepared by Gramercy Group Inc. as part of the Borough-Based Jails (BBJ) environmental monitoring program. These reports document air quality, noise, and vibration measurements during the demolition and dismantlement of the MDC site. They summarize particulate matter (PM<sub>10</sub>) concentrations, compare readings to project action and stop-work thresholds, and describe any mitigation measures triggered during the reporting period. Narrative commentary often notes monitoring continuity, instrument maintenance, and the placement of monitors. Data is based on Community Air Monitoring Plan (CAMP) stations containing a dust and noise meter and vibration monitoring stations. The number and locations of CAMP and vibration monitoring stations were adjusted based on site activities and monitoring station performance.

Additionally, MN DSS Project community presentations from June 2022 to June 2025 were manually reviewed to identify major demolition and dismantlement milestones and assess how data were publicly presented.

## 4. Independent Community Monitor Reports

The consulting group Excel Environmental Resources Inc. was contracted by the NYC Department of Design and Construction (NYCDDC) to serve as the Independent Community Monitor (ICM) between November 2024 to June 2025. The ICM reviewed approved environmental reports and work plans, and conducted a daily review of the dust, noise, and vibration monitoring data for completeness and compliance with established threshold and alert action levels. Excel received daily excursion investigation summaries to evaluate the cause of any noise, dust, or vibration alert level exceedance, the scope of investigation, and the corrective actions taken if related to onsite activities. Additionally, Excel conducted one monthly unscheduled site inspection for real-time verification of dust and noise levels at and surrounding the MDC site. The ICM prepared six monthly

reports summarizing the results of the monitoring, Excel's findings and observations during the monthly site inspection, and additional recommendations, if any.

## KEY FINDINGS

### AIR QUALITY AND DUST CHARACTERIZATION

The primary goal of this analysis was to evaluate how demolition and construction activities at the MDC affected local air quality compared with broader Chinatown and citywide conditions, and to assess the nature of dust generated and transported beyond the site perimeter. The analysis also aimed to identify periods of sustained exposure that could impact community health.

#### Analytical Approach

- Daily PM<sub>10</sub> and PM<sub>2.5</sub> trends from PurpleAir and EPA monitors were compared by month across the MDC site, broader Chinatown, and citywide to identify periods of elevated local pollution.
- High PM periods were cross-referenced with documented demolition and construction milestones and regional pollution events (e.g., wildfires) to distinguish site-specific versus background contributions.
- PM<sub>10</sub> and PM<sub>2.5</sub> levels were assessed relative to EPA regulatory standards and World Health Organization (WHO) health-based guidelines to contextualize potential community exposure.
- Conducted elemental analysis of dust collected outside the demolition/dismantling site perimeter to better characterize the composition of particulate matter leaving the site. Concrete dust deposited beyond the site boundary was collected on October 2024, packed into five 1-cm thick cylindrical samples, and analyzed three times per sample using a Vanta Handheld X-Ray Fluorescence (XRF) Analyzer.

#### Results

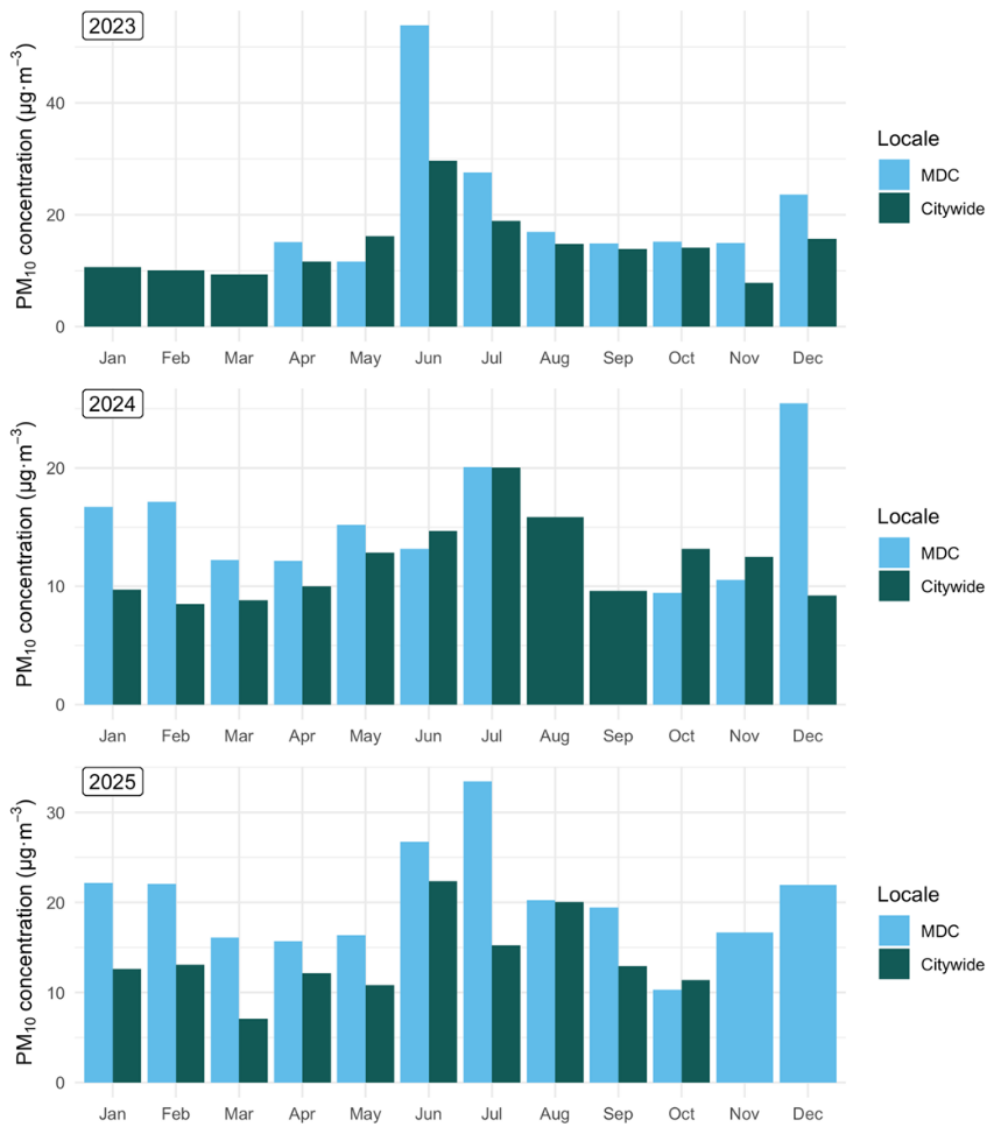
Analysis of real-time air quality data indicated that PM around the MDC remained consistently elevated compared with broader Chinatown and citywide conditions. Both coarse particles (PM<sub>10</sub>), which could be generated by demolition, material handling, and truck traffic, and fine particles (PM<sub>2.5</sub>), which travel farther and contribute to long-term cardiovascular and respiratory risk, were examined to characterize the potential exposure burden on the surrounding community. See Figure 3 for average monthly PM<sub>10</sub> levels and Figure 4 for average monthly PM<sub>2.5</sub> levels.

##### *Coarse Particulate Matter (PM<sub>10</sub>)*

PM<sub>10</sub> is particularly relevant for understanding community exposure because these larger particles settle near the source, may irritate the eyes and airways, and exacerbate respiratory conditions such as asthma.<sup>16</sup> In 2023, PM<sub>10</sub> concentrations near the MDC showed distinct peaks in June and July, coinciding with both intensive demolition of structural towers and regional wildfire events. While it is difficult to separate contributions from the site versus regional sources, residents were exposed to a combination of both, increasing cumulative risk.

In 2024, when site activity reached its peak overall, PM<sub>10</sub> levels at the block level were frequently higher than citywide averages, especially during winter and spring months when demolition and dismantling were most active. Continued demolition and dismantlement, repeated handling of materials and waste, truck movements on adjacent streets, and operation of heavy machinery likely contributed modest but continuous increases in dust. The resulting elevated baseline relative to the citywide ambient air suggests a consistently higher dust burden in the vicinity of the MDC.

By 2025, even as peak dismantling activities decreased, PM<sub>10</sub> concentrations remained higher than the city nearly every month. The greatest difference occurred in July, when the MDC site recorded an average PM<sub>10</sub> level of 33.4 µg/m<sup>3</sup> compared with 15.5 µg/m<sup>3</sup> citywide. This “long tail” of elevated exposure likely reflects later-stage sources, such as truck traffic, removal of construction equipment, exposed soil, and drilling of geotechnical soil borings continuing to generate dust near the MDC. These sustained elevations suggest that the community experience higher dust exposure even after peak demolition activity had ended, highlighting the importance of continuous mitigation measures throughout all phases of construction.

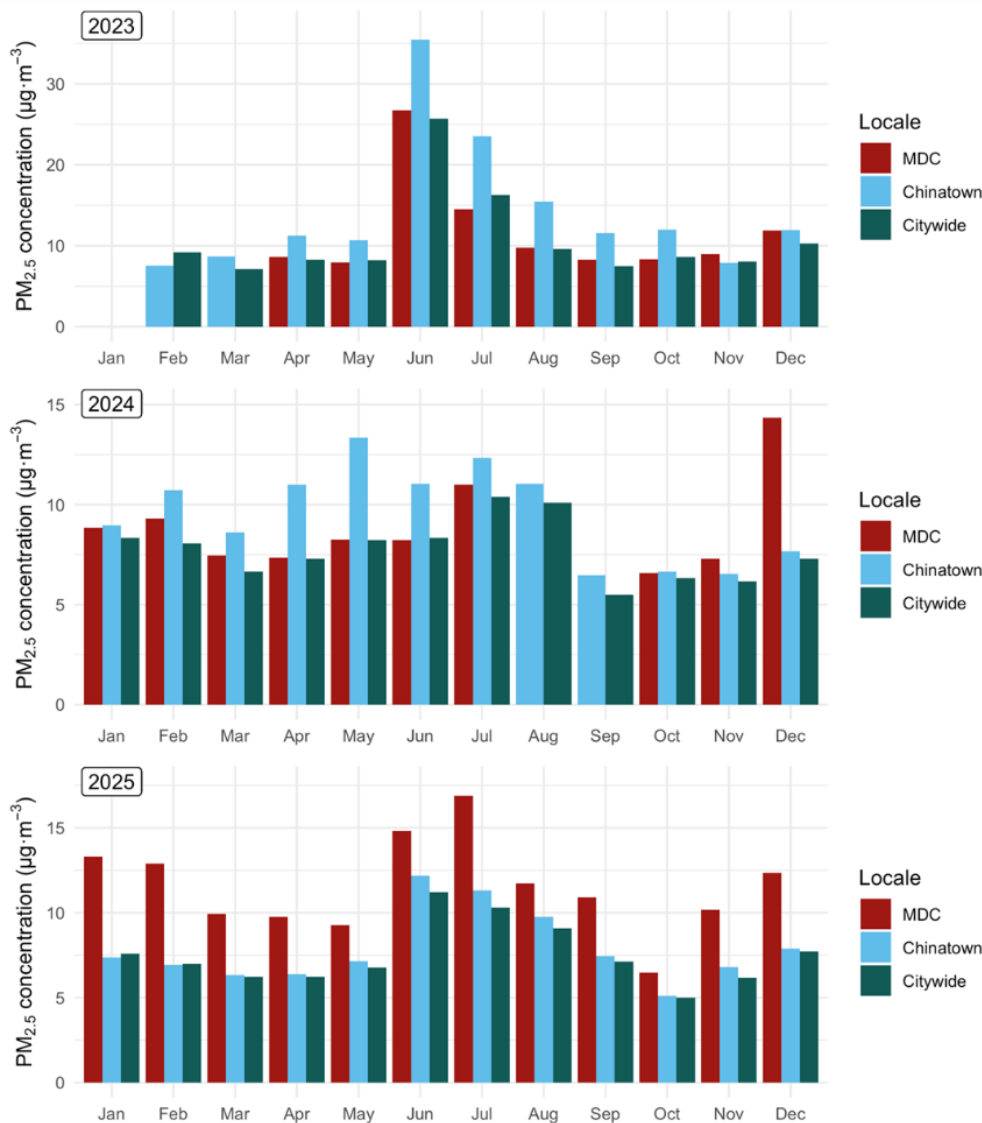


**Figure 3.** Average monthly PM<sub>10</sub> levels at different spatial scales within NYC by year

### Fine Particulate Matter (PM<sub>2.5</sub>)

PM<sub>2.5</sub>, which can penetrate deep into the lungs and enter the bloodstream, contributes to long-term respiratory and cardiovascular risks.<sup>27</sup> In 2023, PM<sub>2.5</sub> near the MDC rose sharply during demolition and wildfire events; however, Chinatown and citywide monitors spiked even higher, indicating that the dirtiest fine-particle days were largely driven by regional conditions. The demolition project acted as an additional local stressor on top of these extreme background levels.

In 2024, PM<sub>2.5</sub> around the MDC generally tracked closely with Chinatown and citywide levels but increased toward the end of the year. This pattern suggests that the most intense demolition work in 2024 generated primarily coarse dust, while fine particle emissions were more limited, possibly due to the nature of tasks and mitigation measures in place. By 2025, however, PM<sub>2.5</sub> exceeded both Chinatown and citywide averages for many months, suggesting that later-stage work, such as material handling, soil disturbance, and truck movement, contributed to persistent fine particle exposure, even as demolition intensity declined.



**Figure 4.** Average monthly PM<sub>2.5</sub> levels at different spatial scales within NYC by year  
*Note.* No PurpleAir data available for the months of August and September in 2023.

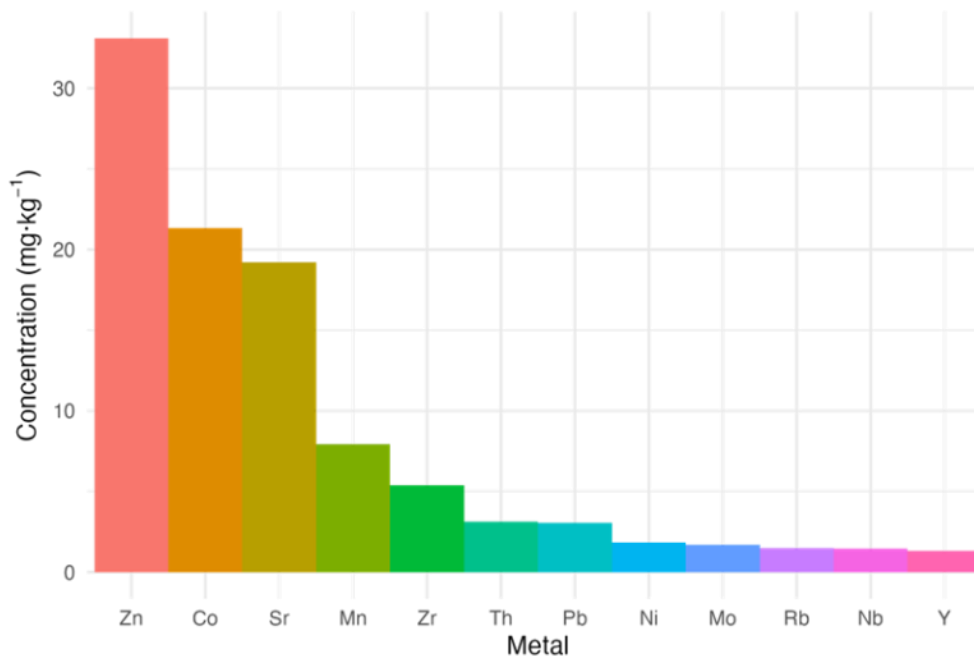
### Dust Elemental Composition

Elemental analysis of dust collected outside the site perimeter indicated that the particulate matter transported beyond the MDC site was primarily composed of materials consistent with concrete and cement. Lime, silica, and aluminum accounted for approximately 98% of the measured composition, with iron comprising roughly 1%. In addition, trace concentrations (each <1%) of multiple heavy metals were detected, including zinc (Zn), cobalt (Co), strontium (Sr), manganese (Mn), zirconium (Zr), thallium (Th), lead (Pb), nickel (Ni), molybdenum (Mo), rubidium (Rb), niobium (Nb), and yttrium (Y) (Figure 5).

While present at low concentrations, several of these metals are not typically dominant constituents of concrete and may reflect contributions from site-specific materials, equipment wear, or legacy contamination. From an exposure perspective, inhalation of PM<sub>2.5</sub>-laden concrete-derived dust poses potential respiratory health risks when exposures occur at elevated concentrations or over extended periods. In particular, respirable crystalline silica is well established as a cause of adverse pulmonary outcomes, including silicosis.<sup>28</sup>

Several detected metals, such as lead, nickel, cobalt, and manganese, are associated with respiratory, neurological, or systemic health effects at sufficient doses and exposure durations. The toxicological significance of these metals depends not only on concentration, but also on particle size, chemical form, solubility, and cumulative exposure over time.<sup>29</sup> Chronic exposure to low levels of these metals may be of concern for vulnerable populations residing near the site.

These findings underscore the importance of comprehensive particulate matter monitoring that includes both concentration measurements and characterization of particle composition. Enhanced monitoring and robust dust control measures are warranted to better assess potential health risks and to inform protective strategies during ongoing and future construction phases.



**Figure 5.** Concentration of heavy metals by mass in collected dust samples via X-Ray Fluorescence (XRF)

## Implications

### *Chronic Exposure*

Although official environmental monitoring reports frequently indicated that daily PM<sub>10</sub> concentrations did not exceed the regulatory 24-hour standard of 150 µg/m<sup>3</sup>, reliance on regulatory compliance alone is insufficient to evaluate potential health impacts in communities already facing elevated environmental and health burdens.<sup>30-32</sup> The pattern of air quality data reviewed in this report suggests that residents living near the MDC site may be experiencing chronic, day-to-day exposure to construction-related particulate matter rather than only isolated short-term emissions associated with peak demolition activities. This distinction is critical. For residents, this means that the most intensive phases of demolition may not be the sole periods of concern. Elevated particulate matter levels may persist well into lower-intensity construction and build-out phases, at a time when community members could reasonably expect environmental conditions to improve.

Elevated particulate matter levels appear to persist beyond the most intensive demolition phases and into lower-intensity construction and build-out periods, creating a prolonged “long tail” of exposure. This “long tail” of exposure has important implications for risk management.<sup>33</sup> Sustained, moderate elevations in dust levels can contribute to chronic respiratory and cardiovascular impacts, even when concentrations do not consistently exceed regulatory thresholds. Effective mitigation therefore cannot be limited to peak activity periods alone but must be maintained across all phases of construction, including periods characterized as routine or lower intensity.

### *Vulnerable Populations*

Federal air quality standards are designed as broad legal thresholds intended to protect the general population and often do not account for heightened vulnerability among older adults, pregnant individuals, children, or people with asthma or heart and lung disease. In environmental justice communities with existing health and exposure burdens, reliance solely on regulatory exceedances as a marker of safety may fail to capture meaningful risk.<sup>31,32</sup> The community immediately adjacent to the MDC includes a substantial concentration of older adults, including residents of Chung Pak low-income senior housing, many of whom are more susceptible to the health effects of air pollution due to age, underlying health conditions, or limited access to healthcare. For these populations, months or years of slightly but consistently higher particulate matter exposure than elsewhere in NYC may still contribute meaningfully to cumulative health risk.

Health-based benchmarks provide additional perspective on these exposures. Using the WHO 24-hour PM<sub>10</sub> guideline of 45 µg/m<sup>3</sup>, PM<sub>10</sub> concentrations in the MDC area exceeded recommended limits on 22 days in 2023, 8 days in 2024, and 18 days in 2025. These exceedances are particularly concerning given that PM<sub>10</sub> estimates in this analysis were derived from PurpleAir sensors, which tend to underestimate coarse particle concentrations during dusty conditions. Actual community exposures were therefore likely higher than observed. Elemental analysis indicated that the dust collected immediately beyond the site perimeter was largely comprised of silica, suggesting that it was concrete-based and likely generated by nearby demolition and construction activities. Under conditions of chronic exposure, inhalation of silica-containing PM<sub>2.5</sub> and PM<sub>10</sub> is associated with increased respiratory risk.<sup>28</sup>

These findings underscore a central environmental justice concern: meeting minimum regulatory standards does not necessarily ensure meaningful protection for communities facing cumulative exposure and heightened vulnerability. Statements of “no exceedances” may indicate the absence of a clear legal violation, but they should not be interpreted as evidence of no health concern for residents living closest to the site. Sustained, transparent air and dust monitoring paired with robust dust control measures across all phases of construction is essential to prevent chronic, cumulative exposures and to protect populations least equipped to handle additional environmental risk.

## **ENVIRONMENTAL MONITORING**

The primary objective of this section was to evaluate the quality, completeness, and transparency of environmental monitoring conducted for the BBJ Manhattan project, and to assess whether publicly available monitoring reports provide sufficient information for independent review, regulatory accountability, and meaningful community oversight. This review focused on: (1) the consistency and interpretability of reported air quality and noise data, (2) the availability of underlying raw datasets, and (3) the extent to which monitoring practices supported verification of potential community health impacts during demolition and construction.

### **Analytical Approach**

To assess the reliability and interpretability of the monitoring program, multiple complementary sources were reviewed and cross-referenced.

All BBJ Manhattan MN DSS Monthly Environmental Monitoring Reports published between August 2022, and May 2025 were systematically examined. Air pollution (PM<sub>10</sub>), noise, and vibration data were reviewed for internal consistency, completeness, and clarity. Instances of reported exceedances, data gaps, anomalies, and errors were documented. Monthly PM<sub>10</sub> data for each monitor were qualitatively scored for completeness using categorical thresholds (0–25%, 25–50%, 50–75%, and 75–100% complete), enabling a comparative assessment of data availability over time (See Figure 6).

Secondly, reported AECOM–Hill JV air monitoring data were cross-referenced with independent community-based PurpleAir monitoring data, which are publicly available and provide continuous, near-site measurements. Temporal alignment between gaps in reported monitoring data and periods of elevated PM<sub>10</sub> observed by PurpleAir sensors was examined to assess whether missing data coincided with potentially high-exposure conditions.

Finally, to evaluate data transparency and accessibility, a Freedom of Information Law (FOIL) request was submitted to the NYCDDC seeking raw, time-resolved PM<sub>10</sub> data from site monitors. Agency responses were reviewed to determine whether underlying numerical datasets were retained or made available for independent analysis.

### **Findings**

A systematic review of the BBJ Manhattan MN DSS Monthly Environmental Monitoring Reports (August 2022–May 2025) identified substantial data gaps, reporting inconsistencies, and quality

deficiencies in PM<sub>10</sub> air pollution and noise monitoring. When evaluated alongside the reconstructed dismantling timeline (Figure 1), these deficiencies significantly limited the ability to relate reported environmental conditions to specific construction activities.

Across the monitoring reports, raw numerical data from deployed air quality monitors were never provided, restricting independent evaluation of measurements. Instead, air quality results were presented primarily through compressed and often pixelated graphical summaries. Many figures used highly compressed y-axes (e.g., displaying only 0 and 100 µg/m<sup>3</sup>), obscuring variation in concentrations and preventing reliable estimation of daily PM<sub>10</sub> levels. In several instances, reported data included physically impossible negative PM<sub>10</sub> values (e.g., June 2023), with no explanation or documented quality assurance procedures.

Significant and frequent data gaps were observed, particularly during 2022 and 2023, despite repeated assertions that monitoring occurred continuously throughout each month, including weekends. For noise monitoring, missing data were often displayed as straight horizontal lines, an implausible pattern given the constantly fluctuating nature of environmental noise. While some interruptions in 2024 were attributed to solar battery failures, instrument relocation, or maintenance, earlier gaps were largely unexplained. Qualitative scoring of monthly PM<sub>10</sub> data revealed that many reporting periods contained substantial proportions of missing or uninterpretable data.

Comparison with independent PurpleAir monitoring data indicates that during several months in 2023, periods corresponding to gaps in reported air quality data coincided with elevated PM<sub>10</sub> concentrations measured at nearby locations. While this temporal overlap does not imply intentional omission, it raises important concerns about whether monitoring interruptions may have occurred during periods of increased airborne dust. Without access to raw datasets or clear explanations for data gaps, such questions cannot be resolved.

Similar data quality issues were identified in AECOM–Hill JV monitoring reports for other BBJ sites, including the Brooklyn facility. These included mislabeled units (e.g., µg/m<sup>3</sup> instead of mg/m<sup>3</sup>), invalid units (“µm/m<sup>3</sup>”), months with no published air monitoring data, duplicated graphs across multiple monitors, and later shifts to reporting only averaged values rather than individual monitor data. The recurrence of these issues across projects suggests systemic weaknesses in data management and reporting practices.

Despite these limitations, monthly reports frequently concluded that “no exceedances were noted.” While this statement may be accurate for certain periods, it must be interpreted with caution. When datasets are incomplete, missing, or contain unexplained anomalies, exceedance determinations cannot be reliably made. In several instances, missing or unavailable data appear to have been implicitly treated as evidence of compliance, when in fact monitoring data were absent. Under these circumstances, conclusions of compliance remain indeterminate rather than affirmative.

ICM reports from Excel Environmental Resources Inc. (November 2024–June 2025) further documented gaps in the monitoring program and consistently recommended improvements, including real-time onsite particulate monitoring using handheld instruments and incorporation of PM<sub>2.5</sub> monitoring. Incorporating the real-time PM<sub>2.5</sub>, PM<sub>10</sub>, and noise monitoring was to understand the direct sources of pollutants on-site. These data would supplement the data from the monthly

reports and enable immediate action to mitigate dust generating activities, thus protecting residents and the community. The ICM had recommended these additional measures throughout reports 1-6. Furthermore, these reports (1-6) had also recommended stricter adherence to dust control measures such as truck coverings, suggesting extra coverings and daily reinforcement. This would ensure no debris escapes sidewalks or roadways, possibly endangering the community. Lastly, reports often emphasized strict adherence to BMPs and NYC requirements and advanced planning prior to new construction phases. The repeated inclusion of these recommendations indicates their relevance to effective environmental oversight; however, they were not incorporated into the AECOM–Hill JV monitoring program.

Efforts to obtain raw monitoring data through a FOIL request to NYCDDC revealed additional transparency issues. Although NYCDDC directed the request to publicly posted monthly reports, these materials did not contain the requested raw, time-resolved datasets. DDC subsequently stated that no additional air quality monitoring data were retained by the agency. On this basis, NYCDDC concluded that no right to appeal existed under FOIL, as no records were withheld. As a result, independent verification of reported concentrations and data completeness is not possible.

Year: 2022		
Monitor ID:	#975	
Month	Data Missing (%)	
January	NA	
February	NA	
March	NA	
April	NA	
May	NA	
June	NA	
July	NA	
August	25 to 50	
September	25 to 50	
October	25 to 50	
November	25 to 50	
December	75 to 100	
Median (%) Missing Data by Monitor:	25 to 50	

Year: 2023						
Monitor ID:	#975	#977	#997	#993	#998	#973
Month	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)
January	50 to 75	NA	January NA	January NA	January NA	January NA
February	25 to 50	75 to 100	February NA	February 25 to 50	February NA	February 25 to 50
March	0 to 25	25 to 50	March NA	March 0 to 25	March 0 to 25	March 25 to 50
April	0 to 25	25 to 50	April NA	April 0 to 25	April 0 to 25	April 75 to 100
May	0 to 25	75 to 100	May NA	May 0 to 25	May 25 to 50	May 75 to 100
June	50 to 75	0 to 25	June NA	June 0 to 25	June 25 to 50	June 75 to 100
July	50 to 75	75 to 100	July NA	July 50 to 75	July 75 to 100	July 75 to 100
August	50 to 75	25 to 50	August 75 to 100	August 25 to 50	August 75 to 100	August 25 to 50
September	50 to 75	0 to 25	September 75 to 100	September 0 to 25	September 25 to 50	September NA
October	50 to 75	0 to 25	October 25 to 50	October 0 to 25	October 0 to 25	October NA
November	50 to 75	50 to 75	November 50 to 75	November 0 to 25	November 25 to 50	November NA
December	25 to 50	25 to 50	December 0 to 25	December 0 to 25	December 25 to 50	December NA
Median (%) Missing Data by Monitor:	50 to 75	25 to 50	50 to 75	0 to 25	25 to 50	75 to 100

Note: monitor movements (#973 swapped for #997)

Year: 2024								
Monitor ID:	#975	#977	#997	#993	#998	#001	#007	#992
Month	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)
January	0 to 25	0 to 25	January 25 to 50	January 25 to 50	January 25 to 50	January NA	January NA	January NA
February	25 to 50	0 to 25	February 50 to 75	February 0 to 25	February 0 to 25	February NA	February NA	February NA
March	0 to 25	0 to 25	March 0 to 25	March 0 to 25	March 0 to 25	March NA	March NA	March NA
April	25 to 50	0 to 25	April 0 to 25	April 0 to 25	April 0 to 25	April 0 to 25	April NA	April NA
May	0 to 25	0 to 25	May 0 to 25	May 0 to 25	May 0 to 25	May 0 to 25	May NA	May NA
June	25 to 50	0 to 25	June 0 to 25	June 0 to 25	June 0 to 25	June 0 to 25	June NA	June NA
July	25 to 50	0 to 25	July 0 to 25	July 0 to 25	July 0 to 25	July 0 to 25	July NA	July NA
August	25 to 50	0 to 25	August 0 to 25	August 0 to 25	August 0 to 25	August 0 to 25	August NA	August NA
September	25 to 50	0 to 25	September 0 to 25	September 0 to 25	September 0 to 25	September 0 to 25	September NA	September NA
October	25 to 50	0 to 25	October 25 to 50	October 0 to 25	October 0 to 25	October 0 to 25	October 0 to 25	October 0 to 25
November	0 to 25	0 to 25	November 25 to 50	November 0 to 25	November 0 to 25	November 0 to 25	November 50 to 75	November 0 to 25
December	25 to 50	0 to 25	December 25 to 50	December 0 to 25	December 25 to 50	December 0 to 25	December NA	December 25 to 50
Median (%) Missing Data by Monitor:	25 to 50	0 to 25	0 to 25	0 to 25	0 to 25	0 to 25	25 to 50	0 to 25

Year: 2025						
Monitor ID:	#975	#977	#997	#993	#998	#001
Month	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)	Data Missing (%)
January	0 to 25	0 to 25	January 25 to 50	January 0 to 25	January 0 to 25	January 0 to 25
February	25 to 50	0 to 25	February 25 to 50	February 0 to 25	February 25 to 50	February 0 to 25
March	0 to 25	0 to 25	March 25 to 50	March 0 to 25	March 25 to 50	March 0 to 25
April	0 to 25	0 to 25	April 25 to 50	April 0 to 25	April 0 to 25	April 0 to 25
May	25 to 50	0 to 25	May 25 to 50	May 0 to 25	May 0 to 25	May 0 to 25
June	NA	NA	June NA	June NA	June NA	June NA
July	NA	NA	July NA	July NA	July NA	July NA
August	NA	NA	August NA	August NA	August NA	August NA
September	NA	NA	September NA	September NA	September NA	September NA
October	NA	NA	October NA	October NA	October NA	October NA
November	NA	NA	November NA	November NA	November NA	November NA
December	NA	NA	December NA	December NA	December NA	December NA
Median (%) Missing Data by Monitor:	0 to 25	0 to 25	25 to 50	0 to 25	0 to 25	0 to 25

Figure 6. Monthly AECOM-Hill JV air monitor PM<sub>10</sub> data quality rankings

### Implications

A central finding of this review is that limitations in data accessibility and transparency substantially undermine the ability of independent reviewers, researchers, and community members to assess environmental conditions at the MDC site. From an environmental justice perspective, access to complete and interpretable environmental monitoring data is fundamental to the community’s right to know about exposures that may affect health. Yet publicly available monitoring reports largely present summarized conclusions without providing raw data, metadata, or sufficient documentation of data gaps, anomalies, and validation procedures, limiting meaningful public review.

These limitations have direct implications for interpreting environmental conditions and regulatory compliance. When datasets contain missing or invalid entries, unexplained anomalies - including

physically implausible values such as negative PM<sub>10</sub> concentrations - or extended periods without usable data, the absence of documented exceedances cannot be interpreted as evidence of safety. Periods with missing or uninterpretable data should not be treated as periods of compliance by default. As a result, this analysis was unable to independently corroborate AECOM's determinations that "no exceedances were noted" during portions of the demolition and dismantlement period. In environmental justice communities facing elevated baseline environmental exposures and compounding health burdens, such data gaps likely underestimated risks rather than adequately characterized them. Without access to complete and reliable data, residents are unable to independently assess whether mitigation measures are effective, regulatory standards are being meaningfully met, or additional protections are warranted.

Although an ICM was eventually contracted for the latter portion of the demolition phase, oversight was limited in both timing and scope. The majority of early-phase demolition occurred without independent review, meaning that significant exposures, particularly from peak dust-generating activities, went largely unverified. While the ICM provided valuable additional monitoring once deployed, this late start highlights the need for independent oversight from the outset of construction projects in environmental justice communities.

These findings raise serious concerns about the transparency, accountability, and reliability of environmental assurances provided to the surrounding neighborhood. Environmental monitoring for large-scale construction projects is not merely a technical requirement; it is a public obligation, particularly in communities like Chinatown. Assertions of continuous monitoring and "no exceedances" lack meaning in the absence of complete, transparent, and verifiable data. Meaningful accountability requires monitoring systems that are continuous, open to public scrutiny, and responsive to the needs of vulnerable populations—criteria that were not met in the published environmental monitoring reports for the BBJ Manhattan project.

## RECOMMENDED MITIGATION STRATEGIES

The findings described above point to persistent environmental burdens, incomplete monitoring data, and restricted public access to data. Together, these factors undermine community trust and contribute to sustained exposure to air pollution, particularly for residents living in close proximity to the construction site. These concerns are especially significant in an environmental justice community, where structural inequities, higher baseline environmental burdens, and limited capacity to avoid exposure can compound potential health risks for vulnerable populations, including children, older adults, and those with pre-existing respiratory or cardiovascular conditions. While an ICM was engaged during the latter portion of the demolition phase, the timing and scope of that oversight limited its ability to address exposures in the earlier phases of demolition when risk levels were potentially highest.

Although this report focuses on environmental metrics, no reliable longitudinal health data were identified for nearby residents, highlighting a critical gap in understanding potential health impacts. Future efforts to assess health outcomes could complement environmental monitoring and help guide mitigation strategies for vulnerable populations.

To address these challenges during the upcoming construction phase, mitigation strategies should prioritize early and continuous monitoring, full real-time data transparency, and strengthened, community-centered independent oversight. The following recommendations outline measures to improve environmental protection, accountability, and responsiveness throughout the life of the project.

### 1) Data Transparency and Accountability

- **Public release of raw, time-stamped monitoring data in real time:**

All air quality, dust, noise, and vibration measurements should be made publicly accessible as they are collected, including QA/QC documentation, sensor downtime logs, and clear explanations for anomalies. This enables independent review, meaningful community oversight and timely action to reduce exposure.

- **Clear labeling of missing or invalid data:**

Periods with absent, invalid, or uninterpretable data should be explicitly flagged and not treated as evidence of compliance. Transparency regarding data gaps is essential for accurate interpretation of environmental conditions.

- **Open data repository:**

Establish a centralized, accessible data repository that provides both historical and live monitoring data, allowing community stakeholders, researchers, and regulators to independently analyze monitoring data and respond quickly to emerging hazards when pollutant levels spike.

## 2) Continuous Monitoring

- **Monitoring across all construction phases:**

Require continuous dust, noise, and vibration monitoring from site preparation through demolition, construction, and final build-out, without delays or reductions based on project phase.

- **Ongoing vigilance during lower-intensity phases:**

Recognize that routine or lower-intensity construction activities can still contribute to chronic exposures. Monitoring and mitigation measures should be maintained consistently throughout all stages of activity to protect residents over time.

## 3) Limit Construction Hours

- **Limit daily construction hours to reduce exposure burdens:**

Restrict early morning, evening, and weekend construction activities to minimize prolonged and repeated exposure to noise, vibration, and particulate matter. This is particularly important given evidence that health risks increase with both intensity and duration of exposure, and that chronic exposure can contribute to cumulative health impacts for residents.

- **Strengthen oversight and justification needed for after-hours work variances**

Require that extended-hour permits be granted only with clear justification (e.g., safety, emergency conditions, or unavoidable construction constraints), rather than routine or recurring approval. All variances should be publicly posted, time-limited, and subject to regular review to prevent normalization of extended exposure conditions.

## 4) Independent Oversight and Community-Centered Environmental Governance

- **Strengthen and extend independent monitoring:**

Ensure that an Independent Community Monitor is engaged from the pre-construction phase and maintained through project completion, with a clearly defined mandate that expands upon prior ICM efforts.

- **Integrate the independent community monitor into planning:**

Involve the monitor in:

- Selection and placement of monitoring equipment
- Determination of parameters to be measured
- Development of data validation protocols and reporting formats

- **Empower the independent community monitor:**

Provide unrestricted access to raw monitoring data, authority to investigate anomalies and community complaints, and a clear mechanism to recommend and track corrective actions, rather than simply leaving findings in community reports.

- **Formalize bidirectional communication:**  
Establish ongoing mechanisms that allow residents and community-based organizations to provide input to both the ICM and the city on monitoring priorities, review of findings, and recommendations.

## **Health Impact Monitoring and Impact Assessment**

- **Implement longitudinal health monitoring:**  
Given the extended construction timeline and potential for prolonged exposure to dust and noise, independent longitudinal health monitoring in addition to environmental metrics is recommended to assess potential impacts on surrounding communities.
- **Focus on vulnerable populations:**  
Pay particular attention to populations at heightened risk, including children, pregnant women, older adults, and individuals with pre-existing respiratory or cardiovascular conditions.
- **Collaborative partnerships:**  
Work with local clinics, hospitals, public health agencies, and academic institutions to support neighborhood-level monitoring of health trends during and after the construction period, including:
  - Asthma and other respiratory conditions requiring emergency department visits or hospitalization
  - Lung health outcomes and other respiratory symptoms associated with particulate exposure
  - Cardiovascular events and hospitalizations
  - Long-term cancer risk and other chronic conditions potentially associated with prolonged construction-related exposure
- Monitoring should be conducted relative to historical baselines and citywide trends, allowing early detection of potential changes associated with proximity to prolonged construction activity and facilitating timely interventions to protect community health.

## CONCLUSION

This review of environmental monitoring data and analysis of dust exposure at the Manhattan Detention Complex highlighted persistent air quality concerns for the surrounding Chinatown community. Elevated PM<sub>10</sub> and PM<sub>2.5</sub> levels observed during and beyond peak demolition periods suggest chronic, day-to-day exposure rather than isolated events. Gaps in environmental monitoring data, restricted data access, and late introduction of independent community monitors greatly hindered efforts to fully assess the extent and potential health implications of these exposures. No reliable longitudinal health data were identified for nearby residents, representing an important knowledge gap in understanding the true impact of prolonged environmental exposures.

The next construction phase, projected to run from 2026 through 2032, will bring prolonged periods of potential exposure, with weekday construction work extending from 6 a.m. to midnight. For residents living immediately next to the site - particularly older adults, children and individuals with pre-existing respiratory or cardiovascular conditions - these extended hours and lengthy construction timeline minimize opportunities to avoid exposure to the ongoing noise, vibration, and dust. While specific health outcomes cannot yet be quantified, the combination of prolonged exposure and vulnerable populations underscores the importance of precautionary measures. These findings underscore the importance of strong environmental monitoring systems, transparent access to data, and effective independent oversight during the next phase of construction. Strengthening these mechanisms will be critical to improving accountability, supporting future efforts to understand potential health impacts, and promoting environmental justice for communities most affected by this long-term project.

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## APPENDIX



David J. Varoli, Esq.  
Deputy Commissioner  
and General Counsel

Lisa Liters, Esq.  
Deputy General Counsel

Amina Wilson  
FOIL Records Access Officer

10/15/2025

Attn.: Antonio Saporito  
NYU Langone Health  
341 E. 25<sup>th</sup> Street, Room 217  
New York, NY 10010  
Via email: [Antonio.saporito@nyulangone.org](mailto:Antonio.saporito@nyulangone.org)

Re: FOIL Request Number 2025-0300: Borough Based Jails – Manhattan Facility, Environmental Monitoring Reports and Documents

Dear Mr. Saporito,

The New York City Department of Design and Construction (“DDC”) received your October 6, 2025 Freedom of Information Law request for records relating to the construction of the Borough Based Jail – Manhattan Facility. Specifically, you requested:

*the raw air pollution data (PM10) from the BBJ Manhattan MN DSS Environmental Monitoring Reports & Documents for each month from the beginning of the project (2022) to the current day (2025). Air monitor numbers include: Air Quality System (AQS) # 993, 997, 975, 977, 998, & 001.*

Following a review, the agency determined that all this information is publicly available on the City’s Closing Rikers website. Please use the below link.

<https://rikers.cityofnewyork.us/?s=manhattan+environmental+monitoring+report>

If you have any further questions regarding this matter, please contact DDC’s FOIL Records Access Officer office at (718) 391-1701.

Sincerely,  
FOIL Records Access Officer

Figure A1. FOIL request response on 10/15/25



Eduardo N. del Valle  
AIA, LEED-AP, DBIA  
Acting Commissioner

Eric Macfarlane, P.E.  
First Deputy Commissioner

David J. Varoli, Esq.  
Deputy Commissioner  
and General Counsel

Lisa Litera, Esq.  
First Deputy General Counsel

Amina Wilson  
FOIL Records Access Officer

12/3/2025

Attn.: Antonio Saporito  
NYU Langone Health  
341 E 25<sup>th</sup> Street, Room 217  
New York, NY 10010

Re: Freedom of Information Law ("FOIL") Request No. 2024-0356  
Information regarding Raw data from Environmental Monitoring Reports &  
Documents (BBJ)

Dear Ms. Marchionni:

The NYC Department of Design and Construction ("DDC") received your November 14<sup>th</sup>, 2025 e-mail regarding FOIL No. 2025-0300. In your message, you claimed that the agency's previous response which included a web link did not contain all the information you sought regarding the Air Quality Monitoring Reports conducted for the Borough Based Jail Manhattan Facility.

While you claimed this message was an "appeal" and that you were not informed of your right to appeal, DDC's response was not a denial. Rather the agency responded to you with all available records applicable to your request. A further search confirmed no other Air Quality Monitoring Reports for the Manhattan Facility are in DDC's possession. Accordingly, DDC is unable to provide you with any additional relevant records.

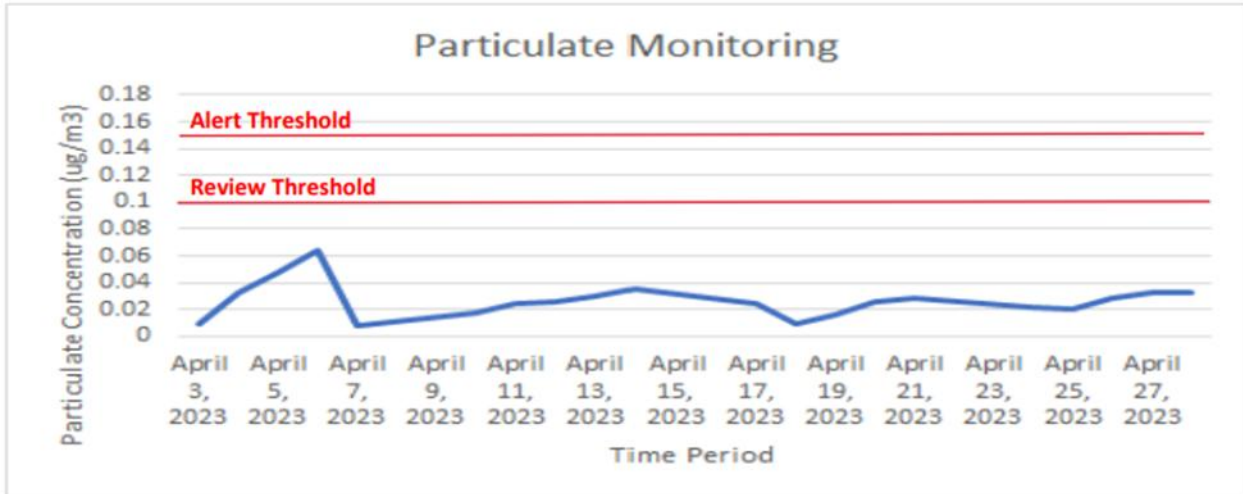
For continuing air quality reports, please visit the closing Rikers website."

Sincerely,

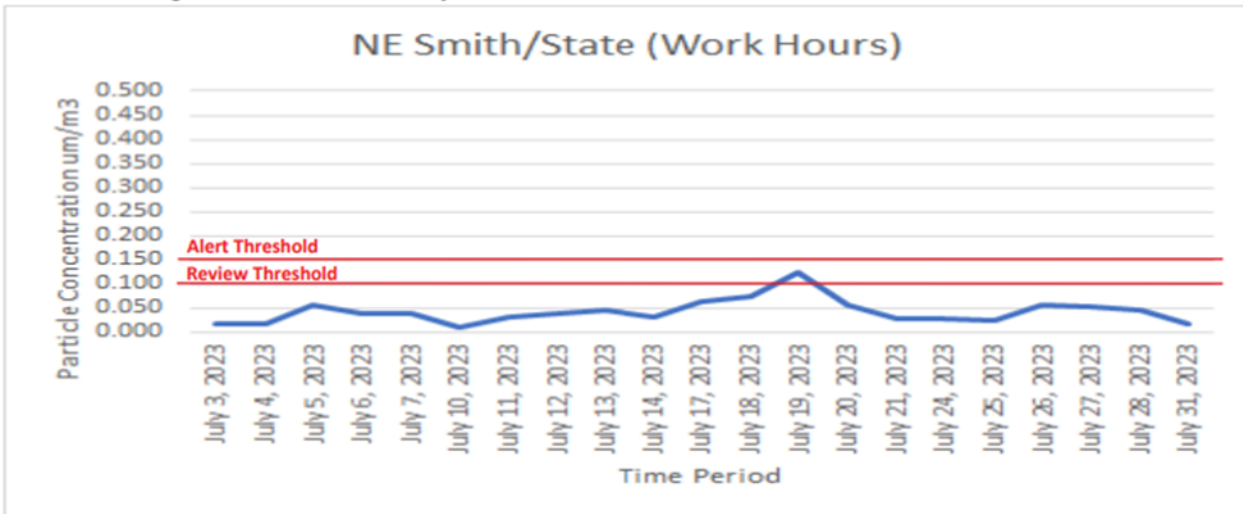
John Lee

Figure A2. FOIL request response on 12/3/25

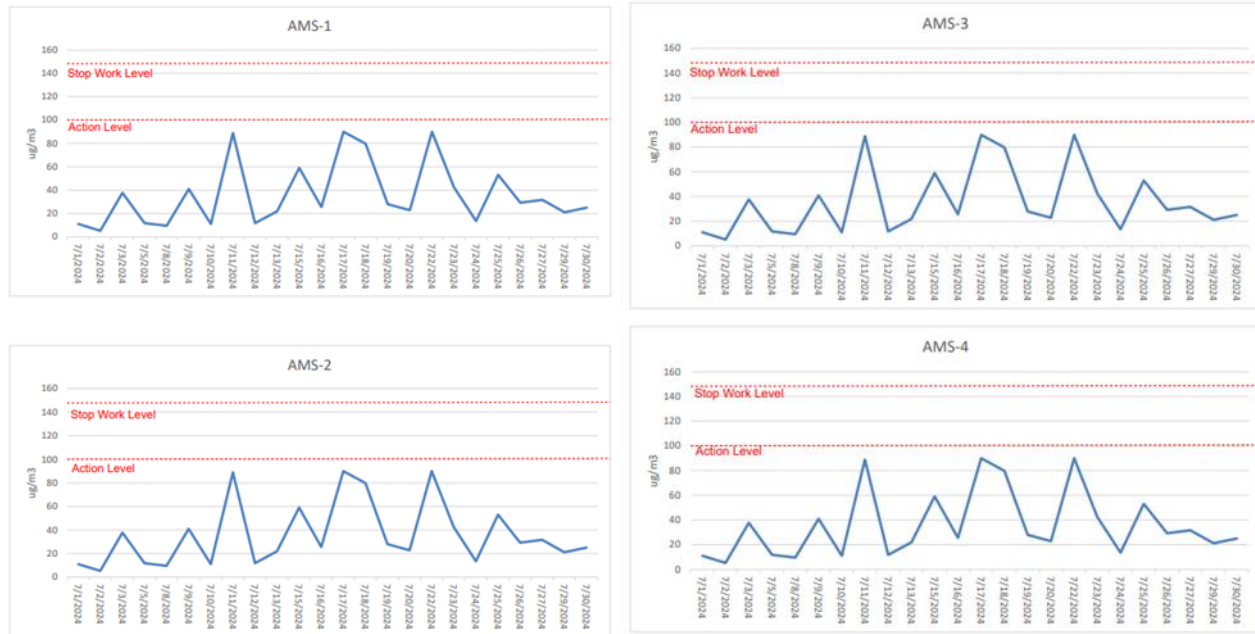
Dust Monitoring Unit – NE Corner – April 2023:



Dust Monitoring Unit – NE Corner – July 2023:

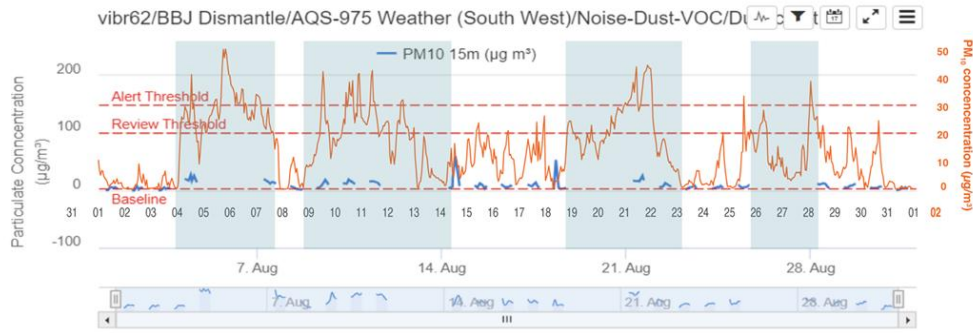


**Air & Dust Monitoring Graph**

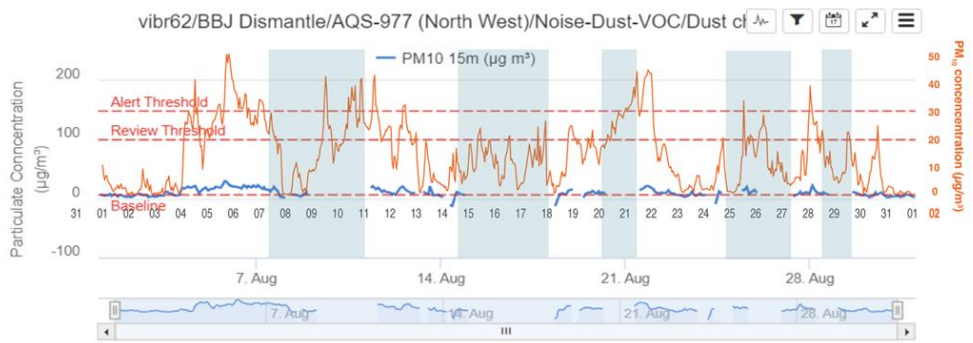


**Figure A3.** Brooklyn Facility Project data quality deficiencies.

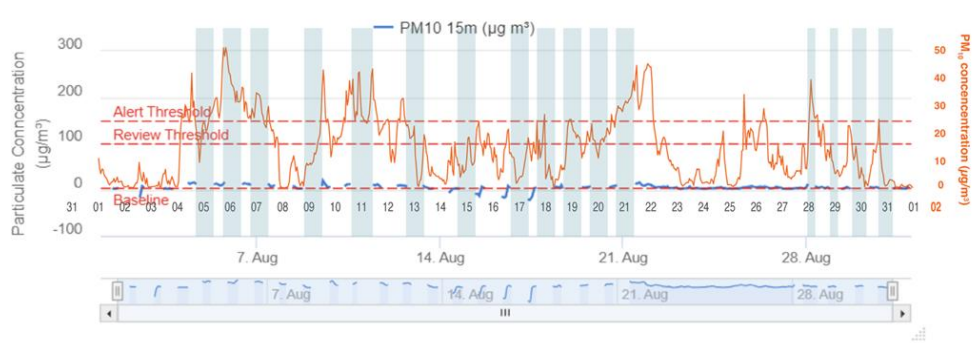
**Air Quality Systems #975 – Dust Monitoring Station – August 23:**



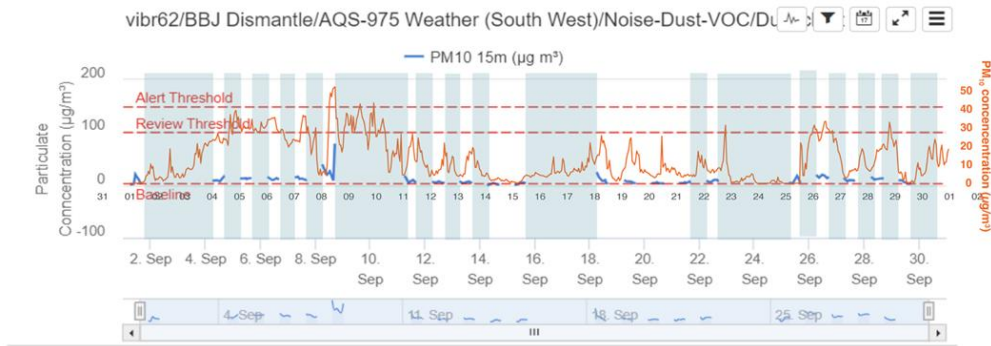
**Air Quality Systems #977 – Dust Monitoring Station – August 23:**



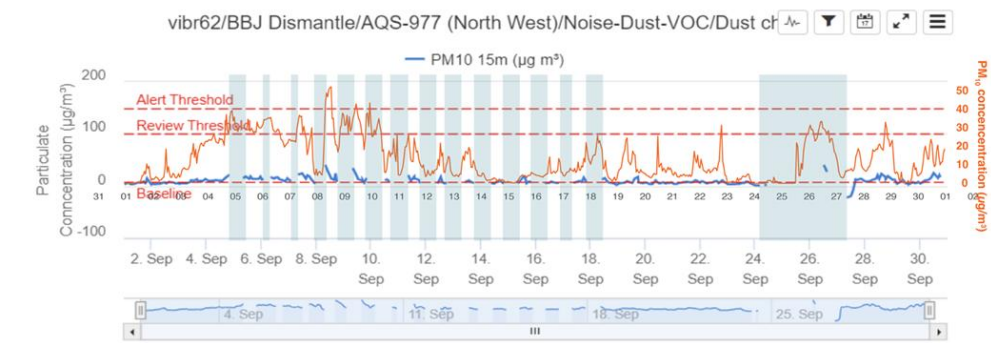
**Air Quality Systems #993 – Dust Monitoring Station – August 23:**



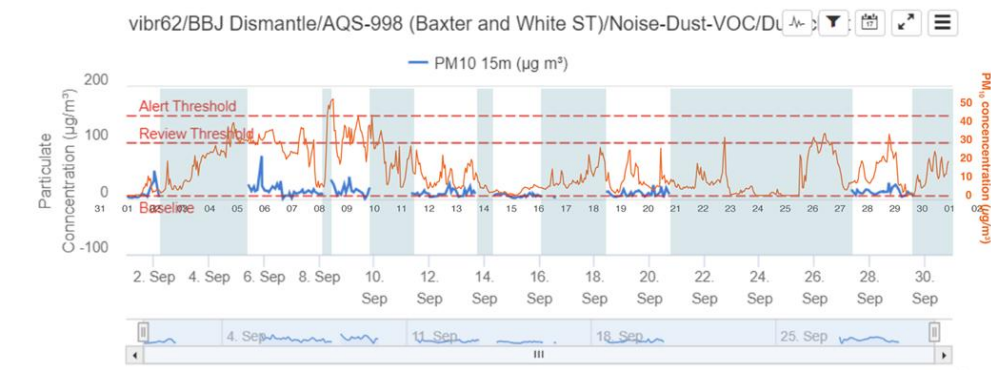
**Air Quality Systems #975 – Dust Monitoring Station – September 23:**



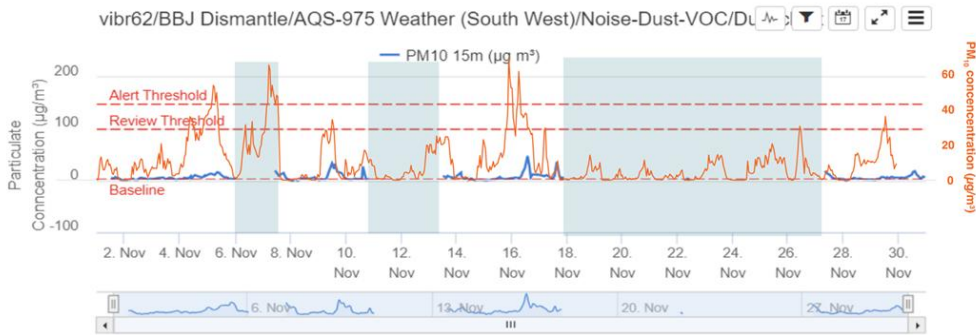
**Air Quality Systems #977 – Dust Monitoring Station – September 23:**



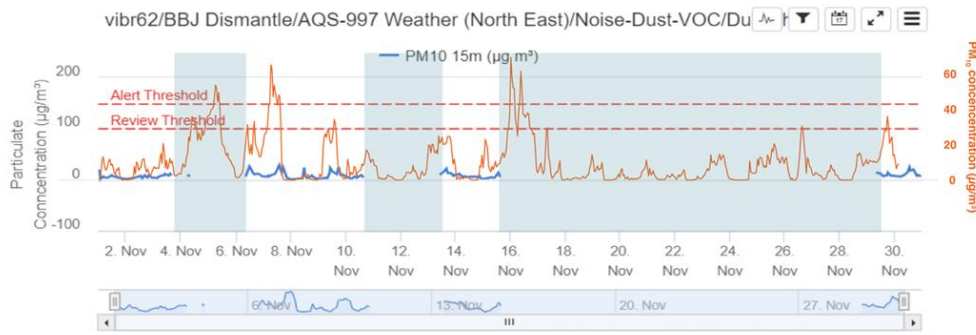
**Air Quality Systems #998 – Dust Monitoring Station – September 23:**



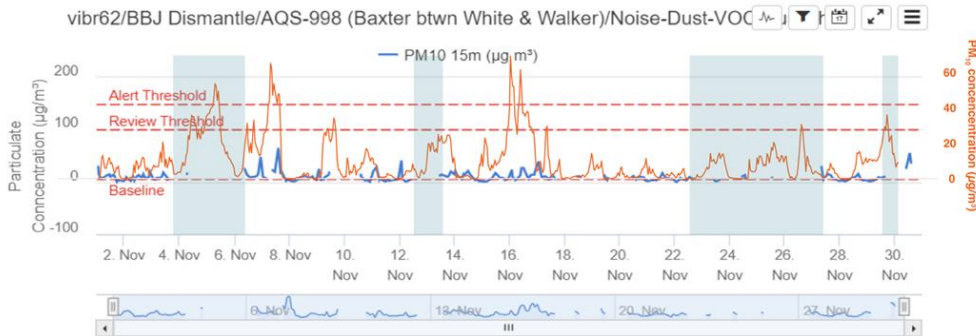
**Air Quality Systems #975 – Dust Monitoring Station – November 23:**



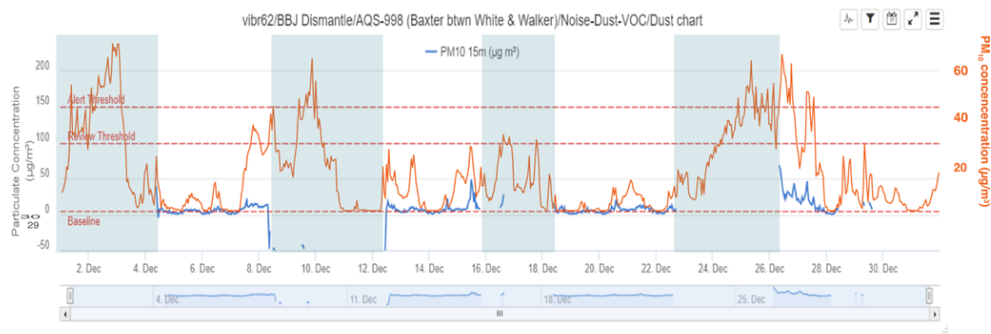
**Air Quality Systems #977 – Dust Monitoring Station – November 23:**



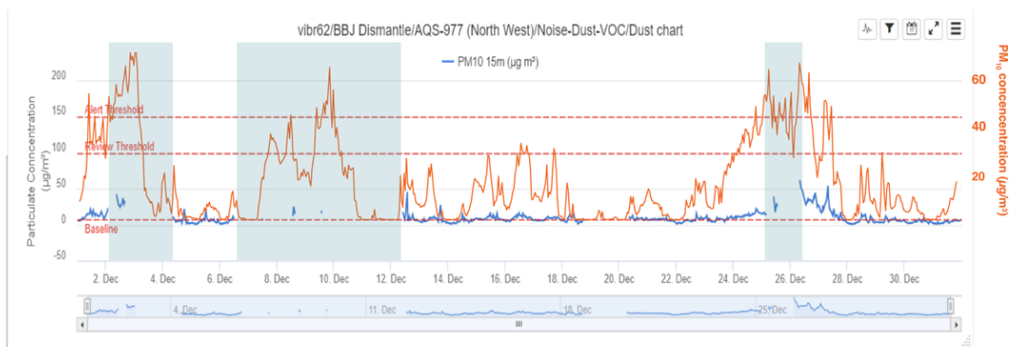
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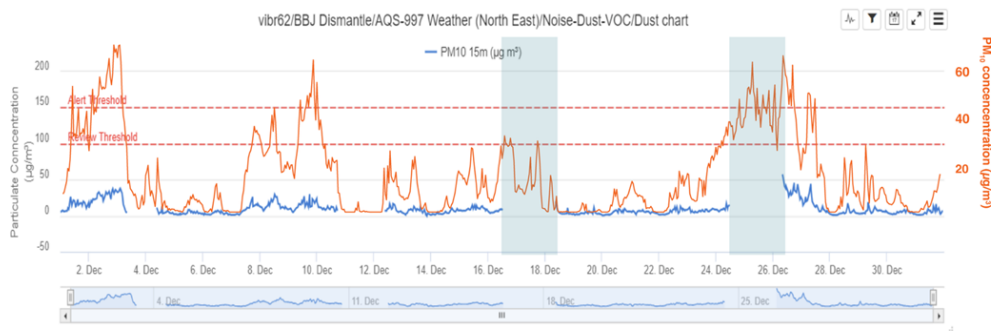
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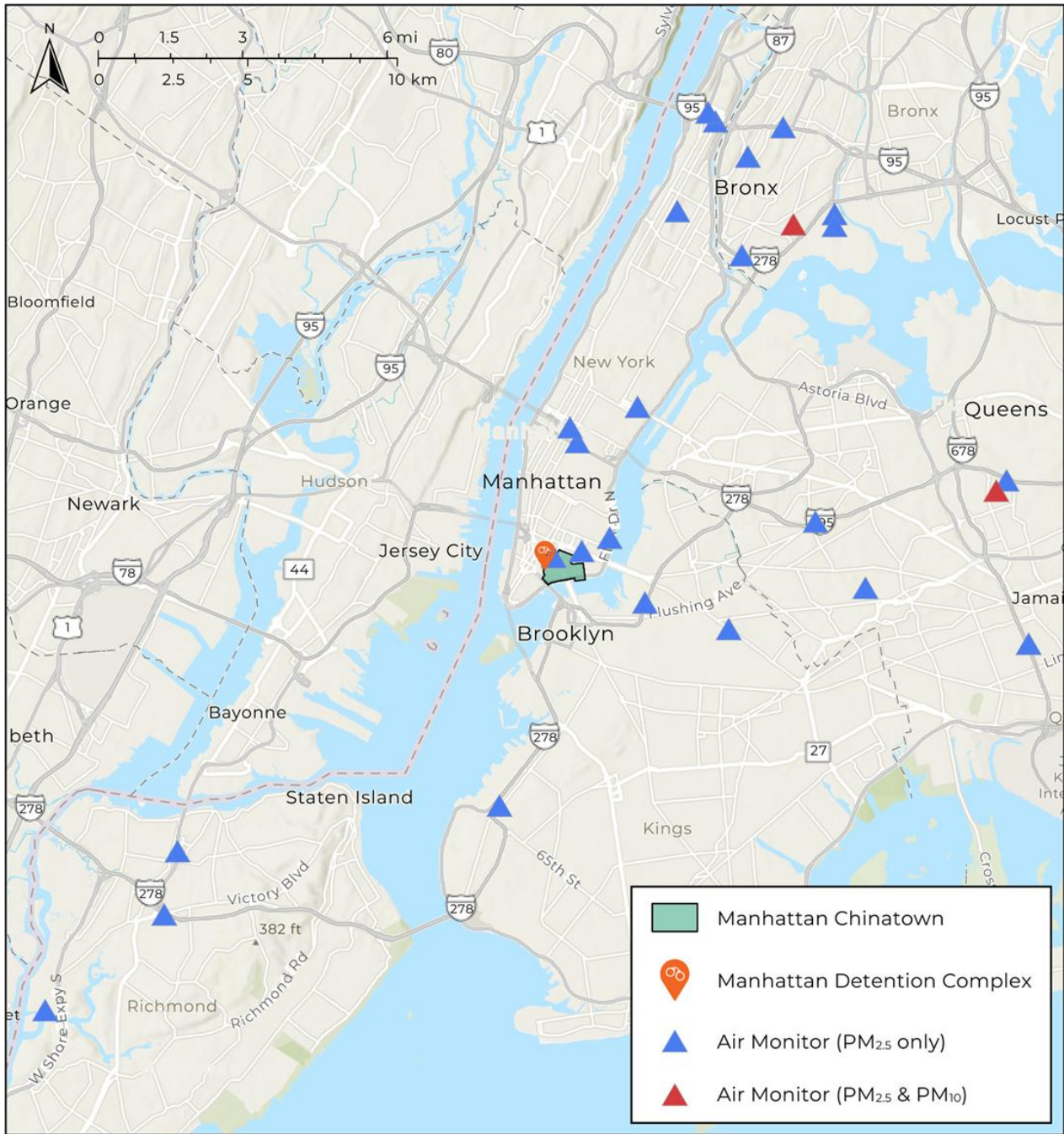
**Air Quality Systems #977 – Dust Monitoring Station – December 23:**



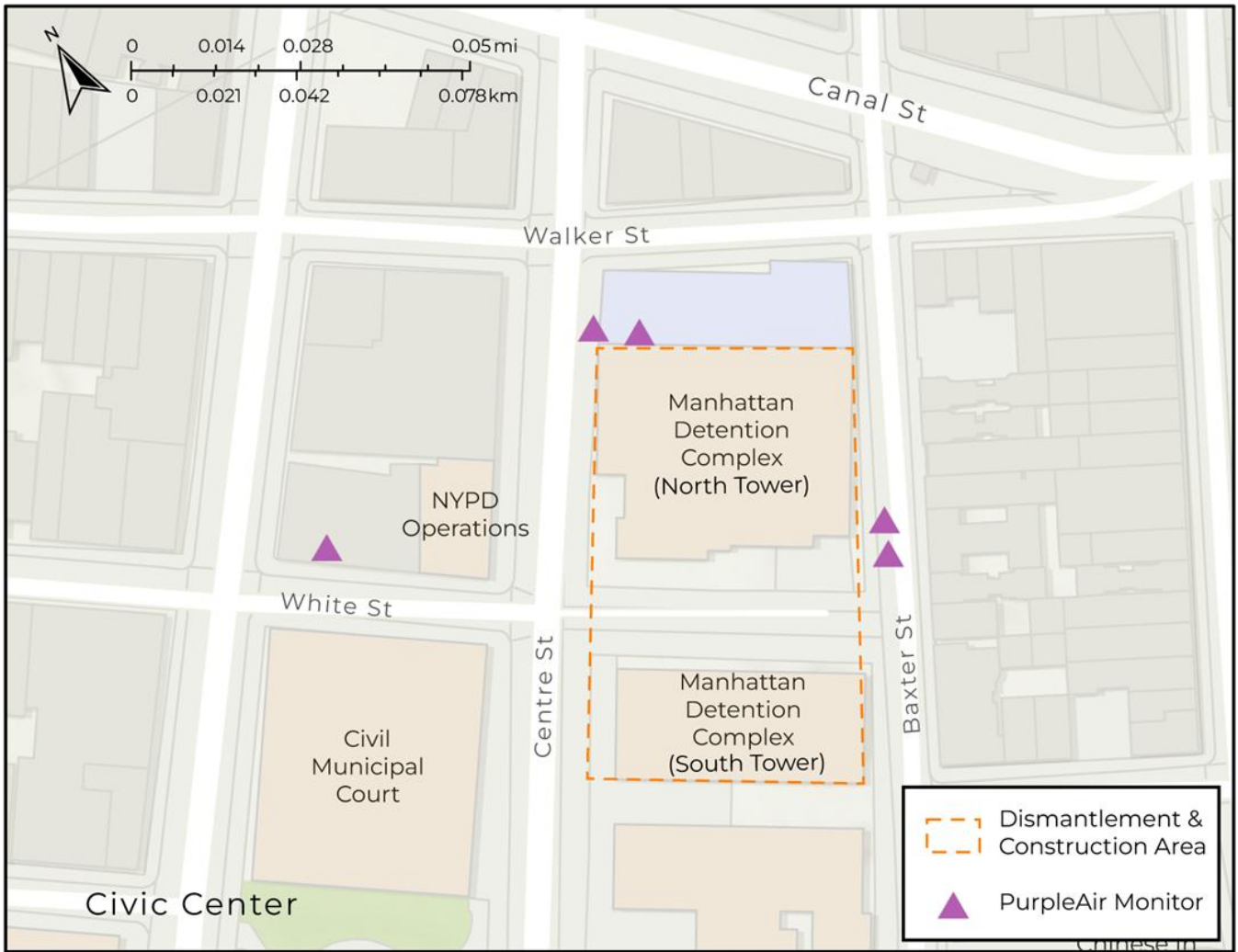
**Air Quality Systems #997 – Dust Monitoring Station – December 23:**



**Figures A4-A8.** Overlay of published PM<sub>10</sub> data by AECOM-Hill JV and PM<sub>10</sub> data from a PurpleAir sensor near the Manhattan Detention complex. Gaps in the AECOM-Hill JV data are highlighted in light green.  
*Note.* The scale of the AECOM-Hill JV PM<sub>10</sub> is shown on the left y-axis and the scale of PurpleAir data is on the right (orange). The dashed horizontal threshold lines are on the scale of the AECOM-Hill JV data.



**Figure A9.** Locations of federal and local air monitoring stations in New York City



**Figure A10.** Locations of PurpleAir monitors around the Manhattan Detention Complex

Daily PM<sub>2.5</sub> Air Quality Index (AQI) around the Manhattan Detention Complex Demolition Site (124-125 White Street, New York, NY)

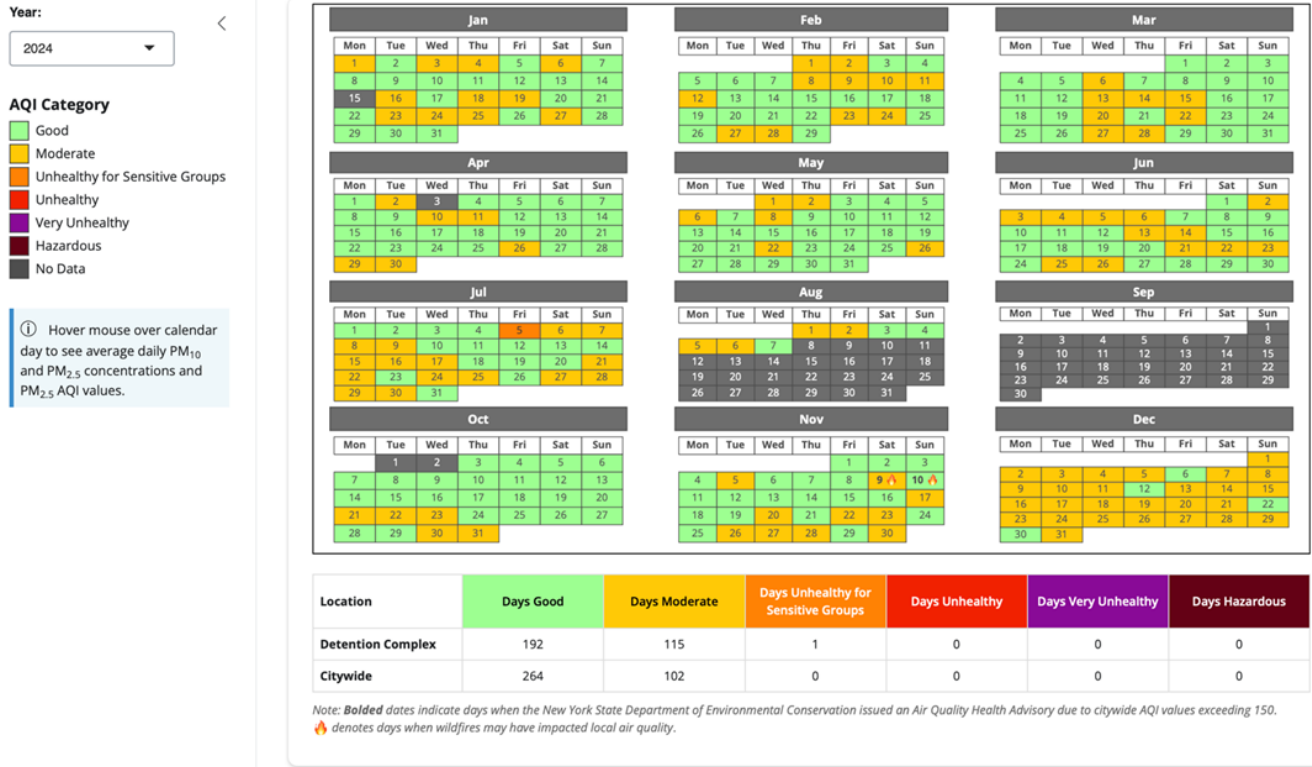


Figure A11. Daily AQI values near the Manhattan Detention Complex demolition site

URL: [https://tri-huynh.shinyapps.io/mdc\\_aqi\\_calendar/](https://tri-huynh.shinyapps.io/mdc_aqi_calendar/)