PARK AVENUE BROOKLYN REZONING
Chapter 12: Public Health

A. INTRODUCTION

This chapter assesses the Proposed Actions' effect on public health. As defined by the 2025 *City Environmental Quality Review (CEQR) Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on human health may occur as a result of a proposed action(s) and, if so, to identify measures to mitigate such effects.

The *CEQR Technical Manual* states that a public health assessment is not necessary for most projects. Where no unmitigated significant adverse impacts are found in other CEQR analysis areas relevant to public health—such as air quality, water quality, hazardous materials, or noise—no public health analysis is warranted. If, however, an unmitigated adverse impact is identified in any of these other CEQR analysis areas, the lead agency may determine that a public health assessment is warranted for that specific technical area. That assessment represents a distinct layer of inquiry; its criteria are informed by public health considerations and are, therefore, different from the criteria that triggered the need to conduct a public health assessment.

As described in the relevant analyses of this Environmental Impact Statement (EIS), the Proposed Actions would not result in an unmitigated significant adverse impact in the areas of operational noise, water quality, air quality, construction air quality, or hazardous materials. However, as discussed in **Chapter 14, "Construction,"** the Proposed Actions could result in unmitigated construction noise impacts.

B. PRINCIPAL CONCLUSIONS

The Proposed Actions would not result in significant adverse public health impacts. As described in the preceding chapters of this EIS, the Proposed Actions would not result in unmitigated significant adverse impacts in the following technical areas that contribute to public health: operational noise, water quality, operational air quality, construction air quality, or hazardous materials.

The analysis presented in **Chapter 14** determined that there are areas surrounding each of the analyzed development sites where construction noise would result in a significant adverse impact. However, while during some periods of construction the Proposed Actions could potentially result in significant adverse impacts related to noise, the predicted overall changes in noise levels would not be large enough to significantly affect public health. Therefore, no significant adverse public health impacts related to construction noise are expected as a result of the Proposed Actions.

C. METHODOLOGY

As noted above, the *CEQR Technical Manual* states that where no unmitigated significant adverse impact is found in other CEQR analysis areas related to public health—such as air quality, water quality, hazardous materials, or noise—no public health analysis is warranted. If, however, an unmitigated significant adverse impact is identified in any of these other CEQR analysis areas, the lead agency may determine that a public health assessment is warranted for that specific technical area. Where significant adverse construction-period noise impacts are identified, it is DCP's practice to examine the potential for these construction-period noise impacts to affect public health.

The construction noise analysis presented in **Chapter 14** was used to identify the extent of the potential construction-period noise exposure to the public as a result of the Proposed Actions. Thresholds for significant adverse construction noise impacts are based on quality-of-life considerations. In this chapter, the potential for the construction-period noise exposure identified in **Chapter 14** to affect the health of the affected population is evaluated based on discussion of chronic exposure to high levels of noise, prolonged exposure to noise levels above 85 dBA, and episodic and unpredictable exposure to short-term impacts of noise at high decibel levels.

D. PUBLIC HEALTH ASSESSMENT – CONSTRUCTION NOISE

Chapter 22 of the *CEQR Technical Manual* breaks construction duration into "short-term" and "long-term" and states that construction noise is not likely to require analysis unless it "affects a sensitive receptor over a long period of time." Consequently, the construction noise analysis considers the potential for construction of a project to create high noise levels (the "intensity"), whether construction noise would occur for an extended period of time (the "duration"), and the locations where construction has the potential to increase noise ("receptors") in evaluating potential construction noise effects.

Noise level increases that would be considered "objectionable" (i.e., equal to or greater than 15 dBA) lasting 12 consecutive months or more and noise level increases that would be considered "very objectionable" (i.e., equal to or greater than 20 dBA)[1] lasting three consecutive months or more could also be considered significant impacts. In addition, for receptors representing interior spaces (i.e., not open space) where construction resulting from the Proposed Actions is predicted to result in "objectionable" noise level increments lasting 12 or more consecutive months, or "very objectionable" noise level increments lasting three or more consecutive months, and where the façade attenuation can be determined based on readily available information, interior noise levels would need to exceed acceptable interior L_{10} noise limits (45 dBA for residential and community facility and 50 dBA for commercial office uses) to be considered significant adverse construction noise impacts.

Assessment

Construction associated with the Proposed Actions would have to follow the requirements of the New York City Noise Control Code (NYC Noise Code), which requires the implementation of construction noise control measures. Specific noise control measures will be described in a noise mitigation plan required under the NYC Noise Code. These measures could include a variety of

[1] Definition of "objectionable" and "very objectionable" noise level increases based on Table B from New York State Department of Environmental Conservation Assessing and Mitigating Noise Impacts policy manual, revised February 2001.

source and path controls. Even with these measures, the analysis presented in **Chapter 14** found that predicted noise levels due to construction-related activities would result in increases in noise levels that would exceed the impact criteria. The construction analysis determined that noise levels due to construction could exceed the construction noise impact criteria at 14 locations adjacent to the work areas. At these receptors, construction would produce noise level increases that would be noticeable and potentially intrusive during the most noise-intensive nearby construction activities; however, the predicted maximum levels would not persist throughout construction, and the noise levels would fluctuate over the course of the construction period. Even so, these locations would experience construction noise levels whose magnitude and duration could constitute temporary significant adverse impacts

However, building construction would typically occur during weekday daytime hours and would therefore not produce noise during nighttime hours when residents would be most sensitive to noise. Further, construction would comply with *New York City Noise Control Code* regulations as well as commit to staging concrete operations at Projected Development Site 6 within the construction barrier until 86 and 88 Walworth Street are vacated. Per *New York City Noise Control Code* regulations, construction under the Proposed Actions would be required to prepare a Construction Noise Mitigation Plan, which may identify more control measures that would further reduce construction noise levels.

Although the thresholds for significant adverse impacts are predicted to be exceeded at certain locations during construction, these exceedances would not constitute a significant adverse public health impact. Although maximum $L_{eq(1)}$ noise levels may reach 85 dBA during some phases of construction, because the buildings at nearby building receptors would provide at least 25 dBA window/wall attenuation, occupants of receptor buildings would experience interior noise levels much lower than exterior noise levels and below the 85 dBA. As such, construction activities associated with the Proposed Actions' RWCDS would not have the potential to result in prolonged exposure to noise levels above 85 dBA at any of these receptor locations or others in the study area. Further, the analysis in this EIS is based on RWCDS conceptual site plans and construction schedules, with the possibility that the actual construction may be of less magnitude in which case construction noise would be less than the analysis predicts. Therefore, given the potential for noise effects related to construction sources would be temporary, localized, and would not likely be short-term high decibel levels, no significant adverse public health impacts related to construction noise are expected as a result of the Proposed Actions.

Chronic Exposure to High Levels of Noise

The predicted construction-period noise impacts identified and described in **Chapter 14** would not constitute chronic exposure to high levels of noise because of the temporary and intermittent nature of construction-period noise. The maximum predicted construction noise levels as a result of the total RWCDS associated with Proposed Actions would occur over a limited duration during the construction period based on the amount and type of construction work occurring in the construction work areas. The activities that would generate the highest noise levels, i.e., demolition and superstructure, are expected to occur for between approximately one and four months depending on the specific construction work area. Further, construction activity would typically be limited to the typical construction shift of 7 AM to 3 PM, leaving the remainder of the day and the evening unaffected by construction noise. Since the construction noise would fluctuate in level and would not occur constantly throughout the construction period, which itself is limited in duration, construction noise would not be described as "chronic." Therefore, construction associated with the Proposed Actions would not have the potential to result in chronic exposure to high levels of noise.

Prolonged Exposure to Noise Levels Above 85 dBA

At existing commercial offices at 48 Spencer Street, existing residences at 79 Spencer Street, 523 Park Avenue, and future residences at Projected Development Site 11, the predicted maximum $L_{eq(1)}$ noise levels during construction may reach approximately 90 dBA at the exterior building façade. However, none of these buildings include outdoor balconies or terraces with line of sight to construction. Because the buildings at those receptors with significant adverse construction noise impacts would provide approximately 25 to 35 dBA window/wall attenuation due to insulated glass windows or storm windows and alternate means of ventilation, interior noise levels would be much lower than exterior noise levels.

Therefore, construction of the total RWCDS associated with the Proposed Actions would not have the potential to result in prolonged exposure to noise levels above 85 dBA at any of these receptor locations or others in the study area.

Unpredictable Exposure to Short-Term High Noise Levels

Based on the predicted noise levels described in **Chapter 14**, construction as a result of the total RWCDS associated with the Proposed Actions is not expected to result in unpredictable exposure to short-term impacts of noise at high decibel levels, as per the *CEQR Technical Manual*. As the predicted noise exposure for the occupants of the noise receptor buildings that could experience potentially significant adverse construction noise impacts would depend on the amount of façade noise attenuation provided by the buildings, and the buildings at those receptors with significant adverse construction noise impacts would provide approximately 25 to 35 dBA window/wall attenuation, interior noise levels at these noise receptors would not actually be exposed to the high exterior noise levels due to construction. Therefore, the maximum short-term noise impact resulting from construction of the total RWCDS associated with the Proposed Actions would not exceed 85 dBA during peak construction periods at any of the analyzed receptors. Because construction under the Proposed Actions would not have the potential to result in impacts of noise at high decibel levels, and because construction noise at the most sensitive receptors (i.e., the residences) would not occur during the nighttime when residences are most sensitive to noise, predicted noise levels due to construction of the total RWCDS associated with the Proposed Actions would not constitute unpredictable exposure to short-term impacts of noise at high decibel levels at these receptors.

Since the area of potential noise impacts and the population exposed to elevated noise levels due to construction is very limited as described above, the noise would not be considered chronic, and the noise would not exceed the threshold of short-term high decibel levels, the predicted noise resulting from construction would not constitute a potential significant adverse public health impact.