

A. INTRODUCTION

This chapter assesses the potential for the proposed actions to affect public health. As defined by the 2014 *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 project and, if so, to identify measures to mitigate such effects. The potential effects of the proposed actions were considered with regard to effects on the surrounding community.

The *CEQR Technical Manual* states that a public health assessment is warranted for a specific technical area if there is a significant adverse impact found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. As described in the relevant analyses of this Environmental Impact Statement (EIS), upon completion of construction, the proposed actions would not result in significant unmitigated adverse impacts in any of the technical areas related to public health. However, as identified in Chapter 19, “Construction,” the proposed actions would result in unmitigated significant adverse construction-period noise impacts at existing residential buildings within the rezoning area (i.e., 470 Lenox Avenue, 40 West 135th Street, 10 West 135th Street, 2186 Fifth Avenue, 25 West 132nd Street, and 45 West 132nd Street), Metropolitan AME Church, Harlem Hospital Center, 2235 Fifth Avenue, 2120 and 2140 Madison Avenue, 485 Malcolm X Boulevard, receptors along the south side of West 132nd Street between Lenox Avenue and 45 West 132nd Street, and receptors along the south side of West 132nd Street between 25 West 132nd Street and Fifth Avenue. Therefore, this chapter provides a public health assessment of construction-period noise at these locations.

PRINCIPAL CONCLUSIONS

The analyses presented in this EIS concluded that the proposed actions would not result in unmitigated significant adverse impacts in the areas of air quality, water quality, hazardous materials, or operational noise. The analysis presented in Chapter 19, “Construction,” determined that construction activities would result in unmitigated significant adverse construction-period noise impacts at receptors in the vicinity of the proposed project’s work areas. However, construction of the proposed project would not result in chronic exposure to high levels of noise, prolonged exposure to noise levels above 85 dBA, or episodic and unpredictable exposure to short-term impacts of noise at high decibel levels, as per the *CEQR Technical Manual*. Consequently, construction of the proposed project would not result in a significant adverse public health impact.

B. METHODOLOGY

The construction noise analysis presented in Chapter 19, “Construction,” was used to identify the extent of the potential construction-period noise exposure to the public as a result of the proposed project. The *CEQR Technical Manual* thresholds for construction noise are based on quality of life considerations. In this chapter, the potential for the construction-period noise exposure identified in Chapter 19, “Construction,” to affect the health of the affected population by is evaluated based on relevant health-based noise criteria. These criteria as identified in the *CEQR Technical Manual*, include 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.

C. PUBLIC HEALTH ASSESSMENT

Construction pursuant to the proposed actions would be required to follow the New York City Noise Control Code, which requires the implementation of construction noise control measures. Additionally, the project would include construction noise control measures beyond those required by the Code. Specific noise control measures would be incorporated in noise mitigation plan(s) required under the New York City Noise Code. These measures could include a variety of source controls (i.e., reducing noise levels at the source or during the most sensitive construction time periods) and path controls (e.g., placement of equipment, implementation of barriers or enclosures between equipment and sensitive receptors).

Even with the implementation of these noise control measures, the analysis presented in Chapter 19, “Construction,” determined that predicted noise levels due to construction-related activities would result in noise levels at existing residential buildings within the rezoning area (i.e., 470 Lenox Avenue, 40 West 135th Street, 10 West 135th Street, 2186 Fifth Avenue, 25 West 132nd Street, and 45 West 132nd Street), Metropolitan AME Church, Harlem Hospital Center, 2235 Fifth Avenue, 2120 and 2140 Madison Avenue, 485 Malcolm X Boulevard, receptors along the south side of West 132nd Street between Lenox Avenue and 45 West 132nd Street, and receptors along the south side of West 132nd Street between 25 West 132nd Street and Fifth Avenue that would constitute a potential significant adverse construction-period noise impact.

Although the *CEQR Technical Manual* thresholds for significant adverse construction noise impacts are predicted to be exceeded at certain locations during construction, these exceedances would not constitute a significant adverse public health impact. An impact found pursuant to a quality of life framework (i.e., a significant adverse construction noise impact) does not necessarily indicate that an impact would occur when the analysis area is evaluated in terms of public health (i.e., a significant adverse public health impact).

CHRONIC EXPOSURE TO HIGH LEVELS OF NOISE

The predicted construction-period noise impacts identified and described in Chapter 19, “Construction,” 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 associated with the 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 activity that would generate the highest noise levels, i.e., pile driving, is expected to occur for approximately 3 months at each of the proposed project buildings. Further, construction activity would typically be limited to the typical construction shift of 7 AM to 3PM, 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

The maximum short-term noise impact resulting from construction of the proposed project would not exceed 85 dBA during peak construction periods at any of the analyzed receptors except for the west façade of the Metropolitan African Methodist Episcopal (AME) Church, represented by Receptor 8D, and the east façade of the proposed Building NW, represented by Receptor 47G. At the west façade of the Metropolitan African Methodist Episcopal (AME) Church, the maximum noise levels up to approximately 86 dBA are predicted to occur during the 3-month period when pile driving would occur as part of construction of Building NW at the nearest location to the receptor. However, the building façade, which has no west-facing windows, would be expected to provide approximately 40 dBA attenuation. At the east façade of the proposed Building NW, the maximum noise levels up to approximately 82 dBA are predicted to occur during the 3-month period when pile driving would occur as part of construction on the projected development site at the nearest location to the receptor. However, the building façade, would be required to provide at least 28 dBA attenuation as shown in Table 16-10 in Chapter 16, “Noise.” Consequently, occupants of these buildings would not experience noise levels exceeding the 85 dBA threshold. Therefore, construction of the proposed project would not have the potential to result in prolonged exposure to noise levels above 85 dBA at any of the other receptor locations.

UNPREDICTABLE EXPOSURE TO SHORT-TERM HIGH NOISE LEVELS

Based on the predicted noise levels described in Chapter 19, “Construction,” construction associated with the project is not expected to result in unpredictable exposure to short-term impacts of noise at high decibel levels, as per the *CEQR Technical Manual*. The maximum short-term noise impact resulting from construction of the proposed project would not exceed 85 dBA during peak construction periods at any of the analyzed receptors except for the west façade of the Metropolitan African Methodist Episcopal (AME) Church, represented by Receptor 8D. Because exterior noise levels would not exceed the acceptable 85 dBA threshold at the other receptors, 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 proposed project would not constitute unpredictable exposure to short-term impacts of noise at high decibel levels at these receptors.

At the west façade of the Metropolitan African Methodist Episcopal (AME) Church, the maximum noise levels up to approximately 86 dBA are predicted to occur when pile driving would occur as part of construction of Building NW at the nearest location to the receptor. However, the building façade, which has no west-facing windows, would be expected to provide approximately 40 dBA attenuation. At the east façade of the proposed Building NW, the maximum noise levels up to approximately 82 dBA are predicted to occur during the 3-month period when pile driving would occur as part of construction on the projected development site at the nearest location to the receptor. However, the building façade would be required to provide at least 28 dBA attenuation as shown in Table 16-10 in Chapter 16, “Noise.” Consequently, occupants of these buildings would not experience noise levels exceeding the 85 dBA threshold. Therefore, construction of the proposed project would not have the potential to result in episodic or unpredictable exposure to short-term impacts of noise at high decibel levels. *