16. Public Health

This chapter addresses the Proposed Action's effect on public health. As defined by the *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.

16.1 INTRODUCTION

The *CEQR Technical Manual* states that a public health assessment is not necessary for most projects. Where no significant unmitigated adverse impact is found in other CEQR analysis areas—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.

As described in the relevant analyses of this EIS, upon completion of construction, the Proposed Action would not result in significant adverse impacts in any of the technical areas related to public health. However, as discussed in Chapter 18, "Construction," the Proposed Action has the potential, at times, to result in temporary unmitigated significant adverse noise impacts during construction. Therefore, this chapter examines the potential effects of construction-period noise impacts on public health.

16.2 PRINCIPAL CONCLUSIONS

As described in the preceding chapters of this EIS, the Proposed Action would not result in significant adverse impacts in the following technical areas: air quality, water quality, hazardous materials, or operational noise.

While during some periods of construction, the Proposed Action could potentially result in significant adverse impacts related to noise as defined by CEQR thresholds, the predicted overall changes to noise levels would not be large enough to significantly affect public health. Therefore, the proposed project would not result in significant adverse public health impacts.

16.3 PUBLIC HEALTH ASSESSMENT – CONSTRUCTION NOISE

As described in Chapter 18, "Construction," according to the *CEQR Technical Manual*, a significant noise impact occurs when there is an increase in the one-hour equivalent noise level ($L_{eq(1)}$) of 5 decibels A-weighted (dBA), depending upon the noise level without the Proposed Action. The CEQR noise thresholds are based on quality of life considerations and not on public health considerations. In terms of public health, significance is not determined based upon the incremental change in noise level, but is based principally upon the magnitude of the noise level and duration of exposure.

Construction of the Proposed Action would be required to include measures to reduce noise levels during construction as required by the New York City Noise Control Code. Even with these measures, the analysis presented in Chapter 18, "Construction," found that construction activities associated with the Proposed Action would occur on multiple development sites within the same geographic area and, as the result, has the potential to increase interior noise levels of existing adjacent buildings. These increases would likely approach or marginally exceed the impact threshold for short periods of time and has the potential during other construction quarters bordering the peak construction period.

Construction activities would take place between 2016 and 2033, and the construction noise impact assessment identified the second quarter of the year 2022 as the peak construction time period, which yielded the greatest overlapping construction activities and, therefore, likely the worst (loudest) construction noise condition for any single time period over the 16-year construction phase. According to the conceptual construction schedule, the three primary development buildings in various phases of construction during the second quarter of 2022 are Projected Development Sites 5, 6, and 7, located between East 43rd and East 45th Streets and Vanderbilt and Fifth Avenues. The construction noise impact assessment focused on noise sensitive land uses in the immediate vicinity of these three projected development sites. Affected locations include commercial uses adjacent to the projected development sites and along routes expected to be traveled by construction-related vehicles to and from the project sites. However, most affected buildings have double-glazed windows and air-conditioning, and would consequently be expected to experience interior $L_{10(1)}$ values less than 45 dBA, which would be considered acceptable according to CEQR criteria. Although these structures have double-glazed windows and alternate ventilation, during some limited time periods construction activities may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for these uses.

At affected locations that do not already have double-glazed windows and air conditioning interior, $L_{10(1)}$ values resulting from construction may exceed 45 dBA. Thus, should the Proposed Action be developed and constructed as conservatively presented in the construction conceptual schedule, these affected locations could experience significant impacts for certain limited periods during construction.

Although the CEQR thresholds for significant adverse impacts are predicted to be exceeded at certain locations during construction, the magnitude and duration of these exceedances would not constitute

significant adverse public health impacts. As discussed above, the CEQR noise thresholds are based on quality of life considerations and not on public health considerations. The predicted absolute noise levels would be below the health-based noise threshold.[1] Therefore, the Proposed Action would not result in significant adverse public health impacts.

[1] According to the *CEQR Technical Manual* (p. 20-6), prolonged exposure to levels above 85 dBA will eventually harm hearing.