Chapter 18: Public Health

A. INTRODUCTION

The 2010 *City Environmental Quality Review (CEQR) Technical Manual* defines as its goal with respect to public health "to determine whether adverse impacts on public health may occur as a result of a proposed project, and if so, to identify measures to mitigate such effects."

According to the *CEQR Technical Manual*, for most proposed projects, a public health analysis is not necessary. 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 an unmitigated significant adverse impact is identified in one of these 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 Draft Environmental Impact Statement (DEIS), upon completion of construction, the proposed project would not result in significant adverse impacts in any of the technical areas related to public health. However, as discussed in Chapter 20, "Construction," the proposed project would, at times, 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.

PRINCIPAL CONCLUSIONS

As described in the preceding chapters of this EIS, the proposed project would not result in unmitigated significant adverse impacts in technical areas such as air quality, water quality, hazardous materials, or operational noise.

While during some periods of construction the proposed project would result in significant adverse impacts related to noise as defined by CEQR thresholds, the predicted overall changes in 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.

B. PUBLIC HEALTH ASSESSMENT—CONSTRUCTION NOISE

As described in Chapter 17, "Noise," 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 between 3 and 5 decibels A-weighted (dBA), depending upon the noise level without the proposed project. 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.

NYU has committed to a proactive approach to minimize noise during construction activities (see Chapter 20, "Construction Impacts"). This approach includes both source and path controls that

exceed measures typical of standard construction practices. NYU has also committed to restrictions on types of concurrent construction activities in order to minimize to the maximum extent practicable the potential significant adverse impacts—including noise impacts—that could be generated by construction activities associated with the Proposed Actions.

Even with these measures, the analysis presented in Chapter 20, "Construction Impacts," shows that during the construction period, significant adverse noise impacts would occur on portions of the following buildings and nearby locations which have a direct line-of-sight to project-related construction activities (see also Figure 20-13):

- Washington Square Village 1, 2, 3, and 4;
- Silver Tower I & II;
- 505 LaGuardia Place;
- Several buildings located on West Houston Street between Greene Street and Mercer Street;
- Several buildings located on LaGuardia Place between Washington Square South and West Houston Street;
- Several buildings located on Mercer Street between Washington Square South and Prince Street; and
- At sensitive locations/buildings proximate to the buildings identified above (see Figure 20-13).

In addition, noise levels at on-site open space locations adjacent to where construction activities are taking place would temporarily increase significantly.

While construction activities would result in the impacts described above, because of the construction noise reduction measures that have been incorporated into the project and committed to by the NYU, the magnitude of the noise levels produced by construction activities for this project are relatively low compared to those that would occur with the use of conventional equipment and construction techniques for a project of this magnitude. In addition, normal weekday work would begin at 8:00 AM (rather than the 7:00 AM start time allowable under New York City Noise Code) and would end at 4:00 or 4:30 PM, and therefore significant noise activities would not occur after this time except for infrequent circumstances such as continuous concrete pours during construction.

As mitigation, at the NYU-owned Washington Square Village and Silver Tower buildings, where significant noise impacts are predicted to occur, windows would be re-caulked and storm windows would be offered. For the Washington Square Village buildings, NYU would offer to insulate/seal existing air conditioning units and provide an interior cover that improves the sound attenuation of the through-the-wall air conditions units, or NYU would offer to provide new air conditioning units. For the Silver Tower buildings, NYU would offer to replace existing packaged terminal air conditioner (PTAC) units with high-attenuation PTAC units installed to fit properly/snugly in the PTAC sleeve. At locations on non-NYU buildings where significant noise impacts are predicted to occur, absent the development of additional measures to reduce project-related construction noise, the project sponsors would offer to provide storm windows and/or window air conditioning units for buildings without double-glazed windows and/or alternative ventilation to mitigate project-related construction noise impacts. With regard to the residential terrace locations (Washington Square Village 1, 2, 3, and 4; 566 LaGuardia Place; and 214 Mercer Street), and at open space locations (i.e., LaGuardia Landscape, Washington Square Village Elevated Garden, Silver Tower Tree Grove, etc.) where significant noise impacts are

predicted to occur, no feasible mitigation measures have been identified that could be implemented to eliminate the significant noise impacts at these locations.

Even with the proposed partial mitigation measures, the CEQR thresholds for significant adverse noise impacts are predicted to be exceeded at certain locations during some periods of time.

However, with the proposed noise attenuation measures included as part of the construction program and the partial mitigation measures proposed, the magnitude and duration of the noise levels at receptor locations would not result in any significant adverse public health impacts. The predicted absolute noise levels would be below Occupational Safety and Health Administration (OSHA) health-based noise thresholds which were developed to protect workers from hearing loss due to long-term exposure to noise. ✷