Chapter 18:

Public Health

The June 2012 *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*, a public health analysis is not necessary when no significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. 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 Environmental Impact Statement (EIS), the Cornell NYC Tech project would not result in significant unmitigated 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.

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.

Cornell would implement a noise mitigation plan as required under the New York City Noise Code: this plan would outline measures that would include a variety of source and path controls. Even with these measures, the analysis presented in Chapter 20 shows that during the construction period, significant adverse noise impacts would occur as follows:

- During construction of Phase 1, impacts would occur at open spaces along Main Street due to autos and trucks passing along these routes to and from the project site during the AM construction traffic peak hour (6 to 7 AM).¹
- During construction of Phase 2, impacts would occur at the Roosevelt Island promenades on the east and west sides of the Island adjacent to the project site and at South Point Park; these impacts would occur due to construction activities occurring on site.

¹ As discussed in Chapter 20, the residential and public school buildings along Main Street all have doubleglazed windows and a means of alternate ventilation (i.e., air conditioning), and would be expected to achieve between 25 and 35 dBA of attenuation. Consequently, these buildings would be expected to experience interior $L_{10(1)}$ values less than 45 dBA during the construction period, which would be considered acceptable according to CEQR criteria, and would therefore not be expected to experience a significant impact.

For the open spaces that would experience exceedances (i.e., open space areas along Main Street during Phase 1 and the promenade and South Point Park adjacent to the project site during Phase 2), there are no feasible mitigation measures that could be implemented to eliminate the significant noise impacts at these locations. Because people would be able to use a variety of other open spaces on Roosevelt Island during the periods of construction during which there would be noise exceedances, these exceedances are not expected to result in a public health impact.

Overall, noise exceedances during the construction period would not result in significant adverse health impacts.