Chapter 18: Public Health

A. INTRODUCTION

Public health is the effort of society to protect and improve the health and well-being of its population. As described in Chapter 1, "Project Description," the applicants, the New York City Department of City Planning (DCP) and SJC 33 Owner 2015 LLC, are proposing a series of discretionary actions (the proposed actions) that would facilitate the redevelopment of St. John's Terminal Building at 550 Washington Street (Block 596, Lot 1) (the development site) with a mix of residential and commercial uses, and public open space (the proposed project) in Manhattan Community District 2. The 2014 *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~~Final Environmental Impact Statement (~~DEIS~~FEIS), upon completion of construction, the proposed ~~actions~~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 ~~actions have the potential to~~project would result in temporary unmitigated significant adverse ~~air quality and~~ noise impacts during construction. ~~Between the DEIS and the Final Environmental Impact Statement (FEIS), detailed analyses will be conducted to quantify the levels of construction air quality concentrations and~~To avoid the potential for significant adverse noise ~~levels that may occur~~impacts at ~~project elements should they be completed and occupied~~the proposed elevated open space during construction, the proposed elevated open space would be closed during the demolition, excavation, and foundation construction ~~on one or more~~stages at either of the ~~other project buildings. Based on~~adjacent building sites, i.e., the ~~results of these analyses, the FEIS will include a consideration of practicable and feasible mitigation measures to reduce or eliminate the impacts. If these potential impacts cannot be mitigated, the lead agency will make a determination as to whether a~~ North or Center Sites. ~~public health assessment is warranted for inclusion in the FEIS.~~

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 Technical Manual* thresholds, the predicted overall changes in noise levels would not be large enough to significantly affect public health. In addition, the proposed elevated open space would be closed during the demolition, excavation, and foundation construction stages to avoid any potential significant noise impacts on the elevated open space during construction. Therefore, the proposed project would not result in significant adverse public health impacts.

B. PUBLIC HEALTH ASSESSMENT

CONSTRUCTION NOISE

As described in Chapter 20, "Construction," for residential spaces to be created as part of the proposed project, noise levels during construction were evaluated based on the *CEQR Technical Manual* noise exposure guidance for residential uses, which specify an interior $L_{10(1)}$ noise level of 45 dBA as acceptable for residential use. For open space areas to be created as part of the proposed project, noise levels during construction were evaluated based on the *CEQR Technical Manual* noise exposure guidance for open space uses, which specify an exterior $L_{10(1)}$ noise level of 55 dBA as acceptable for open space use. Exceedances of these thresholds that occur "over a long period of time" are considered to constitute significant adverse construction noise impacts.

The analysis presented in Chapter 20, "Construction," shows that in the event of a phased construction in which residential elements of the proposed project would be completed and occupied during construction of the remainder of the project elements, significant adverse construction noise impacts as defined above would occur at the occupied residential space during construction. The exceedances of the acceptable noise level thresholds would be due principally to noise generated by the large amount of construction equipment operating on-site. As described in Chapter 20, "Construction," there are no feasible mitigation measures that could be implemented to eliminate the significant noise impacts at these residential locations. Therefore, the potential significant adverse construction noise impacts are identified in this Final Environmental Impact Statement (FEIS) as unmitigated adverse impacts.

While the noise levels predicted to occur during construction inside the residential units, which are included in the proposed project under a phased scenario, would exceed the acceptable thresholds in the *CEQR Technical Manual*, these noise levels are below the level that would constitute significant adverse public health impacts. 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 any of the health-based noise thresholds. Additionally, as described in Chapter 20, "Construction," the predicted elevated noise levels due to construction are associated with specific pieces of construction equipment that operate intermittently during the construction period. Noise levels during hours or days in which those pieces of equipment would not be operating would be lower than the worst-case noise levels determined as part of the construction noise analysis; and outside of the construction work hours, these receptors would not experience elevated noise levels as a result of construction. Consequently, the unmitigated significant adverse construction noise impact that could potentially occur at residential units included in the proposed project under a phased construction scenario would not have the potential to result in a significant adverse public health impact.

The analysis of construction noise in Chapter 20, "Construction," predicts that in the event of a phased construction schedule under which the proposed elevated open space included in the project would be open and accessible while construction occurs at the immediately adjacent

Center Site, noise levels in the proposed elevated open space would be in the low to high 80s dBA for up to approximately 12 months during demolition, rock excavation, and pile installation activities at the Center Site. These levels would exceed the threshold level of 55 dBA $L_{10(1h)}$ specified in the *CEQR Technical Manual* for open space.

During other construction activities, or construction at the South Site, levels of construction noise at the proposed elevated open space would be in the high 70s to mid 80s dBA, which would still exceed the 55 dBA $L_{10(1h)}$ specified in the *CEQR Technical Manual* for open space use, they would be comparable to noise levels in nearby open space areas (e.g., Hudson River Park), and would not have the potential to result in public health impacts to open space users. If the project is constructed such that the proposed elevated open space is open and accessible during construction (other than demolition, excavation, and foundation construction) at other project buildings, the predicted elevated noise levels would occur only during the hours and days that these pieces of construction equipment operate. Outside of the construction work hours, the proposed elevated open space would not experience elevated noise levels as a result of construction. To avoid the potential for significant adverse public health impacts resulting from construction noise at the proposed elevated open space, the proposed elevated open space would be closed during the demolition, excavation, and foundation construction stages at either of the adjacent building sites, i.e., the North or Center Sites. Therefore, the proposed project would not result in significant adverse public health impacts. ✷