13

Public Health

This chapter addresses the Proposed Project's effect on public health. As defined by the *2020 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.

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 related to public health—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 Actions would not result in significant adverse impacts in any of the technical areas related to public health. The relevant analyses for the consideration of public health impacts are summarized and reviewed in this chapter.

Principal Conclusions

As described in the relevant analyses of this EIS, the Proposed ~~Project~~Actions would not result in unmitigated significant adverse impacts in the areas of air quality, water quality, hazardous materials, or operational noise.

The Proposed Actions would not result in significant adverse impacts to public health related to hazardous materials. Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) will be submitted for review and approval by the New York City Department of Environmental Protection (NYCDEP). In addition, regulatory requirements pertaining to the disturbance and handling of any lead-based paint (LBP), asbestos-containing materials (ACM) and PCB-containing building materials would be followed.

The detailed analysis on operational air quality showed that the Proposed Actions would not cause significant adverse air quality impacts on the surrounding sensitive receptors nor would nearby emission sources significantly impact the ~~Proposed Project~~proposed on-site development.

The Proposed Actions would not lead to significant increases in mobile source noise levels. However new noise receptors would experience Clearly Unacceptable and Marginally Unacceptable sound levels, necessitating sufficient outdoor-to-indoor sound attenuation of the window/wall to provide acceptable sound attenuation from the window/wall materials. ~~A Restrictive Declaration or other mechanism~~An (E) Designation (E-648) would be applied to ensure acceptable interior noise levels by specifying the appropriate amount of window/wall attenuation and a closed window condition. With these sound attenuation commitments, there would be no adverse impact due to operational noise.

An analysis of construction air quality showed that there would be no significant adverse air quality impacts during construction, as construction ~~of the Proposed Project~~ would not result in any concentrations of NO_2, PM_{10}, and CO that exceed the NAAQS and the maximum predicted incremental concentrations of $PM_{2.5}$ would not exceed the City's de minimis criteria.

An analysis of construction period noise showed that construction period noise would not exceed 85 dBA at any receptor during the peak construction periods nor would there be a 15 dBA increase at any receptor assuming existing construction noise regulations, typical construction equipment, and the implementation of a Construction Noise Mitigation Plan, as required by the New York City Noise Code, as well as the use of a 8-foot perimeter construction noise barrier.

Methodology

As noted above, the *CEQR Technical Manual* states that where no significant unmitigated adverse impact is found in other CEQR analysis areas related to public health—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. Where significant adverse construction-period noise impacts are identified, it is the New York City Department of City Planning's practice to examine the potential for these construction-period noise impacts to affect public health. Therefore, this public health assessment ~~examines~~is based on the ~~Proposed Project's potential to affect these technical areas~~worst case scenario analyzed for each of the relevant analysis categories (i.e., air quality, hazardous materials, and noise) during both ~~operation~~the operational and construction ~~of the Proposed Project~~periods.

~~As discussed in **Chapter 1, Project Description**, for conservative analysis purposes the EIS considers the two building program options to determine the With-Action reasonable worst case development scenario (RWCDS) for each density-based technical area: the Proposed Project with a mix of hotel, commercial office, local retail, and publicly accessible space; and the All Office Scenario, based on the same overall building square footage and building massing as the Proposed Project but comprised of approximately 2,561,770 gsf of office space, retail, and no hotel. In each chapter, where applicable, the EIS analyzes the scenario with the greater potential for impacts. Since the overall building massing and design would be the same in both program options, this chapter evaluates the With-Action condition including the hotel space, as described above, because it represents the Proposed Project.~~

Assessment

Operational Period

Hazardous Materials

As detailed in **Chapter 7, Hazardous Materials**, the Proposed Actions would not result in significant adverse impacts related to hazardous materials. The results of the subsurface investigation provided in the Phase II Environmental Site Assessment (ESA) indicate the presence of contaminants in historic/urban fill materials below the building slab that exceed applicable New York State Department of Environmental Conservation (NYSDEC) Part 375 cleanup criteria. Furthermore, chlorinated and petroleum VOCs were detected in sub-slab soil vapor samples, but were not detected at concentrations that exceed New York State Department of Health (NYSDOH) regulatory criteria. Contamination identified in the Phase II ESA was not directly attributed to an active release.

To address these conditions during site redevelopment, a RAP and associated CHASP will be submitted for review and approval by NYCDEP. The RAP and CHASP would be implemented during redevelopment to address regulatory requirements relating to the management of excavated materials including stockpiling, transport and disposal of soil/fill materials, dust control, soil vapor mitigation, quality assurance and contingency measures should any gross contamination be encountered relating to current and/or historic site uses. The CHASP would identify potential hazards that may be encountered during construction and specify appropriate health and safety measures to be undertaken to ensure that subsurface

disturbance is performed in a manner protective of workers, the community and the environment (such as personal protective equipment, air monitoring including community air monitoring, and emergency response procedures).

In addition to a RAP and CHASP, regulatory requirements pertaining to the disturbance and handling of any lead-based paint (LBP), asbestos-containing materials (ACM) and polychlorinated biphenyl (PCB)-containing building materials would be followed. Given this, the Proposed Project would not result in any significant adverse impacts with respect to hazardous materials, and there would be no impact on public health.

Air Quality

As detailed in **Chapter 10, Air Quality**, the detailed analysis showed that the Proposed Actions would not cause significant adverse air quality impacts on the surrounding sensitive receptors nor would nearby emission sources significantly impact the Proposed Project. The number of incremental trips generated by the Proposed Project would be lower than the screening thresholds for carbon monoxide (CO) and particulate matter (PM) (both $PM_{2.5}$ and PM_{10}) identified in the *CEQR Technical Manual*. Furthermore, emissions from mobile sources on the Park Avenue Viaduct would be small and would not have a potential to adversely affect air quality of the proposed public open space.

The Proposed Project would use steam for the heating, ventilation and air conditioning (HVAC) systems of the building and therefore would not use fossil fuels for HVAC systems. This commitment ~~would be~~is included ~~into~~in an (E) ~~designation, Restrictive Declaration, or other mechanism~~Designation (E-648) for the Proposed Project. Thereby it would not incur any local air quality impacts. There are no large sources within a 1,000-feet radius of the Development Site that would impact the Proposed Project. There is one light industrial source within a 400-feet radius of the Proposed Project. This source would not emit carcinogenic air pollutants. The analysis of non-carcinogenic non-criteria pollutants resulted in concentrations below guideline levels and demonstrated the hazard index below significance thresholds. Therefore, no adverse air quality impacts on the Proposed Project are expected from the nearby industrial sources. Overall, there would be no significant adverse air quality impacts from the Proposed Project due to air quality and there would be no impact on public health.

Noise

As detailed in **Chapter 12, Noise**, mobile source noise levels would change by up to 0.~~2~~3 dBA or less due to traffic generated by the Proposed Actions. Therefore, there would be no potential for significant adverse noise impacts due to mobile sources. The design and specifications for the ~~Proposed Project's~~proposed building's mechanical equipment would incorporate sufficient noise reduction devices that would enable the ~~Proposed Project~~building to comply with applicable noise regulations and standards, including the standards contained in the revised New York City noise control code.

Based on the noise modeling for new sensitive receptors, the With-Action noise conditions would be Clearly Unacceptable on the south façade and Marginally Unacceptable on the east, north, and west facades, and would therefore require an (E) ~~designation, Restrictive~~

~~Declaration, or other mechanism~~Designation (E-648) for noise to be applied to the Development Site specifying the appropriate amount of window/wall attenuation and an alternate means of ventilation. According to the CEQR Noise Exposure Guidelines, a minimum window/wall sound attenuation of 38 outdoor-to-indoor transmission classification (OITC) on the south façade, and 35 OITC on the east, north, and west façades would be required to meet an interior noise condition of 45 dBA for hotel spaces~~ and 50 dBA for commercial office spaces.~~. Future commercial uses must provide a closed-window condition with a minimum of 33 dBA window/wall attenuation on the south facade facing East 42nd Street and 30 dBA of attenuation on the other facades to maintain an interior noise level not greater than 50 dBA. With this commitment to minimum window/wall sound attenuation requirements and alternate means of ventilation, through ~~a Restrictive Declaration or other mechanism~~an (E) Designation for noise applied to the Development Site, the development facilitated by the Proposed ~~Project~~Actions would not result in a significant adverse impact on public health due to effects on operational noise conditions.

Construction Period

Hazardous Materials

As discussed above and detailed in **Chapter 7, Hazardous Materials**, to avoid the potential for significant adverse impacts relating to hazardous materials on the ~~Proposed Project~~Development Site, a RAP and CHASP will be reviewed by NYCDEP and New York State Department of Environmental Conservation (NYSDEC). In addition, regulatory requirements pertaining to the disturbance and handling of any lead-based paint (LBP), asbestos-containing materials (ACM) and PCB-containing building materials would be followed. This construction oversight ensures that there would be no significant adverse impacts to public health due to hazardous materials during the construction period.

Air Quality

As detailed in **Chapter 15, Construction**, the emissions intensity and quantitative construction air quality analysis for on-site emissions (construction equipment, trucks and fugitive dust from demolition and excavation/foundations), and off-site emissions (construction trucks), the Proposed Project would not result in significant adverse impacts on air quality during construction. The results of the quantitative construction analysis indicate that the Proposed Project would not exceed NO_2, PM_{10}, and CO NAAQS. In addition, the maximum predicted 8-hour CO concentration would be well below and incremental concentrations of $PM_{2.5}$ would not exceed the City's *de minimis* criteria.

The finding of the air quality analysis in **Chapter 15, Construction**, demonstrate that there would be no significant adverse impact due to air quality, therefore, further assessment is not warranted and there would be no impact on public health.

Noise

As detailed in **Chapter 15, Construction**, construction of the Proposed Project would be subject to government regulations and oversight, including the New York City Noise Control Code, which sets forth requirements for construction noise control measures. 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). The Proposed Project would also use an 8-foot perimeter construction noise barrier.

The analysis presented in **Chapter 15, Construction**, analyzed construction noise from mobile and stationary sources for the first and second shift construction activities at each phase throughout the construction timeline. The analysis found that predicted noise due to construction-related activities would not result in noise levels above recommended thresholds at any of the receptors during any phase of construction. Furthermore, construction noise levels would not exceed 85 dBA during any construction phase.

There would not be chronic exposure to high levels of noise due to the Proposed Actions. Construction-period noise identified and described in **Chapter 15, Construction**, would not constitute chronic exposure to high levels of noise for either the No-Action or With-Action condition 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. Furthermore, there would not be 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. Finally, based on the predicted noise levels in **Chapter 15, Construction**, construction associated with the Proposed 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. Therefore, significant adverse impacts to public health are not expected as a result of construction period noise, and further analysis is not warranted.