

A. INTRODUCTION

The *City Environmental Quality Review (CEQR) Technical Manual* (January 2012 edition) 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 ~~Final~~ Final Draft Generic Environmental Impact Statement (~~DE~~FEGEIS), upon completion of construction, the proposed actions would not result in significant adverse impacts in any of the technical areas related to public health. However, as discussed in Chapter 19, “Construction,” the proposed actions 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 ~~DE~~FEGEIS, the proposed actions 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 actions would 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 actions would not result in significant adverse public health impacts.

B. PUBLIC HEALTH ASSESSMENT—CONSTRUCTION NOISE

As stated in Chapter 19, “Construction,” the following criteria define a significant adverse noise impact:

- If the No Action noise level is less than 60 dB(A) $L_{eq(1)}$, a 5 dB(A) $L_{eq(1)}$ or greater increase would be considered significant.
- If the No Action noise level is 61 dB(A) $L_{eq(1)}$, a 4 dB(A) $L_{eq(1)}$ or greater increase would be considered significant.
- If the No Action noise level is equal to or greater than 62 dB(A) $L_{eq(1)}$, or if the analysis period is a nighttime period (defined in the CEQR criteria as being between 10:00 PM and 7:00 AM), the incremental significant impact threshold would be 3 dB(A) $L_{eq(1)}$.

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The above 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.

The analysis presented in Chapter 19, "Construction," shows that during the construction period, elevated noise levels are predicted to occur at ~~forty five (45)~~ 13 locations of the ~~eighty three (83)~~ receptor sites. Affected locations include residential, institutional, and open space areas adjacent to the proposed development sites and along routes expected to be traveled by construction-related vehicles to and from the project site. Most of those locations, however, have double-glazed windows and air-conditioning, and would consequently be expected to experience interior $L_{10(1)}$ values less than 45 dBA most of the time, which would be considered acceptable according to CEQR criteria, throughout most of the construction period. In addition, any projected development at 89 Ludlow Street, should it be operational during 2019 and 2020, would also be expected to experience elevated noise levels for two or more continuous years. However, as a newly constructed building, it would likely have double glazed windows and an alternate means of ventilation as well, providing at least 20 to 30 dBA of window/wall attenuation. Given the building attenuation provided by these existing and projected structures, additional receptor controls would be unlikely to fully mitigate the temporary construction noise impacts.

Affected locations that do not already have double-glazed windows and air conditioning may experience noise levels from construction that would result in interior $L_{10(1)}$ values greater than 45 dBA. Additional options for source and path controls would be incorporated into the construction methodology to the extent practicable and feasible. Thus, should the development sites be developed and constructed as conservatively presented in this conceptual schedule, up to ~~15~~ two locations would be expected to experience an unmitigated significant impact for certain limited periods during construction, and one location may experience a partially mitigated significant impact for certain limited periods during construction ~~staggered portions of the construction period~~. Although the CEQR thresholds for significant adverse environmental impact are predicted to be exceeded at certain locations during construction, the absolute value of these exceedances are not 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. Therefore, the proposed actions would not result in significant adverse public health impacts.

In addition, during existing conditions, the build condition, and during construction, noise levels at the new publicly accessible open space proposed for Site 5 would exceed the levels recommended for passive open spaces. While this is not desirable, there is no effective practical mitigation that could be implemented to avoid these levels during construction. Throughout the city, noise levels in many parks and open space areas that are located near heavily trafficked roadways and/or near construction sites, experience comparable, and sometimes higher, noise levels. *