CHAPTER 22: PUBLIC HEALTH

22.1 Overview

This chapter examines the potential for the Proposed Action to affect the public health status of existing and new Project Area residents, workers, and visitors. For the purposes of this analysis, public health is defined as the activities that society carries out in order to create and maintain an environment in which people can be healthy. According to the *CEQR Technical Manual*, the elements that combine to influence public health include air quality, hazardous materials, construction materials, and natural resources (e.g., water quality impacts). These elements are analyzed in other chapters of the FEIS, and the conclusions of those chapters have been used to determine if impacts to public health would occur from the Proposed Action.

As detailed below, a full assessment of potential impacts on public health is not necessary because none of the areas of concern rise to a level of significance, and no significant adverse public health impacts are expected as a result of the Proposed Action.

22.2 Methodology

The methodology outlined in the *CEQR Technical Manual* was used to first screen the public health criteria to assess whether potential impact exists, and whether it warrants further analysis and determination on the type of analysis to be utilized.

The study area is generally bounded by Hannah Street to the north, the elevated railroad tracks of the SIR and Bay Street to the west, the Front/Bay/Edgewater Street intersection to the south the U.S. Pierhead line to the east. The upland portions of the study area are developed and paved, and largely covered with existing structures. The adjacent Upper New York Bay shoreline consists of man-made structures such as bulkheads, piers and riprap. The near-shore area of the bay is currently used for marine activities while the off-shore area is used as a holding area for large transport ships and tankers.

22.3 Analysis

The *CEQR Technical Manual* states that a public health assessment may not be necessary for many proposed actions, but a thorough consideration of health issues should be documented. In determining whether a public health assessment is appropriate for the Proposed Action, the following *CEQR* concerns have been analyzed and considered:

- **Whether an increase in vehicular traffic or emissions from stationary sources would result in significant adverse air quality impacts.** The potential for these impacts was examined in Chapter 19, "Air Quality." The results show that the Proposed Action would not result in any significant air quality impacts from mobile sources (vehicular traffic) for carbon monoxide (CO) and particulate matter (PM_{10} and $PM_{2.5}$). With respect to stationary sources, the screening-level analysis determined that there would be no potential significant adverse air quality impacts from the anticipated heating and cooling systems associated with

the Proposed Action. In addition, no sources that might significantly affect the air quality of the Project Site were identified. Therefore, air quality impacts from nearby stationary sources would be negligible or insignificant.

- **If there is an increased potential for exposure to heavy metals (e.g., lead) or other contaminants in soil/dust.** The Proposed Action has the potential to disturb hazardous materials and increase pathways for human and environmental exposure, although the magnitude of the impact is not expected to be substantially beyond what occurs at most urban sites. The hazardous materials assessment presented in Chapter 12, "Hazardous Materials," identified that all of the tax lots associated with the Proposed Action have some potential for petroleum and/or non-petroleum contamination on the site. Prior to construction, further investigation would be performed as necessary on each development site to determine the presence and nature of contaminants of concern and the proper remedial and/or health and safety measures that would be employed during redevelopment.

  Mechanisms to ensure that these measures occur include the placement of E-designation on lots that are neither City-owned nor intended for future City ownership. For City-owned sites, E-designations would not be placed on development lots. Instead, since development of these sites would occur through disposition to private entities, a similar mechanism, such as placing a restrictive declaration or other NYCDEP-approved institutional control on parcels to be conveyed by the City to ensure that further investigative and/or remedial activities, as well as health and safety measures, prior to and/or during construction will be required under the City's contract of sale with the private entity selected to develop the site. Table 12-5 in Chapter 12 identifies the sites to receive E-designation.

  The above mechanisms would reduce or avoid the potential that significant adverse impacts would result from the Proposed Action on all development sites. If areas are found to be contaminated, remediation will be performed in accordance with all City, state, and federal regulations and protocols. As a result, there should not be any impact on construction workers or the general public from the implementation of these measures. Moreover, if there are any hazardous materials at the Project Site, their removal would be a post-construction environmental benefit for the area.

- **If there is contamination from historic spills or hazardous substance releases that might have impacted or might impact groundwater that is used as a source of drinking water.** The groundwater below the Project Area is not used as a source of drinking water. Nonetheless, as noted in Chapter 12, "Hazardous Materials", the Homeport Site was tested and found to contain elevated levels of certain contaminants. Based on their land use history, the Project Area properties west of Front Street also have the potential to contain contamination. Thus, the area will be managed, isolated, and/or remediated during the construction phase, in accordance with applicable New York State Department of Environmental Conservation (NYSDEC) and New York City Department of Environmental

Protection (NYCDEP) requirements. If necessary, contaminated groundwater will be treated on-site prior to discharge in accordance with requirements of the NYSDEC- and/or NYCDEP-issued permits.

- **Whether there are solid waste management practices that could attract vermin and result in pest population growth.** No solid waste management practices are proposed beyond those which occur at most residential and commercial uses found in the City. These practices would include all contemporary solid waste collection and containment practices, and conformance with the requirements of the New York City Board of Health. The Project Area will be served by the New York City Department of Sanitation (DSNY), which is responsible for the collection and disposal of municipal solid waste and recyclables generated by residences, City agencies, tax exempt properties and some nonprofit organizations. Solid waste and recyclables from businesses (retail stores, offices, restaurants, industries, etc.) are collected and disposed of by private carters. As discussed in Chapter 15, "Solid Waste and Sanitation Services," the development associated with the Proposed Action would create new demand for the disposal of solid waste, but DSNY and private solid waste services are expected to have adequate capacity to meet the increases in demand. In addition, the Proposed Action would encourage the use of waste minimization features beyond those required by law, such that vermin and pest population growth would not be expected to occur.

- **Whether there would be potentially significant adverse effects to sensitive receptors from noise and/or odors.** New odor sources would not be created as a result of the Proposed Action. With regard to noise, the Proposed Action would create a mixed-use development in an area with existing moderate-to-high noise levels due to the presence of commercial, industrial and transportation land uses. As described in Chapter 20, "Noise," the Proposed Action would create new residential buildings and open spaces in locations with "marginally acceptable" noise levels (according to *CEQR* exterior noise standards). To avoid the potential for noise impacts, (E) designation for noise will be placed on parcels specified in Chapter 20 on the New York City zoning map as part of the proposed rezoning. The (E) designation text will state that in order to ensure an acceptable interior noise environment at the specified sites, future uses on the parcels must provide a minimum window/wall attenuation of either 30 or 35 dBA, depending on the particular site. Prior to development on these sites, the New York City Department of Buildings will receive a NYCDEP report stating that the environmental requirements related to the (E) designation have been met. Therefore, the placement of (E) designations for noise on the City's zoning map, for the parcels listed above, will ensure that the Proposed Action would not result in significant adverse impacts due to noise.

  Although ambient noise levels at the open spaces would be higher than those generally recommended for parks and places of outdoor activities, the ambient noise levels of the open spaces are comparable to noise levels at many existing

City parks which are adjacent to roadways and transportation facilities. No new significant sources of noise would be generated by the Proposed Action.

- **If vapor infiltration from contaminants within a building or underlying soil (e.g., contamination originating from gasoline stations or dry cleaners) would result in significant adverse hazardous materials or air quality impacts.** As described in Chapter 12, "Hazardous Materials," and above, management measures will be developed to address potential hazardous materials that may be encountered through implementation of the Proposed Action. The development and implementation of specific management plans are designed to protect workers and public health and safety, and manage hazardous and/or contaminated materials during construction. These plans, identified in Chapter 12, will be prepared by contractors responsible for construction of the Proposed Action.

- **If potential impacts result in an exceedance of accepted federal, state, or local standards for hazardous materials, noise, air quality, etc.** The Proposed Action will not result in any exceedances of accepted federal, state, or local standards for noise or air quality. With respect to hazardous materials, exceedances of regulatory guidance values were detected during the Phase II Environmental Site Investigation (ESI) performed for the Homeport Site, as discussed in Section 12.3.6 of Chapter 12, "Hazardous Materials."

  Semi-volatile organic compounds (SVOCs) that were identified at concentrations in exceedance of NYSDEC Technical and Administrative Guidance Memorandum (TAGM) Recommended Soil Cleanup Objectives (RSCOs) include Benzoanthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, acenapthylene, anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, phenol, and Dibenz(a,h)anthracene. Metals at concentrations above TAGM RSCOs and Eastern Soil Background Levels were detected in each of the soil samples collected. Groundwater samples revealed elevated concentrations of volatile organic compounds (VOCs) in the southern and northern portions of the site. Benzene, Ethylbenzene, and total Xylenes (BTEX) compounds were identified at concentrations above NYSDEC Technical and Operational Guidance Series (TOGS) standards. SVOCs were detected in excess of NYSDEC TOGS in each groundwater sample with the exception of one. The results of the three soil vapor samples sent for analysis of VOCs found detectable concentrations of VOCs present in each of the soil vapor samples collected. BTEX compounds are present in the soil vapor. All detected VOCs exceeded the NYSDOH and EPA outdoor background levels.

  In a letter dated August 31, 2006, NYCDEP finds that the implementation of specified remedial measures would avoid significant adverse hazardous materials impacts as a result of the Proposed Action. The required remedial measures that EDC will implement are described in Section 12.6.9 of Chapter 12. Therefore, no significant adverse impacts related to an exceedance of accepted federal, state, or local standards for hazardous materials, noise, air quality would result from the Proposed Action.

22.4 Conclusion

For the reasons stated above and in accordance with the *CEQR Technical Manual*, a full assessment of potential impacts on public health is not necessary and no significant adverse impacts are expected as a result of the Proposed Action.