

A. INTRODUCTION

Unavoidable significant adverse impacts are defined as those that meet the following two criteria:

- There are no reasonably practicable mitigation measures to eliminate the impacts; and
- There are no reasonable alternatives to the proposed project that would meet the purpose and need of the action, eliminate the impact, and not cause other or similar significant adverse impacts.

As described in Chapter 22, “Mitigation,” the potential significant impacts identified for the proposed project with respect to historic resources and traffic could be fully mitigated. However, as described below, significant impacts related to odors would not be fully mitigated by the project Build year of 2011.

B. AIR QUALITY

As described in Chapter 18, “Air Quality,” an analysis was performed to determine if local odor conditions near the project site could impact the proposed project. Based on real-time sampling of odors at the project site, it was determined that at times, the concentration of hydrogen sulfide (H₂S)—an indicator of potential odors—was above the 10 parts per billion (ppb) nuisance-based threshold. In accordance with the *New York City Environmental Quality Review (CEQR) Technical Manual*, these levels would constitute a potential significant odor impact that could occur with respect to both future open space users and residents at the project site.

Given that local waterway and infrastructure is assumed to be the greatest contributor of H₂S, to the ambient condition, this impact could potentially be reduced through the implementation of the City-proposed infrastructure projects for the area by 2013 (described above) which include:

- *Rehabilitation of the Gowanus Canal Flushing Tunnel*—This rehabilitation will increase the capacity for water intake from the East River to the canal from 154 to 215 million gallons per day (mgd). This would improve water quality and dissolved oxygen levels, enhance flow through, circulation and reduce stagnation and organic matter concentrations in the canal waters which is one potential source of H₂S.
- *Reconstruction of the Gowanus Pump Station*—This reconstruction would result in the expansion of the capacity of the Gowanus Pump Station through the installation of four new pumps and the redirection of sewage to a force main that currently runs along the inside of the Flushing Tunnel. Because the current force main is not operational, that flow is diverted to the Bond Street sewer, which could be another source of H₂S through manholes and vents. Moreover, relieving the capacity of the Bond Street combined sewer reduced the potential for combined sewer outflow (CSO) discharges into the canal (the reconstruction of the Pump Station and replacement of the force main is projected to reduce the annual volume of

CSO discharges to the canal by 34 percent) which in-turn reduces another potential source of H₂S.

- *Dredging*—Dredging the upper 750 feet of the Gowanus Canal will eliminate exposed sediment mounds which has previously been identified as another potential source of H₂S in the area.

As a result of the above-described proposed infrastructure improvements, it is possible that the identified odor impacts could potentially be reduced by 2013 (or upon completion of dredging). Since it is anticipated that these improvements would be implemented after the proposed project's build year, the odor impacts would be considered unmitigated unavoidable adverse impacts until the completion of the improvements. To the extent that none of these measures are implemented or in the event that such measures are ineffective, H₂S levels at the site could remain above 10 ppb for an hourly average, thereby constituting an unmitigated unavoidable adverse impact of the proposed project. *