Chapter 10: Air Quality

As described in Chapter 1, "Project Description," the proposed project would result in the development of the new Richard Gilder Center for Science, Education, and Innovation as an addition to the American Museum of Natural History (AMNH or the Museum). This chapter evaluates the potential for direct and indirect air quality impacts associated with the proposed project. Direct impacts stem from emissions generated by stationary sources at a project site, such as emissions from on-site fuel combustion for heating and hot water systems. Indirect impacts include emissions from motor vehicle trips ("mobile sources") generated by the project or other changes to future traffic conditions due to a project. A detailed assessment of greenhouse gas emissions is included in Chapter 11, "Greenhouse Gas Emissions."

With respect to mobile sources, as shown in Chapter 9, "Transportation," incremental vehicle trips are expected to be up to 20 vehicle trips through an intersection during weekday peak hours and up to 34 vehicle trips during the Saturday peak hour. These increments do not exceed the 2014 *CEQR Technical Manual* carbon monoxide (CO) screening threshold of 170 peak hour trips at intersections in the project area, or the fine particulate matter (PM2.5) emission screening thresholds discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. Therefore, no mobile source analysis is required.

There are no large or major emission sources, as defined in the *CEQR Technical Manual*, within a distance of 1,000 feet of the project site. Therefore, no assessment of large or major emission sources is warranted.

Heating, ventilation, and air conditioning (HVAC) systems serving the Museum are currently steam and/or electrically powered. It is expected that the proposed project would be steam and/or electricity powered and that no new systems would be installed. While the project would include a new rooftop emergency generator, under CEQR no analysis is needed for systems used only occasionally for backup purposes. Therefore, no assessment of potential stationary air quality impacts is warranted. Chapter 11, "Greenhouse Gas Emissions," considers the proposed project's consistency with the City's greenhouse gas emission reduction (GHG) goals, and includes a description of relevant measures to reduce energy consumption and GHG emissions that could be incorporated into the proposed project.

Overall, the proposed project would not result in any significant adverse impacts on air quality. ✷