Chapter 10: Hazardous Materials

A. INTRODUCTION

This chapter presents the findings of the hazardous materials assessment and identifies potential issues of concern with respect to workers, the community, and/or the environment during construction and after implementation of the proposed project. The proposed project would include partial demolition of the existing building, restoration of the remainder, and construction of a multistory hotel and residential building, which would entail excavation for one below-grade level.

The potential for hazardous material concerns was evaluated based on a February 2012 *Phase I Environmental Site Assessment* (ESA) prepared by AKRF, Inc. The Phase I ESA assessed the potential for hazardous materials to be present, based on a reconnaissance of the project site and surrounding area, a review of data on geology and hydrology of the area, an examination of historical Sanborn Fire Insurance maps, and a review of pertinent federal and state databases.

PRINCIPAL CONCLUSIONS

The Phase I ESA identified potential sources of contamination, including: historical and/or existing petroleum storage tanks on the project site; historical and/or current uses in the surrounding area (including a contractor's yard and a commercial-manufacturing building west-adjacent to the project site, and a dry cleaner and an undertaker on the north-adjacent block); and hazardous waste generators (including dry cleaners) and petroleum storage facilities.

To further evaluate the potential for human or environmental exposure to known or unexpectedly encountered contamination during and following the proposed project, a Subsurface (Phase II) Investigation including the collection of soil and groundwater samples for laboratory analysis would be performed prior to soil disturbance. Based on the results of the Phase II investigation, the developer may be required to prepare a project-specific Remedial Action Plan (RAP) and would be required to prepare a Construction Health and Safety Plan (CHASP) to be implemented during construction of the proposed project. The plans would set out appropriate procedures to be followed to safely address any identified contamination, historical fill materials, etc. and would provide measures to protect both the workers and the community. All excavated soil would be handled and disposed of in accordance with applicable regulatory requirements and measures to control dust during excavation would be implemented to protect both the workers and the community. Should contaminated soil and/or petroleum tanks be encountered, applicable regulatory requirements (e.g., those relating to spill reporting and tank registration) would be followed to address removal of the tanks and any associated soil or groundwater contamination.

Lead-based paint, asbestos-containing materials (ACM), and polychlorinated biphenyl (PCB) containing electrical equipment and fluorescent lighting fixtures, may be present at the project site. Regulatory requirements pertaining to these hazardous materials would be followed.

With these above-described measures, the proposed project would not result in any significant adverse impacts related to hazardous materials.

B. EXISTING CONDITIONS

SUBSURFACE CONDITIONS

Based on U.S. Geological Survey mapping, the project site lies at an elevation of approximately 30 feet above mean sea level, sloping down to the southeast. Bedrock depth in the vicinity of the project site is expected to be highly variable but likely more than 30 feet below grade. Based on surface topography, groundwater would be expected to be first encountered at approximately 25-30 feet below grade, and most likely flows in a southeasterly direction toward the East River approximately 4,000 feet away. However, actual groundwater flow can be affected by many factors including subsurface openings or obstructions such as nearby subway tunnels, basements and underground utilities, past filling, bedrock geology, and other factors beyond the scope of this assessment. Groundwater in Manhattan is not used as a source of potable water (the municipal water supply uses upstate reservoirs).

HAZARDOUS MATERIALS ASSESSMENT

The Phase I ESA included a reconnaissance of the project site and surrounding area, a review of data on geology and hydrology of the area, an examination of historical Sanborn Fire Insurance maps, and a review of pertinent federal and state environmental databases. The Phase I ESA identified the following:

- In the early 20th century, the project site was developed with residential, commercial and office buildings. The existing building was built in 1917 as a large movie theater, which after becoming vacant was reused as five smaller theaters starting in 1985, but became vacant again in the mid-1990s. The southern portion once contained the theater's lobby, two ground-floor stores, a school on the second floor, and a showroom on the third floor.

  No petroleum storage tanks were observed, and no tank registrations were identified in the databases. However, computerized NYC Buildings Department records identified two oil burner applications (dated 1950 and 1969) and a 1955 NYC Fire Department approval of a fuel oil installation. Interviews indicated that an abandoned aboveground storage tank (size unknown) may be located in an oil boiler room in a sub-basement in the northern portion of the building; however, this boiler room was not accessible during the reconnaissance due to a blocked entrance, and was viewed through an opening in the entranceway. Apparent historical oil boilers and a fuel oil-like odor were noted in the oil boiler room. Fuel tank fill ports were observed adjacent to the building on West 125th Street (in front of the former clothing store) and on West 126th Street (where a fuel tank vent pipe was also noted). An apparent groundwater monitoring well was located adjacent to the northwestern corner of the project site on West 126th Street. Although this well could have been installed for a prior environmental investigation, no records of any such investigation were identified.

- Land uses in the surrounding area historically included a contractor's yard and a commercial-manufacturing building west-adjacent to the project site, and a dry cleaner and an undertaker (which may have used embalming chemicals) located northwest of the project site on the north-adjacent block. Regulatory databases identified nearby hazardous waste generators (including dry cleaners) and petroleum storage facilities.
- Given the age of the building lead-based paint may be present. Painted surfaces within the theater were noted to be in poor condition, with chipped and peeling paint.

- Historical land use maps indicated an "asbestos curtain" in the building. This curtain was not observed, and was likely removed during the building's conversion to a multiplex. Suspect asbestos-containing materials (ACM) noted on-site included roofing materials, suspended ceiling tiles, thermal pipe insulation, ventilation duct insulation, spray-on fireproofing, and plaster and sheetrock walls and ceilings. Significant damage to suspect ACM was noted throughout the theater space, and included fallen and/or damaged ceiling tiles, sheetrock and plaster. A portion of the roof which was not observed was also reportedly damaged. Debris consisting of building materials, which may contain ACM and lead-based paint, was noted throughout the theater space. Observed suspect ACM in the nail salon appeared to be in good condition.
- Electrical equipment and fluorescent lighting fixtures on the Property may include polychlorinated biphenyls (PCBs). In addition, fluorescent light bulbs may contain mercury.

C. THE FUTURE WITHOUT THE PROPOSED PROJECT

In the future without the proposed project, the project site would remain in its current condition. No subsurface disturbance would occur, and thus there would be no significant potential for human exposure to any subsurface hazardous materials. Legal requirements relating to hazardous materials in the building (such as suspect ACM, lead-based paint, and PCBs), including requirements for identifying and repairing or removing damaged ACM, would need to be followed.

D. PROBABLE IMPACTS OF THE PROPOSED PROJECT

The proposed project would involve partial demolition of the existing building, restoration of the remainder, and construction of a multistory hotel and residential building, which would entail excavation at the below-grade level.

As noted above, based on the Phase I ESA, subsurface contamination and hazardous materials in buildings (such as ACM, PCBs and lead-based paint) may be present. Renovation, demolition and excavation activities could disturb these hazardous materials and potentially increase pathways for human or environmental exposure. Impacts would be avoided by performing the following procedures:

- A Subsurface (Phase II) Investigation would be conducted prior to soil disturbance to determine whether past or present, on or off-site activities have affected subsurface conditions. This would involve the collection and laboratory analysis of soil and groundwater samples. Based on the results of the Phase II investigation, the developer may be required to prepare a project-specific RAP and would be required to prepare CHASP to be implemented during excavation for the proposed project. The plans would set out appropriate procedures to be followed to safely address any identified contamination, historical fill materials, etc. and would provide measures to protect both the workers and the community. Should contaminated soil and/or petroleum tanks be encountered, applicable regulatory requirements (e.g., those relating to spill reporting and tank registration) would be followed to address removal of the tanks and any associated soil or groundwater contamination.
- All excavated soil would be handled and disposed of in accordance with applicable regulatory requirements and measures to control dust during excavation would be implemented to protect both the workers and the community. Should contaminated soil and/or petroleum tanks be encountered, applicable regulatory requirements (e.g., those

relating to spill reporting and tank registration) would be followed to address removal of the tanks and any associated soil or groundwater contamination.

- Although not anticipated, if dewatering is required for the proposed construction, testing would be performed to ensure that the water would meet New York City Department of Environmental Protection (DEP) sewer discharge requirements. If necessary, pretreatment would be conducted prior to discharge to the City's sewer system, per DEP permit/approval requirements.
- As in the future without the proposed project, unless information or test results exist to indicate that damaged suspect ACM do not contain asbestos, these materials would be sampled by a NYC-certified asbestos investigator to determine whether they are ACM, and any damaged ACM would be removed or repaired by a licensed asbestos abatement contractor in accordance with applicable regulations. Prior to renovation/demolition with the potential to disturb suspect ACM, an asbestos survey would be completed and all ACM that would be disturbed by the activity would be removed and disposed of in accordance with applicable regulatory requirements. Any remaining known and suspect ACM would be maintained in good condition in accordance with applicable regulatory requirements.
- Any renovation/demolition activities with the potential to disturb lead-based paint would be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62—Lead Exposure in Construction).
- Unless labeling or laboratory testing data indicates that suspect PCB-containing electrical equipment and fluorescent lighting fixtures do not contain PCBs, and that fluorescent lights do not contain mercury, disposal would be performed in accordance with applicable regulatory requirements.

With these measures, the proposed project would not result in any significant adverse impacts related to hazardous materials. ✷