Chapter 10: Hazardous Materials

A. CONCLUSIONS OF THE FGEIS AND THE ROD

As discussed in the FGEIS, the evaluation of hazardous materials at the Project Site revealed that no significant adverse impacts related to hazardous materials are anticipated due to the Approved Plan. Hazardous materials identified at the Project Site include PAHs and metals in soil, asbestos and other contaminants contained in dust from the events of September 11 that adhered to the surfaces of structures and in other areas, and low concentrations of VOCs present in groundwater. During construction, hazardous materials will be managed or remediated to protect public health and the environment. Construction measures, including the implementation of site-specific HASPs, dust control measures, contaminated soil and groundwater management plans, and abatement of hazardous materials prior to construction, will aid in the avoidance of adverse health impacts to workers and the general public. Because hazardous materials will be managed or remediated during construction, consistent with all permits and approvals from the appropriate regulatory agencies and all other applicable legal requirements, no significant adverse impacts are expected during either the construction or operational phases of the Approved Plan.

130 LIBERTY STREET

130 Liberty Street is located across the street and south of the WTC site and is a former office building comprised of 40 stories and approximately 1.5 million square feet. The building was severely impacted by the events of September 11. The massive debris generated from the collapse of the South Tower of the WTC broke approximately 1,500 windows, the building’s curtain wall, and its structural components, creating a gash in the building’s exterior and exposing portions of the interior north side of the building between the 7th and 24th floors. The debris demolished the plaza in front of the building, exposing the basement and subbasement areas and rupturing a diesel fuel tank in the basement, the contents of which burned. The gash area and broken windows exposed the interior of the building to the elements and to the dust generated from the collapse of the WTC. As a result, a combination of WTC soot, dust, dirt, debris, and contaminants settled in and on the building. Some sampling of the dust was performed by the previous owner, Deutsche Bank, and its insurers. Some of that sampling found detectable concentrations of asbestos, silica, PAHs, dioxins, PCBs, metals, and mercury. The events of September 11 also resulted in the release of approximately 10,000 gallons of No. 2 fuel oil and 1,000 gallons of diesel oil from ruptured petroleum storage tanks at 130 Liberty Street. The No. 2 fuel oil storage tank was removed and the EPA established a collection system for the oil. Additionally, approximately 100 gallons of lube oil was released in an elevator shaft. The presence of water in the structure at 130 Liberty Street resulted in mold growth within the building.

As discussed in the FGEIS, although there were detectable levels of contaminants in some of samples collected by Deutsche Bank and its insurers, LMDC was advised that such testing was
not sufficient to fully characterize such contaminants and to make final determinations concerning the manner in which these contaminants should be addressed prior to or during the building’s deconstruction. As a result, LMDC concluded that further testing was necessary in order to develop a plan to manage or remediate any hazardous materials present prior to or during deconstruction of the building. That additional testing is briefly described below.

B. UPDATE ON 130 LIBERTY STREET

In 2003, the condition of the building was the subject of litigation between Deutsche Bank, its prior owner, and the insurers for the building. Former U.S. Senate Majority Leader George Mitchell mediated discussions intended to resolve the litigation between Deutsche Bank and its insurers. In early 2004, an accord among Deutsche Bank, its insurers, and LMDC was reached. The accord contemplated that LMDC would acquire the building and then clean and deconstruct it to remove a shrouded reminder of the events of September 11 that continues to have a blighting effect on the surrounding community. Pursuant to this accord, LMDC acquired the building on August 31, 2004.

LMDC’S INITIAL BUILDING CHARACTERIZATION STUDY

Prior to LMDC’s purchase of the building, Deutsche Bank and its insurers conducted some environmental testing of the building in connection with their litigation. In anticipation of its acquisition, LMDC engaged the services of environmental consultants to conduct independent environmental testing and characterization of the building materials, dust, and mold. On September 14, 2004, LMDC released a report by its consultants identifying the initial findings of the characterization study of the building and the contaminants of potential concern.

The September 2004 Initial Building Characterization Study Report (the Initial Study) established the presence and concentrations of some hazardous materials at the building and recommended further sampling. In particular, the Initial Study identified areas of the building requiring additional testing that were inaccessible at that time, including curtain wall cavities, cell systems within floors, interstitial spaces within interior walls and column cavities, inside vertical shafts, and exterior building surfaces. In addition, the Initial Study recommended performing a preliminary waste characterization to determine the proper classification of waste materials for disposal purposes.

Accordingly, a series of supplemental investigations (Supplemental Investigations) were performed by LMDC’s consultants of the previously inaccessible areas including the heating, ventilation and air conditioning (HVAC) distribution ductwork, curtain wall cavity, cell systems within floors, interstitial spaces within interior walls and column cavities, inside vertical shafts, exterior building surfaces, and fireproofing. A further visual inspection of the building for mold and asbestos-containing building materials (ACBMs) was also undertaken. Finally, a preliminary waste characterization was performed.

The Supplemental Investigations are intended to assist in determining what measures and protocols may be required in support of the Deconstruction Plan. In particular, the results are intended to provide reference information allowing for informed decisions to be made regarding appropriate cleaning and deconstruction methods. These decisions include the development and implementation of engineering controls to contain the work zone (i.e., to ensure no exposure to the surrounding community during the cleaning and deconstruction) and appropriate methods for the disposal or recycling of materials generated by the cleaning and deconstruction activities.
Using the available characterization results, LMDC, its consultants, and the selected deconstruction contractor are in the process of developing appropriate deconstruction protocols and safety precautions for the cleaning and deconstruction process to ensure the health and safety of workers and the surrounding community.

DECONSTRUCTION PLAN

Using the Initial Study, Supplemental Investigations, and additional information, LMDC, working with its deconstruction contractor, continues to develop the Deconstruction Plan for the timely and safe deconstruction of the building in accordance with applicable City, State, and Federal laws, as contemplated by the Approved Plan. In December 2004, LMDC released a draft Phase I Deconstruction Plan for public comment and submitted the draft plan to Federal, State, and City regulatory agencies for review. The draft Deconstruction Plan contemplated that the building would be deconstructed in two phases:

- Phase I involves abatement of identified interior ACBMs, cleaning and removal of specified WTC dust within the building, and “soft strip and interior gut” of most interior non-structural materials, as well as the erection of the tower crane and hoist on the site.
- Phase II includes the abatement of identified ACBM associated with the exterior of the structure, the disassembly and removal of some remaining interior non-structural materials, removal of rooftop mechanical equipment and the remaining building envelope, and then finally the structural components of the building.

The draft Phase I Deconstruction Plan was formally submitted for review to the following agencies:

- United States Environmental Protection Agency;
- United States Occupational Safety and Health Administration;
- New York State Department of Labor;
- New York State Department of Environmental Conservation;
- New York City Department of Environmental Protection;
- New York City Department of Buildings;
- New York State and City Departments of Transportation; and
- New York City Office of Emergency Management—Fire Department of New York, New York Police Department, New York City Department of Health and Mental Hygiene

Since receiving comments from regulatory agencies in January 2005, LMDC began preparing a revised Phase I Deconstruction Plan for submission to and approval by the regulatory agencies prior to beginning work on the project.

CURRENT AND ADDITIONAL INFORMATION

A complete list of currently known hazardous materials in and on the building is provided in the Initial Study and the Supplemental Investigations referenced above. Additionally, the revised Deconstruction Plan will contain a listing of known hazardous materials.

Current information concerning the deconstruction of 130 Liberty Street, including the Initial Study and the Supplemental Investigations, can be found on LMDC’s website at: http://www.renewnyc.com/plan_des_dev/130Liberty/default.asp. This information is frequently updated to reflect continuing developments.
C. APPROVED PROGRAM FUEL STORAGE

The towers on the Project Site are expected to have fuel tanks for the storage of diesel fuel for emergency generators required for life safety. In addition, provisions will be made to allow space for the installation of fuel oil tanks for tenants who require their own dedicated emergency generators. Tanks may also be required for the Memorial, the Performing Arts Complex, and/or the Museum for similar purposes. All tanks will be below grade. The locations and installations of the fuel tanks will conform to New York City Building Code requirements. The tanks will be registered with the NYSDEC and will be built and operated in accordance with requirements of the NYSDEC, which are designed to ensure that they will not leak or have other negative environmental impacts.

D. PROPOSED REFINEMENTS POTENTIALLY AFFECTING HAZARDOUS MATERIALS

The Proposed Refinements to the Approved Plan require that the bathtub as described in the FGEIS be extended to include the area below the road bed of Cedar Street between Washington Street and Route 9A. No other refinements would affect hazardous materials.

E. PROBABLE IMPACTS OF THE PROPOSED REFINEMENTS

The Proposed Refinements would not result in any significant adverse impacts related to hazardous materials. In the Southern Site, the expansion of the bathtub would generate soil and groundwater that would be handled and disposed of in accordance with site-specific Health and Safety Plans (HASPs), dust control measures, and contaminated soil and groundwater management plans, thus avoiding adverse health impacts to workers and the general public.

Testing of soil and groundwater below the road bed of Cedar Street between Washington Street and Route 9A, which under the Proposed Refinements would become part of the southern bathtub, was previously performed for the FGEIS. The results of the testing indicate that subsurface soils contain concentrations of PAHs and metals that exceed the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) #4046, “Determination of Soil Cleanup Objectives and Cleanup Levels,” in January 1994 (amended in December 2000). (TAGM #4046 address contaminants in soil from any potential source, includes guidance values for chemicals of concern and established Recommended Soil Cleanup Objectives.) Results of groundwater sampling indicate that the groundwater beneath Cedar Street does not contain concentrations of VOCs, PAHs, PCBs, or metals that exceed the NYSDEC potable water standards (also known as Class GA Standards).

During construction, the hazardous materials in soil and groundwater, including any below the roadbed of Cedar Street between Washington Street and Route 9A, would be managed or remediated to protect public health and the environment. Construction measures, including the implementation of site-specific HASPs, dust control measures, and contaminated soil and groundwater management plans, would aid in the avoidance of adverse health impacts to workers and the general public. Because hazardous materials will be managed or remediated during construction, consistent with all permits and approvals from the appropriate regulatory agencies and all other applicable legal requirements, no significant adverse impacts are expected during either the construction or operational phases of the Approved Plan with the Proposed Refinements.