Chapter 10: Hazardous Materials

A. INTRODUCTION

As discussed in Chapter 1, "Project Description," independent of the proposed action, the applicant is participating in the Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). The applicant was accepted into the BCP on April 19, 2005; an Interim Remedial Work Plan was approved on June 16, 2006; and a Remediation Work Plan was approved by NYSDEC on July 5, 2006 (see Appendix A). This chapter summarizes the environmental investigations completed to date and briefly describes the site remediation as it is being undertaken under the BCP. This chapter also includes a preliminary screening assessment of the projected development sites under the reasonable worst-case development scenario (Lots 1, 58, and 61) and Lots 56 and 57, which would be rezoned.

As described in Chapter 1, until recently, the project site (Lots 5, 8, 10-13, 43, 52, 53, and 55 of Block 1152) contained a mix of uses, including motor vehicle repair shops, surface parking, and warehouse and commercial uses. These uses have been demolished in accordance with activities under the BCP. All on-site buildings, excluding the former parking lot attendant's office, have been demolished. The site is currently under construction, with the remediation taking place in accordance with the BCP.

B. PHASE I ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment (ESA) was prepared by AKRF in June 2003. The Phase I included site visits, interviews, and a review of historic maps and various regulatory databases. The Phase I ESA was conducted for both the project site and the rezoning area.

The results of the Phase I ESA showed that the study area has a 50-year history of industrial and commercial usage. Soil and groundwater beneath a site can become contaminated because of past or present automotive and industrial usage on the site or on adjacent properties. In addition, some of the sites were built on fill material, which often contains contaminants, such as polycyclic aromatic hydrocarbons (PAHs) and heavy metals. Given the age of the former on-site buildings and the site visit, asbestos-containing materials and lead-based paints were identified. The Phase I ESA concluded that there was a potential for the site to contain underground petroleum storage tanks.

C. BROWNFIELD CLEANUP PROGRAM

As discussed above, the Phase I ESA indicated the potential for the site to contain contaminated materials. The applicant applied for and was accepted into NYSDEC's BCP (as of April 19, 2005), and the project site will continue to be cleaned up pursuant to a negotiated agreement under NYSDEC's BCP. On November 8, 2006, the applicant also entered into a restrictive declaration that ensures that if the Brownfield Cleanup agreement is terminated, any

development of the project site would proceed under the oversight of the New York City Department of Environmental Protection (NYCDEP) with respect to hazardous materials (see Appendix A: "Hazardous Materials"). A remedial investigation, through the sampling and analysis of subsurface soil, groundwater, and perimeter soil vapor, and subsequent waste characterization sampling identified areas that needed to be remediated. An Interim Remedial Measure Work Plan and a Remediation Work Plan were prepared and approved to address how the identified contamination would be handled, so that the material is properly removed, transported, and disposed of without adversely affecting the environment and the public health of the people working, attending school, or living near the project site. These activities are being conducted under a Soil Management Plan and a Community Air Monitoring Plan that have been approved by both the New York State Department of Health (NYSDOH) and the NYSDEC.

As part of the site cleanup, all surficial and subsurface soil is being removed and/or covered to standards acceptable to the NYSDEC and NYSDOH. To avoid impacts from dust, vapors, and odors during excavation activities, a NYSDEC/NYSDOH-approved Health and Safety Plan, which includes an Expanded Community Air Monitoring Odor/Vapor Control Plan to protect the on-site workers and the people attending school, working, or living near the site, is being implemented. This plan requires active air monitoring during all soil disturbance activities with boundary threshold standards and actions to be taken in the event the standards are exceeded. The impact to groundwater is not anticipated; however, measures will be taken to manage any groundwater contamination, if directed by NYSDEC.

D. PROJECTED DEVELOPMENT SITES—SCREENING ANALYSIS

As discussed above, a preliminary screening assessment of the projected development sites under the reasonable worst-case development scenario (Lots 58 and 61) and Lots 1, 56, and 57 was conducted (i.e., those properties not controlled by the project sponsor).

CURRENT AND HISTORICAL CONDITIONS

LOT 1

Lot 1 contains a six-story brick building: the Abraham Joshua Heschel School. This structure was built in approximately 1976 and renovated in 2002 when two additional stories were added. Historically, this parcel was occupied by four, five-story store-fronted dwellings (c. 1907 until c. 1951). Electronic Building Department records indicated that a fuel oil burning permit was applied for in 1957. The regulatory database indicated an on-site 5,000-gallon fuel oil UST installed in 1973. Suspect friable asbestos containing materials (ACM), pipe and boiler insulation, in the basement level boiler room were observed to be in significantly damaged condition.

LOT 56

Lot 56 contains a five-story brick residential building that was constructed prior to 1907. There is no evidence to suggest the presence of chemical or petroleum storage tanks.

LOT 57

Lot 57 contains a five-story brick residential building that was constructed prior to 1907. A 5,000-gallon registered fuel oil tank was installed in 1979, but is currently empty and out of

service. Additionally, electronic Building Department records indicated that in 1958, a fuel oil burning permit application was submitted.

LOT 58

Lot 58 currently contains a one-story brick auto repair building that was constructed between 1907 and 1926. Historically, this parcel contained a wagon yard and a one-story contractors building (c. 1907). Historical maps in 1926 indicate a 12,000-gallon fuel oil tank and in 1951 both the fuel oil tank and a 550-gallon gasoline UST. A fuel oil vent pipe and fill cap were observed in the sidewalk in front of the building. The regulatory databases listed three closed-status spills (in 1993, 1995, and 1996), all less then 50 gallons of fuel oil due to tank overfills and equipment failure. The databases also indicate one closed and removed 4,000-gallon gasoline UST (installed in 1980 and removed in 1999). Building Department records indicated that two gasoline tank installation permits were applied for in 1954 and 1959.

LOT 61

Lot 61 contains a four-story concrete and brick commercial building containing an automobile dealership that was built in 1931. Historically, this parcel was occupied by four, five-story store-fronted residential buildings (c.1907 until c.1926), one four-story building that was labeled as the Firestone Service Stores (built in 1931), a four-story garage (c.1976 until c.1986), and a four-story building, with no use indicated (c. 2001). During the site visit, an automobile elevator and a fuel oil fill cap were observed from the right-of-way. Electronic Building Department records indicated that a fuel oil burning permit was applied for in 1940. The regulatory databases listed a closed-status spill of 20 gallons of fuel oil in 1996 due to a tank overfill. The databases also indicated six 275-gallon petroleum ASTs were installed in 1993 and remain active and six 550-gallon gasoline USTs were installed in 1951 and closed-in-place in 2001.

The northwest-adjacent property (the street and sidewalk right-of-way) contains underground utilities owned and operated by Consolidated Edison. This location, which is approximately 10 feet northwest of Lot 61, was listed in the NYSDEC open SPILLS database for a spill of 7,200 gallons of dielectric fluid in 1986. Dielectric fluid may contain polychlorinated biphenyls (PCBs). This spill listing remains open or unresolved. Based on proximity to the study site, this spill listing may have affected on-site conditions.

SUMMARY

In sum, the regulatory databases, Fire Department records, electronic Building Department records, historical land-use maps, and visual inspections indicated that the rezoning area was developed prior to 1907 as residential, transitioned from primarily residential to commercial and industrial uses by the 1950s, and has remained commercial and industrial until the present. Table 10-1 summarizes each parcel's potential to contain storage tanks on the premises.

SCREENING ASSESSMENT

For the parcels located within the rezoning area (Lots 1, 56, 57, 58, and 61), no construction activities are currently planned; however, under the reasonable worst-case development scenario, it is assumed that development would occur on Lots 58 and 61. As discussed in the previous section, the past uses of Lots 58 and 61, the history of numerous on-site petroleum storage tanks, and an open PCB spill in close proximity indicate the possibility of petroleum and PCB contamination in the soil and/or groundwater beneath the site. As part of the proposed

action, an (E) Designation would be placed on Lots 58 and 61 to ensure they are properly investigated and remediated, if necessary, prior to any redevelopment. Under the (E) Designation, the lot owner must prepare a Phase I Environmental Site Assessment (ESA) before any redevelopment and, if necessary, implement a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before issuance of a building permit by the New York City Department of Buildings (DOB) (pursuant to Section 11-15 of the Zoning Resolution—Environmental Requirements). The (E) Designation also requires mandatory Construction Health and Safety Plans (CHASPs), which must be approved by NYCDEP, as well. The text of the (E) Designation for Lots 58 and 61 is as follows:

TASK 1

The fee owner(s) of the lot(s) restricted by this (E) Designation will be required to prepare a scope of work for any soil, gas, or groundwater sampling and testing needed to determine if contamination exists, the extent of the contamination, and to what extent remediation may be required. The scope of work will include all relevant supporting documentation, including site plans and sampling locations. This scope of work will be submitted to NYCDEP for review and approval prior to implementation. It will be reviewed to ensure that an adequate number of samples will be collected and that appropriate parameters are selected for laboratory analysis.

No sampling program may begin until written approval of a work plan and sampling protocol is received from NYCDEP. The number and location of sample sites should be selected to adequately characterize the type and extent of the contamination, and the condition of the remainder of the site. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for choosing sampling sites and performing sampling will be provided by NYCDEP upon request.

TASK 2

A written report with findings and a summary of the data must be presented to NYCDEP after completion of the testing phase and laboratory analysis for review and approval. After receiving such test results, a determination will be provided by NYCDEP if the results indicate that remediation is necessary.

If NYCDEP determines that no remediation is necessary, written notice shall be given by NYCDEP.

If remediation is necessary according to test results, a proposed remediation plan must be submitted to NYCDEP for review and approval. The fee owner(s) of the lot(s) restricted by this (E) Designation must perform such remediation as determined necessary by NYCDEP. After completing the remediation, the fee owner(s) of the lot restricted by this (E) Designation should provide proof that the work has been satisfactorily completed.

An NYCDEP-approved construction-related health and safety plan would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This Plan would be submitted to NYCDEP for review and approval prior to implementation.

Table 10-1
Evidence of Underground and Aboveground Storage Tanks
on the Projected Development Sites in the Rezoning Area

Lot	Source	Date	Capacity (gallons)	Contents	UST/AST
1	Bldg Dept	1957	*	FO Burning Permit	*
	Regulatory Database	1973 -1993	5,000	FO	UST
56	No Evidence of Tanks				
57	Regulatory Database, Site Visit, Fire Dept	1979	5,000	FO (Empty)	AST
	Bldg Dept	1958	*	FO Burning Permit	*
58	Site Visit, Sanborn Map	1926	12,000	FO	*
	Regulatory Database	1999/removed	4,000	GT	UST
	Bldg Dept, Sanborn Map	1951	550	GT	UST
61	Regulatory Database, Sanborn Map	(1951/closed in place 2001)	6 (550)	GT	UST
	Regulatory Database	1993	6 (275)	Used/ Lube Oil	AST
	Site Visit, Regulatory Database, Bldg Dept	1940 1996	* Spill Listing	FO Burning Permit FO	* *

Notes: * = Unknown
AST = Aboveground Storage Tank
FO = Fuel Oil
GT = Gasoline Tank
UST = Underground Storage Tank

E. CONCLUSIONS

As discussed earlier, the project site will continue to be cleaned up pursuant to a negotiated agreement between the project applicant and NYSDEC under the BCP. On November 8, 2006, the applicant also entered into a Restrictive Declaration, which ensures that no significant adverse impacts with respect to hazardous materials would result from the development of the project site, in the event that the BCP agreement is terminated (see Appendix A: Hazardous Materials"). An Interim Remedial Measure Work Plan and a Remediation Work Plan were prepared and approved to address how the identified contamination will be handled. This will be done under a Soil Management Plan and a Community Air Monitoring Plan that has been approved by both the New York State Department of Health (NYSDOH) and the NYSDEC. As part of the site cleanup, all surficial and subsurface soil is being removed and/or covered to standards acceptable to the NYSDEC and NYSDOH. A NYSDEC/NYSDOH-approved Health and Safety Plan, which includes an Expanded Community Air Monitoring Odor/Vapor Control Plan to protect the on-site workers and the people attending school, working, or living near the site, is being implemented.

By following the requirements of the (E) Designation at the projected development sites, there would be no significant adverse impacts to construction workers, neighboring residents, or future occupants of new buildings.

Therefore, no significant adverse impacts are expected at the project site or in the rezoning area as a result of the proposed action. ✷