Chapter 11: Hazardous Materials

A. INTRODUCTION

This chapter presents the findings of the hazardous materials assessment for the Proposed Project. It identifies site conditions that could pose a potential hazard to workers, the community, and the environment during construction and operation of the Proposed Project, and discusses the measures that would be implemented to ensure no significant adverse impacts would result. Environmental conditions resulting from previous and existing uses, both on-site and in the surrounding area, were assessed and documented in the following:

- *Riverside South Final Environmental Impact Statement (FEIS)*; AKRF, Inc. (AKRF), October 1992.
- Riverside South Restrictive Declaration, December 17, 1992.
- *Riverside South—New York, New York—Health and Safety Plan*; AKRF, April 1996.
- Letter from the New York City Department of Environmental Protection (DEP) to AKRF, *re: Riverside South Health & Safety Plan, dated July 23, 1996.*
- *West Side Site—Parcel L, 20 Riverside Boulevard, New York, New York – Phase I Environmental Site Assessment*; Langan Engineering and Environmental Services, Inc. (Langan), June 2005.
- *West Side Site—Parcel M, 10 Riverside Boulevard, New York, New York – Phase I Environmental Site Assessment*; Langan, June 2005.
- *West Side Site—Parcel N, 1-33 West End Avenue, New York, New York – Phase I and Phase II Environmental Site Assessment*; Langan, July 2005.
- *Environmental Site Assessment Updates (Individual reports for Parcels L, M and N)*; Langan, December 4, 2008.
- Findings of an October 2007 topographic survey by Manhattan Surveying and November-January 2008 geotechnical borings by Testwell Labs, Inc., provided by Mueser Rutledge Consulting Engineers.
- *Riverside Center—Parcels L, M and N—Sampling Protocol and Health and Safety Plan*; AKRF, May 2009.
- *Riverside Center—Subsurface (Phase II) Investigation*; AKRF, June 2009.

The project site is currently occupied by a number of uses including: a construction staging area for ongoing Riverside South development on the northwestern portion of Parcel L, a soil stockpile related to this development on the northeastern portion of Parcel L and the northwestern corner of Parcel N; a former warehouse building now being used as a parking garage in the southern portion of Parcels M and N; an active Amtrak pump house on the southeastern side of Parcel N (fronting West 59th Street); three concrete platforms from the former rail yard and temporary construction trailers for the ongoing Riverside South

development on the northern side of Parcel N; and surface parking lots with parking risers on the remainder of the site. A below-grade Amtrak rail line crosses the eastern edge of Parcel N, north to south (the southern portion of the rail line is within a tunnel). The Proposed Project would entail the construction of five multi-story mixed-use buildings with three below-grade levels (automotive service uses above two parking levels) and creation of a publicly-accessible open space. The proposed development would involve excavation over most of the site; at some areas this would extend to approximately 50 feet below grade. Based on previous investigations of the site, bedrock is most likely present less than 50 feet below grade over most of the site. The proposed excavation would, therefore, involve the removal of most of the on-site soil down to bedrock and some bedrock, especially on the eastern side of the site. Any remaining soil would be capped by floor slabs for the basement (covering the portion of the site west of the Amtrak easement) and foundations/building floor slabs. Additionally, soil vapor barriers would be installed beneath the lowest level floor slabs.

B. PRINCIPAL CONCLUSIONS

Environmental investigations of the site conducted between 1987 and 2009 indicated that urban fill, which exists throughout the site in varying thicknesses (approximately 10 to 35 feet), contains elevated concentrations of some volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs) and metals. Soil VOC concentrations were generally well below New York State Department of Environmental Conservation (NYSDEC) Part 375 standards, and the detected concentrations did not appear to indicate petroleum contamination on-site, but rather were likely associated with the urban fill materials and creosote-treated wood. PCBs were only detected in a few samples (and at low levels) and are attributable to the urban fill as are the detected levels of SVOCs and metals.

Groundwater samples contained concentrations of metals and occasionally SVOCs above NYSDEC Class GA Ambient Water Quality Standards (drinking water standards), likely due to suspended sediment in the samples. Detected VOC concentrations were generally below Class GA standards, except two VOCs (acetone and p-isopropyltoluene) detected above Class GA standards in one groundwater sample each during the 2009 Phase II study. The detected concentrations of VOCs in groundwater appeared to be due to off-site sources and/or urban fill beneath the site, and did not appear to indicate on-site petroleum contamination.

As discussed in more detail in Sections E and F, soil would be disturbed in both No Build Scenarios and with the Proposed Project. The incremental soil disturbance due to the Proposed Project would be primarily focused on Parcel N.

Because of the known and potential subsurface contamination, remedial measures would be undertaken to avoid adverse impacts during excavation for the Proposed Project. These would include conducting soil disturbance under a new New York City Mayor's Office of Environmental Remediation (OER)-approved Remedial Action Plan (RAP) and an updated Construction Health and Safety Plan (CHASP), proper handling and disposal of excavated soil, and implementing other practices to protect workers and the surrounding neighborhood. In addition, the buildings would be constructed with waterproofing which would also serve as a vapor barrier to any remaining VOCs or methane. With these measures, as set forth in the Restrictive Declaration that will be recorded as part of the Proposed Project, no significant adverse impacts would result during or after construction as a result of the potential disturbance of any hazardous materials.

C. SUMMARY OF 1992 FEIS FINDINGS

The 1992 Riverside South FEIS analyzed the potential environmental impacts of developing an approximately 74.6-acre former rail yard adjacent to the Hudson River, which was divided into projected development parcels. The parcels corresponding to the project site (L, M and N) are the southern-most parcels of Riverside South project. The 1992 FEIS was based on reviews of public agency databases; the findings of soil, groundwater and soil vapor testing programs; correspondence with DEP; and a Construction Health and Safety Plan prepared by Dames & Moore in 1989.

The project site was created by landfilling in the late 1800s. The surrounding area was historically mixed-use and included many rail, auto-related and manufacturing uses. The New York Central & Hudson River Railroad freight yard, partially located on Parcels L and N, extended north of the site through most of Riverside South.

A soil stockpile of unspecified origin was removed from Parcel L in 1987. In addition, on-site soil may have been affected by an auto repair shop historically located on Parcel M and on the southern side of Parcel N, historical train tracks passing through Parcels L and N, and Amtrak rails passing through a sunken easement on Parcel N. Train tracks and related activities can contaminate surrounding soil with creosote, a wood treatment containing semi-volatile organic compounds, and other oils.

Several areas on other parcels north of the project site with subsurface contamination due to historical rail yard uses, e.g., petroleum storage tanks and the like, were identified. Remediation of these areas was ongoing at the time of the 1992 FEIS. These areas were not expected to impact the project site due to their cross-gradient locations with respect to groundwater.

D. EXISTING CONDITIONS

SUBSURFACE CONDITIONS

Based on geotechnical and environmental investigations of the Riverside South area, the project site is located at approximately Elevation +5 to +24 feet Manhattan Borough Datum (MBD). Soil at the site consists of urban fill placed in the late 1800s (generally ranging in thickness from approximately 10 to 35 feet), underlain by native organic silty clay, increasing in thickness in a westerly direction (up to 40 feet thick in the western portion of the site) and a thin layer of sand or till above bedrock (mainly mica and gneissic schist, granite and pegmatite) in portions of the site. Bedrock is encountered at approximately 0 to -50 feet MBD. Based on area geologic mapping and previous testing conducted in the surrounding area, serpentinite bedrock containing chrysotile (a type of asbestos) is present in off-site areas east and southeast of the site; this type of bedrock could also be present beneath the site.

Groundwater is encountered at approximately at Elevation -2 to +4 feet MBD. Groundwater is expected to flow in a westerly direction toward the Hudson River; however, the flow direction is tidally influenced and may be influenced in certain areas by other factors including the operation of a below grade pump house that dewaters the Amtrak rail line in the southeastern corner of Parcel N. Groundwater in Manhattan is not used as a source of drinking water.

RECENT SITE USES AND REGULATORY DATABASE LISTINGS

By mid-2005, the project site was occupied by paved parking lots with hydraulic car lifts and small parking office buildings. The southern portion of a parking garage with hydraulic car lifts was located on the northern side of Parcel L, and two parking garages were present along the southern edge of Parcel N. An Amtrak tunnel opening into a below-grade rail bed crossed the eastern portion of Parcel N from south to north, and an Amtrak pump house was located west-adjacent to the railway. By late 2008, all hydraulic lifts, buildings and pavement had been removed from a portion of Parcel L, which was used to store construction equipment and stockpile soil excavated during Riverside South construction; and numerous hydraulic car lifts were added to Parcel N to increase parking density. In mid-2009, additional observations included a soil pile in the basement of the on-site parking garage.

The Riverside South area was listed twice in the State Hazardous Waste Generator/Transporter database. One of the Hazardous Waste Generator listings, for Penn Yards at West 59th Street, may have referred to the site. No further information was provided, and no spills were associated with this listing. Regulatory records listed a Brownfield (Voluntary Cleanup Program or VCP) site on the block east of the site. A 2006 remedial investigation detected several gasoline-related VOCs below NYSDEC drinking water standards and slightly elevated concentrations of a pesticide (heptachlor epoxide) and metals in groundwater on the western edge of this property. While this Brownfield property is located upgradient of the site, it has been remediated and no contaminants were detected migrating from it in groundwater in follow-up sampling. This VCP site is not likely to have significantly affected the project site.

The active Consolidated Edison steam generating plant located south of the project site across West 59th Street reported several active and closed spill listings, including an active listing for a 25,000-gallon spill of dielectric fluid in 1983. Two spills reported in 2005 involved 50 gallons of dielectric fluid in a manhole, and an unspecified amount of the fluid on groundwater in an excavation adjacent to the project site. Although the site assessments concluded that releases from the Consolidated Edison plant are not likely to affect the site due to its cross-gradient groundwater flow location and the low mobility of dielectric fluid, oil-contaminated soil could be encountered during off-site work for utility installation.

Several auto repair shops and facilities with buried petroleum storage tanks (including filling stations) were identified on the blocks east and north of the site. Several closed-status petroleum spills were reported east of the site across West End Avenue.

INVESTIGATION FINDINGS

Figure 11-1 shows the locations of sampling conducted during the various programs described below.

1987–1989

Soil testing was conducted throughout the Riverside South property in 1987-1989 by Fanning Phillips & Molnar (FP&M), Dames & Moore, and Hazardous Waste Engineering Consultants. Soil on Parcel M and the southern half of Parcel N was not sampled at the time due to the presence of buildings, most of which were subsequently demolished. In 1987, FP&M tested the soil gas in the western and southern portions of the Riverside South property, including Parcel N using an organic vapor analyzer (OVA) and a gas chromatograph calibrated to detect Priority Pollutant Volatile Organic Compounds (PP VOCs). FP&M detected concentrations of VOCs

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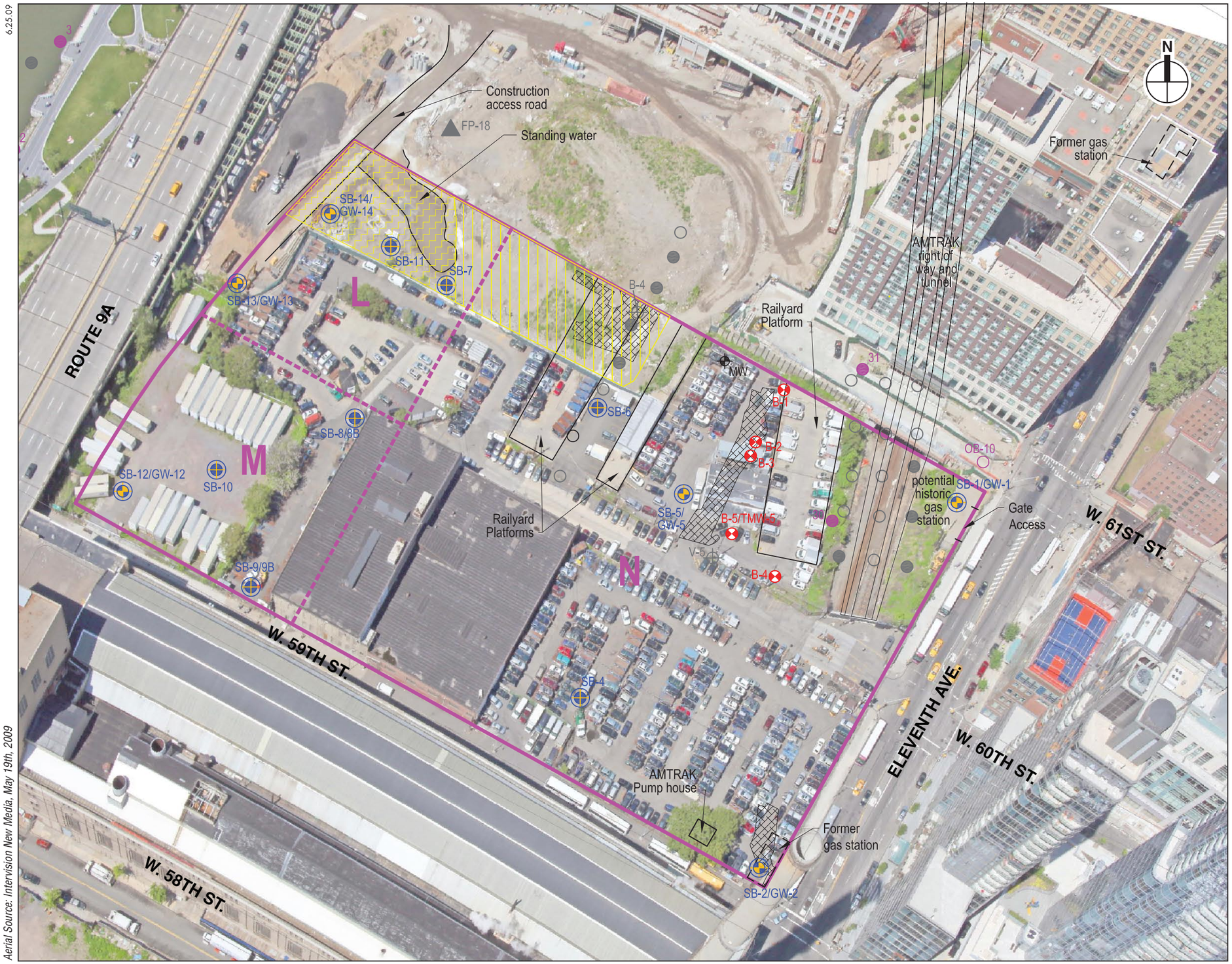

Aerial Source: Intervision New Media, May 19th, 2009

Project Site Boundary

Project Site Parcel

Sampling Legend

- SOIL BORING/GROUNDWATER SAMPLE LOCATION (AKRF 2009)
- SOIL BORING SAMPLE LOCATION (AKRF 2009)
- APPROXIMATE CONSTRUCTION STAGING AREA
- APPROXIMATE SOIL STOCKPILE AREA
- GEOPHYSICAL SURVEY ANOMALY (GPR) (Naeva Geophysics Inc. 2005)
- MW — EXISTING MONITORING WELL FROM UNKNOWN PREVIOUS INVESTIGATION
- B-4 — SOIL BORING AND SHALLOW WELL Fanning, Phillips & Molnar (FP&M),1988-89
- V-5 — VAPOR WELL (FP&M,1987)
- OVA SURVEY SAMPLE < 10 PPM VOLATILE VAPORS (FP&M,1987)
- OVA SURVEY SAMPLE > 10 PPM VOLATILE VAPORS (FP&M,1987)
- FB-18 — SHALLOW SOIL SAMPLE LOCATION AFTER SOIL MOUND EXCAVATION Hazardous Waste Engineering Consultants (HWEC, 1987)
- 1 — SHALLOW SOIL BORING 0-4' COMPOSITE Dames & Moore (D&M) / FP&M, 1987
- OB-10 — SHALLOW SOIL BORING 0-4'COMPOSITE & DEEP SOIL BORING 4'-10' COMPOSITE (D&M / FP&M, 1987)
- B-3 — SOIL BORING (LANGAN, 2005)
- B-5/TMW-5 — SOIL BORING/TEMPORARY MONITORING WELL (LANGAN, 2005)

RIVERSIDE CENTER

Soil and Groundwater Sampling Locations

Figure 11-1

greater than 10 parts per million (ppm) at some testing locations, including several locations on Parcel N. Soil and groundwater samples were collected from soil borings at four of these locations, including one location on Parcel N. The soil sample was reported to contain the VOC methylene chloride above NYSDEC Technical and Administrative Guidance Memorandum (TAGM) #4046 guidelines (the guideline used at that time) and the NYSDEC Part 375 Unrestricted Use Standard (the standard subsequently used by the regulatory agencies), but below the Part 375 Restricted Residential standard. The groundwater sample from this location contained VOCs below NYSDEC drinking water standards (Division of Water Technical and Operational Guidance Series [TOGS] No. 1.1.1—Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations). Groundwater is not a potable source in Manhattan, however, these standards were used as a comparison.

In 1987, after a soil stockpile was removed from a portion of Parcel L, Hazardous Waste Engineering Consultants tested shallow soil in the former stockpile locations, including a sample collected immediately north of Parcel L. The analysis detected elevated concentrations of metals (exceeding TAGM guidance values and Part 375 Unrestricted Use standards, but not Part 375 Restricted Residential standards) and SVOCs, but no VOCs, polychlorinated biphenyls (PCBs) or pesticides.

Additional testing was conducted by Dames & Moore and FP&M in 1988-1989, including the collection of one soil sample on Parcel N. This sample contained elevated concentrations of metals (above TAGM guidance values and Part 375 Unrestricted Use and Restricted Residential standards), and concentrations of SVOCs and VOCs below NYSDEC TAGM #4046 guidelines and Part 375 standards. Additional soil gas testing on the central and northern portions of the Riverside South property (north of the project site) was conducted using an OVA and a gas chromatograph calibrated to detect methane. The soil gas tests indicated that methane was present at concentrations greater than 10 parts per million (ppm) in several locations north of the project site.

2005 - 2008

Phase I Environmental Site Assessments (ESAs) were conducted for Parcels L and M in June 2005 by Langan. A Phase I ESA and a Phase II Subsurface Investigation of Parcel N were conducted in July 2005 by Langan. Subsequently, an updated site assessment of the entire project site was conducted by Langan in October 2008. A variety of information sources were reviewed to prepare the Phase I ESAs, including Sanborn fire insurance maps, City Directories (business and resident listings), environmental regulatory agency databases identifying state and federally listed sites, and New York City databases and records from the Department of Buildings and Fire Department (FDNY). In addition, reconnaissance of the site and surrounding neighborhood was performed. Car lifts containing hydraulic fluid were reported to exist on all three on-site parcels in the 2005 Phase I ESAs. Fluid in hydraulic lifts installed prior to 1979 have the potential to contain PCBs. No evidence of hydraulic fluid leaks was noted during the 2005 site visits. According to the 2008 update, all hydraulic lifts have been removed from a portion of Parcel L, and numerous new hydraulic car lifts supplied by 18 hydraulic oil reservoirs were added to Parcel N. Although the new lifts are not expected to use PCB-containing hydraulic oil, there have been reportedly frequent leaks onto the pavement from broken piping, and there was evidence of staining on pavement and on a rainwater sump pump, which indicates the potential for minor subsurface hydraulic oil contamination. The Subsurface (Phase II) Investigation of Parcel N included collection and laboratory analysis of five soil samples and one groundwater sample. The soil samples contained concentrations of metals and SVOCs above

NYSDEC TAGM #4046 guidelines and Part 375 Unrestricted Use and Restricted Residential standards, typical of urban fill. Elevated concentrations of metals, likely due to suspended sediment, were identified in the groundwater sample. No VOCs or PCBs were detected above TAGM guidelines or Part 375 standards in any of the samples. Since the 2005 Phase II investigation focused on the northeastern corner of Parcel N, a second Phase II investigation was conducted in June 2009 (described below) to assess subsurface conditions on the remainder of Parcel N, as well as Parcels L and M.

New York City Department of Buildings (NYCDOB) records indicated the installation of a 550-gallon No. 2 fuel oil underground storage tank (UST) in a warehouse on Parcel N, northwest of West 60th Street and West End Avenue. Like the historical filling station, the warehouse and the tank may have been removed for the construction of the on-site Amtrak railway. A geophysical survey of Parcel N conducted in June 2005 by Naeva Geophysics, Inc. did not locate any USTs on the parcel.

2009

The Subsurface (Phase II) investigation conducted by AKRF in June 2009 was carried out in general accordance with a Work Plan and site-specific Health and Safety Plan dated May 2009. The Phase II investigation involved the advancement of 13 soil borings with the collection of 26 soil samples and seven groundwater samples. One of the groundwater samples was collected from an existing groundwater monitoring well in the north-central portion of Parcel N; the origin of this well was not known as it did not appear on any reviewed previous reports. The investigation revealed:

- Concentrations of metals and SVOCs in exceedance of Part 375 Unrestricted Use and/or Restricted Residential standards, but typical of urban fill, in soil samples.
- Concentrations of VOCs in soil were generally low, with only acetone exceeding Part 375 Unrestricted Use standards (but not Restricted Residential standards) in 6 of the 26 samples. The detected soil VOC concentrations generally appeared to be associated with apparent creosote-treated wood or urban fill, and did not appear to indicate petroleum contamination. During site activities, soil was field-screened with a photoionization detector (PID), which measures relative concentrations of VOCs, and a landfill gas meter, which detects concentrations of methane. No methane was detected and only slightly elevated PID readings (up to 2.4 ppm) were recorded, which were attributed to urban fill materials.
- PCBs were not detected in most soil samples, but total PCB concentrations in four samples exceeded Part 375 Unrestricted Use standards (but not Restricted Residential standards), either due to historic urban fill beneath the site or prior (e.g., rail yard) site uses.
- Metals and SVOCs were present in groundwater samples in exceedance of Class GA (drinking water) standards, likely due to suspended soil particles in the samples. VOCs detected in groundwater were generally well below Class GA standards, with only two VOCs (acetone and p-isopropyltoluene) exceeding their respective Class GA standards in one groundwater sample each. Acetone exceeded its Class GA standard in a sample from the northeastern corner of the site, likely due to an off-site source, and p-isopropyltoluene exceeded its Class GA standard in a sample from the southwestern corner of the site, possibly due to the urban fill which included apparent creosote-treated wood in the soil boring where it was collected.
- The 2005 site assessment report for Parcel N noted that the Amtrak pump house, which was inaccessible, could contain PCB-containing hydraulic equipment or storage tanks.

Subsequent to this study, access was obtained and the pump house was inspected, which revealed that no hydraulic equipment or storage tanks were present, though a sump and two electric pumps were observed. Amtrak personnel stated that no storage tanks had ever been associated with the pump house.

SUMMARY OF FINDINGS AND EXISTING PROTECTIVE MEASURES

The Riverside South FEIS and subsequent investigations of the project site identified the following:

- The project site was historically occupied by stores and warehouses associated with the rail yard, and later used by parking facilities which included hydraulic lifts.
- Urban fill exists throughout the site in varying thicknesses (approximately 10 to 35 feet). Soil sampling identified levels of metals and SVOCs typical of urban fill. Concentrations of VOCs were generally low, with acetone found in 6 of the 26 samples collected in 2009, which were associated with apparent creosote-treated wood or urban fill. PCBs were not detected in most soil samples, but the few PCB detections were likely related to historic fill or previous site uses.
- Groundwater sampling in 1987/88, 2005 and 2009 detected elevated concentrations of metals and SVOCs (both likely due to suspended sediment). In one 2009 groundwater sample VOCs (acetone and p-isopropyltoluene) in exceedance of their respective Class GA groundwater standards were found, likely due to an off-site source.
- Although soil gas sampling for methane had not been conducted on-site prior to 2009, methane had been detected in soil vapor samples on other Riverside South parcels (likely due to subsurface organic clay). However, no methane was detected in soil samples or ambient air during June 2009 Phase II field activities.
- Based on their age, on-site structures may contain asbestos-containing materials (ACM), lead-based paint, and/or mercury and PCB-containing fluorescent lighting fixtures. Based on area geologic mapping and previous testing in the surrounding area, serpentinite bedrock containing chrysotile (a type of asbestos) is present to the east and southeast of the site; this type of bedrock could be present beneath the site.

  Subsequent to the 1992 FEIS, a December 1992 Restrictive Declaration for Riverside South included the requirement for mitigation of potential hazardous materials impacts, including groundwater contamination, in accordance with the 1992 FEIS. These measures included:

- Implementation of the DEP-approved Construction Phase Health and Safety Plan;
- Proper implementation of remedial alternatives for contaminated soil in accordance with all applicable requirements;
- Vapor testing of soil prior to construction;
- Air monitoring during soil disturbing activities in construction areas and active staging areas;
- Temporary gravel cover during construction of exposed soil in those portions of the site that would be used for construction staging, subject to truck traffic, or subject to other activities that might disturb soil;
- Fencing of undeveloped areas during project development;
- Testing and treatment, if necessary, of groundwater;
- Monitoring and soil aeration, if necessary, for methane gas; and
- Capping with impervious surfaces or clean fill.

The original 1989 Health and Safety Plan was updated in 1996 and specified air monitoring during construction for VOCs and particulates (dust) at the work area, as well as perimeter monitoring at the site boundary downwind of the work area. The HASP included measures for worker and community protection, including personal protective equipment, air monitoring and procedures for dealing with tanks unexpectedly encountered. DEP approved the updated HASP in a letter to AKRF dated July 23, 1996. Contractors and sub-contractors for the Riverside South site were required to either work in accordance with this HASP or create individual HASPs at least as preventive of hazardous materials exposure as this plan. The 2005 site assessments concluded that work on the site should be conducted in accordance with the HASP plan to minimize the potential for exposure to urban fill beneath the site and other potential contaminants. In addition, soil gas sampling for methane and VOCs, and an assessment of the potential for vapor intrusion were recommended. The 2008 ESA Update report concluded that, in addition to these concerns, subsurface soil affected by hydraulic or dielectric oil may be encountered on-site or in the vicinity of the site (e.g., during utility installation), and recommended a contingency plan for encountering oil-contaminated soil.

E. THE FUTURE WITHOUT THE PROPOSED PROJECT

Environmental assessments of the site identified hazardous materials concerns associated with the presence of urban fill beneath the site, the potential for VOCs in soil gas, and potential impacts to soil from on and off-site uses. In either No Build Scenario described in Chapter 1 (or in the Future With the Proposed Project), excavation could result in adverse impacts by increasing pathways for human exposure to potential hazardous materials. Legal requirements for excavation and construction activities (including those relating to off-site soil disposal, petroleum tank removal, spill reporting, and the removal, handling and disposal of asbestos containing materials, lead-based paint and PCBs, as well as requirements associated with the 1992 FEIS, the 1992 Restrictive Declaration and the 1996 CHASP would be followed.

Construction activities would be performed in accordance with the following:

- Prior to building demolition activities, surveys would be conducted for ACM. Confirmed ACM would be removed and disposed of prior to demolition in accordance with all applicable regulations.
- Building demolition activities would be conducted in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62—*Lead Exposure in Construction*).
- Unless labeling or test data indicates that any hydraulic lifts or fluorescent lighting fixtures installed prior to 1979 do not contain PCBs, and that fluorescent lights do not contain mercury, these objects would be handled and disposed of in accordance with all applicable regulatory requirements. In addition, non-PCB containing hydraulic lifts installed after 1979 would be disposed of in accordance with the applicable regulatory requirements.
- Since excavation for new buildings would extend below the water table, dewatering would be necessary during construction and new foundations would require waterproofing, which would also act as a vapor barrier for both VOCs and methane. As such, additional testing for VOCs and methane would not be needed to prevent the potential for post-construction impacts, but, monitoring for VOCs and methane during construction would be performed.
- Excavated soil would be screened for signs of contamination (such as odors, staining, or elevated photoionization detector (i.e., VOC) readings). Any soil exhibiting such signs of

contamination would be segregated and tested. All material that would need to be disposed of would be properly handled and disposed of off-site in accordance with all applicable requirements.

- In addition to VOC and methane monitoring, the construction site would be monitored for dust during any soil moving activity (excavation, loading onto dump trucks for off-site disposal, managing soil stockpiles, etc.).
- Air monitoring for VOCs, methane and particulates would be conducted during subsurface disturbance.
- Prior to dewatering, testing would be performed to ensure that the groundwater would meet applicable requirements. If necessary, pretreatment would be conducted prior to discharge, as required by DEP Sewer Discharge permits.
- A Stormwater Pollution Prevention Plan (SWPPP) would be implemented to prevent contaminated sediment runoff into nearby water bodies. The SWPPP would include procedures for soil stockpiling and runoff control. Excavated soil would be stockpiled for future reuse or off-site disposal. Stormwater management measures, such as hay bales or silt fencing, would be placed around stockpiles and properly maintained to ensure that stormwater runoff complies with the applicable requirements.

F. THE FUTURE WITH THE PROPOSED PROJECT

Soil would be disturbed with the Proposed Project—as it would under both no build scenarios—which could result in increased pathways for human exposure. A RAP and an updated CHASP, both reviewed and approved by OER, would be created, incorporating the requirements outlined above under the Future Without The Proposed Project. The plans would include, for example, requirements relating to: vapor barrier/waterproofing; soil screening, stockpiling, delineating and segregating excavated soil for proper management for either subsequent on-site re-use as backfill (below building structures, behind structural walls or beneath roadbeds, etc.) or for off-site transportation and disposal; dust control; quality assurance; and contingency measures should petroleum, asbestos-containing serpentinite bedrock or other unexpected contamination be encountered, and would be updated both to conform to current regulatory requirements (including 6 NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6) and to include the requirement for preparation and submission of a post-excavation closure report documenting that appropriate procedures were followed.

With the implementation of these measures, as set forth in the Restrictive Declaration that will be recorded as part of the Proposed Project, no significant adverse impacts related to hazardous materials would result from construction activities on the project site. Likewise, following construction, there would be no significant adverse hazardous materials impacts. ✷