Appendix A

Hazardous Materials – Remedial Work Plan

Appendix A: Hazardous Materials

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. This appendix contains the following:

- July 5, 2006 letter from NYSDEC;
- Executive Summary of the Remediation Work Plan.

Information on the NYSDEC Brownfield Cleanup Program can be found on NYSDEC's website: http://www.dec.state.ny.us/website/der/bcp/.

West 61st Site

NEW YORK, NEW YORK

Remedial Work Plan
EXECUTIVE SUMMARY

NYSDEC BCP Number: C231043

AKRF Project Number: 10321

Prepared for:

Algin Management Company, LLC
64-35 Yellowstone Boulevard
Forest Hills, New York 11375

Prepared by:

AKRF Engineering, P.C.
440 Park Avenue South
New York, NY 10016
212-696-0670

Reviewed and Approved by:

MARCH 2006

EXECUTIVE SUMMARY

The West 61st Street Site (the "Site") consists of approximately 62,500 square feet (approximately 1.44 acres) located on West 60th and 61st Streets between West End Avenue and Amsterdam Avenue in Manhattan, New York. The southwestern boundary of the Site is 100 feet east of west End Avenue and approximately 500 feet east of the Hudson River. Specifically, the Site consists of Block 1152, Lots 5, 8, 10, 11, 12, 13, 43, 52, 53, and 55. These parcels are currently occupied by vacant land, except for the northeastern corner of the Site, which is presently used as a commercial parking lot. Residential, industrial, institutional (three schools and a NYC Parks Department pool and community center), and commercial properties (an auto repair shop) are present in the surrounding neighborhood. The Site is located in an area currently going through a transformation from four and five-story residential, industrial, and commercial establishments, to schools and low-rise and high-rise residential buildings containing first-floor retail uses (stores).

The proposed development on the Site is a multi-tenant residential complex with low-rise and high-rise structures, located on the main area of the Site, between West 60th and 61st Streets. A two-level underground parking garage will be situated beneath two of the buildings. A recreation area, consisting of a tennis court and track, will be constructed on the northeastern portion of the Site, along West 60th Street. The intended use of this site is consistent with the current transition of this neighborhood and surrounding area.

A Phase I Environmental Site Assessment (ESA) was performed by AKRF on the Project Site in June 2003 to provide a preliminary Site evaluation to determine whether any existing environmental conditions or past Site uses could affect the intended Site use. The Phase I ESA Report included the findings of a Site inspection, the evaluation of available historical information, and the interpretation of relevant federal and State environmental databases. The Phase I ESA noted the presence of several above ground storage tanks and the likelihood of several below ground storage tanks. Former Site uses included a gasoline station, an automobile repair shop, an iron works, and automobile parking areas. The report also noted the presence of a commercial-industrial facility (Emsig) located east of Lot 13, which produced buttons and fabric. Records indicated that the facility generated metals and solvents in concentrations to be classified as hazardous wastes, and utilized two petroleum storage tanks during it operation from 1926 to 2003. The Phase I ESA identified several recognized environmental conditions (e.g., on-site tanks and previous uses of the Site and the off-site Emsig facility), and recommended that additional information be gathered to further assess the Site.

In October of 2004, Algin Management Company, LLC (Algin) submitted an application to the New York State Department of Environmental Conservation (NYSDEC) to participate in the Brownfield Cleanup Program as a volunteer and was approved to participate in early 2005. Under this agreement, Algin performed a NYSDEC- approved and New York State Department of Health (NYSDOH)-approved remedial site investigation in late summer and early fall of 2005, and submitted a Remedial site Investigation Report (RIR) in January 2006. An Interim Remedial Measure Work Plan was submitted to NYSDEC and NYSDOH in February 2006 to remove one or more suspected underground tanks at three locations, and to remove two distinct locations of contaminated soil containing lead and acetone. The Remediation Work Plan has been prepared to address the environmental conditions identified in the January 2006 RIR.

The remedial investigation activities that occurred at the Site included; a geophysical survey to identify underground tanks; the advancement of soil borings at 18 locations with the collection of two or more samples at each location and analysis for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals; the installation of 10 groundwater monitoring wells, with the collection of samples and analysis for VOCs, SVOCs, pesticides, PCBs and metals; and the installation of soil vapor probes with the collection and analysis of soil vapor samples for VOCs. The results of the remedial investigation indicated that underground tanks are

suspected at three locations (two in Lot 43 and one in Lot 53), and possibly a fourth location in Lot 8. Elevated levels of lead were detected in the northeastern corner of Lot 43 and a slightly elevated concentration of acetone was detected at one location (MW-4) in Lot 5. Petroleum contamination was identified in the southern portion of the Site along West 60th Street. The groundwater flowing from the Site contained one volatile organic compound (benzene) and two pesticides (heptachlor epoxide and 4,4' DDD) slightly above groundwater quality standards. Several metals were identified in concentrations exceeding groundwater standards. The RIR stated that the Site does not pose a significant threat to public health or the environment and indicated that the proposed remedy (construction of the proposed project and removal of contaminated soil) would remove on-site contamination to NYSDEC/NYSDOH standards such that the future occupants would not be exposed to any contaminants remaining at the Site, and any remaining contaminants would not pose a future off-site environmental or health threat.

This Remediation Work Plan includes measures to remove sources of contamination including: underground tanks; contaminated soil directly around the tanks; petroleum-contaminated soil; historic (urban) fill; and construction and demolition debris within the proposed cellar and sub-cellar. In addition, excavation of fill material is necessary in the recreation area and the courtyard to achieve desired elevations for development. Soil beneath the limits of excavation will be tested to ensure that they meet NYSDEC-approved limits in Technical and Administrative Guidance Memorandum (TAGM) # 4046 Recommended Soil Cleanup Objectives (RSCOs) or the allowable site specific soil limits proposed in this document. Another important feature in the Remediation Work Plan is the immediate post-excavation construction of the building foundation and cellar/sub-cellar walls to prevent and/or minimize the recontamination of the remediated areas of the Site. The bottom elevation of the cellar of Building A and the sub-cellar of Buildings B and C are below the groundwater level. Immediate construction of the foundation and surrounding walls will prevent and/or minimize off-site contaminants from entering the Site and avert possible recontamination of the Site. The installation of the foundation and walls is necessary around the entire site, except the eastern section of Lot 43, which is elevated and is not subject to groundwater inflow. The groundwater is in the bedrock and will flow beneath this portion of the Site. To achieve this purpose, the proposed foundation and walls should be constructed: along West 60th Street; along the western property line of Lot 5, along the northern property line of Lot 5; along Building A facing Lot 8; along Building A facing Lots 55, 56, and 57; along Building B facing Lot 8; along Building C facing Lot 55, along the western property line of Lot 55; along West 61st Street; along Building C facing the eastern section of Lot 43 (existing parking lot); and along the eastern property line of Lot 13.

The Remediation Work Plan indicates that most of the excavated waste will be transported off-site to out-of-state facilities located in New Jersey and Pennsylvania. Only native soil to be used as backfill will be tested and approved by NYSDEC before its use. The RWP contains several appendices: a Remediation Health and Safety Plan (Appendix A), which addresses Community Air Monitoring to ensure that the surrounding community is protected from any vapors, dust or odors emitted during the excavation and loading of the on-site soil; a Quality Assurance Project Plan (Appendix C) to ensure that appropriate collection and analytical procedures are observed for any environmental or waste characterization sampling activities; a Sampling Plan (Appendix D) to ensure specific collection and analytical procedures are observed to meet the requirements of the facilities receiving the on-site soil and NYSDEC endpoint sample requirements; and a Soil Management Plan (Appendix E) to provide direction for excavation and any stockpiling of the excavated material, and truck waiting, loading and exiting procedures, including haul routes, and measures to minimize dust, odors and noise from the trucks.

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21ST Street, Long Island City, NY 11101-5407
Phone: (718) 482-4995 • **FAX:** (718) 482-6358
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

July 05, 2006

Michelle Lapin
Senior Vice President
AKRF
440 Park Avenue South
New York, NY 10016

Re: West 61st. Street Site
Site # C 231043
Remedial Work Plan

Dear Ms. Lapin:

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health, has completed its review of the document "Remedial Work Plan" dated March, 2006 and amended by a "Remedial Work Plan Addendum" letters dated June 26 and June 30, 2006. The report and associated amendments were submitted to NYSDEC under the Brownfield Cleanup Program for project number C-231043. The Remedial Work Plan was released for public comment for forty five days as required by program policy. That comment period ended on May 20, 2006.

The Remedial Work Plan as amended, (the Plan) is deemed to be appropriate and protective of public health and the environment and is hereby approved for implementation.

The approved Remedial Plan, including the Stipulation List and amendment letter must be placed by the Applicant in all publicly accessible repositories for the project within 5 business days. A certification that this document has been placed in project repositories, and that the repositories are complete with all project documents, must be submitted to the NYSDEC project manager.

The Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under the Plan. In particular, the Applicant and its contractors are responsible for the structural integrity of excavations, and protection of the structural integrity of buildings, utilities, and other structures both onsite and offsite that may be adversely affected by those excavations. The Applicant and its contractors must obtain any local, state or federal permits or approvals that may be required to perform work under the Plan. Further, the Applicant

and its contractors are solely responsible for the identification of utilities that might be affected by work under the Plan and implementation of all required, appropriate, or necessary health and safety measures during performance of work under the approved Plan.

I understand that remedial work is starting next week. Please keep me informed of all field activities through daily reports via e-mail to spsingh@gw.dec.state.ny.us. Should you have any questions, please contact either me at 718-482-4897 or Dr. Daniel Walsh at 718-482-4599.

Sincerely,

Shaminder Chawla
Hazardous Waste Remediation

CC:

J. Gustella, NYSDOH
D. Smith, NYSDEC
D. Walsh, NYSDEC