SUMMARY REPORT OF SUPPLEMENTAL

SOIL AND GROUNDWATER INVESTIGATION

Performed on the Property Located at

321 Railroad Avenue, City of Peekskill
Westchester County, New York

NYSDEC SPILL NUMBER 0409835

February 11, 2005

Prepared By:

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ESI File: GP04143.21

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Prepared For:

Ginsburg Development Corp.
245 Saw Mill River Road
Hawthorne, NY 10532

Phase I services performed by Ecosystems Strategies, Inc. and summarized in this Combined Phase I and II ESA have been conducted in accordance with Method E 1527-00 as developed by the American Society for Testing and Materials (ASTM), and all fieldwork services were performed in accordance with generally accepted practices and established New York State Department of Environmental Conservation (NYSDEC) protocols.

The undersigned has reviewed this Combined Phase I and II ESA and certifies to Ginsburg Development Corporation that the information provided in this document is accurate as of the date of issuance by this office

Paul H. Ciminello
President

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1.0 INTRODUCTION

1.1 Purpose

This Summary Report of Supplemental Soil and Groundwater Investigation ("Report") chronicles fieldwork performed by Ecosystems Strategies, Inc. ("ESI") on the property located at 321 Railroad Avenue, City of Peekskill, Westchester County, New York. The investigative and analytical work summarized in this Report was performed to further delineate known areas of documented soil contamination, which were identified during a Phase II investigation previously conducted by ESI (see Section 1.4, below), and to provide an initial analysis of existing groundwater quality.

This Report describes all fieldwork methodologies for the work conducted by this office, includes discussions of the resulting analytical data from collected samples, and provides conclusions and recommendations drawn from the fieldwork and analytical data.

1.2 Limitations

This written analysis summarizes the site characterization activities conducted on a specified portion of the property located at 321 Railroad Avenue, City of Peekskill, Westchester County, New York and is not relevant to other portions of this property or any other property. It is a representation of those portions of the property analyzed as of the respective dates of fieldwork. This Report cannot be held accountable for activities or events resulting in contamination after the dates of fieldwork.

Services summarized in this Report were performed in accordance with generally accepted practices and established New York State Department of Environmental Conservation (NYSDEC) protocols. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties, but as probabilities based on professional judgement.

1.3 Site Location and Description

The subject property is an irregular-shaped parcel having frontage on the eastern side of Railroad Avenue. A small, one-story concrete-block building, occupied by a taxi dispatcher and dry cleaning drop-off facility, is located on the central portion of the property. The remainder of the property is primarily utilized as a commuter parking lot.

The specified portion of the property on which the subsurface investigation was conducted (hereafter referred to as the "Site") consists of areas to the south and west of the on-site building (a former service station), which have been impacted by petroleum releases. The source of the petroleum contamination is likely to have been two inactive underground storage tanks (USTs) located to the south of the building, and/or from the former fuel-pump island and piping network. A Fieldwork Map indicating specific Site characteristics is located in Appendix A of this Report.

1.4 Previous Environmental Reports

A Phase I Environmental Site Assessment was performed on the subject property by ESI in October 2004 and a Phase II Investigation was conducted in November 2005 (based on evidence of historic use of the property as a service station). The Phase II Investigation consisted of the completion of a ground penetrating radar (GPR) survey and the extension of soil borings. The findings of these investigations are documented in a Combined Phase I and II Environmental Site Assessment ("Combined Phase I/II") issued by ESI on December 15, 2005.

The GPR survey was conducted in the area surrounding the on-site structure. Two 550-gallon USTs, a former fuel-pump island, and buried piping between the tanks and the fuel-pump island were identified and field marked, based on direct instrument readings. The USTs are located approximately 15 feet south of the building and are oriented in an east/west direction. Fill ports for the USTs were located and the tops of the tanks determined to be approximately 2 to 3 feet below surface grade (bsg). The tanks were partially filled with water at the time of the investigation. The former fuel-pump island was estimated to have been located approximately 15' west of the building. No other tanks were identified in the vicinity of the building during the completion of the GPR survey.

Eight soil borings were mechanically extended on the Site. Sampling was conducted at each boring location at four-foot intervals to a maximum depth of 12' bsg. Subsurface materials generally consisted of dark, variable texture sands (likely to be fill materials). Saturated soils were encountered at 6 to 8' bsg.

Field evidence of significant contamination, including the presence of non-aqueous-phase liquids (NAPL), was observed in several borings located near and immediately downgradient of the USTs, and overtly impacted soils were observed to extend into the saturated zone (Table 1, Appendix B). Elevated concentrations of petroleum products were documented in soil samples collected from areas exhibiting evidence of NAPL (Tables 1, Appendix B). Low levels of petroleum constituents were detected (at a minimum) in all downgradient sampling locations. No PCBs or significant quantities of metals were detected in a subsurface sample collected adjacent to, and downgradient of, the USTs. These findings are consistent with a release of petroleum products from the USTs and/or the former fuel-pump island/piping network. ESI reported a spill event to the NYSDEC (#0409835) on December 3, 2004.

The Combined Phase I/II concluded that: 1) existing laboratory were insufficient to fully define the horizontal and vertical extent of petroleum contamination; 2) on-site groundwater may have been impacted by the petroleum release; and, 3) the removal of the USTs and associated contaminated soils would eliminate the most likely source(s) that could potentially contribute to the degradation of groundwater quality.

1.5 Objectives

The objectives of the Supplemental Soil and Groundwater Investigation were as follows:

- To provide additional information as to the extent of documented petroleum contamination of on-site soils;
- To provided documentation of existing groundwater quality; and,
- To suggest, if appropriate, further investigative and/or remedial options regarding identified on-site contamination.

2.0 SUBSURFACE INVESTIGATION

2.1 Summary of Services

In order to achieve the objective specified in Section 1.5, above, the following services were conducted by ESI on selected portions of the Site:

- Extended six soil borings on the Site to a maximum depth of approximately 8' bsg in the vicinity of two identified USTs, a former fuel-pump island, and likely down-gradient areas;
- Installed 3 temporary well-points at 3 of the boring locations; and,
- Documented the on-site presence or absence of contamination through sampling and laboratory analysis of soil samples for volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs), and groundwater samples for VOCs.

This Report is divided into individual sections that describe the fieldwork conducted by ESI at the Site (Section 2.2), laboratory analysis of samples (Section 2.3), and conclusions and recommendations (Section 3.0).

2.2 Fieldwork Methodology

2.2.1 Site Preparation Services

Prior to the initiation of fieldwork, a request for a complete utility markout of the subject property was submitted by ESI as required by New York State Department of Labor regulations. Confirmation of underground utility locations was secured and a field check of the utility markout was conducted prior to the extension of soil borings.

2.2.2 Extension of Soil Borings

ESI personnel supervised the extension of eight soil borings on the Site by Enviroprobe Service, Inc. on January 15, 2005. These soil borings were extended in the vicinity of the tanks (GP-10, GP-11, and TMW-1), near the northwest corner of the on-site structure (GP-12), and downgradient of the tanks and former fuel-pump island, near the western property line (GP-9 and GP-13). All soil borings were extended using a truck-mounted Geoprobe© direct-push coring device equipped with disposable acetate sleeves (used to prevent the cross contamination of soil samples). Borings GP-9, GP-10, and GP-11 were pre-probed to 4' bsg prior to soil sampling, and TMW-1 was pre-probed to 8' bsg (this location was utilized only for water collection (see Section 2.2.3).

Sampling was conducted at each boring location at four-foot intervals to a maximum depth of 8' below grade or until refusal was reached. The sampling spoon was decontaminated prior to the initiation of fieldwork and after the collection of each sample following established NYSDEC protocols.

A MiniRAE 2000 (Model PGM 7600) photo-ionization detector (PID) was utilized by ESI personnel to screen all encountered material for the presence of any volatile organic vapors where appropriate. Prior to the initiation of fieldwork, this PID was properly calibrated to read parts per million calibration gas equivalents (ppm-cge) of isobutylene.

An assessment of subsurface soil characteristics, including soil type, the presence of foreign materials, field indications of contamination (e.g., unusual coloration patterns, or odors), and instrument indications of contamination (i.e., PID readings) was made by ESI personnel during

the extension of each soil boring. ESI personnel maintained independent field logs documenting physical characteristics, PID readings, and any field indications of contamination for all encountered material at each boring location. Relevant information from ESI logs for each boring location is summarized in Table 2, Appendix B.

Subsurface soils encountered at the Site during the extension of the soil borings generally consisted of dark sands (likely to be fill materials) with some deeper layers of silt and organic muck. Groundwater (as evidenced by saturated soil) was encountered at 4' bsg during the extension of the soil borings.

A Fieldwork Map indicating boring locations and associated selected site features is provided in Appendix A.

2.2.3 Sample Collection

All samples collected during the fieldwork conducted by ESI were obtained in a manner consistent with NYSDEC sample collection and decontamination protocols. Decontaminated stainless steel trowels and dedicated gloves were used at each soil sample location to place the material into jars pre-cleaned at the laboratory. Prior to the collection of each material sample, the sample collection instrument was decontaminated to avoid cross-contamination between samples.

Temporary 1" PVC well-points with 0.1" screens were installed at GP-9, GP-13, and TMW-1, in order to collect groundwater samples. These temporary wells were purged prior to sampling of at least three well volumes (using a peristaltic pump and dedicated plastic tubing), in order to facilitate the clearing of fine-grained suspended material. An obvious petroleum sheen was noted on the purge water from GP-13. Subsequent to well purging, a groundwater sample was collected in laboratory supplied glass vials containing an acid preservative.

All sample containers were placed in a cooler immediately after sample collection and were maintained at cool temperatures prior to transport to the laboratory. The soil samples were transported the following day via courier to York Analytical Laboratories, Inc. (York Laboratories), a New York State Department of Health-certified laboratory (ELAP Certification Number 10854) for chemical analyses. Appropriate chain-of-custody procedures were followed.

2.3 Laboratory Analysis

2.3.1 Guidance Levels

The term "guidance level," as defined in this Report, refers to the concentration of a particular contaminant above which remedial actions are considered more likely. The overall objective of setting guidance levels is to assess the integrity of on-site soils relative to conditions which are likely to present a threat to public health or the environment, given the existing and probable future uses of the site. On-site soils with contaminant levels exceeding these guidance levels are considered more likely to warrant remediation. No independent risk assessment was performed as part of this investigation.

The guidance levels identified in this Report for petroleum hydrocarbons in soils are based on "recommended cleanup objectives" contained in the NYSDEC's Technical and Administrative Guidance Memorandum #4046 (TAGM), dated January 24, 1994, as modified by subsequent NYSDEC memoranda. Guidance levels for hydrocarbons in groundwater are based on the NYSDEC's Water Quality Regulations Surface Water and Groundwater Classification and

Standards, 6 NYCRR Parts 700-705, as amended. All data presented in this Report have been analyzed in accordance with applicable NYSDEC standards.

2.3.3 Laboratory Results

A summary of the results of the laboratory analyses conducted on soil and water samples is presented below (Data Summary Tables are presented in Appendix C and complete copies of Laboratory Reports are included as Appendix D). Recommendations regarding these findings are located in Section 3.0 of this Report, Conclusions and Recommendations.

SOIL

VOCs

Samples GP-9 (4-8') through GP-13 (4-8') and HB-6 (10-11') were analyzed for the presence of VOCs utilizing USEPA Method 8021 STARS List. Multiple VOCs were detected in sample GP-13 at concentrations below guidance levels; reported laboratory minimum detection limits for this sample, however, were 200 parts per billion (ppb), would could be masking low level exceedences of benzene (guidance level 60 ppb) or MTBE (guidance level 120 ppb). Low levels of two VOCs were detected in sample GP-12. No VOCs were detected in any other samples. No benzene or MTBE was detected in any sample submitted for laboratory analysis.

PAHs

Samples GP-9 (4-8') and GP-13 (4-8') were analyzed for the presence of PAHs utilizing USEPA Method 8270. Multiple PAHs were detected at relatively low concentrations in both samples. Two PAHs (peak concentration of 330 ppb) were reported above guidance levels in GP-9 and one PAH (peak concentration of 75 ppb) was detected above the guidance level in GP-13.

GROUNDWATER

Groundwater samples TMW-1, TMW-9, and TMW-13 were analyzed for the presence of VOCs utilizing USEPA Method 8260. Fourteen VOCs (BTEX and associated compounds) were detected in sample TMW-13. Ten of these compounds were detected at concentrations exceeding guidance levels, including benzene (7 ppb) and n-propylbenzene (220 ppb, the peak VOC concentration). Low levels of ethylbenzene (2 ppb) and n-propylbenzene (1 ppb) were detected in sample TMW-1. No halogenated hydrocarbons were detected in either sample. No VOCs were detected in sample TMW-9.

3.0 CONCLUSIONS AND RECOMMENDATIONS

This office has completed the services summarized in Section 2.0 on specified portions of the property located at 321 Railroad Avenue, City of Peekskill, Westchester County, New York. Services included the extension of 6 soil borings, and the installation of 3 well-points, in order to provide additional data regarding know on-site petroleum contamination. Based on the services provided and data generated, the following conclusions and recommendations (in **bold**) have been made.

1. The Site is a former service station, which contains two improperly abandoned, 550-gallon underground storage tanks (USTs). These tanks appear to have been abandoned for some time and contain water, suggesting that they are not structurally sound. Field evidence of petroleum impacted soil has been observed in the vicinity of the USTs and former fuel-pump island, and to the west (i.e. downgradient) of the tanks, during fieldwork events in November 2004 and January 2005. Laboratory analysis of soil samples confirms the presence of elevated concentrations of both volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs) in soil samples. Based on these findings a spill event (#0409835) was reported to the NYSDEC in December 2004. The source of this documented contamination is likely to have been a release from the on-site USTs and/or former fuel-pump island. The NYSDEC will require the removal of the tanks and surrounding contaminated soils in order to close the spill file. Elevated PAH concentrations at soil samples (with the exception of GP-5 [8-12']) are likely to be indicative of contributions from on-site fill.

   An analysis of laboratory data indicates that between 300 and 600 cubic yards of soil with contaminant concentrations exceeding TAGM cleanup objectives are present at the Site. Additional subsurface soils exhibiting petroleum odors are present on the Site; although the NYSDEC will not require removal of these soils, this material will require special handling and will incur additional disposal costs if it is excavated during site development activities.

   It is recommended that the USTs, any existing subgrade piping, and all soils containing significantly elevated petroleum concentrations be excavated and removed from the subject property according to a NYSDEC approved Workplan. A copy of this Report should be provided to the NYSDEC.

   Estimated cost of tank removal : $5,000
   Estimated cost of contaminated soil removal (transport and offsite disposal): $30,000 to $60,000
   Note: no estimate is provided for site restoration activities

2. Fieldwork observations and laboratory data document VOC contamination in groundwater at the western margin of the subject property (TMW-13), near the former fuel-pump island. Groundwater in the immediate vicinity of the USTs (TMW-1) is not significantly impacted and no evidence of contamination was found at the southwestern corner of the property (TMW-9). Groundwater at TMW-13 contains multiple exceedences for BTEX and related compounds, including benzene (7 ppb) and n-propylbenzene (220 ppb, the peak VOC concentration). No MTBE or halogenated hydrocarbons were detected in on groundwater. The presence of elevated VOC concentrations at TMW-13 suggests that impacted groundwater may extend beneath Railroad Avenue. Documented VOC concentrations are relatively low and it is ESI's opinion that active groundwater remediation is not warranted at this time. Groundwater quality is expected to improve following removal of the source of contamination (the USTs and contaminated soil). The NYSDEC is likely to require quarterly monitoring to document groundwater quality.

   It is recommended that permanent groundwater monitoring wells be installed (if required by the NYSDEC) subsequent to tank and soil removal and that quarterly monitoring be conducted according to a NYSDEC approved Workplan.