Ardaman & Associates

Geotechnical, Environmental and Materials Consultants

Post to Fax Note _ 7671	Date / 10/0
Delly Janger	From
Co,/Dept.	Co.
Phone #	Phone # 3ev
FBX # 371-2558	Fax#

March 24, 2009 File No. 03-8619

TO:

Ridgewood Building and Development

and Palmer Place, LLC

P.O. Box 5769 Sarasota FL 34277

Attention: Bllly Springer .

SUBJECT:

Limited Soils Investigation, Excavation Observation and Confirmation Sampling and

Analysis for Above Ground Storage Tank located at Palmer Place Parcel, Iona

Road at Palmer Boulevard, Sarasota County, Florida

Dear Mr. Springer;

As requested, representatives of Ardaman & Associates, Inc. have conducted limited soil sampling and analysis, observed the excavation of petroleum impacted soils and subsequently conducted confirmation soil sampling and analysis at the above referenced site. This report will document the results of our field investigation and analysis.

As you are aware, Phase I and Phase II Solls Investigation have been conducted at the above referenced site. During the performance of the Limited Phase II Solls Investigation, as documented in our report, dated November 16, 2006, an area of petroleum impacted soils was identified in the vicinity of an above ground storage tank. While the area of impact appeared to be somewhat limited, overlying structures and pumps complicated the excavation of the Impacted materials at that time.

Subsequently, a decision was made to excavate the soils and limited additional soils investigation was conducted on March 9, 2009. Seven (7) borings were conducted utilizing a mechanical augering for retrieval of discrete soil samples. These samples were collected by first advancing either a nominal 3 1/2-inch hand auger or a 4-inch mechanical auger to the desired depth and then withdrawing the auger without rotation to facilitate collection of discrete soil samples. Samples were collected generally at 1-foot intervals relative to the ground surface to a maximum depth of 10 feet. Soil samples were evaluated at the surface for apparent stains and odor and then replaced directly into 8-ounce sample jar and covered with a foil lid.

Ridgewood Building and Development File No. 03-8619 March 24, 2009 2

Samples obtained during our field program were thoroughly examined in the field using an organic vapor analyzer (OVA) to determine the fuel content of the soil by way of a soil gas analysis. The FDEP recommends the use of this type of flame-ionization device (FID) to analyze soil samples for volatile organics in the field. Samples obtained from our site investigation were tested for volatile organic content using a Century 128 OVA, calibrated with methane. To obtain the OVA reading, an 8-ounce jar was half-filled with a representative soil sample. An airtight lid was placed on the jar. The OVA tubular sampling probe was then plerced through the airtight lid so that head space gas was pumped through the OVA. A stable reading for head space gas was obtained instantaneously. A copy of the OVA field sampling logs and a Figure depicting borings relative to site structures is included in Appendix 1.

It was determined that the soils could be excavated however the overlying structures including two (2) pump houses and the tank would require removal. The soils were determined appropriate for disposal at the Waste Management Okeechobee Landfill and on March 17, 2009, excavation activities were commenced. A copy of the non-hazardous waste profile sheet and weight tickets are included in Appendix II. As indicated, four (4) loads of material were accepted at the Okeechobee Landfill on March 17th, with a total weight of 77,93 tons.

Following excavation of the material, confirmation organic vapor analysis was conducted at the sidewalls of the excavation. A copy of the OVA field sampling notes and Figure depicting the approximate limits, as well as sample locations are included in Appendix III. As indicated, net positive OVA response remained at the location of Sample 2 from the 7 foot depth to the 10 foot depth at Sample Location 3, at the 8 foot depth only, Sample Location 4, at the 5 to 8 foot depth, Sample Location 8 at the 7 to 10 foot depth and at Sample Location 9, at the 6 to 8 foot depth. Nevertheless, the only organic vapor readings exceeding the 10 ppm threshold were at Sample Location No. 2, therefore, a confirmation soil sample was collected at this location for submittal to the laboratory for analysis.

Laboratory analysis was conducted according to EPA Method 8260 for volatile aromatics, according to EPA Method 8310 for Polynuclear Aromatic Hydrocarbons (PAH) and by the FL-PRO Method for Total Petroleum Hydrocarbons (TPH). A copy of the chain-of-custody form and laboratory analysis are included in Appendix IV. As Indicated, the Polynuclear Hydrocarbons 1-Methyl Naphthalene, 2-Methyl Naphthalene, Acenaphthene, Chrysene, Fluorene and Naphthalene were detected at concentrations of 707, 1120, 37.6, 31.3, 120 and 286 micrograms per kilogram (µg/kg) respectively. The Soil Cleanup Target Levels (SCTL) for Direct Exposure in a residential scenario for these constituents are 200,000, 210,000, 2,400,000, 100, 2,600,000 and 55,000 µg/kg, respectively. Additionally, the leachability based on drinking water criteria for the constituents are 3,100, 8,500, 2,100, 77,000, 160,000 and 1,200 µg/kg, respectively. Therefore, the detected concentrations in the confirmation soil sample all fall below both the direct exposure and the leachability Soil Cleanup Target Levels. In addition, Total Petroleum Hydrocarbons were detected at 67.9 milligrams per kilogram (mg/kg), which is below direct exposure of 460 mg/kg and the leachability based on groundwater criteria of 340 mg/kg. Therefore, all analytes of concern were detected at concentrations below applicable Soil Cleanup Target Levels (SCTL).

The excavation was backfilled to grade. At this time, Ardaman & Associates, Inc. recommends no further investigation as to the area of petroleum impacted solls.



Ridgewood Building and Development File No. 03-8619 March 24, 2009 3

It has been a pleasure to be of assistance to you with this project. Please contact our office if we may be of further service to you or should you have any questions concerning this report.

Gary H. Schmidt, P.E. Senior Vice President

Fl. Lic. No. 12305

Very truly yours,

Ardaman & Associates, Inc.
Certificate of Authorization No. 5950

Ashby Hoover, P.E. Senior Project Engineer Fl. Lic. No. 48942

AH/GHS:nh

cc: Shawn Leins - AM Engineering, Inc.

Ardemen & Associates, Inc.