

THE INFORMATION CONTAINED IN THIS REPORT TITLED
"VOLUNTARY INVESTIGATION AND REMEDIATION PLAN (VIRP)
AND VRP APPLICATION FOR THE
FORMER LOU SOBH FORD PROPERTY
DECATUR, DEKALB COUNTY, GEORGIA©"
HSI#10915

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**VOLUNTARY INVESTIGATION AND REMEDIATION PLAN (VIRP)
AND VRP APPLICATION FOR THE
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DECATUR, DEKALB COUNTY, GEORGIA®"
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ACRONYMS

AES	Analytical Environmental Services, Inc.
AFCEE	Air Force Center for Environmental Excellence
APLS	Aqueous Phase Liquids
Applicant	Sobh Decatur Properties, LLC
bgs	Below Ground Surface
bls	Below Land Surface
CAP	Corrective Action Plan
cis-1,2-DCE	cis-1,2-Dichloroethene
CSR	Compliance Status Report
COCs	Constituents of Concern
COPC	Constituent of Potential Concern
CSM	Conceptual Site Model
EMNA	Enhanced Monitored Natural Attenuation
Georgia EPD	Georgia Environmental Protection Division
GHWMA	Georgia Hazardous Waste Management Act
HRC	Hydrogen Releasing Compound
HSI	Hazardous Site Inventory
HSRA	Hazardous Site Response Act
HSRP	Hazardous Site Response Program
HWMA	Hazardous Waste Management Act
IRIS	Integrated Risk Information System
ISCO	In-situ Chemical Oxidation
MCL	Maximum Contaminant Levels
µg/L	Micrograms per Liter (same as ppb)
mg/Kg	Milligrams per Kilogram (same as ppm)
mg/L	Milligrams per Liter (same as ppm)
NAPLS	Non-Aqueous Phase Liquids
NC	Notification Concentration
Peachtree	Peachtree Environmental
PCE	Tetrachloroethene
POD	Point of Demonstration
ppb	Parts per Billion
ppm	Parts per Million
PRE	Preliminary Risk Evaluation
Property	Thomasville National Bank
RAGS	Risk Assessment Guidance for Superfund
RBCA	Risk Based Corrective Action
REC	Recognized Environmental Conditions
RN	Release Notification
RQSM	Reportable Quantities Screening Method
RRS	Risk Reduction Standard
SVE	Soil Vapor Extraction
SVOCs	Semi-Volatile Organic Compounds
TCLP	Toxicity Characteristic Leaching Procedure
TCE	Trichloroethene
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VIRP	Voluntary Investigation and Remediation Plan
VRP	Voluntary Remediation Program
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

PEACHTREE ENVIRONMENTAL (Peachtree) is submitting this Voluntary Investigation and Remediation Plan (VIRP) and VRP Application on behalf of the applicant, **SOBH DECATUR PROPERTIES, LLC** (and/or “Applicant”), for the Former Lou Sobh Ford Property located at 1665 Scott Boulevard, in Decatur, DeKalb County, Georgia (the “VRP Property”); #10915 (the “Site”). The purpose of this VIRP and VRP Application is to provide supporting documentation in completing the State of Georgia’s March 30, 2010 Voluntary Remediation Program (VRP) Application Form and Checklist. Part of the VRP Application Form and Checklist is to detail a Conceptual Site Model for the property including a preliminary VIRP, a table of delineation standards, supporting text, tables, charts and figures that illustrates the Site’s surface and subsurface setting, sources of contamination, contaminant migration pathways, and potential human and environmental receptors and complete exposure pathways.

1.2 VRP PROPERTY DESCRIPTION

The VRP Property consists of a single parcel of land totaling approximately 5.56 acres, which is more fully described as follows:

- 1665 Scott Boulevard – Parcel ID: 18-062-03-004

The VRP Property has a latitude coordinate of 33° 47' 44" North and a longitude coordinate of 84° 17' 07" West. A VRP Property Location / USGS Topographic Map is included as **Figure 1**.

According to State records, the VRP Property was originally developed as a car dealership in 1965 and has been improved with three single-story, block on slab buildings. The main building (former car dealership, offices and maintenance area) measures approximately 7,000 square feet. The total acreage of the Property itself is approximately 5.56 acres. The VRP Property layout is illustrated in **Figure 2**. The current owner, Sobh Decatur Properties, LLC, purchased the Property in 2004.

The Property is currently vacant and is bounded to the north by Zyka Indian Restaurant and Montessori Academy; to the south by Metro Extended Stay Hotel, Volmaz Pena and Pena, Inc. (car repair facility), and Nalley BMW; to the east Church Street followed by commercial and residential properties.

1.3 QUALIFICATIONS OF THE VRP PROPERTY AND VRP APPLICANT

The Applicant is submitting this VRP Application under the Georgia Voluntary Remediation Act (VRA and/or VRP), (O.C.G.A. § 12-8-100, et seq. (the “Act”) for the VRP Property, Decatur, DeKalb County, Georgia. In order to be considered a “qualifying property”, the Property must be, according to O.C.G.A. § 12-8-105;

- 1) Listed on the Georgia Hazardous Site Inventory (HSI); or meet the criteria of the Georgia Hazardous Site Reuse and Redevelopment Act ("Brownfields Act") O.C.G.A. § 12-8-205; or have a release of regulated substances to the environment.

Under O.C.G.A. § 12-8-105 the property shall also not:

- 2) Be listed on the federal National Priorities List;
- 3) Be currently undergoing response activities required by an Order of the Regional Administrator of the United States Environmental Protection Agency;
- 4) Be a facility required to have a permit under the Georgia Hazardous Waste Management Act ("HWMA"); O.C.G.A. § 12-8-66; and
- 5) Violate the terms and conditions under which the Environmental Protection Division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.

Finally, under O.C.G.A. § 12-8-105 the property shall:

- 6) Have any lien filed under subsection (e) of the HWM Act O.C.G.A. § 12-8-66 or subsection (b) of the Georgia Underground Storage Tank Management Act O.C.G.A. § 12-13-12 be satisfied or settled and released by the Georgia EPD Director pursuant to the HWM Act O.C.G.A. § 12-8-66.

The VRP Property is included in HSI#10915 and none of the other criteria listed in items 2 - 6 apply.

In addition, in order for the Applicant to meet the qualifications of the VRP according to O.C.G.A. § 12-8-106, the following criteria must be met:

- 1) The Applicant must be the property owner of the VRP Property or have express permission to enter another's property to perform corrective action including, to the extent applicable, implementing controls for the VRP Property pursuant to written lease, license, order or indenture;
- 2) Not be in violation of any order, judgment, statute, rule or regulation subject to the enforcement authority of the Director; and
- 3) Meet other such criteria as may be established by the DNR Board pursuant to O.C.G.A. § 12-8-103.

As the Applicant meets all the criteria stated above, the Applicant is "qualified" under the Act.

The contact for the Applicant is as follows:

Sobh Decatur Properties, LLC

150 South Perry Street
Suite 150
Lawrenceville, Georgia 30046
Attn: Mr. William B. Wood, Counsel
(770) 963-6910

Appendix A contains the Warranty Deed and Tax Plat for the Qualifying Property.

2.0 VRP PROPERTY INVESTIGATION AND CORRECTIVE ACTION HISTORY

Detailed below are annotated descriptions of the findings of past investigations and regulatory correspondence, which were developed as part of the previous assessments, conducted for the VRP Property.

2.1 PROPERTY REGULATORY HISTORY

In December 2010, the Former Lou Sobh Ford facility was placed on the State of Georgia Hazardous Site Inventory (HSI) as HSI No. 10915, based on the identification of regulated substances (Tetrachloroethene (PCE) and Polychlorinated Biphenyls (PCBs)) in soil at the VRP Property

2.2 INITIAL HSRA RELEASE NOTIFICATION

Based on the findings of a Phase I and Limited Phase II ESA performed in June-July 1998, a Phase II ESA was performed by SES Environmental (SES) at the VRP Property in December 2000 through February 2001. A total of fifty-one (51) soil borings were installed at the Site, collecting a total of forty-eight (48) soil samples for analysis of PCBs, TPH-DRO, and Volatile Organic Compounds (VOCs). Based on the analytical results, the following constituents were detected in soil:

- Total PCBs (sample - highest concentration detected [mg/Kg]) – TD-7 (26 mg/Kg), L-22-1 (8.9 mg/Kg), L-13-1 (3.4 mg/Kg), L-13-2 (0.59 mg/kg), TD-1 (2.0 mg/Kg), and TD-2 (2.2 mg/Kg). Total PCBs concentrations in soil samples TD-1, TD-2, TD-7, L-22-1, and L-13-1 exceeded the Notification Concentration (NC) of 1.55 mg/kg.
- VOCs (highest concentration detected [mg/Kg]) – 1,1,1-Trichloroethene (0.060 mg/Kg), 2-Butanone (0.360 mg/Kg), 2-Hexanone (0.110 mg/Kg), 2-Methyl-2-pentanone (0.130 mg/Kg), Acetone (0.610 mg/Kg), Ethylbenzene (0.190 mg/Kg), PCE (0.340 mg/Kg), Toluene (0.130 mg/Kg), and Total Xylenes (1.5 mg/Kg). Of the VOCs detected, PCE was detected above its NC of 0.180 mg/Kg in soil sample TD-2. No other VOCs were detected above their respective NC.

Following completion of the soil borings, SES returned to the VRP Property in February 2001 to install four (4) temporary groundwater monitoring wells (TMW-1 through TMW-4) for the purpose of gauging groundwater flow direction and collecting groundwater samples. As stated in the Phase II supplemental sampling activities report, groundwater flow was determined to be towards the northeast. However, based upon a review of the potentiometric map included in the report, Peachtree has determined that flow is actually to the northwest. Groundwater samples were collected from the monitoring wells utilizing a polyethylene bailer. TMW-1, TMW-2, and TMW-3 were analyzed for PCBs, VOCs, and TPH-DRO. TMW-4 was analyzed for PCBs and

TPH-DRO. Based on the analytical results, the following constituents were detected in groundwater:

- VOCs (monitoring well – highest concentration detected [mg/L]) – Acetone (TMW-3 - 1,600 ug/L) and Chloroform (TMW-2 - 18 ug/L). No VOCs were detected above their respective NC. No other VOCs were detected above the laboratory MDL.
- TPH-DRO and PCBs were not detected in any of the groundwater samples submitted for laboratory analysis.

As the results of the groundwater assessment activities were not available at the time of the HSRA Notification, Peachtree has included the SES letter report titled “Additional Sampling Activities – Banner Ford Facility” as **Appendix B**.

2.3 HYDRAULIC LIFT REMOVAL ACTIVITIES – FEBRUARY – MARCH 2004

Based on the findings of the Limited Phase II ESA performed in December 2000, Entrix, Inc. initiated removal of the hydraulic lifts and associated reservoir, abandoned previously decommissioned reservoirs, and performed post-excavation confirmation sampling at the VRP Property. A total of eight (8) lifts, associated hydraulic reservoir, and approximately 140 tons of soil were removed during the activities. Following lift removal and soil excavation activities, 41 confirmation samples were collected and analyzed for PCBs and TPH-DRO. TPH-DRO was detected at concentrations ranging from below the laboratory MDL to 1,100 mg/Kg. Based on the location of the PCB detections observed during the SES Phase II ESA, PCBs were analyzed at lift locations L-13 and L-22. PCBs were not detected above the laboratory MDL. A report titled “Report of Environmental Assessment and Construction Activities”, dated March 2005, not previously available to Peachtree at the time of the HSRA Notification, is included as Appendix C.

2.4 PROPERTY INVESTIGATION ACTIVITIES – APRIL 2008 LIMITED SITE INVESTIGATION

Based on the findings of a December 2007 Phase I ESA, a Limited Site Investigation (LSI) was performed by Terracon at the Site in April 2008. A total of nine (9) soil borings were installed at the Site. Based on the analytical results, the following constituents were detected in soil:

- RCRA Metals (highest concentration detected [mg/kg]) - Barium (249 mg/kg), Chromium (81.7 mg/kg), and Lead (16.0 mg/Kg). All of these concentrations are less than the respective Notification Concentration (NC) for the detected metals.
- VOCs (highest concentration detected [mg/Kg]) - 2-Butanone (0.21 mg/kg), 2-Hexanone (0.032 mg/kg), Acetone (1.2 mg/kg), Carbon Disulfide (0.0061 mg/kg), and Tetrachloroethene (0.0035 mg/kg). Of the VOCs detected, Carbon Disulfide

was detected in soil sample T-4 #1 above its NC or the laboratory detection limit of 0.0056 mg/kg. No other VOCs were detected above their respective NC.

- No PAHs were detected in any of the soil samples submitted for laboratory analysis.

Following completion of the soil borings, soil sample locations T-3 through T-8 were converted to temporary groundwater monitoring well and groundwater samples were collected from the monitoring wells utilizing low flow techniques. Based on the analytical results, the following constituents were detected in groundwater:

- RCRA Metals (monitoring well - concentration detected [mg/L]) - Total Barium (T-3 - 0.40 mg/L; T-4 - 0.0835 mg/L; T-7 - 0.18 mg/L; T-8 - 0.178 mg/L), Dissolved Barium (T-3 - 0.0431 mg/L; T-4 - 0.0597 mg/L; T-7 - 0.0508 mg/L; T-8 - 0.129 mg/L), and Total Lead (T-7 - 0.0205 mg/L). Of these concentrations, only Total Lead was detected above its respective groundwater maximum concentration limit (MCL) of 0.015 mg/L. In May 2008, monitoring well T-7 was resampled and analyzed for Total Lead. Based on the analytical results, Lead (total and dissolved) was not detected in sample T-7A or the Duplicate sample.
- VOCs (monitoring well - concentration detected [mg/L]) - Chloroform (T-5 - 19 ug/L), 1,2-Dichloropropane (T-7 - 5.7 ug/L). Of these concentrations, only 1,2-Dichloropropane was detected above its respective groundwater maximum concentration limit (MCL) of 5.0 ug/L. In May 2008, monitoring well T-7 was resampled and analyzed for 1,2-Dichloropropane. Based on the analytical results, 1,2-Dichloropropane was detected in sample T-7A and the Duplicate sample at concentrations of 5.2 ug/L and 5.4 ug/L, respectively.
- No PAHs were detected in any of the groundwater samples submitted for laboratory analysis.

Based on the analytical data findings to date, a HSRA Notification Package was prepared and forwarded to the Georgia Environmental Protection Division (GEPD) on July 11, 2008. Following GEPD's initial review of the "Notification Package", the GEPD requested a copy of the previously discussed 2001 Phase II Environmental Site Assessment performed at the facility, which was not available during the time of the July 2008 HSRA Notification Package submittal. Based on the 2001 Phase II ESA report, PCBs and PCE were detected in soils at the facility.

2.5 PROPERTY INVESTIGATION ACTIVITIES – JULY 2009 SOIL INVESTIGATION

With regards to the soil impacts the GEPD determined that additional soil investigation was required to verify the 2001 analytical results and further investigate the soil impacts by PCBs and PCE. In July 2009, Peachtree conducted a soil Investigation at the VRP Property to

supplement data collected by Terracon during their 2008 Limited Site Investigation. A total of five (5) soil borings were installed inside the former service/repair center at the VRP Property. Soil samples were collected from each of the borings at depths ranging from ground surface to 20 feet below ground surface (ft-bgs). A total of five (5) soil samples were submitted for laboratory analysis.

Based on the analytical results, the following constituents were detected in soil:

- Total PCBs (sample - highest concentration detected [mg/Kg]) - SB-2-5 (2.72 mg/Kg), SB-3-2 (5.6 mg/Kg), SB-4-2 (2.5 mg/Kg), and SB-5-5 (3.67 mg/kg). All of these concentrations are in excess of the Notification Concentration (NC) of 1.55 mg/kg for Total PCBs.
- VOCs (sample - highest concentration detected [mg/Kg])) - Ethylbenzene (SB-4-2 - 0.034 mg/Kg), Isopropylbenzene (SB-4-2 - 0.020 mg/Kg), Tetrachloroethene (SB-3-2 - 0.64 mg/Kg), Toluene (SB-4-2 - 0.018 mg/kg), m,p-Xylene (SB-4-2 - 0.089 mg/Kg), and o-Xylene (SB-2-5 - 0.82 mg/Kg). Of the VOCs detected, Tetrachloroethene (PCE) was detected in soil samples SB-3-2 and SB-4-2 at concentrations in excess of its NC of 0.18 mg/Kg. No other VOCs were detected above their respective NC.
- PAHs (sample - highest concentration detected [mg/Kg])) - 1-Methylnaphthalene (SB-5-5 - 0.59 mg/Kg), 2-Methylnaphthalene (SB-5-5 - 0.92 mg/Kg), Naphthalene (SB-2-5 - 0.74 mg/Kg), and Phenanthrene (SB-5-5 - 0.63 mg/Kg). Of the PAHs detected, none were detected above their respective NC.

2.6 PROPERTY INVESTIGATION ACTIVITIES – FEBRUARY 2010 SUPPLEMENTAL SOIL INVESTIGATION

In February 2010, Peachtree conducted a supplemental soil investigation at the VRP Property in an attempt delineate PCE and PCB impacts observed during the July 2009 soil investigation. A total of twenty-three (23) soil borings (SB-6 through SB-28) were installed inside the former service/repair center at the VRP Property. Soil samples were collected from each of the borings at depths ranging from ground surface to 20 feet below ground surface (ft-bgs). A total of fifty-two (52) soil samples were submitted for laboratory analysis.

Based on the analytical results, the following constituents were detected in soil:

- Total PCBs (sample - highest concentration detected [mg/Kg]) - SB-6-2 (0.64 mg/Kg), SB-9-2 (8.37 mg/Kg), SB-9-5 (16.64 mg/kg), SB-12-2 (0.512 mg/kg), SB-12-5 (26.99 mg/kg), SB-15-2 (3.85 mg/kg), SB-15-5 (9.47 mg/kg), SB-19-2 (0.119 mg/kg), SB-26-2 (9.58 mg/kg), SB-26-5 (0.039 mg/kg), SB-27-2 (2.59 mg/kg), SB-27-5 (1.35 mg/kg), and SB-28-5 (2.36 mg/Kg). PCB concentrations

were detected in excess of the Notification Concentration (NC) of 1.55 mg/kg for Total PCBs in soil samples SB-9-2, SB-9-5, SB-12-5, SB-15-2, SB-15-5, SB-26-2, SB-27-2, and SB-28-5.

- VOCs (sample - highest concentration detected [mg/Kg]) - 1,1,1-Trichloroethane (SB-9-5 - 0.057 mg/kg), 2-Butanone (SB-9-5 - 1.9 mg/kg), 2-Hexanone (SB-9-5 - 0.45 mg/kg), 4-Methyl-2-Pentanone (SB-9-5 - 0.24 mg/kg), Acetone (SB-9-5 - 16 mg/kg), Chlorobenzene (SB-12-5 - 0.016 mg/kg), Ethylbenzene (SB-9-5 - 0.70 mg/Kg), Isopropylbenzene (SB-9-5 - 0.33 mg/Kg), Tetrachloroethene (SB-9-5 - 1.1 mg/Kg), Trichloroethene (SB-28-5 - 0.023 mg/Kg) Toluene (SB-9-5 - 0.16 mg/kg), m,p-Xylene (SB-9-5 - 2.1 mg/Kg), and o-Xylene (SB-9-5 - 3.4 mg/Kg). Of the VOCs detected, three (3) were detected above their respective NC as follows: 2-Butanone was detected in soil sample SB-9-5 at concentrations in excess of it's NC of 0.79 mg/Kg; Acetone was detected in soil sample SB-9-5 it's NC of 2.74 mg/Kg; and Tetrachloroethene (PCE) was detected in soil samples SB-9-5, SB-12-5, SB-26-2, and SB-28-5 at concentrations in excess of it's NC of 0.18 mg/Kg. No other VOCs were detected above their respective NC.

Peachtree submitted an Amended HSRA "Notification Package" in June 2010 which included the data collected during the February 2010 supplemental soil investigation. Following EPD's review of all the data, the property was listed on the HSI in December 2010.

2.7 PROPERTY INVESTIGATION ACTIVITIES – MAY 2010 SUPPLEMENTAL SOIL INVESTIGATION

In May 2010, Peachtree conducted an additional supplemental soil investigation at the VIRP Property in an attempt to define the PCE source area and perform Synthetic Precipitation Leaching Procedure (SPLP) analysis to determine the leaching potential for PCE and PCB impacted soils. A total of five (5) soil borings (SB-29 through SB-33) were installed inside the former service/repair center at the VPR Property. Soil samples were collected from each of the borings at depths ranging from ground surface to 10 feet below ground surface (ft-bgs). A total of five (5) soil samples were submitted for laboratory analysis of VOCs. One soil sample, SB-33-5, was submitted for laboratory analysis of Total PCBs and SPLP- PCBs. Two soil samples, SB-32-5 and SB-33-5, were submitted for laboratory analysis of SPLP-PCE.

Based on the analytical results, the following constituents were detected in soil:

- Total PCBs (sample - highest concentration detected [mg/Kg]) - SB-33-5 (34.54 mg/Kg). PCB concentrations were detected in excess of the Notification Concentration (NC) of 1.55 mg/kg for Total PCBs in soil sample SB-33-5.
- SPLP-PCBs (sample - highest concentration detected [mg/Kg]) - SB-33-5 (2.7 ug/L). Based on the SPLP result, there is a leaching potential for PCB (Aroclor

1242) at soil sample SB-33-5. Peachtree may utilize this data in the future to develop site-specific Type 4 or 5 RRS for PCBs.

- VOCs (sample - highest concentration detected [mg/Kg]) - Chlorobenzene (SB-32-5 – 1.4 mg/kg), Ethylbenzene (SB-33-5 – 1.7 mg/Kg), Isopropylbenzene (SB-33-5 – 2.6 mg/Kg), Tetrachloroethene (SB-32-5 – 3.9 mg/Kg), Toluene (SB-33-5 – 1.1 mg/kg), m,p-Xylene (SB-33-5 – 8.0 mg/Kg), and o-Xylene (SB-33-5 – 6.1 mg/Kg). Of the VOCs detected, Tetrachloroethene (PCE) was detected in soil samples SB-30-5, SB-32-5, and SB-33-5 at concentrations in excess of its NC of 0.18 mg/Kg. No other VOCs were detected above their respective NC.
- SPLP-PCE – The results of the SPLP analysis for PCE were below laboratory MDLs in soil samples SB-32-5 and SB-33-5. Peachtree may utilize this data in the future to develop site-specific Type 4 or 5 RRS for PCE.

2.8 PROPERTY INVESTIGATION ACTIVITIES – AUGUST 2012 GROUNDWATER INVESTIGATION

In August 2012, Peachtree conducted groundwater investigation at the VRP Property to determine if VOCs and/or PCB impacts exist. A total of six (6) groundwater monitoring wells (MW-1 through MW-6) were installed. Groundwater samples were collected from each of the monitoring wells and analyzed for VOCs and PCBs. Based on the analytical results, the following constituents were detected in groundwater above the MDL:

- PCE (monitoring well - [ug/L]) – MW-5 (7.2 ug/L). PCE was not detected in any of the remaining samples above the laboratory MDL.
- 1,2-Dichloroethane (1,2-DCA) (monitoring well - [ug/L]) – MW-5 (9.7 ug/L). 1,2-DCA was not detected in any of the remaining samples above the laboratory MDL.
- Methyl tert-butyl ether (MTBE) (monitoring well - [ug/L]) – MW-5 (6.0 ug/L) and MW-2 (42 ug/L). MTBE was not detected in any of the remaining samples above the laboratory MDL.

3.0 PRELIMINARY CONCEPTUAL SITE MODEL

A Preliminary 3-D conceptual site model (CSM) has been developed for the VRP Property. The CSM will be utilized to:

- Integrate technical data from various sources;
- Support the selection of sample locations;
- Identify data gaps/needs; and
- Evaluate risks to human health and the environment.

The following provides a description of the various factors (surface / sub-surface setting, regulated substances, known or suspected source areas, contaminant migration pathways, and soil and groundwater impacts) considered during the development of the CSM.

3.1 SURFACE AND SUB-SURFACE SETTING

3.1.1 Surface Setting

The surface setting at the VRP Property consists of a three (3) single story buildings constructed of brick, steel beams, and concrete-block situated on a concrete slab. The largest of the three buildings contains the former car dealership sales offices, lobby, and former service/repair center located on the northern portion. The other two (2) buildings located on the southern portion formerly contained a body shop and a paint/detailing shop. The parking lot and driveway are constructed of asphalt. A grass/landscaped area and detention pond are present to the west of the former Body Shop. The property is designated for commercial-retail use.

3.1.2 Subsurface Setting

The VRP Property is located in the Piedmont Physiographic Province of Georgia south of the Brevard Fault Zone. This province is generally composed of medium to high-grade metamorphic rocks and various igneous rocks. The metamorphic rocks are the most abundant and occur in well-defined northeast trending belts. These rocks include biotite and granite gneiss. The igneous rocks mainly occur as intrusions and are chiefly composed of granite, but also include pyroxenite, gabbro, dolerite and basalt. The VRP Property is located over the Atlanta group, which represents a portion of the Southern Piedmont Province and consists primarily of schist, quartzite and gneiss.

Groundwater in the Piedmont province occupies joints, fractures, and other secondary openings in the bedrock and pore spaces in the overlying regolith. Unweathered and unfractured bedrock in the area has very low porosity. Thus, the quantity of water that a rock unit can store and transmit to wells is determined by the number, capacity, and interconnection of the secondary openings. Shallow unconfined water table conditions are present throughout the Piedmont physiographic province. Recharge to the

groundwater occurs from precipitation. Soils within the area consist predominantly of sandy and clayey silts and silty sands that allow rapid percolation of the rainfall. Typically, the infiltration of precipitation through the soil to the groundwater occurs within a few days after rainfall.

The shallow surficial aquifer beneath the VRP Property generally consists of the following: sandy silt and silty fine sand to a depth of 10 to 15 feet below land surface (BLS), underlain by finer-grained sediments consisting of clayey, slightly sandy silt, and silty clay to depths ranging between 15 to 20 feet BLS, with a silty weathered schist extending into shallow groundwater table. Groundwater occurs under water table (unconfined) conditions within the shallow aquifer with depths to groundwater as measured from the surveyed top of well casings ranging between 19.20 to 27.31 feet BLS. Groundwater elevations collected in September 2012 are summarized on **Table 1**. The approximate groundwater flow direction at the VRP Property is to the northwest. A Potentiometric Surface Map utilizing groundwater elevation data collected on September 6, 2012 is included as **Figure 3**.

3.2 KNOWN OR SUSPECTED SOURCE AREAS

Information obtained from the investigation indicated that the source of the release is in the former service/repair center. Considering past and present service and repair activities, detected PCB impacts in soil at the service/repair center can be attributed to the former use of hydraulic lifts and associated fluids which contained PCBs. VOCs and PAHs detected in soil at the service/repair center, and PCE and 1,2-DCA detected in groundwater, can be attributed to past use of solvents (degreasers) and petroleum based products during automobile maintenance activities. Based on the results of past investigations conducted at the VRP Property, the potential soil source area is isolated to the interior floor drains inside the service/repair center. It is suspected that the source of MTBE may be originating off-site. The known or suspected source areas are depicted on the property layout map (**Figure 2**).

3.3 CONTAMINANT MIGRATION PATHWAYS

A preliminary evaluation of the contaminant migration pathway has been completed and includes the following:

- Horizontal and vertical migration of COCs from the interior floor drains and through the concrete floor to the soils below;
- Horizontal and vertical migration of COCs through soils to the shallow water table;
- Horizontal and vertical migration of COCs within and through the shallow water table, based on hydraulic properties and flow direction.

A final evaluation of the contaminant migration pathways will be performed during the implementation of a Preliminary Remediation Plan, discussed in Section 3.6, and included in the VRP CSR.

3.4 SOIL AND GROUNDWATER IMPACTS

3.4.1 Soil Impacts

Based on the analytical results of Terracon's April 2008 investigation and Peachtree's July 2009, February 2010, and May 2010 soil investigation activities, twenty (20) compounds were detected above the laboratory MDL in soil. The April 2008 soil analytical results are summarized in **Table 2**, while the April 2008 soil sample locations and results are illustrated on **Figure 4**. The July 2009, February 2010, and May 2010 soil sampling analytical results are summarized on **Table 3**. The July 2009 soil sample locations with Total PCBs and PCE results are illustrated on **Figures 5A** and **5B**, respectively. The February 2010 and May 2010 soil sample locations with Total PCBs and PCE results are illustrated on **Figures 6A** and **6B**, respectively. Other VOCs detected in soils are not graphically displayed on figures as Total PCBs and PCE appear to be the driving COCs at the Property based on analytical testing data. Complete copies of the July 2009, February 2010, and May 2010 soil analytical testing results are provided in **Appendix D**.

3.4.2 Groundwater Impacts

Based on the analytical results of Terracon's April 2008 limited site investigation and Peachtree's August 2012 groundwater investigation activities, seven (7) compounds were detected above the laboratory MDL in groundwater. Six (6) groundwater samples were collected in April/May 2008 from six (6) temporary monitoring wells T-3 through T-8 which are no longer present at the VRP Property. Six (6) groundwater samples were collected in August 2012 following the installation of monitoring well MW-1 through MW-6. The April 2008 and August 2012 groundwater sample locations and analytical results are depicted on **Figures 7A** and **7B**, respectively. A complete copy of the August 2012 groundwater analytical testing results is provided in **Appendix E**.

Figure 8A presents the key features of the site, including the location of cross section A-A', captured in the preliminary 3-D conceptual site model (CSM), presented in **Figure 8B**.

The CSM incorporates the site specific surface / sub-surface setting, regulated substances released and known or suspected source areas, contaminant migration pathways, and soil and groundwater impacts along the identified cross section.

3.5 REGULATED SUBSTANCES

As previously discussed, Peachtree and others have conducted soil and groundwater investigations at the VRP Property dating back to 2000. The most recent investigation included the installation and sampling of permanent groundwater monitoring wells in August 2012.

Based on the soil and groundwater data collected to date, the following regulated substances were detected in soil and/or groundwater above laboratory MDLs:

- ▶ 1,1,1-Trichloroethane (1,1,1-TCA - CAS No. 71556) - Soil;
- ▶ 1,2-Dichloroethane (1,2-DCA - CAS No. 107062) - Groundwater;
- ▶ 1,2-Dichloropropane (1,2-DCP - CAS No. 78875) - Groundwater;
- ▶ 2-Butanone (CAS No. 78933) - Soil;
- ▶ 4-Methyl-2-pentanone (CAS No. 108101) - Soil;
- ▶ Acetone (CAS No. 67641) – Soil/Groundwater;
- ▶ Barium (CAS No. 7440393) – Soil/Groundwater;
- ▶ Carbon Disulfide (CAS No. 75150) - Soil;
- ▶ Chlorobenzene (CAS No. 108907) - Soil;
- ▶ Chloroform (CAS No. 67663) - Groundwater;
- ▶ Chromium (CAS No. 16065831) - Soil;
- ▶ Ethylbenzene (CAS No. 100414) - Soil;
- ▶ Isopropylbenzene (CAS No. 98828) - Soil;
- ▶ Lead (CAS No. 7439921) – Soil/Groundwater;
- ▶ Naphthalene (CAS No. 91203) - Soil;
- ▶ Phenanthrene (CAS No. 85018) - Soil;
- ▶ Tetrachloroethene (PCE - CAS No.127184) - Soil/Groundwater;
- ▶ Toluene (CAS No.108883) - Soil;
- ▶ Trichloroethene (TCE - CAS No.79016) - Soil;
- ▶ Total PCBs (CAS No. 1336363) - Soil; and
- ▶ Total Xylenes (m,p-Xylene and o-Xylene) (CAS No. 1330207); - Soil;

3.5.1 Constituents of Concern (COCs) in Soil

Based on a preliminary review of regulated substances detected in soil at the VRP Property, Total PCBs and PCE are considered COCs at the VRP Property as they were detected above their respective Type 1/3 RRS in soil. No other regulated substances were detected above their respective Type 1/3 RRS. A table presenting the regulated substances detected in soil and their respective Type 1/3 Risk Reduction Standards is provided below:

TABLE 3.2.1 – TYPE 1/3 SOIL RRS

REGULATED CONSTITUENT	HIGHEST DETECTED CONCENTRATION (SOIL SAMPLE - DEPTH)	TYPE 1/3 RRS (MG/KG)
1,1,1-TCA	0.060 mg/Kg (TD-2 – (4-8'))	20
2-Butanone	1.9 mg/Kg (SB-9-5')	200
4-Methyl-2-pentanone	0.24 mg/Kg (SB-9-5')	3.30
Acetone	16 mg/Kg (SB-9-5')	400
Barium	249 mg/Kg (T-7 #4 – (14-16'))	1,000
Carbon Disulfide	0.0061 mg/Kg (T-4 #1 – (0-2'))	400
Chlorobenzene	1.4 mg/Kg (SB-32-5')	10
Chromium	81.7 mg/Kg (T-4 #1 – (0-2'))	100 / 1,200
Ethylbenzene	1.7 mg/Kg (SB-33-5-5')	70
Isopropylbenzene	2.6 mg/Kg (SB-33-5')	21.88
Lead	16.0 mg/Kg (T-3 #1 (1-3'))	75 / 400
Naphthalene	0.74 mg/Kg (SB-2-5')	100
Phenanthrene	0.63 mg/Kg (SB-5-5')	110
PCE	3.9 mg/Kg (SB-32-5')	1.9 / 0.5
Toluene	1.1 mg/Kg (SB-33-5')	100
TCE	0.023 mg/Kg (SB-28-5')	0.5
Total PCBs	34.54 mg/Kg (SB-33-5')	1.55
Total Xylenes	14.1 mg/Kg (SB-33-5')	1,000

NOTES: 1) **Bolded** constituents exceed Type 1/3 RRS.

3.5.2 Constituents of Concern (COCs) in Groundwater

Based on a preliminary review of regulated substances detected in groundwater, 1,2-DCA, 1,2-DCP, and PCE are considered COCs at the VRP Property as they were detected above their respective MCL or Type 1/3 RRS in groundwater. No other regulated substances were detected above their respective MCL of Type 1/3 in groundwater. A table presenting the regulated substances detected in groundwater and their respective MCL / Type 1/3 RRS is provided below:

TABLE 3.2.2 – TYPE 1/3 GROUNDWATER RRS

REGULATED CONSTITUENT	HIGHEST DETECTED CONCENTRATION (MONITORING WELL - DATE)	MCL / TYPE 1/3 RRS (UG/L)
1,2-DCA	9.7 ug/L (MW-5 – 8/7/12)	5.0
1,2-DCP	5.7 ug/L (T-7 Water – 4/8/08)	5.0
Acetone	1,600 ug/L (TMW-3 – 2/5/01)	4,000
Barium	400 ug/L (T-3 Water – 4/8/08)	2,000
Chloroform	19 ug/L (T-5 Water – 4/8/08)	100
PCE	7.0 ug/L (MW-5 – 8/7/12)	5.0

NOTES: 1) Monitoring well TMW-3 was resampled to confirm detection of Acetone in February 2001. Based on these results, Acetone was not detected above the laboratory MDL.
 2) Monitoring well T-7 was resampled to confirm detection of Total Lead in May 2008. Based on these results, Total Lead was not detected above the laboratory MDL.
 3) **Bolded** constituents exceed MCL / Type 1/3 RRS.

3.6 PRELIMINARY REMEDIATION PLAN

Once the investigation has been completed and cleanup standards have been calculated, a final corrective action approach for soil and/or groundwater will be proposed. If soils are found to be on Site in excess of applicable soil cleanup risk reduction standards, excavation to remove those impacts would be a means of achieving cleanup compliance. Based upon current impacts found in groundwater, monitored natural attenuation appears to be an acceptable means of addressing those impacts. This approach will be measured against requirements for bio attenuation through modeling and testing of groundwater in an approach separate from the VIRP.

4.0 VRP COMPLIANCE STATUS REPORT PREPARATION

The following activities are planned to be completed at the VRP Property with the results to be provided in a final VRP CSR.

4.1 CONTAMINANT MIGRATION PATHWAYS

A review of potential human health and ecological receptors will be evaluated to determine if any complete or potentially complete pathways are present at the VRP Property. A description of these pathways will be presented in the VRP CSR, if applicable.

4.2 EXPOSURE PATHWAY MODELING

Based on the results of the receptor survey, exposure pathway monitoring may be conducted to determine whether potentially completed pathways may cause exposure at a receptor. The results of any modeling, along with supporting backup, will be incorporated into the VRP, if applicable.

4.3 RECALCULATION OF RISK BASED CLEANUP STANDARDS

The development of revised Risk Reduction Standards (RRS) will be completed based on the results of the receptor survey and the exposure pathway modeling. These revised RRS will be presented in the VRP CSR, if applicable and will guide any planned soil and/or groundwater remediation efforts.

4.4 CONFIRMATION SOIL ANALYSES

Confirmation soil sampling will be completed at the VRP Property to confirm that on-site soils meet current RRS following remediation activities. This data will be provided in the VRP CSR.

5.0 MILESTONE SCHEDULE

A milestone schedule is included in **Appendix F**.