

RUSSELL C. GRIEBEL, PG, CPG

Location

Leeds, Alabama

Primary Focus

Environmental Services

Years of Experience

Firm -22

Total -23

Education

BS | Geology | Clarion University | 1995

Licenses

PG – GA#1614; AL#1222; SC#2683; TX#12237; TN#5821; CPG# 11014

Training/Certifications/Publications

- Southeastern States Vapor Intrusion Symposium
- GBA Annual Brownfield Conference
- Evaluation of Indoor Inhalation Pathway
- ITRC Light Nonaqueous Phase Liquid: Science and Management
- Alabama Risk Based Corrective Action
- OSHA 40-Hour HAZWOPER
- Air & Waste Management Association 1009246
- Ga Brownfields, Georgia Engineer
- Vapor Intrusion: What's all this talk about potential intrusion risk?, Air and Waste Association

Expertise



RUSSELL C. GRIEBEL, PG, CPG

- · Brownfield Redevelopment
- Program Management
- · Remedial Action Plans
- Risk Assessments
- · Vapor Intrusion Risk Assessment
- · Vapor Intrusion Mitigation Design
- UST
- Phase I/II Environmental Assessments
- · Community to Government Liaison
- Compliance Reports
- HUD Environmental Assessments
- Groundwater Analysis
- Geologic Mapping
- Geophysical Assessments
- Geotechnical Investigations
- Ground Penetrating Radar Surveys
- Pumping Tests
- · Subsurface Utility Engineering

Russell C. Griebel, PG, CPGSummary

Mr. Griebel's experience ranges from Phase I Environmental Assessments, Phase II Environmental Assessments, Brownfield projects, detailed corrective actions, underground storage tanks, and Program Management. Mr. Griebel is a leader and technical advisor for field sampling, data analysis, risk assessment, technical writing, verbal presentations, community outreach/support, and personnel management. Mr. Griebel's passion for sustainable development/ preservation and smart growth has enabled him to act as a valuable liaison between public/private developers and various government entities. His exposure to geotechnical engineering and extensive environmental experience has served invaluable for developers trying to understand how to build on environmentally impacted properties.

Mr. Griebel has reviewed hundreds of sites, site investigations, and assessments for compliance with various state regulations and state and federal assessment protocol. Environmental due diligence experience includes Phase I and II environmental assessments. He maintains knowledge of current environmental regulations and testing procedures as associated with the applicable State and Federal agencies. Mr. Griebel has successfully managed over 30 Brownfield applications and assessments, and is United Consulting's Brownfield practice leader. He has performed detailed Vapor Intrusion assessments and designed Vapor Mitigation systems. He has leaded detailed site investigations at various industrial facilities, and managed many remediation projects.

Mr. Griebel believes that participation and leadership in professional associations is vital to representing our client's interests. In this effort, he has actively served the Air and Waste Management Association as a former President of the Georgia Chapter and on the Board of Directors of the Alabama Chapter. Mr. Griebel is the founding father of the Alabama Brownfields Association, and its first President. He is a member in many associations like American Society of Civil Engineers, America Council of Engineering Companies, Georgia Brownfield Association, Birmingham Environmental Professionals Association, and American Institute of Professional Geologists.

Related Experience

CENTRAL PLAZA SHOPPING CENTER – TUSCALOOSA, ALABAMA

Mr. Griebel acted as the Program Manager for this challenging Brownfield redevelopment project. The Subject Site was being redeveloped from its then current shopping center use into a mixed use development. Historically, a former gas



station and an automobile dealership/service facility operated on the Subject Site. Phase I and Phase II Environmental Site Assessments (Phase I/II) and a Geotechnical Evaluation were performed. Through the various assessments, soil and groundwater impacts were identified, as well as underground storage tanks (USTs). Asbestos surveys were also conducted, which resulted in asbestos abatement activities of the existing buildings prior to demolition. On behalf of the purchaser United Consulting submitted a Voluntary Cleanup Plan (VCP) to the Alabama Department of Environmental Management (ADEM) Land Division, Brownfield Redevelopment and Voluntary Cleanup Program. United Consulting performed a risk assessment relative to possible soil remediation and vapor intrusion mitigation. United Consulting performed soil remediation oversight with confirmation sampling. Several USTs were pumped of fluids, and removed from the ground. ADEM UST closure reports were generated and submitted as part of the VCP process. A groundwater use restriction was developed and filed on the property deed. Following the remediation and deed filing, United Consulting prepared a Completion Report that was submitted and approved by ADEM, thereby completing the Brownfield process. The Subject Site is now redeveloped as a mixed use (residential and commercial) development. This was a successful Brownfield redevelopment project, which included tight timeframes to bring the apartment component online meeting the back to school schedule for the University of Alabama. United Consulting worked efficiently to meet the demanding work schedule.

UNIVERSITY OF ALABAMA AT BIRMINGHAM; COYLE PROPERTY - BIRMINGHAM, ALABAMA

United Consulting was retained by UAB to conduct environmental investigations on this property in Birmingham, Jefferson County, Alabama. The Subject Site was originally developed in 1902 as a macaroni factory, which operated until at least 1930. At times, various tenants apparently occupied various portions of the building and included warehouses and a used furniture (and/or woodworking) shop. The furniture operation was present from 1950 to 1971. HESCO, an automotive repair facility, operated in the building from 1972 to 2001. The building has been vacant since around 2001. United Consulting performed one Phase I and two Phase II Environmental Site Assessments (Phase I/II) and a Preliminary Geotechnical Evaluation on the Subject Site. From these assessments it appeared that the soils at the Subject Site contained semi-volatile organic compounds (SVOCs) and metals. The metal concentrations detected were likely associated with the historic fill (which is across most of downtown Birmingham). Volatile organic compounds (VOCs) including petroleum and solvent based chemicals were also detected in the groundwater at the Subject Site. Comparison of the vertical soil impact distribution, groundwater depths, and contaminant distribution suggested that some, if not all, of the groundwater impacts may have originated from an adjacent south former UST facility. On behalf of the UAB Educational Foundation, United Consulting prepared and submitted a Voluntary Cleanup Program ("VCP") Application and the VCP Property Assessment Plan (PAP) for the Subject Site. The development of the plan included working closely with various University representatives, and included detailed communications with Alabama Department of Environmental Management (ADEM) staff. The timing for submittal and approval of the ADEM Brownfield documents was critical for the closing on the property for the client. United Consulting worked diligently to deliver timely documents, and through the detailed efforts resulted in ADEM not requiring a risk assessment to address the soil conditions at the property. This saved the client a significant expense.

RESERVE AT HUNTSVILLE - HUNTSVILLE, ALABAMA

As part of TBG Residential's pursuit of project funding through the Alabama Housing Finance Authority, United Consulting completed a Phase I Environmental Assessment and Phase II Environmental Assessment on a 26.4-acre tract of graded vacant land. Through the Phase I Environmental Assessment, several off-site environmental concerns were noted including several nearby facilities. These included: Former Parker Hannifin Corp., a SHWS/ CERCLIS NFRAP/ VCP/ RCRA-NonGen facility with documented groundwater impacts; Classic Cleaners, a RCRA-NonGen and Other Notable facility, which has operated as a dry cleaning facility since 1995; and Redstone Arsenal, a DOD/ AOCONCERN facility with documented groundwater impacts.



United Consulting advanced various soil borings and installed multiple monitoring wells. Groundwater samples were obtained from each of the direct push probes for analytical testing of volatile organic compounds (VOCs), semi volatile organic compounds (SVOCs), Priority Pollutant metals (total and dissolved), and pH. The assessment identified potential zinc impacts in the groundwater as well as solvent groundwater impacts. United Consulting provided cost effective recommendations to receive limitation of liability benefits through the Alabama Department of Environmental Management. The property was entered into the Brownfield or Voluntary Remediation Program. United Consulting performed a Cleanup Work Plan with a Risk Assessment. Various additional soil and groundwater sampling was performed. The plan was approved, which included a land use restriction and a preemptive vapor intrusion mitigation system. United Consulting documented the installation of the vapor mitigation system during construction. Following construction and deed filing, United Consulting prepared a Completion Report that was submitted and approved by ADEM. The Subject Site is now developed with an affordable housing complex. During the process, United Consulting worked closely with TBG, the AHFA and their attorney, and ADEM. Effective communications between the parties was a significant factor in the success of the project.

ALABAMA HOUSING AND FINANCE AUTHORITY – VARIOUS PROJECTS, ALABAMA STATEWIDE.

United Consulting has been retained by the AHFA for three consecutive years to perform Phase Is with HUD checklist to assist in their determination for potential HOME funding. Mr. Griebel has acted as a Program Manager for these environmental contracts with AHFA. He has provided internal guidance to meet the various standards, and acted as a liaison between the AHFA, the funding applicants, and various state agencies like the Alabama Department of Environmental Management. One particular site was entered into the Voluntary Cleanup Program due to impacted soil and groundwater. Various analysis was performed. Groundwater impacts were present, but from analysis not expected to impact receptors. A groundwater use restriction was placed on the property, along with other engineering controls to mitigate possible exposure routes. ADEM approved the corrective action plans, and the project was constructed in 2015.

SANDY SPRINGS CITY CENTER – SANDY SPRINGS, GEORGIA.

United Consulting was retained by the City to conduct environmental investigations on this high profile project. Sandy Springs intended to redevelop various tracts with its new City Governmental Complex. There were many property owners involved, and the environmental assessments were complicated due to access concerns. Mr. Griebel acted as the Program Manager for this challenging site. United Consulting conducted Phase I and II environmental assessments. Onsite environmental concerns were identified including a drycleaners and printing shops. There were offsite concerns including additional cleaners and gas stations. Chemical impacts were identified in both the soil and groundwater, associated with a dry cleaning. Various regulatory reporting was made for the soil and groundwater releases, and the property was entered into the Brownfield Program. United Consulting oversaw the remediation process working closely with the construction team, and documented the soil remediation process. A detailed dewatering analysis was performed, along with a vapor intrusion risk assessment. An under slab dewatering system was designed, with a monitoring program for possible groundwater treatment prior to discharge to the sanitary sewer. United Consulting managed the Brownfield process and was effective in communication of the various timeframe challenges. sequencing of assessments and associated scopes helped identify the possible remediation cost estimates, which were used in property acquisition negotiations. This ultimately saved the City money in acquisition costs. United Consulting efforts will result in the City receiving certain liability protections for the pre-existing environmental conditions at the Brownfield site. Such protections can be priceless.

BRIARCLIFF PARK PROJECT - DEKALB COUNTY, GEORGIA.

DeKalb County had an initiative to develop additional parks across the area in an effort to promote healthy living and lifestyles. The County identified this approximate 4.7-acre tract of land along Briarcliff Road that was situated in a densely residential developed area. With its availability for acquisition and location, the County planned to purchase and



redeveloped the land as a neighborhood park. United Consulting was retained by the County to complete a Phase I Environmental Assessment on this track that was improved with a vacant two story residential home. Surprisingly, at this historical residential property, United Consulting discovered multiple partially buried 55-gallon drums with staining that indicated a release had possibly occurred. A Phase II Environmental Assessment was conducted including various soil and groundwater sampling. This testing showed a release of several constituents, with the primary constituent being arsenic. Due to the release, the County entered the property into the Georgia Brownfield Program. United Consulting assisted the County in making the Brownfield application, and developed a detailed Prospective Purchaser Corrective Action Plan (PPCAP) to address the contamination present, and to make the proposed park safe for the public. Soil remediation was performed under the Brownfield PPCAP. Coordination was required with the Corps of Engineers. United Consulting oversaw the remediation process and collected confirmation samples. A Brownfield Prospective Purchaser Compliance Status Report was then generated documenting the remediation. The EPD reviewed and approved the PPCSR. This completed the Brownfield process, and the property is ready for final development and the community to safely enjoy as a park!

CENTURGY NORTH - ATLANTA, GEORGIA.

Mr. Griebel was the Program Manager for this Centergy North project, which is a 25-story, mixed-use residential tower located in Atlanta. The upper 22 floors provide 628 beds for off-campus student housing for Georgia Tech, with 230 units in one- to four-bedroom configurations. The Spring Street streetscape will be activated by two levels of office and retail, as well as an extension of Centergy Plaza, which will be a centerpiece of the existing complex. Designed to complement the surrounding architecture, the tower is clad in a glass window wall system with brick veneer and architectural concrete on the upper levels, and brick veneer on the lower levels. Russ and his United Consulting team performed various environmental related services on the project. This included developing a site soil and groundwater sampling plan, a soil management plan, providing guidance on management of impacted soil and groundwater during construction, and the design and installation documentation of a vapor intrusion mitigation system. United Consulting also prepared regulatory documents to achieve Brownfield protections for the developer and future owners. The environmental process was complex, and United Consulting played a significant role in managing the deep foundation installations, which were complicated by the environmental conditions present.

MULTIFAMILY DEVELOPMENT - NASHVILLE, TENNESEE.

United Consulting was retained to design a vapor intrusion mitigation system (VIMS) for this 5 story multifamily residential apartment complex. The property had been entered into the Tennessee Voluntary Cleanup Oversight and Assistance Program (VOAP) by others. As part of the Brownfield Agreement, a VIMS was required to address the possible vapor intrusion pathway. Mr. Griebel met with the owner and provided possible mitigation options. Based on the various factor present, the owner selected the use of a three component system. This primarily consisted of a gravel collection layer below the concrete slabs on grade, a slotted piping collection network connected to solid risers that vented above the roof lines, and a spray applied membrane atop the gravel layer. Russ and his team developed a design drawing set along with written specifications. The system was designed to operate passively at the onset, with the option for later activation, if needed. The design was submitted to the regulatory agency for review and approval prior to construction. United Consulting monitored the installation of the system during construction, performed quality control testing, and provided as-built drawings following construction completion.



CHATTAHOOCHEE WATER TREATMENT PLANT - ATLANTA, GEORGIA.

Mr. Griebel acted as the Program Manager for this challenging petroleum remediation project. The petroleum impacts present at the Site were regulated by the Georgia Environmental Protection Division (EPD) Underground Storage Tank Management Program (USTMP) and are associated with three Underground Storage Tanks that were formerly located at the Site. This Site had presented several challenges including numerous buried utilities and underground hazards associated with the Water Treatment plant, which were unmarked and located in unknown areas. Many rounds of environmental characterization were performed, followed by groundwater remediation. Soil vapor extraction was evaluated and performed, followed by in-situ chemical oxidation (chem-ox). Following remediation, a monitoring program was implemented. The facility has received no further actions status from the EPD. Mr. Griebel worked closely with both the City of Atlanta and the Georgia Environmental Protection Division to ensure that the services performed at the facility were done in the most proficient and cost effective manner possible.

LARKIN COIL, INC. – ATLANTA, GEORGIA.

Russ and his United Consulting team was recommended to a Prospective Purchaser (PP) of this former refrigeration coil manufacture facility by LCI's (the sellers) environmental attorney, with whom United Consulting had previously documented expertise in complex land transactions. As part of the end process of the coil manufacturing process, a solvent, trichloroethylene (TCE), was used to degrease the coils. This was through a tunnel degreaser and tank system. United Consulting met with the PP to review details of the property and initially assess the potential to redevelop the Project Site with commercial end uses. There were many challenges. Upon meetings and negotiations with the EPD, the EPD agreed that with the PP entering the property into the Brownfield Program, the property would be delisted from the HSI, and an existing CO would be revised and eventually terminated. Extensive soil and groundwater sampling was conducted, along with soil and groundwater remediation pilot studies. United Consulting prepared a detailed Brownfield Prospective Purchaser Corrective Action Plan. This included soil and groundwater remediation to an action based standard, with vapor intrusion mitigation to a performance based standard. An escrow account was also negotiated with the seller to complete the proposed corrective actions. The action based remediation approach combined In-Situ Chemical Oxidation (ISCO) and high-vacuum extraction. The PP is in the process of completing the corrective action This approach was the first of its kind in the State of Georgia, and another successful "blight to sight" process. Brownfield project.

WHAT SOME CLIENTS ARE SAYING ABOUT RUSSELL

Charles Crosby, CORE Project Management

"You are always on top of it which I appreciate very much."

Cameron Golden, Redan Group Investments, LLC

"Thank you both again for all of your help this week. You guys have gone above and beyond the call of duty and I appreciate it a ton." "I really can't thank you guys enough for the hard work/expedited effort. My partners and I look forward to doing more work together moving forward!"

Bryant Poole, City of Sandy Springs

"Great news! Thanks for your help with this."

Kendal Golightly, Carter c/o City of Sandy Springs

"Thank you for all of your assistance. United continues to do a great job for us when needed!"

Will Casaday, South City Partners

"Thanks Russ. Great work. Much appreciated."



Vicky Boyce, Arris Realty Partners

"Russ, you are a rock star. Thank you for being diligent and proactive and for communicating with the team so well. Wish all our consultants operated like you do!"

Justin Bloecher, Chick-fil-A Inc.

"Thanks Russ, holy cow! I do really appreciate all the help with this, you definitely saved us money with the discussions with EPD."

