

August 21, 2015

Ms. Suzanne Wynn
Project Manager
Gainesville Community Redevelopment Agency
802 NW 5th Avenue, Suite 200
Gainesville, Florida 32601

Re: Order of Magnitude Estimates for Environmental Assessment/Remediation
Power District, Parcels 1, 2, and 4
SE 5th Avenue
Gainesville, Alachua County, Florida

PSI Project No. 06632553

Dear Ms. Wynn:

Professional Service Industries, Inc. (PSI) is pleased to provide this order of magnitude cost evaluation for potential environmental assessment and remediation activities for the above-referenced properties. One electronic copy and one paper copy of the document have been prepared for your use.

Project Background

The Gainesville Community Redevelopment Agency (CRA) is evaluating the subject property for redevelopment plans. In this process, the City of Gainesville and Gainesville Regional Utilities (GRU) contracted Environmental Consulting & Technology, Inc. (ECT) to prepare the following documents:

- *Phase I Environmental Site Assessment-Three City Parcels, Gainesville Regional Utilities-Parcel 1, September 2007*
- *Phase I Environmental Site Assessment-Three City Parcels, Gainesville Regional Utilities-Parcel 2, September 2007*
- *Phase I Environmental Site Assessment-Three City Parcels, Gainesville Regional Utilities-Parcel 3, September 2007*
- *Phase II Environmental Site Assessment Report-Three City Parcels, Gainesville Regional Utilities-Parcels 1 and 2, June 23, 2011*
- *Phase I Environmental Site Assessment Power District Addition Former Fleet Maintenance Facility, October 2014 (for Parcel 4)*
- *Low-Scored Site Initiative Report, June 2015 (for Parcel 4)*

Project Purpose

To assist the Gainesville CRA in evaluating the values of Parcels 1, 2 and 4, the client has requested that PSI develop order of magnitude estimates for potential assessment and remediation activities. Please note that due to the limited information available at this time (limited Phase II Environmental Site Assessment (ESA) data for Parcels 1, 2, and 4 with no delineation

of identified impacted media), the range of costs evaluated has been based on PSI's experience for other sites in Florida. Additionally, it is PSI's understanding that the Gainesville CRA has not yet determined the future intended uses of the properties. Without having a future development plan in place, it cannot be determined whether all of the impacted soil and groundwater at the site(s) will need to be remediated to below Chapter 62-777, Florida Administrative Code (FAC) cleanup target levels, or whether the parcels can achieve restricted regulatory closure (i.e., No Further Action With Conditions [NFAC]) while soil/groundwater impacts remain on the parcels. Therefore, a wide range of estimated costs for each parcel has been provided.

General

Please note that to achieve environmental regulatory closure for each property, the soil and groundwater impacted by test parameters at concentrations above Chapter 62-777, FAC cleanup target levels must be completely delineated (horizontally and vertically). The intended use of each parcel (i.e., residential, commercial, or mixed use with both components) may affect whether the site can achieve regulatory closure through a Site Rehabilitation Completion Order (SRCO or unconditional closure) or through a NFAC with some impacted media remaining. A NFAC usually includes engineering controls to prevent human exposure to the media and/or leaching of impacted soil to the groundwater. Examples of engineering controls include 2 feet of clean fill, asphalt, or concrete covering impacted soil. A NFAC will also include institutional controls, such as a deed restriction that requires that the engineering controls are maintained on the property or that specifies that the site groundwater cannot be used for potable or irrigation purposes. Also note that achieving regulatory closure (either conditional or unconditional) can take a considerable amount of time. The timeframes for receiving regulatory closure are dictated by the individual site conditions and can take months or years to achieve.

Order of Magnitude Evaluation

Parcel 1 (528 SE 5th Avenue)

Summary of Previous Assessment Activities

The Phase I ESA report for Parcel 1 did not identify recognized environmental conditions (RECs) in accordance with Standard Practice ASTM E 1527-13; however, the report identified possible mold on walls of the field services building and potential asbestos containing materials (ACMs) located throughout the building. If the building is intended for future use, a mold survey is recommended to be performed by a Florida licensed mold assessor (FLMA) and if confirmed, the impacted materials may require removal. If not already done so, a Lead and Asbestos Operations and Maintenance (O&M) Plan should be developed and implemented to maintain the lead based paint (LBP) and ACMs documented in the Phase II ESA report. If the building is not intended for future use, ACMs identified by the asbestos survey may be required to be abated, or demolished in place under wet conditions, by a Florida licensed abatement contractor, prior to or during demolition. To evaluate costs associated with mold abatement, a mold survey would need to be completed first. To evaluate the costs associated with lead and asbestos O&M or abatement, additional information regarding the quantity and condition of each LBP and ACM would be necessary.

ECT performed Phase II ESA activities at the site in April 2011, including the collection of eight soil samples and two groundwater samples for laboratory analysis. The Phase II ESA report for Parcels 1 and 2 identified the following:

- No test parameters were detected at concentrations above Chapter 62-777, FAC Soil Cleanup Target Levels (SCTLs) in the soil samples collected from Parcel 1.
- One polynuclear aromatic hydrocarbon (PAH) test parameter was detected at a concentration above its Chapter 62-777, FAC Groundwater Cleanup Target Level (GCTL) in the groundwater sample collected from Soil Boring SB-4. Benzo(a)anthracene was detected at 0.64 microgram per liter ($\mu\text{g/L}$), which exceeds the GCTL of 0.05 $\mu\text{g/L}$. The groundwater sample was collected from the northwest portion of the property.

Based on limited assessment data currently known for Parcel 1, no soil impacts have been identified that would require further assessment or remediation. The limited groundwater data indicates that the site groundwater may be impacted above Chapter 62-777, FAC GCTLs. However, the groundwater samples collected in 2011 were collected from temporary points. Therefore, PSI recommends initially installing a monitoring well using hollow stem auger methods and sampling according to Florida Department of Environmental Protection (FDEP) standard operating procedures (SOPs) to confirm the groundwater results in the vicinity of SB-4. If groundwater impact is confirmed in this area, PSI recommends additional groundwater assessment activities to evaluate the extent of the impact.

The Phase II ESA report also documented results of lead paint sampling and an asbestos survey performed at the site. Lead was detected in five of the material samples collected from Parcel 1, including one sample from the field services technician building and four samples from the wastewater building. Asbestos was identified in three of the samples collected from Parcel 1, including one sample from the wastewater building and two samples from the field services technician building.

Order of Magnitude Cost Estimates Based on Provided Information

- Mold Survey - \$2,500
- Lead and Asbestos O&M Plan - \$2,500 - \$3,500
- Groundwater Assessment - \$10,000 - \$50,000
- Conditional Closure (no active remediation required) - \$10,000 - \$20,000
- Unconditional Closure (groundwater remediation required) - \$100,000 - \$500,000

Based on the 2011 Phase II ESA data, it is unlikely that active groundwater remediation will be required to achieve regulatory closure for Parcel 1.

Parcel 2 (555 SE 5th Avenue)

Summary of Previous Assessment Activities

The Phase I ESA report for Parcel 2 identified the following RECs: it was reported that polychlorinated biphenyls (PCBs) were stored in a materials storage building that was not accessible during ECT's Phase I ESA site visit, and the adjoining northwest property had a petroleum discharge that had ongoing assessment and remedial activities since 1987. Additionally, the report identified eight drums of used oil filters, rags, and trash located outside of the on-site warehouse in the southwest portion of the property as a de minimis condition. Additionally, the report identified possible mold on walls of the main office buildings and potential ACMs located throughout the buildings. If the buildings are intended for future use, a mold survey is recommended to be performed by a FLMA and if confirmed, the impacted materials may require removal. If not already done so, a Lead and Asbestos O&M Plan should be developed to maintain

the LBP and ACMs documented in the Phase II ESA report. If the buildings are not intended for future use, ACMs identified by the asbestos survey may be required to be abated, or demolished in place under wet conditions, by a Florida licensed abatement contractor, prior to or during demolition. To evaluate costs associated with mold abatement, a mold survey would need to be completed first. To evaluate the costs associated with lead and asbestos O&M or abatement, additional information regarding the quantity and condition of each LBP and ACM would be necessary.

ECT performed Phase II ESA activities at the site in April 2011, including the collection of 17 soil samples and three groundwater samples for laboratory analysis. The Phase II ESA report for Parcels 1 and 2 identified the following:

- Arsenic was detected in Soil Sample SB-13, collected from approximately 4-5 feet below land surface (BLS) along the west boundary of Parcel 2, at a concentration above its Chapter 62-777, FAC Direct Exposure-Residential (DE-I) SCTL; however, below its Chapter 62-777, FAC Direct Exposure-Commercial/Industrial (DE-II) SCTL.
- Arsenic and the Benzo(a)pyrene Toxicity Equivalent (BaP TEQ, a PAH calculation) were detected in Soil Sample SB-19, collected from approximately 0.5 foot BLS along the south boundary of Parcel 2, at concentrations above DE-I SCTLs; however, below DE-II SCTLs and Leachability SCTLs (LSCTLs).
- PAH test parameters and the BaP TEQ were detected in Soil Boring SB-21, collected from approximately 0.5 foot BLS along the east boundary of Parcel 2, at concentrations above DE-I SCTLs, DE-II SCTLs, and/or LSCTLs.
- Total petroleum hydrocarbons (TPH) and PAHs including the BaP TEQ were detected in Soil Sample SB-23, collected from approximately 6-8 feet BLS in the south central portion of Parcel 2, at concentrations above DE-I SCTLs and/or LSCTLs; however, below DE-II SCTLs.
- No test parameters were detected at concentrations above GCTLs in the groundwater samples collected from Parcel 2.

Based on limited assessment data currently known for Parcel 2, soil impacts were identified in four of the 17 soil samples collected. PSI recommends additional soil assessment activities in these areas to evaluate the extent of the impacts. No groundwater impacts have been identified that would require further assessment or remediation at this time. However, the results of the recommended additional soil assessment activities may indicate that supplemental groundwater assessment will be required in targeted areas.

The Phase II ESA report also documented results of lead paint sampling and asbestos survey performed at the site. Lead was detected in 15 of the material samples collected from Parcel 2, including four samples from warehouse #2, 10 soil samples from warehouse #1, and one soil sample from the operations center. Asbestos was identified in two of the samples collected from Parcel 2, both collected from the operation center/warehouse.

Order of Magnitude Cost Estimates Based on Provided Information

- Mold Survey - \$2,500
- Lead and Asbestos O&M Plan - \$2,500 - \$3,500
- Soil Assessment - \$25,000 - \$75,000
- Conditional Closure (no active remediation required) - \$10,000 - \$20,000
- Unconditional Closure (soil remediation required) - \$100,000 - \$200,000

Based on the 2011 Phase II ESA data, it is unlikely that active soil remediation will be required, or only isolated soil removal activities will be required, to achieve regulatory closure for Parcel 2.

Parcel 4 (528 SE 5th Avenue)

Summary of Previous Assessment Activities

The Phase I ESA report for Parcel 4 identified the following RECs: the subject property was listed as a Leaking Underground Storage Tank (LUST) facility with a reported historic petroleum discharge that impacted site soil and groundwater, as well as previous uses of various site structures including automotive repair, historical paint shop, car wash area, and an underground sediment collection sump. Please note that the Phase I ESA did not discuss mold, LBP, or potential ACMs. No documents regarding lead or asbestos sampling have been provided to PSI for Parcel 4. If the site buildings are intended for future use, a LBP and asbestos survey should be performed. If either materials are identified, an O&M plan should be prepared and implemented for the property.

The current site conditions related to the LUST designation were assessed by ECT in March through May 2015. No petroleum-impacted soil or groundwater was identified at concentrations above Chapter 62-777, FAC SCTLs or GCTLs by ECT in 2015. In their June 2015 Low-Scored Site Initiative (LSSI) Report, ECT concluded that the site met the qualifications for a LSSI NFA. The report also recommended that one additional groundwater sampling event be performed in August 2015 to achieve the NFA requirements. The FDEP issued a July 28, 2015 comment letter regarding the July 2015 report. In the letter, the FDEP agreed with ECT's recommendation to perform another groundwater sampling event. However, the FDEP needs to issue a new work order to ECT so that they can perform the sampling activities. Therefore, it is not known when the groundwater sampling event will be able to be scheduled.

In June 2015, PSI performed Phase II ESA activities at Parcel 4 to address the RECs identified in ECT's October 2014 Phase I ESA report, with the exception of the former petroleum impacts associated with the LUST that are being addressed by ECT. PSI collected three soil samples and three groundwater samples for laboratory analysis. The Phase II ESA report for Parcel 4 identified the following:

- Tetrachloroethene (PCE, a chlorinated solvent) was detected in Soil Sample SB-1@1', collected inside the main maintenance building, at a concentration above the LSCTL; however, below the DE-I SCTL and DE-II SCTL.
- PCE was detected in the groundwater sample collected from Temporary Monitoring Well TMW-1, also inside the main maintenance building east of SB-1@1', at a concentration of 5.3 µg/L, which exceeds the GCTL of 3 µg/L.

Based on limited assessment data currently known for Parcel 4, soil and groundwater impacts above Chapter 62-777, FAC cleanup target levels were identified in one soil sample and one groundwater sample collected. PSI recommends additional soil and groundwater sampling activities to evaluate the extent of the site impacts. Since the groundwater sample collected in 2015 was collected from a temporary well, PSI recommends initially installing a monitoring well using hollow stem auger methods and sampling according to FDEP SOPs to confirm the groundwater results in the vicinity of TMW-1. If groundwater impact is confirmed in this area, PSI recommends additional groundwater assessment activities to evaluate the extent of the impact.

Order of Magnitude Cost Estimates Based on Provided Information

- Lead Based Paint Survey - \$3,500 - \$5,500
- Asbestos Survey - \$4,500 - \$7,500
- Lead and Asbestos O&M Plan (if identified) - \$2,500 - \$3,500
- Soil Assessment - \$10,000 - \$100,000
- Groundwater Assessment - \$10,000 - \$100,000
- Conditional Closure (no active remediation required) - \$10,000 - \$20,000
- Unconditional Closure (groundwater remediation required) - \$250,000 - \$1,000,000

Based on the limited 2015 Phase II ESA data and the nature of chlorinated solvents, PSI is unable to determine at this time if active remediation will be required at this property to achieve regulatory closure. The limited data known to date also prevents PSI from determining whether a conditional closure will be possible for Parcel 4. Additionally, PSI recommends that a soil vapor survey be performed once the future use of the property is determined, including the locations and construction specifications of future buildings. Soil vapor assessments are most effective once the future use and development of a site is known. A soil vapor assessment for Parcel 4 would cost \$15,000-\$30,000, depending on how much information regarding the future use is known at the time of the assessment activities.

If you have any questions regarding the information contained herein, please contact the undersigned at (407) 304-5560.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.



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cc: Vicki Lewis, PSI