

**TASK ORDER No. 5**

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2014

**FORT LAUDERDALE PUBLIC WORKS DEPARTMENT**

**CFL WW REPUMP STATION A – SOIL SAMPLING PLAN PREPARATION, SITE ASSESSMENT REPORT ADDENDUM (SARA) AND GROUNDWATER NATURAL ATTENUATION MONITORING ONLY PLAN (NAMOP)**

**PROFESSIONAL SERVICES**

EE&G Environmental Services, LLC (CONSULTANT) has prepared this task order to provide environmental consulting associated with the preparation of a Soil Sampling Plan, Site Assessment Report Addendum (SARA), along with the performance of a 1-Year Groundwater Natural Attenuation Monitoring Only Plan (NAMOP) at the City of Fort Lauderdale (CFL) WW Repump Station A, located at 2101 Northwest 6<sup>th</sup> Street, in Fort Lauderdale, Florida. The activities are intended to address comments within the Broward County Environmental Protection and Growth Management Department's (EPGMD) correspondence dated April 3, 2014, along with agreements between the CITY, the CONSULTANT and the EPGMD in a telephone conference call conducted on April 17, 2014.

The services will be provided in accordance with the rates established under the Master Agreement between EE&G and the City of Fort Lauderdale (City), RFQ 616-10632 General Environmental Engineering Consultant Services, which was approved by City Commission on June 21, 2011, as extended and amended on June 5, 2012 and extended again on February 19, 2013, and May 20, 2014.

**PROJECT BACKGROUND**

On May 29, 2013, a petroleum discharge occurred from a 550-gallon diesel fuel aboveground storage tank (AST), which migrated onto open ground adjoining the tank. In June 2013, the CONSULTANT mobilized to the facility, conducted partial source removal of the accessible petroleum-affected soils (~ 65 tons) and prepared an Initial Remedial Action Report (IRA). The IRA report documented that the impact extended thru the vadose zone (dry) soils and into the groundwater table, where free floating product (FFP) was encountered. The IRA Report recommended additional assessment, along with the preparation of a Site Assessment Report (SAR) to document the extent & magnitude of the remaining impacted area.

In March 2014, the CONSULTANT prepared a SAR for the former diesel spill. The SAR noted that 1) the petroleum-affected soils that remained in-place appeared to be largely isolated to the spill area & extended under the generator slab and building; 2) that FFP was present, but only in one monitoring well in the center of the spill area; 3) that the petroleum-affected groundwater appeared to be largely isolated to the spill area; and 4) that horizontal and vertical control of the petroleum-affected groundwater appeared to have been achieved & that the impact appeared to be within the property boundaries. The SAR recommended that the CITY begin recovery of the FFP via hand-bailing, drumming and offsite disposal thru a licensed waste hauler, along with the performance of a 1-year Groundwater NAMOP. Following the performance of a 1-year Groundwater NAMOP, it was recommended that the CITY complete the requirements for site closure via a No Further Action with Conditions (NFAC) via Risk Management Option (RMO) II.

**PROJECT DESCRIPTION**

The scope of this task order is to prepare a Soil Sampling Plan, to conduct additional soil assessment and groundwater sampling activities in accordance with the EPGMD-approved Soil Sampling Plan, and to perform a 1-year Groundwater NAMOP. The additional site assessment activities will be reported within a SARA, and conducted in accordance with the Florida Department of Environmental Protection (FDEP) guidelines established in Chapter 62-780, Florida Administrative Code (FAC) and recommendations & Sampling Plan approval of the EPGMD. NAMOP sampling will be conducted in accordance with the FDEP SOPs, per Chapter 62-160, FAC.

## **SCOPE OF SERVICES AND DELIVERABLES**

This task order will cover the services required to conduct the following management and site assessment activities:

- Preparation of a Soil Sampling Plan for soil borings to be located in and around the spill area. The Soil Sampling Plan will include figures illustrating the proposed sampling locations, along with recommendations for specific sampling intervals and analytical testing. Two copies of the Soil Sampling Plan will be submitted to the EPGMD and two copies to the CITY.
- Following EPGMD approval of the Soil Sampling Plan, the CONSULTANT will mobilize to the facility and via use of a drill rig, advance up to 12 soil borings in and around the spill area. Notifications of the field work will be provided in writing to the EPGMD and the CITY at least 72-hours to mobilization.
- The collection and laboratory analysis of 12 soil samples.
- The collection and laboratory analysis of groundwater samples from four perimeter shallow-interval monitoring wells and one deeper-interval monitoring well.
- The performance of one groundwater depth-to-water and flow survey.
- The preparation of SARA, which will include a summary of field activities, the results of the analyses, site diagrams & summary tables. The CONSULTANT will deliver two signed and sealed original reports to the CITY.
- The performance of a 1-Year Groundwater NAMOP, which will include the quarterly (once every three months) sampling and laboratory analysis of groundwater from five shallow-interval monitoring wells and one deeper-interval monitoring well. The CONSULTANT will deliver two signed and sealed original Quarterly NAMOP reports to the EPGMD and the CITY following each event.

The CONSULTANT is responsible for all work of their sub consultants/subcontractors to meet the deliverables included on this task order. Under this task order JAEE Environmental Services, Inc. will provide drilling services to collect soil samples, and Florida Spectrum Environmental Services, Inc. will provide laboratory testing and analytical services. Both sub consultants are listed in the Master Agreement. The CONSULTANT shall provide quality assurance reviews for each phase of this task order.

The CONSULTANT shall provide all services described on the tasks herein below:

### **Task 1 – Soil Sampling Plan & Field Preparation Activities**

The CONSULTANT shall prepare a Soil Sampling Plan for soil borings to be located in and around the spill area. The Soil Sampling Plan shall include figures illustrating the proposed sampling locations, along with recommendations for specific sampling intervals and analytical testing.

The CONSULTANT shall coordinate staff and subcontractors required to complete the activities included in the assessment. Activities include scheduling of subcontractors and management of personnel to complete field activities. Prior to implementation of field activities, the CONSULTANT shall review the existing site-specific Health and Safety Plan (HASP) to identify risks associated with the performance of the site activities.

The CONSULTANT shall contact the Sunshine State One Call utility clearance service to mark public underground utilities, for the protection of the City; however Sunshine State One Call do not assume responsibility for marking private utilities. Therefore, it is requested that any as-built plans for private utilities and underground improvements be provided by the CITY. The CONSULTANT cannot accept responsibility for damage to unmarked private underground utilities that are unknown.

The CONSULTANT'S Project Manager and/or Project Director shall provide periodic status correspondence and e-mail summaries to document the progress of key tasks, findings and project decisions.

This task is estimated at 27 hours and Not-to-Exceed \$2,390

### **Deliverables**

The CONSULTANT shall provide two copies of the Soil Sampling Plan to the EPGMD and two copies to the CITY.

The CONSULTANT shall provide the CITY an email summary documenting the timeframe to conduct the scope, progress of key tasks, findings and project decisions.

### **Task 2 – Additional Soil and Groundwater Assessment Activities for SARA**

The CONSULTANT shall mobilize to the site and advance up to 12 soil borings around the spill area using direct-push technology (DPT) drilling techniques via the subcontractor JAEE Environmental Services, Inc. (a FL licensed well water drilling company). The CONSULTANT shall visually inspect the soil borings to assess for indications of petroleum staining, FFP, unnatural discoloration or unnatural materials. The soil borings shall be field screened with an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID), both with and without the use of a carbon filter. Following review of the OVA/FID field results and visual observations, the CONSULTANT shall collect up to 12 soil samples from the 12 soil borings. The sampling shall be conducted to provide additional information regarding the vertical and horizontal delineation of the petroleum-affected vadose zone soils that remain in-place, and to confirm that two-feet of clean fill was present about the affected materials that remain in-place. The 12 soil samples shall be analyzed for the following parameters:

- Volatile Organic Compounds (VOCs) by EPA Method 8260
- Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270
- Total Petroleum Hydrocarbons (TPHs) by Method FL-PRO

The CONSULTANT shall collect groundwater samples from the source well (if FFP is gone), four perimeter shallow-interval monitoring wells (MW-2 thru MW-5) and one deeper-interval monitoring well (DW-1). In order to collect samples representative of aquifer conditions, stabilization data including pH, conductivity, turbidity, temperature and dissolved oxygen shall be collected during the purging of the monitoring wells. Following stabilization, CONSULTANT shall collect groundwater samples into pre-cleaned laboratory-provided glassware, place them on ice, and transport them to a laboratory for the following analyses:

- VOCs by EPA Method 8260
- PAHs by EPA Method 8270
- TPHs by Method FL-PRO

CONSULTANT shall containerize purge water from the source area into a 55-gallon drum, which CONSULTANT shall label and stage onsite in an area agreed upon by the CITY. The task order includes the costs to dispose of up to three 55-gallon drums of petroleum-affected purge water and the product recovery (generated by the city) via the subcontractor Everglades Waste Removal Services (a licensed waste hauler). The CONSULTANT assumes the characterization data collected during the initial groundwater assessment in March 2014 will be adequate to acquire disposal approval.

Sampling shall be conducted in accordance with FDEP's Standard Operating Procedures (SOPs), as specified in QA Rule Chapter 62-160 FAC. Samples shall be transported by the CONSULTANT for analysis to the subcontractor Florida Spectrum Environmental, a National Environmental Laboratory Accreditation Conference (NELAC) certified laboratory.

This task is estimated at 81 hours and Not-to-Exceed \$16,150

## **Deliverables**

The CONSULTANT shall provide two copies of a SARA to the EPGMD and two copies to the CITY. The SARA report shall include a summary of field activities, assessment results (OVA and laboratory analyses), a site diagram showing sampling locations, a groundwater depth-to-water and flow survey, recommendations, etc.

### **Task 3 – One Year Groundwater Natural Attenuation Monitoring Only Plan (NAMOP) Activities**

The CONSULTANT shall implement of a 1-year Natural Attenuation Monitoring Only Plan (NAMOP). The NAMOP shall include the collection of groundwater samples on a quarterly basis, along with the preparation and submittal of a NAMOP report following each sampling event. NAMOP sampling will be conducted in accordance with the FDEP SOPs, per Chapter 62-160, FAC. Select samples will be transported by the CONSULTANT to a NELAC-certified laboratory for analysis.

Monitoring wells to be included within each Groundwater NAMOP event shall include MW-1 thru MW-5 and DW-1. Groundwater samples from each well (per quarter) shall be laboratory analyzed for the following parameters:

- VOCs by EPA Method 8260
- PAHs by EPA Method 8270
- TPHs by Method FL-PRO

The CONSULTANT shall perform depth-to-water and groundwater elevation surveys during each NAMOP sampling event, to assess the general direction of groundwater flow. Existing top-of-casing data shall be utilized during the surveys.

CONSULTANT shall containerize purge water from each of the NAMOP sampling events into 55-gallon drums, which CONSULTANT shall label and stage onsite in an area agreed upon by the CITY. The task order includes the costs to dispose of two 55-gallon drum of petroleum-affected purge water via the subcontractor Everglades Waste Removal Services.

This task is estimated at 106 hours and Not-to-Exceed \$18,680

## **Deliverables**

The CONSULTANT shall provide Quarterly Groundwater NAMOP reports for each sampling event. The reports shall include associated figures, attachments and supporting documentation. The reports shall be signed and sealed by a Professional Geologist. Two copies of each report shall be submitted to the EPGMD and two copies to the CITY.

***See Attachment 1 for checklist of items to be included for tasks and deliverables***

### **PROJECT ASSUMPTIONS**

- The CONSULTANT shall not start the work until provided a written Notice to Proceed from the City.
- Working hours at the site shall be coordinated with the City.
- The CITY shall be considered the generator for the disposal of the petroleum-affected groundwater; however, the CONSULTANT shall be authorized to sign on behalf of the CITY during the disposal approval and hauling process.
- The recovery of FFP located within source area monitoring well MW-1 shall be conducted by the CITY, and that the FFP shall be adequately recovered by the time the NAMOP sampling activities occur so that this well can be included within the sampling regimen.

**CITY'S RESPONSIBILITIES**

- The CONSULTANT'S project manager or a designated representative shall coordinate the project with the CITY'S appointed project manager.
- A CITY inspector shall be present to observe the work at the site. The CITY shall coordinate access to the site.
- Permit fees if required (i.e. County, will be paid by the City). A three week processing time is required for the City to provide a check for permit fees.

**ADDITIONAL SERVICES**

If authorized in writing by the CITY as an amendment to this Task Order, the CONSULTANT shall furnish, or obtain from others, Additional Services of the types listed in Exhibit A of the Master Agreement. The CITY, as indicated in the Master Agreement, will pay for these services. In the event that additional assessment or a remediation plan is required, these additional services may begin with a meeting between CONSULTANT and the CITY to discuss the findings presented in the summary reports and the resultant requirements that may have to be met from regulatory agencies.

**PERFORMANCE SCHEDULE**

The CONSULTANT shall perform the services identified in Task 1 through Task 2 inclusive within 45 working days of written Notice to Proceed. The CONSULTANT shall perform the services identified in Task 3 inclusive within 365 working days of written Notice to Proceed.

**METHOD OF COMPENSATION**

The services performed shall be accomplished using the Not-to-Exceed method of compensation. A fee schedule and cost breakdown for reimbursable expenditures is included on Exhibit A.

**TERMS OF COMPENSATION**

Services shall be provided for the following Not to Exceed amounts:

Task No	Task Title	Labor Fees		Total
		Consultant	Sub consultant	
1	Soil Sampling Plan Preparation & Field Activities	\$2,390	\$	\$2,390
2	Additional Soil and Groundwater Site Assessment Activities	\$7,035	\$	\$7,035
3	1-Year Groundwater NAMOP Activities	\$9,310	\$	\$9,310
All tasks				\$ 18,735
Task No	Description	Equipment and Material Costs		Total
		Consultant	Sub consultant	
2	Additional Soil and Groundwater Site Assessment Activities	\$ 665	\$ 8,450	\$ 9,115
3	1-Year Groundwater NAMOP Activities	\$ 1,070	\$ 8,300	\$ 9,370
All Equipment and Material Costs				\$ 18,485
<b>TOTAL</b>				<b>\$ 37,220</b>

The total number of hours for the project is 214 for CONSULTANT and 0 for sub consultant.

**CITY CONTACTS**

Requests for payments should be directed to City of Fort Lauderdale Accounts Payable via e-mail to AcctsPayable@FortLauderdale.gov. All other correspondence and submittals should be directed to the attention of Mr. Todd Hiteshew ([THiteshew@fortlauderdale.gov](mailto:THiteshew@fortlauderdale.gov)) Environmental Services Manager, Public Works Department at the address shown below. **Please be sure that all correspondence refers to the City project number and title as stated above.**

City of Fort Lauderdale  
City Hall, 5<sup>th</sup> Floor – Public Works Department  
100 North Andrews Avenue  
Fort Lauderdale, FL 33301

**CONSULTANT CONTACTS**

The CONSULTANT shall designate a Project Manager to be responsible for all contractual matters and technical matters as they pertain to this task order.

EE&G Environmental Services, LLC  
5751 Miami Lakes Drive  
Miami Lakes, Florida 33014  
c/o Mr. Adam Brosius  
[abrosius@eeandg.com](mailto:abrosius@eeandg.com)  
Cell: (305) 710-7014  
Office: (305) 374-8300  
Fax: (305) 374-9004

IN WITNESS WHEREOF, the CITY and the CONSULTANT execute this Task Order No. 5 as follows:

CITY OF FORT LAUDERDALE:

By: \_\_\_\_\_  
LEE R. FELDMAN, City Manager

(SEAL)

ATTEST:

\_\_\_\_\_  
JONDA K. JOSEPH, City Clerk

Approved as to form:

\_\_\_\_\_  
Assistant City Attorney

WITNESSES:

[Signature]  
Signature

Brian Daley  
Print Name

[Signature]  
Signature

Matt Santiago  
Print Name



STATE OF FLORIDA:  
COUNTY OF Miami-Dade:

The foregoing instrument was acknowledged before me this 24 day of June, 2014, by Craig Clevenger as manager for EE&G Environmental Services, LLC, a Florida limited liability company.

(SEAL)

EE&G Environmental Services, LLC

By: [Signature]

Name: Craig Clevenger, P.G.

Title: Manager

ATTEST:

[Signature]  
By:

Name: Carolyn Bailey

Title: Manager

[Signature]

Notary Public, State of Florida  
(Signature of Notary Public)

Maria J Torres-Lopez  
Name of Notary Typed, Printed or Stamped

Personally Known  OR Produced Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_



**EXHIBIT A - - FEE SCHEDULE, REIMBURSABLES AND OTHER COSTS**

**CONSULTANT** (in accordance with Master Agreement)

Fee Schedule												Total Hours	Labor Cost (\$)
Labor Category		Professional Geologist	Project Professional		Field Scientist		CADD Senior Draftsperson		Administrative Assistant				
Percent Utilization		17.2%	47.7%		26.8%		5.8%		2.6%				
Labor Rate		\$140/hr	\$95/hr		\$75/hr		\$60/hr		\$40/hr				
Task No.	Task Title	Hrs.	Subtotal (\$)	Hrs.	Subtotal (\$)	Hrs.	Subtotal (\$)	Hrs.	Subtotal (\$)	Hrs.	Subtotal (\$)		
1	Soil Sampling Plan and Field Prep	5	700	12	1140	2	150	4	240	4	160	27	\$ 2,390
2	Additional Site Assessment for SARA	6	840	40	3800	25	1875	6	360	4	160	81	\$ 7,035
3	1-Year NAMOP	12	1680	42	3990	40	3000	8	480	4	160	106	\$ 9,310
<b>Totals</b>		23	3220	94	8930	67	5025	18	1080	12	480	214	<b>\$ 18,735</b>

**Equipment and Material Costs** (in accordance with Master Agreement)

Task No.	Task Description	EE&G Equipment and Material Description	Cost (\$)
2	Additional Site Assessment	Organic Vapor Analyzer (1) at \$150 per day	\$ 150
		Soil and Groundwater Sampling Equipment & PPE (1) at \$150 per day	\$ 150
		55-gallon Drum for Purge Water (3) at \$65 each <sup>1</sup>	\$ 195
		Truck Rental/Mileage (2) at \$85 per day	\$ 170
3	1-year Groundwater NAMOP	Groundwater Sampling Equipment & PPE (4) at \$150 per day	\$ 600
		55-gallon Drums for Purge Water (2) at \$65 each <sup>1</sup>	\$ 130
		Truck Rental/Mileage (4) at \$85 per day	\$ 340
<b><u>Equipment and Material Costs Subtotal</u></b>			<b>\$ 1,735</b>

**Sub-Consultant Costs** (in accordance with Master Agreement)

Task No.	Task Description	EE&G Equipment and Material Description	Cost (\$)
2	Additional Site Assessment	Geoprobe Driller Rate (1) at \$1,850 per day <sup>1</sup>	\$ 1,850
		T&D Disposal of (3) 55-g drum of petroleum-affected purge water at \$250 per drum <sup>2</sup>	\$ 750
		(12) Soil samples for analysis of VOC, PAH and TPH at \$325 per sample <sup>3</sup>	\$ 3,900
		(6) Groundwater samples for analysis of VOC, PAH and TPH at \$325 per sample <sup>3</sup>	\$ 1,950
3	1-year Groundwater NAMOP	T&D Disposal of (2) 55-g drum of petroleum-affected purge water at \$250 per drum <sup>2</sup>	\$ 500
		(24) Groundwater samples for analysis of VOC, PAH and TPH at \$325 per sample <sup>3</sup>	\$ 7,800
<b><u>Sub-consultant Costs Subtotal</u></b>			<b>\$ 16,750</b>
<b>Total for Task Order =</b>			<b>\$ 18,485</b>

Notes:

- <sup>1</sup> This service will be performed by JAEE Environmental Services, Inc.
- <sup>2</sup> This service will be performed by Everglades Waste Removal
- <sup>3</sup> This service will be performed by Florida Spectrum Environmental Services, Inc.