TASK ORDER No. DWF-4

Dated this	dav of	, 2013

FORT LAUDERDALE PUBLIC WORKS DEPARTMENT

PLANT "A" FORMER TRASH TRANSFER STATION, LINCOLN PARK AREA – SITE ASSESSMENT FOR DIESEL SPILL

PROFESSIONAL SERVICES

EE&G Environmental Services, LLC (CONSULTANT) has prepared this task order to provide environmental consulting associated with the recommended site assessment activities at the Plant "A" Former Trash transfer Station, Lincoln Park facility, located at along NW 19th Avenue and NW 6th Street, in Fort Lauderdale, Florida. 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 of February 19, 2013.

PROJECT BACKGROUND

On May 29, 2013, a petroleum discharge occurred from a 550-gallon diesel fuel above ground storage tank (AST), which migrated onto open ground adjoining the tank. In June 2013, EE&G mobilized to the facility to conduct a de minimis source removal of the affected soils. Upon performance of the source removal, it was apparent that the impact extended thru the vadose soil and into the groundwater table, where free floating product (FFP) was encountered. The CONSULTANT provided the CITY with an email summarizing the conditions at the site and that the impacted area required further assessment to determine the extent of the FFP, so that a remedial action plan (RAP) could be presented to the regulatory agency.

PROJECT DESCRIPTION

The scope is to conduct site assessment activities, including soil and groundwater sampling & the performance of a depth-to-water and groundwater flow survey. The goal will be to delineate the impacted soils that remain in-place following the source removal, to determine the extent of the FFP and petroleum-affected groundwater, and to determine the direction of ground water flow. The data and field findings will be utilized for the preparation of a Site Assessment Report (SAR), which will include a RAP to address the FFP, along with the impacted soils and/or groundwater. The site assessment activities will be conducted in accordance with Chapter 62-780 of the Florida Administrative Code (FAC).

SCOPE OF SERVICES AND DELIVERABLES

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

- The advancement of 10 soil borings around the spill area.
- The collection and laboratory analysis of six soil samples.
- The installation of five permitted & permanent shallow-interval groundwater monitoring wells.
- The installation of one permitted & permanent double-cased deeper-interval groundwater monitoring well.
- The collection and laboratory analysis of six groundwater samples.
- The performance of top-of-casing, depth-to-water and groundwater flow surveys.
- The preparation of SAR/RAP, which will include a summary of field activities, the results of the analyses, site diagrams & summary tables, and recommendations to address the FFP and/or impacted materials. The CONSULTANT will deliver two signed and sealed original reports to the City of Fort Lauderdale.

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 install monitoring wells 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 engineering services described on the tasks herein below:

Task 1 – Site and Field Preparation Activities

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 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 they 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. The CONSULTANT cannot accept responsibility for damage to unmarked private underground utilities that are unknown. The 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 5 hours and Not to Exceed \$480.00

Deliverables

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

Task 2 - Site Assessment Activities

The CONSULTANT shall mobilize to the site and advance up to 10 soil borings around the diesel spill area using direct-push technology (DPT) drilling techniques. The CONSULTANT shall visually inspect the soil borings to assess for indications of petroleum staining, FFP, unnatural discoloration or unnatural materials. The soil borings will 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, EE&G will collect up to 6 soil samples from the 10 borings. The sampling will be conducted to provide horizontal delineation of the petroleum-affected vadose zone soils that remain in-place following source removal and to identify the limits of the FFP atop the groundwater interface. The 6 soil samples will 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 install five permanent & permitted shallow-interval groundwater monitoring wells using direct-push technology (DPT) drilling techniques. The shallow-interval monitoring wells will be constructed of 1.5-inch PVC pipe, including 10-feet of 0.010-inch slotted & pre-packed well screen and 5-feet of solid PVC riser. The filter pack will be sealed with a layer of bentonite and the remainder of the borehole annular space will be filled with silica sand. The well casing will be completed with a water tight cap. The CONSULTANT also will install one deeper-interval double-cased monitoring well, whose outer casing will be a 4-inch solid PVC riser which extends to 25-feet BLS. The deeper-interval monitoring well will be drilled thru the grouted outer casing and will include 5-feet of 0.010-inch slotted & pre-packed well screen and 30-feet of solid PVC riser. The total depth for shallow-interval wells is anticipated to be 15-feet BLS and the deeper-interval well is anticipated to be 35-feet BLS. The wells will be completed with a concrete pad, manhole assembly and cover plates. The goal of the wells will be to provide horizontal and vertical delineation of the FFP and petroleum-affected groundwater. Following well installations, the

CONSULTANT shall collect top-of-casing information from the new wells (using a site specific datum point). The CONSULTANT will collect depth-to-water readings for all wells prior to sampling, in order to provide groundwater elevation and flow information to be included within the summary report for the assessment activities. Soils and purge water from the source area will be containerized into 55-gallon drums, which will be labeled and staged onsite in an area agreed upon by the CITY. The task order includes the costs to dispose of one 55-gallon drum of petroleum-affected soils and one 55-gallon drum of petroleum-affected purge water via the subcontractor FCC Environmental LLC, and assumes the characterization data collected during the initial source removal will be adequate to acquire disposal approval from a licensed waste hauler and disposal facility.

The CONSULTANT shall collect groundwater samples from the 6 newly installed monitoring wells. In order to collect samples representative of aquifer conditions, stabilization data including pH, conductivity, turbidity, temperature and dissolved oxygen will be collected during the purging of the monitoring wells. The purged water will be spread atop an impervious surface to allow for evaporation. Following stabilization, groundwater samples will be collected into pre-cleaned laboratory- provided glassware, placed on ice and transported to a laboratory for the following analyses:

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

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

This task is estimated at 35 hours and Not to Exceed \$16,825.00

Deliverables

There are no deliverables anticipated for this task.

Task 3 – Data Interpretation & Report Preparation

Upon receipt of the field and analytical data collected in Task 2, the CONSULTANT shall prepare a SAR/RAP report in accordance with Chapter 62-780 FAC. The SAR/RAP report will include recommendations to address FFP and impacted soils & groundwater, a summary of field activities, assessment results (OVA and laboratory analyses), a site diagram showing sampling locations, etc.

Two original copies of the Summary Report will be signed and sealed by a Professional Geologist, and will be delivered to the City of Fort Lauderdale.

This task is estimated at 38 hours and Not to Exceed \$3,555.00

Deliverables

The CONSULTANT shall provide two SAR/RAP reports signed and sealed by a Professional Geologist to the CITY. In addition, an electronic version in PDF shall be provided to the CITY.

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

PROJECT ASSUMPTIONS

- The CONSULTANT will not start the work until provided a written Notice to Proceed from the City.
- Working hours at the site will be coordinated with the City.
- The CITY will be considered the generator for the disposal of the petroleum-affected soils and groundwater; however, the CONSULTANT will be authorized to sign on behalf of the CITY during the disposal approval and hauling process.

CITY'S RESPONSIBILITIES

- The project manager or a designated representative will coordinate the project for the CITY.
- A CITY inspector will be present to observe the work at the site. The CITY will 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 Report 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 3 inclusive within 20 working days of written Notice to Proceed.

METHOD OF COMPENSATION

The services performed shall be accomplished using the Not to Exceed method of compensation. Reimbursable expenses associated with these services are not included in the fees and will be itemized separately, subject to an established Not to Exceed limit. 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	Tools Title	Labor Fees		Total	
No	Task Title	Consultant	Sub consultant	Total	
1	Site & Field Activities	\$480	\$	\$480	
2	Site Assessment	\$2,810	\$	\$2,810	
3	Data Interpretation & Report Preparation	\$3,555		\$3,555	
			All tasks	\$ 6,845	
Task	Description	Equipment a	Total		
No	Description	Consultant	Sub consultant	Total	
2	Site Assessment	\$740 \$13,275		\$ 14,015	
	\$ 14,015				
Task	Description	Reiml	Total		
No	Consultant Sub cons		Sub consultant	IOlai	
			TOTAL	\$ 20,860	

The total number of hours for the project is 78 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 AcctsPayble@FortLauderdale.gov. All other correspondence and submittals should be directed to the attention of Mr. Todd Hiteshew (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, 4th 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

Cell: (305) 710-7014 Office: (305) 374-8300 Fax: (305) 374-9004

	CITY OF FORT LAUDERDALE, a municipal corporation of the State of Florida:
	By LEE R. FELDMAN, City Manager
(CORPORATE SEAL)	ATTEST:
	JONDA K. JOSEPH, City Clerk
	Approved as to form:
	CARRIE L. SARVER Assistant City Attorney

CONSULTANT

WITNESSES:	EE&G Environmental Services, LLC
	By:
Signature	,
Adam B. Brosius – EE&G Print Name	Name: Craig Clevenger, P.G.
Timervanic	Title: Manager
	ATTEST:
Signature	
Print Name	By:
Fillit Name	Name: Carolyn Bailey
(CORPORATE SEAL)	Title: Manager
Services, LLC acknowledged the for	rolyn Bailey as Managers of <u>EE&G Environmental</u> regoing instrument before me this day of the corporation. They are personally known to me
(SEAL)	Notary Public, State of Florida (Signature of Notary taking Acknowledgement)
	Name of Notary Typed, Printed or Stamped
	My Commission Expires
	Commission No.

EXHIBIT A - - FEE SCHEDULE, REIMBURSABLES AND OTHER COSTS

Consultant (in accordance with Master Agreement)

CONSULTANT (in accordance with Master Agreement)

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Labor	r Category	Professio	nal Geologist	Project	: Professional	Fiel	d Scientist	CADD Senior Draftsperson		Total Hours	Labor Cost (\$)
Percen	Percent Utilization		22.9%		40.0%		31.5% 5.6%		5.6%		,
Lab	Labor Rate		\$140/hr		\$95/hr		\$75/hr \$60/hr		\$60/hr		
Task No.	Task Title	Hrs.	Subtotal (\$)	Hrs.	Subtotal (\$)	Hrs.	Subtotal (\$)	Hrs.	Subtotal (\$)		
1	Site & Field Activities	1	140	2	190	2	150			5	\$ 480
2	Site Assessment	1	140	6	570	28	2100			35	\$2,810
3	Data Interp. & Report Prep.	5	700	25	2375			8	480	38	\$ 3,555
1	Totals	7	980	33	3135	30	2250	8	480	78	\$ 6,845

Equipment and Material Costs (in accordance with Master Agreement)

Task No.	Task Description	EE&G Equipment and Material Description	Cost (\$)
2	Site Assessment	Organic Vapor Analyzer (2) at \$150 per day Soil and Groundwater Sampling Equipment & PPE (1) at \$100 per day Truck Rental/Mileage (3) at \$85 per day	\$ 300 \$ 100 \$ 340
Equipment and Material Costs Subtotal			\$ 740

Sub-Consultant Costs (in accordance with Master Agreement)

Task No.	Task Description	EE&G Equipment and Material Description	Cost (\$)
		Geoprobe Driller Rate (1.5) at \$1,850 per day ¹	\$2,775
		(5) Permanent & permitted shallow-interval monitoring wells at \$600 per well ¹	\$ 3,000
		(1) Permanent & permitted double-cased deeper-interval monitoring well at \$2500 per well ¹	\$ 2,500
2	Site Assessment	(2) 55-gallon drums for soil and purge water at \$50 per drum ¹	\$ 100
		T&D Disposal of (2) drums of petroleum-affected wastes at \$500 per drum ²	\$ 1,000
		(6) Soil samples for analysis of VOC, PAH and TPH at \$325 per sample ³	\$ 1,950
		(6) Groundwater samples for analysis of VOC, PAH and TPH at \$325 per sample ³	\$ 1,950
Sub-consultant Costs Subtotal			\$ 13,275
Total for Task Order =			

Notes:

¹ This service will be performed by JAEE Environmental Services, Inc.

² This service will be performed by FCC Environmental, LLC

 $^{^{\}rm 3}$ $\,$ This service will be performed by Florida Spectrum Environmental Services, Inc.