



**SHELL PETROLEUM DEVELOPMENT COMPANY OF NIGERIA LIMITED (SPDC)**

**TENDER OPPORTUNITY: PROVISION OF ENVIRONMENTAL STUDIES AND ASSOCIATED SERVICES**

**TENDER REF: NG01022484**

**NipeX Tender No: 1000002183**

## 1.0 INTRODUCTION

SHELL hereby announces to interested and prequalified companies an upcoming tendering opportunity for the Provision of Environmental Studies for SPDC. The proposed contract will commence in Q1 of 2018 and remain active for a three (3) year duration, followed by a one (1) year extension option.

## 2.0 Scope Of Work

The work/service to be provided in these proposed contracts include but not limited to the following:

- Determine the baseline environmental conditions (biophysical, socio-economic and health status).
- Determine the extent, magnitude and concentration of pollutants from the proposed project.
- Determine the extent of impact of the proposed project on the environment;
- Identify socio-economic effects of the project on the communities including impacts on demographic change, natural and cultural resources /properties, livelihood, social infrastructures, and issues on Lifestyles/values, crime and disorder, capacity & quality of infrastructure, economic development and change as well as analysis of the opportunity cost to land take and chemical spills during project activities
- Identify health hazards that may result from the different phases of the project during execution (including operation) and evaluation of local population exposure to these hazards.
- Develop cost effective integrated Environmental (Social and Health) Management Plan (EMP).
- Description of the existing action namely; installation/project, operations, oil/hazardous materials/waste spillage, waste generation/volume, characteristics of wastes, existing pollution control technology, disposal methods, etc.
- Qualitative and quantitative description of the already impacted environment, (biophysical/biodiversity/social and health).
- Levels of significance for losses of environmental resources affected by the already existing installations/projects or action. These environmental resources are the elements, features, conditions and areas valued by man that can be characterised as physiographic, biological (including bioaccumulation and chronic toxicity testing) cultural, aesthetic etc.
- Modification/mitigation/ameliorating plans to process or systems to either eliminate or decrease adverse environmental impacts to the greatest extent possible.
- Effectiveness of the Environmental Management Plan developed before the project. Development of an EMP (post-EER) for the operations of the Assets.
- Acquisition of qualitative and quantitative data/information (biophysical/socio-economic/health) required for evaluating the impact of the executed project activity on the environment.
- Identification of sources, pathways and receptors of contaminants/pollutants (Conceptual Site Models).
- The use of Risk Based Corrective Action (RBCA) technique to determine the risk associated with the facility.
- Ecological/biophysical data including biodiversity.
- Development of appropriate plan for site restoration and remediation.
- Acquisition of qualitative and quantitative data/information (biophysical/socio-economic/health) required for evaluating the impact of the cleaned up oil spill on the environment.
- Sludge and oily sand treatment
- Burnt fluorescence bulbs, Chlorofluorocarbon, Dredge spoils , Asbestos handling/ disposal, etc
- Produced Sand, Formation water, Oily waste water, sanitary waters and Storm Water Monitoring
- Drill, develop, label and secure monitoring boreholes for the assessment of contamination and periodic Vertical Electric Sounding (VES), screening, casing, cementing, production using Sumo pump, logging, and capping to secure the borehole with a lock
- Reporting of ground water quality from established boreholes including its trend analysis.
- Evaluate biological/microbiological/Physiochemical characteristics of the environments impacted by operational discharges.
- Purchase and/or isolation of healthy and Juvenile forms of Biological Organisms for the Biological Monitoring Tests [Minimum Number = 10000 spp per trophic Level; Including acclimatization in the Lab
- Trucking of Habitat/Natural Water for Study -Habitat water/ Natural Seawater Provision for entire Study (circa 242,500 Liters)
- Toxicity Testing (using Treated & Untreated Produced Water)
- Acute Toxicity Test - acute toxicity test using Microtox® Model 500 for one trophic level: Bacteria (vibrio fischeri). The toxic unit EC<sub>50</sub> of the effluent and waste water.
- Acute Toxicity Test - 0, 12, 24, 48, 72 & 96 hrs acute toxicity test using the Whole Effluent (WET) procedure for four trophic levels: Marine algae, Crustacea, Mollusc and Fish. The toxic units (Tu) LC<sub>50</sub>, EC<sub>50</sub> NOEC and LOEC.
- Bio-magnification (Molluscs, algae and bacteria)
- Bio-magnification: Fish Tissue analysis (Heavy metals and organics)
- Fish Tissue analysis (Observable effects)
- Bio-magnification: Crustaceans Tissue analysis (Heavy metals and organics),
- Bio-magnification: Molluscs Tissue analysis (Heavy metals and organics)
- Bio-magnification: Algal and Microbial analysis (Heavy metals and organics)

- Depuration: Crustacean
- Depuration: Molluscs
- Depuration: Fishes
- Depuration: Crustaceans Tissue analysis (Heavy metals and organics)
- Crustacean Tissue analysis (Observable effects)
- Depuration: Molluscs Tissue analysis (Heavy metals and organics)
- Algal Acute toxicity test
- Produced Water (Untreated and Treated), Slop Tank waste and Reference Chemical Characterization
- Sea Water from the offshore environment, habitat water of the organism and Sediments/Mud flat Characterization
- Testing of Oil Dispersants
- Naturally Occurring Radioactive Materials (NORM) Survey
- Biodiversity and Ecosystem Services (BES) Assessment
- Validity Surveys of Critical Habitats/Sensitive Areas having overlaps with SPDC-JV assets and activities
- Adhoc Biodiversity Consultancy Services (comprises evolving BES issues arising from SPDC-JV's assets, projects and activities including RAs, IAs, FLBs, etc.,)
- Conduct weekly environmental compliance monitoring for operational facilities as applicable such as Gaseous Point Source Emission, ambient air quality, Produced sand, formation water, oily waste water, sanitary waters, Storm water monitoring, groundwater and aqueous effluent monitoring.
- Assess all environmental components as applicable e.g. Air Quality, soil, Surface water, sediment, groundwater, fisheries, microbiology, health, socio-economic etc. as required by regulation.

### 3.0 Mandatory Requirements

1. To be eligible for this tender exercise, interested contractor are required to be pre-qualified in the Product Group 3.02.02- Safety, Health and Environment, 3.03.05 - Safety and Environmental and 3.13.02 - Environmental Management Systems Certification (Product/Services) category in NipeX Joint Qualification System (NJQS) data base. **Only successfully pre-qualified suppliers in this category will receive Invitation to Technical Tender (ITT).**

2. To determine if you are pre-qualified and view product/service category you are listed for, open [www.nipex-ng.com](http://www.nipex-ng.com) and access NJQS with your login details, click on continue Joint Qualification Scheme tool, click check my supplier status and then click supplier product group.

3. If you are not listed in a product/service category you are registered with DPR to do business, contact NipeX office at 30, Oyinkan Abayomi Street, Ikoyi, Lagos with your DPR certificate as evidence for necessary update.

4. To initiate the JQS prequalification process, access [www.nipex-ng.com](http://www.nipex-ng.com) to download the application form, make necessary payments and contact NipeX office for further action.

5. To be eligible, all tenders must comply with the Nigerian Content Requirements in the NipeX system.

6. To be eligible, all tenders must own a laboratory with ISO 17025 as an added advantage.

### 4.0 Nigerian Content Requirements

Vendors are to demonstrate strict compliance with the provisions of Nigerian Oil & Gas Industry Content Development Act and also provide the following requirements:

- Demonstrate that the entity is a Nigerian Registered Company, or Nigerian Registered Company as the contracting entity in genuine alliance or joint venture with foreign company with details on scope and responsibilities of parties for this work. Such companies must show evidence of joint venture binding agreement duly signed by the CEO of both companies including evidence or plans of physical operational presence and set-up in Nigeria
- Furnish details of company ownership and share -holding structure. Also submit clear photocopies of your CAC Forms CO2 and CO7
- Provide evidence of what percentage of your key management positions is held by Nigerians and what percentage of the total work force are Nigerians. Also, show overall percentage of work to be performed in Nigeria and those by Nigerian resources relative to total work volume.
- Provide a Nigerian Content Plan providing a detailed description of the role, work scope, man-hours and responsibilities of all Nigerian companies and personnel that would be involved in executing the work. Also provide details of Nigerian Content focal point or manager.
- State proposed total scope of work to be conducted by Nigerian personnel (whether contracted directly or under subcontract agreements) with names and addresses including evidences of well -equipped offices and workshop; attach past experience of such patronage.
- Specific to this work, provide detailed plan for staff training and development on equipment repairs & maintenance and procurement (including all software to be used, number of personnel, name of organization providing such training and evidence of past training record) for Nigerian personnel including description of any specific programs in place for transfer of technology and skills to indigenous businesses and Nigerians over the next five (5) years.

- Location of in-country facilities (Office complex, laboratory facilities and testing facilities etc)
- Contractor must be willing and able to provide evidence of maximization of made in Nigeria goods and services.
- Provide evidence of registration with NCDMB JQS
- Provide details on any other Nigerian Content initiative your company is involved in.

**5.0 Closing Date:** Only Tenderers who are registered with the relevant NJQS product/category as at **1<sup>st</sup> August 2017** being the advert close date shall be invited to submit Technical bids.

**6.0 Additional Information**

- All costs incurred in preparing and processing NJQS prequalification shall be to the contractor's accounts.
- This advertisement shall neither be construed as any form of commitment on the part of SPDC to award any contract to any company and or associated companies, sub-contractors or agents, nor shall it entitle prequalified companies to make any claims whatsoever, and/or seek any indemnity from SPDC and or any of its partners by virtue of such companies having been prequalified in NJQS.
- SPDC will communicate only with authorized officers of the pre-qualifying companies and NOT through individuals or Agents.

Please visit NipeX portal at [www.nipex-ng.com](http://www.nipex-ng.com) for this advert and other information. Also note that this contract will be progressed through NipeX system.