



## **INDIVIDUAL CONSULTANT PROCUREMENT NOTICE 01st June 2021**

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**TITLE OF CONSULTANT:** Individual Consultant (IC) to Undertake WasteWater Data Collection Pilot Study in Selected Industries in Botswana

**COUNTRY:** BOTSWANA

**DESCRIPTION OF ASSIGNMENT:** To collect wastewater quality data in selected industries and determine best practices in pre-treatment of wastewater produced.

**PROJECT NAME:** Biogas Project

**PROJECT NUMBER:** 00101976

**SUPERVISION:** Project Manager - Biogas

Proposals with reference should be submitted in a sealed envelope clearly labelled, **“Individual Consultant (IC) to Undertake WasteWater Data Collection Pilot Study in Selected Industries in Botswana”** should be submitted at the following address no later than **16<sup>th</sup> June 2021 at 12:00pm (Botswana Time)**, to:

*The Resident Representative  
United Nations Development Programme  
P.O. Box 54  
Gaborone*

or by email to: [procurement.bw@undp.org](mailto:procurement.bw@undp.org)

Any request for clarification must be sent in writing, or by standard electronic communication to the address or e-mailed to [enquiries.bw@undp.org](mailto:enquiries.bw@undp.org) UNDP Botswana will respond in writing or by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of the inquiry to all prospective facilitators.

***NOTE:** Consultancy firms/companies interested in applying for this assignment are free to do so provided they submit a CV of only one qualified consultant and present its bid in a manner that would allow for evaluation of the bid in accordance with the evaluation criteria specified in these solicitation documents. That is, the experience required is that of the individual whose CV would have been submitted by the company rather than that of the company. Further, if the submitted bid wins, the ensuing contract will be between the UNDP and the company/firm, not the individual.*

## **1.0 BACKGROUND**

The Government of Botswana (GoB), through the Department of Energy (DOE), in collaboration with the United Nations Development Programme (UNDP) are implementing a project titled “Promoting production and utilization of Biogas from Agro-waste in South-Eastern Botswana (Biogas Project)”. The Biogas Project seeks to facilitate low-carbon investments in the production and utilization of biogas from agro-waste in South-Eastern Botswana. The project aims to assist the government through the following three components:

1. Institutional strengthening and capacity development;
2. Facilitation and establishment of biogas plants; and
3. Setting up of utilization and knowledge platforms.

The Biogas Project aims to support the Water Utilities Corporation in their mandate to enforce and monitor the discharge of wastewater from industries into the sewer line and/or environment. Monitoring is done through the physical inspection of industries, sampling and testing of wastewater and feedback to industries. Each industry is expected to sign a Trade Effluent Agreement (TEA) with WUC. This agreement states that the industry is not allowed to discharge effluent not compliant to BOS93: Water Quality – Wastewater Specification – Physical, Microbiological and Chemical Requirements. The industry is therefore obligated to install, as is required, pre-treatment equipment to ensure compliance to this standard. Failure to adhere to the standard results in the industry being fined and/or not allowed to discharge into the sewer system.

This consultancy therefore aims to engage a consultant who will, in detail, identify what the challenges faced by the WUC as well as the selected industries are and determine what solutions can be put in place to ensure compliance to the signed agreement. The consultant will collect, test and analyse wastewater samples at the selected industries and recommend solutions for automatic sampling and testing as well as appropriate pre-treatment systems for each of the selected industries.

## **2.0 OBJECTIVE**

The objective of this assignment is to undertake a pilot study of the wastewater discharge of 6 selected industries in order to determine the quality of the wastewater being discharged and therefore propose relevant solutions.

## **3.0 SCOPE OF WORK AND RESPONSIBILITIES**

The Consultant will undertake wastewater sampling, testing and analysis in selected industries (Battery Manufacturing Industry, Multi-Species Abattoir, Senn foods abattoir & tannery, Botswana Breweries Limited, Princess Marina Hospital and Clover dairies) on a pilot basis and make recommendations in the form of a budgeted 2 year action plan for WUC. The consultant will complete to, the activities listed below:

- a) Produce an inception report indicating workplan and detailed methodology inclusive of reasonable timelines and proposed sampling plan to be used;
- b) Produce and present a status-quo report indicating
  - i. test results and analysis following first round of sampling from each industry,
  - ii. major parameters found in sampled wastewater and impact of these on the sewage system and environment,
  - iii. challenges faced by WUC in monitoring and enforcement of TEAs, international best practices on pre-treatment of these parameters,
  - iv. reasons some industries have not signed the TEA;
  - v. the issues preventing selected industries who have signed the TEA from complying with the TEA and
  - vi. propose best practices to ensure compliance to TEA;
- c) Produce and present monthly results from 6 sessions of sampling and testing over a 4-month period based on parameters indicated in BOS93 WasteWater – Physical Microbiological and Chemical Requirements – Specification.
- d) Produce and present a costed action plan based on the project findings, lessons learnt and recommendations indicating:
  - i. type and cost of automatic equipment for sampling, testing and analysis
  - ii. recommended frequency of sampling and testing;
  - iii. capacity needs assessment of WUC staff members;

- iv. capacity assessment of WUC lab;
  - v. Challenges anticipated in implementation of action plan; and
  - vi. Recommendations for further work
- e) Produce and present a final report summarizing all findings including the monthly reports, and recommendations for moving forward.

#### 4.0 DELIVERABLES

No.	Deliverable
1.	<b>Inception Report</b> To be submitted within 2 weeks after contract signing
2.	<b>Status-Quo Report</b> To be submitted 4 weeks after approval of inception report
3.	<b>Test Reports</b> To be submitted bi-weekly after approval of status-quo report
4.	<b>Costed Action Plan</b> To be submitted 6 weeks after approval of status quo report
5	Produce and present a final report incorporating a 2 year costed action plan, summary of the test results and recommendations for further work <b>Final Report</b> To be submitted 2 weeks after approval of draft final report

#### NOTE

The consultant is expected to set out in the technical proposal the methodology that will be adopted for each item in the Scope of Works. It is also expected that the methodology will

follow global best practices for such work. The proposal should also determine the exact number of workdays required to address the full Scope of Works, based on the methodology chosen.

## **5.0 COORDINATION OF THE CONSULTANCY**

The consultant will be required to submit all submissions to the Biogas Project Manager. The technical reference group will oversee the work of the consultancy from start to finish and approve deliverables within one (1) week of submission.

## **6.0 DUTY STATION**

Botswana

## **7.0 QUALIFICATIONS AND EXPERIENCE**

### ***7.1 EDUCATION***

Bachelor's degree in Chemical / Biological Science, Water Engineering or other closely related fields.

### ***7.2 EXPERIENCE:***

- a) Minimum of 5 years' experience in the Wastewater sector including appropriate experience with testing and analysis of water or wastewater.
- b) With at least 5 years of experience in project management;
- c) Experience in carrying out or having been directly involved in at least one assignment of a similar nature and complexity close to the present assignment;
- d) Experience in dealing with and engaging stakeholders from diverse backgrounds.

### ***7.3 COMPETENCIES***

#### **7.3.1. Corporate Competencies**

- a) Demonstrates commitment to UNDP's mission, vision and values
- b) Display cultural, gender, religion, race, nationality and age sensitivity and adaptability

- c) Ability to train and work effectively with counterpart staff at all levels and with all groups involved in the project and,
- d) Highest standards of integrity, discretion and loyalty.

### **7.3.2. Functional Competencies**

#### **Knowledge Management and Learning**

- a) Shares knowledge and experience; and
- b) Actively works towards continuing personal learning, acts on learning plan and applies newly acquired skills.

### **7.3.3. Development and Operational Effectiveness**

- a) Ability to perform a variety of specialized tasks related to results management, including support to design, planning and implementation of program, managing data, reporting;
- b) Ability to provide input to business processes re-engineering, implementation of new system, including new IT based systems;
- c) Ability to report analytical outputs in a clear, concise manner to non-technical audience;
- d) Ability to maintain appropriate records/uphold quality assurance integrity
- e) Strong drafting, presentation and reporting skills, excellent written communication skills;
- f) IT competencies in Word, Excel, PowerPoint and Internet

### **7.3.4. Leadership and Self-Management**

- a) Focuses on result for the client and respond positively to feedback; and
- b) A good personality with strong leadership skills

## **8.0 DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS**

### ***8.1 Technical Proposal***

Provide a brief and concise methodology on how they will approach and conduct the proposed assignment.

## ***8.2 Financial Proposal***

The financial proposal will specify the daily fee of the individual consultant based on the number of days worked, cost of travel and daily subsistence fees. Each action item must be clearly costed. The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables. Payments are based upon output, i.e. upon delivery of the services specified in the Terms of Reference (TOR). In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a comprehensive breakdown of this lump sum amount (including professional fees, travel, per diems, accommodation, and number of anticipated working days).

## **8.3 Personnel CV**

Detailed personnel CV including past experiences in similar projects with names and traceable contacts of three (3) referees should be included.

## **9.0 DURATION OF THE WORK**

The consultancy work shall be done in a period to be specified by the consultant but not exceeding 6 months from the date of contract signing.

## **10.0 TRAVEL**

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the Expert/Individual Consultant wish to travel on a higher class he/she should do so using their own resources. In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses



should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed.

## 11.0 EVALUATION

Only those candidates who obtain at least **70%** of the technical evaluation will be considered for financial proposal evaluation.

- **Stage 1:** Preliminary evaluation of the proposals will be based on [yes/no] response as per the table below. If the response is ‘no’ for any of the 3 criteria, the consultant will be disqualified from further evaluation.
- **Stage 2:** Technical capability of the Consultant to deliver the required consultancy outputs evaluated on a scale of 0-100 points wherein the qualifying mark is **70%**. The criteria to be used are shown below:

Criteria	Weight
<b><u>Technical Evaluation</u></b>	
<b>Criteria A:</b> Relevant qualifications (academic & technical, minimum Bachelors degree)	YES/NO
<b>Criteria B:</b> Adequate relevant work and/or professional experience (Minimum 5 years)	YES/NO
<b>Criteria C:</b> Complete Consultancy package submitted (Technical and Financial Proposal)	YES/NO
<b>Criteria D: Context</b> – Comprehensive, clear understanding and concise knowledge of wastewater and/or water sampling and testing	30
<b>Criteria E: Relevant Professional /Work Experience</b> – Demonstrate relevant work experience including 3 relevant referees	30
<b>Criteria F: Methodology</b> – Clear and detailed methodology of how the assignment will be undertaken. Demonstrable competence on the subject matter and clear responsiveness to the Terms of Reference (TORs)	40

## **12.0 AWARD**

The award of the contract will be made to the Consultant after the offer has been evaluated and determined as:

- a) Responsive/compliant and/or acceptable for the assignment and;
- b) Having scored 70% and above on technical evaluation
- c) Award will be made based on cumulative criteria considering both the technical and financial proposals.

Lastly, UNDP retains the right to contact references directly.

## **13.0 PAYMENT SCHEDULE**

Payment shall be made following the suggested schedule as below:

1. 0% upon APPROVAL of the Inception Report.
2. 20% upon APPROVAL of status-quo report
3. 30% upon APPROVAL of test reports
4. 40% upon APPROVAL of action plan
5. 10% upon APPROVAL of final report