# Invitation No: MV-MEE-181012-CS-CQS

# TERMS OF REFERENCE

## Outline Terms of Reference for the Selection of a Consultant to prepare the detailed design for Fire Protection System in R. Vandhoo and Supervision

## BACKGROUND

## Solid Waste Management (SWM) including the management of Hazardous Waste is a priority sector for the Maldives due to the fact of high economic and social dependence on a healthy marine environment. In recent years there has been a significant increase in the magnitude of waste management problems throughout the country for a number of reasons, including but not limited to population increase, changing lifestyle, dependence on importation, coupled with the environmental challenges brought about by the growing tourism. The amount of hazardous waste generated in islands such as lithium batteries, used paints, thinners and waste oil has also increased over the years primarily due to technological advancements, coupled with the rapid explanation of construction industry. Hazardous waste is considered as a priority waste that needs to be stored and managed carefully with special precaution. Potential for fires and explosions are high due to the toxic nature of such wastes. It is planned to only carryout storage of hazardous waste at island level, while treatment and final disposal will be facilitated at the regional waste management facility (RWMF). Hence, it is paramount for the RWMFs to be equipped with proper firefighting mechanisms.

## The worsening waste management situation is increasingly resulting in pollution of the environment and the generation of conditions prejudicial to public health. Practices vary from community to community, but at most islands waste is building up into many open dump sites spreading across islands and disposed of either in the sea or by open burning. Predicting the threats to the economic development, the Government of Maldives took a decision to invest heavily in the waste sector with the support of various donors and international agencies to build the necessary infrastructure to develop an integrated and sustainable solid waste management system throughout the country on a Zonal approach.

## This process has started in 2008 with the support of the World Bank Group, under the International Development Association (IDA) credit to develop an integrated SWM system for Zone II, namely the Maldives Environmental Management Project (MEMP). This project was completed in 2015, by developing SWM systems at the island level and a regional waste treatment facility for final disposal of residual wastes from Zone II islands.

## To continue this work, the Government of the Republic of Maldives has received a second grant from the IDA for another project called the “Maldives Clean Environment Project” (MCEP) and has allocated a portion of the grant to operationalize R.Vandhoo regional waste management facility of zone 2.

## Accordingly, as implementing agency of the above project, the Ministry of Environment (ME) is seeking assistance of a qualified and competent consultancy firm to prepare the design of a fire protection system at R. Vandhoo regional waste management facility.

## The Ministry of Environment now invites eligible consultants to submit their “Expression of Interest” (EOI) for providing the services. Interested consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the services.

## OBJECTIVES

The main objective of this consultancy is to complete the fire protection design for the Vandhoo Regional Waste Management Facility (RWMF).

## SCOPE OF WORKS

A master plan layout is already prepared by the Ministry of Environment to show the existing facilities and required facilities for RWMF.

Based on this, this assignment includes:

1. Prepare a study on existing fire safety system and planned upgrades; to identify deficiencies and additional requirements.
2. To design fire safety system as per Maldives National Defence Force (MNDF) accepted standards at R. Vandhoo, incorporate any existing fire safety items that can be used. Expected deliverable include but are not limited to:

Meeting with stakeholders to discuss the requirements (MCEP / MNDF / WAMCO)

Propose draft design as per client and stakeholders' recommendations

Submit the final report in a format needed for approval by MNDF, which shall include

* 1. Design Report
	2. Design Drawings
	3. Specifications
	4. Bill of Quantities (priced and for bidders)
1. Providing assistance and advice during the bidding for a contractor. This includes preparation of TOR/RFP and other documents required for bidding.
2. Evaluation of the received proposal subject to the bidding process conducted for the above RFP.
3. Undertake periodic site inspection, check work in progress regarding workmanship, quality control, and performance as described in the contract documents.
4. Provide instructions to clarify the contract documents where required.
5. Administer variations and obtain client approvals.
6. Assess progress claims and issue progress certificates.
7. Assess and approve claims for extension of time.
8. Prepare defects list prior to practical completion.
9. Inspect rectification and issue notice of practical completion.
10. Assess the final contract account.
11. Issue the final certificate on completion of all defects and outstanding work.

**The layout and requirements of all the deliverables shall be discussed with ME and MNDF and preliminary design shared and agreed upon before proceeding with detailed design.**

* The consultant shall produce all the detailed drawings and BoQ as per NFPA, and shall conform with local standards and regulations. The tasks to be undertaken by the consultant under this Terms of Reference are to be managed in close collaboration with Civil Engineer and Environmental and Social Safeguards Specialist of the Project Management Unit (PMU) of MCEP at ME,

## ELIGIBILITY AND QUALIFICATION

The following staff members will be required for the assignment. The Consultant should submit full CV’s for each of the proposed staff members highlighting the criteria given below.

|  |  |  |
| --- | --- | --- |
| **Position** | **Qualification** | **Quantity** |
| Electrical Engineer | Bachelor’s Degree in electrical engineering, electrical engineering technology or a related field with minimum 05 years’ general experience in designing and 03 years’ specific experience in designing fire protection systems related to the requirement of this assignment. | 1 |
| Mechanical Engineer | Bachelor’s Degree in Mechanical Engineering or a related field with minimum 05 years’ general experience and 03 years’ specific experience in designing fire protection systems related to the requirement of this assignment. | 1 |

To be eligible for this assignment,

1. The consultant should submit full CV with the following details:
* Attested copies of accredited educational certificates.
* Description of similar assignments and value of such assignments. Role of the consultant / staff member for each of the assignment should be specified (for example EIA consultant, social assessment expert, surveyor etc.)

**NOTE: Designs undertaken as lead engineer and support staff or team member must be clearly defined.**

1. Staff list of proposed team members for each of the required 2 positions

## EVALUATION CRITERIA

Criteria, sub-criteria, and point system for the evaluation of the Full Technical Proposals:

**Points**

**i) Specific experience of the Consultant (as a firm) relevant to the Assignment: [20]**

**(ii) Key Experts’ qualifications and competence for the Assignment:**

*[Notes to Consultant: each position number corresponds to the same for the Key Experts in Form TECH-6 to be prepared by the Consultant]*

*a) Position K-1: [Electrical Engineer]* [40]

*b) Position K-2: [Mechanical Engineer]* [40]

**Total points for criterion (iii):****[80]**

The number of points to be assigned to each of the above positions shall be determined considering the following three sub-criteria and relevant percentage weights:

1) General qualifications (general education, training, and experience): 20%

2) Adequacy for the Assignment (relevant education, training, experience in the sector/similar assignments) 70%

3) Relevant experience in the region (working level fluency in local language(s)/knowledge of local culture or administrative system, government organization, etc.): 10%

 Total weight: 100%

**Total points for the three criteria: [100]**

 **The minimum technical score (St) required to pass is 70%**

## DELIVERABLES

|  |  |
| --- | --- |
| **Deliverable** | **Submission Deadline (from signing of agreement)** |
| Submission of study report on existing fire system | 7 calendar days |
| Submission of preliminary design report | 30 calendar days |
| Submission of final design report (design report, drawings, specifications, BoQ) | 45 calendar days |
| Providing all other consultancy services stated in scope of works | NA |

## PAYMENT

Payment will be in accordance with the schedule specified below;

|  |  |  |
| --- | --- | --- |
| Description | Allocation | Requirement |
| Submission of preliminary design report | 30% | Submission of preliminary design report |
| Submission of final design report (design report, drawings, specifications, BoQ) | 40% | Submission of final design report (design report, drawings, specifications, BoQ) |
| Supervision Consultancy – Payment 1 | 15% | Submission of report on Material Inspection  |
| Supervision Consultancy – Final Payment | 15% | Submission of Final report upon completion of civil works. |

## REPORTING

The successful consultant will report to Civil Engineer of MCEP at ME or an alternate nominated by the Project Manager.

Upon completion of the final Report, a total of 3 (three) hard copies and a digital copy on CD ROM (preferably in Acrobat PDF format) of the report shall be submitted to ME.

## Proposal

1. The technical proposal and the price proposal must be submitted in two separate sealed envelopes.
2. Technical proposal should contain a methodology and workplan.
3. A workplan / schedule consistent to the TOR must be provided.

## CONTRACT DURATION

1. The duration for submittals is 45 calendar days
2. The duration for consultancy services is until completion of fire safety installation works by the selected contractor