Invitation No: MV-MEE-46609-CS-LCS TERMS OF REFERENCE

Outline Terms of Reference for Selection of Consultant to undertake the preparation of Environmental and Social Management Plans for the establishment of Island Waste Management Centres in Six Selected Islands

1. BACKGROUND

Solid Waste Management (SWM) 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 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 has been completed in 2015, by developing SWM systems at the island's level and a regional waste treatment facility for final disposal of residual wastes from Zone II islands.

Following the success of the MEMP project and the design implemented, the Government of the Republic of Maldives has applied for a grant from the IDA for another regional waste management project under the title "Maldives Clean Environment Project" (MCEP) and shall allocate a portion of the grant for Consultancy Services for preparing Environmental and Social Management Plans (ESMP) of six islands.

Accordingly, as implementing agency of the above project, the Ministry of Environment and Energy (MEE) is seeking assistance of a qualified and competent individual consultant for preparing ESMPs for the proposed development of Island Waste Management System including the construction of Island Waste Management Centres and establishing intra island waste collection, transport and waste management system in six islands of the selected regions.

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

2. OBJECTIVES

The specific objective of this assignment is to ensure that the environmental safeguards have been taken into consideration for the construction of IWMCs and are in compliance with the existing relevant laws and regulations of the Maldives and World Bank's Safeguards Policies applicable to the project.

The main objective of the MCEP is to improve solid waste management practices in selected regions, namely Zone 2 (Noonu, Raa, Baa and Lhaviyani atoll), Zone 4 (Meemu, Faafu and Dhaalu atoll) and Zone 5 (Thaa and Laamu atoll). This will be achieved through the following four (4) components:

- Component 1: National Solid Waste Management Strategy and Policy
- Component 2: Regional Waste Management Systems
- Component 3: Island Waste Management Systems
- Component 4: Project Management

Preparation of ESMP reports are only related to Component 3, which will support development/completion of island level facilities for managing collection, segregation, on-site treatment and storage of residual waste, until its eventual transfer to common facility. The candidate zones for the project are 4 and 5, in addition to residual activities in Zone 2.

The project is categorized as an Environmental Category A as per the World Bank safeguards categorization process.

Therefore, following safeguard policies are applicable to the MCEP

1. OP 4.01 – Environmental Assessment to ensure any environmental impact associated with project activities are identified in time and mitigated.

2. OP 4.04 – Natural Habitats is triggered because all of the country's islands are surrounded by coral reefs which are significant natural habitats. The overall project will not conduct any activities within designated protected areas and project interventions will facilitate in mitigating pollution and degradation of such ecosystems due to inappropriate SWM.

3. OP 4.12 - The interventions leading to the construction and expansion of IWMCs could lead to future in case finds of involuntary loss of crop and / or land taking as a small percentage of communities rely on surrounding land for agriculture and livelihood thus proper due diligence measures to tackle any in case finds have to be inbuilt in to project screening.

Furthermore, carryout Environmental Assessments are a legal requisite in the Maldives for development projects that may have any undesirable impacts on the environment. Schedule D of the Amendment 2 to the Environmental Impact Assessment Regulations (2012) provides a screening list of all development types for which a full ESIA is mandatory. However, the proposed development of IWMCs are small scale and therefore, is not listed under the Schedule D of the Environmental Impact Assessment Regulations (2012) of the Maldives. A screening process was followed for the six islands and the screening decision from EPA was to submit ESMP reports and get approval prior to commencement of project activities.

3. SCOPE OF WORKS

The assignment includes the preparation of the ESMP reports for the establishment of waste management systems in the following 6 islands;

- 1. Th. Buruni
- 2. Th. Omadhoo
- 3. Th. Madifushi
- 4. Th. Kinbidhoo
- 5. Th. Thimarafushi
- 6. M. Mulah

The individual consultant shall produce ESMP reports through consultative process in accordance with Environmental Impact Assessment Regulations (2012) enforced by EPA of the Republic of Maldives and the Environmental and Social Assessment and Management Framework (ESAMF) of MCEP. Consultation shall be made with but not necessarily limited to; Ministry of Environment and Energy, Island Councils of the above islands and where necessary community consultation shall also be

undertaken. The tasks to be undertaken by the individual consultant under this Terms of Reference are to be managed in close collaboration with Environmental and Social Safeguards (ESS) Officer of the Project Management Unit (PMU) of MCEP at MEE, and include but are not necessarily limited to the following:

- Undertake the application process for the ESMP works of the assignment.
- Undertake field observations and necessary stakeholder consultations and develop the ESMP reports as per the screening decision, ESAMF and the Terms of Reference (TOR) provided in Annex 1.
- Submit draft ESMP reports to the PMU and World Bank.
- Prepare the final reports by considering the comments given by the PMU and World Bank.
- Submit the final ESMP reports to Environmental Protection Agency (EPA), and get approval/decision statement.
- Shall furnish any request by EPA for any additional information during the ESMP reviewing stage until a final decision is made by the EPA.
- Submit the decision statements and the approved ESMP reports to the PMU for MCEP, MEE.

4. ELIGIBILITY AND QUALIFICATION

The following staff member(s) will be required for the assignment.

Position	Qualification	Quantity
ESMP Consultant (As	Bachelor's Degree in Environmental Science/Environmental	1
per the criteria given	Management/Environmental Engineering or related field	
in Environment	with minimum 05 years' experience in the field of	
Impact Assessment	environment and 02 years' specific experience in preparing	
Regulations 2012)	ESIA or ESMP reports.	

To be eligible for this assignment,

- 1. The individual consultant should submit full CV highlighting the criteria given below:
 - a. Bachelor's Degree in Environmental Science/Environmental Management/Environmental Engineering or related field with minimum 05 years'

experience in the field of environment and 02 years' task specific experience in preparing EIA or EMP reports. Postgraduate qualifications will be an added advantage. Copies of accredited academic certificates must be submitted.

- b. EIA Consultants should submit a copy of his/her EIA license.
- c. Demonstrate past experience in performing the services (description of similar assignments, value of such assignments and decision statements issued by EPA for the completed assignments shall be furnished as evidence).
- d. Experience in conducting ESIA / ESMP for Waste Management Systems will be given preference.

NOTE: Assignments undertaken as lead consultant and support staff or team member must be clearly defined.

2. The proposed consultant must meet the criteria given in Environment Impact Assessment Regulation, 2012.

5. EVALUATION CRITERIA

The EOI's submitted by the consultants will be evaluated based on the criteria below.

(A) Consultant's Qualification and Experience [100]

Bachelor's Degree in in Environmental Science/Environmental	[60]
Management/Environmental Engineering or related field	
Postgraduate Degree in Environmental Science/Environmental	[20]
Management/Environmental Engineering or related field	
5 years' experience in the field of Environment	[10]
2 years' experience in preparing ESIA or ESMP reports	[10]

(B) Specific Experience in conducting ESMP / ESIA [100]

No. of ESIA and ESMP reports completed	[40]
• Lead Consultant (5 points per project)	
• Team Member / Support Staff (2 points per project)	
Note: Maximum cumulative points that can be attained for assignment undertaken as a team member or support staffs is 10. Multiple reports completed as a single assignment will be assessed based on pro-rata basis.	
No. of task specific ESIA and ESMP reports completed	[40]
• Lead Consultant (5 points per project)	
• Team Member / Support Staff (2 points per project)	
Note: Maximum cumulative points that can be attained for assignment undertaken as a team member or support staffs is 10. Multiple reports completed as a single assignment will be assessed based on pro-rata basis.	

Value	Value of previous ESMP reports completed (as lead consultant)		[20]
•	• > MVR 35,000 (3 points per project)		
•	• > MVR 50,000 (1 points per project)		
	Value of multiple reports completed as a single assignme ated on pro-rata basis.	ent will be	
	cal Score $(St) = A/100*[W1] + B/100*[W2]$		
Weight	s Distribution		
W1	Consultant's Qualifications and Experience	[40]	
W2	Experience in conducting ESMP / ESIA	[60]	

6. DELIVERABLES

• **Draft ESMP Reports:** The draft ESMP reports shall be submitted to the client no later than <u>21</u> <u>calendar days</u> after the commencement of the assignment in accordance to the TOR provided in Annex 1 and in the general format and content of the ESMP study given in Schedule E3 of the Environmental Impact Assessment Regulations (2012).

• Final ESMP Reports: The individual consultant shall produce the final ESMP reports by considering the comments made, if any, by the Client. The final ESMP reports shall be submitted to EPA, no later than <u>28 calendar days</u> after the commencement of the assignment.

• Additional Information: The individual consultant shall provide any additional information requested by EPA and submit to EPA within <u>4 calendar days</u> of receiving the request for additional information.

7. REPORTING

The successful individual consultant will report to ESS Officer of MCEP at MEE or an alternate nominated by the Project Manager.

Upon completion of the final ESMP reports, 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 EPA. The decision statements issued by EPA and the approved reports shall be submitted to the PMU.

8. CONTRACT DURATION

a) The duration of the assignment is 43 calendar days including the duration for the ESMP approval and release of ESMP decision statement.

Annex 1: Terms of Reference for ESMP

Objective and Scope of Preparation of Environmental and Social Management Plan (ESMP)

In order to ensure short and long term environmental impacts that would arise due to improvement and rehabilitation work (to be described in the first section based on the sub-project/activity), an ESMP plan will need to be developed as per the scope presented below and in accordance with the ESAMF of the Project and the Environmental Impact Assessment Regulations (2012). The project IWMPs should be reviewed and used as the basis for baseline information. Field level verification should be conducted prior to the preparation of the ESMPs:

1. **Introduction:** Briefly describe the major components of the proposed project. Provide a brief history and justification of the project and describe how the proposed development will improve on the current arrangements for waste management in the project area. Provide details of the proponent, and institutional arrangements for implementation and operations of the proposed development, and environmental and social issues of similar projects. Include desktop studies and review of similar ESMPs and ESIAs. The introductory chapter should also cover the legal aspects related to the project, which is detailed below.

Legislative and Regulatory Considerations: Outline the project's consistency with the existing national, state, regional and local planning that apply to the project include reference to relevant statutory and non-statutory plans, planning policies, guidelines, strategies and agreements as appropriate. Outline the pertinent policies, regulations and standards governing project location, land use, environmental quality, and public health and safety. This section does not have to be exhaustive, but should cover information on legal requirements specific to the project, such as permits to be taken under the Environmental Impact Regulations (2012) and the land allocation process followed with MLSA and other relevant institutions. Additionally, the status of Island Waste Management Plan (IWMP) should be described, indicating whether the plan has been prepared, under review or approved, and highlighting any challenges faced by the council in plan preparation and approval (if any).

2. **Study Area:** Submit an A3 scaled plan with indications of all the proposed land infrastructures. Specify the boundaries of the study area for the ESMP highlighting the location and size of the proposed construction. The study area should include nearby environmentally sensitive areas. Justification for site selection shall be provided. Relevant developments in the area must also be addressed including residential areas and all economic ventures and cultural sites.

3. **Project Description:** Provide a full description and justification of relevant parts of the project, using maps at appropriate scale where necessary. The following should be provided including all inputs and outputs related to the proposed activities shall be justified.

- a) Provide a clearly labelled concept design and scaled site plan of the project boundary.
- b) Submit a detailed description of the components of the project and how the project activities will be undertaken.
- c) Describe the construction phase components of the project including but not limited to site clearance, collection bay area, compost slab, groundwater pump room, leachate collection tank and perimeter walls.
- d) Describe the operational phase components of the project including but not limited to waste collection services, method of storing, composting method, leachate management, arrangements for the removal of inorganic waste from the IWMC and clean-up of existing small open dump sites.
- e) Include a project schedule.
- f) A matrix of inputs and outputs related to the project activities shall be included and described separately for construction and operational phase.

4. **Existing Environment:** The existing environment study will not require detailed data collection and survey, analysis techniques since this is an ESMP and not a full ESIA study. However, the following information must be provided based on field observations and consultations with the island council and the community. Photographic evidence should be provided where appropriate.

- a) <u>Current Waste Management Practices:</u> Describe how waste is managed at present. This should include information about the existing open dump sites (if any) and method of disposal.
- b) <u>Unassigned Waste Dumping</u>: Describe the overall cleanliness of the island and whether unassigned waste dumping is observed.
- c) <u>Project Site and Access Road:</u> Describe the condition of the ground and soil of the project site. Provide information related to distances between residential areas, commonly used

public places and nearest distribution box. Additionally, information related to the access road and route to waste unloading area shall be provided.

- d) <u>Coastal Modification / Erosion</u>: Provide information related to any coastal modifications undertaken in the island in recent history and the side of the island subjected to coastal erosion. Indicate whether any coastal erosion is noticed from the shoreline closest to the proposed development.
- e) <u>Vegetation present at the site:</u> Describe the number and type of vegetation present at the project site including scientific and local names.
- f) <u>Protected Areas and Environmentally Sensitive Sites:</u> Provide information on the environmentally protected and sensitive areas that exists close to the proposed development.

5. **Impact Identification:** The ESMP report should identify all the impacts, direct and indirect, during and after construction, and evaluate the magnitude and significance of each. Particular attention shall be given to impacts associated with the following:

- a) <u>Physical / Chemical:</u> describe impacts on groundwater, soil, noise, air and waste.
- b) <u>Biological:</u> describe impacts on vegetation and fauna.
- c) <u>Sociological / Cultural:</u> describe impacts of road closure, health and safety and sociocultural conflict.
- d) <u>Economic:</u> describe any potential benefits or losses to the economy.

The methods used to identify the significance of the impacts shall be outlined. One or more of the following methods must be utilized in determining impacts; checklists, matrices, overlays, networks, expert systems and professional judgment. Justification must be provided to the selected methodologies. The report should outline the uncertainties in impact prediction and also outline all positive and negative/short and long-term impacts. Identify impacts that are cumulative and unavoidable.

6. **Mitigation and management of negative impacts:** Identify possible measures to prevent or reduce significant negative impacts to acceptable levels. These will include both environmental and socio-economic mitigation measures. Mitigation measures to avoid or compensate habitat destruction caused by land clearance will have to be considered. Measures for both construction and operation phase shall be identified. Cost the mitigation measures, equipment and resources required to implement those measures. The confirmation of commitment of the developer to implement the proposed mitigation measures shall also be included. An Environmental management plan for the proposed project, identifying responsible persons, their duties and commitments shall also be given. In cases where impacts are unavoidable arrangements to compensate for the environmental effect shall be given.

7. **Development of monitoring plan:** Identify the critical issues requiring monitoring to ensure compliance to mitigation measures and present impact management and monitoring plan for vegetation clearance, spillage assessment and grievance redress mechanism. Detail of the monitoring program including the physical and biological parameters for monitoring, cost commitment from responsible person to conduct monitoring in the form of a commitment letter, detailed reporting scheduling, costs and methods of undertaking the monitoring program must be provided.

The monitoring programme should give details of the following;

- Monitoring indicators to be measured for evaluating the performance of each mitigatory measure (for example national standards, engineering structures, extent of area replanted, etc.).
- Monitoring mechanisms and methodologies
- Monitoring frequency
- Monitoring locations
- Cost of monitoring
- Responsible party

8. **Grievance Redress Mechanism (GRM):** Describe the proposed grievance redress mechanism of the project developed by the PMU and the responsible person in each tier.

9. **Stakeholder consultation:** Identify appropriate mechanisms for providing information on the development project and the GRM to relevant stakeholders. Consultations must be undertaken with the island council and designated waste management focal point of the island on the execution of the GRM. The report should include a list of people/groups consulted, their contact details and summary of the major outcomes.

Presentation- The ESMP report, to be presented in digital format, will be concise and focus on significant environmental issues. It will contain the findings, conclusions and recommended actions supported by summaries of the data collected and citations for any references used in interpreting those data. The ESMP report will be organized according to, but not necessarily limited by, the outline given in the Environmental Impact Assessment Regulations (2012).