



## Ministry of Environment

Male', Republic of Maldives.

وَقُوَّتْ مُبَعَّثَرْ قَرْتَرْسْرْ مُبَعَّثَرْ - وَقُوَّتْ مُبَعَّثَرْ رَسْرْ

No. (IUL) 438-ENV/438/2019/51

## **Recruitment of consultant for Preparation of Poly Chlorinated Bi-phenyls (PCB) Management Plan - TOR**

## 1. Project Context

The Government of the Republic of Maldives has received funding from the Global Environmental Facility (GEF) for implementation of a project "Implementation of an Environmentally Sound Management of Municipal and Hazardous Solid Wastes to reduce emission of Unintentional Persistent Organic Pollutants (UPOPs) and Poly Chlorinated Biphenyls (PCB's). PCBs are a class of synthetic organic chemicals popular in the past for their use in electrical equipment. Even though its properties such as inertness and longevity made it favorable in the commercial industry, in 1979 production of PCBs were banned due to their toxicity to the environment and human health. PCBs are one of the most widespread persistent environmental pollutants and were classified as Persistent Organic Pollutant in 2001 by the "Stockholm Convention on Persistent Organic Pollutants (POPs). All parties including the Maldives who have ratified the convention are mandated to eliminate Polychlorinated Biphenyls (PCBs) containing liquids and PCB contaminated equipment by 2025.

The National Implementation Plan (NIP) was developed and published in 2017 under the obligations as party to the Stockholm convention on Persistent Organic Pollutants. According to the NIP Maldives has 15 potentially contaminated Electrical Transformers with a total of 6100 liters of potentially contaminated PCB oil and 03 oil filled circuit breaker located in Addu Hithadhoo and Gn.Fuvahmulah Island.

The goal of the plan is to report the current situation with regard to PCB management in the Republic of Maldives and give concrete direction for the future action on PCB elimination and disposal.

## 2. Objective of the Assignment

Activities under this consultancy are related to the development of a National PCB Management Plan (NMP) for the potentially PCB contaminated oil and equipment. The goal of the plan is to report the current situation with regard to PCB management in the Republic of Maldives and give concrete direction for the future action on PCB elimination and disposal.



### 3. Tasks of the Consultant

Main Tasks	Deliverable	Expected time	Expected Deadline
<p><b>1.</b> Review the available background information and assess the current situation in the country on the following issues:</p> <ul style="list-style-type: none"> <li>a) Desk review National Implementation Plan (NIP) on the Stockholm Convention</li> <li>b) Conduct field visits to undertake visual analysis of PCB contaminated sites, products and precursors</li> <li>c) Stakeholder meetings with the PCB holders</li> <li>d) to raise awareness on PCBs and their management</li> <li>e) understand country-specific conditions, national legislation and technical standards.</li> </ul> <p><b>2.</b> identify challenges/barriers in management of PCB equipment and oil</p> <ul style="list-style-type: none"> <li>a) Inventory of the PCB equipment and waste and the PCB contaminated sites in the Republic of Maldives;</li> <li>b) Institutional capacities for PCB management;</li> <li>c) Regulatory framework covering the legal aspects of the PCB management;</li> <li>d) Technical capacities for sound PCB management</li> <li>e) analytical and research capacities</li> <li>f) transformers maintenance practices</li> <li>g) PCB interim storage facilities,</li> <li>h) transportation of PCBs, PCB disposal capacities and practices</li> </ul>	<p>Situation report that includes the following (first deliverable)</p> <ul style="list-style-type: none"> <li>a) Inventory of the PCB equipment and waste and the PCB contaminated sites in the Republic of Maldives;</li> <li>b) Field visit and stakeholder meeting reports</li> <li>c) Report on Institutional capacities for PCB management;</li> <li>d) Report on Regulatory framework covering the legal aspects of the PCB management;</li> <li>e) Report on technical capacities for sound PCB management (analytical and research capacities, transformers maintenance practices, PCB interim storage facilities, transportation of PCBs, PCB disposal capacities and practices).</li> </ul>	7 days (15%)	21 April 2019
<p><b>3.</b> First Draft of the National PCB Management Plan in accordance with the structure given in this TOR and submission of the same to the relevant stakeholders for their review and comments</p>	<p>1. First draft of PCB Management plan</p>	20 days (70%)	12 May 2019
13 Finalization of the National PCB Management Plan based on the received comments	2. Final PCB Management plan	7 days (15%)	20 May 2019





#### 4. Travel Plan:

The consultancy foresees two field trips to PCB contaminated sites in Addu and Fuvahmulah to understand condition and performances of the PCB-containing equipment that is in operation; working practices, procedures and safety aspects during handling, draining, repairing, decommissioning and phasing-out of the PCB equipment (tentatively set for 16-17 April 2019). All travel expenses associated with the trips (tickets, accommodation DSA) will be covered by Ministry of Environment as per the government rules and regulations.

The National PCB Management Plan should be developed in accordance with the following structure

- a) Background information that gives some general data on country, POPs/PCBs and Stockholm Convention on POPs in order to introduce the reasons and basis for development of the PCB NMP.
- b) Situation report that contains comprehensive and detailed data and information on the institutional and legal framework linked with PCB management in the Republic of Maldives. It also has existing inventory of PCB equipment and oil in order to report how far the evidence of PCBs in Maldives has progressed, as well as the situation analysis of PCBs management in order to identify the activities to be considered for the future implementation based on the strength, weakness, opportunities and threats (SWOT) analysis.
- c) Action Plan on PCB reduction and elimination is intended to actions to be undertaken in order to provide final PCB elimination in the country. The milestone for the Action Plan development is situation report. The Action Plan will be presented for inputs and comments for further refining in order to ensure an integrated and inclusive approach of the consideration and involvement of all stakeholders in the implementation of the Stockholm Convention Annex A, Part II.

## 5. Content of the National PCB Management Plan:

1. Background information
  - 1.1 Country background
  - 1.2 Introduction to POPs/PCBs
  - 1.3 Introduction to Stockholm Convention
2. Situation report
  - 2.1 Institutional capacities for PCB management
  - 2.2 Regulatory framework for PCB management
  - 2.3 Technical capacities for sound PCB management
    - 2.3.1 Analytical and research capacities
    - 2.3.2 Transformer maintenance facilities/practices
    - 2.3.3 PCB interim storage facilities
    - 2.3.4 Transportation companies for PCBs
    - 2.3.5 PCB disposal facilities/practices



- 2.4 Inventory of the PCB identified equipment and waste and PCB contaminated sites
  - 2.4.1 NIP preliminary inventory
  - 2.4.2 Detailed PCB inventory
  - 2.4.3 PCB contaminated sites
- 2.5 Disposed/treated PCB waste/equipment
- 2.6 Situation Analysis of PCBs management

3. Action plan on PCB reduction and elimination

## 6. Qualification

The Consultant(s) should have knowledge, skills and previous experience as follows:

1. Bachelors/Masters level university degree in Science/Engineering/Environmental Management and other relevant discipline.
2. should have minimum 7 years of general and professional experience in environmental sector
3. Experience in the area of POPs/PCBs is desirable.
4. Sound knowledge on the national environmental legislation, Stockholm Convention on POPs, and the internationally accepted guidelines and protocols on PCB management.
5. Experience in undertaking multi-stakeholder workshops and broad-based consultative processes
6. Sound knowledge of global pollution issues and preferably of key national environmental issues
7. Previous experience of working with International Organizations on the development of GEF environment projects will be advantageous
8. Excellent analytical skills
9. Excellent verbal and written communication skills in English

## 7. Reporting

The consultant is expected to work closely with the project team of Environment Department of the Ministry of Environment and will report directly to the staff designated to the task during the assignment.

## 8. Contract duration

The contract duration will be **34 calendar days** from the commencement of the assignment



## 9. Selection Criteria

The consultants will be selected based on the following criteria:

Rating Criteria	
Criterion	Maximum Points
Academic qualifications	50
Professional Experience in environmental sector	20
Experience in the area of POPs/PCBs	30

## 10. Consultancy Fee

The total consultancy fee of the assignment is MVR 45,000.00 (Forty Five thousand four hundred and fifty). Payments will be made as per submission of the deliverable as outlined in the table under the section of this TOR.

## **11. Services provided by the client:**

The Environment Department of Ministry of Environment will provide necessary information/materials and travel support required for the data collection for fulfillment of tasks and will facilitate the necessary meetings if any.

## 12. Application

Interested consultants may submit the expressions of interest by email indicating the following.

- Cover Letter
- Curriculum Vitae (CV) with demonstrated experiences on similar works performed in the past with referees;
- Academic Qualifications documents;
- Copy of National Identification Card (or Passport)

## 13. Submission

Interested consultants may submit their proposals on or before 04<sup>th</sup> April 2019, 12:00pm, to the following address.

Procurement Section  
Ministry of Environment  
Ameenee Magu, Maafannu  
Male', 20392  
Republic of Maldives