# **Terms of Reference (TOR)**

# **Industrial Engineer**

<u>Project Name</u>: Lebanon Environmental Pollution Abatement Project (LEPAP)

Reference Number: 00089320

<u>Subject</u>: Industrial Engineer for the Lebanon Environmental Pollution Abatement Project

(LEPAP).

**Type of Contract:** Long Term Agreement

### 1. Background

As a follow up to the Country Environment Analysis completed in June 2011, the Ministry of Environment and the World Bank have initiated the development of "Lebanon Environmental Pollution Abatement Project (LEPAP)" which aims at reducing pollution generated by point-source/industrial entities, mainly from effluent discharge and air emissions.

LEPAP will be providing technical assistance and financial incentives, through selected commercial banks, to public and private enterprises to bring their effluent discharges or their air emissions towards compliance with the Environment Protection Law 444. This program will support enterprises to meet national environmental standards in a cost effective manner, including Decree No. 8471/2012 on "Environmental Compliance for Establishments". The sub-projects financed under LEPAP could include pollution prevention, resource recovery, clean technology adoption, fuel substitution, waste minimization, or end of pipe environmental control where no other alternatives are available.

The Project Management Unit (PMU), which is funded under AICS grant (Italian Cooperation) that is partly managed by UNDP, will be responsible for the technical and day-to-day management of the project, in close collaboration with the Ministry of Environment and UNDP. The PMU will tap enterprises willing to comply with Decree No. 8471/2012 and will provide technical support and financial advice to enroll them in LEPAP. The PMU will ensure that the project produces the results specified in the World Bank project appraisal document, to the required standard of quality and within the specified constraints of time and cost.

To improve the pollution abatement technical capabilities of the PMU, an Industrial Engineer (referred to as "Consultant") will be recruited to support the LEPAP project and to respond to the various technical requirements related to the cost of the industrial pollution abatement interventions.

#### 2. Scope of Work, Responsibilities and Description of the Proposed Analytical Work

The Consultant shall perform all the services/work as necessary to fulfill the objectives of the consultancy contract.

More particularly, the Consultant will be expected to carry out tasks such as:

- Review relevant literature related to the potential LEPAP sub-project as needed;
- 2. Seek or review offers and/or any other available documentations in view of assessing the technical and financial feasibility of the proposed sub-project;
- 3. Conduct field visits to the relevant project sites as needed;
- 4. Submit a technical report in line with the LEPAP project's requirements including:
  - ✓ Industrial process flow charts as needed;
  - ✓ A quantitative assessment of estimated pollution reduction;
  - ✓ Validation of sub projects financial offers and viability of proposed technical solution;
- 5. Provide technical support to the LEPAP project in the evaluation and processing of relevant technical information as needed.

## 3. Qualifications Required

The Consultant must present the following qualifications:

Education	Master Degree in industrial engineering, mechanical engineering, sustainable and clean production or other related fields.
Experience	Minimum 10 years of relevant professional experience
	Experience in cleaner production and pollution abatement in industrial
	sectors;
	Knowledge of World Bank safeguards policies is an asset;
	Sound previous experience in similar projects in the required domains.
Competencies	Proficiency English; Knowledge of Arabic and/or French is an asset.
	Demonstrable analytical skills and report-writing skills.
	Excellent, proven management and communication skills.

#### 4. Duration of Contract and Reporting

The contract will be valid until the end of December 2017, with a maximum of 30 working-days. Under the LTA specific time bound Individual Contracts (IC) will be issued to the selected contractor.

UNDP does not warrant that any quantity of Services will be purchased during the term of this Agreement. The agreement may be renewed, at the sole option of the UNDP, on the same terms and conditions, for Two (2) additional periods of One (1) year each, by means of a written notification of such renewal by the UNDP to the Consultant and upon an Annual Performance Appraisal of the services provided.

The Consultant will report to LEPAP Project Manager.

### 5. Deliverables Requirements

• 48hrs to 72hrs for urgent opinions

- Provision period of other required services will be defined upon each UNDP's demand
- The workload might however be distributed unequally over time with more and less intense periods of work
- The Consultant is expected to consider that he/she will perform the needed work in his/her own premises, using his/her own property and technology, and hold direct responsibility for the quality of delivered outputs.
- Deliverables are agreed upon with the Project Manager based on the defined tasks.

#### 6. Payment Terms

Payment will be made against each approved deliverable based on a certificate of payment- an IC Time Sheet must be submitted by the Consultant, and duly approved by the Project Manager; this shall serve as the basis for the payment of fees.