

Annex 1

The Consultancy Term of References

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The Consultancy Term of Reference (ToR)s identify the objective of the study as to “undertake an independent Supplementary Environmental and Social Impact Assessment (SESIA) of the proposed Reuse system, Remediation Works and Decommissioning of BeitLahia Wastewater Treatment Plant (BLWWTP)”. Eight tasks have been identified in the ToRs, in addition to a special task concerning sludge management, as follows:

Task 1. Description of the Proposed Project: Provide a full description of the project location; general layout; unit process description and diagram for rehabilitation/new components; population served, present and projected; number and types of connected households; water supply characteristics, adjacent facilities and communities, natural, or cultural facilities close to project site; existing/new road or other supportive infrastructure.

Task 2. Description of the Environment: Assemble, evaluate and present relevant baseline data on the environmental characteristics of the study area.

(a) *Physical environment:* geology (general description for overall study area and details for land application sites); topography; soils (general description for overall study area and details for land application sites); monthly average temperatures, rainfall and runoff characteristics; description of waters bodies (identity of streams, springs, wadis, groundwater, water quality; existing discharges or withdrawals).

(b) *Biological environment:* identify and describe any terrestrial communities, rare or endangered species; sensitive habitats, including parks or reserves, significant natural habitats, in areas affected by construction, facility sitting, land application or disposal;

(c) *Socio-cultural environment:* present and projected population; present land use/ownership; planned development activities; community structure; public health as it relates to water use; tourism; cultural properties.

Task 3. Legislative and Regulatory Considerations: Describe pertinent Palestinian national, municipal, and local laws, regulations and standards governing environmental quality, pollutant discharges to surface waters and land, industrial discharges to public sewers, water reclamation and reuse, agricultural and landscape use of sludge, health and safety, land use control, etc.

Task 4. Determination of the Potential Impacts of the Proposed Project: In this analysis distinguish between significant positive and negative impacts, direct and indirect impacts, and immediate and long-term impacts. Identify impacts that are unavoidable or irreversible. Wherever possible, describe impacts quantitatively, in terms of environmental and/or social costs and benefits. The environmental and social impacts should be classified for both the construction and operational phases of the project. Although not exhaustive, the main impacts to be investigated are:

- (i) Impacts on water supply and water quality;
- (ii) Impacts on the local agriculture industry;
- (iii) Impacts on vehicle, donkey, foot traffic, and commerce in the project areas

- during the construction period;
- (iv) Construction-related impacts (noise, dust, debris, increased accidents) during the construction phase;
 - (v) Impacts related to construction of the effluent reuse pipeline, well field, and pumping of the effluent from beneath the infiltration ponds. Specific attention should be given to the possible impact on existing wells of groundwater level drawdown that may be caused by the effluent recovery wells;
 - (vi) For the decommissioned site, explore consequences of keeping the site open including examination of safety issues for children;
 - (vii) Public health benefits anticipated.

Task 5. Clarify the project social impacts including on issues related to involuntary resettlement:

- Briefly describe who are the affected communities;
- Summarize positive and adverse social impacts that will be accrued by community members;
- Clarify what the permanent and temporary land requirements of the project are in specific relation to land ownership, land use, access to properties, or livelihood as it relates to access to properties, most notably in and around the path of the construction including lands for access roads and reservoirs in the recovery well areas;
- Summarize both positive and adverse effects of various land taking scenarios including PWA rental of private lands, willing-buyer, willing-seller option, or voluntary land donations in exchange for specific project benefits (i.e, municipality employment);
- For each project intervention (e.g. pipelines, wells, pumping stations, reservoirs) clarify all direct economic and social impacts caused by the involuntary taking of land (if any) resulting in: relocation or loss of shelter; loss of assets or access to assets; loss of income sources or means of livelihoods (regardless of whether the affected persons must move to a new location)
- Summarize Palestinian legislation on the acquisition of land through eminent domain principle.
- Conduct a rapid assessment of community's willingness and ability to pay for services, with special attention to more vulnerable households (poorer families, widows, disabled persons). This would include detailing social impacts of the effluent reuse scheme, subsequent tariff collection, and system efficiency;
- Examine the institutional arrangements for the reuse scheme including how water will be allocated at individual household/farm levels, with specific attention to the equitable distribution of water, including the community understanding of these resources will be presented;
- Examine potential livelihood issues arising from a change in hydrology caused in the water regime. Attention will be given to whether farmers will be negatively impacted

- by the draw down resulting from the 27 wells. How does this compare to the overall benefits accrued?
- Assessment of the demand for reused water (a rapid assessment of the willingness and ability to pay is included in the ToR but the demand should be assessed as well);
 - Current type of crops on the 1,500 ha targeted by the Project;
 - Forecasted type of crops on the 1,500 ha targeted by the Project, which are dependent on the below questions:
 1. What are the sanitary regulations related to this use?
 2. If the expected quality of the treated water might restrict the type of crops to be irrigated, an analysis of the social and economic impacts should be done (since some farmers might be affected).
 - Methodology of follow-up of the physical-chemical quality of the treated effluent (after treatment and before reuse);
 - Methodology of follow-up of the healthy conditions of the stakeholders (operators and farmers). An epidemiologic comparison should be put in place to detect a potential impact of the Project;
 - Emergency plan if a technical problem is faced on the WWTP (implying a low quality of the treated water);
 - Awareness campaign on sanitary issues for workers and population who will consume the products grown on the 1,500 ha.

Task 6. Development of an Environmental and Social Management Plan (ESMP)

Prepare a detailed plan to monitor the implementation of each mitigating measurement that corresponds to a negative impact of the project during rehabilitation/construction as well as operations. Include in the plan an estimate of capital and operating costs and a description of other inputs (such as training and institutional strengthening) needed to implement the plan. Review the authority and capability of institutions at local, provincial/regional, and national levels and recommend steps to strengthen or expand them so that the EMP may be effectively implemented. Assess compensation to affected parties for impacts that cannot be mitigated.

The ESMP should include (but is not limited to):

- Construction management mitigation to manage the disposal of construction waste generated in an environmentally-friendly manner. Likewise, 'lifecycle management' recommendations for materials being replaced should be included, as Gaza has a serious solid waste management problem;
- A fugitive dust control mitigation plan should be prepared to control fugitive dust emissions during construction activities;
- A noise control mitigation plan to control noise impacts on the surrounding communities during construction activities;

- Traffic control mitigation plan to minimize the disruption of daytime traffic flows along important access roads;

In summary, the ESMP should include the following: a proposed work program, budget estimates, schedules, staffing and training requirements, and other necessary support services to implement the mitigating measures, as well as a detailed monitoring plan. This monitoring plan will include for each mitigation measure who is the responsible party for mitigating the impact, how often the mitigating measure should be assessed, as well as a monitoring indicator and parameters.

The ESMP should identify one or two "key indicators" from the monitoring plan that may be used as overall "safeguard indicators" in the project-level Results Framework as a measure of general environmental and social safeguard performance.

An outline of the contents of the ESMP to be included in the project's Operational Manual should be provided along with environmental/social protection clauses for contracts and specifications.

Task 7. Assist in conducting Stakeholder Consultations: Following the identification of key project stakeholders (affected communities and farmers, relevant NGOs, among others), the consulting firm will assist PWA in coordinating ESIA-specific consultations with relevant stakeholders likely to be affected, both positively and negatively, by the proposed project. As this project has been assessed as a World Bank environmental category A, these stakeholders should be consulted once a draft ESIA has been prepared and an executive summary of the ESIA will be publicized both prior to and after these consultations. The draft ESIA should also be available in a public place accessible to affected groups and local NGOs.

Relevant materials will be provided to affected groups in a timely manner prior to consultation and in a form and language that is understandable and accessible to the groups being consulted. The consultant should maintain a record of the public consultation and the records should indicate: means other than consultations e.g. surveys used to seek the views of affected stakeholders; the date and location of the consultation meetings; a list of the attendees and their affiliation and contact address; and summary minutes.

At least two public hearing workshops shall be arranged; the first one shall be EA scoping before the inception report. The program should describe approach, frequency, and substantive issues to be discussed with concerned stakeholders. A public hearing should be held for presenting the findings and recommendations of the consultant at the end of the EA process.

Special Task: Sludge Management:

Sludge management resulting from the North Gaza Wastewater Treatment Plant and intended to be used in the agricultural land as detailed in the effluent recovery and reuse scheme or in emergency cases to be dumped to landfill should be incorporated into Tasks 3-7.

Potential concerns might include:

- (i) various environmental (soil, land, water, and air) impacts relating to disposal and/or agricultural use options;
- (ii) environmental health concerns, including the composition and extent of heavy metals exposure during disposal and/or transport and potential agricultural use;
- (iii) social and distributional impacts, whereas, if there is agricultural demand for the sludge, how will the sludge be distributed i.e. will be given away freely, or rather sold, at what price, to whom, and to whom will the proceeds accrue?
- (iv) Public awareness concerning sludge use: if the sludge is indeed given away and/or sold, how will the consumers be made aware of the composition of the sludge and suggested rules for its application.

Task 8. Development of draft terms of reference for preparing a Resettlement Policy Framework (RPF) / Resettlement Action Plan (RAP), if required: If the firm's analysis of the temporary or permanent land acquisition that is anticipated to occur determines that OP/BP 4.12 is triggered, the firm will develop and provide draft terms of reference for preparing a RPF / RAP.